The Solution is Clear

Pre-Calibrated, One-Stroke, Piston-Design Pump—built tough with corrosion-resistant metal alloy to withstand the harshest environments. LIFETIME WARRANTY.

Firm-Grip, Explosion-Proof Casing—ergonomically designed and non-slip, the pump body is also intrinsically safe.

Automatic Stroke Counter*—tracks up to 10 pump strokes to eliminate the risk of miscounting. *Available only on model GV-110.

Fail-Safe Piston Handle—easy to pull handle locks into two positions (50 ml and 100 ml), denoted by clear alignment markings on the shaft and body for accurate and complete sampling.

Inlet Clamping Nut—easy and secure tube insertion that firmly holds Gastec Detector Tube for leak-proof sampling.

Integrated Tube Tip Breaker—equipped with diamond cutting edge for maximum durability. Discarded tips are safely deposited in the pump head.

Thermal Ring—displays ambient temperature allowing you to accurately correct detector tube readings for temperature on the spot.

Flow Finish Indicator—ensures precise sample volumes by displaying when a 50 ml or 100 ml stroke is complete.

For over 40 years, the Gastec pump and Tube System has provided fast, simple and precise gas measurements and remains a clear leader in detector tube technology.

**BETTER TECHNOLOGY**

Gastec offers a complete line of detector tubes for over 600 applications that includes over 375 single-stroke applications. No other manufacturer offers this number of single-stroke tubes or applications. The tubes are easy to read with clear lines of demarcation and only Nextteq offers an on-the-spot ambient temperature display.

**BETTER QUALITY**

No other manufacturer has more SEI-certified tubes than Gastec. With most applications requiring one stroke, there is less sampling time, less chance of errors, no miscalculated strokes and no miscompressions.

**BETTER VALUE**

Gastec’s precision pump is backed by a LIFETIME WARRANTY. It was designed and built right the first time with the superior features that are important to today’s busy professionals...features that competitors are still trying to duplicate.

Nextteq is Gastec’s exclusive U.S. master wholesale distributor.

Scan for additional information on Gastec pumps

For more information: NEXTTEQ LLC
Toll-free: 877-312-2333 • email: info@nextteq.com
www.nextteq.com

Gastec Gas Sampling Pump
(Part No. GV-110-S-TR)
1,557,416

This is the number of alarms generated by gas monitors on iNet® in 2011. These alarms, logged by iNet, warn hard-working people of potential danger in their workplaces. As this number continues to increase, so will the number of lives saved and people that can go home to their families at the end of each day.

To learn more about iNet from the Gas Detection People visit us at www.indsci.com

Visit our AlHce Booth #304

Don’t Buy Gas Detectors
Subscribe to iNet®—Gas Detection as a Service

www.indsci.com
Comfort and safety, right from the start.

3M™ has always been an innovator in worker health and safety. In 1972, we introduced the first NIOSH-approved disposable filtering facepiece respirator and launched the first disposable earplug.

40 years and thousands of patents later, 3M now offers an extensive family of Personal Protective Equipment (PPE). In addition to bringing new innovations to the market, we are constantly enhancing products with new technology and materials. 3M has remained at the forefront of worker safety. Trust your PPE to a company that has the support and services you’ve needed for decades past and can rely on for years to come.

To learn more about our full line of PPE products, go to www.3M.com/40years.

The power to protect your world.

© 2012, 3M. All rights reserved. 3M and The power to protect your world are trademarks and service marks of 3M Company. Used under license in Canada.
CPR & First Aid Training: A Must for Your Safety Program.

What We Offer:
- eLearning Courses
- Classroom Courses
- Instructor Training
- Nationwide Training
- First Aid
- CPR
- AED
- Bloodborne Pathogens

Visit our booth #1005 for more information.
www.heart.org/cpr
AIHce 2012 Redefining Our Future

Welcome to AIHce 2012 and to Indianapolis! Get ready for a week of interactive sessions that will leave you equipped with ideas and solutions to take back and apply immediately on the job. AIHce 2012 is your opportunity to step back from everyday demands and focus on your most important asset — your professional development.

Enjoy more than 600 oral and poster abstract presentations, courses, lectures, roundtables, EHS crossover programs, lunch discussions, and exhibitor theater presentations addressing the latest professional issues, scientific topics, management trends, and innovative techniques.

New at AIHce 2012!

- **AIHce Mobile App Debut. Keep AIHce at your fingertips with the new AIHce App!** Create and manage your schedule, view detailed session and exhibitor listings, and stay informed about the latest AIHce happenings — all from the convenience of your mobile device. Learn more on page 13.

- **IGNITE — “Enlighten Me, but Make it Quick!”** AIHce introduces a new educational experience — a series of short, fast-paced five-minute presentations. Hear what friends and colleagues have to share in this innovative and engaging new format. Attend an IGNITE session. Details on page 51.

- **Have a “Free Lunch” — on AIHce.** All full registrants received a coupon valued at $10. Use the coupon to purchase lunch in the Expo on Tuesday, June 19. A variety of options are available. Browse the exhibits at your leisure and enjoy lunch — on AIHce!

**IF YOU HAVE ANY QUESTIONS DURING THE WEEK, STOP BY THE INFO KIOSK, OR ASK ANY AIHA STAFF MEMBER FOR ASSISTANCE. ENJOY YOUR WEEK!**
AIHce 2012
Redefining Our Future

Table of Contents

Information & Activities
- Boards and Conference Committees .............. 7
- General Information .......................... 8
- Certification ................................ 9
- Hotel Guide .................................. 11
- Technical Tours ................................ 12
- AIHce Mobile App .............................. 13
- Technology Tools ............................... 14
- Student and Young Member Activities .......... 15
- CareerAdvantage Development Fair ‘12 ....... 16
- Volunteer Collaboration Café ....................... 17
- Awards ......................................... 18
- Board and Volunteer Group Activities .......... 22
- Stewardship & Sustainability ..................... 24

Education
- Friday and Saturday At-a-Glance ............... 25
- Sunday At-a-Glance ........................... 26
- Monday At-a-Glance ............................ 30
- Monday Technical Program ..................... 32
- Expo Theater .................................. 32 & 36
- Luncheon Discussions ........................... 36
- Tuesday At-a-Glance ......................... 42
- Tuesday Technical Program .................... 44
- Expo Theater .................................. 44 & 48
- Luncheon Discussions ........................... 48
- Special Ignite Sessions ........................... 51
- Wednesday At-a-Glance ..................... 54
- Wednesday Technical Program ............... 56
- Expo Theater .................................. 56 & 59
- Luncheon Discussions ........................... 59
- Thursday At-a-Glance ...................... 66
- Thursday Technical Program ................. 67
- Poster Sessions ................................. 72

Expo 2012
- Expo Highlights ............................... 74
- Expo Theater .................................. 74
- AIHce 2012 Sponsors ......................... 75
- Expo Floor Plan ................................ 76
- Exhibitors by Aisle ............................. 78
- Exhibitors by Alphabet ......................... 80
- Exhibitors by Product and Services .......... 95

Floor Plans & Indices
- Index of Advertisers ......................... 100
- Indiana Convention Center ..................... 102
- JW Marriott Hotel .............................. 104
- Index of Case Study and Scientific Research Abstracts .......... 106
- Technical Program by Topic ................... 116

AIHce at a Glance

Friday – Sunday
June 15 – 17
8:00 a.m.
9:00 a.m.
10:00 a.m.
11:00 a.m.
NOON
1:00 p.m.
2:00 p.m.
3:00 p.m.
4:00 p.m.
5:00 p.m.
6:00 p.m.
7:00 p.m.
8:00 p.m.
PDCs
Opening Session
Technical Sessions
Expo Only
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
MSA/AIHA Reception
Social Events

Monday
June 18
8:00 a.m.
9:00 a.m.
10:00 a.m.
11:00 a.m.
NOON
1:00 p.m.
2:00 p.m.
3:00 p.m.
4:00 p.m.
5:00 p.m.
6:00 p.m.
7:00 p.m.
8:00 p.m.
Opening Session
Technical Sessions
Expo Only
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
MSA/AIHA Reception
Social Events

Tuesday
June 19
8:00 a.m.
9:00 a.m.
10:00 a.m.
11:00 a.m.
NOON
1:00 p.m.
2:00 p.m.
3:00 p.m.
4:00 p.m.
5:00 p.m.
6:00 p.m.
7:00 p.m.
8:00 p.m.
Opening Session
Technical Sessions
Expo Only
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
MSA/AIHA Reception
Social Events

Wednesday
June 20
8:00 a.m.
9:00 a.m.
10:00 a.m.
11:00 a.m.
NOON
1:00 p.m.
2:00 p.m.
3:00 p.m.
4:00 p.m.
5:00 p.m.
6:00 p.m.
7:00 p.m.
8:00 p.m.
Opening Session
Technical Sessions
Expo Only
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
MSA/AIHA Reception
Social Events

Thursday
June 21
8:00 a.m.
9:00 a.m.
10:00 a.m.
11:00 a.m.
NOON
1:00 p.m.
2:00 p.m.
3:00 p.m.
4:00 p.m.
5:00 p.m.
6:00 p.m.
7:00 p.m.
8:00 p.m.
Opening Session
Technical Sessions
Expo Only
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
Expo Only
Technical Sessions
Expo & Poster Sessions
Technical Sessions
Expo Opening Cocktail Reception
MSA/AIHA Reception
Social Events

www.AIHce2012.org
Introducing . . . the OHD QUANTIFIT
THE NEW GOLD STANDARD IN RESPIRATOR FIT TESTING

Eliminates the need to probe the facepiece!

- 1-3 minute respirator fit testing
- On-board data storage
- USB keyboard and printer connection
- So easy to use that the subject can test himself
- USB thumb-drive storage and data transfer
- USB Computer interface with included software
- Firmware upgrades and improvements may be downloaded from the internet
- Easy-to-read backlit display
- Optical knob for easier menu navigation
- More audio feedback during testing

See us at Booth # 1008

Trade in your old fit test equipment!
Thank You ...

to the following volunteers for their time and expertise in assembling the 2012 program.

Local Conference Committee
Chair, Kevin G. Gara, CIH

Community Service
Larry Newton, CIH, CSP
Kate Hamblin, CHMM

Opening General Session
Amy Szentes, CIH

Personnel
Dan Flinta, CIH, CSP

Promotion
Beau Middaugh

Technical Tours
Consuelo Davis, CIH

President, Indiana Local Section
Tina Lash, CIH

The LCC, in partnership with AIHA, works to organize and execute an outstanding AIHce. A special thanks to all who donated their time throughout the year to make this year’s conference memorable.

Permanent Conference Committee
AIHA® Program Co-Chair, Allan Fleeger, CIH, CSP
ACGIH® Program Co-Chair, Robert F. Herrick, ScD, CIH, MS
Chair, Christine Lorenzo, CIH
Vice Chair, L. Faye Grimsley, PhD, CIH

Members
Lezah P. Brown, MSPH, PhD
Stacy Bucherl
Barbara Dawson, CIH, CSP
Matthew Finucane, MS, CIH
Catherine Hovde, CIH
J. Torey Nalbone, PhD, CIH
Karin Wetzel, CIH
David Zalk, PhD, CIH, MPH

Continuing Education Committee
Chair, Melissa M. Rupert, CIH, MS
Vice Chair, Stephanie R. Carter, PhD, CIH
Secretary, Penelope E. Pietrowski, CIH
Past Chair, Camille Carraway, CIH

Members
Chandran Achutan, PhD
Dennis P. Bridge, CIH, CSP, PE
Rebecca Brown, CIH
Kaleb Grittner, CIH, ROH, CRSP
Judith L. Healy, CIH, CSP
Randall J. Keller, PhD, CIH, CSP, DABT
Kevin C. Roegner, MPH, CIH
Dirk P. Yamamoto, LL Col., BSC, PhD, CIH, PE

AIHA® Board of Directors

AIHA® Board of Directors

AIHA® Board of Directors

Executive Director, Peter J. O’Neill, FASAE, CAE
AIHce 2012 is headquartered at the Indiana Convention Center (ICC). Most committee meetings and evening social activities are located at the JW Marriott, the headquarters hotel.

AIHce Information
ICC, Wabash Lobby » 317-262-8500
Need assistance? Stop by the information kiosk; AIHce staff is happy to help.

ICC Concierge
ICC, Crossroads Lobby
Looking for a restaurant? Directions to the NCAA? Visit the concierge for assistance with sightseeing activities, shopping options and restaurant reservations.

AIHce On Demand
Reach your educational goals using conference recordings from AIHce 2012. AIHce On Demand offers the following, available online 24/7:
- Presentation slides synced to audio recordings
- Downloadable MP3 files and abstract presentations
- Up to 250 hours of recorded educational content

Stop by the AIHce On Demand counter in Registration to purchase the complete library of sessions. Pay just $75 through the end of the conference. After AIHce, the price increases to $195.

*If you registered at the Best Value or Premium rate in advance, AIHce On Demand is included — no need to purchase.

AIHce On Demand is brought to you by Scott Safety

Airport Transportation
Taxis
The 15-minute ride between the airport and downtown Indianapolis is approximately $30 in metered taxis.

City Bus Service
IndyGo’s Green Line Downtown/Airport Express route provides non-stop service between the airport and major downtown hotels and the Indiana Convention Center. Green Line service runs daily from 5:00 a.m.–9:00 p.m. The cost is $7, one-way trip. Visit www.indygo.net or call 317-635-3344.

AIHSA® International Reception
Each year, AIHA welcomes registrants from around the world. International professional members are invited to join other international colleagues on Monday night. Admission by invitation; international badge required.

Sponsored by Galson Laboratories

Expo Highlights
ICC, Halls A-E
Monday  9:00 a.m.–5:30 p.m.
Tuesday  9:00 a.m.–3:00 p.m.
Wednesday  9:00 a.m.–1:30 p.m.

It’s all happening at the Expo — the place to browse more than 300 exhibits, relax, dine and meet with colleagues. Each day features Expo-only hours affording time in the Expo between sessions.
- Expo Theater
- FREE Lunch in the Expo on Tuesday — use your voucher at any concession in the center
- Clandestine Drug Lab Exhibit
- Expo Opening Cocktail Reception — don’t forget your drink ticket
- Passport to Prizes + Daily Prize Drawings
- Cyber Cafe + Networking Lounges
- Web and Software Showcase
- University Row
- Technical and Student Posters
- Luncheon Discussions
- Restaurants

AIHSA® and ACGIH®
AIHA, Booth 922
It’s all happening at AIHA!
Take advantage of 15% off all AIHA publications and education, including these new titles debuting at AIHce:
- 2012 ERPG/WEEL Handbook
- 2012 ERPG Update Set
- 2012 Emergency Response Guidebook

Don’t want to carry heavy books around? Have your purchases shipped — FOR FREE!

Plus
- Learn more about the Product Stewardship & Sustainability Network;
- Find out if you’re a dart-throwing monkey;
- Experience the convenience and portability of PDF publications;
- Take a sneak-peek at upcoming AIHA conferences; ...And much more!

The ACGIH® Pavilion Booth 938
Staff will demonstrate how ACGIH® defines the science of occupational and environmental health by showcasing the member benefits, outstanding publications and software, and upcoming educational events for which ACGIH® is renowned. Information regarding The Action Level®, our at-home, self-study continuing education course, the Foundation for Occupational Health and Safety (FOHS), and the Foundation’s Sustainable TLV®/BE® Program will be available. Please stop by and see us.

Poster Sessions
ICC, Hall B
More than 100 technical and student papers present the latest findings in OEHs. Posters are displayed 9:00 a.m., Monday, through 1:00 p.m., Wednesday, during the Expo hours. Technical Session authors present their research on Monday and Tuesday. Student authors present on Wednesday. See p. 72.

NEW! Student Posters Award Ceremony
Wednesday, 12:30 p.m.–1:00 p.m.
AIHA Volunteer Groups will present awards to Student Posters.

Luncheon Discussions
ICC, Hall B
Luncheon Discussions are small conversational groups facilitated by AIHA Members and NIOSH researchers and technical staff. Discussions focus on current issues, trends, relevant topics and research. Purchase lunch from a concession and choose your discussion. Seating is limited and available first-come, first-served.
- Product Stewards
  Monday, 1:00 p.m.–2:00 p.m.
- Student and Early Career Professionals
  Monday, 1:00 p.m.–2:00 p.m.
- NIOSH Tech Talks: Current Topics
  Tuesday, 12:30 p.m.–1:30 p.m.
- Volunteer Group Tech Talks
  Wednesday, Noon–1:00 p.m.

26th Annual AIHF Fun Run/Walk
Tuesday, 6:30 a.m.–8:00 a.m.
Meet at the JW Marriott; Event Entrance, Level 1
Lace up your running shoes and support the work of the AIHF. Run 5K or walk 2K — all are welcome! New and advance registered participants must stop by Registration to check in and sign a waiver by 5:30 p.m. on Monday. The on-site fee is $40. No check in or new registrations accepted at the race site.
Sponsored by Eli Lilly & Company

MORE CMs!
You can now earn COCs and CEUs for weekday technical sessions! Simply complete the online survey at: www.aihce2012.org/certification.
The all-time high.

Insert image of a grand prize drawing area with a drawing wheel, featuring a prize wheel with dollars signs.

Although walk-ins are welcome, you are encouraged to make an appointment early in the day to reduce the wait time. Cash prizes of $100, $50 and $25, will be awarded randomly each day; be sure to swipe your Expo card at the door. A special Grand Prize will be awarded if total pints collected exceed 129 – the all-time high.

Sponsored by AIHA’s LCC and administered by the Indiana Blood Center.

Business Centers
ICC, opposite room 116
T: 317-262-4496; F: 317-262-4435
Email: ikonbusinesscenter@icclos.com
Monday–Tuesday  7:30 a.m.–5:00 p.m.
Tuesday–Wednesday  7:30 a.m.–3:00 p.m.
Thursday  9:00 a.m.–4:00 p.m.
Friday  9:00 a.m.–5:00 p.m.
For those registrants actively seeking employment, the CareerAdvantage Development Fair has always been the place to search and apply for open OEH positions online. Even if you aren’t currently looking for a new job, you’ll want to increase your marketability as a job candidate for the future. See page 16 for the list of scheduled events.

AIHce in the Press Room; proper credentials required. Members of the media are invited to register for AIHce or peruse the AIHce website. Complimentary messaging and Internet access is available.

Those registrants actively seeking employment, the CareerAdvantage Development Fair has always been the place to search and apply for open OEH positions online. Even if you aren’t currently looking for a new job, you’ll want to increase your marketability as a job candidate for the future. See page 16 for the list of scheduled events.

If you are an employer seeking to fill an open position, stop by and post your job online; candidates will be able to view your position immediately. You can also search through online resumes and select from hundreds of qualified OEH professionals.

Questions about the AIHce mobile app?
Knowledgeable staff are ready to help!
Guest Program
All registered spouses and guests are invited to attend the Welcome Brunch – A Hoosier Hello on Monday at 10:00 a.m. at the JW Marriott. See who is attending AIHce and meet old friends at this annual event. Learn what Indianapolis has to offer and get tips on what to do and what to see during your stay.

Following brunch, join us for Indianapolis Indeed! – a city tour with stops at the famous Indianapolis Motor Speedway and President Benjamin Harrison’s home. This introduction to “Circle City” is a great way to spend the afternoon. The tour departs the JW Marriott, Event Entrance on Level 1 at 12:30 p.m. and returns at 5:30 p.m.

These events are included in the family member/non-IH guest registration fee and admittance is open only to registered spouses or guests. Tickets are required for both activities.

Mary Kay Day
You deserve a little pampering! Mary Kay Cosmetics will host a special hospitality suite at the JW Marriott, room 312. A wide range of services will be offered – skin care, color cosmetics, makeovers, color analysis and more. The hospitality suite is open Tuesday, 10:00 a.m.–Noon. A Mary Kay representative will attend the Welcome Brunch on Monday to register interested participants in advance. Space is limited, so be sure to sign up! Based on demand, the program may be repeated on Wednesday. Look for details in the hospitality suite.

Mary Kay services are offered at no charge; no minimum purchase required.

New! Paperless Evaluations
PDC and technical session evaluations are now paperless. Use your smartphone, laptop, iPad or mobile device, or the cyber center computers to access the evaluations one of three ways –

- The AIHce Mobile App. Visit http://crwd.cc/aihce2012 or scan the QR code
- Log on to www.aihce2012.org/certification
- Links sent via email at the conclusion of your PDC and Technical Session

Questions? Visit the Speaker Ready Room, ICC, 108

Registration
ICC, Wabash Lobby » 317-262-8502
Friday
5:00 p.m.–7:00 p.m.
Saturday–Monday
7:00 a.m.–5:30 p.m.
Tuesday
7:30 a.m.–5:30 p.m.
Wednesday
7:30 a.m.–4:00 p.m.
Thursday
7:30 a.m.–10:30 a.m.

To register as a member, individuals must have satisfied all the requirements of membership and paid 2012 dues in full prior to AIHce.

Registrants must wear name badges to be admitted to AIHce sessions and events. Courses, tours, AIHF activities and selected social activities require a ticket. Once tickets are purchased, fees are not refundable however, ticket exchanges may be permitted.

After one initial re-print, there is a $5.00 charge for lost badge, ticket or Expocard replacement.

Lanyards provided by Sensidyne, Inc.

PDCs
All courses are located in the Convention Center. To access electronic handouts go to www.aiha.org/eMats. If in need of assistance, please stop by the Speaker Ready Room, ICC, 108.

PDC Luncheons
For your convenience, a boxed lunch is included with all PDCs. Lunch will be served in Hall A, Noon–1:00 p.m. A ticket is required.

Sponsored by CTEH

Speaker Ready Room
ICC, 108 » 317-262-8507
Saturday–Tuesday
7:30 a.m.–11:30 a.m. and 12:30 p.m.–5:30 p.m. 
Wednesday
7:30 a.m.–11:30 a.m. and 12:30 p.m.–6:30 p.m.
Thursday
7:00 a.m.–11:30 a.m. and 12:30 p.m.–4:30 p.m.

Check in is mandatory for all Podium, Roundtable, Symposium and Crossover presenters and moderators and monitors*. Visit the Ready Room at least 60 minutes prior to the start of the session.

Presenters are required to confirm recording permissions and to meet with an audiovisual technician.

- Presentations may be uploaded in the session room only after testing in the Speaker Ready Room. Please bring your presentation(s) on a thumb drive or other electronic media device.
- Only AIHce-supplied computers may be used in technical sessions.

* PDC instructors are welcome to use the room, but not required to check in. AIHA does not provide computers to course instructors.

Student and Early Career Professionals
AIHce programs and activities of interest to those who are new to the profession, or just starting their careers, have been gleaned into a single program of events. See page 15. Future Leaders and Young Members won’t want to miss the annual get-together on Sunday night at the Cadillac Ranch: An American Bar and Grill.

Sunday night event sponsored by 3M

Technical Tours
Depart ICC, Maryland Street Entrance
Participants should assemble at the Maryland Avenue Entrance 15 minutes prior to the published time of departure. If you are interested in a specific tour, check at Registration to see if tickets are available.

Volunteer Collaboration Café
ICC, Crossroads Lobby
Sunday–Wednesday, 7:30 a.m.–4:00 p.m.
Stop by the Volunteer Collaboration Café to update your AIHA profile, watch an IH-related movie, attend a special session, or find out more about AIHA membership and volunteer opportunities. See page 17.

New! Volunteer Red Carpet Club
ICC, 111
Monday–Wednesday, 9:00 a.m.–4:00 p.m.
AIHA loves its volunteers, both national and local! To show its appreciation, AIHA is providing an exclusive, members-only lounge where AIHA volunteers can enjoy a little downtime. Tuesday has been designated as official “Volunteer Appreciation Day.”

New! WiFi
Wireless internet access is available throughout the Convention Center. On your laptop, click “view available networks” and select AIHce 2012. It’s that simple.

Complete session evaluations, at your convenience, keep in touch with work, and check email using your laptop. Several laptop lounges are located in the center.

Courtesy of Scientific Analytical Institute.
ON ALL TOURS
...to ensure admittance to the tour site, carry valid government-issued photo identification, i.e., driver’s license, passport, or military ID. Personal electronics (cameras, iPods, cell phones with photographic capability, and other like items) may not be used during the tour. Briefcases, backpacks, and totes are discouraged. Limited jewelry and appropriate attire, including long pants (men and women), long-sleeved shirts, and flat, closed sturdy walking shoes are a must!

Additional restrictions, if applicable, are listed in each tour description.

Board bus fifteen minutes prior to scheduled departure from the ICC, Maryland Entrance. Tickets are nonrefundable.

Monday, June 18
Sold Out
TT-01 Eli Lilly & Company
1:30 p.m.–4:30 p.m.
Driver’s license required. Safety glasses provided.

Tuesday, June 19
Sold Out
TT-02 Covanta Indianapolis, Inc. (Tour 1)
9:30 a.m.–11:30 a.m.
Long-sleeved shirt, slacks, and durable flat-soled shoes required. Hard hat, safety glasses, and hearing protection provided.

TT-02A Indianapolis Motor Speedway
9:30 a.m.–12:30 p.m.
$35
The Indianapolis 500 is the world’s most famous auto race and the world’s largest single-day spectator sporting event, attracting over 200,000 spectators. The “500” has been “Redefining the Future” since its inception in 1911.

Although racing is inherently risky, the protection of drivers, crews and spectators is of paramount importance. Go behind the scenes at the Indianapolis Motor Speedway (IMS) to explore some of the OEHS, security and medical aspects of IMS operations. Subject matter may include crash protection (vehicle and wall designs), fire protection, personal protective equipment, hearing conservation, medical services, security and emergency preparedness, hazardous materials and waste management.

Note: Specific topics and speakers are subject to change.

Sold Out
TT-03 Roche Diagnostics
9:30 a.m.–1:00 p.m.
No open-toed or open-heeled shoes; some walking and stair climbing required.

Sold Out
TT-04 Covanta Indianapolis, Inc. (Tour 2)
1:30 p.m.–3:30 p.m.
Long-sleeved shirt, slacks, and durable flat-soled shoes required. Hard hat, safety glasses and hearing protection provided.

Sold Out
TT-05 Dow AgroSciences LLC
1:30 p.m.–4:30 p.m.
Participants are required to have completed admittance forms in advance. These forms were e-mailed in May. Safety glasses and lab coats provided. Considerable walking and standing. Possible exposure to plant pollens.

SAVE THE DATE! Registration opens in December.

AIHce 2013
MONTREAL, CANADA
MAY 18-23 | AIHce2013.ORG
THE PREMIER CONFERENCE AND EXPO FOR OEHS PROFESSIONALS
New! AIHce 2012 Mobile App
Available for iPhone, iPad, Android and Blackberry
http://crwd.cc/aihce2012

Build Your Conference Schedule
Tap the bookmark to easily add any session or activity to Your Favorites.

View Sessions, Exhibitors, Speakers and More
View information on speakers, educational sessions, special events and exhibitors with a single tap!

Evaluate Session
Tap a link inside the session you want to evaluate and go to the survey.

Add Your Contact Info — Networking Made Simple!
Share your contact information with other attendees by completing the Contacts screen. You can then select the person with whom you’d like to share your information. In Your Contacts, you can see who has shared their information with you. *Your information is only accessible to those you have shared it with.

Find Your Way Around
Launch Maps by tapping a room name or an exhibitor’s booth number. The yellow dot will show you other activities happening there and when they are scheduled. Maps will also find local amenities and locations around the venue. To view more details, tap the pin in the top right corner and select a location.

Stay in the Know
Receive real-time messages and alerts by enabling push notifications during setup.

Spread the Word
Use the Tell Your Friends button to email your friends about the app.

Still have questions? Visit the Mobile App Help Desk, ICC, Wabash Lobby.
Sunday, 2:30 p.m.–6:00 p.m.
Monday and Tuesday, 9:00 a.m.–5:30 p.m.
Introducing the AIHce Mobile App!
Use with iPhones, iPads, Androids and Blackberries!

Text to Win an iPad!
Four Chances to Win!
While visiting the Expo, find the four Text-to-Win stations in the Expo. At each location, text the word on the sign to 68398. You can only enter once at each location, but by visiting all four locations, you’ll increase your chance of winning. One iPad per person. Winners will be notified by text on Tuesday evening, and you’ll take your iPad home with you.

The fine print — Msg&Data rates may apply. You will receive one confirmation text message for each text sent; each winner will receive one text. Phone numbers will not be saved or used again. To opt-out, text STOP to 68398. Only one entry per mobile phone per location.

IH Calculator – Debuting at AIHce!
Developed by an AIHA project team and a student development team from Arizona State University for Apple mobile devices (cell phones and tablets), this app can be used by professionals performing industrial hygiene calculations. The app allows occupational health and safety professionals to view common formulas and conversions on a mobile device and populate the formulas’ fields to calculate results. The app provides a more time efficient and convenient tool to the industrial hygienist. Go to the Apple App Store and search for AIHA IH Calculator. For questions or comments about the app, e-mail aihaapp@aiha.org.

Smart Apps for Smart People
Thursday, June 21
8:30 a.m.–10:00 a.m. » ICC, Volunteer Collaboration Café
Drop by this App Open House to share, collaborate, or learn how to bump, download and swipe your way to better use of your favorite smart phone or tablet. Bring your device, learn from your peers and share your favorites in this loosely-structured, hands-on session.

Stay Connected!
Complimentary Wi-Fi is provided throughout the convention center. Wi-Fi courtesy of Scientific Analytical Institute.
STUDENT AND YOUNG MEMBER ACTIVITIES

Future Leaders and Young Member Reception
(by invitation)
Sponsored by 3M

Sunday, June 17, 7:00 p.m.-10:00 p.m.
Cadillac Ranch
39 West Jackson Place, Union Station
Have you been a part of the Future Leaders Institute or are you a student attending AIHce? If so, attend the Future Leaders and Young Member Reception to socialize with your peers and to meet new people.

Students and Early Career Professionals Track
The following technical sessions were assembled for students and those new to the profession.
Monday, June 18,
10:30 a.m.-1:00 p.m. » ICC, 102
RT 204 Oh, the Places You’ll Go! Perspectives on IH Career Paths
Sponsored by the Students & Early Career Professionals Committee
Monday, June 18,
2:00 p.m.-5:00 p.m. » ICC, 102
RT 210 Perspectives of Preparation for the CIH Exam v 6.0
Sponsored by the Students & Early Career Professionals Committee
Wednesday, June 20,
1:30 p.m.-4:30 p.m. » ICC, 243
RT 231 The Future of EHS: Past to Present
Wednesday, June 20,
1:30 p.m.-4:30 p.m. » ICC, 102
RT 232 The Next Generation of Technical Leaders: IH Student Research Showcase

Volunteer Collaboration Café
Sunday, June 17–Wednesday, June 20
ICC, Crossroads Lobby
Need a place to relax for a few minutes or to meet with peers? Visit the Collaboration Café — a multipurpose area where you can relax, network with colleagues and seasoned professionals, and attend complimentary special events. See page 17 for a complete list of activities at the Collaboration Café.

CareerAdvantage Development Fair 2012
Monday, June 18–Wednesday, June 20
ICC, 105
Sponsored by the AIHA Career and Employment Services Committee, the Fair offers sessions designed to help those in the OEHIS field advance their current career and find and maintain positions in the industry. The CareerAdvantage Development Fair also provides an opportunity for employers and professionals to socialize and make important contacts. See page 18 for information.

Student & Early Career Professionals Luncheon Discussions
Monday, June 18,
1:00 p.m.–2:00 p.m. » ICC, Expo, Hall B
Designed specifically for students and early career professionals, AIHA members lead informal discussions on a variety of topics, including career goals, certification, volunteering, and more! Seating is available first-come, first-served.

Mentoring Program Networking Event
Sponsored by the Students & Early Career Professionals Committee
Monday, June 18, 6:00 p.m.-8:00 p.m.
Indianapolis Colts Grille,
110 W. Washington Street
Join us at the Mentoring Program’s 2nd Annual Networking Event! This event is open to all participating members of AIHA’s Mentoring Program, and to students and professionals interested in being a mentor or having a mentor. The AIHA Mentoring Program is an excellent way to get involved in the community, to build your network, and to support the development of another professional!

AIHF Fun Run/Walk
Sponsored by Eli Lilly and Company
Tuesday, June 19, 6:30 a.m.
White River State Park
Lace up your tennis shoes and support the work of the American Industrial Hygiene Foundation. The event is open to everyone from serious runners to recreational walkers. All participants must stop by Registration in the Convention Center to sign a waiver, obtain a race number, and pick up the official T-shirt. On-site registration is complimentary to students; $40 for non-students. Register by 5:30 p.m. on Monday. Registrations will not be accepted at the race site.

IGNITE
Offering Enlightenment and Knowledge — In a Hurry!
Tuesday, June 19, 2:30 p.m.–4:00 p.m. » ICC, 209
Moderator: M. Latko, AIHA, Falls Church, VA.
Arranger and Monitor: C. Tobin, AIHA, Falls Church, VA.
The IGNITE session originated in the high-technology profession but has spread worldwide. In a five-minute presentation, speakers share their professional and personal passions using 20 slides that auto advance every 15 seconds. AIHce 2012 is offering its own version of IGNITE. Learn what’s on the minds of your colleagues and friends in this innovative and engaging new format. Find out why this new program has become an international phenomenon. Experience firsthand what is meant by the IGNITE motto, “Enlighten us, but make it fast!”
See page 51 for presentation listing.

Student Local Sections Council Business Meeting
Tuesday, June 19, 11:00 a.m.-1:00 p.m.
JW Marriott, White River Ballroom B
Meet other student local section officers and share best practices. Students interested in forming a student section at their school are encouraged to attend.

Students and Early Career Professionals Committee Meeting
Tuesday, June 19, 1:00 p.m.–3:00 p.m.
JW Marriott, White River Ballroom D
Interact with members of the SECP Committee. Discuss current and new projects focused on developing outreach materials and providing students and early career industrial hygienists with mentoring. New volunteers, including students, are encouraged to attend.

AIHA Volunteer Group Meetings
Monday, June 18–Wednesday, June 20
These are not closed door meetings! AIHA has more than 45 volunteer groups that focus on a variety of technical topics, and several that address student needs. Unless otherwise noted, volunteer group meetings are open to all. See page 22 for meeting times and locations.

Student Poster Session
Wednesday, June 20
10:00 a.m.–Noon » ICC, Expo, Hall B
Students discuss their scientific research at the 22nd Annual Student Poster Session. Two posters will be selected “Best of Session” and recognized at the new Student Posters Award Ceremony, 12:30 p.m.–1:00 p.m. Student awards given by AIHA Volunteer Groups will also be presented at this ceremony.
Résumé Critiquing  
**Monday, June 18**  
8:00 a.m.–9:00 a.m.; 11:00 a.m.–Noon  
and 3:00 p.m.–4:00 p.m.  
**Tuesday, June 19**  
8:00 a.m.–9:00 a.m. and 11:00 a.m.–Noon  
**Wednesday, June 20**  
9:00 a.m.–Noon and 1:00 p.m.–3:00 p.m.  

Bring your résumé to the Development Fair to sign up for your résumé critiquing session with an experienced hiring director. You will get helpful feedback directly related to style, length, focus, use of accomplishments and keywords, and more.

Everyone Is a Consultant  
**Monday, June 18, 9:30 a.m.–10:30 a.m.**  
Thomas Blank, CIH, CSP  
Kevin Roegner, MPH, CIH  

Gain insight on how to determine whether a consulting practice is for you, how to establish a consulting business, practical matters for beginning a consulting practice, and overcoming various obstacles.

Using Social Media as a Networking Tool  
**Monday, June 18, 1:30 p.m.–2:00 p.m.**  
Mary Ellen Brennan, SPHR  
Craig Sorrell, Collaborative Projects  

Sometimes, it’s not what you know, but who you know—right? The role of networking is undeniably important in the job search. Learn how to use social media to enhance networking in your job search.

Questions You Wanted to Ask, But Were Afraid To  
**Monday, June 18, 2:15 p.m.–2:45 p.m.**  
Mary Ellen Brennan, SPHR  

What’s the salary for this job? How many hours will I have to work? Questions like this can jeopardize the success of your interview, but how does the job seeker find out if the job is a good fit? Find out what you should and shouldn’t ask and other ways to get the information you need about a potential opportunity—from the employer’s view.

Interviewing Do’s and Don’ts—Live Interview and Critique  
**Tuesday, June 19, 9:30 a.m.–10:30 a.m.**  
Mary Ellen Brennan, SPHR  
Richard Prodans, CIH, CSP  
Isabel Zuclich, IH  

Members of the Career and Employment Services Committee (CES) and AIHA’s Human Resources Director will stage and manage several mock job interviews to provide attendees with the Do’s and Don’ts of interviewing in today’s professional workplace. This seminar will give attendees an interactive experience where they can observe and discuss interviewing styles as well as potential obstacles. Attendees will gain practical tools and experience to utilize when looking for a new opportunity.

Get Your Résumé Noticed  
**Tuesday, June 19, 1:30 p.m.–2:00 p.m.**  
Laurie Corsi, CIH  

Gain insight on how to get your résumé noticed by an employer. You already know you’re competing with more applicants than ever before, so you have one chance for an employer to review your résumé and decide to give you a call. This seminar will provide an overview of the Do’s and Don’ts of résumé writing to ensure you get that call.

Phone Interview Etiquette  
**Tuesday, June 19, 2:15 p.m.–2:45 p.m.**  
Sharon Sperber, CIH  

Phone interview etiquette is just as important as in-person interview etiquette because when it comes to getting hired, regardless of how you interview, a successful meeting will get you to the next stage of the hiring process.

While you’re actively job searching, it’s important to be prepared at a moment’s notice for a phone interview. You never know when a recruiter or a networking contact might call and ask if you have a few minutes to talk.

Speed Networking  
**Tuesday, June 19, 3:00 p.m.–4:00 p.m.**  

Bring plenty of business cards and be ready to meet with colleagues from all levels and industries – you will make more contacts in a shorter time.

Employers!  
It’s not too late to post your open positions using the Development Fair package. Stop by to quickly post your jobs online so candidates can view them immediately. You can also search through online résumés and select from over one thousand qualified OEHS professionals. Visit the staff at the Development Fair today to find out more.
Tuesday, June 19
7:30 a.m.–4:00 p.m.
Going the Extra Mile — Volunteer Appreciation Day: Come hear about the great work AIHA volunteers are doing and how you can get involved.

9:00 a.m.–9:30 a.m. » Show and Tell: Recent Volunteer Group Initiatives
Learn more about recent Volunteer Group activities and how to be involved.

9:30 a.m.–10:00 a.m. » Bring AIHA to Your Campus
Learn how easy it is to start a student local section on your campus.

10:00 a.m. » Missed the General Session?
Tuesday’s General Session to be replayed throughout the day!

11:30 a.m.–Noon » Socially Networked
You’ve heard the term social networking, but what exactly is it? Discover the tools you can use to engage in and monitor social media; some tips on getting started on social media sites like Twitter, LinkedIn, and Facebook; and learn how you can use social media sites to your advantage in your professional career.

1:00 p.m.–2:00 p.m. » Movie: Inside Japan’s Nuclear Meltdown
View the PBS FRONTLINE investigative report from the perspective of workers and government officials involved in the 2011 nuclear meltdown at Japan’s Fukushima Daiichi nuclear complex after the 9.0 magnitude earthquake.

2:00 p.m.–2:30 p.m. » SharePoint Tutorial
SharePoint Communities are private communities where groups can collaborate on projects, have discussions, create their own Wiki pages, organize a group calendar, and assign tasks to group members. That sounds great, but how do you use all of that? Learn some tips, tricks, and a general how-to from Craig Sorrell.

3:30 p.m. » Raffle

Wednesday, June 20
7:30 a.m.–4:00 p.m.
Be Seen, Be Heard — Before It’s Too Late: Take advantage of this last opportunity to network with peers and share your ideas!

9:00 a.m.–9:30 a.m. » Learn About AIHF Scholarships
Learn what it takes to apply for an American Industrial Hygiene Foundation Scholarship.

9:30 a.m.–10:00 a.m. » Student Exchange
Meet other student members and exchange contact information.

10:00 a.m. » Missed the General Session?
Wednesday’s Opening Session to be replayed throughout the day!

11:30 a.m.–Noon » Socially Networked
You’ve heard the term social networking, but what exactly is it? Discover the tools you can use to engage in and monitor social media; some tips on getting started on social media sites like Twitter, LinkedIn, and Facebook; and learn how you can use social media sites to your advantage in your professional career.

1:00 p.m.–2:00 p.m. » Movie: Inside Japan’s Nuclear Meltdown
View the PBS FRONTLINE investigative report from the perspective of workers and government officials involved in the 2011 nuclear meltdown at Japan’s Fukushima Daiichi nuclear complex after the 9.0 magnitude earthquake.

2:30 p.m.–3:00 p.m. » Giving Back — Mentoring Program
Are you interested in being or finding a mentor? If so, stop by and sign up.

3:30 p.m. » Raffle

Thursday, June 21
7:30 a.m.–4:00 p.m.
Focus on the Future: Retail and Healthcare Initiative

2:00 p.m.–3:00 p.m. » Student Exchange
You’ve heard the term social networking, but what exactly is it? Discover the tools you can use to engage in and monitor social media; some tips on getting started on social media sites like Twitter, LinkedIn, and Facebook; and learn how you can use social media sites to your advantage in your professional career.

3:30 p.m. » Raffle
All awards will be presented at the Opening General Session on Monday, June 18, unless otherwise noted.

**AIHA®**

**Edward J. Baier Technical Achievement Award**
Established in 1984 in honor of Edward J. Baier, this award is presented by Bureau Veritas to the individual, company, academic institution, organization, or association that has made the most significant contribution to industrial hygiene in recent years. This year’s recipient is Daniel Drolet, of IRSST in Quebec, Canada. Mr. Drolet was a key innovator in developing IH Mod, a mathematical modeling program for industrial hygienists. His innovations have made IH Mod widely available in several languages, increasing its utility and accessibility. Recently, Drolet has been integral in the development of the IH SkinPerm tool, which enables industrial hygienists to better understand chemical exposures to the skin.

**Distinguished Service Award**
This award recognizes distinguished service in the advancement of industrial hygiene and unique technical contributions to the aims and goals of AIHA. This year’s recipient, Loren Anderson, CIH, ROH, is the Golder Associates Global EH&S Service Leader and has served on the AIHA Board of Directors as both a Director and Treasurer. He has served on the Editorial Review Board of the Applied Occupational and Environmental Hygiene Journal, as well as contributing technical expertise to several AIHA committees. A previous recipient of the Edward J. Baier Technical Achievement Award, Mr. Anderson continues to significantly contribute to the profession.

**Donald E. Cummings Memorial Award**
This award was established in 1943 as a tribute to Donald E. Cummings, AIHA’s third president. It is given for outstanding contributions to the knowledge and practice of industrial hygiene. This year’s recipient is Franklin Mirer, PhD, CIH. Dr. Mirer received his PhD in organic chemistry from Harvard University and continued in academia to become a professor of Environmental and Occupational Health at the Hunter College of the City University of New York. An inductee into the National Safety Council’s Health and Safety Hall of Fame, Dr. Mirer is widely recognized for his diligent contributions to the profession.

**Kusnetz Award**
This award was established in 1987 and is named for its donors, Florence Kusnetz and AIHA Past President Howard Kusnetz. The award is presented to a certified industrial hygienist who has not reached his or her 40th birthday by May 1 of the year in which the award is presented, is employed in the private sector, and has worked to provide the highest standards of health and safety protection for the employees for which he or she is responsible by exhibiting high ethical standards and technical abilities. This year’s recipient is Michael Finnimore, MSPH, CIH, CSP, CHMM. Mr. Finnimore has served the AIHA Ionizing Radiation committee as chair, vice chair, and secretary, sharing his knowledge with both AIHA and global EHS employees at Baxter Healthcare Corporation. His training and development plans have led to improved industrial hygiene and radiation knowledge and practice throughout Baxter’s global facilities.

**Alice Hamilton Award**
This award was established in 1993 by the AIHA Board of Directors. It is presented to an outstanding woman who has made a definitive, lasting achievement in the field of occupational and environmental hygiene through public and community service; social reform; technological innovation or advancements in the scientific approach to the recognition, evaluation, and control of workplace hazards. This year’s recipient is Cindy Coe, CIH. Ms. Coe is the current Regional Administrator in OSHA Region IV and has served on the AIHA Board of Directors. Among her contributions to the profession, Ms. Coe initiated the interactive Glen Williamson forum at AIHce to raise awareness about the role of the regulator in addressing workplace health hazards, to illustrate real-life workplace scenarios, and to show the application and effectiveness of control methods and solutions.

**Social Responsibility Award**
Established in 2009 and cosponsored and supported by Bureau Veritas, this award is presented to an individual, entity, group, or organization who works inside organizations to develop and promote practical solutions to social responsibility issues related to industrial hygiene or environmental health and safety. This year’s winner is Developing World Outreach Initiative (DWOI). DWOI has significantly contributed to international efforts to raise awareness about occupational health and safety. DWOI supports the training of local workers and OHS organizers in developing countries by hosting seminars and workshops, and sponsoring individuals to participate in OHS-related training. In addition, DWOI continually supplies universities, NGOs, and OHS employees in developing countries with books and grants aimed at program development. Richard Hirsh, CIH, DWOI Committee Chairperson, will accept on behalf of DWOI.

**William P. Yant Award**
This award was established in 1964 to commemorate the leadership of William P. Yant, Sc.D., first president of AIHA. Sponsored by the Mine Safety Appliances Company, the award is presented for outstanding contributions in industrial hygiene or allied fields to an individual residing outside the United States. This year’s winner is Tan Kia Tang. Mr. Tan Kia Tang is the Deputy Director of the Occupational Safety and Health Specialist Department, within the Ministry of Manpower in Singapore. He has practiced industrial hygiene within the Ministry since 1977 and has written...
articles, papers, technical reports, and advisories on occupational health and hygiene. Currently serving as a co-chair of the National Globally Harmonized System (GHS), he is working to further implement GHS on chemical hazard communication. Mr. Tan Kia Tang is a professor at both the School of Public Health and the Department of Chemical and Bio-Molecular Engineering of the National University of Singapore.

**President’s Award**
The President’s Award is given to an individual, task force, special interest group, or local section for outstanding contributions to efforts to achieve the mission of the AIHA during the presidency year. Kept secret until conference, the award winner will be announced at the AIHA President’s Reception on Wednesday, June 20, between 6:30 p.m-8:00 p.m.

**2012 AIHA Fellows**
The 2012 Fellow Award winners will be honored during the Tuesday General Session and again at the AIHA Fellows SIG meeting on Wednesday, June 20. Members chosen to be Fellows were nominated by colleagues for their significant contributions to the practice of industrial hygiene or related disciplines. The Fellow classification is limited to no more than 5 percent of the AIHA membership.

**ACGIH®**
These awards will also be presented at the ACGIH® Membership Reception and Annual Meeting of the Membership on Sunday, June 17.

**The John J. Bloomfield Award**
This award is presented to a young industrial hygienist who pursues the problem of occupational health hazards primarily by doing fieldwork and demonstrates significant contribution to the profession. This year’s recipient is Cara M. Mitchell. Ms. Mitchell is the EHS Coordinator at SEM Products, Inc. in Rock Hill, South Carolina. In that position, she conducts weekly hazardous waste inspections; composes quarterly and annual hazardous waste reports; conducts monthly safety talks at plant meetings; conducts safety audits and abates the findings; conducts noise monitoring throughout the facility and advises on engineering and administrative controls; conducts incident investigations; and performs spray booth monitoring for face velocity. Previously, she was the Health and Safety Compliance Officer for North Carolina OSHA. She received her BS degree in Environmental Science from the University of North Carolina Wilmington, and an MS degree in Environmental and Occupational Hygiene from the University of Cincinnati.

**Meritorious Achievement Award**
This award is given to members of ACGIH® who have made an outstanding, long-term contribution to the progress of occupational and environmental health. The recipient of this year’s award is John M. Dement, PhD, CIH. Dr. Dement is a Professor in the Division of Occupational and Environmental Medicine at Duke University Medical Center, and an Adjunct Professor in the Department of Environmental Sciences and Engineering and in the Department of Epidemiology at the University of North Carolina at Chapel Hill, School of Public Health. Dr. Dement has served in the U.S. Public Health Service for 22 years, where he was employed in various research and management positions by NIOSH and NIEHS. He has authored 100+ peer-reviewed publications on occupational health and safety issues. Dr. Dement has served on numerous national and international panels and committees, including the WHO and the Institution of Medicine. He also served on the NIOSH Board of Scientific Counselors (1994–2003) and ACGIH Board of Directors (1987–1990), serving as Chair in 1989. Dr. Dement was Editor-in-Chief of Applied Occupational and Environmental Hygiene from 1993 to 1998.

**William Steiger Memorial Award**
This award honors individuals from the social/political sphere whose efforts have contributed to advancements in occupational safety and health. This year’s recipient is Richard E. Fairfax, CIH. Mr. Fairfax is Deputy Assistant Secretary of OSHA and was named to his new position by Assistant Secretary David Michaels. As Deputy Assistant Secretary, Mr. Fairfax is responsible for supervision of the work of the Occupational Safety and Health Administration’s ten Regional Offices across the country and the Directorates of Enforcement and Construction. Prior to this position, Mr. Fairfax served as the Director of Enforcement Programs and Acting Director of Construction Programs for OSHA. A certified industrial hygienist, he has worked for OSHA for 32 years as a field industrial hygienist, regional industrial hygienist, and as a senior industrial hygienist. Mr. Fairfax also served on the Editorial Review Board for the Journal of Occupational and Environmental Hygiene.

**Herbert E. Stokinger Award**
This award is given each year to an individual who has made a significant contribution to the broad field of industrial and environmental toxicology. This year’s recipient is Michelle M. Schaper, PhD. Dr. Schaper is a toxicologist with the U.S. Department of Labor, Mine Safety and Health Administration (MSHA). She has over 25 years of experience as an inhalation toxicologist. Dr. Schaper received a BS degree in Chemistry, an MS degree in Industrial Hygiene, and a PhD in Toxicology, all from the University of Pittsburgh. She was a faculty member, a graduate student advisor, and a researcher at the University of Pittsburgh for 12 years after completing her doctorate. Dr. Schaper is the author or co-author of numerous abstracts, peer-reviewed articles, and book chapters, focusing on the use of animal models to evaluate the respiratory effects of airborne chemicals. She has applied the data obtained in these animal models to predict safe exposure conditions for workers. Dr. Schaper has served on the AIHA® Toxicology Committee and the ACGIH® Threshold Limit Values for Chemical Substances (TLV®-CS) Committee. This award will be presented at the Stokinger Lecture on Thursday, June 21, and announced at the AIHce Opening Session.

**AIHA Volunteer Groups**

**David L. Swift Memorial Award**
This award honors the memory of Dr. David L. Swift, professor at The Johns Hopkins University, for his outstanding contributions to aerosol and industrial hygiene research. Aerosol research papers published during the year in the Journal of Occupational and Environmental Hygiene are reviewed by the AIHA Aerosol Technology Committee.

**Don B. Chaffin Award**
The Ergonomics Committee established the Chaffin Award in 2008 in recognition of the Best Professional Podium Presentation and Roundtable Presentation. The award honors Dr. Chaffin’s many contributions to the field of ergonomics and to AIHA.
**Donna Doganiero Award**
The AIHA Safety Committee presents a Best Crossover Session Award for an AIHce presentation of exceptional quality and one that has particular relevance to the field of Occupational Safety. The Safety Committee makes this award in the name of Donna Doganiero, a truly outstanding individual, to recognize her achievements and vision in continuing to move the field of industrial hygiene and safety forward.

**H. Kenneth Dillon Memorial Award**
This award is presented by the Biosafety and Environmental Microbiology Committee to honor the memory of Dr. Ken Dillon, a former AIHA fellow and principal instructor for several years of the popular PDC “Prevention, Determination, and Remediation of Biological Contamination in Indoor Environments.” The award is presented to the best student poster at AIHce.

**Indoor Environmental Quality Committee Best IEQ Paper Award**
Since 1997, the Indoor Environmental Quality (IEQ) Committee has evaluated peer reviewed articles that promote the practice of IEQ. The authors of the winning paper are honored at the committee’s annual meeting. To be nominated, the paper must: (a) be peer reviewed and published during the previous calendar year in the *Journal of Occupational and Environmental Hygiene*; (b) provide practical information for industrial hygienists and expand the knowledge base of indoor environmental quality professionals; (c) address a critical issue in IEQ; and (d) present the topic in an engaging and well-written manner.

**John A. Leonowich Award for Educational Excellence in Nonionizing Radiation**
The John A. Leonowich Award honors educational excellence in nonionizing radiation by students actively pursuing NIR initiatives through research or education.

**John M. White Award**
Established by the Respiratory Protection Committee, this award encourages scientific and application-oriented research in respiratory protection. It recognizes work that enhances the knowledge base in an area of understanding or provides new insight that will lead to improved employee protection.

**John Palassis Memorial Award**
The Communication and Training Methods Committee presents this award to an outstanding member of the committee for his or her extraordinary contribution to the committee’s mission.

**Larry and Ruth Birkner Award**
The Birkner Award is presented by the Management Committee in honor of AIHA member Larry Birkner, past Chair of the Management Committee, and his wife, Ruth McIntyre Birkner. The award recognizes significant achievement in one of several management areas in industrial hygiene practice: achievement in one or more aspects of industrial hygiene management, teaching achievements in industrial hygiene management, or other achievements deemed worthy. The award is presented at the Annual Meeting of the Management Committee.

**Margaret Samways Memorial Student Poster Award**
This award honors the memory of Margaret Samways, past Chair and longtime member of the Communication and Training Methods Committee. Margaret, with her vast knowledge and practical experience as a trainer, worked tirelessly to provide industrial hygienists with valuable tools to deliver effective training that facilitates learning and ultimately improves worker health.

**Noise Committee Outstanding Lecture**
This award was established in 1995 to encourage excellence in education, public speaking, and presentation quality on noise-related topics at AIHce. The award is determined by a vote of the Noise Committee and is based on audience evaluations.

**Occupational and Environmental Medicine Committee Award**
The Occupational and Environmental Medicine Committee recognizes an individual for excellence in the field of occupational and environmental medicine. Judges consider presentations, professional development courses, poster sessions and peer reviewed published manuscripts from both the medical and industrial hygiene disciplines that contribute to the advancement of occupational and environmental medicine.

**Rachel Carson Award**
AIHA’s Environmental Issues Committee bestows this highest honor on an EHS group or professional who has attained outstanding success in his/her business, profession, or life’s work.

**Real-Time Detection Systems Committee Outstanding Presentation Awards**
All Real-Time Detection Systems Committee poster presentations are eligible for two awards: Best Poster and Best Student Poster. These awards acknowledge excellence in basic or applied research in the gas and vapor detection field. The winning posters are determined by the Real-Time Detection Systems Committee and registrant evaluations.

**Rochelle Crew Memorial Award**
The Construction Committee presents this award in memory of Ms. Crew, a former member of the committee and longtime instructor of construction safety PDCs. The award is given to the best construction-related paper, PDC or technical presentation at the previous year’s AIHce.

**Sampling and Laboratory Analysis Committee Award**
This award recognizes outstanding contributions to the field of industrial hygiene sampling analysis and is given for Best Presentation and Best Poster.

**Tichauer Award**
The Ergonomics Committee established the Tichauer Award in 1996 for Best Ergonomics Podium and Best Ergonomics Poster by a young researcher. The award was established to encourage ergonomics-related conference participation and to recognize excellence in research conducted by students and young researchers.

**Upton Sinclair Memorial Lecture**
The Upton Sinclair Memorial Lecture on outstanding occupational health, safety, and environmental investigative journalism is awarded by the Social Concerns Committee. The 2012 Upton Sinclair Memorial Lecture will be delivered by Chris Hamby of the Center for Public Integrity at 10:30 a.m. on Tuesday.

**The Golden Seed Award**
The Students and Early Career Professionals Committee established this award in 2007. It is presented to an individual who has demonstrated a commitment to promoting industrial hygiene and/or provided guidance and mentoring to students or early career professionals. This award will be presented at the Volunteer Recognition Ceremony.

**AIHce Best Poster Award**
The Best Poster Award is based on two criteria: (1) technical content — organization of the poster material, current importance of the topic, sophistication of scientific or technological aspects of the subject, and the importance of the conclusions for today’s workers; and (2) visual communication — clarity, color, space, balance, text, graphics and effectiveness.
2011 AIHA Best Seller
This award is presented to the authors of publications that sold the most copies during the year. This year two books receive this honor. The 2011 Best Seller is presented to Daniel H. Anna, PhD, CIH, CSP, editor of The Occupational Environment: Its Evaluation, Control, and Management, 3rd Edition. In 2011, AIHA sold 567 copies of this publication. Also receiving this award are Allan K. Fleeger, CIH, CSP, and Dean L. Lillquist, PhD, CIH, CHMM, authors of the Industrial Hygiene Reference & Study Guide, 3rd Edition. In 2011, AIHA sold 426 copies of this publication. These awards will be presented Tuesday at the Volunteer Recognition Ceremony.

2011 Critics’ Choice Award
This award honors a publication completed in 2011 and evaluated by members of the Publications Committee. The committee selected this publication based on its impact on the profession, originality, and the quality of writing. This year’s recipient is Daniel H. Anna, PhD, CIH, CSP, editor of The Occupational Environment: Its Evaluation, Control, and Management, 3rd Edition. The award will be presented at the Volunteer Recognition Ceremony.

AIHA Local Section Awards
The Michigan Industrial Hygiene Society Best Paper Award was established 1957 to recognize an outstanding publication in the journal of the American Industrial Hygiene Association. In 1989, the MIHS Board of Directors voted to also recognize the authors of the Best Paper in applied industrial hygiene from Applied Occupational and Environmental Hygiene. The journals were combined in 2004 to form the current Journal of Occupational and Environmental Hygiene. MIHS continues to present a Best Paper award to the authors of an outstanding article selected from the Journal. This year’s winner is Development of a Sampling Patch to Measure Dermal Exposures to Monomeric and Polymeric 1,6-Hexamethylene Diisocyanate: A Pilot Study by Jennifer M. Thomasen, Kenneth W. Fent and Leena A. Nylander-French at UNC, Chapel Hill, NC. It will be presented at the Volunteer Recognition Ceremony.

SAVE THE DATE! Registration opens in June.

AIHA Fall Conference 2012
San Antonio, Texas • October 27-31
www.AIHAFallConference.org

Your Source for Scientific, Management & Technical Knowledge

FORMERLY KNOWN AS PCIH

Sponsored by the AIHA® Academy of Industrial Hygiene
AIHA®

2012 Finance Committee Meeting
Wednesday, June 20, 1:30 p.m.–3:00 p.m., ICC, 211

Academic Accreditation Committee Meeting
Sunday, June 17, 6:00 p.m.–9:00 p.m., JW Marriott, 201

Academic SIG Meeting
Wednesday, June 20, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom D

Academy Conference Team Meeting
Monday, June 18, 12:30 p.m.–1:30 p.m., ICC, Conference Room West

Academy of Industrial Hygiene Meeting
Saturday, June 16, 10:00 a.m.–5:00 p.m., JW Marriott, 206

Aerosol Technology Committee Meeting
Tuesday, June 19, 10:00 a.m.–Noon, JW Marriott, White River Ballroom C

Annual Business Meeting
Thursday, June 21, 8:30 a.m.–10:30 a.m., ICC, 120

AIHA-LAP, LLC Accredited Laboratories Forum
Sunday, June 17, 5:30 p.m.–7:30 p.m., JW Marriott, 309

Analytical Accreditation Board Meeting
Saturday, June 16, 8:30 a.m.–5:00 p.m., JW Marriott, 201

ANSI/AIHA Z88 Respiratory Protection Standards Committee Meeting
Wednesday, June 20, 10:00 a.m.–Noon, JW Marriott, 206

ANSI/AIHA Z9 Ventilation System Standards Committee Meeting
Monday, June 18, 2:00 p.m.–4:00 p.m., JW Marriott, 206

ANSI/AIHA Z9.12 Subcommittee Meeting
Monday, June 18, 10:30 a.m.–12:30 p.m., JW Marriott, 206

Biological Monitoring Committee Meeting
Wednesday, June 20, 10:00 a.m.–Noon, JW Marriott, 107

Biosafety and Environmental Microbiology Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom B

Blue Council Meeting
Monday, June 18, 3:30 p.m.–4:30 p.m., JW Marriott, 105

Board of Directors Meeting
Sunday, June 17, 8:00 a.m.–4:30 p.m., JW Marriott, White River Ballroom D

Board of Directors Meeting
Thursday, June 21, 11:00 a.m.–4:00 p.m., JW Marriott, 104

Career and Employment Services Committee Meeting
Wednesday, June 20, 5:00 p.m.–7:00 p.m., JW Marriott, 311

Clandestine Laboratory Working Group Meeting
Tuesday, June 19, 10:00 a.m.–Noon, JW Marriott, 105

Communication and Training Methods Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, 105

Computer Applications Committee Meeting
Wednesday, June 20, 3:30 p.m.–5:30 p.m., JW Marriott, 105

Confined Spaces Committee Meeting
Monday, June 18, 3:30 p.m.–5:30 p.m., JW Marriott, White River Ballroom C

Construction Committee Meeting
Wednesday, June 20, 9:00 a.m.–Noon, JW Marriott, White River Ballroom B

Consultants SIG Business Meeting
Wednesday, June 20, 1:30 p.m.–3:30 p.m., JW Marriott, 102

Continuing Education Committee Business Meeting
Tuesday, June 19, 2:00 p.m.–5:00 p.m., ICC, 211

Control Banding Working Group Meeting
Wednesday, June 20, 3:30 p.m.–5:30 p.m., JW Marriott, 104

EHSMS Task Force
Sunday, June 17, 5:00 p.m.–7:00 p.m., JW Marriott, 307

Engineering Committee Meeting
Tuesday, June 19, 10:00 a.m.–Noon, JW Marriott, 103

Engineering Industry SIG Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, 102

Environmental Issues Committee Meeting
Tuesday, June 19, 10:00 a.m.–Noon, JW Marriott, 102

Environmental Issues SIG Meeting
Monday, June 18, 10:00 a.m.–Noon, JW Marriott, 107

Ergonomics Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, 104

Exposure Assessment Strategies Committee Meeting
Monday, June 18, 10:00 a.m.–Noon, JW Marriott, White River Ballroom B

Fellows SIG Meeting
Wednesday, June 20, 4:00 p.m.–6:00 p.m., JW Marriott, Grand Ballroom 1

Finance Committee Meeting
Monday, June 18, 2:00 p.m.–4:00 p.m., ICC, 211

Future Leaders and Young Members Reception (by invitation)
Sunday, June 17, 7:00 p.m.–10:00 p.m., Cadillac Ranch, 39 W. Jackson Place, Union Station

Government Affairs Update
Wednesday, June 20, 2:00 p.m.–3:30 p.m., ICC, 212

Green Building Working Group Meeting
Wednesday, June 20, 1:30 p.m.–3:30 p.m., JW Marriott, 103

Green Council Meeting
Tuesday, June 19, 2:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom A

Guideline Foundation Board Meeting
Monday, June 18, 11:00 a.m.–1:00 p.m., JW Marriott, 109

Health Care Working Group Meeting
Monday, June 18, 3:30 p.m.–5:30 p.m., JW Marriott, White River Ballroom I

Incident Preparedness and Response Working Group Meeting
Wednesday, June 20, 3:30 p.m.–5:30 p.m., JW Marriott, 107

Indigo Council Meeting
Monday, June 18, 4:30 p.m.–5:30 p.m., JW Marriott, 103

Indoor Environmental Quality Committee
Wednesday, June 20, 10:00 a.m.–Noon, JW Marriott, White River Ballroom C

Indoor Environmental Quality SIG Meeting
Monday, June 18, 3:30 p.m.–5:30 p.m., JW Marriott, 104

International Affairs Committee Meeting
Monday, June 18, 2:00 p.m.–6:00 p.m., JW Marriott, White River Ballroom G

International Reception (by invitation)
Monday, June 18, 6:30 p.m.–8:00 p.m., JW Marriott, White River Ballroom F

International Training/Qualifications in OH Meeting
Tuesday, June 19, 3:30 p.m.–5:00 p.m., ICC, 210

Ionizing Radiation Committee Meeting
Monday, June 18, 10:00 a.m.–Noon, JW Marriott, 105

Joint Industrial Hygiene Ethics Education Committee Meeting
Sunday, June 17, 5:00 p.m.–7:00 p.m., JW Marriott, 308

Laboratory Health and Safety Committee Meeting
Wednesday, June 20, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom C

Law Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, 107

Management Committee Meeting
Monday, June 18, 10:00 a.m.–Noon, JW Marriott, White River Ballroom D

Minority SIG Meeting
Tuesday, June 19, 10:00 a.m.–Noon, JW Marriott, White River Ballroom D

MSA/AIHA Reception
Tuesday, June 19, 10:00 a.m.–Noon, JW Marriott, White River Ballroom 5

Nanotechnology Working Group Meeting
Wednesday, June 20, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom B

Noise Committee Meeting
Monday, June 18, 3:30 p.m.–5:30 p.m., JW Marriott, White River Ballroom D

Nonionizing Radiation Committee Meeting
Monday, June 18, 3:30 p.m.–5:30 p.m., JW Marriott, 106

Occupational and Environmental Medicine Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, 103

Occupational and Environmental Medicine Committee Meeting
Thursday, June 21, 11:00 a.m.–1:00 p.m., JW Marriott, 108

Oil and Gas Working Group
Wednesday, June 20, 10:00 a.m.–Noon, JW Marriott, White River Ballroom D

Orange Council Meeting
Wednesday, June 20, 4:30 p.m.–5:30 p.m., JW Marriott, 105
BOARD AND VOLUNTEER GROUP ACTIVITIES

Past Presidents’ Brunch (by invitation)
Wednesday, June 20, 9:30 a.m.–11:00 a.m., JW Marriott, 309

Permanent Conference Committee Meeting
Wednesday, June 20, 4:00 p.m.–6:00 p.m., ICC, Conference Room West

Pharmaceutical Round Robin Committee Meeting
Wednesday, June 20, 8:00 a.m.–9:30 a.m., JW Marriott, 102

Practice, Standards and Guidelines Committee Meeting
Wednesday, June 20, 10:00 a.m.–Noon, JW Marriott, 103

President’s Reception (by invitation)
Wednesday, June 20, 6:30 p.m.–8:00 p.m., JW Marriott, Grand Ballroom 3

Product Steward Networking Reception
Sunday, June 17, 5:30 p.m.–7:00 p.m., JW Marriott, 303

Protective Clothing and Equipment Committee Meeting
Monday, June 18, 1:30 p.m.–3:30 p.m., JW Marriott, 103

Publications Committee Meeting
Tuesday, June 19, 10:30 a.m.–Noon, ICC, Conference Room West

Real-Time Detection Systems Committee Meeting
Monday, June 18, 10:00 a.m.–11:00 a.m., JW Marriott, 102

Red Council Meeting
Wednesday, June 20, 10:00 a.m.–11:00 a.m., JW Marriott, 102

Respiratory Protection Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom I

Risk Assessment Committee Meeting
Monday, June 18, 1:30 p.m.–3:30 p.m., JW Marriott, 104

Safety Committee Meeting
Monday, June 18, 1:30 p.m.–3:30 p.m., JW Marriott, 102

Sampling and Laboratory Analysis Committee Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom C

Saturday PDC Monitor Meeting
Saturday, June 16, 7:00 a.m.–7:30 a.m., ICC, 108

SDS and Label Authoring Registry SME Team Meeting
Monday, June 18, 12:30 p.m.–2:00 p.m., ICC, 210

Social Concerns Committee Meeting
Wednesday, June 20, 10:00 a.m.–Noon, JW Marriott, 104

Stewardship and Sustainability Committee Meeting
Monday, June 18, 3:30 p.m.–5:30 p.m., JW Marriott, White River Ballroom B

Sunday PDC Monitor Meeting
Sunday, June 17, 7:00 a.m.–7:30 a.m., ICC, 108

Toxicology Committee Meeting
Monday, June 18, 1:30 p.m.–3:30 p.m., JW Marriott, 107

Value Strategy Committee of the Academy Meeting
Monday, June 18, 10:00 a.m.–Noon, JW Marriott, 102

Violet Council Meeting
Wednesday, June 20, 11:00 a.m.–Noon, JW Marriott, 105

Volunteer Group Chairs Meeting
Thursday, June 21, 8:30 a.m.–10:00 a.m., ICC, 210

Volunteer Group Secretaries Orientation Meeting
Thursday, June 21, 10:00 a.m.–11:30 a.m., ICC, 211

Volunteer Recognition Ceremony and Reception
Tuesday, June 19, 4:30 p.m.–6:30 p.m., Marriott Downtown, Marriott Ballroom

WEE Committee
Thursday, June 21, 9:00 a.m.–5:00 p.m., JW Marriott, 105

Yellow Council Meeting
Monday, June 18, 10:00 a.m.–11:00 a.m., JW Marriott, 106

AIHA Local Sections

Local Sections Council Business Meeting
Tuesday, June 19, 1:30 p.m.–3:30 p.m., JW Marriott, White River Ballroom G

Local Sections Officers Training
Thursday, June 21, 10:00 a.m.–11:00 a.m., JW Marriott, 106

Student Local Sections Council Business Meeting
Tuesday, June 19, 11:00 a.m.–1:00 p.m., JW Marriott, White River Ballroom B

AIHA Student and Early Career Professionals

Mentoring Program Networking Event
Monday, June 18, 6:00 p.m.–8:00 p.m., Indianapolis Colts Grille, 110 W. Washington Street

Student Local Sections Council Business Meeting
Tuesday, June 19, 11:00 a.m.–1:00 p.m., JW Marriott, White River Ballroom B

Students and Early Career Professionals Committee Meeting
Tuesday, June 19, 1:00 p.m.–3:00 p.m., JW Marriott, White River Ballroom D

AIHF

AIHF Board of Trustees Meeting
Tuesday, June 19, 3:30 p.m.–5:30 p.m., JW Marriott, 106

AIHF Recognition Reception (by invitation)
Sunday, June 17, 6:00 p.m.–7:00 p.m., Cadillac Ranch, 39 W. Jackson Place, Union Station

JOEH

JOEH Editorial Review Board Meeting
Sunday, June 17, 7:00 p.m.–9:00 p.m., JW Marriott, 203

JOEH LLC Board Meeting
Tuesday, June 19, 4:00 p.m.–6:00 p.m., JW Marriott, 311

ACGIH®

Board of Directors Meeting
Sunday, June 17, 8:00 a.m.–3:00 p.m., JW Marriott, 103

FOHS Board of Trustees Meeting
Monday, June 18, 10:30 a.m.–Noon, ICC, Conference Room East

Membership Reception and Annual Meeting of the Membership
Sunday, June 17, 6:00 p.m.–7:30 p.m., JW Marriott, 306
Stewardship & Sustainability Schedule

AIHA has been the trusted provider of high quality education and professional resources for industrial hygienists and occupational and environmental health and safety professionals for 73 years. AIHA has now expanded its quality programming to meet the needs of product stewards.

Product Steward Program Schedule

Saturday
- PDC 020 Registry Preparation: MSDS and Label Authoring, 8:00 a.m.–5:00 p.m.  » ICC, 202
- PDC 104 GHS and OSHA Hazard Communication Implementation, 8:00 a.m.–5:00 p.m.  » ICC, Wabash 2
- PDC 109 Sustainability Measures and Metrics: Changing the World Through Transparency, 8:00 a.m.–5:00 p.m.  » ICC, 126
- PDC 110 Product Stewardship: Chemical and Consumer Products Risk Management, 8:00 a.m.–5:00 p.m.  » ICC, 212
- PDC 701 ANSI Z10 (2012): Continual Improvement System for Sustainable HSE Management, 8:00 a.m.–5:00 p.m.  » ICC, 240

Sunday
- PDC 408 GHS: The New Hazard Communication, 8:00 a.m.–5:00 p.m.  » ICC, Wabash 2
- PDC 410 Lean Safety, Health, and Sustainability, 8:00 a.m.–5:00 p.m.  » ICC, Wabash 1
- PDC 701 ANSI Z10 (2012): Continual Improvement System for Sustainable HSE Management, 8:00 a.m.–5:00 p.m.  » ICC, 240

Monday
- RT 205 Sustainable Operations and Practices in Lab Environments, 10:30 a.m.–1:00 p.m.  » ICC, 127
- CR 307 The Synergy of Environmental Health and Safety and Sustainability, 2:00 p.m.–3:00 p.m.  » ICC, 202
- CR 309 ISO 14001, Lean and Six Sigma Sustainability Programs, 3:30 p.m.–4:30 p.m.  » ICC, 202

Tuesday
- RT 215 Sustainability Management: Systems, Process, and Culture, 10:30 a.m.–12:30 p.m.  » ICC, 127
- RT 217 GHS—The New OSHA Hazard Communication, 10:30 a.m.–1:00 p.m.  » ICC, 125
- RT 219 Downstream User Obligations Under REACH, 1:30 p.m.–5:30 p.m.  » ICC, 122

Wednesday
- RT 228 Trends in Green Chemistry: From Policy Reform to Innovation, 10:00 a.m.–12:30 p.m.  » ICC, 125
- RT 234 Sustainability/CSR Reporting and the OHS Missing Link, 1:30 p.m.–3:30 p.m.  » ICC, 125
- RT 235 How to Effectively Implement the New Hazcom (GHS)–A Chemical User’s Perspective, 5:00 p.m.–7:30 p.m.  » ICC, Wabash 2

Thursday
- CR 334 Understanding Corporate Social Responsibility: New Opportunities for EHS Professionals, 1:00 p.m.–2:00 p.m.  » ICC, 102

Sponsored by:

Product Stewardship
& Sustainability Network
A Society of Product Stewards
**AT-A-GLANCE:**
Friday and Saturday, June 15 and 16

### Friday, June 15

8:00 a.m.–4:30 p.m.
PDC 001 Certified Safety Professional (CSP) Exam Preparation Workshop
ICC, 203

8:00 a.m.–5:00 p.m.
PDC 002 CHMM Preparation: Essentials of Hazardous Materials Management (EHMM)
ICC, 208
PDC 003 QEP Preparation: Environmental Science, Management, Policy and Environmental Review
ICC, 210

5:00 p.m.–7:00 p.m.
Registration
ICC, Wabash Lobby

### Saturday, June 16

7:00 a.m.–7:30 a.m.
Saturday PDC Monitor Meeting
ICC, 108

7:00 a.m.–5:30 p.m.
Registration
ICC, Wabash Lobby

7:30 a.m.–11:30 a.m.
Speaker Ready Room
ICC, 108

8:00 a.m.–Noon
PDC 201 Introduction to EHS for the Nanotechnology Industry
ICC, 104
PDC 202 Creative Strategies for Adult Learners
ICC, 101
PDC 203 Case Studies on Ethical Decision Making
ICC, 103

8:00 a.m.–4:30 p.m.
PDC 001 Certified Safety Professional (CSP) Exam Preparation Workshop
ICC, 203

8:00 a.m.–5:00 p.m.
PDC 002 CHMM Preparation: Essentials of Hazardous Materials Management (EHMM)
ICC, 208
PDC 003 QEP Preparation: Environmental Science, Management, Policy and Environmental Review
ICC, 210
PDC 010 Train-the-Trainer: 4-Gas Monitor/PID Field Use
ICC, 209
PDC 020 Registry Preparation: MSDS and Label Authoring
ICC, 202
PDC 101 Bayesian Statistics: Overview and Applications in IH Data Interpretation
ICC, Wabash 1
PDC 102 Biological Safety 1: Fundamentals of Biosafety
ICC, 120
PDC 103 Ergonomics Toolkit: Application of Common Ergonomic Assessment Tools
ICC, 121
PDC 104 GHS and OSHA Hazard Communication Implementation
ICC, Wabash 2
PDC 105 Implementing a Combustible Dust Program
ICC, 122
PDC 106 Incorporating Prevention through Design Methods into the Design and Re-design Process
ICC, 123
PDC 109 Sustainability Measures and Metrics: Changing the World Through Transparency
ICC, 126
PDC 110 Product Stewardship: Chemical and Consumer Products Risk Management
ICC, 212
PDC 111 Wellness and Health Education: Connecting IH and Worker Health
ICC, 110
PDC 112 Worker Fatigue Risk Management: Applying New Standards
ICC, 125

PDC 701 ANSI Z10 (2012): Continual Improvement System for Sustainable HSE Management
ICC, 240
PDC 703 NFPA 70E (2012): Basic Electrical Safety/Arc Flash
ICC, 241
PDC 704 Exposure Assessment Strategies and Statistics
ICC, 242
PDC 705 Exposure Modeling: Using Mathematical Models to Estimate Exposure
ICC, 243
PDC 707 The Art of Safety: Mastering Communication Techniques
ICC, 244
PDC 708 Introduction to the Value Strategy: A Process for Promoting Health and Safety Interventions
ICC, 245

12:30 p.m.–5:30 p.m.
Speaker Ready Room
ICC, 108

1:00 p.m.–5:00 p.m.
PDC 301 Defining and Evaluating Data Quality for Exposure Assessment
ICC, 104
PDC 302 Emergency Response: Application of Online Resources
ICC, 101
PDC 303 Applied Concepts of Nanotechnology for the EHS Professional
ICC, 102
PDC 304 Noise Exposure Assessment: Sampling Strategy and Data Acquisition
ICC, 103

AIHA®
8:30 a.m.–5:00 p.m.
Analytical Accreditation Board Meeting
JW Marriott, 201

10:00 a.m.–5:00 p.m.
Academy of Industrial Hygiene Meeting
JW Marriott, 206

**Calling all First Time Attendees!**
Join us for an AIHce Orientation on Monday, 7:00 a.m.–8:00 a.m., and learn how to get the most out of your time spent at the conference.
Sunday, June 17

7:00 a.m.–7:30 a.m.
Sunday PDC Monitor Meeting
ICC, 108

7:00 a.m.–5:30 p.m.
Registration
ICC, Wabash Lobby

7:30 a.m.–11:30 a.m.
Speaker Ready Room
ICC, 108

7:30 a.m.–4:00 p.m.
Volunteer Collaboration Café
ICC, Crossroads Lobby

8:00 a.m.–Noon
PDC 501 Particle Size–Selective Aerosol Sampling: Respirable, Thoracic, Inhalable
ICC, 102
PDC 502 Case Studies on Ethical Decision Making
ICC, 103
PDC 503 Smart Devices and the EHS Professional
ICC, 104

8:00 a.m.–4:30 p.m.
PDC 001 Certified Safety Professional (CSP) Exam Preparation Workshop
ICC, 203

8:00 a.m.–5:00 p.m.
PDC 002 CHMM Preparation: Essentials of Hazardous Materials Management (EHMM)
ICC, 208
PDC 010 Train-the-Trainer: 4-Gas Monitor/PID
ICC, 209
PDC 411 Methods and Applications for Exposure Assessment Chemical Detection in Real Time
ICC, 124
PDC 412 Mold Recognition: Effective Sampling Strategies and Results Interpretation
ICC, 123
PDC 413 Noise Control Engineering
ICC, 143
PDC 414 Nonionizing Radiation, Hands–on Measurements
ICC, 205
PDC 415 Ramping Up Your Hearing Protection and Jazzing Up Your Hearing Conservation
ICC, 145
PDC 416 REACH: A Risk Management Strategy
ICC, 128
PDC 417 Surface Disinfection for Infection Prevention
ICC, 142
PDC 418 Surface Sampling for Metals: Issues, Methods, and Strategy
ICC, 141
PDC 420 Vapor Intrusion Investigation and Mitigation: Advances in Assessment and Practice
ICC, 140
PDC 421 Welding: IH’s Latest Challenge
ICC, 125
PDC 422 Writing Effective IH Reports
ICC, 211
PDC 701 ANSI Z10 (2012): Continual Improvement System for Sustainable HSE Management
ICC, 240
PDC 703 NFPA 70E (2012): Basic Electrical Safety/ Arc Flash
ICC, 241
PDC 704 Exposure Assessment Strategies and Statistics
ICC, 242
PDC 705 Exposure Modeling: Using Mathematical Models to Estimate Exposure
ICC, 243
PDC 707 The Art of Safety: Mastering Communication Techniques
ICC, 244
PDC 708 Introduction to the Value Strategy: A Process for Promoting Health and Safety Interventions
ICC, 245

12:30 p.m.–5:30 p.m.
Speaker Ready Room
ICC, 108

1:00 p.m.–5:00 p.m.
PDC 601 CBRN Respirator Selection, Use, and Maintenance Guidelines
ICC, 110
PDC 602 Disaster Responder: Protection for Workers in Hot Environments
ICC, 102
PDC 603 Exposure Assessment Using Whole–Air Sampling Techniques
ICC, 104
PDC 604 Strategies for Managing Odor Annoyance in the Workplace
ICC, 127

2:30 p.m.–6:00 p.m.
AIHce Mobile App Help Desk
ICC, Wabash Lobby

ACGIH®
8:00 a.m.–3:00 p.m.
ACGIH Board of Directors Meeting
JW Marriott, 103

6:00 p.m.–7:30 p.m.
ACGIH Membership Reception and Annual Meeting of the Membership
JW Marriott, 306

AIHA®
8:00 a.m.–4:30 p.m.
AIHA Board of Directors Meeting
JW Marriott, White River Ballroom D

Noon–5:00 p.m.
AIHA Registry Programs Competency Assessments
JW Marriott, 101

5:00 p.m.–7:00 p.m.
EHMS Task Force
JW Marriott, 307

Joint Industrial Hygiene Ethics Education Committee Meeting
JW Marriott, 308

5:30 p.m.–7:00 p.m.
Product Stewardship & Sustainability Network Reception
JW Marriott, 303

5:30 p.m.–7:30 p.m.
AIHA – LAP , LCC Accredited Laboratories Forum
JW Marriott, 309

6:00 p.m.–9:00 p.m.
Academic Accreditation Committee Meeting
JW Marriott, 201

7:00 p.m.–10:00 p.m.
Future Leaders and Young Members Reception (by invitation)
Cadillac Ranch, 39 West Jackson Place, Union Station

Note Meeting Rooms ...
ICC = Indiana Convention Center
AT-A-GLANCE: Sunday, June 17

JOEH
7:00 p.m.–9:00 p.m.
JOEH Editorial Review Board Meeting
JW Marriott, 203

AIHF
6:00 p.m.–7:00 p.m.
AIHF Recognition Reception (Invitation Only)
Cadillac Ranch, 39 West Jackson Place, Union Station

Ancillary
7:30 a.m.–5:00 p.m.
ABIH Board Meeting
JW Marriott, 105
8:00 a.m.–5:00 p.m.
Board of Certification in Professional Ergonomics (BCPE) Certification Exam
JW Marriott, 102
9:30 a.m.–6:30 p.m.
IOHA Board Meeting (by invitation)
JW Marriott, 104

AIHce cannot guarantee the appearance of all presenters listed in this program. We regret any disappointment if a particular speaker is unable to present.

AIHce 2012 Blood Drive
ICC, 110

You’re the type we’re looking for!

Monday, June 18 and Tuesday, June 19
9:00 a.m.–2:00 p.m.
Wednesday, June 20
9:00 a.m.–1:00 p.m.

Giving blood is safe, simple and takes less than an hour. Requirements are minimal.

Identification required.

All donors are automatically entered into a daily drawing for cash prizes of $100, $50 and $25. Swipe your Expocard at the door.

A special Grand Prize will be awarded to one lucky individual if total donations exceed 129 pints — the standing record donated at AIHce 2007. Winners will be notified by email.
Real-Time Solutions for Industrial Hygiene Professionals

The full line of TSI health and safety instruments are designed to accurately and reliably measure a wide variety of industrial hygiene parameters.

DUSTTrak™ & SIDEPAK™
Aerosol Monitors
- Battery operated, data-logging, light scattering laser photometers
- Ideal for personal exposure (AM510) and workplace (DustTrak) monitoring
- Real-time mass concentration readings
- Measures aerosol contaminants such as dust, smoke, fumes and mists

PORTACOUNT® PRO and PRO+
Respirator Fit Testers
- Real-time fit factor for training on proper donning procedures and ensuring fit prior to testing
- Easy, stand alone operation with touch screen interface
- OSHA-compliant to fit test all types of respirators
- Trustworthy results with a quantifiable fit factor reading

Primary Calibrators
- Volumetric flow rate displayed continuously for real-time adjustments
- Battery powered, compact and lightweight
- Field portable—use the same primary calibrator for adjustment, calibration and periodic checks
- Accurate to +/- 2% of reading

VISIT TSI at AIHce 2012, TSI booth #700.
It’s All Happening at AIHA!

Booth #922

Take advantage of 15% off all AIHA publications and education, including these new titles debuting at AIHce:

- 2012 ERPG/WEEL Handbook
- 2012 ERPG Update Set
- 2012 Emergency Response Guidebook

Don’t want to carry heavy books around?
Have your purchase shipped — FOR FREE!

PLUS
Learn more about the Product Stewardship & Sustainability Network;
Find out if you’re a dart-throwing monkey;
Experience the convenience and portability of PDF publications;
Take a sneak-peek at upcoming AIHA conferences;
...And much more!

ALL AT THE AIHA BOOTH!
It’s the place to be!
## Monday, June 18

### Monday, June 18

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m.–8:00 a.m.</td>
<td>AIHce First Time Attendee Orientation</td>
<td>ICC, 202</td>
</tr>
<tr>
<td>7:00 a.m.–5:30 p.m.</td>
<td>Registration</td>
<td>ICC, Wabash Lobby</td>
</tr>
<tr>
<td>7:30 a.m.–11:30 a.m.</td>
<td>Speaker Ready Room</td>
<td>ICC, 108</td>
</tr>
<tr>
<td>7:30 a.m.–4:00 p.m.</td>
<td>Volunteer Collaboration Café</td>
<td>ICC, Crossroads Lobby</td>
</tr>
<tr>
<td>7:30 a.m.–5:00 p.m.</td>
<td>Press Room</td>
<td>ICC, 112</td>
</tr>
</tbody>
</table>

### AT-A-GLANCE: Monday, June 18

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 a.m.–11:00 a.m.</td>
<td>CR 301 Innovative Approaches to Eliminating Accidents and Fatalities Inside Confined Spaces and During Use of Inert Gases at Construction Sites</td>
<td>ICC, 120</td>
</tr>
<tr>
<td>10:00 a.m.–11:30 a.m.</td>
<td>CR 302 Mission Possible: Creating Top Gun Safety Leaders</td>
<td>ICC, Wabash 3</td>
</tr>
<tr>
<td>10:00 a.m.–11:30 a.m.</td>
<td>Welcome Brunch, “A Hoosier Hello” (Admission by ticket)</td>
<td>JW Marriott, Grand Ballroom 4</td>
</tr>
<tr>
<td>10:00 a.m.–2:00 p.m.</td>
<td>Exhibitor Product Demos and Presentations</td>
<td>Expo Theater, Hall C</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>Ask the Expert With Dr. David Michaels, PhD, MPH</td>
<td>ICC, Wabash 1</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>PO 101 Exposure Assessment Methodologies – Part 1</td>
<td>ICC, 240</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>PO 102 Indoor Environmental Quality – I</td>
<td>ICC, 122</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>PO 103 Laboratories, Analytical and Research</td>
<td>ICC, 202</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>RT 201 Mock OSHRC Hearing: Multi–Employer Work Site Liability for Health and Safety Consultants</td>
<td>ICC, Wabash 2</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>RT 202 Nonionizing Radiation in Health Care Settings</td>
<td>ICC, 205</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>RT 203 What is 85/3, and Why Noise Is More Hazardous Than You Think</td>
<td>ICC, 125</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>RT 204 Oh, The Places You’ll Go! Perspectives on IH Career Paths</td>
<td>ICC, 122</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>RT 205 Sustainable Operations and Practices in Lab Environments</td>
<td>ICC, 127</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>RT 206 Ask NIOSH Experts: Practical Advice and Lessons from Nanotechnology Field Assessments</td>
<td>ICC, 243</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>CR 303 Gearing up for the Revised NFPA 70E (2012 Edition) Electrical Safety/Arc Flash Requirements</td>
<td>ICC, 103</td>
</tr>
<tr>
<td>10:30 a.m.–12:30 p.m.</td>
<td>CR 304 TOR – A Better Way to Investigate Accidents</td>
<td>ICC, Wabash 3</td>
</tr>
</tbody>
</table>

### Visit the Expo!

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m.–4:00 p.m.</td>
<td>CareerAdvantage Development Fair 2012</td>
<td>ICC, 105</td>
</tr>
<tr>
<td>9:00 a.m.–4:00 p.m.</td>
<td>Volunteer Red Carpet Club</td>
<td>ICC, 111</td>
</tr>
<tr>
<td>9:00 a.m.–2:00 p.m.</td>
<td>Annual Blood Drive</td>
<td>ICC, 110</td>
</tr>
<tr>
<td>9:00 a.m.–5:30 p.m.</td>
<td>Social Tour: Indianapolis Indeed!</td>
<td>JW Marriott, Bus departs Event Entrance, Level 1</td>
</tr>
<tr>
<td>12:30 p.m.–2:00 p.m.</td>
<td>IH Mysteries Workshop</td>
<td>ICC, 212</td>
</tr>
<tr>
<td>12:30 p.m.–5:30 p.m.</td>
<td>CR 305 Your Supplier Communication Program for Risk Management</td>
<td>ICC, 120</td>
</tr>
<tr>
<td>1:00 p.m.–2:00 p.m.</td>
<td>Jeffrey S. Lee Lecture</td>
<td>ICC, 122</td>
</tr>
<tr>
<td>1:30 p.m.–4:30 p.m.</td>
<td>TT–01 Eli Lilly &amp; Company</td>
<td>ICC, Expo, Hall B</td>
</tr>
<tr>
<td>2:00 p.m.–3:00 p.m.</td>
<td>CR 306 The Criticality of Understanding Potential</td>
<td>ICC, 103</td>
</tr>
<tr>
<td>2:00 p.m.–4:30 p.m.</td>
<td>CR 307 The Synergy of Environmental Health and Safety and Sustainability</td>
<td>ICC, 202</td>
</tr>
<tr>
<td>2:00 p.m.–5:00 p.m.</td>
<td>RT 208 Leaders and Legends in Ergonomic Modeling</td>
<td>ICC, Wabash 2</td>
</tr>
<tr>
<td>2:00 p.m.–4:40 p.m.</td>
<td>PO 104 Exposure Assessment Standards and Challenges</td>
<td>ICC, 120</td>
</tr>
<tr>
<td>2:00 p.m.–5:00 p.m.</td>
<td>PO 105 Nanotechnology: Assessment and Control</td>
<td>ICC, 240</td>
</tr>
<tr>
<td>2:00 p.m.–5:00 p.m.</td>
<td>PO 106 Socio–Legal and Regulatory Aspects of IH Practice</td>
<td>ICC, Wabash 1</td>
</tr>
</tbody>
</table>

### Poster Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 a.m.–5:30 p.m.</td>
<td>Social Tour: Indianapolis Indeed!</td>
<td>JW Marriott, Bus departs Event Entrance, Level 1</td>
</tr>
</tbody>
</table>

### Note Meeting Rooms ...

**ICC = Indiana Convention Center**
### AT-A-GLANCE: Monday, June 18

#### 2:00 p.m.–5:10 p.m.
- **PO 107 Aerosols**  
  *ICC, Wabash 3*
- **RT 212 Implementing Engineering Controls in Construction**  
  *ICC, 243*
- **SS 001 Science Symposium: Closer to Spock’s Tricorder — The Latest in Real-Time Detection**  
  *ICC, 205*

#### 3:30 p.m.–4:30 p.m.
- **CR 308 How to Build a Health and Safety Culture through PDCA (Plan–Do–Check–Act) Approach**  
  *ICC, 103*
- **CR 309 ISO 14001, Lean and Six Sigma Sustainability Programs**  
  *ICC, 202*

#### 4:00 p.m.–5:30 p.m.
- **Expo Opening Cocktail Reception**  
  *ICC, Expo, Halls A–E*
  
  This is the perfect opportunity to meet this year’s exhibitors, browse the technical posters, visit with colleagues and learn about new products and services from AIHA® and ACGIH®.

#### ACGIH®
- **10:30 a.m.–Noon**
  - FOHS Board of Trustees Meeting  
    *ICC, Conference Room East*

#### AIHA®
- **8:00 a.m.–1:00 p.m.**
  - AIHA Registry Programs Competency Assessments  
    *JW Marriott, 101*
- **10:00 a.m.–11:00 a.m.**
  - Yellow Council Meeting  
    *JW Marriott, 106*
- **10:00 a.m.–Noon**
  - Environmental Issues SIG Meeting  
    *JW Marriott, 107*

#### Ancillary
- **4:30 p.m.–6:30 p.m.**
  - University of California, Berkeley — School of Public Health  
    *JW Marriott, 301*
- **5:00 p.m.–9:00 p.m.**
  - Department of Energy (DOE) and DOE Contractor Industrial Hygiene Meeting  
    *JW Marriott, 303*
- **5:30 p.m.–7:30 p.m.**
  - University of Minnesota School of Public Health’s Industrial Hygiene Reunion  
    *Harry & Izzy’s, 153 S. Illinois Street*
- **5:30 p.m.–8:30 p.m.**
  - EMSL Client Appreciation Reception (by invitation)  
    *Indiana State Museum*
- **6:00 p.m.–8:00 p.m.**
  - Harvard University Reception  
    *JW Marriott, 308*
- **6:30 p.m.–8:00 p.m.**
  - Johns Hopkins University Reception  
    *JW Marriott, 306*

---

### First Time Attending AIHce?

**Join us for an AIHce orientation session.**

7:00 a.m.–8:00 a.m.  
*ICC, 202*

- Meet other first-time conference-goers
- Learn how to effectively use the Final Program as your conference guidebook
- Discover the best networking events that can lead to meeting valuable contacts
- Learn about the on-site resources and what they can do for you
- Hear tips on how to maximize your overall conference experience
Monday, June 18

OPENING GENERAL SESSION: 8:00 A.M.–9:30 A.M.
ICC, SAGAMORE BALLROOM

The Future: Life Sciences and the Knowledge Economy
Juan Enriquez, Co-founder, Synthetic Genomics Inc., Managing Director, Excel Venture Management, Boston, MA

Juan Enriquez is a unique individual who lives in the future and works on the cutting edge of discovery. His company, Synthetic Genomics, is developing breakthrough genomic-driven solutions for major global issues.


The genetic revolution and other technologies will have unprecedented political, ethical, economic, and financial impacts on almost every workplace. Gene data is already transforming how several major industries do business. At AIHce, Enriquez maps out how these extraordinary discoveries and applications will impact OEHS professionals.

10:00 a.m.

iNet DS Mobile Solution, Industrial Scientific Corporation
The iNet DS Mobile Solution is the complete wireless solution for instrument management. The iNet DS Mobile bundle allows instruments to be docked, tested, and calibrated with data sent to iNet Control from any location, any time, with nothing more than a simple 3G wireless connection. Attendees will learn how to gain the advantages of iNet to enhance their gas detection program in even the most remote monitoring applications.

10:30 a.m.

PhaseCore Heat Activated Cooling Products: SWEDE CarbonX Vest in Action, First Line Technology, LLC
SWEDE CarbonX Cooling Vests are the best solution to reduce and combat heat stress in electrical and fire hazard environments where flammability protection is required. CarbonX Cooling Vests use PhaseCore, a phase change material, to provide a cooling effect to the body’s core, and CarbonX is flame retardant.

11:30 a.m.

Learn How to Perform Safety Inspections Faster and More Efficiently with ChemSW’s New SI Live™ Solution, ChemSW Inc.
New safety inspection solutions allow you to use a mobile device to perform data acquisition, eliminate transcription errors and automate reporting. Inspect, track, and report anything at your site. Learn how ChemSW’s unique new solution lets you manage inspection programs online; use common mobile devices such as iPhones®, iPads®, and, Androids™ to record your inspection observations; and then upload the data automatically into the SI Live database for reporting. It’s fast, simple, and accurate.

Noon

The Model DX4040 portable FTIR gas analyzer can identify “unknown” gases within minutes of arriving at the site by searching the NIST/EPA© reference library of over 5000 gases. Measuring 25 gases simultaneously at sub-ppm levels, the DX4040 is also a cost-effective solution for performing workplace exposure assessments at hospitals, chemical plants, remediation sites, and universities.

12:30 p.m.

NEW! 3M™ Sound Examiner SE-400 Sound Level Meter with NEW! 3M Detection Management Software DMS, Quest Technologies, a 3M company
The Sound Examiner SE-400 series of sound level meters are engineered to accurately measure noise levels in highly variable environments. These advanced instruments compute the average sound pressure level (Leq/Lavg) over run time, helping you to more accurately assess occupational and environmental noise levels. The Sound Examiner uses 3M Detection Management Software DMS. A DMS CD is shipped free of charge with SE-400 Series meters and all new 3M Quest data logging instruments purchased through June 30, 2012.
CR 301
Innovative Approaches to Eliminating Accidents and Fatalities Inside Confined Spaces and During Use of Inert Gases at Construction Sites
10:00 a.m.–11:00 a.m. » ICC, 120
Presenter: C. Penniahill, ExxonMobil, Singapore.
Monitor: F. Boachie, University of Cincinnati, Cincinnati, OH.
Program will present unique approaches to the management of inert gases and confined spaces at civil/structural construction sites. Accidents and fatalities within confined and enclosed spaces frequently result from the presence of a hazardous atmosphere and a lack of hazard awareness and field recognition. Innovative training, use of field equipment, risk-based review of work activities, and application of field assessment process will be reviewed. The author is currently working at an international construction site with 22,000+ workers.

PO 101
Exposure Assessment Methodologies — Part 1
10:30 a.m.–10:50 a.m.
SR-101-1 Occupational Exposure Modeling Uncertainty Investigation with Monte Carlo Simulation. K. Czarnocki, B. Wit, E. Czarnocka, Lublin University of Technology, Lublin, Poland; J. Nowak, A. Kuczmow, John Paul II Catholic University, Lublin, Poland; S. Mankiewicz, St. John’s Regional Oncology Center, Lublin, Poland.

CR 302
Mission Possible: Creating Top Gun Safety Leaders
10:00 a.m.–11:00 a.m. » ICC, Wabash 3
Presenter: C. Brudecki, Navarro Research and Engineering, Inc., Oak Ridge, TN.
The Mission Possible: ZERO Program is a surefire way to achieve worker participation in your safety program. You can learn to create, maintain, and improve your safety culture and performance metrics by teaching personnel to become part of the injury prevention team. Personnel take ownership of the safety program and make a personal commitment to become safety leaders. You will learn about “Wingfest,” becoming a good wingman, and, ultimately, becoming a top gun safety leader.

PO 102
Indoor Environmental Quality — I
10:30 a.m.–10:50 a.m.

Special Session
Ask the Expert With Dr. David Michaels, PhD, MPH
10:30 a.m.–12:30 p.m. » ICC, Wabash 1
Moderator: A. Fleeger, ExxonMobil Chemical Company, Houston, TX.
Monitor: M. Finucane, University of Pennsylvania, Philadelphia, PA.
Dr. David Michaels, Assistant Secretary of Labor for OSHA, will provide an update on OSHA activities and then open the floor to questions from the audience.

PO 103
Laboratories, Analytical and Research
10:30 a.m.–10:50 a.m.

10:50 a.m.–11:10 a.m.
CS-102-2 An Examination of the EPA’s Environmental Relative Moldiness Index (ERMI). P. Rey, J. Hicks, Exponent, Inc., Oakland, CA.
CS-102-3 What Levels of Culturable Fungi and Bacteria in Carpet Dust Are Reasonable? K. Candee, D. Havick, EMC Insurance Companies, Des Moines, IA.
CS-102-4 Variables Affecting the Interpretation of Dust Sampling Data. H. Burge, EMLab P&K, San Bruno, CA.
CS-102-5 Evaluation of Elevator Shafts as a Pathway for Fungal Spores and Particles to Enter a Hospital Housing Immuno-compromised Patients. M. Berkheiser, University of Texas, Houston, TX.
CS-102-6 Bioaerosol and Related Environmental Factors at University Laboratories. S. Hwang, D. Park, Y. Ko, C. Hwang, Seoul National University, Seoul, Republic of Korea; L. Lee, Inha University, Incheon, Republic of Korea.

Please turn off cell phones in all sessions.
RT 201
Mock OSHRC Hearing: Multi-Employer Work Site Liability for Health and Safety Consultants
10:30 a.m.–12:30 p.m. » ICC, Wabash 2
Arranger: B. Miller, North Wind, Inc., Idaho Falls, ID.
Moderator: S. Celly, Celly Services, Inc., Long Beach, CA.

On completion, participant will be able to: • Define the creating, exposing, correcting, and controlling employer as it relates to hazards at a multi-employee work site • Understand the controlling employer’s responsibility to exercise reasonable care to prevent and detect violations on the multi-employer work site • Review through a mock trial case and exercise, examples of controlling employer’s liability with respect to their subcontractor’s violations under the Occupational Health and Safety (OSHA) CPL 2-0.124, Multi-Employer Citation Policy • Understand the Occupational Safety and Health Review Commission (OSHRC) “Solis v. Summit Contractors, Inc.” decision as well as the U.S. Court of Appeals for the Eighth Circuit decision that vacated, as it existed for over 30 years, the multi-employer citation policy that allowed OSHA to issue a citation to any employer who was the creating employer (creating the hazardous condition), correcting employer (responsible for correcting a hazard, i.e., given the responsibility of installing and/or maintaining particular safety/health equipment or devices), controlling employer (has general supervisory authority over the work site, including the power to correct safety and health violations or require others to correct them), or the exposing employer (employer whose employees are exposed to the hazard). As a result, general contractors on construction sites could receive OSHA citations as a controlling employer for a subcontractor’s violation even if none of the general contractor’s employees was exposed to the cited safety hazard and the general contractor neither created the hazard nor was required to correct it. This hybrid mock Occupational Safety and Health Review Commission (OSHRC) hearing explores the complex issues that may arise from a multi-employer work site with an OSHA Compliance officer and the construction business owner cited for OSHA violations acting as testifying witness. Attorneys acting in the roles of both Secretary of Labor and defense attorneys direct and cross-examine the defendant and plaintiff witnesses. Workshop attendees serve as OSHRC judges and determine the hearing decision. Following the hearing, key multi-employer legal issues are discussed and related exercises completed, along with participants’ questions and open discussion of OSHA multi-employer citation topic.

  B. Miller, North Wind, Inc., Idaho Falls, ID.
  S. Celly, Celly Services, Inc., Long Beach, CA.
- Mock OSHRC Hearing: Multi-Employer Work Site Liability for Health and Safety Consultants and Employers (OSHA Officer).
  E. Erikson, Guida, Slavich & Flores, Dallas, TX.
  S. Sherman, U.S. Department of State, Washington, DC.

RT 202
Nonionizing Radiation in Health Care Settings
10:30 a.m.–12:30 p.m. » ICC, 205
Arranger and Moderator: S. Shindel, Intel Corporation, Chandler, AZ.

Use of nonionizing radiation is increasing in health care settings. NIR is used for therapeutic and diagnostic purposes, such as lasers used in surgery and dental procedures. In addition, exposure to NIR is a concern to patients with embedded medical devices who may need to avoid high EMF areas or change work practices. This roundtable will address several topics relevant to IHs in general practice and in the health care industry.

- Lasers in Health Care, Hazards and Controls. K. Merrill, Mainthia Technology, Inc., Virginia Beach, VA.
- Electromagnetic Fields: How They Affect Employees with a Pacemaker or Defibrillator. S. Bagley, EMF Testing USA, Fishers, IN.
- Optical Radiation Hazards in Dental Care. M. Phillips, K. Graziano, University of Oklahoma, Oklahoma City, OK.
- Evaluation and Control of Germicidal Ultrasound Radiation in Health Care. T. Fuller, Illinois State University, Bloomington, IL.

RT 203
What Is 85/3, and Why Noise Is More Hazardous Than You Think
10:30 a.m.–12:30 p.m. » ICC, 125
Arranger: J. Ratliff, Kanto Corporation, Portland, OR.

There is a movement nationally for companies to adopt the concept of an 85 dBA criterion level for 8-hour exposures, and a 3 dBA doubling rate. This session will explore these concepts, which are used worldwide except in the USA, and new research on why noise is more hazardous than you think. Hearing conservation programs are set up on baseline and annual audiograms, but new research shows that even with no decrement in an audiogram, there can be nerve damage that manifests itself in other ways. By incorporating the 85/3 concept, the work force will be substantially more protected from occupational noise exposure.

- What Is the 85/3 Concept? J. Ratliff, Kanto Corporation, Portland, OR.
- When the Exchange Rate Makes a Difference — Noise Monitoring of Traffic Police in Kathmandu Valley, Nepal. W. Carter, University of Findlay, Findlay, OH.
- Adding Insult to Injury: Cochlear Nerve Degeneration After “Temporary” Noise-Induced Hearing Loss. S. Kujawa, Harvard University, Boston, MA.
- The 85/3 Concept — What We Hope to Accomplish. W. Clark, Washington University, St. Louis, MO.

RT 204
Oh, the Places You’ll Go! Perspectives on IH Career Paths
10:30 a.m.–1:00 p.m. » ICC, 102
Arranger: C. Hovde, Caterpillar, Roseville, MN.
Monitors: T. Huynh, University of Minnesota, Minneapolis, MN; T. Carmody, 3M, St. Paul, MN.

Young industrial hygienists are entering the career with many great opportunities to make a positive difference in the lives of workers. The problem they face is deciding what direction to go and how that direction will impact future career options. While the various options are exciting and challenging, they may not be the right fit for everyone. The speakers will give examples and practical tips on the culture, opportunities, benefits/drawbacks of their five organizations to help young hygienists make informed decisions about prospective career paths. Panel members will include government enforcement, NASA, loss control, consulting, and industry. Attendees will gain ideas on where to start their careers or where they want to go next and will also be given the opportunity to share success.
stories with students and early career professionals in attendance.

- OSHA: Navigating Through Challenges; Diverse Opportunities on How You Can Make a Positive Impact. C. Lorenzo, OSHA, Denver, CO.
- Assessing Risk of Loss by Focusing on Analysis of Risks Rather Than a Specific Incident. D. Boyd, Liberty Mutual, Wausau, WI.

RT 205
Sustainable Operations and Practices in Lab Environments
10:30 a.m.–1:00 p.m. » ICC, 127
Arrangers: M. Ochs, Arizona State University, Tempe, AZ; A. Lehocky, University of Georgia, Atlanta, GA.
Moderator: A. Lehocky, University of Georgia, Atlanta, GA.
Monitors: J. Lemanski, Arizona State University, Tempe, AZ; J. Peters, Brookhaven National Lab, Upton, NY.

How should your organization decide which measures to take for resource conservation of a laboratory facility? What roles can the industrial hygienist take in determining and promoting safe and sustainable practices? This session will provide information on these topics and include ideas to consider at your facility. Laboratory environments present a host of opportunities and challenges for energy and resource conservation. Typical laboratories may consume 5–7 times more energy than traditional office buildings. To assist in addressing how to deal with increasing energy costs and energy consumption, employers must design increasingly efficient laboratory buildings. We will examine available technologies and share operational components for managing a laboratory conservation program.

- Implementation of Sustainable Lab Programs. M. Ochs, Arizona State University, Tempe, AZ.
- Quantifying Demand-Based Control’s Substantial Lab Building Energy Reduction. G. Sharp, Aircuity, Inc., Newton, MD.
- Laboratory Sustainability in a Corporate Environment. H. Partlowe, Henkel/Dial, Scottsdale, AZ.
- Evolution of the Fume Hoods. L. Savage, Labconco Corporation, Kansas City, MO.

RT 206
Ask NIOSH Experts: Practical Advice and Lessons from Nanotechnology Field Assessments
10:30 a.m.–1:00 p.m. » ICC, 243
Arranger and Moderator: C. Geraci, NIOSH, Cincinnati, OH.
Monitors: C. Beaucham, C. Sparks, NIOSH, Cincinnati, OH.

NIOSH continues as the lead agency in the U.S. responsible for conducting research and making occupational safety and health recommendations for nanotechnology. Knowledge gained from field investigations has served as the basis for developing guidance for evaluating and controlling worker exposure to nanomaterials. Since 2005, NIOSH has provided the AIHA membership with updates on research results. In response to strong feedback from the 2011 AIHce session, NIOSH will modify the format for 2012 to have a minimum of prepared presentations to maximize the opportunity for open discussion. The focus will be on practical approaches based on lessons learned from conducting field investigations over the past 24 months. Emphasis will be on how to use key information and research results to conduct industrial hygiene assessments of nanomaterial processes. Information will be drawn from the following NIOSH research areas:

- Nanomaterials Toxicology — Key Results from Inhalation and in Vitro Studies. V. Castranova, NIOSH, Morgantown, WV.
- Exposure Assessments — Status of the NIOSH Carbon Nanotube Industrywide Study. M. Dahm, NIOSH, Cincinnati, OH.
- Exposure Assessments — Update on Strategic Approaches. K. Martinez, NIOSH, Cincinnati, OH.
- Risk Assessment Approaches for Nanomaterials. D. Heidel, NIOSH, Cincinnati, OH.
- Engineering Controls for Nanomaterial Processes and Tasks. K. Dunn, NIOSH, Cincinnati, OH.
- Advances in Personal Protective Equipment, Clothing, and Respiratory Protection. R. Shaffer, NIOSH, Pittsburgh, PA.
- An Overview of the NIOSH Nanotechnology Strategic Plan. L. Hodson, NIOSH, Cincinnati, OH.

CR 303
11:30 a.m.–12:30 p.m. » ICC, 103

NFPA 70E (Standard for Electrical Safety in the Workplace) is a global consensus that has provided guidance on worker safety from shock and arc flash hazards since 1976. In late 2011, NFPA released the 2012 Edition of NFPA 70E. The 2012 standard includes revisions to hazard risk category tables, new PPE requirements, frequency requirements for electrical safety program auditing and qualified person training, and revisions to electrical safety program implementation. The revised standard with comparisons to previous editions is outlined.

CR 304
TOR — A Better Way To Investigate Accidents
11:30 a.m.–12:30 p.m. » ICC, Wabash 3
Presenter: D. Weber, Safety Awakenings LLC, Schofield, WI. Monitor: C. Linder, St. Louis, MO.

TOR (Technic of Operations Review) Analysis is a management tool used to identify operational errors that lead to accidents. Originally developed in 1973 by D.A. Weaver, TOR has been used to investigate catastrophes, injury accidents, occupational illnesses, and environmental spills. Recently, the presenter has been working with D. A. Weaver to develop an updated version of TOR. Attendees will learn the 2012 TOR analysis process and will receive the instructions and forms needed to apply it in their workplace.

CR 305
Your Supplier Communication Program for Risk Management
11:30 a.m.–12:30 p.m. » ICC, 120
Presenters: K. Bubeck, Ithos Global, Troy, NY; J. Hellerstein, MeadWestVaco Packaging, Richmond, NH.

Gathering data on chemicals in product ingredients is one thing. The next step is to then take that chemical-level product data and screen it against known toxins; suspected toxins; and all environmental, health, and safety regulatory lists from all parts of the globe. What’s the best way to do it?
**Exhibitor Product Demos and Presentations**

1:00 p.m.  
**A New Active Dry Sampler for Low Level Vapor Phase and Particulate Isocyanate Measurements, Supelco, Supelco/Sigma-Aldrich**

Supelco will demonstrate a new active sampling device for low level measurement of diisocyanates. The device is a two-part impregnated filter sampling system that does not require any field reagent addition or field desorption. The device can be used with most sampling pumps. It offers the ease of use of traditional active sampling devices and the ultra-sensitivity of LC-MS/MS and LC-MS instrumentation. Both the sampling device and the analytical protocol will be presented.

1:30 p.m.  
**Portable, Continuous Measurement Formaldehyde Monitor for IAQ Applications, GrayWolf Sensing Solutions**

Introducing GrayWolf’s FM-801 formaldehyde meter which optically detects the discoloration of a chemically impregnated porous glass cartridge when exposed to HCHO. It “re-zeros” after each 30 minute test. Range is <20ppb up to 1ppm. For low-range measurements, typical of IAQ applications, a single cartridge may be used continuously up to 500 hours. This presentation will also show how the FM-801 may be used as a stand-along display/logger, or interfaced into GrayWolf’s AdvancedSense and DirectSense multi-parameter IH loggers.

**Workshop**

**IH Mysteries Workshop**  
**SOLD OUT**

12:30 p.m.–2:00 p.m.  
**ICC, 212**

**Facilitator:** Ellen Clas, Clas Consulting, LLC, Norfolk, MA

**Luncheon Discussions**

**Product Stewards Luncheon Discussion**

1:00 p.m.–2:00 p.m.  
**ICC, Expo, Hall B**

Luncheon discussions are small conversational groups that focus on current issues, trends, relevant topics, and research. Purchase lunch from a concession and choose your discussion. Seating is limited and available first-come, first-served.

**Luncheon Discussions**

**Students and Early Career Professionals**

1:00 p.m.–2:00 p.m.  
**ICC, Expo, Hall B**

Luncheon discussions are small, interactive group discussions facilitated by members of AIHA’s Students and Early Career Professionals Volunteer Group. Topics address issues of specific interest to young industrial hygienists or to hygienists new to the profession. Purchase lunch and select a discussion — seating is first-come, first-served. The first 20 students and early career professionals at the Student Tech Talks will receive a discounted voucher for lunch.

1. **CIH Certification**
   - **Facilitators:** N. Greeson, Duke University, Hillsborough, NC; L. O’Donnell and B. Snow, American Board of Industrial Hygiene, Lansing, MI

2. **Creating the Support You Need to Be Successful**
   - **Facilitator:** C. Hanko, Chandler, AZ

3. **How to Break the Ice with Workers to Accomplish IH Tasks: Tips & Tricks for Effectively Communicating with Management**
   - **Facilitator:** D. Roskelley, R&R Environmental, Sandy, UT

4. **Mentoring**
   - **Facilitator:** A. Boester, SES Environmental, Fort Wayne, IN

5. **What Is It Like to Manage H & S at Multiple Locations: Travel, Organization, and Management Tips**
   - **Facilitators:** C. Elish, Euless, TX and C. Hoehn, CIH, Praxair Inc., Blaine, MN

**CR 306**

**The Criticality of Understanding Potential**

2:00 p.m.–3:00 p.m.  
**ICC, 103**

**Presenter:** D. Groover, BST, Ojai, CA  
**Monitor:** G. Samuel, Johns Hopkins University, Baltimore, MD

For any one situation in the workplace, a wide range of safety outcomes typically occur. But often, focus is given only to what actually occurred without consideration for potential. This contributes to several problems, including safety metrics that don’t tell the whole story, wasted efforts on trivial events, and a lack of confidence that something serious or catastrophic won’t happen. This session will provide an understanding of potential and how to ensure its inclusion in your safety efforts.

**CR 307**

**The Synergy of Environmental Health and Safety and Sustainability**

2:00 p.m.–3:00 p.m.  
**ICC, 202**

**Presenter:** L. Vallee, Harleysville Insurance, Asbury, NJ  
**Monitor:** J. Kunz, 3M, St. Paul, MN

Corporate social responsibility and sustainability initiatives present exciting, synergistic, and recognizable business objective achievement opportunities for environmental health and safety professionals. These initiatives require companies to adopt and maintain community and work force “environmentally friendly” practices that ultimately will be judged as hallmarks of business success on a profit equivalent plane. Safety professionals are well poised to “stretch” and identify and collaboratively address reduction of toxins and conservation issues validating the business value of safety efforts, intelligence, and leadership.

---

The viewpoints, opinions and conclusions expressed in the presentations, sessions and discussions at AIHce have not necessarily been approved or endorsed by AIHA® or ACGIH® and do not necessarily reflect those of AIHA® or ACGIH®.
RT 207
Effective Adult SH&E Training Techniques: Back to the Basics
2:00 p.m.–4:30 p.m.  »  ICC, 203
This roundtable continues the tradition of roundtables sponsored by the Communications & Training Methods Committee on effective training techniques using case studies and professional practice updates. The topics being presented are different from those in the past, with a couple of old basics that we need to be reminded of occasionally. So, conference participants need not worry about repeated presentations. IHS are often called on to assess the need for and the success of training for the health and safety of their companies’ employees. They may be called on to develop, present, or contract with SH&E trainers to present effective training. Whatever the case, a grasp of what constitutes effective training in diverse settings is essential. This roundtable will feature solutions/lessons learned for the following situations/problems: how adults learn; training needs assessments; effective training presentation skills, especially for different adults learn; training needs assessments; effective training presentation skills, especially for different adults. This roundtable will focus on how and why the models were developed and how they fit into the profession. The speakers will also address how the tools they developed lay down the groundwork for the practice of ergonomics and future scientific studies. It also gives the students who worked on the Ergonomic Toolkit a chance to meet the innovators who built the tools in it.
○ Static Strength and How It Fits. D. Chaffin, University of Michigan (Emeritus), Ann Arbor, MI.
○ The ACGIH TLVs for Ergonomics. T. Armstrong, University of Michigan, Ann Arbor, MI.
○ The Strain Index. A. Garg, University of Wisconsin, Milwaukee, WI.

PO 104 Exposure Assessment Standards and Challenges
2:00 p.m.–4:40 p.m.  »  ICC, 120
2:00 p.m.–2:20 p.m.
CS-104-1 Are the OSHA HAZCOM Reporting Thresholds Adequate? T. Morris, Morris Innovative IH & S Solutions, Cincinnati, OH.
CS-104-2 Identifying and Quantifying Secondary Chemical Exposures. V. Daliesiess, EMSL Analytical, Cinnaminson, NJ.
2:20 p.m.–3:00 p.m.
SR-104-3 Comparison of Total, Inhalable, and Respirable Manganese Particle Size Fractions in Shipyard Welding Processes. D. Chute, Atrium EH&S Services, LLC, Reston, VA; P. Blomquist, Applied Thermal Sciences, Inc., Sanford, ME.
3:00 p.m.–3:20 p.m.
SR-104-4 Developing Exposure Parameters for Uncommon Exposures. M. Sullivan, California State University at Northridge, Northridge, CA.
3:20 p.m.–3:40 p.m.
SR-104-5 An Exposure Assessment Strategy and JEM for a Semiconductor Industry. C. Torres, ENVIRON, Atlanta, GA; F. Boelter, J. Persky, ENVIRON, Chicago, IL; J. Poole, ENVIRON, Tampa, FL; P. Harper, ENVIRON, Phoenix, AZ.
3:40 p.m.–4:00 p.m.
CS-104-6 Is FDA Approval Relevant for Occupational Health at Food Production Facilities? T. Morris, Morris Innovative IH&S Solutions, Cincinnati, OH.
4:00 p.m.–4:20 p.m.
CS-104-7 Field Evaluation of Passive Ozone Detector Badges for Use as Screening Tools During Ozone Treatment Processes. M. Andrew, Sumerra, Hong Kong; M. Rosales, Forensic Analytical Consulting Services, Inc., Los Angeles, CA.

PO 105 Nanotechnology: Assessment and Control
2:00 p.m.–4:40 p.m.  »  ICC, 240
2:00 p.m.–2:20 p.m.
CS-105-1 EPA Approaches for Assessing and Controlling Workplace Releases and Exposures to Nanomaterials. A. Lamba, U.S. EPA, Washington, DC.
2:20 p.m.–2:40 p.m.
2:40 p.m.–3:00 p.m.
3:00 p.m.–3:20 p.m.
SR-105-4 Development of a Small Battery-Operated Nanoparticle Sizer. J. Johnson, M. Grose, J. Kolb, R. Caldwell, K. Erickson, E. Willis, TSI Incorporated, Shoreview, MN.
3:20 p.m.–3:40 p.m.
CS-105-5 Surface Wipe Sampling for Nanomaterials. C. Beaucham, K. Martinez, C. Geraci, NIOSH, Cincinnati, OH.
3:40 p.m.–4:00 p.m.
SR-105-6 Evaluation of Nanoparticle Dispersion and Containment of a New Nanomaterial Fume Hood Using Computational Fluid Dynamics. K. Dunn, J. Bennett, NIOSH, Cincinnati, OH; C. Tsai, S. Woskie, M. Ellenbecker, University of Massachusetts Lowell, Lowell, MA.
4:00 p.m.–4:20 p.m.
4:20 p.m.–4:40 p.m.
SR-105-8 WITHDRAWN Nanoparticle Exposure Assessment in the University Laboratory. S. Ham, J. Park, C. Yoon, Seoul National University, Seoul, Republic of Korea; I. Lee, Inha University, Incheon, Republic of Korea.
PO 106
Socio-Legal and Regulatory Aspects of IH Practice
2:00 p.m.–4:40 p.m. » ICC, Wabash 1

2:00 p.m.–2:20 p.m.
CS-106-1 GHS and Beyond: The Power of Positive Material Declaration. K. Kawai, Actio, Portsmouth, NH.

2:20 p.m.–2:40 p.m.
CS-106-2 Downstream User Obligations Under REACH. R. Skoglund, 3M Company, St. Paul, MN.

2:40 p.m.–3:00 p.m.
CS-106-3 High Lead Levels Detected in Children's Toys, Jewelry, and Hair Accessory Items Sold at Low-Priced Retailers. B. Sothen, Microecologies, Inc., New York, NY.

3:00 p.m.–3:20 p.m.
CS-106-4 The Historical Understanding of the Sources, Risks, and Regulation of Lead Exposure in New Jersey Prior to 1970. M. Holton, ENVIRON International Corp, Princeton, NJ.

3:20 p.m.–3:40 p.m.
CS-106-5 The NIOSH Draft Criteria Document on Occupational Exposure to Diacetyl and 2,3-Pentanedione — An Update. L. McKeman, NIOSH, Cincinnati, OH.

3:40 p.m.–4:00 p.m.

4:00 p.m.–4:20 p.m.
CS-106-7 Industrial Hygiene Behind Bars. D. Krupinski, NIST, Boulder, CO.

4:20 p.m.–4:40 p.m.

RT 209
Human Biological Monitoring: State of the Art
2:00 p.m.–5:00 p.m. » ICC, 127
Arranger: S. Que Hee, University of California, Los Angeles, CA. Moderator: C. Estill, NIOSH, Cincinnati, OH. Monitors: L. Blum, NMS Labs, Inc., Willow Grove, PA; K. Diep, American Airlines, Fort Worth, TX.

Biological monitoring is the development, measurement, and interpretation of data obtained from human fluids, such as urine, blood, and breath. Researchers from NIOSH, universities, and corporate research entities are constantly developing new measurement techniques to measure chemical/biochemical markers in body fluids in a non-invasive manner. The roundtable provides a snapshot of the state of the art. NIOSH researchers will present their findings on the biological monitoring after exposure to tobacco smoke, polyaromatic hydrocarbons in asphalt, anthrax, pesticides, and weapons of mass destruction. Note: The findings and conclusions in the reports from NIOSH presenters are those of the author(s) and do not necessarily represent the views of NIOSH. Other presentations will focus on the biological monitoring of personal multiple biomarkers, and the state of the setting of biological environmental exposure levels (BEELs).

• Comparing Multiple Methods for Monitoring Tobacco Smoke Exposure. D. Sammons, NIOSH, Cincinnati, OH.
• Biomonitoring for Exposure to Bioterrorism Agents. R. Biagini, NIOSH, Cincinnati, OH.
• Study of Polycyclic Aromatic Compound Metabolites in Urine of Asphalt Paving Workers: Contribution of Inhalation vs. Dermal Routes. J. Snawder, NIOSH, Cincinnati, OH.
• Development of Immunochemical Methods for Biomonitoring. J. Smith, NIOSH, Cincinnati, OH.
• Multiplexed Monitoring of Human Responsiveness. K. Oliver, Radix BioSolutions, Ltd., Georgetown, TX.
• The Current State of BEELs. S. Que Hee, University of California, Los Angeles, CA.

RT 211
Update on Health Effects Research and Guidelines on Mold, Moisture and Damp Buildings
2:00 p.m.–5:00 p.m. » ICC, 125

It has long been established that damp and moldy buildings are associated with adverse health effects, particularly allergies, asthma, and other respiratory ailments. Fundamental changes in the way that buildings are constructed, which were largely driven by the energy crises of the early 1970s, resulted in structures that have reduced drying potentials, water vapor transmission potentials and hygric buffer capacities, and an increase in the amount of materials that are susceptible to mold growth. The addition of poorly designed and/or maintained HVAC systems to these buildings has, for the most part, only exacerbated the problem. As a result, the number of “sick” buildings due to moisture control problems has significantly increased over the past 30+ years. Climate changes, resulting in more frequent and severe storms, along with the associated flooding, also can potentially result in large numbers of damp and moldy buildings. Publications on the remediation of mold and moisture problems in buildings include those recently released by Health Canada, the World Health Organization, the EPA and the Centers for Disease Control and Prevention. Advances in research have also provided a better understanding of what levels of dampness are problematic, the nature of the association between dampness and asthma, and effective strategies to reduce excess moisture indoors.

• Putting Your Best Foot Forward and Avoiding Common Pitfalls. A. Windau, NASA, Cleveland, OH.
• Hitting a Homerun — Second at Bat. M. Watson, Federal Railway Administration, Washington, DC.
• So You Passed the CIH Exam... What’s Next... A Raise? CSP Exam? New Job? C. Ficklen, SQ2, Inc., Hampton, VA.
- Blood from Turnips — Why Many HVAC Systems Can’t Control Indoor Humidity. W. Baker, Michaels Engineering, La Crosse, WI.
- Population Health Effects of Mold and Damp Buildings. J. Miller, Carlton University, Ottawa, QC, Canada.
- Clinicians’ Guidance on Mold and Moisture. P. Schenck, University of Connecticut, Farmington, CT.

PO 107 Aerosols
2:00 p.m.–5:10 p.m. » ICC, Wabash 3
Arranger and Moderator: V. Alzenberg, ExxonMobil, Houston, TX. Monitors: D. Malzahn, Exponent, Inc., Farmington Hills, MI; M. Sheehan, West Chester University, West Chester, PA.

2:10 p.m.–2:30 p.m.
SR-107-1 Computational Fluid Dynamics (CFD) Investigation of Particle Bounce on Human Aspiration Efficiency. K. Anderson, R. Anthony, University of Iowa, Iowa City, IA.

2:30 p.m.–2:50 p.m.
SR-107-2 Particle Size Distributions of Welding Fume Measured in the Breathing-Zone and in an Emission Chamber. J. Breske, California State University, Fullerton, CA; A. Abelmann, ChemRisk, LLC, Chicago, IL; S. Erdal, University of Illinois, Chicago, IL.

2:50 p.m.–3:10 p.m.

3:10 p.m.–3:30 p.m.
SR-107-4 WITHDRAWN Estimation of Internal Exposure of Workers to Ionizing Radiation in the Zircon Industries. A. Villet, Saint Gobain, Cavallion, France.

3:30 p.m.–3:50 p.m.
SR-107-5 The Size Segregating Characteristics of Two Prototype Cyclones Used to Sample Diesel Particulate Matter and Coal Dust. M. Sheehan, West Chester University, Downingtown, PA; E. Cauda, J. Volkwein, NIOSH, Pittsburgh, PA.

3:50 p.m.–4:10 p.m.
SR-107-6 Evaluating the Inter-instrument Variability and Comparative Performance of the XMX/2L-MIL Biological Air Sampler vs. the AGI-30 Air Sampler. J. Black, U.S. Air Force, Wright-Patterson AFB, OH.

4:10 p.m.–4:30 p.m.

4:30 p.m.–4:50 p.m.
SR-107-8 Capture and Retention Efficiency of Aerosol Particles as a Function of Particle Size, Sampling Flow Rate, and Collection Media for the XMX/2L-MIL Biological Air Sampler. J. Black, U.S. Air Force, Wright-Patterson AFB, OH.

4:50 p.m.–5:10 p.m.
SR-107-9 Effects of Spray Surfactant and Particle Charge on Respirable Dust Control. M. Wang, P. Raynor, University of Minnesota, Minneapolis, MN.

RT 212 Implementing Engineering Controls in Construction
2:00 p.m.–5:30 p.m. » ICC, 243
Arranger: M. Cooper, The Lippy Group, Berkeley, CA. Moderator: R. Herrick, Harvard University, Boston, MA. Monitors: C. Le, CPWR — The Center for Construction Research and Training, Silver Spring, MD; C. Mcninis, International Brotherhood of Boilermakers, Fall River, NS, Canada.

The construction industry exposes workers to a wide range of health and safety hazards. The National Occupational Research Agenda (NORA) includes 15 strategic goals for construction, including three related to prominent health hazards in that sector — noise, silica, and welding fumes. This roundtable will focus on those goals and research involving implementation of engineering controls to reduce exposures associated with those three hazards. Speakers will discuss the magnitude of exposure risk; the degree to which engineering controls are available, utilized, and effective; and examples of controls under development for specific high-exposure tasks. Key factors considered during selection of engineering controls, important characteristics for successful implementation, and efforts to involve multiple stakeholders in identifying and promoting use of engineering controls in construction will also be presented.

- Use of Industry Partnerships to Select, Evaluate, and Promote Practical and Effective Engineering Controls for Construction — Welding Fumes and Silica. P. Susi, CPWR — The Center for Construction Research and Training, Silver Spring, MD.
- Commercially Available Portable Local Exhaust Ventilation for Controlling Worker Exposures to Welding Fumes in Construction. J. Meeker, University of Michigan, Ann Arbor, MI.
- Selecting Local Exhaust Ventilation for the Control of Exposure to Silica During Tuckpointing. M. Cooper, The Lippy Group, Berkeley, CA.
- Engineering Controls for Noise — A “Buy Quiet” Case Study and Other NIOSH Noise Control Activities in the Construction Industry. C. Hayden, NIOSH, Cincinnati, OH.

- Reining in the Dust: NIOSH’s Engineering Control Research to Reduce Silica Exposures in Construction. M. Gressel, NIOSH, Cincinnati, OH.
- Designing Controls for Dust and Noise During Heavy Chipping on Bridge Substructure Work: An Action Research Project. S. Shepherd, University of Massachusetts, Lowell, MA.

SS 001 Closer to Spock’s Tricorder — The Latest in Real-Time Detection
2:00 p.m.–5:30 p.m. » ICC, 205
Arranger: P. Smith, OSHA, Sandy, UT. Moderator: E. Bishop, Parsons, Council Bluffs, CA. Monitors: J. Golden, 3M Company, Cottage Grove, MN; D. Bolstad-Johnson, Phoenix Fire Department, Phoenix, AZ.

Advances in real-time detection systems and informatics now allow for high reliability data that are immediately available to decision makers. This symposium will bring together a panel of experts who as individuals are involved in designing, testing, or using the latest innovations in real-time chemical detection and identification tools and informatics platforms to get the resulting data to those who need it as quickly as possible. Assembled experts will discuss microfabricated sensor arrays, miniature mass spectrometers, traditional and atmospheric pressure ionization for mass spectrometric detection in the field, and pulling it all together with wireless transmission of data and positioning to present 3-D models of the results.

- Smaller, Faster, Better: Mass Spectrometers Designed for High Performance in the Field. P. Smith, OSHA, Sandy, UT.
- Field Portable GC-MS and Enabling Sampling Technologies for Collection of Analytes from Air, Water, Particulates and Surfaces. N. Porter, Torion Technologies, American Fork, UT.
- Prototype Micro-Gas Chromatograph for Rapid Determination of Explosive Marker Compounds. G. Serrano, University of Michigan, Ann Arbor, MI.
- Field Testing of a Micro-Gas Chromatograph Prototype: Near Real Time Analysis of TCE Vapors in Indoor Air in Contaminated Homes. J. Bryant, University of Michigan, Ann Arbor, MI.
- The Chemical Exposure Monitor with Indoor Positioning (CEMWIP) Project. K. Brown, NIOSH, Cincinnati, OH.
CR 308
How to Build a Health and Safety Culture Through PDCA (Plan-Do-Check-Act) Approach
3:30 p.m.–4:30 p.m. » ICC, 103
Presenter: G. Culina, CCOHS, Hamilton, ON, Canada.
Monitor: K. Chatterjee, GZA GeoEnvironmental, Inc., Fairfield, NJ.
Managing health and safety can be complex and time consuming. An occupational health and safety management system (OHSMS) provides a framework for handling key activities and ensuring continual improvement in OHS performance and the development of your safety culture. During this presentation, you will learn how you can benefit from PDCA and what standards support the implementation of an OHSMS. You will learn how to improve performance by integrating a strategic safety management culture into your organization.

CR 309
ISO 14001, Lean and Six Sigma Sustainability Programs
3:30 p.m.–4:30 p.m. » ICC, 202
Presenter: G. Popov, University of Central Missouri, Overland Park, KS.
Monitor: P. Georgieva, University of Central Missouri, Warrensburg, MO.
ISO 14001 Environmental Management System (EMS) Standard is an effective administrative tool in the field of corporate responses to sustainability. This crossover program is designed to introduce EHS professionals to various EMS, Lean and Six Sigma tools applicable to sustainability programs. The presenter will describe how to develop ISO 14001 EMS implementation program and link it to Lean Six Sigma improvement programs to generate better environmental and operational results. Successful implementation of EMS, Lean Six Sigma model will be demonstrated.

Find your APPTitude!
Explore using various mobile apps — visit the AIHce Mobile App Help Desk in Wabash Lobby. Attend Smart Apps for Smart People on Thursday at the Volunteer Collaboration Café.

The findings and conclusions in the National Institute for Occupational Safety and Health abstract presentations have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

Celebrate Volunteer Day! Special Recognition at the Tuesday General Session!

The home of JEROME® introduces atomic fluorescence spectroscopy for PORTABLE mercury analysis
PORTABLE Atomic Fluorescence Spectroscopy Mercury Analyzer Meets EPA & ATSDR Cleanup Levels Flexible Data Handling Choice of Two Independently Programmable Auto Sampling Mode 3 Units of Measurement nanograms, micrograms, milligrams Color Display with Easy to Use Menu System

JEROME® J505 AIHce BOOTH #542 Made in the USA 800.528.7411 | www.azic.com

Arizona Instrument LLC
The home of JEROME
Indianapolis – “the most walkable downtown” in America – will host the 2012 American Industrial Hygiene Conference and Exposition (AIHce). Stop by the ACGIH® Pavilion for huge savings:

- **ACGIH®'s Signature Publications**, including these NEW publications: *2012 TLVs® and BEIs® Book; 2012 Guide to Occupational Exposure Values; 2012 TLVs® and BEIs® CD-ROM; 2012 TLVs® and BEIs® with 7th Edition Documentation, CD-ROM (Single User and Network Versions);* and *Modern Industrial Hygiene, Volume 3 – Control of Chemical Agents* (Combos available for extra savings!)

- **ACGIH®'s Cooperative Publications**, including approximately 400 scientific and technical publications, produced by the most renowned scientific publishers and offered for sale by ACGIH®

- Information on the **unbeatable value of membership in ACGIH®**

- Information on the **upcoming educational events**

- Information on the **Foundation for Occupational Health & Safety (FOHS)** – including the **Sustainable TLV®/BEI® Program**

**Select ACGIH® Signature Publications will be available at a 20% Cash and Carry discount while supplies last.** Other publications will be offered at a special **10% Conference discount**.

Visit the ACGIH® Pavilion at AIHce Expo Booth 938 in the Indiana Convention Center. Expo hours are:

- Monday, June 18, 9:00 a.m. – 5:30 p.m.
- Tuesday, June 19, 9:00 a.m. – 3:00 p.m.
- Wednesday, June 20, 9:00 a.m. – 1:30 p.m.

Redefine Your Future and Save at the ACGIH® Pavilion. We look forward to seeing you in Indianapolis!

* To receive the 20% discount, payment is required at the time of purchase. Books must be taken with you — shipping is not available. Discounts may not be combined with any other offer; and are only available during the event.
Tuesday, June 19

6:30 a.m.–8:00 a.m.
AIHF Fun Run/Walk
White River State Park

7:30 a.m.–7:45 a.m.
Speaker Ready Room
ICC, 108

7:30 a.m.–4:00 p.m.
Volunteer Collaboration Café
ICC, Crossroads Lobby

7:30 a.m.–5:00 p.m.
Press Room
ICC, 112

7:30 a.m.–5:30 p.m.
Registration
ICC, Wabash Lobby

8:00 a.m.–9:00 a.m.
General Session:
Redefining Our Future
John M. Howard, MD, MPH, JD
NIOSH
Washington, DC
ICC, Sagamore Ballroom

8:00 a.m.–4:00 p.m.
CareerAdvantage Development Fair 2012
ICC, 105

9:00 a.m.–2:00 p.m.
Annual Blood Drive
ICC, 110

9:00 a.m.–3:00 p.m.
Visit the Expo!
ICC, Halls A–E
Passport to Prizes, Text to Win Promo, Special Displays, Cyber Centers, Restaurants, Lounges, Expo Theater
No sessions 9:00 a.m.–10:30 a.m. and 12:30 p.m.–2:00 p.m.

Poster Sessions
ICC, Expo, Hall B
Poster Session 403
Authors present 10:00 a.m.–Noon
Poster Session 494
Authors present 1:00 p.m.–3:00 p.m.

9:00 a.m.–4:00 p.m.
Volunteer Red Carpet Club
ICC, 111

9:00 a.m.–5:30 p.m.
AIHce Mobile App Help Desk
ICC, Wabash Lobby

9:30 a.m.–11:30 a.m.
TT–02 Covanta Indianapolis, Inc. (Tour 1)
ICC, Bus departs Maryland Entrance; board by 9:15 a.m.

9:30 a.m.–12:30 p.m.
TT–02A Indianapolis Motor Speedway
ICC, Bus departs Maryland Entrance; board by 9:15 a.m.

9:30 a.m.–1:00 p.m.
TT–03 Roche Diagnostics
ICC, Bus departs Maryland Entrance; board by 9:15 a.m.

9:30 a.m.–2:30 p.m.
Exhibitor Product Demos and Presentations
Expo Theater, Hall C
See presentation descriptions on page 44 and 48.

10:00 a.m.–11:00 a.m.
CR 310 Response Safety and Industrial Hygiene Professionals: Are You Prepared to Respond to a Disaster or Incident?
ICC, 202
CR 311 Specifying Work Clothing to Match Workplace Hazards
ICC, 203

10:30 a.m.–11:30 a.m.
12th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting
ICC, 243

10:30 a.m.–12:30 p.m.
PO 108 Exposure Assessment Methodologies — Part 2
ICC, 240
PO 109 Health Care Industries — I
ICC, 103
PO 110 Ergonomics
ICC, Wabash 2
RT 213 Addressing Background Sources of VOCs During Vapor Intrusion Investigations
ICC, 120
RT 214 Federal Lead Update Roundtable
ICC, 102
RT 215 Sustainability Management: Systems, Process and Culture
ICC, 127
RT 216 Welding Industrial Survey, Fume Generation and Characterization Studies
ICC, 122

10:30 a.m.–12:50 p.m.
PO 111 Real–Time Detection Systems
ICC, Wabash 3

10:30 a.m.–1:00 p.m.
RT 217 GHS—The New OSHA Hazard Communication
ICC, 125
RT 218 Exploring New Approaches to Indoor Air Investigations
ICC, 205

11:00 a.m.–Noon
NIOSH Special Session: Updating the NIOSH Cancer and REL Policies
ICC, 104

11:30 a.m.–12:30 p.m.
CR 312 Behavior Engineering — Design Your Workplace to Promote Safe Behaviors
ICC, 203
CR 313 Manage Your Chemicals, Manage Your Risk
ICC, 202

12:30 p.m.–1:30 p.m.
Luncheon Discussions: NIOSH Tech Talks: Current Topics
ICC, Expo, Hall B
William P. Yant Award Lecture
ICC, 243

12:30 p.m.–2:00 p.m.
IH Mysteries Workshop
ICC, 212

12:30 p.m.–5:30 p.m.
Speaker Ready Room
ICC, 108

1:30 p.m.–3:00 p.m.
Town Hall: Have We Accomplished All We Can in Protecting Workers?
ICC, Wabash 2

1:30 p.m.–3:30 p.m.
TT–04 Covanta Indianapolis, Inc. (Tour 2)
ICC, Bus departs Maryland Entrance; board by 1:15 p.m.

1:30 p.m.–4:30 p.m.
TT–05 Dow AgroSciences LLC
ICC, Bus departs Maryland Entrance; board by 1:15 p.m.

1:30 p.m.–5:00 p.m.
SS 002 Exposure Scenarios for Nanomaterial Workers and Workplaces: Trends and Hot Issues
ICC, 120

1:30 p.m.–5:30 p.m.
RT 219 Downstream User Obligations Under REACH
ICC, 122
RT 220 Reducing Uncertainty in the Semiconductor Industry via Employee Exposure Assessment
ICC, 127
AIHA®
8:00 a.m.–5:00 p.m.
AIHA Registry Programs Competency Assessments
JW Marriott, 101

10:00 a.m.–Noon
Aerosol Technology Committee Meeting
JW Marriott, 103
Clandestine Laboratory Working Group Meeting
JW Marriott, 105
Engineering Committee Meeting
JW Marriott, 103
Environmental Issues Committee Meeting
JW Marriott, 102
Minority SIG Meeting
JW Marriott, White River Ballroom D

AIHF
3:30 p.m.–5:30 p.m.
AIHF Board of Trustees Meeting
JW Marriott, 106

Occupational and Environmental Medicine Committee Meeting
JW Marriott, 106

10:30 a.m.–Noon
Publications Committee Meeting
ICC, Conference Room West

11:00 a.m.–1:00 p.m.
Student Local Sections Council Business Meeting
JW Marriott, White River Ballroom B

1:00 p.m.–3:00 p.m.
Student and Early Career Professionals Committee Meeting
JW Marriott, White River Ballroom D

1:30 p.m.–3:30 p.m.
Biosafety and Environmental Microbiology Committee Meeting
JW Marriott, White River Ballroom B

Communication and Training Methods Committee Meeting
JW Marriott, 105
Engineering Industry SIG Meeting
JW Marriott, 102
Ergonomics Committee Meeting
JW Marriott, 104
Law Committee Meeting
JW Marriott, 107

Local Sections Council Business Meeting
JW Marriott, White River Ballroom G

Occupational and Environmental Epidemiology Committee Meeting
JW Marriott, 103

Respiratory Protection Committee Meeting
JW Marriott, White River Ballroom I

Sampling and Laboratory Analysis Committee Meeting
JW Marriott, 102

2:00 p.m.–5:00 p.m.
Continuing Education Committee Business Meeting
ICC, 211

2:30 p.m.–3:30 p.m.
Green Council Meeting
JW Marriott, Grand Ballroom 5

3:00 p.m.–5:00 p.m.
International Training/Qualifications in OH
ICC, 210

4:30 p.m.–6:30 p.m.
Volunteer Recognition Ceremony and Reception
Marriott Downtown, Marriott Ballroom

AIHF®
8:00 a.m.–5:00 p.m.
AIHF Registry Programs Competency Assessments
JW Marriott, 101

10:00 a.m.–Noon
Aerosol Technology Committee Meeting
JW Marriott, 103
Clandestine Laboratory Working Group Meeting
JW Marriott, 105
Environmental Committee Meeting
JW Marriott, 103
Environmental Issues Committee Meeting
JW Marriott, 102
Minority SIG Meeting
JW Marriott, White River Ballroom D

AIHF
3:30 p.m.–5:30 p.m.
AIHF Board of Trustees Meeting
JW Marriott, 106

JOEH
4:00 p.m.–6:00 p.m.
JOEH LLC Board Meeting
JW Marriott, 311

Ancillary
7:00 a.m.–8:45 a.m.
Ashtead Technology Networking Breakfast
(by invitation)
JW Marriott, 306

8:00 a.m.–5:30 p.m.
Dangerous Decibels Educator Training Workshop
JW Marriott, 201

10:00 a.m.–1:00 p.m.
Workplace Health Without Borders
ICC, 210

11:00 a.m.–1:30 p.m.
OSH Compliance Officers’ Forum on Equipment Evaluation
JW Marriott, Grand Ballroom 7

4:00 p.m.–6:00 p.m.
University of Cincinnati–Academy of Kettering Fellows
JW Marriott, 308

West Virginia University Alumni Reception
Hard Times Café, 49 South Meridian Street

4:30 p.m.–6:00 p.m.
University of Central Missouri Alumni and Friends
JW Marriott, 310

University of Texas and University of Houston–Clear Lake Reception sponsored by JK, Inc. and HIH Laboratory
JW Marriott, 308

Wayne State University Alumni Reception
JW Marriott, 308

University of Michigan Reception
JW Marriott, 303

7:30 p.m.–9:00 p.m.
University of Oklahoma Graduates and Friends Dinner
Milano Inn, 231 S. College Avenue

There is a “Free Lunch” — on AIHce
All full registrants received a $10 coupon with their badge mailing. Use the coupon to purchase lunch in the Expo on Tuesday! A variety of meal options are available. Browse the exhibits at your leisure and enjoy lunch — on AIHce!
GENERAL SESSION: 8:00 A.M.–9:00 A.M.
ICC, SAGAMORE BALLROOM

Redefining Our Future
John M. Howard, MD, MPH, JD, Director, NIOSH, Washington, DC

Dr. John Howard is one of the nation’s leaders in occupational health and worker safety. Under his inspirational leadership, NIOSH has launched many new initiatives and made significant progress to prevent work related disease and injury. But what lies ahead for the profession?

Always an engaging speaker, Dr. Howard shares his vision of the future of OEHS. What challenges and opportunities are on the horizon? How will OEHS professionals adapt and evolve in order to address emerging trends?

After this thought-provoking presentation the real conversation begins. Interact with Dr. Howard during a special “Ask the Expert” Session following the General Session.

Exhibitor Product Demos and Presentations
9:30 a.m.–11:00 a.m. » ICC, Expo Theater, Hall C

9:30 a.m.
CorTemp® Ingestible Core Body Temperature Sensor Technology, CorTemp-HQ, Inc.
CorTemp is a wireless monitoring solution enabling you to detect elevated core body temperature and the effectiveness of your cooling methods in hot workplace environments. Critical decisions can be made early on to protect your workforce before the onset of heat stress and fatigue. FDA cleared. The CorTemp monitor can be used to randomly, manually monitor multiple workers or can be worn to continuously monitor single workers via long range RF telemetry. There will be a live demonstration of the CorTemp sensor, data monitor, and long range accessories.

10:00 a.m.
Potent Compound Containment, ILC Dover
ILC Dover, the worldwide leader in flexible containment systems will demonstrate various techniques for containment that can achieve levels of <1mg/u³. DoverPac® and other products manufactured by ILC can contain potent compounds in the nanogram levels range with low-cost flexible solutions. Containment of charging/discharging processes as well as encapsulating production equipment will be demonstrated. A brief description of our contained drum transfer devices and in process isolators will also be discussed.

10:30 a.m.
New Disposable Size-Selective Particulate Samplers, SKC Inc.
SKC Inc. has developed size-selective samplers called Parallel Particle Impactors (PPIs) to help industrial hygienists address new sampling criteria for airborne particulate matter. SKC now introduces disposable versions of these samplers for ease in handling. For compounds such as sulfuric acid, SKC offers a PPI for thoracic particulate matter for use at 2L/min. For compounds such as crystalline silica, SKC offers a high flow PPI for collection of respirable particulate matter at 8L/min.

CR 310
Response Safety and Industrial Hygiene Professionals: Are You Prepared to Respond to a Disaster or Incident?
10:00 a.m.–11:00 a.m. » ICC, 202
Presenter: M. Bernard, FEMA, Bothell, WA. Monitor: C. Porchas, Tuscon, AZ.

The safety and industrial hygiene professional in the industrial setting have fairly strait protocols and established procedures as they deal with day-to-day issues. However, when asked to become involved in an evolving incident or disaster, a whole different mind-set, set of protocols, processes, and tools come into play. This presentation will discuss these issues and hopefully stimulate discussion on what those in our profession can do to prepare for being part of an incident response.

CR 311
Specifying Work Clothing to Match Workplace Hazards
10:00 a.m.–11:00 a.m. » ICC, 203
Presenter: G. Kephart, Restoration Services Inc., Knoxville, TN. Monitor: A. Young, University of Evansville, Evansville, IN.

“Show up dressed for work.” That employer statement once covered all that needed to be said regarding work clothing. Today, many industries and occupational hazards necessitate employer-provided work uniforms. Good news: There is a large body of industry consensus standards available to specify work clothing appropriate to various potential hazards. Bad news: No one fabric is a “coverall” from the standpoint of real-world occupational hazards. This crossover program will discuss some strategies for optimizing work clothing correlation to workplace hazards.

The viewpoints, opinions and conclusions expressed in the presentations, sessions and discussions at AIHce have not necessarily been approved or endorsed by AIHA® or ACGIH® and do not necessarily reflect those of AIHA® or ACGIH®.
12th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting Preventable Deaths at “Model Workplaces”: Finding Unexpected Stories on One of the Most Overlooked Beats in Journalism

10:30 a.m.–11:30 a.m. » ICC, 243

Presenter: Chris Hamby, The Center for Public Integrity, Washington, DC.

Between 2000 and 2011, more than 80 workers died at workplaces that were exempted from regular inspections because they were deemed among the nation’s safest. In a majority of the cases, regulators found serious safety violations, but there were usually few consequences for the company. This story is one of many that reporters could find on one of the most overlooked beats in journalism. Articles about the conditions that working men and women face can resonate deeply with a wide audience, but getting them in readers’ hands and making them relatable can be challenging. Though many traditional news outlets have placed investigative reporting on the chopping block, there are many opportunities for far-reaching stories. Hamby will discuss an eight-month examination of the Occupational Safety and Health Administration’s Voluntary Protection Programs, as well as investigative reporting on issues ranging from combustible dust to occupational illnesses.

Special Session
Ask the Expert with John Howard, MD, MPH, JD

10:30 a.m.–Noon » ICC, Wabash 1
Moderator: R. Herrick, Harvard University, Marblehead, MA.

Following Dr. Howard’s General Session on Redefining Our Future, the real conversation begins. Join Dr. Howard at this special “Ask the Expert” Session.

PO 108
Exposure Assessment Methodologies — Part 2

10:30 a.m.–12:30 p.m. » ICC, 240
Arranger: M. Vadali, University of Minnesota, Brooklyn Park, MN. Moderator: S. Kim. Monitor: J. Hwang, University of Minnesota, Minneapolis, MN.

10:30 a.m.–10:50 a.m.

10:50 a.m.–11:10 a.m.
CS-108-2 Qualitative Exposure Assessment Methodology for Chemical Substances. W. Selviz, Kuwait Oil Company (KOC), Ahmadli, Kuwait.

11:10 a.m.–11:30 a.m.

11:30 a.m.–11:50 a.m.

11:50 a.m.–12:10 p.m.

12:10 p.m.–12:30 p.m.
CS-108-6 Case Study: Controlling Exposure to Animal Allergens in R&D. M. Vangeel, Johnson & Johnson, Geel, Belgium.

PO 109
Health Care Industries — I

10:30 a.m.–12:30 p.m. » ICC, 103
Arrangers: M. Jones, Department of Veterans Affairs, Iowa City, IA; D. Hurley, CertainTeed Corp., North Wilkesboro, NC. Moderator: S. Derman, Medishare Environmental Health & Safety Services, Santa Clara, CA. Monitors: M. Jones, Department of Veterans Affairs, Iowa City, IA; D. Louches, St. Luke’s Regional Medical Center, Boise, ID.

10:30 a.m.–10:50 a.m.
SR-109-1 Review of the Evidence for Airborne Transmission of Methicillin-Resistant Staphylococcus Aureus (MRSA) and Its Control. H. Perez, I. Burstyn, Drexel University, Philadelphia, PA; K. Michael, University of Washington, Seattle, WA.

10:50 a.m.–11:10 a.m.

11:10 a.m.–11:30 a.m.

11:30 a.m.–11:50 a.m.
CS-109-4 Nosocomial Mycosis Outbreak Control and Prevention. J. Manfrida, TestAmerica, Phoenix, AZ.

11:50 a.m.–12:10 p.m.
CS-109-5 Addressing Legionella and Waterborne Pathogens in Hospitals with a Water Risk Assessment Plan. S. Ebersohl, Pall Medical, Ann Arbor, MI.

12:10 p.m.–12:30 p.m.
CS-109-6 Evacuate or Investigate? Preplanning Saves Disruption and Dollars. S. Rupkey, Bureau Veritas North America, Downers Grove, IL.

PO 110
Ergonomics

10:30 a.m.–12:30 p.m. » ICC, Wabash 2

10:30 a.m.–10:50 a.m.
CS-110-1 Sit/Stand Workstation Guidelines to Avoid Health Consequences Associated with Prolonged Occupational Sitting or Standing. B. McGowan, Humantech, Inc., Ann Arbor, MI.

10:50 a.m.–11:10 a.m.

11:10 a.m.–11:30 a.m.

11:30 a.m.–11:50 a.m.
CS-110-4 A Case Study with the Revised AIHA Ergonomic ToolKit. T. Blackwell, R. Sesek, C. Gungor, R. Thomas, Auburn University, Auburn, AL; S. Gibson, Ergonomics Applications, Inc., Salem, SC.

11:50 a.m.–12:10 p.m.
SR-110-5 Shoulder Muscle Fatigue in Automotive Manufacturing. S. Ferguson, W. Marras, The Ohio State University, Columbus, OH.

12:10 p.m.–12:30 p.m.
SR-110-6 Musculoskeletal Exposure During Automobile Assembly as a Function of Vehicle Rotation. S. Ferguson, W. Marras, The Ohio State University, Columbus, OH.

12:30 p.m.–12:50 p.m.
CS-110-7 WITHDRAWN Looking for Trouble ... Implications of Early Reporting Initiatives on Injury and Severity Rates. E. Kunz, Medtronic CardioVascular, Santa Rosa, CA.
RT 213
Addressing Background Sources of VOCs During Vapor Intrusion Investigations
10:30 a.m.–12:30 p.m. » ICC, 120
Arranger and Moderator: C. Millner, Center for Toxicology and Environmental Health (CTEH), LLC, North Little Rock, AR. Monitors: D. Rush, CTEH, North Little Rock, AR; C. Metzler, BP America, Houston, TX.

One of the biggest issues complicating vapor intrusion (VI) investigation is that suspect VI compounds are commonly present in indoor air from household goods and consumer and industrial products. These background concentrations often exceed regulatory screening levels, leading to additional remedial actions. Current indoor air sampling methods do not differentiate the sources of these compounds, resulting in further costly investigations. This series of presentations will discuss these sources, use of innovative real-time detection technologies for identification and removal of sources; sampling procedures, detection limit achievement, and a hands-on demonstration by a laboratory; a case study highlighting the differences in VI investigations and the importance of background source identification and removal; and a comparison of indoor VOC concentrations to health-based indoor air screening standards and interpretation of the data. Participants will better understand how background sources confuse VI investigations, and air sampling strategies and methods for VI sampling programs.

- Use of Real-Time Instruments for the Identification of Background Sources During Vapor Intrusion Investigations. C. Millner, CTEH, North Little Rock, AR.
- Challenges of Sampling and Reporting Lower Level VOCs in Air Related to Vapor Intrusion Evaluations. T. Badal, Test America, Savannah, GA.
- Background VOCs in Indoor Air: Sources, Concentrations, and Comparison to Health-Based Indoor Air Standards. J. Kind, CTEH, North Little Rock, AR.
- VI Case Study and Importance of Identifying Sources. L. Mahoney, CTEH, North Little Rock, AR.

RT 214
Federal Lead Update Roundtable
10:30 a.m.–12:30 p.m. » ICC, 102

While notable progress has been made in reducing childhood and adult lead poisoning, further efforts are needed by the federal government and others to eliminate this avoidable disease. Four federal agencies will provide updates on their accomplishments and upcoming activities, noting, in particular, the opportunities that occupational and environmental health professionals have for participating in this effort.

- CDC Lead Update. B. Brooks, U.S. Centers for Disease Control and Prevention, Atlanta, GA.

RT 215
Sustainability Management: Systems, Process, and Culture
10:30 a.m.–12:30 p.m. » ICC, 127

This roundtable will share effective strategies for establishing sustainability management systems within organizations and will provide valuable lessons and perspective for health and safety professionals whose roles are continuing to evolve within their organizations. A discussion of why sustainability is essential for business from an investor’s perspective will set the stage for case studies about four different corporations, each at a different stage in their sustainability program implementation. The speakers will offer their own experiences as their organizations took steps to implement sustainability and how management systems were used to help achieve success. Audience members will be encouraged to briefly share their own experiences with the group during the discussion period.

- Case Study: Employing a Management System Approach Within a Corporate Sustainability Program. R. Deist, Accellent, Inc., Wilmington, MA.
- Case Study: Company Cultural Shift Toward Sustainability. G. Barbi, Becton Dickinson, Franklin Lakes, NJ.

RT 216
Welding Industrial Survey, Fume Generation and Characterization Studies
10:30 a.m.–12:30 p.m. » ICC, 122

Welding is among the most important and utilized industrial processes, and welders comprise one of the largest working populations. Yet from an industrial hygiene perspective much remains to be learned due to the large number of processes and exposure variables. Fume exposures are of concern, and opportunities exist to optimally select processes to reduce exposures. Welding process cost-benefit comparisons of technical feasibility, production rate, quality, cost, and exposure levels have been conducted to determine feasibility of process selection to reduce exposures. Welders experience higher rates of lung disease and cancer, yet the importance of specific air contaminants are not yet well understood. Epidemiologic studies have yielded equivocal results due to confounders and lack of exposure information. The large number of fume components and exposure variables complicates exposure assessments. Fume generation studies provide an opportunity to characterize fume components and exposure emissions by process and material and evaluate the effect of determinant variables in a controlled environment.

- Cost-Benefit Comparison of Welding Processes by Technical Feasibility, Production Rate, Quality, Cost, and Exposure Levels. J. Spear, J.E. Spear Consulting LP, Magnolia, TX.
- Minimizing Hexavalent Chromium Exposures in Stainless Steel Welding: Research Findings. M. Keane, NIOSH, Morgantown, WV.
- Generation of Fumes and Components Including Chromium, Manganese, and Iron by Welding Variables; and Welding Fume Filtration Efficiency and Pressure Drop Pattern of Respirators. C. Yoon, Seoul National University, Seoul, Republic of Korea.

PO 111
Real-Time Detection Systems
10:30 a.m.–12:50 p.m. » ICC, Wabash 3
Arranger: W. Groves, Penn State, University Park, PA. Moderator: E. Bishop, Parsons, Pasadena, CA. Monitors: J. Engel, U.S. Navy, Camp Pendleton, CA; L. Monteith, University of Washington, Seattle, WA.
10:30 a.m.-10:50 a.m.  
SR 111-1 Microfabricated Gas Chromatographs with Microsensor Array Detectors for Determinations of Low-Level Complex Vapor Mixture Components.  E. Zellers, University of Michigan, Ann Arbor, MI.
10:50 a.m.-11:10 a.m.  
11:10 a.m.-11:30 a.m.  
SR 111-3 Modular Quantitative Air Sampling for Thermal Desorption/Gas Chromatography Analysis in the Field.  P. Smith, OSHA, Sandy, UT.
11:30 a.m.-11:50 a.m.  
SR 111-4 Solid Phase Microextraction Screening to Determine the Presence of Formaldehyde in Products Containing Concentrations Requiring Disclosure Under the Hazard Communication Standard.  J. Kraft, University of Utah, Salt Lake City, UT; P. Smith, OSHA, Sandy, UT.
12:10 p.m.-12:30 p.m.  
SR 111-5 Effect of Calibration Environment on the Performance of Two Direct-Reading Organic Vapor Monitors.  C. Coffey, R. LeBouf, NIOSH, Morgantown, WV.
12:30 p.m.-12:50 p.m.  
12:30 p.m.-12:50 p.m.  

RT 218  
Exploring New Approaches to Indoor Air Investigations 10:30 a.m.-1:00 p.m.  »  ICC, 205  
Arranger: M. Eide, Boise, ID. Moderator: P. Kostle, University of Iowa, Iowa City, IA. Monitors: S. Iske, University of Central Missouri, Warrensburg, MO; J. Cooper, Bureau Veritas North America, Novi, MI.  

RT 219  
NIOSH Special Session  Updating the NIOSH Cancer and REL Policies  11:00 a.m.-Noon » ICC, 104  
Presenters: P.A. Schulte; T.J. Lentz; P.J. Middendorf, NIOSH, Cincinnati, OH.  

CR 312  
Behavior Engineering — Design Your Workplace to Promote Safe Behaviors 11:30 a.m.-12:30 p.m.  »  ICC, 203  
Presenter: J. Kester, Argonne National Laboratory, Lemont, IL. Monitor: D. Moore, University of California, Berkeley, CA.

The final OSHA standard revising hazard communication to conform to the GHS has been issued and U.S. companies are involved in the transition from the old standard to the GHS. This session will explore the status of GHS implementation in the U.S., Canada, and globally. Our OSHA speaker will review the new hazard standard with an emphasis on what has changed. OSHA has developed tools to assist small business with the transition, and a speaker will describe some of those tools. Our speaker from Canada will update us on where Canada is in the implementation process and when we can expect their regulatory changes. A final speaker will review the status of global implementation.

- Introduction and Overview of the GHS.
- The U.S. Final Rule — Revising the GHS to Conform to the GHS.
- The Status of GHS Implementation in Canada.
- The Status of International Implementation of the GHS.

By the end of this session, attendees will have a better understanding of the current state of GHS implementation and what comes next for their workplace.

Everyone is talking about behavior safety these days, often promising injury cost reductions of 70% or more. Unfortunately, even the best behavior safety process will be ineffective if your workplace is not designed to promote safe behaviors. In this session, you will learn about: The role of workplace design in behavior safety; how common workplace design issues impact employee behaviors; engineering design concepts that positively impact behaviors; and methods for integrating ergonomics into the behavior safety process.
CR 313
Manage Your Chemicals, Manage Your Risk
11:30 a.m.–12:30 p.m.  » ICC, 202
Presenter: K. Peterson, Safetec Compliance Systems, Inc., Vancouver, WA.

This session is designed to help EHS professionals understand how to identify and manage the inherent risk associated with the use, storage, transportation, and disposal of chemicals. Each participant will leave the session with tools that they can take back to their organizations to evaluate and prioritize goals and objectives to reduce the likelihood of worker exposures, NOVs, and enforcement actions.

CR 314
WITHDRAWN
Process Safety Management: Industry Trends and Updates
11:30 a.m.–12:30 p.m.
Presenter: P. Thomas, Resource Compliance, Inc., Dinuba, CA.

Luncheon Discussions
NIOSH Tech Talks: Current Topics
12:30 p.m.–1:30 p.m.  » ICC, Expo, Hall B

Luncheon discussions are small, highly interactive group discussions facilitated by NIOSH. Luncheon discussion seating is first-come, first-served.

1. Updating NIOSH’s Cancer and REL Policies
Moderators: P.A. Schulte, T.J. Lentz, P.J. Middendorf, NIOSH, Cincinnati, OH.

NIOSH is in the process of updating its cancer and REL policies, and draft policies were presented in the “Updating the NIOSH Cancer and REL Policies” session. Discussion will focus on obtaining reactions to the draft policies and obtaining input from participants on potential improvements.

2. Engineering Controls
Moderator: R.M. Hall, NIOSH, Cincinnati, OH.

NIOSH engineering control efforts include planning and conducting research on engineering control technology to prevent worker exposures to hazards, and promoting the application of effective engineering control technology for safeguarding worker safety and health. NIOSH researchers help prevent occupational disease and injury by conducting workplace engineering evaluations and developing practical, solution-oriented control technology interventions. To conduct these efforts, NIOSH scientists and engineers work collaboratively with companies; unions; trade associations; labor organizations; universities; and local, state, and federal governments. Discussion on areas of engineering control research within NIOSH.

3. Nanotechnology
Moderator: C. Geraci, L. Hodson, NIOSH, Cincinnati, OH.

NIOSH is the leading federal agency conducting research and providing guidance on the occupational safety and health implications and applications of nanotechnology. This research focuses on answering the essential questions to understanding these implications and applications. NIOSH has conducted numerous field investigations to evaluate exposures and control techniques. NIOSH is also partnering with nanomaterial companies to develop case studies on the effectiveness of using a Prevention through Design approach when designing or expanding their processes, and to demonstrate the utility of a hazard and control banding approach for risk management of engineered nanomaterials.

4. Safe Patient Handling and Movement
Moderator: T.R. Waters, NIOSH, Cincinnati, OH.

Nurses and other health care providers have one of the highest incidence rates of musculoskeletal disorders (MSDs) of any industry sector. These disorders result from exposure to heavy physical exertion associated with handling and moving patients in various health care settings. NIOSH has conducted research in the prevention of these disorders through implementation of safe patient handling (SPH) programs. Findings from these studies demonstrate that SPH programs are highly effective in reducing risks of MSDs. Participants will discuss topics of interest.

5. Buyer Beware: Know It’s NIOSH Approved
Moderator: J. Coyle, NIOSH, Pittsburgh, PA.

All respirators used in the workplace must be certified by NIOSH. This requires stringent evaluation and testing to meet uncompromising standards of quality, performance, and reliability. The discussion will focus on how misleading advertising and the sale of counterfeit respirators were uncovered by NIOSH. Discuss the public information campaign that was launched to educate users and safety managers of these activities and provide an easy mechanism to verify NIOSH approval of filtering facepiece respirators in order to provide full protection to workers.

6. Comprehensive Strategies for Hazard and Exposure Risk Assessment and Management
Moderator: M.D. Hoover, NIOSH, Morgantown, WV.

The NIOSH Exposure Assessment Cross-Sector Program is working to harmonize and apply the “anticipate, recognize, evaluate, control, and confirm” approach for all hazards, including infectious disease control, indoor air quality, violence in the workplace, slips-trips-and-falls, ergonomics, safe use of cleaning agents and other chemicals, shift-work, and other total-worker-health issues. This discussion will focus on finding ways to advance a more comprehensive and cost-effective systems approach to terminology, training, and practice for assessing and managing health hazards and exposure risks for all types of stressors for all classes of workers.

7. Partnerships for Occupational Safety and Health: The NORA Manufacturing Agenda
Moderators: T. Slavin, Navistar, Inc., Warrenville, IL; F. Reenshaw, Cherry Hill, NJ; T. Braun, Liberty Mutual Research, Hopkinton, MA; M. Baskett, NIOSH, Cincinnati, OH.

Exhibitor Product Demos and Presentations
Noon–2:30 p.m.  » ICC, Expo Theater, Hall C

Noon
Kanomax Handheld Precision Sound Level Meter with O-dB Function, Kanomax USA Inc.

The Kanomax handheld sound level meter features a lightweight, compact design. It has A, C, and F weighting modes; 28 to 130 dB measurement range; and measures LP, Leq, Le, Lmax, Lmin, and Lx. The unit is equipped with a high sensitive electrets condenser microphone that eliminates the self-noise of the microphone (0-dB function). The easy-to-read LCD is backlit and can display an analog bar graph. Additional functions can be added with optional SD program cards.

12:30 p.m.
Labconco Introduces a New Lower Energy Fume Hood, Labconco Corporation

Labconco Corporation has led product innovation in fume hoods since 1925. It continues this tradition with the introduction of a new Protector XStream fume hood. Changes in sashes, baffles, and viewing height are all present, which allow for an even higher level of containment. The features of this exciting new product will be covered in this presentation.

1:00 p.m.
Methamphetamine Lab Recognition and Safety

Senior Trooper Tom Egler has been with the Indiana State Police for 12 years. He is currently assigned to the Meth Suppression Section as an investigator providing full-time meth investigations in central Indiana.
A goal of the NORA Manufacturing Agenda is to identify the greatest opportunities to reduce injuries, illnesses, hazardous exposures, and fatalities in the manufacturing sector. This is an opportunity to share information about innovative research and successful partnerships in manufacturing, as well as to explore potential research collaborations and partnerships to improve occupational safety and health.

William P. Yant Award Lecture
Management of Workplace Health Hazards — A Multi-Pronged Approach
12:30 p.m.–1:30 p.m.  » ICC, 243

Presenter: Tan Kia Tang, MS, Ministry of Manpower, Singapore.

Singapore embarked on its industrialization programme in the 1960s and within a span of 40 years, it had transformed from a developing country to an advanced economy nation. Concomitant with its rapid industrialisation, concerted efforts were made as early as in 1970s to address the associated workplace safety and health (WSH) hazards through enforcement of the Factories Act and self-regulation e.g. formation of safety committees and introducing safety and health management system. Improvements were seen in terms of the national accident and occupational disease statistics. However, following a cluster of high profile accidents in 2004, Singapore embarked on a major reform of its safety and health framework in 2005. The OSH Division was re-organised; two new units viz-a-viz the industry-led WSH Council and the WSH Institute were set up to promote WSH best practices and enhance WSH knowledge respectively; an International Advisory Panel was formed; new legislation including the goal-setting WSH Act was introduced to cover all workplaces, and enhance self-regulation with risk assessment as the cornerstone of WSH management; a 10-year WSH blueprint – WSH 2018 was launched to chart our road map; and action plans were drawn up with the aim of achieving WSH excellence by 2018. These have made a significant progress in our WSH performance.

There was no simple solution to the complex and cross-cutting WSH problems; a multi-pronged approach was needed to manage WSH at the national level. In the arena of occupational hygiene which is one of the pillars of WSH, the role of regulatory bodies in workplace health hazards management is to set and enforce occupational health and hygiene standards (e.g. exposure limits for health hazards), and provide infrastructure (e.g. for capability building and information dissemination) to facilitate compliance. While enforcement action is needed to get the job done, promotional activities and industry engagement, incentives and recognition of efforts are effective motivators. In the final analysis, it is within the plant itself that hazards must be controlled or prevented. Specific in-plant occupational hygiene programmes (e.g. chemical management and hearing conservation programmes) and self-regulatory systems can be developed and implemented to manage health hazards. The most effective way to manage health hazards is to design them out at the planning stage; this is followed by engineering controls, administrative measures and personal protection.

This paper covers Singapore’s experience in the area of occupational health hazards management over the years and the impact of various strategies, programmes and initiatives that help to shape the workplace and workforce. It highlights the multi-pronged approach to health hazards management ranging from setting standards, enforcement of law, implementing targeted intervention programmes (e.g. for noise, chemicals, confined spaces, and asbestos), building capability in hazard identification, assessment and control, monitoring and surveillance, to promotional efforts and engagement activities, research and innovations, recognition and incentive schemes. A big challenge is to reach out and engage the small and medium enterprises which constitute the bulk of the industry.

IH Mysteries Workshop
SOLD OUT
12:30 p.m.–2:00 p.m.  » ICC, 212
Facilitator: Fred Boelter, Environ International, Chicago, IL

A multi-pronged approach was needed to manage WSH at the national level. In the arena of occupational hygiene which is one of the pillars of WSH, the role of regulatory bodies in workplace health hazards management is to set and enforce occupational health and hygiene standards (e.g. exposure limits for health hazards), and provide infrastructure (e.g. for capability building and information dissemination) to facilitate compliance. While enforcement action is needed to get the job done, promotional activities and industry engagement, incentives and recognition of efforts are effective motivators. In the final analysis, it is within the plant itself that hazards must be controlled or prevented. Specific in-plant occupational hygiene programmes (e.g. chemical management and hearing conservation programmes) and self-regulatory systems can be developed and implemented to manage health hazards. The most effective way to manage health hazards is to design them out at the planning stage; this is followed by engineering controls, administrative measures and personal protection.

This paper covers Singapore’s experience in the area of occupational health hazards management over the years and the impact of various strategies, programmes and initiatives that help to shape the workplace and workforce. It highlights the multi-pronged approach to health hazards management ranging from setting standards, enforcement of law, implementing targeted intervention programmes (e.g. for noise, chemicals, confined spaces, and asbestos), building capability in hazard identification, assessment and control, monitoring and surveillance, to promotional efforts and engagement activities, research and innovations, recognition and incentive schemes. A big challenge is to reach out and engage the small and medium enterprises which constitute the bulk of the industry.
Exposure scenarios for nanomaterial workers and workplaces: Trends and Hot Issues

1:30 p.m.–5:00 p.m. » ICC, 120


Exposure scenarios are key tools to assess the risks of a material and substance and to define appropriate risk management strategies. Compared to regular chemical agents, nanomaterials bring additional uncertainties and complexity that are related to i) how exposure must be described (a nanomaterial concentration is multi-metric with characteristics such as size distribution, number, surface properties, shape, etc.), ii) the dependence of the hazard-exposure relationship on a multitude of these factors and iii) the fact that there is a considerable lack of good quality exposure data. In the absence of a good understanding of these issues, good documentation of exposure is a challenge but one that must be addressed by all that are already confronted with workers and workplaces dealing with nanomaterials. This session will focus on issues related to the development of exposure scenarios for nanomaterials. How can they be built upon, what are regulatory needs in the USA, what are strategies to develop exposure scenarios under the European REACH regulation? Session participants will focus on what is currently known, and what are the challenges for developing scenarios for regulatory risk assessment, for trade promotion, and for research of exposure and health effects. This session will provide the state of knowledge and will discuss current trends in Europe and the USA.

- Workers Exposure and Health at Nanomaterial Workplaces — An Overview. M. Riediker, Institute for Work and Health, Lausanne, Switzerland.
- Nanomaterials Documentation in the USA Status of the Science and Knowledge. C. Geraci, NIOSH, Cincinnati, OH.
- Use of Exposure (and Health) Data for Epidemiological Studies. M. Schubauer-Berigan, NIOSH, Cincinnati, OH.
- REACH Exposure Scenarios for Nanomaterial Workers and Workplaces. M. Van Tongeren, Institute of Occupational Medicine, Edinburgh, United Kingdom.
- The Challenge to Measure all the Data Needed for a Nanomaterial Exposure Scenario. S. Tsai, University of Massachusetts, Lowell, Dracut, MA.
- From Theory to Practice: Experiences of a Service Provider with Nanomaterial Exposure Documentation. D. Ewert, nanoTox, Inc., Albuquerque, NM.
- Roundtable Discussion. M. Riediker, Institute for Work and Health, Lausanne, Switzerland.

Downstream User Obligations Under REACH

1:30 p.m.–5:30 p.m. » ICC, 122


REACH (Registration, Evaluation, Authorization and restriction of Chemical substances), the European Union’s regulation on chemicals and their safe use, has significantly raised the prescriptive nature of the risk management responsibilities of downstream users of chemicals in the European Union. Under REACH, a downstream user of REACH-registered substances is responsible for ensuring that their uses and the risk management strategies they implement are within the boundaries of what the manufacturer or importer of the substance has registered. In addition, the downstream user is obligated to ensure that the relevant aspects of the risk management strategy are communicated down the supply chain as part of the REACH extended Safety Data Sheet (eSDS). Compliance with this regulation presents a unique situation to the practicing industrial hygienist wherein there is a statutory obligation to implement a risk management strategy that fits within the boundaries of the strategy delineated by the registrant. In addition to fitting a risk management strategy within the boundaries of the registration, downstream users must also reconcile registered and intended uses; foster for the co-existence of REACH exposure and release limits with traditional limits; and manage the potentially redundant, incompatible, or even contradictory risk management strategies of multiple registered substances within a process or mixture.

- Overview of Downstream User Obligations Under REACH. P. Harper, ENVIRON, Phoenix, AZ.
- Downstream User Chemical Safety Assessment. M. Van Tongeren, Institute of Occupational Medicine, Edinburgh, United Kingdom.
- Systematic Description of Registered and Intended Uses under REACH. L. Dell, ENVIRON, Amherst, MA.
- Coexistence of REACH DNELs and DMELs and Traditional Exposure Limits (OELs). R. Roy, 3M Company, St. Paul, MN.
- Reconciling Registered and Intended Risk Management Strategies. R. Skoglund, 3M Company, St. Paul, MN.
- Managing Mixtures Within a REACH Compliant Risk Management Strategy. P. Logan, 3M Company, St. Paul, MN.
- Workshop and Audience Participation. P. Logan, 3M Company, St. Paul, MN.

Reducing Uncertainty in the Semiconductor Industry via Employee Exposure Assessment

1:30 p.m.–5:30 p.m. » ICC, 127

Arranger: C. Torres, ENVIRON, Atlanta, GA. Moderator: G. Dotson, NIOSH, Cincinnati, OH. Monitors: D. Westbrook, Eastman Chemicals, Kingsport, TN; C. Albaugh, Akzo Nobel, Strongsville, OH.

This roundtable will explore existing, newly developed and potential future exposure assessment data, issues, and regulations particularly related to the semiconductor manufacturing industry. Existing — speakers will review previously published studies and highlight relevant methods, results, and conclusions. Newly developed — current topics such as use of Bayesian decision analysis, mathematical modeling and cooperation with allied occupational health professionals (i.e., epidemiologists) will be explored through a case study of a recently completed exposure characterization and exposure reconstruction study conducted for three manufacturing lines previously and currently operated in Asia by the world’s largest semiconductor memory manufacturer. Additionally, the benefits of partnering with academic experts in the field of exposure assessment while conducting studies of this nature will be provided by a current professor. Future — a current industry leader will discuss a prospective exposure assessment approach employed in their global operations, and a governmental representative will provide insights into likely regulatory harmonization across geographies, with potential particular relevance to the semiconductor industry.

- Summarizing 50 Years of Semiconductor Manufacturing — An Introduction to Existing, Newly Developed and Future Exposure Assessment Data and Topics. J. Stewart, Harvard University, Boston, MA.
- Summarizing the IBM Exposure Assessment and Cancer Incident Studies. R. Herrick, Harvard University, Boston, MA.
- A Review of the United Kingdom Health and Safety Executive’s Historical Hygiene Assessment (HHA) of National Semiconductor UK Facilities. J. Cherie, Institute of Occupational Medicine, Edinburgh, United Kingdom.
- A Current Day Worker Exposure Assessment of Three Semiconductor Manufacturing Lines in South Korea. J. Poole, ENVIRON, Tampa, FL.
- An Exposure Reconstruction of Previous Employee Exposures at Three Semiconductor Manufacturing Lines in South Korea. R. Jones, ENVIRON, Chicago, IL.
- Approaches and Benefits of Partnering with Academic Exposure Assessment Experts. 
  J. Meeker, University of Michigan, Ann Arbor, MI.
- Study on Environmental Exposure Properties and Health Impact of Nanoparticles in Semiconduc-
  tor Manufacturing Process. 
  C. Kwangmín, Samsung Health Research Institute, 
  Gihung, Republic of Korea.
- Intel’s Chemical Use Approval Process: A Prospective Exposure Assessment Strategy. 
  R. Tubby, Intel Corporation, Hillsboro, OR.
- Current Trends and an Exploration of the Future of the Regulatory Framework Impacting Exposure 
  Assessment in the Semiconductor Industry. 
  J. Cherrie, Institute of Occupational Medicine, 
  Edinburgh, United Kingdom.

RT 221
Welding Exposure 
Assessments and Exposure 
Database Design
1:30 p.m.–5:30 p.m. » ICC, 240
Arranger: A. Siert, Xcel Energy, Denver, CO. 
Moderator: J. Spear, J.E. Spear Consulting, LP, Magnolia, TX.
Monitors: F. Anderson, Zachry Industrial, Inc., San Antonio, TX; B. Stott, AMEC, Calgary, ON, Canada.

Welding is among the most important and utilized industrial processes, and welders comprise one of the largest working populations. Welders experience higher rates of lung disease and cancer, yet the importance of specific air contaminants are not well understood. Epidemiologic studies have yielded equivocal results due to confounders and lack of exposure information. There is a need for exposure assessments to multiple fume components by process and material, but they must be designed to also quantify other predictor variables. There are current efforts under way to construct welding exposure databases, yet previous efforts are of very limited value due to quality and comparability problems. For exposure information to be useful and comparable, exposures and variables should be collected and recorded in a uniform fashion.

- Flux-Cored Arc Welding Exposures in Electric Power Generation and Fume Components. 
  A. Siert, Xcel Energy, Denver, CO.
- Thermal Cutting Exposures in Electric Power Generation and Fume Components. 
  S. Woods, Xcel Energy, Denver, CO.
- Comparison of Welding Exposures Simultaneously Collected Inside the Hood vs. on the Collar, 
  and Does Sample Placement Matter? 
  D. Dechant, University of Alabama, Tuscaloosa, AL.
- Harmonizing Welding Fume Data Collection. 
  M. Harris, Hamlin & Harris, Inc., Baton Rouge, LA.
- Development of a Multi-Metals Welding Fume Database. 
  J. Hicks, Exponent, Oakland, CA.
- Development of Semiparametric Relationship 
  Between Fume Exposure and Welding-Related 
  Parameters Using Fraction Factorial Design. 
  A. Abelmamn, ChemRisk, LLC, Chicago, IL.

PO 112
Current Topics in 
Occupational Medicine 
and Epidemiology
2:30 p.m.–5:30 p.m. » ICC, 202
Arrangers: J. Ingram, City and County of San Francisco 
Department of Public Health, San Francisco, CA; 
R. Adams, ENVIRON, Princeton, NJ. 
Moderator: C. Remisz, Navy and Marine Corps 
Public Health Center, Williamsburg, VA. 

- Particle Size Distributions of Welding Fume 
  Measured in the Breathing Zone and in an Emission 
  Chamber. J. Breskey, University of California, 
  Fullerton, Fullerton, CA.
- Real Time Detection Systems and the Industrial Hygienist. 
  C. Ficklen, PID Analyzers, LLC, Sandwich, MA.
- Solute Sensory Clues: Influence or Choice 
  C. Johnson, 3M, St. Paul, MN.
- How Can I Become a Super IH? 
  P. Logan, 3M, St. Paul, MN.

IGNITE
Offering Enlightenment and Knowledge — In a Hurry! 
2:30 p.m.–4:00 p.m. » ICC, 209
Moderator: M. Latko, AIHA, Falls Church, VA.
Arranger and Monitor: C. Tobin, AIHA, Falls Church, VA.

The IGNITE session originated in the high-technology profession but has spread worldwide. In a five-minute presentation, speakers share their professional and personal passions using 20 slides that auto advance every 15 seconds. AIHce 2012 is offering its own version of IGNITE. Learn what’s on the minds of your colleagues and friends in this innovative and engaging new format. Find out why this new program has become an international phenomenon. Experience firsthand what is meant by the IGNITE motto, “Enlighten us, but make it fast!”

- Breathless: On Top of Colorado’s Highest Peak – Mt. Elbert 
  C. Lorenzo, OSHA, Denver, CO.
- If Video Killed the Radio Star, How Has the Internet Affected the IH Rock Star? 
  C. Ficklen, SQA2, Inc., Hampton, VA.
- Real Time Detection Systems and the Industrial Hygienist 
  J. Driscoll, PID Analyzers, LLC, Sandwich, MA.
- Solute Sensory Clues: Influence or Choice 
  C. Johnson, 3M, St. Paul, MN.
- Real Time Detection Systems and the Industrial Hygienist 
  C. Remisz, Navy and Marine Corps Public Health Center, Williamsburg, VA.
- Solute Sensory Clues: Influence or Choice 
  C. Johnson, 3M, St. Paul, MN.
- How Can I Become a Super IH? 
  P. Logan, 3M, St. Paul, MN.

3:10 p.m.–3:30 p.m.
CS-112-3 Reduction of Occupational Injuries in the 
German Industry Within a Two Stage Project: 
Results of an Epidemiologic Follow-Up Study and 
Application of a Tool for Prevention — The Preven-
tion Index (PI). J. Börgér, Y. Sun, F. Bochmann, 
Institute for Occupational Safety and Health of 
German Social Accident Insurance, Sankt Augustin, 
Germany; K. Ponto, German Social Accident Insur-
ance Institution for the Woodworking and Metalwork-
ing Industries, Mainz, Germany.
3:30 p.m.–3:50 p.m.
SR-112-4 Estimation and Characterization of Poly-
chlorinated Dibenzo-p-dioxins and Dibenzofurans 
Generated from an Automobile Foundry Factory 
in China. L. Wang, W. Chen, Huazhong University of 
Science and Technology, Hubei, China.
3:50 p.m.–4:10 p.m.
SR-112-5 Diesel Motor Emissions and the Risk of 
Lung Cancer — A Re-Analysis of Epidemiologic 
Evidences. F. Bochmann, Y. Sun, A. Nold, M. Mat-
tenkott, IFA-DGUV, Sankt Augustin, Germany.
4:10 p.m.–4:30 p.m.
SR-112-6 Structural Equation in Occupational 
Exposure and Occupational Cancer Risk Modeling. 
K. Czarnocki, E. Czarnocka, B. Wt, M. Bojar, Lublin 
University of Technology, Lublin, Poland; J. Nowak, 
John Paul II Catholic University, Lublin, Poland; 
S. Mankiewicz, St. Johns’ Regional Oncology Center, 
Lublin, Poland.
4:30 p.m.–4:50 p.m.  
SR-112-7  Active Issues in Risk Assessment: Carcinogen Classification.  F. Minar, CUNY at Hunter College, New York, NY.

5:00 p.m.–5:10 p.m.  

5:10 p.m.–5:30 p.m.  

RT 222  
2:30 p.m.–5:30 p.m.  » ICC, 205  

Noise of high intensity but short duration — known as impulsive and impact noise — is distinct in many respects from steady-state noise. Differences are found in the damage-risk criteria, mechanism of hearing loss, measurement and analysis, and efficacy of hearing protection. Accurate predictions of the auditory risk from these impulses lag behind our understanding of steady-state noise. The hearing conservation community must reconcile observations that impulse and impact noise can produce greater hearing loss than steady-state noise, yet the ear appears to have unique resistance to certain types of impulsive and impact noise. This roundtable gathers leading experts in impulsive and impact noise to share the current knowledge in this area and equip industrial hygienists with tools to understand and manage these kinds of noise.

CR 316  
Incubating Accidents: How Management Fails at Safety  
3:00 p.m.–4:00 p.m.  » ICC, 203  
Presenters: D. Bryant, University of Central Missouri, Warrensburg, MO; J. Hartle, Johnson County Fire Protection District, Warrensburg, MO. Moderator: M. DeVany, DeVany Industrial Consultants, Vancouver, WA.

Organizations and managers act in predictable ways to ignore, downplay, or misinterpret risk, resulting in accidents and man-made disasters. Major accidents and system failures are not caused by unknown technical factors but by managerial decisions made months or years before the event occurs. Case studies of serious accidents will illustrate the managerial failures that undermine safety and allow hazards to incubate. Recognition of these underlying managerial factors will enable professionals to develop effective strategies and prevent disastrous accidents.

CR 317  
OSHA in Health Care: Out of Sight and Out of Mind?  
3:00 p.m.–4:00 p.m.  » ICC, 102  
Presenters: S. Harris, UL PureSafety, Franklin, TN. Monitor: L. Feng, University of California, Berkeley, CA.

Based on generally accepted myths about OSHA, the health care community may feel justified in taking little or no action to deal with occupationally acquired infectious diseases or other OSHA issues. The facts say otherwise: millions of employees across thousands of sites; the highest illness and injury rates in the nation; millions of nosocomial infections and fatalities each year; and few OSHA inspections. It looks like we finally got OSHA’s attention. Hint: “A weak culture of worker safety in this sector…”

CR 315  
Case Studies of Two Young Worker Fatalities: Focus on Prevention  
3:00 p.m.–4:00 p.m.  » ICC, Wabash 3  

In 2009, 359 workers under the age of 24 died from workplace injuries, including 27 youths under 18 years old. This presentation by a senior analyst on WHD’s Child Labor and Special Employment Team and an OSHA health scientist will review two case studies of young worker fatalities describing the cases, relevant workplace hazards, and WHD’s and OSHA’s investigations. Discussion will focus on preventive measures and lessons learned to protect young workers in similar tasks and workplaces.

PO 113  
Indoor Environmental Quality — II  
3:00 p.m.–5:20 p.m.  » ICC, 243  

3:00 p.m.–3:20 p.m.  
CS-113-1  CFD Driven Method for HVAC-Induced Cross-Draft Optimization Aimed at Promoting Chemical Hood Containment Performance. A. Kolesnikov, CPP, Fort Collins, CO.
3:20 p.m.–3:40 p.m.  
SR-113-2 Monitoring Air Quality in Corrosive Drywall Homes.  E. Light, Building Dynamics, Ashton, MD; B. Manis, Building Health Sciences, Rockville, MD.
3:40 p.m.–4:00 p.m.  
SR-113-3 Relationship Between Strontium, Sulfur, and Reduced Sulfur Gases: Imported and Domestic Drywall.  J. Komiński, Environmental Quality Management, Inc., Cincinnati, OH.
4:00 p.m.–4:20 p.m.  
4:20 p.m.–4:40 p.m.  
4:40 p.m.–5:00 p.m.  
CS-113-6 Ultrafine Particles from Smoke Testing of Plumbing Stacks to Locate Sewer Gas Leaks in a High-Rise Building.  J. Persky, F. Bonetti, M. Baquiran, ENVIRON, Chicago, IL.
5:00 p.m.–5:20 p.m.  
CS-113-7 Formaldehyde Exposure Assessment During the Application of Professional Hair Smoothing Products.  R. Kalmes, M. Posson, Exponent, Oakland, CA; M. Fedoruk, Exponent, Irvine, CA.

PO 114  
Industrial Hygiene General Practice
3:00 p.m.–5:40 p.m.  » ICC, Wabash 1
Arranger and Moderator: D. Day, Sealed Air Corporation, Duncan, SC. Monitor: S. Connell, University of Alabama, Birmingham, AL.
3:00 p.m.–3:20 p.m.  
SR-114-1 Determination of Nitrogen Trichloride by Dynamic Air Sampling with Solid-Phase Microextraction.  H. Liu, S. Tsai, National Taiwan University, Taipei, Taiwan.
3:20 p.m.–3:40 p.m.  
3:40 p.m.–4:00 p.m.  
CS-114-3 A Case Study in Perimeter Monitoring — Emergency Style.  H. Umhoefer, Total Safety EHS Services, Houston, TX; D. Bower, ICU — A Total Safety Company, Houston, TX.
4:00 p.m.–4:20 p.m.  
4:20 p.m.–4:40 p.m.  
CS-114-5 Evaluating Slips and Falls — A Tale of Two Restaurants.  S. Evans, MDE Inc., Seattle, WA.
4:40 p.m.–5:00 p.m.  
CS-114-6 Challenges Associated with Sampling for Nickel Carbonyl During Nickel Catalyst Changeouts.  J. Tudor, Shell Oil Company, Norco, LA; P. Owens, Shell Oil Company, Martinez, CA; M. Macfarlane, Shell Canada, Calgary, AB, Canada; J. Kliebert, Motiva Enterprises LLC, Convent, LA; J. Najolia, Motiva Enterprises LLC, Norco, LA.
5:00 p.m.–5:20 p.m.  
CS-114-7 Lead Exposure Due to Use of Powder Actuated Tools.  M. Wiggins, Liberty Mutual Group, Lexington, SC.
5:20 p.m.–5:40 p.m.  

CR 319  
Turbo-Charged Risk Management — Integrating ISO 31000 with ISO 14001
4:30 p.m.–5:30 p.m.  » ICC, Wabash 3

The findings and conclusions in the National Institute for Occupational Safety and Health abstract presentations have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

New! Paperless Evaluations  
Don’t Forget to Complete Your Evaluation!

PDC and technical session evaluations are now paperless. Use your smartphone, laptop, iPad or mobile device, or the cyber center computers to access the evaluations one of three ways —

- The AIHce Mobile App. Visit http://crwd.cc/aihce2012 or scan the QR code
- Log on to www.aihce2012.org/certification
- Links sent via email at the conclusion of your PDC and Technical Session

Questions? Visit the Speaker Ready Room, ICC, 108

NEW — MORE certification maintenance!
You can now earn COCs and CEUs for weekday technical sessions! Simply complete the online survey at www.aihce2012.org/certification.
**Wednesday, June 20**

7:30 a.m.–11:30 a.m.  
Speaker Ready Room  
ICC, 108

7:30 a.m.–3:00 p.m.  
Press Room  
ICC, 112

7:30 a.m.–4:00 p.m.  
Registration  
ICC, Wabash Lobby  
Volunteer Collaboration Café  
ICC, Crossroads Lobby

8:00 a.m.–9:00 a.m.  
General Session  
A CEO’s Perspective: Redefining Our Future  
John C. Sheptor  
Imperial Sugar Company  
Sugar Land, TX  
ICC, Sagamore Ballroom

8:00 a.m.–4:00 p.m.  
CareerAdvantage Development Fair 2012  
ICC, 105

9:00 a.m.–1:00 p.m.  
Poster Sessions  
ICC, Expo, Hall B  
Poster Session (Graduate and Undergraduate Students)  
Authors present 10:00 a.m.–Noon  
Student Posters Award Ceremony  
12:30 p.m.–1:00 p.m.

Annual Blood Drive  
ICC, 110

9:00 a.m.–1:30 p.m.  
Visit the Expo!  
ICC, Halls A–E  
Passport to Prizes, Text to Win Promo, Special Displays, Cyber Centers, Restaurants, Lounges, Expo Theater  
No sessions 9:00 a.m.–10:00 a.m. and Noon–1:00 p.m.

9:00 a.m.–4:00 p.m.  
 Volunteer Red Carpet Club  
ICC, 111

9:30 a.m.–1:00 p.m.  
Exhibitor Product Demos and Presentations  
Expo Theater, Hall C  
See presentation descriptions on page 56 and 59.

10:00 a.m.–11:00 a.m.  
CR 320 Achieving World Class Health and Safety through Transformational Leadership  
ICC, 104

CR 321 Assessing Your Safety and Health Management System  
ICC, 203

CR 322 How to Develop and Sustain an Effective Accident Investigation Program  
ICC, 202

10:00 a.m.–Noon  
PO 115 Environmental Microbiology Research  
ICC, 102

PO 116 Health Care Industries — II  
ICC, Wabash 1  
PO 117 Integrating Exposure Assessment, Risk Assessment, and Risk Management  
ICC, Wabash 3  
RT 224 Integrating Ergonomics into Green Building Design  
ICC, 120  
RT 225 Methamphetamine Labs: Current Issues  
ICC, Wabash 2  
RT 226 Under Pressure! Compressed Gases and Cryogens: A Comprehensive EDHS Prospective  
ICC, 127

10:00 a.m.–3:00 p.m.  
CR 326 Private Sector Preparedness — Is Your Company Ready for Certification?  
ICC, Wabash 3  
CR 327 Proactive Management of Hospital Water Supply Systems in Support of the Environment of Care  
ICC, 103

1:30 p.m.–3:00 p.m.  
Emerging Issues — Carbon Monoxide: A Persistent Problem  
ICC, 205

1:30 p.m.–3:30 p.m.  
RT 234 Sustainability/CSR Reporting and the OHS Missing Link  
ICC, 125

1:30 p.m.–4:00 p.m.  
RT 227 Ten Years Since the U.S. Anthrax Incidents: Engaging the IH Community  
ICC, Wabash 2  
1:30 p.m.–4:10 p.m.  
PO 120 Engineering Controls — Lessons from Design and Practice  
ICC, 209

1:30 p.m.–4:30 p.m.  
PO 121 Environmental Issues for the EH&S Practitioners  
ICC, 104  
PO 122 Noise: Evaluation, Control, and Hearing Conservation  
ICC, 202

1:30 p.m.–12:40 p.m.  
RT 228 Trends in Green Chemistry: From Policy Reform to Innovation  
ICC, 125

10:00 a.m.–12:40 p.m.  
PO 118 Safety  
ICC, 103

11:30 a.m.–12:30 p.m.  
CR 323 End of an Era? The Phase Out of the ORM–D Exception  
ICC, 202  
CR 324 Safety Eyewear and ANSI Standards — Seeing Is Believing!  
ICC, 203  
CR 325 What Is Wrong with Mandatory Safety Training (and How to Fix It)!  
ICC, 104

Noon–1:00 p.m.  
Luncheon Discussions: Volunteer Groups Tech Talks  
ICC, Expo, Hall B

12:30 p.m.–1:30 p.m.  
Cummings Award Lecture  
ICC, Wabash 1

12:30 p.m.–6:30 p.m.  
Speaker Ready Room  
ICC, 108

12:30 p.m.–6:30 p.m.  
RT 229 Application of Computational Fluid Dynamics in Industrial Hygiene  
ICC, 127  
RT 230 Challenging Confined Spaces  
ICC, 120  
RT 231 The Future of EHS: Past to Present  
ICC, 243  
RT 232 The Next Generation of Technical Leaders: IH Student Research Showcase  
ICC, 102  
1:30 p.m.–4:50 p.m.  
PO 123 Respiratory Protection  
ICC, 203

1:30 p.m.–5:30 p.m.  
RT 233 NIOSH Health Hazard Evaluations: Results of Recent Industrial Hygiene Evaluations  
ICC, 240  
SS 003 Science Symposium: Exposure Limit Setting Processes: A Multinational Challenge  
ICC, 122

Note Meeting Rooms ...
ICC = Indiana Convention Center
# AT-A-GLANCE: Wednesday, June 20

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 p.m.–2:30 p.m.</td>
<td>AIHA Government Affairs Update</td>
<td>ICC, 212</td>
</tr>
<tr>
<td>3:00 p.m.–4:00 p.m.</td>
<td>CR 328 Accident Investigation — Effective Techniques and Documentation</td>
<td>ICC, Wabash 3</td>
</tr>
<tr>
<td>3:00 p.m.–4:00 p.m.</td>
<td>CR 329 Safety Culture: Motivation and Influence</td>
<td>ICC, 103</td>
</tr>
<tr>
<td>4:30 p.m.–5:30 p.m.</td>
<td>CR 330 Industrial Ecology: An Industrial Hygiene Approach</td>
<td>ICC, Wabash 3</td>
</tr>
<tr>
<td>5:00 p.m.–7:00 p.m.</td>
<td>PO 124 Indoor Environmental Quality — III</td>
<td>ICC, Wabash 1</td>
</tr>
<tr>
<td>5:00 p.m.–7:30 p.m.</td>
<td>RT 235 How to Effectively Implement the New Hazcom (GHS) — A Chemical Users Perspective</td>
<td>ICC, Wabash 2</td>
</tr>
<tr>
<td>5:00 p.m.–7:30 p.m.</td>
<td>RT 236 Applying Bayesian Data Analysis in the Real World to Solve Real Problems</td>
<td>ICC, 102</td>
</tr>
<tr>
<td>6:00 p.m.–7:00 p.m.</td>
<td>CR 331 Safety Contacts: Caught You Doing Something Right</td>
<td>ICC, Wabash 3</td>
</tr>
<tr>
<td>8:00 a.m.–9:30 a.m.</td>
<td>Pharmaceutical Round Robin Committee Meeting</td>
<td>JW Marriott, 102</td>
</tr>
<tr>
<td>8:00 a.m.–5:00 p.m.</td>
<td>AIHA Registry Programs Competency Assessments</td>
<td>JW Marriott, 101</td>
</tr>
<tr>
<td>9:00 a.m.–Noon</td>
<td>Construction Committee Meeting</td>
<td>JW Marriott, White River Ballroom B</td>
</tr>
<tr>
<td>9:30 a.m.–11:00 a.m.</td>
<td>AIHA Past Presidents’ Brunch (by invitation)</td>
<td>JW Marriott, 309</td>
</tr>
<tr>
<td>10:00 a.m.–11:00 a.m.</td>
<td>Red Council Meeting</td>
<td>JW Marriott, 102</td>
</tr>
<tr>
<td>10:00 a.m.–Noon</td>
<td>ANSI/AIHA Z88 Respiratory Protection Standards Committee Meeting</td>
<td>JW Marriott, 206</td>
</tr>
<tr>
<td>10:00 a.m.–Noon</td>
<td>Biological Monitoring Committee Meeting</td>
<td>JW Marriott, 107</td>
</tr>
<tr>
<td>10:00 a.m.–Noon</td>
<td>Indoor Environmental Quality Committee Meeting</td>
<td>JW Marriott, White River Ballroom C</td>
</tr>
<tr>
<td></td>
<td>Oil and Gas Working Group</td>
<td>JW Marriott, White River Ballroom D</td>
</tr>
<tr>
<td></td>
<td>Practice, Standards and Guidelines Committee Meeting</td>
<td>JW Marriott, 103</td>
</tr>
</tbody>
</table>

**AIHA**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 a.m.–Noon</td>
<td>Violet Council Meeting</td>
<td>JW Marriott, 105</td>
</tr>
<tr>
<td>1:30 p.m.–3:00 p.m.</td>
<td>2012 Finance Committee Meeting</td>
<td>ICC, 211</td>
</tr>
<tr>
<td>1:30 p.m.–3:30 p.m.</td>
<td>Academic SIG Meeting</td>
<td>JW Marriott, White River Ballroom D</td>
</tr>
<tr>
<td></td>
<td>Consultants SIG Business Meeting</td>
<td>JW Marriott, 102</td>
</tr>
<tr>
<td></td>
<td>Green Building Working Group Meeting</td>
<td>JW Marriott, 103</td>
</tr>
<tr>
<td></td>
<td>Laboratory Health and Safety Committee Meeting</td>
<td>JW Marriott, White River Ballroom C</td>
</tr>
<tr>
<td></td>
<td>Nanotechnology Working Group Meeting</td>
<td>JW Marriott, White River Ballroom B</td>
</tr>
<tr>
<td>3:30 p.m.–5:30 p.m.</td>
<td>Computer Applications Committee Meeting</td>
<td>JW Marriott, 103</td>
</tr>
<tr>
<td></td>
<td>Control Banding Working Group Meeting</td>
<td>JW Marriott, 104</td>
</tr>
<tr>
<td></td>
<td>Incident Preparedness and Response Working Group Meeting</td>
<td>JW Marriott, 107</td>
</tr>
<tr>
<td>4:00 p.m.–6:00 p.m.</td>
<td>Fellows SIG Meeting</td>
<td>JW Marriott, Grand Ballroom 1</td>
</tr>
</tbody>
</table>

**Social Concerns Committee Meeting**

**Permanent Conference Committee Meeting**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30 p.m.–5:30 p.m.</td>
<td>Orange Council Meeting</td>
<td>JW Marriott, 105</td>
</tr>
<tr>
<td>5:00 p.m.–7:00 p.m.</td>
<td>Career and Employment Services Committee Meeting</td>
<td>JW Marriott, 311</td>
</tr>
<tr>
<td>6:30 p.m.–8:00 p.m.</td>
<td>AIHA President’s Reception (by invitation)</td>
<td>JW Marriott, Grand Ballroom 3</td>
</tr>
</tbody>
</table>

**Ancillary**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m.–5:30 p.m.</td>
<td>Dangerous Decibels Educator Training Workshop</td>
<td>JW Marriott, 201</td>
</tr>
<tr>
<td>1:30 p.m.–5:00 p.m.</td>
<td>API Workshop for Petroleum Industry IHs, sponsored by American Petroleum Institute (by invitation)</td>
<td>JW Marriott, Grand Ballroom 7</td>
</tr>
<tr>
<td>1:30 p.m.–5:30 p.m.</td>
<td>Forest Products Industrial Hygiene Forum sponsored by NCASI</td>
<td>JW Marriott, 106</td>
</tr>
<tr>
<td>3:00 p.m.–6:00 p.m.</td>
<td>AAR Railroad Industrial Hygiene Forum sponsored by American Association of Railroads</td>
<td>JW Marriott, 306</td>
</tr>
<tr>
<td>5:30 p.m.–7:30 p.m.</td>
<td>University of South Florida Reception</td>
<td>JW Marriott, 302</td>
</tr>
</tbody>
</table>

**New! Paperless Evaluations**

Don’t Forget to Complete Your Evaluation!

PDC and technical session evaluations are now paperless. Use your smartphone, laptop, iPad or mobile device, or the cyber center computers to access the evaluations one of three ways —

- The AIHce Mobile App. Visit [http://crwd.cc/aihce2012](http://crwd.cc/aihce2012) or scan the QR code
- Log on to [www.aihce2012.org/certification](http://www.aihce2012.org/certification)
- Links sent via email at the conclusion of your PDC and Technical Session

Questions? Visit the Speaker Ready Room, ICC, 108

**NEW — MORE certification maintenance!**

You can now earn COCs and CEUs for weekday technical sessions! Simply complete the online survey at: [www.aihce2012.org/certification](http://www.aihce2012.org/certification).

AIHce cannot guarantee the appearance of all presenters listed in this program. We regret any disappointment if a particular speaker is unable to present.
**Wednesday, June 20**

**GENERAL SESSION: 8:00 A.M.–9:00 A.M.**  
ICC, SAGAMORE BALLROOM

**A CEO’s Perspective: Redefining Our Future**

**John C. Sheptor,** President and CEO, Imperial Sugar Company, Sugar Land, TX

John C. Sheptor is recognized as a visionary leader in the global manufacturing and supply chain industries. He is known for achieving strong organizational growth, expanding markets across borders, and building resourceful teams.

In February, 2008, a dust explosion at Imperial Sugar’s Port Wentworth, Georgia refinery caused the loss of lives, injuries and substantial damage to the facility. Mr. Sheptor was touring the facility at the time of the incident, narrowly escaping injury. He participated that evening and for many days thereafter in the emergency response and search for survivors.

Since then, the company has transformed itself, making numerous safety and health changes. Mr. Sheptor will share lessons learned about change, as he led Imperial Sugar through what he calls the longest and most memorable year of his life.

*Immediately following his presentation, Mr. Sheptor will host a 20 minute Q&A session. Attendees who stay will be asked to move to the front.*

---

**Exhibitor Product Demos and Presentations**

9:30 a.m.–10:30 a.m.  » ICC, Expo Theater, Hall C

**9:30 a.m.**  
**Introducing the mTrap: The Only Spore Trap Specifically Designed to Efficiently and Rapidly Capture PCR Air Samples, Assured Bio Labs, LLC**

The new mTrap product will be introduced during the presentations. The presentation will provide an overview of the technology and a hands-on demonstration to attendees on the proper use of the mTrap with standard sampling pump and tripod technology. Free trial packs will be available.

**10:00 a.m.**  
**Good Lab Practices with Powder Handling in an OEL 3 and 4 Environment, Flow Sciences, Inc.**

Powders and potent compounds used in R&D environments can be light and fluffy (micron to nano). These harmful particulates can create serious personnel exposures. Flow Sciences designs safety containment solutions for personal protection.

---

**CR 320**  
**Achieving World Class Health and Safety Through Transformational Leadership**  
10:00 a.m.–11:00 a.m.  » ICC, 104

**Presenter:** R. Fulwiler, Technology Leadership Associates, Cincinnati, OH.  
**Monitor:** M. Hicks, University of Michigan, Chandler, AZ.

Leadership can be broken down into two styles — transactional and transformational. Transactional leaders focus on the work, while transformational leaders focus both on the work and the worker. Transactional leaders will achieve, at best, average results in any functional area. Transformational leaders will be more able to engage the worker and achieve above average results. This is certainly the case when it comes to achieving world-class safety, since the key to world-class safety is engagement.

---

**CR 321**  
**Assessing Your Safety and Health Management System**  
10:00 a.m.–11:00 a.m.  » ICC, 203

**Presenters:** T. Rancour, Rancour & Associates, LLC, Northville, MI; B. Russell, Systems Approach LLC, West Simsbury, CT.

Internal and external Safety & Health Management Systems (SHMS) (e.g., OSHA VPP, ANSI Z10, OHSAS 18001, etc.) are widely available and have been adopted by many companies to improve S&H program performance. This session will examine what an S&H management system is, some of the reasons driving implementation of SHMS, and some of the errors encountered in fully understanding and/or implementing these systems. The presenters will offer strategies and tools for avoiding the pitfalls and optimizing performance.

---

**CR 322**  
**How to Develop and Sustain an Effective Accident Investigation Program**  
10:00 a.m.–11:00 a.m.  » ICC, 202

**Presenter:** B. Moriarty, Chubb Insurance, Glen Ellyn, IL.  
**Monitor:** S. Lynch, Auburn University, Auburn, AL.

An accident investigation program is the most important safety program a company can have; however, accident investigation is one of the weakest programs in many companies today. A study of completed accident investigation reports typically reveals significant gaps in identifying the root cause and control techniques that focus on the elimination of the exposure. Accident investigation requires a process — one that leads the investigator to an exposure control technique based on the accident root cause.
PO 115
Environmental Microbiology Research
10:00 a.m.–Noon » ICC, 102
10:00 a.m.–10:20 a.m.
SR-115-1 WITHDRAWN Using New Parameters for Correlation Between Concentration of Carbon Dioxide and Bacterial Bioaerosols in Indoor Workplaces.
T. Lin, J. Liu, L. Yang, China Medical University, Taichung, Taiwan; P. Hung, C. Chen, Institute of Occupational Safety and Health, Taipei, Taiwan.
10:20 a.m.–10:40 a.m.
A. Gifford, INFINICON, Inc., East Syracuse, NY.
10:40 a.m.–11:00 a.m.
SR-115-3 A Building Performance Model for Evaluating Bioaerosol Data. R. Spicer, H. Gangleff, WCD Group, Pennington, NJ.
11:00 a.m.–11:20 a.m.
SR-115-4 Evaluation of Bioaerosol and Antibiotic-Resistant Characteristics on a Broiler Farm.
C. Lai, T. Fan, C. Chen, Y. Chen, J. Lee, Y. Lin, Chung Shan Medical University, Taichung, Taiwan.
11:20 a.m.–11:40 a.m.
SR-115-5 Effect of Relative Humidity on Impactor Sampling Among Four Airborne Viruses.
11:40 a.m.–Noon
CS-116-1 Industrial Safety Science: The Value Stream of Industry Hygiene in Health Care.
J. Bowman, S. Mazycz, St. Vincent Hospital, Indianapolis, IN.
10:20 a.m.–10:40 a.m.
CS-116-2 Thinking Outside the Nosecone: A Case Study Discussing a Novel Solution to Control Waste Anesthetic Gas Exposure in a Variumix.
M. Canright, B. Koillmeyer, Forensic Analytical Consulting Services, Rancho Dominguez, CA; J. Martinelli, Forensic Analytical Consulting Services, Citrus Heights, CA.
10:40 a.m.–11:00 a.m.
CS-116-3 The Importance of Good Chemical Management in Hospitals.
G. Byrns, A. Nelson, Illinois State University, Normal, IL.
11:00 a.m.–11:20 a.m.
SR-116-4 WITHDRAWN Application of Linear Programming Model for the Management of Indoor Bioaerosol Concentrations in the Workplace.
T. Lin, H. Chang, Y. Lin, China Medical University, Taichung, Taiwan.
11:20 a.m.–11:40 a.m.
11:40 a.m.–Noon
CS-116-6 Industrial Safety Science: The Value Stream of Industry Hygiene in Health Care.
J. Bowman, S. Mazycz, St. Vincent Hospital, Indianapolis, IN.
11:00 a.m.–11:20 a.m.
SR-117-1 WITHDRAWN Using New Parameters for Correlation Between Concentration of Carbon Dioxide and Bacterial Bioaerosols in Indoor Workplaces.
T. Lin, J. Liu, L. Yang, China Medical University, Taichung, Taiwan; P. Hung, C. Chen, Institute of Occupational Safety and Health, Taipei, Taiwan.
11:20 a.m.–11:40 a.m.
SR-117-2 Historical Exposure Reconstruction for Dermal Exposures in Emergency and Workplace Settings.
S. Dotson, T. Lentz, NIOSH, Cincinnati, OH; A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH; F. Frasch, NIOSH, Morgantown, WV.
11:40 a.m.–Noon
SR-117-6 Characterizing Dermal Route Contributions to Exposures to Chemicals Within Emergency and Workplace Settings. S. Dotson, T. Lentz, NIOSH, Cincinnati, OH; F. Frasch, NIOSH, Morgantown, WV; A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH.

PO 116
Health Care Industries — II
10:00 a.m.–Noon » ICC, Wabash 3
Arranger: M. Jones, Department of Veterans Affairs, Iowa City, IA. Moderator: N. Rice, Intermountain Healthcare, Salt Lake City, UT. Monitors: M. Jones, Department of Veterans Affairs, Iowa City, IA; S. Derman, Medishare Environmental Health & Safety Services, Santa Clara, CA.
10:00 a.m.–10:20 a.m.
CS-116-1 Assessment of Antineoplastic Contamination in a Chemotherapy Suite of a Hospital.
R. Fernandez, O. Malik, M. Kumala, ECH0 Management, Inc., Mississauga, ON, Canada.
10:20 a.m.–10:40 a.m.
CS-116-2 Thinking Outside the Nosecone: A Case Study Discussing a Novel Solution to Control Waste Anesthetic Gas Exposure in a Variumix.
M. Canright, B. Koillmeyer, Forensic Analytical Consulting Services, Rancho Dominguez, CA; J. Martinelli, Forensic Analytical Consulting Services, Citrus Heights, CA.
10:40 a.m.–11:00 a.m.
CS-116-3 The Importance of Good Chemical Management in Hospitals.
G. Byrns, A. Nelson, Illinois State University, Normal, IL.
11:00 a.m.–11:20 a.m.
11:20 a.m.–11:40 a.m.
SR-117-5 A Decision Support System for Linking Risk Assessment and Risk Management Information for Dermal Exposures in Emergency and Workplace Settings. S. Dotson, T. Lentz, NIOSH, Cincinnati, OH; A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH; F. Frasch, NIOSH, Morgantown, WV.
11:40 a.m.–Noon
SR-117-6 Characterizing Dermal Route Contributions to Exposures to Chemicals Within Emergency and Workplace Settings. S. Dotson, T. Lentz, NIOSH, Cincinnati, OH; F. Frasch, NIOSH, Morgantown, WV; A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH.

RT 224
Integrating Ergonomics into Green Building Design
10:00 a.m.–Noon » ICC, 120
Arranger and Moderator: K. Irving-Deady, Computing with Comfort, Concord, MA. Monitors: N. Sanders, IAQ Consulting Partners, Atlanta, GA; M. Macomber, OSHA, Saginaw, MI.

The Leadership in Energy and Environmental Design (LEED) framework provides a practical way to measure energy efficiency, community impact, indoor environmental quality, plus materials and resource sustainability in design, construction, operation, and maintenance of buildings. The value of integrating human factors into green buildings and computer-related equipment will be explored. Application of human factors principles could enhance workplace environments by considering placement, usability, and adjustability of fixtures and furniture for end users, as well as their control over these variables. There will be a focus on “human element” low risk, healthy ergonomics for users of computers and office furniture. Organizations can earn LEED credits by implementing a formal ergonomics program under the category “Innovation in Design.” Another application of human factors to the LEED process is in the area of sustainable materials and resources. As important as it is to include environmental considerations, it is equally important to evaluate the conditions in which people work throughout the complete life cycle, including extraction, transportation, manufacturing, maintenance, use, recycling, and end-of-life disposal.

- Case Study: Ergonomics Considerations in Sustainable Office Design. L. Nystrom, DuPont, Wilmington, DE.
Methamphetamine residue testing and cleanup of these labs. This roundtable will address the challenges and solutions to worker health and safety posed by compressed gases and cryogens. Real-world examples will be applied to both regulatory and consensus standard requirements, encompassing the safety and industrial hygiene challenges that may be encountered by the EOHS professional.

- NFPA 55 Overview and Common Compressed Gas Considerations. S. Fess, Xerox Corporation, Webster, NY.
- The Cold Hard Truth About Working with Cryogens. K. Krause, Praxair, Inver Grove Heights, MN.
- Understanding Uniform Fire Code Requirements for Compressed Gases and Cryogens. J. Silvers, Occupational Services, Inc., San Diego, CA.
- Proper Selection, Use, and Issues with Specialty Calibration Gas Standards. D. Maser, Enviroair Consultant, Inc., Chesterfield, MI.

Special Session

ABHI Forum
10:00 a.m.–12:00 p.m. » ICC, 205
The AHBI Board of Directors encourages you to attend the AHBI Forum. The AHBI board continues to stay on top of trends and concerns affecting the certified industrial hygienist and connect with those in the profession desiring to pursue the “mark of excellence”, which is the CIH. The Board of Directors will provide a short update of the happenings at AHBI and also seeks input from its stakeholders across the occupational and industrial health professions to better plan for the future of the certification process. The board will also report on how the input from participants attending the 2011 Forum has been used to refine the board’s strategic direction.

RT 228
Trends in Green Chemistry: From Policy Reform to Innovation
10:00 a.m.–12:30 p.m. » ICC, 125
Arranger and Moderator: D. Martin, Pacific Biosciences, Menlo Park, CA; Monitors: M. Ochs, Arizona State University, Tempe, AZ; K. Thompson, 3M, St Paul, MN.

There has been a growing global evolution toward chemical policy reform and sustainable chemical development. Regulatory reform initiatives have pushed manufacturers to increase the disclosure of toxicity and health risk information to downstream users. Green chemistry principles are becoming more widespread and common types of hazardous materials encountered in the workplace, yet their risks to worker health and safety are often overlooked and/or underestimated. In addition to the regulatory requirements in OSHA Subpart H, many consensus standards exist outside traditional worker safety standards to guide in ensuring workplace health and safety while working with and around these hazardous materials. These include NFPA 55 (Standard for Compressed Gases), NFPA 101 (Life Safety Code), and the Uniform Fire Code (UFC). This roundtable will examine the challenges and solutions to worker health and safety posed by compressed gases and cryogens. Real-world examples will be applied to both regulatory and consensus standard requirements, encompassing the safety and industrial hygiene challenges that may be encountered by the EOHS professional.

- The Changing Definition of Green. T. Grumbles, Nexeo Solutions, LLC, Woodlands, TX.
- Attributes of Sustainable Chemistries and Processes. R. Skoglund, 3M, St. Paul, MN.

PO 118
Safety
10:00 a.m.–12:40 p.m. » ICC, 103

- CS-118-3 Predictive Modeling of Potential Serious Injury Risk. B. Bethel, Sikorsky Aircraft Corp, Stratford, CT; L. Beaunin, Rochester Institute of Technology, Rochester, NY; R. Striebe, Keene State College, Keene, NH.
- CS-118-5 Four Key Components to a Safety Program that Works! T. Shuford, InjuryFree, Inc., Woodinville, WA.
- CS-118-6 WITHDRAWN Combustible Dust: Overview and 27-Step Pocket Checklist Tool. J. Rider, Noblesville, IN.
- SR-118-7 Chemical Resistance of 30 Disposable Nitrile Gloves Exposed to Simulated Movement. R. Phalen, California State University,
San Bernardino, CA; W. Wong, University of California, Los Angeles, CA.
12:20 p.m.-12:40 p.m.

CR 325
What Is Wrong with Mandatory Safety Training (and How to Fix It)!
11:30 a.m.-12:30 p.m.  »  ICC, 104
Presenter: J. Klane, Arizona State University, Tempe, AZ.
Monitor: M. Hicks, University of Michigan, Chandler, AZ.

Mandatory training has many problems, including not learner-friendly, counter to adult learning principles, no training needs assessment, ineffective delivery, overemphasizing information, expecting automatic learning outcomes, over-reliance on written tests, viewing training as stand-alone entities. Possible improvements/solutions/“fixes” include: putting learners’ needs first, conducting training needs assessments, following ANSI/ASSE’s Z490 Standard on EHS Training and using many adult learning principles. Case studies are used augmenting points, training problems, and/or training “fixes.”

Luncheon Discussions
Volunteer Group Tech Talks
Noon-1:00 p.m.  »  ICC, Expo, Hall B
Luncheon Discussions are small, highly interactive group discussions facilitated by representatives from various AIHA® Volunteer Groups. Topics reflect current trends and high-interest, relevant issues from each Volunteer Group’s technical content. Purchase lunch and select a Tech Talk — seating is first-come, first-served. Topics subject to change.

1. Aerosol Technology Committee
Topic: Nanoparticle Leakage through Face Seal Interface of Filtering Facepiece Respirators
Engineered nanoparticles are produced in several industrial processes. Some of the nanomaterials are potentially toxic. Works use NIOSH-approved respirators for protection against nanomaterials. Nanoparticle penetration through respirator filter media is well known. Face seal leakage, however, has not been been studied in detail. This talk will provide information on recent findings on nanoparticle leakage.

2. Biological Monitoring Committee
Topic: When to Use Biomonitoring in the Workplace
Experts will answer questions on the topic and problems associated with biological monitoring.

3. Biosafety and Environmental Microbiology Committee
Topic: Biosafety in Research Laboratories
The NIH issued changes in requirements for laboratories with respect to design criteria. This talk will examine issues confronting industrial hygienists who have responsibility in academic, pharmaceutical, and health care clinical research laboratories.

4. Communication and Training Methods Committee
Topic: Successful Use of Apps in Training and Communication
Share ideas on the effective use of software applications in mobile learning and hazard communication.

5. Computer Applications Committee
Topic: Website Design, Mobile Devices, and Threats (Virus, Spam, Phish, etc.) Is there an App for that?
Discuss topics of interest or questions related to computers and apps.

6. Confined Spaces Committee
Topic: Confined Space Entry Potpourri
Talk with committee members regarding confined space entry interests and challenges. Committee members will share innovative written procedures, information on various confined space entry guides, how to size a confined space program to fit your business, and differing requirements of various agencies. Prospective new members are invited to stop by.

7. Construction Committee
Topic: A New Approach to Managing Heat Stress in the Workplace
Discuss the prevention of heat stress illnesses, injuries, and fatalities.

8. Control Banding Working Group (co-sponsored by Nanotechnology Working Group)
Topic: Advances in Contamination Control and Cleanup
Share information about state-of-the-art and emerging strategies, methods, equipment, and infrastructure for good practice to anticipate, recognize, evaluate, control, and confirm effective contamination control and cleanup for engineered nanomaterial and other potentially toxic material usage in laboratories and other workplaces.
9. Engineering Committee
   Topic: Computational Fluid Dynamics (CFD) and Industrial Hygiene (IH)
   For over two decades many industries have used CFD. Now with increased processing power of personal computers it is available to more industries. CFD can aid in the design of engineering controls and estimate worker exposure to contaminants, along with many other useful applications to IH. People with all levels of CFD knowledge are invited.

10. Ergonomics Committee
   Topic: Ergonomics of Portable Hand-Held Devices
   Portable hand-held devices can be a benefit to humankind but can also be the bane of our existence. Discuss both physical and cognitive ergonomics of handheld devices.

11. Green Building Working Group
   Topic: AIHA’s Indoor Air Quality Management Program (IAQMP) Registry
   Discuss the new IAQMP registry, including how it will fit into green building certifications (IGCC, LEED, etc.) and the targeted audience.

12. Indoor Environmental Quality Committee
   Topic: Drywall: Moldy or Chinese
   Experts will discuss AIHA’s IEQ source documents and how they may impact everyday litigation. Participants are encouraged to bring general questions, as well as to share critical reviews of these documents for those practicing IEQ regularly.

13. International Affairs Committee
   Topic: Volunteer Opportunities in the IAC
   Focus on current activities and projects of the IAC, including ambassadorships to foreign countries, outreach to developing countries, training Chinese occupational health and safety inspectors, and current documents being developed.

14. Ionizing Radiation Committee
   Topic: Understanding and Responding to Radiation Fears
   Industrial hygienists often find handling people’s fears to be more challenging than resolving technical issues. This talk will look at the basis for radiation fears, along with how to listen and respond to questions about radiation safety.

15. Laboratory Health and Safety Committee
   Topic: Laboratory Sustainability Continuous Improvement Rating System
   Discuss current recommended changes to Labs 21 Sustainability Environmental Performance Criteria developed by the International Institute for Sustainability Laboratories (I2SL).

16. Nanotechnology Working Group (co-sponsored by Control Banding Working Group)
   Topic: Advances in Contamination Control and Cleanup
   Share information about state-of-the-art and emerging strategies, methods, equipment, and infrastructure for good practice to anticipate, recognize, evaluate, control, and confirm effective contamination control and cleanup for engineered nanomaterial and other potentially toxic material usage in laboratories and other workplaces.

17. Noise Committee
   Topic: Current Noise Topics and General Discussion

18. Nonionizing Radiation Committee
   Topic: Smart Meters and Other Contributors to the Sea of Nonionizing Radiation that Surrounds Us
   Many utility providers have started using smart meters that use radio frequency (RF) radiation to wirelessly send information about utility usage. Some communities are concerned about exposure. Discuss the emissions from these meters and how they fit into the RF environment around us.

19. Occupational and Environmental Medicine Committee
   Topic: Current Topics in Occupational and Environmental Medicine

20. Protective Clothing and Equipment Committee
   Topic: Effective Implementation of PPE Hazard Assessment
   Discuss compliance requirements, while sharing examples of PPE Hazard Assessments and methods for communicating PPE requirements to field staff.

21. Respiratory Protection Committee
   Topic: Fit Testing Respirators — Ask the Experts
   A unique opportunity to pick the brains of two experts on respirator fit testing, Dr. Roy McKay of the Univ of Cincinnati, and Jay Parker, Physical Scientist at NIOSH — NPPTL. Also, discuss new developments in fit testing methods and standards.

22. Safety Committee
   Currently there is no OSHA standard for the design, installation, and maintenance of steel static storage systems (pallet rack storage). Existing ANSI standards do not include guidance on the operational aspects of these systems. Compare the European Standard EN 15635 Steel Static Storage Systems — Application and Maintenance of Storage Equipment and AIHA's Storage Rack Safety Guidelines.

23. Sampling and Laboratory Analysis Committee
   Topic: Common Industrial Hygiene Sampling Issues
   Discuss common issues encountered during worker exposure assessments. Both active and passive sampling will be addressed.

24. Stewardship and Sustainability Committee
   Topic: AIHA Green Chemistry Position Paper
   After the release of this position paper, the committee was asked to provide comments for the California Department of Toxic Substances Control final green chemistry regulation. Discuss the value of commenting as part of the regulatory engagement process, which the committee advocated for in this position paper.

Donald E. Cummings Award Lecture
All Dressed Up — But Where Are We Going?
12:30 p.m.–1:30 p.m. » ICC, Wabash 1

Presenter: Franklin E. Miler, PhD, CIH, CUNY School of Public Health, New York, NY

As occupational health and safety practitioners, we face some serious problems: the loss of the manufacturing base; the decline in quality jobs and enforcement of rights at work; contracting in, out and offshore; congressional interventions; and obstruction of new health and safety protections, both governmental and consensus. The formation of OSHA in 1970, centralizing a national discourse, combined with better social fundamentals, spurred major improvements in process and knowledge — it’s up to our profession whether progress is now stalled or is going to be reversed.

The last 40 years are best understood in terms of actual paradigms, which include: Auto Industry H&S Programs; Lead; Energy lockout; Formaldehyde; Metalworking fluids; Ergonomics; Risk Assessment for designing protections. The UAW v. General Dynamics case established that compliance with a PEL (or other OSHA standard) doesn’t give employers a license to kill.

If health and safety — specifically industrial hygiene — is to advance, we need to secure our base (in manufacturing and chemicals) and extend our reach. This means a new focus on health care, high risk service sector occupations and small workplaces. The essence of IH is: measure exposure to a hazard; determine a limit or a level of concern; reduce exposure below that limit; work for continuous improvement. What’s obvious for chemicals and noise must be applied to ergonomic risk factors, infectious agents, biological agents, and work related psychosocial stress.

Most important, the profession should internalize the ethic that our task — whether employed by management, consultants, government or labor — is to give voice to those workers who now can’t speak.

CR 326
Private Sector Preparedness — Is Your Company Ready for Certification?
1:30 p.m.–2:30 p.m. » ICC, Wabash 3

Presenter: E. Clas, Clas Consulting LLC, Norfolk, MA
Monitor: A. Brown, Illinois State University, Normal, IL

The Voluntary Private Sector Preparedness Accreditation and Certification Program (PS-Prep) is mandated by Title IX of the Implementing Recommendations
of the 9/11 Commission Act of 2007 (the Act). Its purpose is to enhance nationwide resilience in an all-hazards environment by encouraging private sector preparedness. PS-Prep provides a mechanism for organizations to be certified by an accredited third party establishing that the organization conforms to preparedness standards adopted by DHS. Will you be prepared?

CR 327
Proactive Management of Hospital Water Supply Systems in Support of the Environment of Care
1:30 p.m.–2:30 p.m. » ICC, 103
Presenter: M. Fiore, J. Franke, NorthShore University, Evanston, IL; Monitor: C. Roberts, University of Michigan, Ann Arbor, MI.

Providing and sustaining safe domestic and utility water systems require a team approach to proactive water management. Practical experiences at a mid-western four-hospital health system will be shared to elucidate the internal and external challenges, as well as identified best practices, to control water quality. The hospital management approach is based on ASHRAE 188 — Prevention of Legionellosis Associated with Building Water Systems and fulfills the intent of The Joint Commission Environment of Care requirement for safe hospital water supply systems.

Special Session
Emerging Issues — Carbon Monoxide: A Persistent Problem
1:30 p.m.–3:00 p.m. » ICC, 205

Carbon Monoxide exposure overexposure has been an issue for a long time, but frequently gets over-looked as industrial hygienists concentrate on other more complicated issues. This session will provide a recent case study where CO levels were elevated in a downtown office building during renovation work and an update on current sources of and issues with Carbon Monoxide. There will be an interactive discussion with attendees to include an opportunity to share their experiences and ask questions of the presenters.

- Carbon Monoxide Emitted from a Portable Propane Generator Being Used During Renovation of a Downtown Office Building — Case Study. J. Morawetz, ICWC Center for Worker H&S Education, Cincinnati, OH.
- Overview of Residential Danger, Sources and Magnitude of Problem. E. Pinzer, U.S. Department of Housing and Urban Development, Washington, DC.

RT 234
Sustainability/CSR Reporting and the OHS Missing Link
1:30 p.m.–3:30 p.m. » ICC, 125

It is hard to overstate the prominence of sustainability and corporate social responsibility (CSR). While there are a plethora of ways to define sustainability/CSR, voluntary and mandatory reporting frameworks drive the way organizations develop their programs in this space. A weak link in reporting frameworks are robust occupational health and safety (OHS) performance measures and metrics. This roundtable examines important and timely issues for IH and safety professionals on sustainability/CSR reporting challenges and solutions. Four presentations and an interactive discussion will include: an overview of reporting frameworks with a focus on the Global Reporting Initiative (GRI) and their next generation framework; an introduction to the Center for Safety and Health Sustainability’s framework; an examination of GRI’s current G3 OHS metrics and challenges with reporting on them; and a description of important issues that IH and OHS professionals need to know about trends in integrated and mandatory sustainability/CSR reporting. Attendees will gain insight and practical tips on how to strengthen their skills and value to their organization, improve sustainability/CSR programs, and navigate complex reporting frameworks.
- Strengthening Worker Safety and Health in the Sustainability/CR Space. T. Cecich, TFC & Associates, Apex, NC.
- Nuts and Bolts of OHS in GRI G3 and Upgrades for the Upcoming G4 in 2013. Z. Mansdorf, EHS and Sustainability, Boca Raton, FL.

RT 227
Ten Years Since the U.S. Anthrax Incidents: Engaging the IH Community
1:30 p.m.–4:00 p.m. » ICC, Wabash 2
Arranger and Moderator: B. Fraser, Health Canada, Ottawa, ON, Canada; Monitors: P. Dulaney, Applied Environmental, Inc., Cary, NC; R. Strode, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

This roundtable panel will discuss managing an incident of bioterrorism in the built environment from an industrial hygiene perspective. Major themes to be addressed include: (1) Identifying the critical steps that must be taken in the event of suspected release of a particulate biological agent, such as anthrax, in a building. (2) What should be done/not done based on lessons learned from the 2001 incidents in the U.S., previous incidents, and more recent experience from research and other studies. (3) Occupant management immediately after an event to protect public health and to minimize the unnecessary spread of contamination within the building and elsewhere after an event. (4) Managing social consent to maximize the probability of re-occupancy. (5) Appropriate methods of sampling and analysis, as well as personal and area decontamination. (6) Outline the findings from the series of anthrax response workshops carried out by DHS. (7) Perspective from Europe.
- Exposure Characterization for Anthrax Incidents Since 2001 — Intentional and “Natural” Releases. K. Martinez, NIOSH, OH.
- Findings from an Anthrax Exercise Series Conducted in 10 FEMA Regions in the U.S. J. Ignacio, Department of Homeland Security, Washington, DC.
- Occupant Management after a Bio-Incident and Subsequent Building Reoccupancy: The Current Situation and Priorities for Future Activities. J. Miller, Carleton University, Ottawa, ON, Canada.

PO 120
Engineering Controls — Lessons from Design and Practice
1:30 p.m.–4:10 p.m. » ICC, 209
Arrangers: J. Leung, Shell Canada Ltd., Calgary, AB, Canada; S. Durgam, GE, Cincinnati, OH; Moderator: J. Leung, Shell Canada Ltd., Calgary, AB, Canada; Monitors: I. McKeman, Cincinnati, OH; V. Kero, Hackensack, NJ.

1:30 p.m.–1:50 p.m.

1:50 p.m.–2:10 p.m.

2:10 p.m.–2:30 p.m.
- CS-120-3 Specialized Engineering Controls for Hexavalent Chromium and Cobalt in Metal Manufacturing. L. Verdier, Shaw Environmental, Inc., Cincinnati, OH; S. Fischer, Haynes International, Kokomo, IN.

www.AIHce2012.org
2:30 p.m.–2:50 p.m.

2:50 p.m.–3:10 p.m.

3:10 p.m.–3:30 p.m.
CS-120-6 Reducing Airborne Exposures and Community Nuisance Odors at a Foundry. G. Croteau, University of Washington, Seattle, WA.

3:30 p.m.–3:50 p.m.
CS-120-7 Occupational Exposure Controls: IH Meets CSI. T. Morris, Morris Innovative IH&S Solutions, Cincinnati, OH.

3:50 p.m.–4:10 p.m.
CS-120-8 So, You Want to Renovate Your Anatomy Labs and Morgue? Lessons Learned: 5 Years Post-Lab Renovation. J. Whitlock, Wright State University, Dayton, OH.

1:30 p.m.–4:30 p.m. » ICC, 104

PO 121
Environmental Issues for the EH&S Practitioners
1:30 p.m.–4:30 p.m.

1:30 p.m.–1:50 p.m.
Committee Award Presentation

1:50 p.m.–2:10 p.m.
CS-121-1 Redeveloping an Abandoned Industrial Property – Resolving a Stalemate with Local Government and a Neighboring Community. S. Poplar, F. Boelter, ENVIRON, Chicago, IL.

2:10 p.m.–2:30 p.m.
SR-121-2 An Analysis of Formaldehyde Levels in Travel Trailers. P. Hewett, Exposure Assessment Solutions, Inc., Morgantown, WV.

2:30 p.m.–2:50 p.m.
SR-121-3 Air Contaminants Inside and Outside Rural Homes Near Biosolids-Applied Agricultural Farm Fields. F. Akbar-Khanzadeh, A. Ames, S. Milz, D. Carlson, T. Koch, J. Kabelen, K. Czajkowski, University of Toledo, Toledo, OH.

2:50 p.m.–3:10 p.m.
SR-121-4 Evaluation of Carbon Monoxide Exposures During the Operation of Recreational Watercraft. D. Stephenson, Boise State University, Boise, ID.

3:10 p.m.–3:30 p.m.
SR-121-5 WITHDRAWN The Association Between Residential Proximity to Swine Animal Feeding Operations and Childhood Asthma. B. Pavilonis, The University of Iowa, Iowa City, IA.

3:30 p.m.–3:50 p.m.
CS-121-6 Bed Bugs — What to Do About Unwanted Houseguests. M. Shum, National Collaborating Centre for Environmental Health, Vancouver, BC, Canada.

3:50 p.m.–4:10 p.m.
SR-121-7 Emission Factors and Exposures from Ground Level Pyrotechnics. G. Croteau, R. Dills, M. Beauregard, M. Davis, University of Washington, Seattle, WA.

4:10 p.m.–4:30 p.m.
SR-121-8 Determinations of 1,4-Dioxane and Phthalates in Water Simultaneously by Solid-Phase Microextraction. W. Lin, S. Tsai, National Taiwan University, Taipei, Taiwan; Y. Tseng, Morrison Christian Academy, Taichung, Taiwan.

3:00 p.m.–4:30 p.m. » ICC, 127

RT 229
Application of Computational Fluid Dynamics in Industrial Hygiene
1:30 p.m.–3:40 p.m.
Arranger: E. Lee, NIOSH, Morgantown, WV. Moderator: M. Harper, NIOSH, Morgantown, WV. Monitors: T. Lee, S. Kim, NIOSH, Morgantown, WV.

Computational fluid dynamics (CFD) has seen wide application for solving engineering problems, especially for aerodynamic design of automobiles and aircraft. However, it has seen limited use for calculating gas and particle transport relevant to industrial hygiene due to the complexity of underlying mathematics. With the development of user-friendly and commercially available software and improvements in model accuracy, CFD is becoming a powerful tool for occupational health professionals from macro to micro applications for understanding air and contaminant transport within the working environment. This roundtable introduces the current state-of-science of CFD for industrial hygiene applications, including workplace exposures, sampler design and performance, engineering controls, and human exposure models. Using examples of CFD simulations applied to these applications, the panel will discuss the strengths and weaknesses of the CFD capability, including the need for model validation. The panel will also address the future of using CFD modeling tools.

3:50 p.m.–4:10 p.m.
SR-122-8 Evaluation of Noise Exposure Among Brazilian Headphone/Headset Professional Users. W. Iramina, S. Eston, University of Sao Paulo, Sao Paulo, Brazil; J. Felicio, City Hall (Prefeitura), Jundiai, Brazil; M. Da Silva, Doulos Ambiental, Sao Paulo, Brazil.

4:10 p.m.–4:30 p.m.

1:30 p.m.–3:40 p.m.

1:30 p.m.–1:50 p.m.

1:50 p.m.–2:10 p.m.
CS-122-2 Successful Noise Control Engineering in a Bagging Plant. R. Stewart, Oldcastle Building Products, Wyomissing, PA.

2:10 p.m.–2:30 p.m.
CS-122-3 WITHDRAWN Implementing HPD Fit-Testing into a Hearing Conservation Program. S. Henderson, Chevron Phillips Chemical Company, LP, Old Ocean, TX.

2:30 p.m.–2:50 p.m.
CS-122-4 Does Handenedness or Order of Test Effect Earplug Fit Results? T. Schultz, Honeywell Safety Products, Frederictown, PA; R. Allomong, ConAgra Foods, Archbold, OH.

2:50 p.m.–3:10 p.m.
SR-122-5 Evaluation of Exposure to Noise and Hearing Loss Among Dentists in Yazd. N. Tahmaseby, Yazd University, Yazd, Islamic Republic of Iran.

3:10 p.m.–3:30 p.m.
CS-122-6 Cicada Invasion! Noise Study of Brood XIX. M. Bogard, Vanderbilt University, Nashville, TN.

3:30 p.m.–3:50 p.m.
SR-122-7 Peak Noise Exposure During Concrete Grinding in Confined Areas. F. Akbar-Khanzadeh, S. Milz, A. Ames, C. Wagner, J. Laughlin, University of Toledo, Toledo, OH.

3:50 p.m.–4:30 p.m.
SR-122-8 Evaluation of Noise Exposure Among Brazilian Headphone/Headset Professional Users. W. Iramina, S. Eston, University of Sao Paulo, Sao Paulo, Brazil; J. Felicio, City Hall (Prefeitura), Jundiai, Brazil; M. Da Silva, Doulos Ambiental, Sao Paulo, Brazil.

4:10 p.m.–4:30 p.m.
Workers entering confined spaces are not always trained to recognize when the work to be done can change the confined space from safe to potentially fatal. This failure to recognize new hazards brought by the work to be done inside the confined space — requiring reclassifying the non-permit required confined space into a permit-required one — is an all too common and sometimes fatal mistake. In this seventh annual Challenging Confined Spaces Roundtable, seasoned C.S. entry experts explore the hazards of work performed in confined spaces, emphasizing how the work done inside can change the confined space from safe to potentially fatal.

- How to Succeed by Really Trying, F. Toca, Atlantic Environmental, Inc., Atlanta, GA.
- Women and Diversity in the Field of Environmental Health and Safety: Now and Later, F. Grimsley, Tulane University, New Orleans, LA.
- Globalization EHS Now and Then, K. Seabrook, ASSE, Mendham, NJ.
- EHS Now and Then, T. Norrie, ASSE, Long Beach, CA.

RT 232
The Next Generation of Technical Leaders: IH Student Research Showcase
1:30 p.m.–4:30 p.m. » ICC, 102
Arranger and Moderator: P. Smith, OSHA, Sandy, UT. Monitors: B. Groves, Penn State University, University Park, PA; M. Roe, 3M, Blaine, MN.

This roundtable brings together our newest leaders in research related to real-time detection. Participants are students who will present high-quality applied research related to real-time detection systems were studied or used to improve our profession’s ability to protect worker health.

- Field Portable X-Ray Fluorescence for Rapid Detection of Engineered Nanomaterials, B. Hill, The University of Iowa, Iowa City, IA.
- Collection of Micron Particles in a Continuous Open Water Channel System, M. Martin, University of Cincinnati, Cincinnati, OH.
- Modular Quantitative Air Sampler for Field Analysis Using Person-Portable Gas Chromatography — Mass Spectrometry, T. Juarez, Uniformed Services University of the Health Sciences, Bethesda, MD.

RT 231
The Future of EHS: Past to Present
1:30 p.m.–4:30 p.m. » ICC, 243

Our goal is to engage in thought-provoking, meaningful dialogue and to stimulate discussion that raises questions and challenges professionals regarding what changes are necessary to sustain the future of EHS/ES. The first speakers will give retrospective and prospective points of view of how environmental health and safety has been redefined through the years. Ms. Norris will lay the foundation of the roundtable with how the profession is now integrated at various levels of business and different stakeholders. Ms. Seabrook will focus on how EHS management has been influenced from global events. Dr. Grimsley will provide information on how women have changed the culture of EHS in the workplace. The last two speakers of the roundtable will engage the audience with specific real-world examples of past experiences. Dr. Brown will speak to the benefits and challenges faced by minority women EHS professionals. Dr. Toca’s presentation will guide the audience through developing a lifelong plan to succeed as EHS professionals.
The National Institute for Occupational Safety and Health (NIOSH) Health Hazard Evaluation (HHE) program provides a mechanism by which employees, unions, and employers across the United States can request free assistance from NIOSH in addressing occupational health concerns in the workplace. In response to some of these HHE requests, NIOSH industrial hygienists and medical officers perform on-site evaluations and often encounter a wide variety of both common and unique workplace exposures and health hazards. The roundtable will present the results of several HHEs performed by NIOSH industrial hygienists that illustrate a broad spectrum of potential health hazards encountered in workplaces. The overall objective is to provide practicing hygienists with an understanding of how NIOSH industrial hygienists develop their strategy for assessing the workplace. We will also discuss the health hazards that were identified during the evaluations and the recommendations provided to reduce or eliminate the hazards and protect workers.

- Overview of the NIOSH Health Hazard Evaluation Program. T. Seitz, NIOSH, Cincinnati, OH.
- Evaluation of a Marine Mammal Rescue Center in California. T. Niemeier, NIOSH, Cincinnati, OH.
- Evaluating a Persistent Nuisance Odor in an Office Building. G. Burr, NIOSH, Cincinnati, OH.
- Occupational Exposures During Pesticide Application to Control Sea Lampreys in the Great Lakes. D. Ceballos, NIOSH, Cincinnati, OH.
- Health Hazard Evaluation Program Emergency Responder Preparedness Exercise. R. McCleery, NIOSH, Cincinnati, OH.
- Evaluation of Heat Stress and Strain Among Employees at an Aluminum Smelter. C. Dowell, NIOSH, Cincinnati, OH.
- Exposures to Organic Solvents During Screen Printing. S. Brueck, NIOSH, Cincinnati, OH.
- Investigation of a Fatal Laboratory-Acquired Plague Infection. B. King, NIOSH, Cincinnati, OH.

RT 233

NIOSH Health Hazard Evaluations: Results of Recent Industrial Hygiene Evaluations

1:30 p.m.–5:30 p.m. » ICC, 240

Arranger: B. King, NIOSH, Cincinnati, OH. Moderator: K. Wallingford, NIOSH, Cincinnati, OH. Monitors: K. Fent, J. Choi, NIOSH, Cincinnati, OH.

Industrial Hygienists and allied professionals consider Occupational Exposure Limits (OELs) to be one of the most effective tools for performing risk assessments upon which risk management strategies for worker protection are based. OELs have been established for airborne workplace chemicals by various regulatory and authoritative organizations for well over 60 years now. With the changing regulatory arena, particularly in Europe, shifting centers of manufacturing growth, a move towards a more global perspective on health issues, tendencies towards control banding and the formulation of control assumptions without the apparent use of exposure data, the time to re-examine the continued value of OELs is now, particularly since only about 1,000–2,000 of over 100,000 chemicals in worldwide use are presently either regulated by a government statute or have a guideline OEL. In an effort to define future approaches, the presenters highlight the historical evolution of OELs, the known OEL setting processes today, their role in occupational hygiene and risk assessment, the profiling of other risk related tools to complement traditional exposure limit setting, a clarification of existing tools and their strengths, and today’s world community challenges. The symposium will be integrated with audience participation, with a desired outcome of an “defined path forward” for the profession.

- Poll to Calibrate Audience Knowledge, Expectations, Output From Broader National AIHA Membership Survey. J. Mulhausen, 3M, St. Paul, MN.
- Current and Future Approaches in OEL Setting by Various Agencies and Organizations. S. Ripple, Dow Chemical Company, Midland, MI.
- Hazard Banding: A Tool for Setting OELs for Chemicals with Limited Data. D. Heidel, NIOSH, Cincinnati, OH.
- Toward Harmonization of a Suite of Tools for Occupational Risk Assessment. A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH.
PO 124
Indoor Environmental Quality — III
5:00 p.m.–7:00 p.m. » ICC, Wabash 1

5:00 p.m.–5:20 p.m.
SR-124-1 Assessing Building Occupant Indoor Air Quality Expectations Compared to Nationally Recognized Standards. S. Lemessa, St. Luke’s Episcopal Hospital, Houston, TX.

5:20 p.m.–5:40 p.m.
CS-124-2 This Classroom Is Making Me Sick! — Resolving Indoor Air Quality Concerns of Teachers and Parents at an Elementary School: A Case Study. T. Choe, D. Cox, Forensic Analytical Consulting Services, Hayward, CA.

5:40 p.m.–6:00 p.m.

6:00 p.m.–6:20 p.m.

6:20 p.m.–6:40 p.m.
SR-124-5 Indoor Air Quality of Hair and Makeup Trailers in the Vancouver Motion Picture Industry. W. Quirke, University of British Columbia, Vancouver, BC, Canada; D. Brennan, ActSafe, Vancouver, BC, Canada.

6:40 p.m.–7:00 p.m.

RT 235
How to Effectively Implement the New Hazcom (GHS) — A Chemical User’s Perspective
5:00 p.m.–7:30 p.m. » ICC, Wabash 2

Much of the work to transition to the GHS will fall on chemical manufacturers, but there are changes that will affect the chemical user as well. This roundtable will provide practical information on how to effectively implement the new and revised requirements of the Hazard Communication Standard in your facility, as a user of chemicals.

○ What Is the GHS and What Do You Need to Do? D. Deeds, Industrial Health & Safety Consultants, Shelton, CT.

○ How GHS Will Change In-Plant Labeling Systems. S. Williams, Aloca Inc., Pittsburgh, PA.

○ WITHDRAWN GHS Implementation: Stories from the Field. E. Quevedo, Paladin Law Group LLP, Walnut Creek, CA.

○ Examples of How Advanced Training Technologies Can Improve Your Hazard Communication Training. T. Ouimet, Yale University, Plantsville, CT.

○ GHS and Hazard Communication Program Modifications. R. Quevedo, URS Corporation, San Jose, CA.

CR 331
Safety Contacts: Caught You Doing Something Right
6:00 p.m.–7:00 p.m. » ICC, Wabash 3
Presenter: J. LaBelle, Superior Essex, Fort Wayne, IN.
This presentation details a key ongoing safety management concept called “Safety Contacts.” A Safety Contact is a behavior-reinforcing conversation between employees and defined as regularly and positively recognizing employees for the same behaviors that they exhibit. The Safety Contact process was designed from the ground up to be personal, one-on-one, behavior encouraging, behavior improving, and, most importantly, behavior reinforcing. Key outcomes identified with this process are employees are more likely to repeat safe behaviors when they are positively and regularly recognized for them.
Thursday, June 21

7:00 a.m.–11:30 a.m.
Speaker Ready Room
ICC, 108
7:30 a.m.–10:30 a.m.
Registration
ICC, 108

8:00 a.m.–Noon
ICC, 125
8:00 a.m.–5:00 p.m.
Train the Trainer Workshop
ICC, 103
8:30 a.m.–9:30 a.m.
CR 332 Health and Safety Auditing for Industrial Hygienists
ICC, 102

8:30 a.m.–10:00 a.m.
Smart Apps for Smart People
ICC, Volunteer Collaboration Cafe

8:30 a.m.–10:30 a.m.
P0 119 Biosafety and Environmental Microbiology
ICC, 203
P0 125 Green Buildings and the Industrial Hygienist
ICC, 202
8:30 a.m.–10:50 a.m.
P0 126 Risk Assessment/Risk Management Case Studies
ICC, Wabash 3
8:30 a.m.–11:00 a.m.
RT 238 Global Professional Ethics Roundtable Discussion
ICC, 127
RT 239 Innovative Hearing Conservation—Preventing Noise–induced HL in “Kids” of all Ages
ICC, Wabash 2

8:30 a.m.–11:10 a.m.
P0 127 Management and Communication in OSH
ICC, Wabash 1
10:00 a.m.–11:00 a.m.
CR 333 Taking Process Safety and Catastrophic Event Prevention to the Next Level
ICC, 102

1:00 p.m.–2:00 p.m.
CR 334 Understanding Corporate Social Responsibility: New Opportunities for EHS Professionals
ICC, 102
1:00 p.m.–4:00 p.m.
PO 128 Sampling and Analysis: Current Trends in Workplace Exposure Assessments
ICC, Wabash 3
PO 129 Biological Monitoring and Aerosols
ICC, 125
SS 004 Science Symposium: Assessing Exposure During Disaster Response: The Gulf Oil Spill Experience
ICC, Wabash 2
1:00 p.m.–4:30 p.m.
RT 240 Radiation Emergency Response and Annual Memorial Tribute to Dr. Herman Cember
ICC, 120
1:00 p.m.–5:00 p.m.
RT 241 Honing Your Competitive Edge in the Battle for the Bucks
ICC, 127
2:30 p.m.–3:30 p.m.
CR 335 Enhancing Chemical Management Within the Framework of Existing TSCA Regulations
ICC, 102

Noon–1:00 p.m.
Stokinger Award Lecture
ICC, Wabash 1
12:30 p.m.–4:30 p.m.
Speaker Ready Room
ICC, 108

AIHA*
8:00 a.m.–5:00 p.m.
AIHA Registry Programs Competency Assessments
JW Marriott, 101
8:30 a.m.–10:00 a.m.
Volunteer Group Chairs Meeting
ICC, 210
8:30 a.m.–10:30 a.m.
AIHA Annual Business Meeting
ICC, 120
9:00 a.m.–5:00 p.m.
WEEL Committee
JW Marriott, 105
10:00 a.m.–11:00 a.m.
Local Sections Officers Training
JW Marriott, 106
10:00 a.m.–11:30 a.m.
Volunteer Group Secretaries Orientation Meeting
ICC, 211
11:00 a.m.–4:00 p.m.
AIHA Board of Directors Meeting
JW Marriott, 104

Ancillary
8:00 a.m.–5:00 p.m.
Honeywell IH Meeting (by invitation)
JW Marriott, 312

New! Paperless Evaluations
Don’t Forget to Complete Your Evaluation!

PDC and technical session evaluations are now paperless. Use your smartphone, laptop, iPad or mobile device, or the cyber center computers to access the evaluations one of three ways –

- The AIHce Mobile App. Visit http://crwd.cc/aihce2012 or scan the QR code
- Log on to www.aihce2012.org/certification
- Links sent via email at the conclusion of your PDC and Technical Session

Questions? Visit the Speaker Ready Room, ICC, 108

NEW — MORE certification maintenance!
You can now earn COCs and CEUs for weekday technical sessions! Simply complete the online survey at www.aihce2012.org/certification.

Please turn off cell phones in all sessions.
RT 237
Glen Williamson Forum: OSHA’s Most Interesting Health Cases, 2009-2011
8:00 a.m.–Noon » ICC, 125

The forum is in honor of the former OSHA Region VI Deputy Regional Administrator who died suddenly at the age of 49 in 1997. He was a leader in the field of industrial hygiene, as well as for OSHA. The goal of the forum is to raise awareness about the role of the regulator in addressing workplace health hazards, to illustrate real-life workplace scenarios, and to show the application and effectiveness of control methods and solutions. The cases presented will highlight exposure levels at the initiation of the OSHA visit, and results that demonstrate reduction in or elimination of the hazard. Attendees will gain practical information regarding exposure assessment and control, as well as learn more about OSHA’s approach to workplace health issues. The forum will be interactive, with attendees having the opportunity to ask questions of the panel as the presentations are made.

- Cotton Dust Exposures in Absorbent Boom Manufacturing. K. Matson, OSHA, Milwaukee, WI.
- Lead, Vanadium and Iron Oxide Exposures During Bridge Reconstruction. M. Westmoreland, OSHA, Jackson, MS.
- Noise Exposures in a Meat Packing Plant. C. Synak, OSHA, Omaha, NE.
- Overexposures to Hexavalent Chromium in Structural Steel Fabrication. J. Cheng, OSHA, Wichita, KS.
- Process Safety Management in Grain Handling. P. Pisasale, OSHA, Omaha, NE.
- Lead Exposure at an Indoor Pistol Shooting Range. P. Mitch, OSHA, Greenwood Village, CO.
- Chlorodifluoromethan “R-22″ Asphyxiation at an Ice Rink. D. Keown, OSHA, Mobile, AL.
- Lead and Cadmium Exposures at a Radiation Therapy Facility. L. Smith, OSHA, Columbus, OH.
- Overexposure to Lead and Hexavalent Chromium During Hard Chrome Plating of Toilet Seat Molds. K. Robertson, OSHA, Milwaukee, WI.

Special Session
Train the Trainer Workshop Using Statistics in Improving IH Exposure Judgments (“Running from Dart Throwing Monkeys”) 8:00 a.m.–5:00 p.m. » ICC, 103
Open only to college and university IH professors.

Purchase tickets at registration by Noon, Wednesday.

CR 332
Health and Safety Auditing for Industrial Hygienists
8:30 a.m.–9:30 a.m. » ICC, 102
Presenter: D. Regelbrugge, ENVIRON, Park Ridge, IL. Monitor: B. Kissel, Indiana State University, Shadyside, OH.

Each year thousands of employees are seriously injured at work due to workplace accidents; some never return home, victims of tragic accidents. These accidents will forever change the individual injured, their families, and the businesses they work for. Many of these accidents could have been prevented had a thorough health and safety audit been performed in the workplace. This presentation will focus on the various types of audits, the tools available, and procedures necessary to conduct an audit and follow-up.

PO 119
Biosafety and Environmental Microbiology
8:30 a.m.–10:30 a.m. » ICC, 203
Arranger and Moderator: D. Hurley, CertainTeed Corp., North Wilkesboro, NC. Monitors: P. Hauck, Glen Cove, NY; C. Peart, Merck, West Point, PA.

8:30 a.m.–8:50 a.m.


CS-119-2 How the 20/20 Rule Reduced the Amount of Violations from the Ohio EPA. W. Palmer, Wright State University, Dayton, OH.

9:10 a.m.–9:30 a.m.

CS-119-3 U.S. Department of Energy’s Integrated Safety Management (ISM): Applications at the National Biodefense Analysis and Countermeasures Center. V. Landon, Battelle National Biodefense Institute, Fort Detrick, MD.

9:30 a.m.–9:50 a.m.


9:50 a.m.–10:10 a.m.


10:10 a.m.–10:30 a.m.


PO 125
Green Buildings and the Industrial Hygienist
8:30 a.m.–10:30 a.m. » ICC, 202
Arranger: L. Kimmelman, EDI, Riverside, IL. Moderator: M. Devany, Devany Industrial Consultants, Vancouver, WA. Monitors: E. Massawe, Southeastern Louisiana University, Hammond, LA; V. Hillman, Liberty Mutual Group, Hopkinton, MA.

8:30 a.m.–8:50 a.m.


8:50 a.m.–9:10 a.m.


9:10 a.m.–9:30 a.m.


9:30 a.m.–9:50 a.m.


9:50 a.m.–10:10 a.m.

SR-125-5 Health Status of Corrosive Drywall Home Occupants. H. Weiner, HM Weiner MD, Boca Raton, FL; E. Light, Building Dynamics, Ashton, MD; B. Manis, Building Health Sciences, Rockville, MD.

10:10 a.m.–10:30 a.m.

CS-125-6 The Role of Indoor Environmental Professionals in an ANSI Standard-Based Moisture Management and Mold Prevention Program Complying with the New IgCC. E. Homer, Air Quality Sciences, Inc., Marietta, GA.

New!
Smart Apps for Smart People
8:30 a.m.–10:00 a.m. » ICC, Volunteer Collaboration Café
Drop by this App Open House to share, collaborate, or learn how to bump, download, and swipe your way to better use of your favorite smart phone or tablet. Bring your device, learn from your peers and share your favorites in this loosely structured, hands-on session.
PO 126
Risk Assessment/Risk Management Case Studies
8:30 a.m.–10:50 a.m. » ICC, Wabash 3
Arrangers: P. Williams, E Risk Sciences, LLP, Boulder, CO; B. Heckman, LaCroix Davis LLC, Mechanicsburg, PA; Moderator: B. Heckman, LaCroix Davis LLC, Mechanicsburg, PA. Monitors: G. Britt, U.S. Army, APG, MD; M. Sullivan, California State University, Northridge, CA.
8:30 a.m.–8:50 a.m.
CS-126-1 Benzene Risk — Informing a Model with Sampling Data, Odor Descriptions, and Biological Indicators. F. Boelter, ENVIROH, Chicago, IL.
8:50 a.m.–9:10 a.m.
CS-126-2 The Chemical Formulation Conundrum in Risk Management. D. Lillquist, G. Schultz, W. Hendricks, OSHA, Salt Lake City, UT.
9:10 a.m.–9:30 a.m.
9:30 a.m.–9:50 a.m.
CS-126-4 Application of Control Banding Concept in Indian’s Leading Pharmaceutical Company. M. Patel, Bureau Veritas, Abu Dhabi, United Arab Emirates; V. Vyas, Dr. Reddys Laboratories Limited, Hyderabad, India.
9:50 a.m.–10:10 a.m.
10:10 a.m.–10:30 a.m.
10:30 a.m.–10:50 a.m.

RT 239
Innovative Hearing Conservation — Preventing Noise-Induced HL in “Kids” of All Ages
8:30 a.m.–11:00 a.m. » ICC, Wabash 2
Arranger and Moderator: E. Berger, 3M, Indianapolis, IN. Monitors: K. Wetzell, E. Lilly, Indianapolis, IN; J. Cissna, Portland General Electric, Portland, OR.
Workers with noise-induced hearing loss will frequently express “I wish I had been told about preventing this when I was young.” When their risky listening behaviors were forgotton. Our youth are at risk of developing noise-induced hearing loss and tinnitus from a young age, similar to their working parents. The Dangerous Decibels program was developed to reduce the incidence of noise induced hearing loss and tinnitus by changing knowledge, attitudes, and behaviors about hazardous sound exposure. Implementing this innovative educational program in local workplaces and communities will positively influence children, equip them with practical preventive strategies, and actively engage their working parents. This roundtable will familiarize the attendee with the Dangerous Decibels program and enthusiastically explore the potential benefits and realities of engaging the families of workers and the local community in hearing loss prevention outreach. Hands-on activities will be utilized to demonstrate the novel training techniques that can be implemented in occupational and/or community-based settings. If you are a “kid at heart,” you won’t want to miss this one.
- The Essential Nature of Sound. E. Berger, 3M, Indianapolis, IN.
- Novel Approaches to Hearing Education. D. Meinke, University of Northern Colorado, Greeley, CO.
- Dangerous Decibels — A Fun and Interactive Program for All Ages. W. Martin, Oregon Health Sciences University, Portland, OR.
- From the Workshop into the Classroom — Let the Fun Begin! T. Madison, 3M, St. Paul, MN.

PO 127
Management and Communication in OSH
8:30 a.m.–11:00 a.m. » ICC, Wabash 1
Arrangers: S. Skipper, EnSafe Inc., Knoxville, TN; J. Zey, University of Central Missouri, Warrensburg, MO. Moderator: S. Skipper, EnSafe Inc., Knoxville, TN. Monitors: J. Zey, University of Central Missouri, Warrensburg, MO; R. Goodman, EnSafe Inc., Cincinnati, OH.
8:30 a.m.–8:50 a.m.
8:50 a.m.–9:10 a.m.
9:10 a.m.–9:30 a.m.
CS-127-3 Incident Analysis and Root Cause: Integrating a Quality 8-D Process. P. Esposito, ESIS, Annapolis, MD.
9:30 a.m.–9:50 a.m.
CS-127-4 Safety Through Accountability and Recognition: Achieving a World-Class Culture and Exceptional Safety Performance. P. Esposito, ESIS, Annapolis, MD.
9:50 a.m.–10:10 a.m.
CS-127-5 Implementation of a Chemical Exposure Assessment Program. R. Smith, EaglePicher Tech., Joplin, MO.
10:10 a.m.–10:30 a.m.
10:30 a.m.–10:50 a.m.
SR-127-7 Urine Color Is an Effective Biomarker for Self-Monitoring Hydration Status in Army Cadets from the United Arab Emirates. T. Loney, United Arab Emirates University, Al Ain, United Arab Emirates; J. Carter, L. Scullion, G. Nicholson, Optimal Performance Limited, Bristol, United Kingdom; M. Al Shehhi, United Arab Emirates Armed Forces, Abu Dhabi, United Arab Emirates.
10:50 a.m.–11:10 a.m.

CR 333
Taking Process Safety and Catastrophic Event Prevention to the Next Level
10:00 a.m.–11:00 a.m. » ICC, 102
Presenter: S. Stricoff, BST, Ojai, CA.
For more than 20 years, the concepts of PSM have been in use in industries with catastrophic event
potential, yet these events continue to occur. This presentation compares the approach embodied in PSM with the more comprehensive approach required to address the impact of organizational culture, leadership, and HR systems on catastrophic event prevention. The seven specific areas most frequently overlooked in prevention of catastrophic events are described, creating a blueprint for taking catastrophic event prevention to the next level.

Herbert E. Stokinger Award Lecture
So You Think That You Can … Set Threshold Limit Values?

Presenters: Michelle M. Schaper, PhD, Toxicologist, U.S. Department of Labor, Mine Safety and Health Administration, Washington, DC.

The first book of TLVs® was published by ACGIH® in 1961. These TLVs® evolved from a list of approximately 135 Maximum Allowable Concentrations (MACs) of Air Contaminants for 1946. In 1961, there were approximately 250 chemical substances for which TLVs® were developed. They were defined as airborne concentrations that “represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.” These TLVs® were generally applied to a workforce of normal, healthy, adult males. Today, there are approximately 850 chemical substances for which TLVs® have been developed. Over the years, ‘Notations’ (e.g., SKIN, SEN, A1…5) have been added that remind EHS professionals of special concerns related to a chemical substance. Documentation, which may be extensive, is provided for each chemical substance so that EHS professionals can understand the basis of each TLV®. Although the 2012 definition of the TLVs® still includes the language “nearly all workers may be repeatedly exposed,” today’s workforce is diverse in terms of age, gender, ethnicity, wellness, physical limitations, and other factors. Dr. Schaper’s presentation will review changes in the TLVs® (e.g., numerical values, endpoints of toxicity such as irritation), and in the characteristics of the workers the TLVs® are intended to protect. It is not an easy task to set TLVs® or other occupational exposure limits (OELs). ACGIH® and others who are involved in the development of such limits have been criticized and legally challenged. Dr. Stokinger once wrote about the need for research and evaluation of environmental health. Perhaps it is time for a reality check on why occupational exposure limits are set in the first place. Our mission has been and remains the protection of workers. Dr. Schaper will discuss the importance of developing, updating, and using current OELs and ensuring that proper training of our workers is being done to fulfill our mission.

CR 334 Understanding Corporate Social Responsibility: New Opportunities for EHS Professionals


The growing importance of corporate social responsibility (CSR) and increasing demands for organizational transparency and accountability have created new pressures and opportunities for industrial hygienists and environmental, health, and safety (EHS) professionals. We explore how to develop and promote CSR programs and overcome common barriers to implementation. With case studies across numerous industries, we show how CSR programs benefit the stakeholders they impact. We share personal stories of EHS professionals who have transitioned into CSR roles.

PO 128 Sampling and Analysis: Current Trends in Workplace Exposure Assessments


1:00 p.m.—4:00 p.m. » ICC, Wabash 3

SR-128-1 The Effect of Concentration, Sorbent Weight, and Adsorbate on the Adsorption Capacity of a Novel Fluidized Air Sampling Media Utilizing a Sparging System to Generate VOCs at Different Levels. A. Alarfaj, Saudi Aramco, Dhahran, Saudi Arabia.
The Deepwater Horizon oil spill is believed to have released nearly five million barrels of oil, constituting the largest accidental oil spill in marine waters to date. Oil was first observed on theater’s surface on April 22, 2010, following the April 20, 2010 explosion and subsequent sinking of the Deepwater Horizon drilling unit. The oil leak continued until being capped on July 15, 2010. During and after the leak, thousands of workers and residents involved in cleanup efforts were exposed to oil and/or dispersant products. The National Institute of Environmental Health Sciences (NIEHS) has launched a multi-year study to investigate the potential health effects from the oil spill in the Gulf region. The study is focused on workers’ exposures and potential health outcomes such as respiratory, neurobehavioral, carcinogenic, and immunological effects. The study is also expected to evaluate mental health concerns and other oil spill-related stressors such as job loss, family disruption, and financial uncertainties. This symposium provides an overview of the exposure assessment strategies, an analysis of analytical direct reading instruments and analysis of exposure data collected to date.

- **NIEHS Gulf STUDY — Study Overview and the Exposure Assessment Process.** P. Stewart, Stewart Exposure Assessment, LLC, Arlington, VA.
- **NIEHS Gulf STUDY — Exposure Assessment Techniques and Preliminary Findings.** M. Stenzel, Exposure Assessment Applications, LLC, Arlington, VA.
- **BP’s Response to the Gulf Oil Spill.** C. Metzler, BP, Houston, TX.
- **Direct Reading Instruments and the Gulf Oil Spill: Understanding the Strengths/Limitations When Analyzing the Data.** C. Millner, Center for Toxicology and Environmental Health, LLC, North Little Rock, AR.
- **Analysis and Modeling of Airborne BTEX Concentrations from the Deepwater Horizon Oil Spill.** H. Avens, ChemRisk, LLC, Boulder, CO.

### PO 129

**Biological Monitoring and Aerosols**

1:00 p.m.–4:00 p.m. » ICC, 125

**Arranger and Moderator:** D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. **Monitors:** M. Grespin, W. Cyrs ChemRisk, LLC, San Francisco, CA.

This symposium provides an overview of the exposure assessment strategies, and an analysis of exposure data collected to date. Oil was first observed on theater’s surface on April 22, 2010, following the April 20, 2010 explosion and subsequent sinking of the Deepwater Horizon drilling unit. The oil leak continued until being capped on July 15, 2010. During and after the leak, thousands of workers and residents involved in cleanup efforts were exposed to oil and/or dispersant products. The National Institute of Environmental Health Sciences (NIEHS) has launched a multi-year study to investigate the potential health effects from the oil spill in the Gulf region. The study is focused on workers’ exposures and potential health outcomes such as respiratory, neurobehavioral, carcinogenic, and immunological effects. The study is also expected to evaluate mental health concerns and other oil spill-related stressors such as job loss, family disruption, and financial uncertainties. This symposium provides an overview of the exposure assessment strategies, an analysis of analytical direct reading instruments and analysis of exposure data collected to date.

- **NIEHS Gulf STUDY — Study Overview and the Exposure Assessment Process.** P. Stewart, Stewart Exposure Assessment, LLC, Arlington, VA.
- **NIEHS Gulf STUDY — Exposure Assessment Techniques and Preliminary Findings.** M. Stenzel, Exposure Assessment Applications, LLC, Arlington, VA.
- **BP’s Response to the Gulf Oil Spill.** C. Metzler, BP, Houston, TX.
- **Direct Reading Instruments and the Gulf Oil Spill: Understanding the Strengths/Limitations When Analyzing the Data.** C. Millner, Center for Toxicology and Environmental Health, LLC, North Little Rock, AR.
- **Analysis and Modeling of Airborne BTEX Concentrations from the Deepwater Horizon Oil Spill.** H. Avens, ChemRisk, LLC, Boulder, CO.

### PO 129

**Biological Monitoring and Aerosols**

1:00 p.m.–4:00 p.m. » ICC, 125

**Arranger and Moderator:** D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. **Monitors:** M. Grespin, W. Cyrs ChemRisk, LLC, San Francisco, CA.

This symposium provides an overview of the exposure assessment strategies, and an analysis of exposure data collected to date. Oil was first observed on theater’s surface on April 22, 2010, following the April 20, 2010 explosion and subsequent sinking of the Deepwater Horizon drilling unit. The oil leak continued until being capped on July 15, 2010. During and after the leak, thousands of workers and residents involved in cleanup efforts were exposed to oil and/or dispersant products. The National Institute of Environmental Health Sciences (NIEHS) has launched a multi-year study to investigate the potential health effects from the oil spill in the Gulf region. The study is focused on workers’ exposures and potential health outcomes such as respiratory, neurobehavioral, carcinogenic, and immunological effects. The study is also expected to evaluate mental health concerns and other oil spill-related stressors such as job loss, family disruption, and financial uncertainties. This symposium provides an overview of the exposure assessment strategies, an analysis of analytical direct reading instruments and analysis of exposure data collected to date.

- **NIEHS Gulf STUDY — Study Overview and the Exposure Assessment Process.** P. Stewart, Stewart Exposure Assessment, LLC, Arlington, VA.
- **NIEHS Gulf STUDY — Exposure Assessment Techniques and Preliminary Findings.** M. Stenzel, Exposure Assessment Applications, LLC, Arlington, VA.
- **BP’s Response to the Gulf Oil Spill.** C. Metzler, BP, Houston, TX.
- **Direct Reading Instruments and the Gulf Oil Spill: Understanding the Strengths/Limitations When Analyzing the Data.** C. Millner, Center for Toxicology and Environmental Health, LLC, North Little Rock, AR.
- **Analysis and Modeling of Airborne BTEX Concentrations from the Deepwater Horizon Oil Spill.** H. Avens, ChemRisk, LLC, Boulder, CO.
Transitioning from Safety Risk Assessments to Health Risk Assessments in Radiological Emergencies. E. Daxon, Batelle, San Antonio, TX.


Observed Techniques, Planning, and Lessons Learned from Radiation Contamination on a Ship from Japan. C. Gagnon, U.S. Coast Guard, Novato, CA.

RT 241
Honing Your Competitive Edge in the Battle for the Bucks
1:00 p.m.–5:00 p.m. » ICC, 127

Arranger and Moderator: D. Heidel, NIOSH, Cincinnati, OH. Monitors: J. Zey, University of Central Missouri, Warrensburg, MO; T. Lentz, NIOSH, Cincinnati, OH.

Is your H&S budget cut to the bone? Are your projects to reduce risks stalled due to cost constraints? Does your organization view your contributions as less than “value added”? Does your chief financial officer avoid your phone calls? You’re not alone. Competing for limited resources in the current economic environment requires that you become comfortable discussing the business value of your planned H&S interventions. Understanding and using the process for demonstrating how your H&S risk reduction goals can support the achievement of your organization’s business goals are essential skills for the H&S professional, but they are skills that most of us did not learn in college. And, let’s face it, finance professionals talk a language that is more than a bit intimidating! This roundtable will take the mystery out of developing effective business cases by demonstrating the “value strategy” steps through case studies completed by H&S professionals.

The Value of Safety to the CEO. D. Eberts, Sikorsky Aircraft Corporation, Stamford, CT.


Finance “101.” E. Biddle, NIOSH, Morgantown, WV.

Using the Value Proposition to Gain Acceptance for Enhanced Exposure Control. B. Bethel, Sikorsky Aircraft Corporation, Stamford, CT.

EHS Value Strategy: A Path to Sustainability. G. Popov, University of Central Missouri, Warrensburg, MO.


Do I Really Have to Use the Entire AIHA Value Strategy to Prove My Case? E. Biddle, NIOSH, Morgantown, WV.

CR 335
Enhancing Chemical Management within the Framework of Existing TSCA Regulations
2:30 p.m.–3:30 p.m. » ICC, 102

Presenter: K. Blake, 3E Company, San Diego, CA.

In this session, the speaker will navigate through the different components of TSCA while providing insight into the following topics: History of TSCA; Scope and Sections, including new CDR rules; Importing and Exporting Requirements; Impact on TSCA and TSCA Reform on Businesses; p.m.N Submissions; Latest developments—changes and new programs.

The findings and conclusions in the National Institute for Occupational Safety and Health abstract presentations have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

World-class service. All around the world.

Air quality testing. Lab analysis. LEED certification. Equipment rental. 24/7/365 call center. Internationally accredited. When it comes to exposure monitoring, today’s businesses have a world of challenges. Fortunately, Galson Laboratories puts a world of solutions at your fingertips. From innovative programs like our FreePumpLoan™, FreeSampling Badges™, and IH Live Chat, to a full suite of testing and monitoring solutions, we’ve got you covered around the clock—and around the world. In fact, Galson provides services in all 50 states and 38 countries.

To learn more, visit us at galsonlabs.com or call 888-432-LABS.
Expo, Hall B

Posters are grouped by topic and authors are stationed at their posters at designated times to answer questions. It’s a great spot on the Expo floor to meet colleagues and to discuss the latest research in OEHS!

All posters are open for viewing 9:00 a.m. Monday, June 18 through 1:00 p.m. Wednesday, June 20.

Poster Session Arrangers
- Chad Dowell, NIOSH, Cincinnati, OH.
- Aleos Stefanioiu, NIOSH, Morgantown, WV.
- R. Kent Oostenstad, University of Alabama, Birmingham, AL (Students).
- Lorraine Conroy, University of Illinois at Chicago, Chicago, IL (Students).
- Jim McGlothlin, Purdue University, West Lafayette, IN (Students).

Poster Session 401
Author Attend Time: Monday, June 18, 10:00 a.m.–Noon

Communication & Training
- CS-401-01 Latino Worker Safety and Health on West-Wisconsin Dairy Farms. B. Beamer, University of Wisconsin-Stout, Menomonie, WI; M. Bauer, OSHA, Eau Claire, WI.

Computer Applications

Green Building and LEED
- CS-401-04 Performance of Industrial Hygiene Site Monitoring Efforts for LEED Pre-Occupancy Testing for New School Construction Along with Sampling and Laboratory Analytical Challenges Related to Data Presentation and Interpretation Including Lessons Learned. J. Kohrn, Jan Kohrn, M.S., CIH, Inc., Houston, TX; H. Dotwala, Environ-Tas, Inc., Houston, TX.
- CS-401-05 Foam Insulation — IAQ Complaints and Impact on VOCs for LEED Evaluations. J. Kenny, ESIS Environmental Health Lab, Cromwell, CT.

Occupational & Environmental Epidemiology
- SR-401-06 Occupational Health Surveillance Program for Swine Workers. S. Krychuk, A. Owusu-Kyem, P. Pahwa, C. Karunanyake, N. Koehncke, D. Rennie, University of Saskatchewan, Saskatoon, SK, Canada.

Risk Assessment & Management
- CS-401-08 Value (Cost Effectiveness) of EH&S Investments. E. Reed, Liberty Mutual Insurance Co, Centennial, CO; A. Lieberman, Environmental Information Services, Inc., Boulder, CO.

Safety

Poster Session 402
Author Attend Time: Monday, June 18, 2:00 p.m.–4:00 p.m.

Aerosols
- SR-402-01 Impact of Apparent Density and Moisture Absorption Rate on Airborne Emission of Nanopowders. S. Lee, W. Ko, Feng Chia University, Taichung City, Taiwan.
- SR-402-02 Penetration of Charged Particles through Metallic Tubes. K. Chang, S. Huang, C. Chen, National Taiwan University, Taipei, Taiwan; C. Chen, Institute of Occupational Safety and Health, Taiwan; Y. Chen, Chang-Jung Christian University, Taiwan, Taiwan.
- SR-402-03 Characterization of a Vibrating Mesh Aerosol Generator. W. Chan, S. Huang, Y. Kuo, C. Chen, National Taiwan University, Taipei, Taiwan.
- SR-402-04 Fine Particle Exposures During Vehicle Fire Suppression: Mobile Direct Reading Sampling. D. Evans, NIOSH, Cincinnati, OH.

Environmental Issues
- SR-402-05 The Environmental Fate of Polybrominated Diphenyl Ethers in Taiwan — The Application of a Food Web Model. S. Tsai, L. Lin, I. Wang, W. Lin, H. Lu, H. Liu, National Taiwan University, Taipei, Taiwan.

Exposure Assessment Strategies
- CS-402-06 WITHDRAWN: Case Studies Assessing Worker and Community Exposures to Toxic Substances in Developing Countries. A. Sussell, NIOSH, Cincinnati, OH.
- CS-402-07 Exposure Assessment at an Electrolytic Manganese Dioxide Processing Plant. S. Durgam, NIOSH, Cincinnati, OH.
- CS-402-08 Pill Dust Exposures at a Mail Order Pharmacy. K. Fent, S. Durgam, NIOSH, Cincinnati, OH.
- CS-402-10 Design and Conduct of an Industrial Hygiene Field Site Monitoring Strategy for Onshore Oil and Gas Operations Including Oilfield Services: Documenting the Potential for Occupational Exposures to Chemicals and Physical Hazards as well as Other Site Hazard Surveys. J. Kohrn, L. McKelvey, Jan Kohrn, M.S., CIH, Inc.; Houston, TX; E. Salazar-Vega, University of Texas, Houston, TX.
- SR-402-11 Application of Bayesian Decision Analysis to Determine the Modified Exposure Profile and the Priority of Nationwide High Risk Enterprises. S. Wang, P. Tsai, China Medical University, Taichung, Taiwan.
- CS-402-12 Development of a Sampling Based, Refractory Ceramic Fiber Exposure Assessment Program for Optical Mirror Manufacturing. J. Piakos, University of Arizona, Tucson, AZ.
- SR-402-14 Usefulness of Vapor Pressure for Control Banding in the Semiconductor Workplaces. D. Lim, K. Kim, S. Kim, Samsung Electronics, Gyeonggi-Do, Republic of Korea.

Poster Session 403
Author Attend Time: Tuesday, June 19, 10:00 a.m.–Noon

Biological Monitoring

Biosafety and Environmental Microbiology
- SR-403-02 The Study of Bioaerosol Characteristics in a Wood Processing Plant. C. Lai, Y. Liu, Y. Chen, Y. Zhang, Y. Lin, Chung Shan Medical University, Taichung, Taiwan.
Ionizing Radiation

- CS-403-03 X-ray Exposure in the Orthopedic and Neurosurgical Operation Theatre. Z. Kotwica, Westpomorinan Regional Hospital, Gryfice, Poland; M. Kotwica, Institution of Occupational Health, Lodz, Poland.

Laboratories, Analytical & Research


Nonionizing Radiation

- CS-403-05 WITHDRAWN: Radiation Exposure from IT Labs — Should it Concern Us? Y. Yu, DSM, Shanghai, China.

Sampling and Laboratory Analysis

- SR-403-06 Immunodetection of (1-3)-β-d-glucan Particles Using the Halogen immunoassay. F. Rivera-Marani, A. Rule, P. Breysse, Johns Hopkins University, MD.
- CS-403-07 Heavy Metal Contamination Analysis of Soils, Sediments and Fluids with Field Portable XRF. K. Russell, M. Jennings, S. Moller, Olympus Innov-X, Woburn, MA.
- SR-403-08 Assessing Exposures to 1-Chloro-4-(Trifluoromethyl) Benzene (PCBTF). M. Harper, B. Lewis, D. Burns, J. Wells, J. Ham, S. Kim, NIOSH, Morgantown, WV.
- SR-403-09 Recommendations for Kaolin Interference Correction to Quartz Measurement in Coal Mine Dust. T. Lee, W. Chisholm, M. Kashon, M. Harper, NIOSH, Morgantown, WV.

WIDRAWN: SR-403-12 Correcting the Gas/particle Partitioning of Pcd/d/fs in the Flue Gas Collected from an Iron Ore Sinter Plant. Y. Kuo, Y. Chen, J. Yang, P. Tsai, National Cheng Kung University, Tainan, Taiwan; L. Wang, G. Chang-Chien, Cheng Shiu University, Kaohsiung, Taiwan.

Poster Session 404

Author Attend Time: Tuesday, June 19, 1:00 p.m.–3:00 p.m.

Health Care Sites/Industry

- CS-404-01 Creation of a Series of Home Healthcare Workers Fast Fact Cards. L. Hodson, NIOSH, Cincinnati, OH.

Indoor Environmental Quality

- CS-404-03 Reduction of Excessive Formaldehyde Levels in Residential Construction through Engineering Controls. M. Heaney, Liberty Mutual, Amherst, NH.
- SR-404-04 Distribution Characteristics of Airborne Bacteria in Pig Buildings. K. Kim, Catholic University of Pusan, Pusan, Republic of Korea; Y. Roh, Simon Fraser University, Vancouver, BC, Canada; C. Kim, Yonsei University, Seoul, Republic of Korea; D. Kim, Seoul National University of Technology, Seoul, Republic of Korea.

Industrial Hygiene General Practice

- CS-404-05 Legionnaires’ Disease in Workers at an Automobile Shredding Facility. R. Boystein, R. Bailey, C. Piacitelli, C. Schuler, J. Cox-Ganser, K. Kreiss, NIOSH, Morgantown, WV.
- CS-404-07 Hexavalent Chromium Exposure Control During Hard Facing. G. Robinson, Liberty Mutual, Loves Park, IL.
- SR-404-08 Health and Safety in Small Auto Collision Repair Shops — Outcomes of a 1-year Intervention. A. Bejan, D. Parker, M. Skan, Park Nicollet Institute, St. Louis Park, MN; L. Brosseau, University of Minnesota, Minneapolis, MN.
- CS-404-09 Selecting that New Industrial Hygiene and Safety Inspection Instrument. M. Stevens, Cincinnati Technical Center, Cincinnati, OH.
- CS-404-10 Hexavalent Chromium Surface Contamination from Stainless Steel Welding Activities. R. Claiborne, Zurich Services Corp., Charlotte, NC.

Protective Clothing and Equipment


Poster Session 405

Graduate and Undergraduate Students

Author Attend Time: Wednesday, June 20, 10:00 a.m.–Noon

Graduate and undergraduate students present to discuss research and answer questions.

Paperless Evaluations

Don’t Forget to Complete Your Evaluation!

PDC and technical session evaluations are now paperless. Use your smartphone, laptop, iPad or mobile device, or the cyber center computers to access the evaluations one of three ways —

- The AIHce Mobile App. Visit http://crwd.cc/aihce2012 or scan the QR code
- Log on to www.aihce2012.org/certification
- Links sent via email at the conclusion of your PDC and Technical Session

Questions? Visit the Speaker Ready Room, ICC, 108

NEW — MORE certification maintenance!

You can now earn COCs and CEUs for weekday technical sessions! Simply complete the online survey at: www.aihce2012.org/certification.
**Indiana Convention Center**

**Halls A-E**

**Hours**
Monday, June 18, 9:00 a.m.–5:30 p.m.  
Tuesday, June 19, 9:00 a.m.–3:00 p.m.  
Wednesday, June 20, 9:00 a.m.–1:30 p.m.

**Expo Opening Cocktail Reception** on Monday from 4:00 p.m.–5:30 p.m. Remember to bring your complimentary drink ticket.

**Tuesday Lunch in the Expo** — Full registrants received a coupon for lunch valid at any one of the various concessions in the Convention Center.

**Passport to Prizes**

**Prize Booth 136**
Have your passport stamped by participating exhibitors and drop your entry at Prize Booth 136 by Noon on Wednesday. Winning names will be drawn at 12:30 p.m. The Grand Prize is a trip to AIHce 2013 in Montreal, Quebec. 2nd Prize is $1,000.

**NEW! Text to Win an iPad! Four Chances to Win!**

Find the four Text-to-Win stations in the Expo. At each location, text the word on the sign to 68398. You can only enter once at each location, but by visiting all four locations, you’ll increase your chances of winning. Only one iPad per person. Winners will be notified by text Tuesday evening, and you’ll take your iPad home with you.

*(The fine print — Msg&Data rates may apply. You will receive one confirmation text message for each text sent; each winner will receive one text. Text numbers will not be saved or used again. To opt out, text STOP to 68398. Only one entry per mobile phone, per location.)*

**Special Exhibits**

**Clandestine Drug Lab Exhibit Booth 1225**

AIHA’s Clandestine Laboratory Working Group has developed a mock clandestine drug lab display that focuses on hazards associated with the production of methamphetamine and indoor marijuana grow operations. Representatives from Indiana State Police Methamphetamine Suppression Section and the DEA Springfield, Illinois office will be on hand to demonstrate how they approach, monitor, and mitigate health hazards associated with clandestine drugs. In addition, Indiana State Police will be giving a 90-minute presentation on Methamphetamine Lab Recognition and Safety on Tuesday from 1:00 p.m.–2:30 p.m. in the Expo Theater.

**The Hope Quilt, Booth 149**

**Presentation:**
Monday, 1:00 p.m.–1:20 p.m.  
Pamela Vossenas, MPH, Workplace Safety & Health Coordinator/Staff Epidemiologist, UNITE HERE! International Union, New York, NY

For generations, quilting has represented an important tradition that has enabled women to build community, turn discarded scraps of fabric into something useful and create something that, when joined together, is bigger and more beautiful than the sum of its parts.

In keeping with this tradition, the Hope Quilt stitches together the stories of hotel housekeepers and the pain they endure everyday just to provide for their families. Housekeepers throughout North America have contributed patches to the quilt, which now stretches nearly 200 feet.

With each patch symbolizing a story of pain or injury brought on by the heavy burden of their jobs, this quilt is a testament to the work of housekeepers and their worth as human beings. It is a symbol that together, they can turn their stories of pain into a source of strength, and empower each other in their journey for simple, safe solutions to housekeeping hazards.

The Hope Quilt illustrates a need for simple remedies such as fitted sheets, mops, long-handled tools, and a health and safety standard for hotel housekeeping to enforce safe working rules. Some of these are solutions recommended this past year by CalOSHA in response to complaints filed by Hyatt housekeepers about repetitive motion injuries — the very injuries depicted in the Hope Quilt.

*The Quilt will be displayed daily until 1:00 p.m. on Wednesday.*

**Expo Theater: Product Demos and Presentations**

**Hall C**

**Monday, June 18**

See presentation descriptions on pages 32 and 36.

*10:00 a.m.*  
Inet DS Mobile Solution, Industrial Scientific Corp.

*10:30 a.m.*  
PhaseCore Heat Activated Cooling Products: SWEDE CarbonX Vest In Action, First Line Technology, LLC

*11:30 a.m.*  
Learn How to Perform Safety Inspections Faster and More Efficiently with ChemSW’s New SI Live™ Solution, ChemSW Inc.

*Noon*  

*12:30 p.m.*  
NEW! 3M™ Sound Examiner SE-400 Sound Level Meter with NEW! 3M Detection Management Software DMS, Quest Technologies, a 3M company

*1:00 p.m.*  
A New Active Dry Sampler for Low Level Vapor Phase and Particulate Isocyanate Measurements, Supelco, Supelco/Sigma-Aldrich

*1:30 p.m.*  
Portable, Continuous Measurement Formaldehyde Monitor for IAQ Applications, GrayWolf Sensing Solutions

**Tuesday, June 19**

See presentation descriptions on pages 44 and 48.

*9:30 a.m.*  
CorTemp Ingestible Core Body Temperature Sensor Technology, CorTemp-HQ, Inc.

*10:00 a.m.*  
Potent Compound Containment, ILC Dover

*10:30 a.m.*  
New Disposable Size-Selective Particulate Samplers, SKC Inc.

*Noon*  
Kanomax Handheld Precision Sound Level Meter with 0-dB Function, Kanomax USA Inc.

*12:30 p.m.*  
Labconco Introduces a New Lower Energy Fume Hood, Labconco Corporation

*1:00 p.m.*  
Methamphetamine Lab Recognition and Safety

**Wednesday, June 20**

See presentation descriptions on pages 56 and 59.

*9:30 a.m.*  
Introducing the mTrap: The Only Spore Trap Specifically Designed to Efficiently and Rapidly Capture PCR Air Samples, Assured Bio Labs, LLC

*10:00 a.m.*  
Good Lab Practices with Powder Handling in an OEL 3 and 4 Environment, Flow Sciences, Inc.

*Noon*  
AtlasWork™, Atlas Ergonomics

*12:30 p.m.*  
An Online Tool for GHS MSDS Authoring, ChemWatch NA
PLATINUM SPONSOR

INDUSTRIAL SCIENTIFIC

Industrial Scientific Corporation
Passport to Prizes, Final Program, Advance Program, Expo Card, Booth 304

GOLD SPONSORS

Arizona Instrument LLC
Final Program, Conference Bag, Booth 542

Galsen Laboratories
International Reception, Final Program, Booth 704

Scientific Analytical Institute, Inc.
Cyber Center, Booth 907

OTHER SPONSORS

3E Company
Passport to Prizes
Booth 711

3M
Final Program
Booth 300

Actio Corporation
Passport to Prizes
Booth 715

AirClean Systems
Park Bench
Booth 1133

ALS Environmental
AIHce Email, Final & Advance Programs,
Standing Sign
Booth 833

American Board of Industrial Hygiene
Passport to Prizes
Booth 807

American Heart Association
Row 1000 Aisle Sign
Final Program
Standing Sign
Booth 1005

Assay Technology
Row 800 Aisle Sign
Booth 808

Bowen EHS, Inc.
Passport to Prizes
Booth 1020

Center for Toxicology and Environmental Health, LLC
PDC Lunch/Break Co-sponsor
Booth 1041

ChemSW, Inc.
AIHce Email
Booth 1019

Crowcon Detection Instruments
Polybag Insert
Booth 226

CUNY School of Public Health at Hunter College
Final Program

Datachem Software
Passport to Prizes
Booth 811

E.D. Bullard
Polybag Insert
Booth 314

Eli Lilly and Company
AIHF Fun Run/Walk

EMSL Analytical, Inc.
EMSL Analytical, Inc.
Passport to Prizes
Booth 522

Fauske & Associates, LLC
Final Program
Booth 119

NEXTTEQ LLC
Final Program
Booth 611

OHD
Final Program
Booth 1008

RAE Systems
Polybag Insert
Booth 308

Raeco Rents
Passport to Prizes
Booth 1222

RJ Lee Group LLC
Final Program
Booth 1125

S.E. International
Passport to Prizes
Booth 1027

Scott Safety
AIHce On Demand Co-Sponsorship
Booth 452

Sensidyne, LP
Lanyards
Row 900 Aisle Sign
Booth 900

SiteHawk
Passport to Prizes
Booth 429

SKC Inc.
Final Program
Web Banner
Booth 503

Thermo Scientific - Air Quality Instruments & Portable XRF Analyzers
Row 500 Aisle Sign
3 Standing Signs
Booth 519

TRS RenTelco
Web Banners
Booth 618

TSI Inc.
Final Program,
AIHce Email,
Row 700 Aisle Sign
Booth 700

www.AIHce2012.org
**Indiana Convention Center**  
**Halls A-E**

**Hours**  
Monday, June 18, 9:00 a.m.–5:30 p.m.  
Tuesday, June 19, 9:00 a.m.–3:00 p.m.  
Wednesday, June 20, 9:00 a.m.–1:30 p.m.
**Expo Opening Cocktail Reception**
Monday from 4:00 p.m.–5:30 p.m.
Bring your complimentary drink ticket from your registration packet.
Aisle 100
ESIS Inc. – Health, Safety & Environmental Services ............................................. 107
CY Holding Company Ltd. .......................................................... 108
Argus-Hazco .................................................................................. 109
NARDA Safety Test Solutions ............................................................. 111
AMEC ......................................................................................... 114
Phonak Communications ................................................................. 115
Olympus Innov-X ................................................................. 117
Materials Analytical Services LLC ...................................................... 118
Fauske & Associates LLC ................................................................ 119
Wiley ......................................................................................... 120
Ion Science LLC ........................................................................... 122
Complete Equity Markets Inc. .......................................................... 124
Exametrix Inc. .............................................................................. 126
National Hearing Conservation Association (NHCA) ............................. 133
Shoes for Crews ............................................................................ 134

Aisle 200
Warwick Mills - TurtleSkin .................................................................. 217
VPPPA Inc. .................................................................................. 218
American Society of Safety Engineers .............................................. 219
Pullman-Holt Corp. ........................................................................ 220
CorTemp – HQ Inc. .......................................................................... 222
Larson Davis .................................................................................. 223
First Line Technology LLC ............................................................... 224
Crowcon Detection Instruments ......................................................... 226
Masimo ......................................................................................... 229
Alistagen Corp. ............................................................................. 230
Health Conservation Inc. (HCI) ....................................................... 231
EHS Today .................................................................................... 233
ERLAB Inc. .................................................................................. 236

Aisle 300
3M ............................................................................................... 300
Quest Technologies, a 3M company .................................................. 300
Industrial Scientific Corp. ................................................................. 304
RAE Systems ................................................................................. 308
Draeger Safety Inc. ......................................................................... 311
E.D. Bullard .................................................................................. 314
DuPont Protection Technologies ......................................................... 317
Industrial Hygiene News/Rimbach Publishing Inc. ................................. 319
Travelers Laboratory ....................................................................... 322
Industrial Safety & Hygiene News ....................................................... 323
Casella CEL Inc. ............................................................................ 326
Giff Instrumentation Inc. ................................................................ 329
Kitagawa America LLC .................................................................. 331
Met One Instruments Inc. ................................................................. 333
Supelco/ Sigma-Aldrich ............................................................... 334
SanAir Technologies Laboratory Inc. ................................................. 336
Interactive Safety Products Inc. ......................................................... 338
PUREFLIO .................................................................................. 338
Protective Industrial Products Inc. ....................................................... 341
Edge Eyewear .............................................................................. 344
Fabenco Inc. .................................................................................. 347
AFC International Inc. ..................................................................... 348
SEER TECHNOLOGY .................................................................. 349
Cedermo AB .................................................................................. 351
Kestrel Pocket Weather Meters by NK .................................................. 353

Aisle 400
Nilfisk Industrial Vacuums ............................................................... 425
ESC Services Inc. .......................................................................... 426
COHOs ....................................................................................... 427
SiteHawk ...................................................................................... 429
UL PureSafety ................................................................................. 431
WorkCare Inc. .............................................................................. 433
Working Concepts Inc. ................................................................ 434
GrayWolf Sensing Solutions .............................................................. 436
Tiger-Vac Inc. (USA) .................................................................. 438
NuAire Inc. .................................................................................. 440
Decagon Devices Inc. .................................................................... 442
Sundstrom Safety Inc. .................................................................. 447
Kinetics Noise Control .................................................................. 448
Schneider Laboratories Global Inc. ..................................................... 449
E.A.R. Inc. .................................................................................. 451
Scott Safety ................................................................................... 452

Aisle 500
MSA ............................................................................................ 500
SKC ........................................................................................... 503
Honeywell Safety Products ............................................................. 508
BW Technologies by Honeywell/ Honeywell Analytics ....................... 511
Bureau Veritas North America Inc. ..................................................... 516
Thermo Scientific – Air Quality Instruments & Portable XRF Analyzers .................................................................................. 519
EMSL Analytical Inc. ..................................................................... 522
RKI Instruments ........................................................................... 525
Labconco Corp. ........................................................................... 527
Goodway Technologies Corp. ......................................................... 529
Health Physics Society .................................................................... 530
Critical Environment Technologies Canada Inc. .................................. 531
Total Safety (ICI) a Total Safety Company ........................................ 533
Aerobiology Laboratory Associates Inc. .............................................. 536
Entech Instruments Inc. .................................................................. 537
MAXAIR Systems ......................................................................... 538
Gasmet Technologies Inc. ................................................................. 540
Pall Medical .................................................................................. 541
Arizona Instrument LLC .................................................................. 542
NIOSH .......................................................................................... 544
Compliance Solutions .................................................................... 547
ILC Dover .................................................................................... 548
Alimed Inc. .................................................................................. 551
KeepSafe Inc. ............................................................................... 553

Aisle 600
Nexteq LLC .................................................................................. 611
Occupational Health & Safety Magazine ............................................. 617
TRS-Environmental ........................................................................ 618
Gas Clip Technologies Inc. ............................................................... 619
Board of Certified Safety Professionals (BCSP) .................................. 620
Zefon International Inc. ................................................................... 629
ENMET Corp. ............................................................................... 633
ergoCentric Seating Systems ............................................................. 634
A.P. Buck Inc. ............................................................................... 635
VICI Metronics Inc. ....................................................................... 636
Moldex-Metric Inc. ........................................................................ 644
Flow Sciences Inc. ........................................................................... 647

Aisle 700
TSI Inc. ........................................................................................ 700
Galson Laboratories ........................................................................ 704
Air Systems International ............................................................... 708
3E Company ................................................................................ 711
CPAP Safety ................................................................................ 714
Actio Corp. .................................................................................. 715
Medgate Inc. ................................................................................ 717
Lisam Systems .............................................................................. 718
Showa Best Glove ......................................................................... 719
MSDspro LLC ............................................................................... 720
Mycrometer Inc. ............................................................................ 733
Assured Bio Labs LLC .................................................................. 735
JLG Industries Inc. ......................................................................... 736
Brue & Kjaer ................................................................................ 744
Atlas Ergonomics .......................................................................... 745
Portagas Inc. ................................................................................ 748
T K Group .................................................................................... 749
ErgoGenesis .................................................................................. 751

Aisle 800
Photovac, an INFICON Brand ........................................................... 803
ERSI ............................................................................................ 804
Bios International Corp. .................................................................. 805
American Board of Industrial Hygiene .............................................. 807
Assay Technology Inc./ AT Labs/ MNR Services ................................... 808
Datachem Software Inc. .................................................................. 811
Safetec. ......................................................................................... 812
ALS Environmental ...................................................................... 833
Radix BioSolutions ....................................................................... 834
AIHA Registry Programs LLC ......................................................... 835
Veritox Inc. .................................................................................. 836
Eagle Safety Eyewear ................................................................... 844
National Safety Council ................................................................ 845

Aisle 900
Sensidyne, LP ................................................................................. 900
Prism Analytical Technologies Inc. ..................................................... 903
Morphix Technologies .................................................................... 905
Scientific Analytical Institute Inc. ....................................................... 907
Kontrol Kube by Fiberlock Technologies Inc. ...................................... 908
Mkidsonline ................................................................................ 911
Particle Measuring Systems ............................................................. 912
Dakota Software Corp. .................................................................. 913
American Industrial Hygiene Association* (AIHA®) ................................ 922
ProcessMap Corp. ......................................................................... 934
Environmental Safety Technologies .................................................. 935
GASTEC Corp. ............................................................................ 936
ACGH® ...................................................................................... 938
Colden Corp. ............................................................................... 944
Euro Safety & Health .................................................................... 945
Eurofins Air Toxics Inc. .................................................................. 947
GHS Safety .................................................................................. 949
### Aisle 1000

Analytics Corp........................................1000  
Ashtead Technology ..................................1003  
American Heart Association........................1005  
Redshift Technologies Inc.............................1007  
OHD ......................................................1008  
KMI ........................................................1011  
Axion Health ...........................................1012  
ChemWatch NA ...........................................1013  
Spiramid LLC ..........................................1015  
Expert Publishing/EBSCO ............................1016  
Open Range Software LLC ............................1018  
ChemSW Inc. ............................................1019  
Bowen EHS Inc. ........................................1020  
PathCon Laboratories ................................1022  
Dade Moeller .............................................1023  
Kanomax USA Inc. ......................................1025  
S.E. International Inc..................................1027  
TestAmerica Laboratories Inc. ......................1029  
EMLab P&K LLC ........................................1030  
Golder Associates Inc. ................................1033  
I.E. Monitoring Instruments ...........................1036  
National Registry of Certified Chemists ..........1037  
QuanTEM Laboratories LLC ..........................1038  
Air Techniques International .........................1040  
Center for Toxicology and Environmental Health LLC........................................1041  
Cirrus Research plc ....................................1044  
BGI Inc. ..................................................1045  
Taylor & Francis ........................................1047  
ABET ......................................................1049

### Aisle 1200

Purdue University ........................................1200  
University of Toledo Department of Public Health & Preventive Medicine ..........1201  
Johns Hopkins Bloomberg School of Public Health ...............................................1203  
University of California, School of Public Health, Berkeley, CA .................1204  
Univ. of Illinois/Great Lakes Centers for Occupational & Environmental Safety & Health........................................1205  
University of South Florida College of Public Health, Sunshine ERC.............1207  
Marshall University/Safety Technology .......1208  
University of Washington — Environmental & Occupational Health Sciences .....1209  
BEAC ......................................................1211  
Restek Corp. ..............................................1212  
Safety Management Systems Inc. ..................1213  
Dynasil Products .......................................1215  
Indoor Biotechnologies Inc. ........................1216  
Troy Acoustics Corp. ...................................1218  
Grainer .....................................................1219  
RAECO Rents ..........................................1222  
Baseline-MOCON .....................................1223

### CUNY School of Public Health at Hunter College

The CUNY School of Public Health (SPH) at Hunter College invites applicants interested in earning a Doctor of Public Health (DPH) degree specializing in Environmental and Occupational Health. This track trains doctoral-level researchers and teachers about EOH problems affecting urban populations. In addition to the EOH Track, the CUNY DPH program offers the following specializations: Community, Society and Health (with a sub-track in Nutrition); Epidemiology; and Health Policy and Management.

The City University of New York (CUNY) is the nation’s largest urban public university. The CUNY SPH is accredited by the Council on Education for Public Health and integrates DPH, MPH, MS, and BS programs at four consortium schools. The CUNY SPH seeks new ways to prevent and control health problems in urban populations while training practitioners to implement these solutions in New York City and other urban centers.

CUNY SPH DPH faculty member Franklin E. Mire, PhD, CIH is the 2012 recipient of the Donald E. Cummings Award and will present the Cummings Memorial Lecture “All Dressed Up — But Where are We Going?”

AllHce 2012 June 20th Wednesday, 12:30 p.m.—1:30 p.m.

The CUNY School of Public Health at Hunter College
212-396-7778  
cunyph@hunter.cuny.edu  
www.cuny.edu/sph
THE shaded boxes indicate NEW exhibitors at AIHce 2012!

3E Company ........................................ 711
3207 Grey Hawk Court
Carlsbad, CA 92010
(760) 602-8700
info@3ecompany.com
www.3ecompany.com
3E Company’s suite of chemical, regulatory, and EH&S compliance information services span the chemical lifecycle, covering global regulatory data; MSDS authoring, distribution, and management; transportation; emergency response; regulatory reporting; and waste management.

3M ................................................ 300
Bldg. 235 - 2W - 70
St. Paul, MN 55144
(800) 328-1667
lmkuschei@mmm.com
www.3m.com/occasafety
Disposable and reusable respirators; supplied and powered air purifying respiratory; hearing, head, eye, and face protection; software and training materials; welding products; detection and air monitoring systems; reflective materials and fall protection; EAR devices, respiratory protection equipment specialists.

A.P. Buck Inc. ............................. 635
7101 Presidents Drive, Ste. 110
Orlando, FL 32809
(407) 851-8602
pkg@apbuck.com
www.apbuck.com
Air sampling pumps and calibrators for IH and IAQ industry.

ABET ........................................ 1049
111 Market Place, Ste. 1050
Baltimore, MD 21202
(410) 347-7700
info@abet.org
www.abet.org
ABET credits more than 3,100 academic degree programs in applied science, computing, engineering, and engineering technology at 660 universities in 23 nations.

ACGIH® ........................................ 938
1330 Kemper Meadow Drive
Cincinnati, OH 45240
(513) 742-2020
mail@acgih.org
www.acgih.org
The ACGIH® Pavilion will showcase the resources for which it is well known: books, educational events, membership, and technical information.

Actio Corporation .................................. 715
30 International Drive, Ste. 201
Portsmouth, NH 03801
(603) 433-2300
contact@actio.net
www.actio.net
Actio Corporation provides on-demand, centralized supply chain management of product materials, down to the chemical level. Actio’s 15 years of experience helps businesses automatically comply with GHS, REACH, RoHS, Cal Prop 65, TSCA, conflict mineral legislation, and more. Compliance automation is here; visit www.actio.net.

Aerobiology Laboratory Associates Inc. ............. 536
43760 Trade Center Place, Ste. 100
Dulles, VA 20166
(877) 648-9150
suzanne@aerobiology.net
www.aerobiology.net
Environmental laboratory services, to include client assistance with interpretation of results.

NEW! AFC International Inc. .............. 348
715C SW Almond St.
DeMotte, IN 46310
(800) 952-3293
sales@afclntl.com
www.afclntl.com
Gas detection instruments, air monitor, and sampling devices, respiratory protection equipment specialists.

AIHA Registry Programs LLC .......... 835
3141 Fairview Park Drive, Ste. 777
Falls Church, VA 22042
(703) 846-0755
info@aiharegistries.org
www.aiharegistries.org
Come to our booth to learn about credentials for practicing OEHS professionals. Enhance your certification and highlight your areas of specialty expertise for employers and clients. Gain stackable, portable credentials based on your demonstrated competence. Find out how these credentials are distinctly different.

Air Systems International ................. 1040
11403 Cronridge Drive
Owings Mills, MD 21117
(410) 363-9696
info@atitest.com
www.atitest.com
ATI is a global leader in developing, manufacturing, and servicing equipment for testing high purity air filters and respirators; showcasing portable respirator testing products at AIHce 2012.

AirClean Systems ....................... 1133
3248 Lake Woodard Drive
Raleigh, NC 27604
(800) 849-0472
info@aircleansystems.com
www.aircleansystems.com
Ductless fume hoods.

Aircuity Inc. .................................. 1131
55 Chapel St.
Newton, MA 02458
(617) 641-8831
tfalco@aircuity.com
www.aircuity.com
Aircuity is a leading airside efficiency company providing building owners with sustained energy savings by optimizing ventilation rates through its intelligent measurement solutions.

Alimed Inc. .................................. 551
297 High St.
Dedham, MA 02026
(800) 225-2610
sdavis@alimed.com
www.ergobilities.com
Ergonomics, health and safety, office and industrial products.

Alistagen Corporation ................... 230
10 Park Avenue
New York, NY 10016
(212) 317-0100
information@alistagen.com
www.alistagen.com
Alistagen’s Caliwel BNA line of first hospital functional architectural paints. Breakthrough in the control and spread of infectious diseases in architectural settings. Leading anti-microbial paint. Effective against viruses, bacteria and fungi. Caliwel kills microbes on contact and prevents new growth for up to six years. No biocides, no VOC.

ALS Environmental .......................... 833
Cincinnati: 800-458-1493
Salt Lake City: 800-356-9135
Simi Valley: 805-526-7161
IHServices.usa@alsglobal.com
www.alsglobal.com
ALS Environmental, including ALS Cincinnati (formerly DataChem Laboratories, Inc.), ALS Salt Lake City (formerly DataChem Laboratories, Inc.) and ALS Simi Valley (formerly Columbia Analytical Services) delivers worldwide comprehensive air quality and...
industrial hygiene analytical services. Combining the experience and skills of our laboratories in Cincinnati, OH; Salt Lake City, UT; and Simi Valley, CA, ALS is capable of meeting a wide range of air testing needs.

AMEC .................................................. 114
440 Dovercourt Drive
Winnipeg, Manitoba R3Y 1N4
Canada
(204) 488-2997
patrick.campbell@amec.com
www.amec.com
Industrial hygiene consulting services, indoor air quality/mold surveys, regulated materials management, infrared thermography surveys, chemical risk/exposure assessment, and expert witness services.

American Board of Industrial Hygiene ........................................... 807
6015 W. St. Joseph Highway, Ste. 102
Lansing, MI 48917
(517) 321-2638
abih@abih.org
www.abih.org
Promotion of industrial hygiene certification.

American Heart Association ........................................... 1005
7272 Greenville Ave.
Dallas, TX 75231
(877) 242-4277
heart saver@heart.org
www.heart.org/cpr
The American Heart Association offers first aid, CPR, AED, and bloodborne pathogens training in a classroom setting and eLearning format. Visit our booth for more information!

American Industrial Hygiene Association (AIHA*) ....................... 922
3141 Fairview Park Drive, Ste. 777
Falls Church, VA 22042
(703) 849-8888
infonet@aiha.org
www.aiha.org
With more than 60 years as the world’s premier organization for OEHs professionals, AIHA can provide the quality technical, professional, and career resources you need to excel in your field.

American Society of Safety Engineers ......................... 219
1800 E. Oakton St.
Des Plaines, IL 60018
(847) 699-2929
customerservice@asse.org
www.asse.org
Since 1911, the American Society of Safety Engineers has helped safety professionals expand their network, access safety best practices and solutions, and grow their careers. ASSE represents more than 34,000 individual members dedicated to safety practice specialties and common interests including construction, manufacturing, management, and more.

Analytics Corp. .......................... 1000
10329 Stony Run Lane
Ashland, VA 23005
(804) 365-3000
jmccleskey@analyticscorp.com
www.analyticscorp.com
Accredited by AIHA since 1981, Analytics provides full service laboratory testing. Areas of expertise include industrial hygiene, pharmaceutical, dialysis, and environmental.

Argus-Hazco ..................................... 109
46400 Continental Drive
Chesterfield, MI 48047
(586) 840-3200
info@argus-hazco.com
www.argus-hazco.com
Your connection to detection: gas, water, air. We rent; sell; repair industrial health, safety, and environmental equipment. Argus-Hazco for all your needs! (800) 332-0435.

Arizona Instrument LLC .................... 542
3375 N. Delaware St.
Chandler, AZ 85225
(800) 528-7411
sales@azic.com
www.azic.com
Arizona Instrument LLC offers an exclusive line of portable Jerome gold film sensor mercury and hydrogen sulfide analyzers. A large display, on-board data logging, auto zeroing, and battery-powered sensor regeneration make it easy to use and maintain the instrument in the field. Rentals are available.

Ashtead Technology ...................... 1003
10635 Richmond Ave., Ste. 100
Houston, TX 77042
(832) 308-7600
sales.NA@ashtead-technology.com
www.ashtead-technology.com
Ashtead Technology offers a comprehensive fleet of environmental monitoring equipment such as analyzers, detectors, monitors, and samplers for almost every application need. We also aim to be your single source supplier for accessories and consumables such as calibration gases, tubing, and PPE supplies. www.ashtead-technology.com, (800) 242-3910.

Assay Technology Inc./
AT Labs/MNR Services ............. 808
1382 Stealth St.
Livermore, CA 94551
(800) 833-1258
askassay@assaytech.com
www.assaytech.us
Air samplers and analytical services for more than 200 vapors and aerosols, featuring personal monitoring badges. AIHA-accredited laboratories. Best price on badge with analysis. Respirator cartridge/canister service life testing and temperature-humidity flow control systems available.

NEW! Assured Bio Labs LLC ............ 735
228 Midway Lane, Ste. B
Oak Ridge, TN 37830
(865) 813-1700
info@assuredbio.com
www.assuredbio.com
Assured Bio operates as a commercial lab performing analysis of specimens collected by hygienists at residential, commercial, and industrial locations. Fungal and bacterial identifications are a specialty. Assured also devotes time to the development of “new-to-the-world” biotechnology solutions for use in the indoor air quality industry.

NEW! Atlas Ergonomics ............... 745
13601 Forest Park Drive
Grand Haven, MI 49417
(616) 844-6322 ext. 3201
jlandsman@atlasergo.com
www.atlasergo.com
Atlas serves over 10,000 U.S. Cities. We provide physical demands analysis, pre-employment screens, ergonomics software and services, and on-site injury triage/physical therapy for manufacturing, commercial/public transportation, warehouses, offices, and health care. We provide a simple total solution especially for large multi-site clients.

NEW! Axion Health ...................... 1012
2300 15th St., Ste. 400
Denver, CO 80202
(877) 770-3073
sales@axionhealth.com
www.axionhealth.com
Axion Health, clinically driven EHS software solutions: designed with the latest technology, our web-based solutions are user-friendly, internet-accessible, completely paperless, quick to launch, and affordable.

Baseline-MOCON ................. 1223
P.O. Box 649
Lyons, CO 80540
(303) 823-6661
info@baselineindustries.com
www.baseline-mocon.com
Continuous analyzers, gas chromatographs, photoionization sensors, and toxic gas detectors.

BEAC ............................................. 1211
247 Maitland Ave.
Altamonte Springs, FL 32701
(407) 831-7727
info@beac.org
www.beac.org
Professional certification for EHS auditors.
AIHce 2012 Final Program

BGI Inc. ................................. 1045
58 Guinan St.
Waltham, MA 02451
(781) 891-9380
info@bgiusa.com
www.bgiusa.com
BGI has provided the industrial hygiene and environmental monitoring communities with instrumentation for over four decades.

Bios International Corp. ........... 805
10 Park Place
Butler, NJ 07405
(973) 492-8400
sales@biosint.com
www.biosint.com
Bios International leads primary flow measurement. DryCal standards are supported by ISO 17025 accreditation uncertainty analyses and interlab comparisons with NIST and other labs worldwide.

Board of Certified Safety Professionals (BCSP) ........... 620
2301 W. Bradley Ave.
Champaign, IL 61821
(217) 359-9263
bcsp@bcsp.org
www.bcsp.org
Safety certifications through examination, including the Certified Safety Professional (CSP) certification and the OSH, CLCS, CHST, and STS certifications.

Bowen EHS Inc. ......................... 1020
1289 N. Fordham Blvd., Ste. 411
Chapel Hill, NC 27514
(866) 264-5852
manager@bowenehs.com
www.BowenEHS.com
Bowen EHS Inc. provides review courses for the CIH, CHMM, and ASP/CSP exams via live lectures online and four-day workshops. Join our Member Center for access to additional health and safety resources designed to help you pass the exam! We are dedicated to your success!

Bruel & Kjaer ......................... 744
2815 A Colonades Court
Norcross, GA 30071
(800) 332-2040
info@bks.com
www.bkhome.com
B&B will show the new Personal Noise Dose Meter Type 4448 and Protector Software for recording and assessing noise exposure levels. B&K Type 1 sound level and human vibration meters will be available for demonstration. Don’t miss exploring sound in and around your facility with the Noise@Work, Predictor, and Odeon Industrial software applications.

Bureau Veritas North America Inc. .................. 516
1601 Sawgrass Corporate Parkway, Ste. 400
Fort Lauderdale, FL 33323
(888) 357-7020
usinfo@us.bureauveritas.com
www.us.bureauveritas.com
Bureau Veritas, a global provider of health, safety, and environmental (HSE) consulting and laboratory services, is committed to helping clients navigate the path to HSE excellence and corporate responsibility in today’s business environment. Contact us and discover a strategic partner with a fresh perspective on managing HSE and sustainability programs.

BW Technologies by Honeywell/ Honeywell Analytics .................. 511
405 Barclay Blvd.
Lincolnshire, IL 60069
(800) 663-4164
info@gasmonitors.com
www.gasmonitors.com
BW Technologies by Honeywell manufactures a full line of portable gas detection instrumentation for toxic and combustible gases, volatile organic compounds (VOCs), and oxygen.

Casella CEL Inc. ....................... 326
415 Lawrence Bell Drive, Unit 4
Buffalo, NY 14221
(716) 276-3040
info@casellausa.com
www.CasellaUSA.com
Casella CEL, a subsidiary of IDEAL Industries Inc., is a leader in rugged, easy to use instrumentation and software for IH and environmental monitoring. Products include CEL dBadge™ Noise Dosimeters, 200 & 600 series Sound Level/Octave Band Meters, Tuff™ Sample Pumps, MicroDust Pro real-time dust monitor, and new CEL-960 Human Vibration Monitor.

CCOHS .................................. 427
135 Hunter St. E.
Hamilton, ON L8N 1M5
Canada
(905) 572-2981
clientservices@ccohs.ca
www.ccoh.ca
CCOHS promotes the total well-being—physical, psychosocial, and mental health—of workers by providing information, training, education, management systems, and solutions that support health and safety programs and the prevention of injury and illness.

Cederroth AB .............................. 351
P.O. Box 715
Upplands Vaestby, Sweden SE-19427
Sweden
+46 8 590 96300
firstaid@cederroth.com
www.firstaid.cederroth.com
First aid products, eye wash.

Center for Toxicology and Environmental Health LLC........ 1041
5120 North Shore Drive
North Little Rock, AR 72086
(501) 801-8500
support@cteh.com
www.cteh.com
CTEH® is an environmental consulting company specializing in the scientific expertise of toxicology, risk assessment, industrial hygiene, occupational health, and emergency response.

NEW! Centers for Disease Control & Prevention: NCEH/ATSDR ........ 1130
1600 Clifton Road, MSF61
Atlanta, GA 30329
(770) 488-0589
zyc@cdc.gov
www.cdc.gov
CDC’s National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry scientifically consider all factors that affect the health of people, including healthy community design.

ChemSW Inc. ......................... 1019
4771 Mangels Blvd.
Fairfield, CA 94534
(707) 864-0845
info@chemsw.com
www.chemsw.com
The leader in chemical inventory management systems, ChemSW’s innovative solutions enable companies to eliminate chemical safety deficiencies, streamline inspections, ensure compliance, and automate regulatory reporting.

ChemWatch NA ......................... 1013
2706 Greystone Road
Nashville, TN 37204
(615) 467-0383
info@chemwatchna.com
www.chemwatchna.com
ChemWatch MSDS database is used globally in 33 languages for SDS management and authoring, OHS compliance, emergency response summaries, inventory, labeling, and research. PC, LAN, Web.

NEW! Cirrus Research plc ......... 1044
Acoustic House, Bridlington Road
Humnanby, MP Y014 0PH
United Kingdom
+44 1723 891655
sales@cirrusresearch.co.uk
www.cirrusresearch.co.uk
Cirrus Research manufactures noise measurement instrumentation. Our noise meters and noise dosimeters use the latest technology and give you the information needed quickly, simply, and reliably.
Clothes Cleaning Systems .......... 1118
4475 Technology Drive
Wilson, NC 27896
(252) 243-3752
clothescleaningbooth@hotmail.com
www.clothescleaningbooth.com
CCB II Dust Removal/Decontamination System. Removes 95 percent of visible dust from a worker’s clothing in 18 seconds or less, while fully dressed and wearing their PPE. The only system tested and accepted for use by NIOSH as performing to the design/performance criteria. Companies are experiencing reduced levels of toxic dust in/around their facilities.

Colden Corp.......................... 944
1617 JFK Blvd., Ste. 1705
Philadelphia, PA 19103
(215) 496-9237
colden@colden.com
www.colden.com
Colden Corp. provides personalized and responsive, client-focused service with professionalism and integrity to address occupational health, safety, and environmental concerns.

Complete Equity Markets Inc....... 124
1190 Flex Court
Lake Zurich, IL 60047
(800) 323-6234
www.cemins.com
Liability insurance.

Compliance Solutions.................. 547
3980 Quebec St., Ste. 200
Denver, CO 80207
(800) 771-2706
comments@csregs.com
www.csregs.com
HAZWOPER and DOT classes in over 60 U.S. cities and over 50 online EH&S courses in English and Spanish.

NEW! Concept Seating Inc......... 1123
W226 N825 Eastmound Drive, Ste. B
Waukesha, WI 53186
(800) 892-5563
info@conceptseating.com
www.conceptseating.com
Ergonomic 24/7 heavy duty intensive use chairs. Modular design, replaceable covers, unique suspension, and six-year warranty that covers all normal wear and tear. 550 lb. weight limit.

Contour Design Inc................... 1129
10 Industrial Drive
Windham, NH 03087
(800) 462-6678
ergoinfo@contourdesign.com
www.contourdesign.com
Roller Mouse.

NEW! CorTemp - HQ Inc............. 222
210 Ninth St. Drive W.
Palmetto, FL 34221
(941) 723-4197
sales@hqinc.net
www.cortemp.com
The CorTemp® core body temperature monitoring system has been used in the sport, occupational safety, first responder, and military markets for over 25 years. Featuring the CorTemp® ingestible core body temperature pill (sensor), the system has become the gold standard of monitoring core temperature in hot, physical environments. FDA cleared.

CPLab Safety........................... 714
14 Commercial Blvd., Ste. 113
Novato, CA 94949
(415) 883-2600
info@cplabsafety.com
www.cplabsafety.com
Safety ECO Funnel: gasket in the hinged lid, made of HDPE. Available with assortment of screw cap sizes to fit common lab waste containers. Customize with HPLC Adapters. Safety cabinets, cans, plastic and glass labware, eyewear, gloves.

Critical Environment Technologies Canada Inc........ 531
Unit 145, 7391 Vantage Way
Delta, BC V4G 1M3
Canada
(604) 940-8741
marketing@ctecii.com
www.critical-environment.com
CETCI is a leading global supplier of gas detection systems, including self-contained systems, control- lers and transmitters, and IAQ portable instruments. Applications include commercial, institutional, municipal, and light industrial markets worldwide.

Crowcon Detection Instruments.................. 226
21 Kenton Lands Road
Erlanger, KY 41018
(859) 957-1039
salesusa@crowcon.com
www.crowcon.us
Portable and fixed gas detection instruments.

CY Holding Company Ltd.......... 108
P.O. Box 1090
O’Fallon, Missouri 63366
(636) 892-1828
safetyhood@live.com
www.ase-safety.com
Fire escape smoke hoods, chem-bio hoods, CBRN, EEBD, mine self-rescue respirators, fired blankets, escape ropes, fire escape suits, SCBAs.

Dade Moeller.......................... 1023
1835 Terminal Drive, Ste. 200
Richland, WA 99354
(509) 946-0410
judson.kenoyer@moellerinc.com
www.moellerinc.com
Dade Moeller is nationally recognized, specializing in radiological and nuclear safety, environmental protection, worker safety and health, and technical site services; providing a full range of services to government and commercial clients.

Dakota Software Corp............. 913
23240 Chagrin Blvd., Ste. 620
Cleveland, OH 44122
(216) 765-7100
dakotamarketing@dakotasoft.com
www.dakotasoft.com
Dakota Software has provided EHS management software to regulated industries, consultants, and government since 1988. Dakota’s Suite of Products, Profiler, Auditor, Tracer, Scout, and Metrics, can be used in combination or independently to proactively manage compliance at the point of control.

Datachem Software Inc............. 811
69 Milk St., Ste. 300
Westboro, MA 01581
(800) 377-9717
cliff.goede@datachemsoftware.com
www.certisstep.com
DataChem Software produces computer-based training programs that help professionals prepare for their certification exams, such as the CIH, CSP, ASP, CHMM, CPE, OHST, CHST, CLCS, and CHFM exams.

Decagon Devices Inc.............. 442
2365 NE Hopkins Court
Pullman, WA 99163
(509) 332-2756
sales@decagon.com
www.aqualab.com
Decagon Devices manufactures instrumentation to measure moisture in all its forms. Water activity, water potential, and water content will be displayed.

Draeger Safety Inc............... 311
101 Technology Drive
Pittsburgh, PA 15275
(412) 787-8383
prodinfo@draeger.net
www.draeger.com
Draeger is a leading international company in the fields of medical and safety technology. Dräger products protect, support, and save lives. Founded in 1889 and located in Lübeck, Germany, the Dräger company generated revenues of about EUR 2.18 billion in 2010.

Decagon Devices manufactures instrumentation to measure moisture in all its forms. Water activity, water potential, and water content will be displayed.
DuPont Protection Technologies 317
5401 Jefferson Davis Highway
Richmond, VA 23234
(800) 931-3456
gary.m.burnett@usa.dupont.com
www.personalprotection.dupont.com
Personal protective garments from DuPont.

NEW! Dynasil Products .................. 1215
44 Hunt St.
Watertown, MA 02472
(617) 668-6901
ndisales@dynasilproducts.com
www.dynasilproducts.com
The LPXPro Lead Paint Analyzer represents a new generation of XRF analyzers. It is designed for on-site efficiency, ease of use, and accuracy.

E.A.R. Inc.......................................451
P.O. Box 18888
Boulder, CO 80308
(303) 447-2619
andrew@earinc.com
www.earinc.com
 Worldwide provider of custom-fit and generic hearing protection and communication systems.

E.D. Bullard ................................... 314
1898 Safety Way
Cynthiana, KY 41031
(859) 234-6611
info@bullard.com
www.bullard.com
Powered air purifying respirators, supplied air respirators, air quality equipment, hard hats, face protection visors.

Eagle Safety Eyewear ................. 844
3801 Bishop Lane
Louisville, KY 40218
(877) 465-3887
plippy@eaglesafety.com
www.eaglesafety.com
Providing prescription and nonprescription eyewear programs nationwide. Focusing on eye and face protection.

Edge Eyewear .............................344
P.O. Box 845
Layton, UT 84041
(866) 953-7325
sales@wolfpeak.net
www.edge-eyewear.com
Edge Eyewear is designer-quality safety eyewear. All Edge Eyewear is independently tested to the ANSI Z87.1 • 2010 and ballistic impact requirements.

EHS Today .....................................233
1300 E. Ninth St.
Cleveland, OH 44114
(216) 931-9273
marci.bushek@penton.com
www.ehstoday.com
EHS Today is a monthly publication for EHS professionals featuring information to meet OSHA and EPA compliance requirements, improve management of safety, industrial hygiene, and environmental programs, and find products/services to protect employees and property. It’s a must read for those who are committed to protecting workers and the workplace.

Emilcott ...................................... 1113
190 Park Ave.
Morristown, NJ 07960
(800) 886-3645
info@greenlightsys.com
www.greenlightsys.com
Greenlight Environmental Monitoring System by Emilcott.

EMLab P&K LLC ............................1030
1936 Olney Ave.
Cherry Hill, NJ 08003
(609) 871-1984
customerservice@emlabpk.com
www.emlabpk.com
EMLab P&K LLC is the leading commercial indoor air quality testing lab in North America specializing in analyzing air/surface samples for fungi, asbestos, bacteria, radon, and USP 797.

EMSL Analytical Inc. ......................522
200 Route 130 N.
Cinnaminson, NJ 08077
(856) 220-3675
jtrowman@emsl.com
www.emsl.com
Quality and innovative laboratory services under the same private ownership for 29 years; 35 U.S. locations and one Canadian location, ISO 17025 compliant quality systems, cGMP laboratories, FDA Registration, full service analytical testing, full service sampling equipment, products and media division, free IH pump loan and rental programs.

Entech Instruments Inc................. 537
2207 Agate Court
Simi Valley, CA 93065
(805) 527-5939
susanmoore@entechinst.com
www.entechinst.com
Entech Instruments Inc. announces a breakthrough technology for whole air sample collection: Helium Diffusion Sampling™ (HDS). Entech now offers “universal” HDS active sampling solutions that simplify the collection of chemicals for GC/MS analysis.

ErgoGenesis ..................................751
1 Bodybilt Place
Navasota, TX 77868
(936) 825-1700
orders@ergogenesis.com
www.ergogenesis.com
Bodybilt ergonomic office seating andergofusion workplace accessories: your ultimate ergonomic solution.

ERLAB Inc..................................236
388 Newburyport Turnpike
Rowley, MA 01969
(800) 964-4434
captairsales@erlab.com
www.erlab.com
Erlab, the manufacturer of Captair brand products and GreenFumeHood Technology, has been the ductless fumehood leader since 1968. Learn why our filtration is the safest, most efficient, and easiest to use. We carry fume hoods, chemical storage cabinets, and many other safety solutions for your lab.
management services. The company offers hearing conservation, respiratory clearance, physician examinations, and online reporting.

**Expert Publishing/EBSCO ...........1016**
10 Estes St.
Ipswich, MA 01938
(978) 326-6500
information@ebscohost.com
www.ebscohost.com
Expert Publishing (ExPub), a division of EBSCO Publishing, is the premier provider of up-to-date, decision-support chemical information for the global environmental health and safety community.

**Fabenco Inc. ..........................347**
2002 Karbach St.
Houston, TX 77092
(713) 686-6620
sales@safetygate.com
www.safetygate.com
Employee-owned, 45-year manufacturer of the Fabenco self-closing safety gate product line. Made in the USA.

**NEW! Fauske & Associates LLC... 119**
16W070 83rd St.
Burr Ridge, IL 60527
(877) FАUSКЕ1
griffin@fauske.com
www.fauske.com
Fauske & Associates LLC provides risk management services including process safety management. Be sure you comply with new OSHA NEP mandates.

**NEW! First Line Technology LLC .......224**
3656 Centerview Drive, Unit 4
Chantilly, VA 20151
(703) 955-7510
sales@firstlinetech.com
www.firstlinetech.com
Phasecore cooling and Fibertect Decon.

**Flow Sciences Inc. .....................647**
2025 Mercantile Drive
Leland, NC 28451
(800) 849-3429
information@flowsciences.com
www.flowsciences.com
Flow Sciences Inc. (FSI) designs and manufactures safety containment solutions for pharmaceutical, biotech, nanotech, and chemical industries.

**Galson Laboratories ...................704**
6601 Kirkville Road
East Syracuse, NY 13057
(888) 432-5227
junangst@galsonlabs.com
www.galsonlabs.com
Galson’s industry-leading programs, FreePump-

**NEW! GHS Safety....................949**
3829 Forest Parkway
Wheatfield, NY 14120
(905) 648-6811
info@ghssafety.com
www.ghssafety.com
Compliance and training products for the Globally Harmonized System (GHS).
Golder Associates Inc. .............. 1033
3730 Chambly Tucker Road
Atlanta, GA 30341
(770) 496-1893
solutions@golder.com
www.golder.com
Golder Associates is an employee-owned, global company specializing in ground engineering and environmental services. We offer technical excellence in a variety of disciplines.

Health Conservation Inc. (HCI) .... 231
415 Financial Court
Rockford, IL 61107
(815) 964-4465
bbblack@hcicentral.com
www.hcilocation.com
HCI: nationwide leader for mobile audiometric, respiratory fit-testing/clearance, vision screening, on-site delivery of test results, training programs, and database management.

Honeywell Safety Products .......... 508
900 Douglas Pike
Smithfield, RI 02917
(800) 430-5490
honeywell@honeywell.com
www.honeywellsafety.com
Honeywell Safety Products is a leading global manufacturer of PPE, providing safety solutions for all industries. Our brands: Honeywell, Uvex, Miller, North, Howard Leight, Fibre-Metal, and Salisbury. Featured products include respiratory, hand, footwear/clothing, head, first-aid, eye/face, and fall protection. Spieran is now Honeywell.

Industrial Hygiene News/ Rimbach Publishing Inc. .......... 319
8650 Babcock Blvd.
Pittsburgh, PA 15237
(412) 364-5366
karen@rimbach.com
www.rimbach.com
Industrial Hygiene News reaches over 68,000 professionals and features products and services that will help keep employees safe and the organization compliant with OSHA regulations.

Indoor Biotechnologies Inc. ......... 1216
1216 Harris St.
Charlottesville, VA 22903
(434) 984-2304
info@inbio.com
www.inbio.com
Laboratory analysis of allergens and endotoxin in environmental samples. Manufacturer of purified allergens for commercial and research use. Dust collection device and home test kit for dust mite allergen.

NEW! Goodway Technologies Corp. ........................................... 529
420 W. Ave.
Stamford, CT 06902
(800) 243-7532
mfmarks@goodway.com
www.goodway.com
Manufacturer of innovative products for the maintenance professional. Mold remediation, Vacuums with HEPA & ULPA filtration, IAQ solutions.
Interactive Safety Products Inc. 338
9825-A Northcross Center Court
Huntersville, NC 28078
(800) 251-7377
sales@ihnomax.com
www.ihnomax.com

The PUREFLO range, manufactured in North Carolina, provides combined head, eye, face, welding, and positive powered respiratory protection (PAPR) with APFs up to 1,000. PUREFLO ESM alerts the wearer, through helmet-mounted audio display, when to charge batteries and/or change the filter, at the same time eliminating the need for fit-testing.

Ion Science LLC 122
33 Commercial Drive
Waterbury, VT 05676
(802) 244-5153
info@ionscienceusa.com
www.ionscience.com

Ion Science are leading manufacturers of technologically advanced gas detectors, PID/VOC and benzene detectors, SF6 leak detectors, and corrosion monitors, distributed worldwide. Instruments are available for a wide range of industries and applications: health and safety, petrochemical, chemical, environmental, landfill, and confined space entry.

JLG Industries Inc. 736
13712 Crayton Blvd.
Hagerstown, MD 21742
(240) 420-2661
info@jlg.com
www.jlg.com

The LiftPod® is an innovative personal lift that provides an affordable, productive, portable, and safe alternative to working on ladders, scaffolding, and rolling ladders to address the wants and needs of safety and facility professionals seeking a new solution.

Johns Hopkins Bloomberg School of Public Health 1203
615 N. Wolfe St., Room W7517
Baltimore, MD 21205
(410) 502-0742
creinhar@jhsph.edu
www.jhsphs.edu/erc

The Johns Hopkins ERC offers graduate degree programs and continuing education in occupational and environmental hygiene, medicine, nursing, and occupational injury epidemiology.

Kanomax USA Inc. 1025
219 US Highway 206
Andover, NJ 07821
(800) 247-8887
info@kanomaxusa.com
www.kenomaxusa.com

IAQ monitor, dust monitor, particle counter, anemometer, sound meter, and vibration meter.

KeepSafe Inc. 553
1018 Main St.
Baker, LA 70714
(888) 300-7800
keepsafe@ksafe.com
www.ksafe.com

Manufacturer of safety tags, signs, labels, banners, posters, badges, mirror hangers, safety calendars, safety postcards, wallet cards, and more.

Kestrel Pocket Weather Meters by NK 353
21 Creek Circle
Boothwyn, PA 19061
(610) 447-1555
info@nkhome.com
www.nkhome.com

Kestrel Pocket Weather meters by NK instantly measure all environmental conditions, including WBGT. In-depth storage and Bluetooth wireless data transfer capabilities available. Five-year warranty. Made in the USA.

Kinetics Noise Control 448
6300 Irelan Place
Dublin, OH 43017
(877) 457-2695
indsales@kineticsnoise.com
www.kineticsnoise.com

A manufacturer of innovative noise and vibration control products, Kinetics Noise Control has the engineered solutions for your noise and vibration control problems!

Kitagawa America LLC 331
200 Wanaque Ave., Ste. 204
Pompton Lakes, NJ 07442
(973) 616-5410
info@kitagawa-america.com
www.kitagawa-america.com

Gas detector tubes, colorimetric tubes, stain tubes, breathing air tubes, OEM gas sensors, airtight equipment, respirator fit-testers, hazmat, IAQ.

KMI 1011
586 Argus Road, Ste. 103
Oakville, ON L6J 3J3
Canada
(866) 919-7922
contactus@kminnovations.com
www.kminnovations.com

EHS software including incident management, audit and inspection, and corrective action. KMI systems are fast to deploy, easy to use, and provide real cost savings.

Kontrol Kube by Fiberlock 908
150 Gascomb Road
Andover, MA 01810
(800) 342-3755
info@fiberlock.com
www.fiberlock.com

Kontrol Kubes are mobile containment units designed to be set up quickly and easily to establish a temporary negative pressure environment. They are ideal for the control of airborne particulate during hospital renovations, construction and repairs, or for temporary patient isolation and increased surge capacity.

Labconco Corp. 527
8811 Prospect Ave.
Kansas City, MO 64132
(816) 258-3222
sales@labconco.com
www.labconco.com

Since 1925, Labconco has been manufacturing quality laboratory equipment. Labconco will be displaying nanotechnology enclosures, biosafety cabinets, fume hoods, and ductless enclosures.

Larson Davis 223
3425 Walden Ave.
Depew, NY 14043
(888) 258-3222
sales@larsondavis.com
www.LarsonDavis.com

Noise dosimeters, human vibration monitors, sound level meters, and octave band analyzers.

NEW! Lisam Systems 718
3131 E. 29th St., Ste. E
Bryan, TX 77802
(979) 595-1444
andrewn@lisam.com
www.lisam.com

Lisam Systems provides global EHS solutions to 600 customers worldwide. Lisam ExESS® is the premier chemicals and inventory management software suite with globally GHS-compliant SDS and label authoring and management in 40 languages, integrated chemical and regulatory content, CDR/REACH/CSCL volume tracking and reporting, safety, and waste management.

Marshall University/Safety Technology 1208
1 John Marshall Drive, GH 112
Huntington, WV 25755
(304) 696-4664
mcintosh@marshall.edu
www.marshall.edu

Safety Technology and Environmental Science degree programs at Marshall University are preparing today’s students for the occupational health and safety careers of the future.
Masimo ...........................................229
40 Parker
Irvine, CA 92618
(949) 297-7534
csi@masimo.com
www.masimo.com
Masimo develops and manufactures innovative noninvasive medical monitoring technology that helps detect carbon monoxide poisoning, methemoglobinemia, oxygen saturation, and total hemoglobin in patients on-site in seconds.

Materials Analytical Services LLC...........................................118
3945 Lakefield Court
Suwanee, GA 30024
(770) 866-3200
mmount@maestest.com
www.maestest.com
Industrial hygiene laboratory services, TVOC product emission chamber testing, materials analysis, product failure, microbial analysis, and small particle analysis by light and electron microscopy.

Materion Brush Inc...........................................1116
6070 Parkblvd
Mayfield Heights, OH 44124
(800) 862-4118
ellen.manes@materion.com
www.materion.com
Information on working safely with beryllium, beryllium alloys, and beryllia ceramics.

NEW! MAXAIR Systems ...............538
17171 Daimler St.
Irvine, CA 92614
(800) 443-3842
info@maxair-systems.com
www.maxair-systems.com
MAXAIR Systems® is a recognized leader in advanced respiratory and contact protection for various environments in health care, pharmaceutical manufacturing, bio-research labs, and industrial markets.

Met One Instruments Inc..............333
1600 NW Washington Blvd.
Grants Pass, OR 97526
(541) 471-7111
sales@metone.com
www.metone.com
Met One Instruments Inc. designs and manufactures particle counters, aerosol monitors, and air quality instrumentation. Reliable, accurate, affordable, as well as ISO9001:2008 certified.

Moldex-Metric Inc. .......................644
10111 W. Jefferson Blvd.
Culver City, CA 90232
(310) 837-6500
sales@moldex.com
www.moldex.com
Respiratory protection and hearing conservation.

Morphix Technologies ..................905
2557 Production Road
Virginia Beach, VA 23454
(800) 808-2234
sales@morphitech.com
www.morphitech.com
Morphix manufactures the ChromAir® and SafeAir® direct-reading badges and color comparators and the Chameleon® hands-free, toxic industrial chemical detector.

MSA ..................................................500
1000 Cranberry Woods Drive
Cranberry Twp., PA 16066
(724) 776-8600
info@msasafety.com
www.msanet.com
The world’s leading manufacturer of safety products since 1914. MSA products may be simple to use and maintain, but they’re also highly sophisticated devices and protective gear—the result of countless R&D hours, relentless testing, and an unwavering commitment to quality that saves lives and protects thousands of men and women each and every day.

MSDSonline ...........................................911
350 N. Orleans St., Ste. 950
Chicago, IL 60654
(888) 362-2007
sales@MSDSonline.com
www.msdsonline.com
MSDSonline is a leading provider of sustainable on-demand EH&S compliance solutions for managing and authoring MSDSs, reporting workplace incidents, training employees, and administering other critical EH&S information.

MSDSSpro LLC.........................720
1300 E. 68th Ave., Ste. 208A
Anchorage, AK 99518
(907) 272-6635
sales@msdsspro.com
www.msdsspro.com
MSDS and chemical management (Intranet/Internet options), unlimited access to 1 million MSDSs, chemical authorization, secondary labels, indexing & MSDS acquisition, inventory services, M/S SDS authoring services and labels (45+ languages), MSDS sourcing/updating for regulatory compliance-Osha, WHMIS, SARA, DHS, GHS, REACH.

Mycometer Inc. ..........................733
5002 S. MacDill Ave.
Tampa, FL 33611
(813) 831-6511
irogers@mycometer.com
www.mycometer.com
Mycometer equipment offers rapid, reliable, robust onsite analysis for fungi and bacteria in air, bulk, water, and surface samples. Award-winning, field proven technology for investigation, remediation, and delicate materials assessment.

NARD Safety Test Solutions ........111
435 Moreland Road
Hauppauge, NY 11788
(631) 231-1700 ext. 5663
kiesha.schilling@f-3com.com
www.narda-sts.com
Non-ionizing radiation safety products. Nardalert and RadMan RF personal monitors, ELF/VLF, RF and microwave safety instruments.

National Hearing Conservation Association (NHCA) ...........133
3030 W. 81st Ave.
Westminster, CO 80031
(303) 224-9022
nhcaoffice@hearingconservation.org
www.hearingconservation.org
A diverse organization representing multiple professions, including audiologists, nurses, physicians, and industrial hygienists, and providing resources and professional development focused on noise-induced hearing loss prevention.

National Library of Medicine .......1122
8600 Rockville Pike
Bethesda, MD 20894
(888) 346-3656
custserv@nlm.nih.gov
www.nlm.nih.gov
The National Library of Medicine provides FREE Internet access to its environmental health, toxicology, chemical, and hazardous substances resources. For more information, please visit tox.nlm.nih.gov.

NEW! National Registry of Certified Chemists .................1037
125 Rose Ann Lane
West Grove, PA 19390
(610) 322-0657
rphifer@nrcc6.org
www.nrcc6.org
Certification program for chemical hygiene officers.
National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143
(800) 621-7819
customerservice@nsc.org
www.nsc.org
NSC saves lives by preventing injuries and deaths at work, in homes, and communities, and on the roads, through leadership, research, education, and advocacy as well as through the annual NSC Congress & Expo.

Nextteq LLC
8406 Benjamin Road, Ste. J
Tampa, FL 33634
(877) 312-2333
info@nextteq.com
www.nextteq.com
Nextteq LLC is the trusted leader in the industrial hygiene and safety industries, offering solutions for gas detection, first response/hazmat testing, respiratory protection, and water and soil analysis.

Nilfisk Industrial Vacuums
740 Hemlock Road, Ste. 100
Morgantown, PA 19543
(800) 645-3475
questions-nilfisk.com
www.nilfiskindustrialvacuums.com
Nilfisk Industrial Vacuums helps manufacturers meet their cleaning challenges with an extensive range of high-performance, HEPA filter industrial vacuum cleaners. Vacuums are equipped with industry-specific features, efficient filtration systems, and a wide range of accessories including overhead cleaning of dust and debris on overhead pipes.

NIOSH
4676 Columbia Parkway, Mail Stop C-19
Cincinnati, OH 45226
(513) 533-8532
csherman@cdc.gov
www.cdc.gov/niosh
The National Institute for Occupational Safety and Health (NIOSH) is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness.

NIOSH/ERC/CE
2180 E. Galbraith Road
Cincinnati, OH 45237
(513) 558-1729
kermit.davis@uc.edu
www.eh.uc.edu/hscce
Continuing health and safety education schedules and brochures for all 17 NIOSH education and research centers.

NuAire Inc.
2100 Fernbrook Lane N.
Plymouth, MN 55447
(763) 553-1270
nuaire@nuaire.com
www.nuaiere.com

Occupational Health & Safety Magazine
14901 Quorum Drive, Ste. 425
Dallas, TX 75254
(972) 687-6700
kogrady@1105media.com
www.ohsonline.com
Occupational Health & Safety is a leading publication in health, safety, and hygiene, reaching over 80,000 subscribers. Products include monthly magazine, ohsonline.com, virtual events, targeted e-newsletter, and webinars.

NEW! Occupational Health Practice Survey Research — University of Arizona
1295 N. Martin Ave., P.O. Box 24510
Tucson, Arizona 85724
(520) 626-1263
cph-occmed@email.arizona.edu
www.publichealth.arizona.edu/academics/masters/mph/oh
Help researchers improve understanding of the actual activities and skills of industrial hygienists. The Occupational Health Practice research project is conducted by the University of Arizona and sponsored by NIOSH. To learn more or participate, visit our booth!

Occupational Safety & Health Administration (OSHA)
200 Constitution Ave. NW
Washington, DC 20210
(202) 693-1999
chatmon.veneta@dol.gov
www.osha.gov
Publications.

OHD
197 Cahaba Valley Parkway
Birmingham, AL 35124
(205) 980-0180
sales@ohdusa.com
www.ohdusa.com
QUANTITFIT Quantitative Respirator Fit-test System in only two to three minutes. Most accurate method available and complete data management software included. DoseBadge wireless noise dosimeter, Optimus Sound Level Meter. All data in one measurement, including entire 120 dB dynamic range. Complete noise management software included at no charge.

NEW! Pall Medical
25 Harbor Park Drive
Port Washington, NY 11050
(866) 347-3428
saferwater@pall.com
www.pall.com/healthcarewater
Pall Medical offers advanced filtration technologies from point of building entry to point-of-use (taps, showers, and ice machines), providing effective barriers against gram-negative bacteria. Reduce exposure to waterborne pathogens and provide sterilizing grade filtered water. Immediate response provided for water outbreaks.

Particle Measuring Systems
5475 Airport Blvd.
Boulder, CO 80301
(303) 443-7100
marketing@pmeasuring.com
www.pmeasuring.com
Particle Measuring Systems nanoparticle detectors, impactors, DMA-differential mobility analyzers, SMPS, on-site nanoparticle exposure assessment.

PathCon Laboratories
270 Scientific Drive, Ste. 3
Norcross, GA 30092
(770) 446-0540
bshelton@pathcon.com
www.pathcon.com
Microbiological evaluation/occupational health consultation for buildings with occupant health complaints. Laboratory analyses include bacteria and fungi in air and Legionella bacteria in water.
### NEW! Philips Healthcare  649
22100 Bothell Everett Highway
Bothell, PA 98021
(425) 981-6589
shindy.skaari@philips.com
www.healthcare.philips.com
Phils Heart Start is the worldwide leader in AED deployments with over 900,000 AEDs shipped to date. We design and produce every device as if the life of someone we love depends on it.

### Protective Industrial Products Inc.  341
26 Computer Drive E.
Albany, NY 12205
(518) 861-0133
pipmarketing@pipusa.com
www.pipusa.com
Personal protective equipment.

### ProcessMap Corp.  934
1301 International Parkway, #160
Sunrise, FL 33323
(954) 515-5040
sales@processmap.com
www.processmap.com
Environmental health and safety, sustainability, and training/compliance software solutions.

### Quest Technologies, a 3M company  300
1060 Corporate Center Drive
Oconomowoc, WI 53066
(262) 567-9157
3Mdetectionmail@mmm.com
www.3M.com/detection
Quest Technologies, a 3M company, is part of 3M’s OH&S Division and represents its Detection Portfolio. 3M Quest is a manufacturer of rugged, reliable instrumentation and software systems used by safety and industrial hygiene professionals worldwide to monitor and evaluate noise, heat stress, indoor air quality, and select toxic/combustible gases.

### Photovac, an INFICON Brand  803
300 Second Ave.
Waltham, MA 02451
(781) 290-0777
sales@photovac.com
www.photovac.com
On-site detection and analysis of volatile organic compounds (VOCs), toxic industrial chemicals (TICs), and chemical warfare agents (CWAs).

### Portagas Inc.  748
1202 E. Sam Houston Parkway S.
Pasadena, TX 77508
(713) 928-6477
robert@portagas.com
www.portagas.com
PORTAGAS, an INFICON Manufacturer of HEPA vacuums for professional abatement, restoration, and construction. All dry and wet/dry models equipped with tested and certified HEPA filters.

### Purdue University  1200
School of Health Sciences
West Lafayette, IN 47907
(765) 494-1439
neil@purdue.edu
www.healthsciencess.purdue.edu
Teaching and research in IH: BS, MS, PhD.

### RAE Systems  308
3775 N. First St.
San Jose, CA 95134
(408) 952-8246
raesales@raesystems.com
www.raesystems.com
Gas detection solutions.

### RAECO Rents  1222
135 Bernice Drive
Bensenville, IL 60106
(866) 736-8347
rents@raecorents.com
www.RaecoRents.com
RAECO Rents offers the latest in particulate monitors, respirator fit-testers, noise and sound level meters, and portable gas detectors from TSI, 3M Quest, Testo, Sensidyne Gilian, Honeywell Analytics, and more. Save 5 percent automatically when you rent at RAECORents.com!

### Radix BioSolutions  834
111 Cooperative Way, Ste. 120
Georgetown, TX 78626
(512) 867-8000 ext. 116
kgo@radixbiosolutions.com
www.radixbiosolutions.com
Radix BioSolutions develops and manufactures immunoassay products and performs bioanalytical services for customers in the research community, the drug discovery/diagnostics industry, and allied markets. Our scientists’ backgrounds are in immunology, drug discovery, and biochemistry, along with enabling medical device expertise.

### Redshift Technologies Inc.  1007
34 E. 29th St.
New York, NY 10016
(212) 683-8993
info@redshift-techn.com
www.redshift-techn.com
The best industrial hygiene systems and beyond. Redshift provides EH&S software and consulting across your enterprise: IH systems, incident, risk, asset management, supply chain, emergency response, profiling, MSDS, metrics, labeling, auditing and action tracking, emissions, inventory, and more.
Restek Corp.
1110 Benner Circle
Belleville, PA 16823
(814) 353-1300
crm@restek.com
www.restek.com
Restek has been developing innovative chromatography solutions for LC and GC since 1985. We provide the tools analysts need to monitor the quality of air, water, soil, food, pharmaceuticals, chemicals, and petroleum products.

RightAnswer.com
4520 E. Ashman Road
Midland, MI 48642
(989) 835-5000
gmarkham@rightanswer.com
www.rightanswer.com

RJ Lee Group Inc.
350 Hochberg Road
Monroeville, PA 15146
(724) 325-1776
jschafer@rjl.com
www.rlj.com
RJ Lee Group Inc. is a fully accredited industrial hygiene laboratory specializing in microscopy, x-ray diffraction, organic and inorganic analysis.

RKI Instruments
33248 Central Ave.
Union City, CA 94587
(800) 754-5165
sales@rkiinstruments.com
www.rkiinstruments.com
Manufacturer of portable/fixed gas detection equipment and sensor technology. Products include smallest 4-gas monitor, 5-sample draw with 100 percent volume methane, and 6-gas portable.

RMCOEH — University of Utah
391 Chipeta Way, Ste. C
Salt Lake City, UT 84108
(801) 581-8719
connie.crandall@hsc.utah.edu
www.medicine.utah.edu/rmcoeh
Academic and continuing education programs in occupational safety and health.

S.E. International Inc.
P.O. Box 39
Summertown, TN 38483
(800) 293-5759
radiationinfo@seintl.com
www.seintl.com
Manufacturer of Radiation Alert® ionizing radiation detection instruments; Geiger counters, dosimeters, multi-channel analyzers for surface, air, and food contamination. Reliable for laboratory, environmental, industrial, educational, and HAZMAT situations.

Safetec
7700 NE Parkway Drive, Ste. 125
Vancouver, WA 98662
(360) 326-7357
tiffany@safetec.com
www.safetec.net
Safetec is the global leader in chemical and regulatory compliance technologies and services, specializing in (M)SDS management, chemical inventory control, and environmental reporting.

Safety Management Systems Inc.
58 Newtown Ave.
Norwalk, CT 06851
(203) 838-8877
mspizirri@att.net
www.hazmatsystemsinccom
Safety Management Systems Inc. specializes in health, safety, and environmental risk management compliance software solutions, services, and products.

SanAir Technologies
1551 Oakbridge Drive, Ste. B
Powhatan, VA 23139
(888) 895-1177
dburrington@sanair.com
www.sanair.com
A full service environmental laboratory accredited by the American Industrial Hygiene Association (AIHA) for environmental microbiology and lead, by the National Voluntary Laboratory Accreditation Program (NVLAP) for airborne asbestos fiber analysis (TEM) and bulk asbestos fiber analysis (PLM), and a CDC ELITE member for Legionella identification.

Schneider Laboratories
2512 W. Cary St.
Richmond, Virginia 23227
(804) 353-6778
info@slabinc.com
www.slabinc.com
Specializing in the analyses of organic compounds, asbestos, and metals in various matrices including air, paint, soil, wipes, building materials, wastewater, drinking water, and hazardous wastes.

Scientific Analytical Institute Inc.
4604 Dundas Drive
Greensboro, NC 27407
(877) 292-3888
lab@sailab.com
www.sailab.com
SAI is a worldwide provider of AIHA/NVLAP laboratory services. Specializing in quality-oriented fast turnarounds with unparalleled customer service, SAI analyzes silica, metals, asbestos, lead, CR(VI), and mold.

Scott Safety
4320 Goldmine Road
Monroe, NC 28110
(704) 291-8421
scott.sales.us@tycoint.com
www.scottssafety.com
Respiratory protection equipment, self-contained breathing apparatus, confined space entry, gas detection monitors.

SEER TECHNOLOGY
2681 Parleys Way
Salt Lake City, UT 84109
(801) 746-7888
sales@seertechnology.com
www.seertechnology.com
SEER Technology is the developer of the AccuSense® Chemical Recognition System, a field portable, dual hyphenated gas chromatograph that detects, identifies, and quantifies multiple chemicals in real-time with precision. The NAVISEER® Personnel Tracking System provides real-time location information for human assets deployed in GPS-denied areas.

Sensidyne
16333 Bay Vista Drive
Clearwater, FL 33702
(727) 530-3602
info@Sensidyne.com
www.Sensidyne.com
Sensidyne manufactures the word’s most dependable air sampling and gas detection equipment: Gilian Personal and Area Air Sampling Pumps; Sensidyne Point Gas Detection Instruments for combustible, toxic, and oxygen; Sensidyne Colorimetric Gas Detector Tubes; Santek Sound and Vibration Instruments; Sensidyne Air Flow Calibrators and Accessories.

NEW! Shoes For Crews
250 S. Australian Avenue
West Palm Beach, FL 33401
800-218-4770
info@shoesforcrews.com
www.shoesforcrews.com
Shoes For Crews manufactures today’s #1-rated slip-resistant footwear for employees in the workplace, backed by our $5,000 Slip & Fall Warranty and 60-Day Wear & Compare Guarantee.

Showa Best Glove
579 Edison St.
Menlo, GA 30731
(706) 862-6755
usa@showabestglove.com
www.showabestglove.com
Showa Best Glove offers more than 1,800 glove choices for use primarily in the industrial, construction, automotive, health care, retail, and commercial fishing industries.
SiteHawk ........................................429
709 Nissan Drive
Smyrna, TN 37167
(615) 459-0064–22
info@sitehawk.com
www.sitehawk.com
SiteHawk offers MSDS and EHS chemical information management through our web-based, user friendly software/managed services, including authoring and inventory services; SiteHawk is your global solution.

SKC ..............................................503
863 Valley View Road
Eighty Four, PA 15330
(724) 941-9704
skcorder@skincn.com
www.skincn.com
Leader in sampling technologies for chemical and biological contaminants. Products include sampling pumps, calibrators, and sample collection media for gases, vapors, particulates, and bioaerosols including mold.

NEW! Sundstrom Safety Inc........447
20 N. Blossom St.
East Providence, RI 02914
(401) 434-7300
info@srsafety.com
www.srsafety.com
APR air purifying respirators, SAR supplied air respirators, PAPR powered air purifying respirators, respirator kits, escape hoods, and accessories.

Supelco/Sigma-Aldrich .................334
595 N. Harrison Road
Bellefonte, PA 16823
(814) 359-3441
bobbiejo.seyler@sial.com
www.sigma-aldrich.com/analytical
Products from active and passive air sampling for thermal or solvent desorption to HPLC and GC columns, and associated supplies and accessories for sample analyses.

T K Group ......................................749
1781 S. Bell School Road
Rockford, IL 61016
(815) 332-3460
sales@tkonthebweb.com
www.tkonthebweb.com
T K Group is the nation’s largest mobile hearing testing company. We test/train up to 10 employees simultaneously. We have a web-based reporting program that allows you to monitor your program from your computer.

Taylor & Francis .........................1047
325 Chestnut St.
Philadelphia, PA 19106
(215) 625-8900
amanda.patterson@taylorandfrancis.com
www.tandfonline.com
Taylor & Francis is a leading academic publisher of scholarly journals including the Journal of Occupational and Environmental Hygiene.

TestAmerica Laboratories Inc ........1029
4625 E. Cotton Center Blvd., Ste. 189
Phoenix, AZ 85040
(602) 659-7611
elizabeth.baker@testamericainc.com
www.testamericainc.com/services/industrial-hygiene-services.aspx
TestAmerica Laboratories Inc., leader in environmental and industrial hygiene testing.

The Mountain & Plains Education & Resource Center — CIH Online! .....................1109
13001 E. 17th Place, B119
Aurora, CO 80043
(303) 724-4409
maperc@ucdenver.edu
www.maperc.ucdenver.edu
The Mountain & Plains ERC online courses are the place for occupational health and safety professionals to find courses and learning tools in industrial hygiene, safety, and more. Stop by our booth to learn about CIH Online, a new comprehensive industrial hygiene review course offered 100 percent online. Get prepared. Stay prepared.

The University of Findlay ..............1101
1000 N. Main St.
Findlay, OH 45840
(419) 444-6484
zeyen@findlay.edu
www.findlay.edu
ES&H training and academic degree programs, emergency response. Management and security service are also offered by a respected, nationally recognized university.

Thermo Scientific — Air Quality Instruments & Portable XRF Analyzers ..........................519
27 Forge Parkway
Franklin, MA 02038
(508) 520-0430
customerservice.aqi@thermofisher.com
www.thermoscientific.com
We provide a comprehensive line of gas detectors for monitoring the presence of combustible and toxic gases in the environment as well as for metal analysis.

Tiger-Vac Inc. (USA) .....................438
73 SW 12th Ave., Bldg. 1, Unit 7
Dania, FL 33004
(954) 925-3625
sales@tiger-vac.com
www.tiger-vac.com
Legally certified explosion proof vacuum cleaners for combustible and flammable powders offered in pneumatic and electrically operated. Hepa/Ultra filtration for hexavalent chromates, toxic, and nuisance dusts. Turn key vacuum systems with dustless sanders for point of generation dust control. Potent powder recovery with safe canister change out.

Total Safety (ICU), a Total Safety Company ..................................................533
11111 Wilcrest Green Drive, Ste. 300
Houston, TX 77042
(888) 448-5825
lmachalicek@totalsafety.com
www.totalsafety.com
Integrated safety services and products.

Travelers Laboratory ....................322
90 Lambert Road
Windsor, CT 06095
(800) 842-0355
tberkan@travelers.com
www.travelerslab.com
Comprehensive IH analytical services, which includes free pump loan program, free comprehensive analytical scan service, perm pump loan, free technical webinars, equipment rentals, and training.

NEW! Troy Acoustics Corp ..............1218
2580 Sidney Lanier Drive
Brunswick, GA 31525
(800) 987-3306
info@troyacoustics.com
www.troyacoustics.com
Troy Acoustics manufactures, designs, and installs OSHA compliant engineering noise control solutions; specializing in shooting ranges, equipment enclosures, manufacturing facilities, or any noisy environment.
## Universities and Education Programs

<table>
<thead>
<tr>
<th>University Name</th>
<th>Address</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California, School of Public Health, Berkeley, CA</td>
<td>50 University Hall, #7360 Berkeley, CA 94720 (510) 642-8365 <a href="mailto:gceppare@berkeley.edu">gceppare@berkeley.edu</a> <a href="http://www.sph.berkeley.edu">www.sph.berkeley.edu</a></td>
<td>Industrial hygiene graduate degree program offering MS, MPH, and PhD degrees. NIOSH traineeships available for eligible students at this University of California, Berkeley program.</td>
</tr>
<tr>
<td>University of Cincinnati Environmental and Occupational Hygiene</td>
<td>3223 Eden Ave., 330 Kettering Lab Cincinnati, OH 45267 (513) 558-2809 <a href="mailto:kermit.davis@uc.edu">kermit.davis@uc.edu</a> <a href="http://uc.edu/erc">http://uc.edu/erc</a></td>
<td>Education opportunities at the University of Cincinnati’s Education and Research Center.</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>1415 Washington Heights Ann Arbor, MI 48109 (734) 764-3018 <a href="mailto:umcohsse-info@umich.edu">umcohsse-info@umich.edu</a> <a href="http://www.sitemaker.umich.edu">www.sitemaker.umich.edu</a></td>
<td>Continuing and graduate education.</td>
</tr>
<tr>
<td>University of South Florida College of Public Health, Sunshine ERC</td>
<td>13201 Bruce B. Downs Blvd., MDC 56 Tampa, FL 33612 (813) 974-0989 <a href="mailto:hosman@health.usf.edu">hosman@health.usf.edu</a> <a href="http://health.usf.edu/publichealth/erc/index.htm">http://health.usf.edu/publichealth/erc/index.htm</a></td>
<td>Information regarding the Sunshine Education &amp; Research Center programs that include continuing education, as well as master’s and doctoral programs in public health/industrial hygiene at the University of South Florida College of Public Health.</td>
</tr>
<tr>
<td>University of Toledo Department of Public Health &amp; Preventive Medicine</td>
<td>3000 Arlington Ave., MS 1027 Toledo, OH 43614 (419) 383-5356 <a href="mailto:public.health@utoledo.edu">public.health@utoledo.edu</a> <a href="http://hsc.utoledo.edu/med/pubhealth">http://hsc.utoledo.edu/med/pubhealth</a></td>
<td>Master of Science in Occupational Health-Industrial Hygiene degree offered along with an MPH and five graduate certificates.</td>
</tr>
<tr>
<td>University of Washington — Environmental &amp; Occupational Health Sciences</td>
<td>4225 Roosevelt Way NE, #100 Seattle, WA 98105 (206) 616-7843 <a href="mailto:nwcohs@u.washington.edu">nwcohs@u.washington.edu</a> <a href="http://depts.washington.edu/envhlth/">http://depts.washington.edu/envhlth/</a></td>
<td>Graduate, undergraduate, and continuing education in occupational and environmental health and safety; industrial hygiene field research and consultation; Region X OSHA-authorized training.</td>
</tr>
<tr>
<td>University of Illinois/Great Lakes Centers for Occupational &amp; Environmental Safety &amp; Health</td>
<td>2121 W. Taylor St. Chicago, IL 60612 (312) 996-6904 <a href="mailto:syn@uic.edu">syn@uic.edu</a> <a href="http://www.uic.edu/sph/glakes">www.uic.edu/sph/glakes</a></td>
<td>The Great Lakes Center for Occupational and Environmental Safety and Health exists to improve, promote, and maintain the health of workers and communities.</td>
</tr>
<tr>
<td>University of Alabama at Birmingham — Deep South ERC</td>
<td>1530 Third Ave. S. Birmingham, AL 35294 (205) 934-7178 <a href="mailto:dsc@uab.edu">dsc@uab.edu</a> <a href="http://www.uab.edu/dsc">www.uab.edu/dsc</a></td>
<td>The University of Alabama at Birmingham and the Deep South Center for Occupational Health and Safety offer graduate programs and professional development programs in environmental and occupational health and safety.</td>
</tr>
</tbody>
</table>
Warwick Mills — TurtleSkin .......... 217
301 Turnpike Road
New Ipswich, NH 03071
(603) 291-1043
jbond@warwickmills.com
www.turtleskin.com
Protective gloves.

Westex .............................................. 1112
2845 W. 48th Place
Chicago, IL 60632
msears@westex.com
www.westex.com
Westex manufactures Ultra Soft® flame resistant fabrics that offer industry-leading balance of protection, comfort and value, and offer excellent protection from electric arc flash for NFPA 70E compliance and flash fire.

Wiley ................................................. 120
111 River St. 4-02
Hoboken, NJ 07030
(201) 748-8893
info@wiley.com
www.wiley.com
John Wiley & Sons publishes on behalf of more societies and membership associations than anybody else. Wiley offers over 1,250 online journals, thousands of books in print and online, reviews, reference works, databases, and other innovative resources. For more information, visit www.wiley.com, or our online resource, onlinelibrary.wiley.com.

WorkCare Inc. ................................. 433
300 S. Harbor Blvd., Ste. 600
Anaheim, CA 92805
(800) 455-6155
info@workcare.com
www.workcare.com
WorkCare provides consulting medical director services nationwide, specializing in medical surveillance, drug testing, on-site clinics, case management and incident intervention, travel medicine and absence management.

Working Concepts Inc. .................. 434
P.O. Box 1345
Gresham, OR 97080
(503) 663-3374
order@softknees.com
www.softknees.com
We design and manufacture ergonomic knee protection and standing mats. Our products are Soft Knees no strap knee pads, Ergokneel Kneeling Mats, and Extreme Standing Mats for standing without pain.

Zefon International Inc. .............. 629
5350 SW First Lane
Ocala, FL 34474
(800) 282-0073
zefonCS@zefon.com
www.zefon.com
Leading manufacturer and distributor of air and surface sampling equipment, devices, and media used to monitor indoor environmental, occupational health, and safety conditions. Industries include automotive, building inspection, construction, environmental, industrial hygiene, medical, occupational safety, remediation, and mining.

---

EXPO: Exhibitors by Alphabet

Visit Us:
Booth 119!
Aerosol Technology
Air Techniques International, 1040
BGI Inc., 1045
EMSL Analytical Inc., 522
Kanomax USA Inc., 1025
MAXAIR Systems, 538
Met One Instruments Inc., 333
Particle Measuring Systems, 912
RAECO Rents, 1222
Sensidyne, LP, 900
SKC, 503
Sundstrom Safety Inc., 447
Thermo Scientific - Air Quality Instruments & Portable XRF Analyzers, 519
TSI Inc., 700

Asbestos & Dust Abatement
Air Systems International, 708
Ashtead Technology, 1003
BGI Inc., 1045
Casella CEL Inc., 326
Clothes Cleaning Systems, 1118
Dynasil Products, 1215
ERSI, 804
Kontrol Kube by Fiberlock Technologies Inc., 908
Materials Analytical Services LLC, 118
Nilfisk Industrial Vacuums, 425
Pullman-Holt Corp., 220
SanAir Technologies Laboratory Inc., 336
Sensidyne, LP, 900
Sundstrom Safety Inc., 447
Tiger-Vac Inc. (USA), 438
Total Safety (ICU), a Total Safety Company, 533
WorkCare Inc., 433
Zefon International Inc., 629

Biosafety
CY Holding Company Ltd., 108
Flow Sciences Inc., 647
ILC Dover, 548
Labconco Corp., 527
MAXAIR Systems, 538
Mycometer Inc., 733
NuAire Inc., 440
Tiger-Vac Inc. (USA), 438
Total Safety (ICU), a Total Safety Company, 533

Communications/Telecommunications
E.A.R. Inc., 451
MSA, 500
NIOSH, 544
Phonak Communications, 115
RightAnswer.com, 1119
Scott Safety, 452

Computer Applications
3E Company, 711
Actio Corp., 715
Atlass Ergonomics, 745
Axion Health, 1012
ChemSW Inc., 1019
Dakota Software Corp., 913
Datachem Software Inc., 811
ESC Services Inc., 426
Expert Publishing/EBSCO, 1016
IndustrySafe - TRA Inc., 1115
KMI, 1011
Lisam Systems, 718
Medgate Inc., 717
MSA, 500
MSDSonline, 911
Open Range Software LLC, 1018
ProcessMap Corp., 934
Redshift Technologies Inc., 1007
Safetec, 912
Safety Management Systems Inc., 1213
SiteHawk, 429
Spiramid LLC, 1015
UL PureSafety, 431

Confined Space
AFC International Inc., 348
Air Systems International, 708
Ashtead Technology, 1003
Crowcon Detection Instruments, 226
CY Holding Company Ltd., 108
Draeger Safety Inc., 311
ENMET Corp., 633
ESC Services Inc., 426
Gas Clip Technologies Inc., 619
GIG Instrumentation Inc., 329
Honeywell Safety Products, 508
I.E. Monitoring Instruments, 1036
Industrial Scientific Corp., 304
Ion Science LLC, 122
Kitagawa America LLC, 331
MAA, 500
Portagas Inc., 748
RAE Systems, 308
RAECO Rents, 1222
RKI Instruments, 525
Scott Safety, 452
Sundstrom Safety Inc., 447
Thermo Scientific - Air Quality Instruments & Portable XRF Analyzers, 519
Total Safety (ICU), a Total Safety Company, 533

Education/Training
3M, 300
American Heart Association, 1005
Atlas Ergonomics, 745
Axion Health, 1012
Board of Certified Safety Professionals (BCSP), 620
Bowen EHS Inc., 1020
CCOH, 427
ChemWatch NA, 1013
Compliance Solutions, 547
Datachem Software Inc., 811
Emilcott, 1113
EMSL Analytical Inc., 522
ENMET Corp., 633
ESIS Inc. - Health, Safety & Environmental Services, 107
Euro Safety & Health, 945
GHS Safety, 949
Goldstar Associates Inc., 1033
Health Conservation Inc. (HCI), 231
Johns Hopkins Bloomberg School of Public Health, 1203
Marshall University/Safety Technology, 1208
Materion Brush Inc., 1116
MSDSonline, 911
Mycometer Inc., 733
National Library of Medicine, 1122
NIOSH, 544
NIOSH/ERC/CE, 1100

EHS Regulatory Compliance
3E Company, 711
Actio Corp., 715
Assay Technology Inc./AT Labs/MNR Services, 808
Axion Health, 1012
BEAC, 1211
Bureau Veritas North America Inc., 516
ChemSW Inc., 1019
ChemWatch NA, 1013
Golden Corp., 944
Dakota Software Corp., 913
E.A.R. Inc., 451
Emilcott, 1113
Euro Safety & Health, 945
Expert Publishing/EBSCO, 1016
Flow Sciences Inc., 647
Galson Laboratories, 704
Gasmet Technologies Inc., 540
GHS Safety, 949
Goldstar Associates Inc., 1033
Health and Safety - TRA Inc., 1115
KMI, 1011
Lisam Systems, 718
Medgate Inc., 717
MSA, 500
MSDSonline, 911
Open Range Software LLC, 1018
ProcessMap Corp., 934
Redshift Technologies Inc., 1007
Safetec, 912
Safety Management Systems Inc., 1213
SiteHawk, 429
Spiramid LLC, 1015
UL PureSafety, 431

Occupational Health Practice Survey Research - University of Arizona, 1127
QOH, 1008
Purdue University, 1200
RightAnswer.com, 1119
RJ Lee Group Inc., 1125
RMOCEH - University of Utah, 1105
T K Group, 749
The Mountain & Plains Education & Resource Center - CIH Online, 1109
The University of Findlay, 1101
Total Safety (ICU), a Total Safety Company, 533
Travelers Laboratory, 322
UL PureSafety, 431
University of Illinois/Great Lakes Centers for Occupational & Environmental Safety & Health, 1205
University of California, School of Public Health, Berkeley, CA, 1204
University of Cincinnati Environmental and Occupational Hygiene, 1107
University of Michigan, 1103
University of South Florida College of Public Health, Sunshine ERC, 1207
University of Toledo Department of Public Health & Preventive Medicine, 1201
University of Washington - Environmental & Occupational Health Sciences, 1209
WorkCare Inc., 433

Associations
ACGIH®, 938
American Industrial Hygiene Association (AIHA), 922
American Society of Safety Engineers, 219
Hays Affinity, 1126
National Hearing Conservation Association (NHCA), 133
National Registry of Certified Chemists, 1037

Biological Monitoring
A.P. Buck Inc., 635
AFC International Inc., 348
Assured Bio Labs LLC, 735
Decagon Devices Inc., 442
EMLab P&K LLC, 1030
EMSL Analytical Inc., 522
Environmental Safety Technologies, 935
GIG Instrumentation Inc., 329
Indoor Biotechnologies Inc., 1216
Materials Analytical Services LLC, 118
MAXAIR Systems, 538
Mycometer Inc., 733
Radix BioSolutions, 834
SanAir Technologies Laboratory Inc., 336
Total Safety (ICU), a Total Safety Company, 533
Zefon International Inc., 629

EHS Regulatory Compliance
3E Company, 711
Actio Corp., 715
Assay Technology Inc./AT Labs/MNR Services, 808
Axion Health, 1012
BEAC, 1211
Bureau Veritas North America Inc., 516
ChemSW Inc., 1019
ChemWatch NA, 1013
Golden Corp., 944
Dakota Software Corp., 913
E.A.R. Inc., 451
Emilcott, 1113
Euro Safety & Health, 945
Expert Publishing/EBSCO, 1016
Flow Sciences Inc., 647
Galson Laboratories, 704
Gasmet Technologies Inc., 540
GHS Safety, 949
Goldstar Associates Inc., 1033
Health and Safety - TRA Inc., 1115
KMI, 1011
Lisam Systems, 718
Medgate Inc., 717
MSA, 500
MSDSonline, 911
Open Range Software LLC, 1018
ProcessMap Corp., 934
Redshift Technologies Inc., 1007
Safetec, 912
Safety Management Systems Inc., 1213
SiteHawk, 429
Spiramid LLC, 1015
UL PureSafety, 431

Education/Training
3M, 300
American Heart Association, 1005
Atlas Ergonomics, 745
Axion Health, 1012
Board of Certified Safety Professionals (BCSP), 620
Bowen EHS Inc., 1020
CCOH, 427
ChemWatch NA, 1013
Compliance Solutions, 547
Datachem Software Inc., 811
Emilcott, 1113
EMSL Analytical Inc., 522
ENMET Corp., 633
ESIS Inc. - Health, Safety & Environmental Services, 107
Euro Safety & Health, 945
GHS Safety, 949
Goldstar Associates Inc., 1033
Health Conservation Inc. (HCI), 231
Johns Hopkins Bloomberg School of Public Health, 1203
Marshall University/Safety Technology, 1208
Materion Brush Inc., 1116
MSDSonline, 911
Mycometer Inc., 733
National Library of Medicine, 1122
NIOSH, 544
NIOSH/ERC/CE, 1100

EXPO: Exhibitors by Product and Services

www.AIHce2012.org
Emergency Response Planning
3E Company, 711
3M, 300
Assay Technology Inc./AT Labs/MNR Services, 808
Axion Health, 1012
Bureau Veritas North America Inc., 516
CCOHS, 427
Center for Toxicology and Environmental Health LLC, 1041
ChemWatch NA, 1013
Draeger Safety Inc., 311
Emilcott, 1113
ENMET Corp., 633
First Line Technology LLC, 224
Galson Laboratories, 704
Golder Associates Inc., 1033
Grainger, 1219
MAXAIR Systems, 538
Philips Healthcare, 649
Redshift Technologies Inc., 1007
Safetec, 812
Sundstrom Safety Inc., 447
Total Safety (ICU), a Total Safety Company, 533

Environmental Consulting
3E Company, 711
Aerobiology Laboratory Associates Inc., 536
Assured Bio Labs LLC, 735
BGI Inc., 1045
Bureau Veritas North America Inc., 516
Center for Toxicology and Environmental Health LLC, 1041
Colden Corp., 944
Dade Moeller, 1023
Dakota Software Corp., 913
Environmental Safety Technologies, 935
ESC Services Inc., 426
Euro Safety & Health, 945
Golder Associates Inc., 1033
ILC Dover, 548
Materials Analytical Services LLC, 118
Prism Analytical Technologies Inc., 903
RJ Lee Group Inc., 1125
Safetec, 812
SanAir Technologies Laboratory Inc., 336
Total Safety (ICU), a Total Safety Company, 533

Environmental Products/Services
3E Company, 711
Actio Corp., 715
Aerobiology Laboratory Associates Inc., 536
ALS Environmental, 833
Analytics Corp., 1000
Argus-Hazco, 109
Ashhead Technology, 1003
Assured Bio Labs LLC, 735
Axion Health, 1012
BEAC, 1211
BGI Inc., 1045
Bios International Corp., 805
Casella CEL Inc., 326
CCOHS, 427
Centers for Disease Control & Prevention: NCEH/ATSDR, 1130
ChemWatch NA, 1013
Cirrus Research plc, 1044
Clothes Cleaning Systems, 1118
Compliance Solutions, 547
Dakota Software Corp., 913
Decagon Devices Inc., 442
Dynasil Products, 1215
Emilcott, 1113
EMLab P&K LLC, 1030
EMSL Analytical Inc., 522
Entech Instruments Inc., 537
Environmental Safety Technologies, 935
ERLAB Inc., 236
Eurofins Air Toxics Inc., 947
Expert Publishing/EBSCO, 1016
Gasmet Technologies Inc., 540
GASTEC Corp., 936
GF Instrumentation Inc., 329
GrayWolf Sensing Solutions, 436
Ion Science LLC, 122
Kestrel Pocket Weather Meters by NK, 353
Kinetics Noise Control, 448
Kitagawa America LLC, 331
KMI, 1011
Lisam Systems, 718
Masimo, 229
Medgate Inc., 717
Met One Instruments Inc., 333
MSDSonline, 911
Mycometer Inc., 733
NARDA Safety Test Solutions, 111
National Library of Medicine, 1122
Nextteq LLC, 611
NuAire Inc., 440
Olympus Innov-X, 117
Portagas Inc., 748
Prism Analytical Technologies Inc., 903
ProcessMap Corp., 934
Quanta Systems, 908
Quest Technologies, a 3M company, 300
RAE Systems, 308
RAECO Rents, 1222
Redshift Technologies Inc., 1007
Restek Corp., 1212
RJ Lee Group Inc., 1125
S.E. International Inc., 1027
Safetec, 812
Safety Management Systems Inc., 1213
SanAir Technologies Laboratory Inc., 336
Scientific Analytical Institute Inc., 907
Sensidyne, LP, 900
SiteHawk, 429
Supelco/Sigma-Aldrich, 334
TestAmerica Laboratories Inc., 1029
Thermo Scientific - Air Quality Instruments & Portable XRF Analyzers, 519
Tiger-Vac Inc. (USA), 438
Troy Acoustics Corp., 1218
TRS-Environmental, 618

Ergonomics
Alimed Inc., 551
Atlas Ergonomics, 745
Bureau Veritas North America Inc., 516
CCOHS, 427
Concept Seating Inc., 1123
Contour Design Inc., 1129
ergoCentric Seating Systems, 634
ErgoGenesis, 751
ESIS Inc. - Health, Safety & Environmental Services, 107
Euro Safety & Health, 945
Flow Sciences Inc., 647
Labconco Corp., 527
Medgate Inc., 717
NuAire Inc., 440
Protective Industrial Products Inc., 341
Shoes for Crews, 134
Total Safety (ICU), a Total Safety Company, 533
Vestil Manufacturing, 1111
WorkCare Inc., 433
Working Concepts Inc., 434

First Aid
American Heart Association, 1005
Cederroth AB, 351
Honeywell Safety Products, 508

Flowmeter
A.P. Buck Inc., 635
Ashhead Technology, 1003
BGI Inc., 1045
Bios International Corp., 805
Kanomax USA Inc., 1025
Kestrel Pocket Weather Meters by NK, 353
Restek Corp., 1212
RKI Instruments, 525
TSI Inc., 700

Gas Detection
3M, 300
A.P. Buck Inc., 635
AFC International Inc., 348
Argus-Hazco, 109
Arizona Instrument LLC, 542
Ashtead Technology, 1003
Assay Technology Inc./AT Labs/MNR Services, 808
Baseline-MOCON, 1223
BW Technologies by Honeywell/Honeywell Analytics, 511
Critical Environmental Technologies Canada Inc., 531
Crowcon Detection Instruments, 226
Draeger Safety Inc., 311
EXPO: Exhibitors by Product and Services

ENMET Corp., 633
Eurofins Air Toxics Inc., 947
Gas Clip Technologies Inc., 619
Gasmet Technologies Inc., 540
GASTEC Corp., 936
GFS Instrumentation Inc., 329
GrayWolf Sensing Solutions, 436
I.E. Monitoring Instruments, 1036

Industrial Hygiene News/Rimbach Publishing Inc., 319
Zefon International Inc., 629
VICI Metronics Inc., 636
TSI Inc., 700
Total Safety (ICU), a Total Safety Company, 533
ERSI, 804

Indoor Air Quality
A.P. Buck Inc., 635
Aerobiology Laboratory Associates Inc., 536
AFC International Inc., 348
Aircuity Inc., 1113
ALS Environmental, 833
Argus-Hazo, 109
Arizona Instrument LLC, 542
Ashtead Technology, 1003
Assay Technology Inc./AT Labs/MNR Services, 808
Assured Bio Labs LLC, 735
Baseline-MOCON, 1223
BGI Inc., 1045
Bios International Corp., 805
Bureau Veritas North America Inc., 516
CCOHs, 427
Center for Toxicology and Environmental Health LLC, 1041
Colden Corp., 944
Critical Environmental Technologies Canada Inc., 531
Draeger Safety Inc., 311
Emilcott, 1113
EMLab P&K LLC, 1030
EMSL Analytical Inc., 522
ENMET Corp., 633
Entech Instruments Inc., 537
Environmental Safety Technologies, 935
ESIS Inc. - Health, Safety & Environmental Services, 107
Euro Safety & Health, 945
Eurofins Air Toxics Inc., 947
Galson Laboratories, 704
Gasmet Technologies Inc., 540
GASTEC Corp., 936
GFS Instrumentation Inc., 329
Golder Associates Inc., 1033
Goodway Technologies Corp., 529
Goodway Technologies Corp., 529
Grainger, 1219
Health Conservation Inc. (HCI), 231
Honeywell Safety Products, 508
Johns Hopkins Bloomberg School of Public Health, 1203
Kanomax USA Inc., 1025
Kinetics Noise Control, 448
Larson Davis, 223
Moldex-Metric Inc., 644
MSA, 500
National Hearing Conservation Association (NHCA), 133
NHCA, 133
OHD, 1008
Phonak Communications, 115
Quest Technologies, a 3M company, 300
RAECO Rents, 1222
Spiralmd LLC, 1015
T K Group, 749
WorkCare Inc., 433

Heat Stress
AFC International Inc., 348
Argus-Hazo, 109
Ashtead Technology, 1003
Bureau Veritas North America Inc., 516
Casella CEL Inc., 326
CorTemp - HQ Inc., 222
First Line Technology LLC, 224
I.E. Monitoring Instruments, 1036
Industrial Hygiene News/Rimbach Publishing Inc., 319
Kanomax USA Inc., 1025
Kestrel Pocket Weather Meters by NK, 353
NIOSH, 544
Protective Industrial Products Inc., 341
Quest Technologies, a 3M company, 300
RAECO Rents, 1222
WorkCare Inc., 433

Hearing Conservation
3M, 300
Bruel & Kjaer, 744
Casella CEL Inc., 326
Cirrus Research plc, 1044
Colenr Colden, 944
E.A.R. Inc., 451
Examinetics Inc., 126
Grainger, 1219
Health Conservation Inc. (HCI), 231
Honeywell Safety Products, 508
Johns Hopkins Bloomberg School of Public Health, 1203
Kanomax USA Inc., 1025
Kinetics Noise Control, 448
Larson Davis, 223
Moldex-Metric Inc., 644
MSA, 500
National Hearing Conservation Association (NHCA), 133
OHD, 1008
Phonak Communications, 115
Quest Technologies, a 3M company, 300
RAECO Rents, 1222
Spiralmd LLC, 1015
T K Group, 749
WorkCare Inc., 433

Indoor Hygiene Consulting
Axion Health, 1012
Bureau Veritas North America Inc., 516
Center for Toxicology and Environmental Health LLC, 1041
ChemSW Inc., 1019
Colden Corp., 944
Contour Design Inc., 1129
Critical Environmental Technologies Canada Inc., 531
Dade Moeller, 1023
Emilcott, 1113
Environmental Safety Technologies, 935
ESIS Inc. - Health, Safety & Environmental Services, 107
Euro Safety & Health, 945
Eurofins Air Toxics Inc., 947
Galson Laboratories, 704
Gasmet Technologies Inc., 540
GASTEC Corp., 936
GFS Instrumentation Inc., 329
Golder Associates Inc., 1033
Goodway Technologies Corp., 529
Grainger, 1219
Health Conservation Inc. (HCI), 231
I.E. Monitoring Instruments, 1036
Indoor Biotechnologies Inc., 1216
Industrial Hygiene News/Rimbach Publishing Inc., 319
Industrial Scientific Corp., 304
Ion Science LLC, 122
Johns Hopkins Bloomberg School of Public Health, 1203
Kanomax USA Inc., 1025
Kitagawa America LLC, 331
Kontrol Kube by Fiberlock Technologies Inc., 908
Materials Analytical Services LLC, 118
Met One Instruments Inc., 333
Morphex Technologies, 905
Mycometer Inc., 733
Nexteq LLC, 611
Nifflak Industrial Vacuums, 425
NuAire Inc., 440
PathCon Laboratories, 1022
Photovac, an INFICON Brand, 803
Prism Analytical Technologies Inc., 903
Quest Technologies, a 3M company, 300
RAE Systems, 308
RAECO Rents, 1222
Restek Corp., 1212
SanAir Technologies Laboratory Inc., 336
Scientific Analytical Institute Inc., 907
Sensidyne, LP, 900
SKC, 503
Supelco/Sigma-Aldrich, 334
TestAmerica Laboratories Inc., 1029
Thermo Scientific - Air Quality Instruments & Portable XRF Analyzers, 519
Travelers Laboratory, 322
TRS-Environmental, 618
TSI Inc., 700
VeriBox Inc., 836
Zefon International Inc., 629

Government Agencies
Centers for Disease Control & Prevention: NCEH/ATSDR, 1130
ILC Dover, 548
National Library of Medicine, 1122
NIOSH, 544
Occupational Health Practice Survey Research - University of Arizona, 1127
Occupational Safety & Health Administration (OSHA), 648
Safety Management Systems Inc., 1213

Hazardous Waste
3E Company, 711
Actio Corp., 715
Arizona Instrument LLC, 542
Ashtead Technology, 1003
Center for Toxicology and Environmental Health LLC, 1041
ChemSW Inc., 1019
Emilcott, 1113
ERSI, 804
Golder Associates Inc., 1033
### Laboratory Health & Safety Products

<table>
<thead>
<tr>
<th>Company</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td>AirClean Systems, 1133</td>
<td></td>
</tr>
<tr>
<td>ChemSW Inc., 1019</td>
<td></td>
</tr>
<tr>
<td>CPLab Safety, 714</td>
<td></td>
</tr>
<tr>
<td>Critical Environment Technologies Canada Inc., 531</td>
<td></td>
</tr>
<tr>
<td>CY Holding Company Ltd., 108</td>
<td></td>
</tr>
<tr>
<td>EMSL Analytical Inc., 522</td>
<td></td>
</tr>
<tr>
<td>ERLAB Inc., 236</td>
<td></td>
</tr>
<tr>
<td>Flow Sciences Inc., 647</td>
<td></td>
</tr>
<tr>
<td>Gasmet Technologies Inc., 540</td>
<td></td>
</tr>
<tr>
<td>GASTEC Corp., 936</td>
<td></td>
</tr>
<tr>
<td>GIG Instrumentation Inc., 329</td>
<td></td>
</tr>
<tr>
<td>Honeywell Safety Products, 508</td>
<td></td>
</tr>
<tr>
<td>ILC Dover, 548</td>
<td></td>
</tr>
<tr>
<td>Kitagawa America LLC, 331</td>
<td></td>
</tr>
<tr>
<td>Labconco Corp., 527</td>
<td></td>
</tr>
<tr>
<td>MAXAIR Systems, 538</td>
<td></td>
</tr>
<tr>
<td>Met One Instruments Inc., 333</td>
<td></td>
</tr>
<tr>
<td>MSA, 500</td>
<td></td>
</tr>
<tr>
<td>MSDSonline, 911</td>
<td></td>
</tr>
<tr>
<td>Nexteq LLC, 611</td>
<td></td>
</tr>
<tr>
<td>NuAire Inc., 440</td>
<td></td>
</tr>
<tr>
<td>S.E. International Inc., 1027</td>
<td></td>
</tr>
<tr>
<td>Sensidyne, LP, 900</td>
<td></td>
</tr>
<tr>
<td>SiteHawk, 429</td>
<td></td>
</tr>
<tr>
<td>Supelco/Sigma-Aldrich, 334</td>
<td></td>
</tr>
<tr>
<td>Travelers Laboratory, 322</td>
<td></td>
</tr>
<tr>
<td>TSI Inc., 700</td>
<td></td>
</tr>
<tr>
<td>Warwick Mills - TurtleSkin, 217</td>
<td></td>
</tr>
<tr>
<td>Zefon International Inc., 629</td>
<td></td>
</tr>
</tbody>
</table>

### Laboratory Services/Consulting

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerobiology Laboratory Associates Inc., 536</td>
<td></td>
</tr>
<tr>
<td>ALS Environmental, 833</td>
<td></td>
</tr>
<tr>
<td>Analytics Corp., 1000</td>
<td></td>
</tr>
<tr>
<td>Arizona Instrument LLC, 542</td>
<td></td>
</tr>
<tr>
<td>Assay Technology Inc./AT Labs/MNR Services, 808</td>
<td></td>
</tr>
<tr>
<td>Assured Bio Labs LLC, 735</td>
<td></td>
</tr>
<tr>
<td>Bureau Veritas North America Inc., 516</td>
<td></td>
</tr>
<tr>
<td>EMLab P&amp;K LLC, 1030</td>
<td></td>
</tr>
<tr>
<td>EMSL Analytical Inc., 522</td>
<td></td>
</tr>
<tr>
<td>Environmental Safety Technologies, 935</td>
<td></td>
</tr>
<tr>
<td>ESIS Inc. - Health, Safety &amp; Environmental Services, 107</td>
<td></td>
</tr>
<tr>
<td>Eurofins Air Toxics Inc., 947</td>
<td></td>
</tr>
<tr>
<td>Fauske &amp; Associates LLC, 119</td>
<td></td>
</tr>
<tr>
<td>Galson Laboratories, 704</td>
<td></td>
</tr>
<tr>
<td>ILC Dover, 548</td>
<td></td>
</tr>
</tbody>
</table>

**Indoor Biotechnologies Inc., 1216**

**Mycometer Inc., 733**

**PathCon Laboratories, 1022**

**Prism Analytical Technologies Inc., 903**

**QuanTEM Laboratories LLC, 1038**

**RJ Lee Group Inc., 1125**

**SanAir Technologies Laboratory Inc., 336**

**Schneider Laboratories Global Inc., 449**

**Scientific Analytical Institute Inc., 907**

**TestAmerica Laboratories Inc., 1029**

**Veritox Inc., 836**

### Lead Abatement

<table>
<thead>
<tr>
<th>Company</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M, 300</td>
<td></td>
</tr>
<tr>
<td>Air Systems International, 708</td>
<td></td>
</tr>
<tr>
<td>Clothes Cleaning Systems, 1118</td>
<td></td>
</tr>
<tr>
<td>Dynasol Products, 1215</td>
<td></td>
</tr>
<tr>
<td>ERSI, 804</td>
<td></td>
</tr>
<tr>
<td>I.E. Monitoring Instruments, 1036</td>
<td></td>
</tr>
<tr>
<td>Kontrol Kube by Fiberlock Technologies Inc., 908</td>
<td></td>
</tr>
<tr>
<td>Materials Analytical Services LLC, 118</td>
<td></td>
</tr>
<tr>
<td>Nilfisk Industrial Vacuums, 425</td>
<td></td>
</tr>
<tr>
<td>Olympus Innov-X, 117</td>
<td></td>
</tr>
<tr>
<td>Pullman-Holt Corp., 220</td>
<td></td>
</tr>
<tr>
<td>SanAir Technologies Laboratory Inc., 336</td>
<td></td>
</tr>
<tr>
<td>Sensidyne, LP, 900</td>
<td></td>
</tr>
<tr>
<td>Sundstrom Safety Inc., 447</td>
<td></td>
</tr>
<tr>
<td>Thermo Scientific - Air Quality Instruments &amp; Portable XRF Analyzers, 519</td>
<td></td>
</tr>
<tr>
<td>Tiger-Vac Inc. (USA), 438</td>
<td></td>
</tr>
<tr>
<td>WorkCare Inc., 433</td>
<td></td>
</tr>
</tbody>
</table>

### Legal Services

<table>
<thead>
<tr>
<th>Company</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assured Bio Labs LLC, 735</td>
<td></td>
</tr>
<tr>
<td>Center for Toxicology and Environmental Health LLC, 1041</td>
<td></td>
</tr>
<tr>
<td>Colden Corp., 944</td>
<td></td>
</tr>
<tr>
<td>Scientific Analytical Institute Inc., 907</td>
<td></td>
</tr>
<tr>
<td>Veritox Inc., 836</td>
<td></td>
</tr>
</tbody>
</table>

### Management Consulting

<table>
<thead>
<tr>
<th>Company</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEAC, 1211</td>
<td></td>
</tr>
<tr>
<td>Colden Corp., 944</td>
<td></td>
</tr>
<tr>
<td>ESIS Inc. - Health, Safety &amp; Environmental Services, 107</td>
<td></td>
</tr>
<tr>
<td>Golder Associates Inc., 1033</td>
<td></td>
</tr>
<tr>
<td>Johns Hopkins Bloomberg School of Public Health, 1203</td>
<td></td>
</tr>
<tr>
<td>Occupational Health Practice Survey Research - University of Arizona, 1127</td>
<td></td>
</tr>
<tr>
<td>RJ Lee Group Inc., 1125</td>
<td></td>
</tr>
</tbody>
</table>

### Mobile Health Testing

- Center for Toxicology and Environmental Health LLC, 1041
- Examinetics Inc., 126
- Health Conservation Inc. (HCl), 231

### Mold Detection/Remediation

- Assured Bio Labs LLC, 735
- Decagon Devices Inc., 442
- EMSL Analytical Inc., 522
- Environmental Safety Technologies, 935
- ESIS Inc. - Health, Safety & Environmental Services, 107
- Eurofins Air Toxics Inc., 947
- Goodway Technologies Corp., 529
- Indoor Biotechnologies Inc., 1216
- Industrial Hygiene News/Rimbach Publishing Inc., 319
- Kontrol Kube by Fiberlock Technologies Inc., 908
- Materials Analytical Services LLC, 118
- Mycometer Inc., 733
- Nilfisk Industrial Vacuums, 425
- SanAir Technologies Laboratory Inc., 336
- Sundstrom Safety Inc., 447

### MSDS

- 3E Company, 711
- Actio Corp., 715
- CCOHS, 427
- ChemSW Inc., 1019
- ChemWatch NA, 1013
- Euro Safety & Health, 945
- Expert Publishing/EBSCO, 1016
- Lissam Systems, 718
- MSDSonline, 911
- MSDSpro LLC, 720
- ProcessMap Corp., 934
- Redshift Technologies Inc., 1007
- Safetec, 812
- Safety Management Systems Inc., 1213
- SiteHawk, 429

### Noise Control

- Bruel & Kjaer, 744
- Sensidyne, LP, 900
- Troy Acoustics Corp., 1218

### Occupational Health Consulting

- Atlas Ergonomics, 745
- Axion Health, 1012
- Bureau Veritas North America Inc., 516
- Center for Toxicology and Environmental Health LLC, 1041
- Colden Corp., 944
- Contour Design Inc., 1129
- Critical Environment Technologies Canada Inc., 531
- Emilitcott, 1113
- ESC Services Inc., 426
- ESIS Inc. - Health, Safety & Environmental Services, 107
- Euro Safety & Health, 945
- Golder Associates Inc., 1033
- Johns Hopkins Bloomberg School of Public Health, 1203
- Materion Brush Inc., 1116
- Occupational Health Practice Survey Research - University of Arizona, 1127
- RJ Lee Group Inc., 1125
- Spiramid LLC, 1015
- T K Group, 749
- Veritox Inc., 836
- WorkCare Inc., 433

### Product Health & Safety

- 3E Company, 711
- 3M, 300
- Actio Corp., 715
- AirClean Systems, 1133
- Axion Health, 1012
- CCOHS, 427
- Cederoth AB, 351
- ChemSW Inc., 1019
- Contour Design Inc., 1129
- CPLab Safety, 714
- Critical Environment Technologies Canada Inc., 531
- E.A.R. Inc., 451
- E.D. Bullard, 314
- EMSL Analytical Inc., 522
- ENMET Corp., 633
- ESC Services Inc., 426
- Expert Publishing/EBSCO, 1016
- GASTEC Corp., 936
- GIG Instrumentation Inc., 329
Protective Clothing
3M, 300
Argus-Hazo, 109
CY Holding Company Ltd., 108
Draeger Safety Inc., 311
DuPont Protection Technologies, 317
E.D. Bullard, 314
First Line Technology LLC, 224
Grainger, 1219
Honeywell Safety Products, 508
ILC Dover, 548
Industrial Hygiene News/Rimbach Publishing Inc., 319
MSA, 500
NIOSH, 544
Protective Industrial Products Inc., 341
Supelco/Sigma-Aldrich, 334
Warwick Mills - TurtleSkin, 217
Westex, 1112
Zefon International Inc., 629

Protective Eyewear
3M, 300
CPLab Safety, 714
Edge Eyewear, 344
Grainger, 1219
Honeywell Safety Products, 508
I.E. Monitoring Instruments, 1036
Industrial Hygiene News/Rimbach Publishing Inc., 319
Interactive Safety Products Inc., 341
PUREFL0, 338
Supelco/Sigma-Aldrich, 334
TRS-Environmental, 618

Protective Gloves
Alimed Inc., 551
CPLab Safety, 714
CY Holding Company Ltd., 108
DuPont Protection Technologies, 317
Grainger, 1219
Honeywell Safety Products, 508
Protective Industrial Products Inc., 341
Showa Best Glove, 719
Supelco/Sigma-Aldrich, 334
TRS-Environmental, 618
Warwick Mills - TurtleSkin, 217

Respiratory Protection
3M, 300
AFC International Inc., 348
Air Systems International, 708
Air Techniques International, 1040
Argus-Hazo, 109
CY Holding Company Ltd., 108
Draeger Safety Inc., 311
E.D. Bullard, 314
ENMET Corp., 633
ESIS Inc. - Health, Safety & Environmental Services, 107
Examinetics Inc., 126
GIG Instrumentation Inc., 329
Health Conservation Inc. (HCI), 231
Honeywell Safety Products, 508
ILC Dover, 548
Industrial Hygiene News/Rimbach Publishing Inc., 319
MAXAIR Systems, 538
Moldex-Metric Inc., 644
MSA, 500
Nexteq LLC, 611
NIOSH, 544
OHD, 1008
Protective Industrial Products Inc., 341
Scott Safety, 452
Sundstrom Safety Inc., 447
TSI Inc., 700
WorkCare Inc., 433
Zefon International Inc., 629

Risk and Exposure Assessment
Actio Corp., 715
Ashtead Technology, 1003
Atlas Ergonomics, 745
Axion Health, 1012
Bureau Veritas North America Inc., 516
Casella CEL Inc., 326
ChemSW Inc., 1019
Cirrus Research plc, 1044
CorTemp - HQ Inc., 222
CPLab Safety, 714
CY Holding Company Ltd., 108
DuPont Protection Technologies, 317
E.A.R. Inc., 451
E.D. Bullard, 314
Edge Eyewear, 344
ENMET Corp., 633
ERLAB Inc., 236
ESC Services Inc., 426
Expert Publishing/EBSCO, 1016
Fabenco Inc., 347
Fauske & Associates LLC, 119
Flow Sciences Inc., 647
GASTEC Corp., 936
GIG Instrumentation Inc., 329
GHS Safety, 949
Grainger, 1219
Honeywell Safety Products, 508
I.E. Monitoring Instruments, 1036
ILC Dover, 548
Industrial Scientific Corp., 304
Interactive Safety Products Inc., 338
JLG Industries Inc., 736
KeepSafe Inc., 553
Kinetics Noise Control, 448
Labconco Corp., 527
Lisam Systems, 718
MAXAIR Systems, 538
Medgate Inc., 717
Morphix Technologies, 905
MSA, 500
MSDSOnline, 911
NIOSH, 544
NTIS, 700
OHD, 1008
Particle Measuring Systems, 912
Mitigate Risk
Ensure Compliance
Protect Workers

Unbound Engineered Nanoparticles
When working with unbound nanoparticles (UNP), RJ Lee Group can help alleviate concern about potential sources of exposure to workers and the environment. Our experts will conduct a customized study to assess the potential release of UNP and then determine appropriate control measures. Learn more at www.nano.rjlg.com

Attend Our Podium Session
or Visit Us at Booth #1125

Nanotechnology: Assessment and Control Podium Session
“Multiple Magnification Analysis for Unbound Engineered Nanoparticles Using High-Resolution Electron Microscopy (HR-EM)”
June 18, 2:30 - 3:00 PM
Expo Hours

- **MONDAY, JUNE 18**
  9:00 a.m.–5:30 p.m.

- **TUESDAY, JUNE 19**
  9:00 a.m.–3:00 p.m.

- **WEDNESDAY, JUNE 20**
  9:00 a.m.–1:30 p.m.

Legend

- Information
- Technical Tour Shuttles
- AIHce On Demand
- Message/Cyber Centers
- First Aid
- ATM
- Food Court
- CareerAdvantage 2012 ....................105
- Speaker Ready Room .......................108
- Blood Drive ................................110
- AIHA Volunteer Red Carpet Club ....111
- Press Room .................................112
CASE STUDIES
Monday, June 18

CS-102-01 Choosing the Appropriate Spore Trap Sampler: Do Efficiency Differences Matter? ........................................ PO 102 ... Indoor Environmental Quality — 1 ............................. 10:30 a.m.–10:50 a.m. 33
CS-102-02 An Examination of the EPA’s Environmental Relative Moldiness Index (ERMI) ........................................ PO 102 ... Indoor Environmental Quality — 1 ............................. 10:50 a.m.–11:10 a.m. 33
CS-102-03 What Levels of Culturable Fungi and Bacteria in Carpet Dust are Reasonable? ................................. PO 102 ... Indoor Environmental Quality — 1 ............................. 11:10 a.m.–11:30 a.m. 33
CS-102-04 Variables Affecting the Interpretation of Dust Sampling Data .......................................................... PO 102 ... Indoor Environmental Quality — 1 ............................. 11:30 a.m.–11:50 a.m. 33
CS-102-06 Bioaerosol and Related Environmental Factors at University Laboratories .................................. PO 102 ... Indoor Environmental Quality — 1 ............................. 12:10 p.m.–12:30 p.m. 33
CS-103-01 Implementation of High Hazard Operating Procedures for Highly Hazardous Substances in Chemical Laboratories .......................................................... PO 103 ... Laboratories, Analytical and Research ............... 10:30 a.m.–10:50 a.m. 33
CS-103-03 Development of Statewide Consensus Safety Guidelines for Nanomaterials Research in California PO 103 ... Laboratories, Analytical and Research .............................. 11:10 a.m.–11:30 a.m. 33
CS-103-05 Get Informed with QR Codes ................................. PO 103 ... Laboratories, Analytical and Research ........................ 11:50 a.m.–12:10 p.m. 34
CS-103-06 Simplifying Routine Inspections of Safety Showers and Eyewashes ........................................ PO 103 ... Laboratories, Analytical and Research ......................... 12:10 p.m.–12:30 p.m. 34
CS-104-01 Are the OSHA HAZCOM Reporting Thresholds Adequate? ................................................ PO 104 ... Exposure Assessment Standards and Challenges 2:00 p.m.–2:20 p.m. 37
CS-104-02 Identifying and Quantifying Secondary Chemical Exposures ........................................ PO 104 ... Exposure Assessment Standards and Challenges 2:20 p.m.–2:40 p.m. 37
CS-104-06 Is FDA Approval Relevant for Occupational Health at Food Production Facilities? ......................... PO 104 ... Exposure Assessment Standards and Challenges 3:40 p.m.–4:00 p.m. 37
CS-104-07 Field Evaluation of Passive Ozone Detector Badges for Use as Screening Tools During Ozone Treatment Processes ........................................ PO 104 ... Exposure Assessment Standards and Challenges 4:00 p.m.–4:20 p.m. 37
CS-105-01 EPA Approaches for Assessing and Controlling Workplace Releases and Exposures to Nanomaterials PO 105 ... Nanotechnology: Assessment and Control .......................... 2:00 p.m.–2:20 p.m. 37
CS-105-03 Multiple Magnification Analysis for Unbound Engineered Nanoparticles using High-Resolution Electron Microscopy (HR-EM) ................................ PO 105 ... Nanotechnology: Assessment and Control ................... 2:40 p.m.–3:00 p.m. 37
CS-105-05 Surface Wipe Sampling for Nanomaterials ........................................................................ PO 105 ... Nanotechnology: Assessment and Control ........................... 3:20 p.m.–3:40 p.m. 37
CS-106-01 GHS & Beyond: The Power of Positive Material Declaration . PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice ........................................................................... 2:00 p.m.–2:20 p.m. 38
CS-106-02 Downstream User Obligations Under REACH ............................................................ PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice 2:20 p.m.–2:40 p.m. 38
CS-106-03 High Lead Levels Detected in Children’s Toys, Jewelry and Hair Accessory Items Sold at Low-Priced Retailers PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice 2:40 p.m.–3:00 p.m. 38
CS-106-04 The Historical Understanding of the Sources, Risks and Regulation of Lead Exposure in New Jersey Prior to 1970 PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice 3:00 p.m.–3:20 p.m. 38
CS-106-05 The NIOSH Draft Criteria Document on Occupational Exposure to Diacetel and 2,3-Pentanedione — An Update PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice 3:20 p.m.–3:40 p.m. 38
CS-106-06 Development and Validation of an International Safe Work Practice ........................................ PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice 3:40 p.m.–4:00 p.m. 38
CS-106-07 Industrial Hygiene Behind Bars ...................................................................... PO 106 ... Socio-Legal and Regulatory Aspects of IH Practice 4:00 p.m.–4:20 p.m. 38

POSTERS
CS-401-01 Latino Worker Safety and Health on West-Wisconsin Dairy Farms ........................................ PS 401 ... Communication & Training ................................. 10:00 a.m.–Noon 72
CS-401-02 Control of Airborne and Skin-borne Methanol Exposures During Manual Optical Filter Cleaning — A Case Study ........................................ PS 401 ... Communication & Training ................................. 10:00 a.m.–Noon 72
CS-401-03 Shell’s Global Deployment of a Risk-based Health Management Program ................................ PS 401 ... Computer Applications ........................................ 10:00 a.m.–Noon 72
INDEX OF CASE STUDY & SCIENTIFIC RESEARCH ABSTRACTS

Tuesday, June 19

<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Abstract Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-108-02</td>
<td>Qualitative Exposure Assessment Methodology for Chemical Substances</td>
</tr>
<tr>
<td>CS-108-04</td>
<td>Beryllium Characterization of a Decommissioned Nuclear Facility</td>
</tr>
<tr>
<td>CS-108-06</td>
<td>Case Study: Controlling Exposure to Animal Allergens in R&amp;D</td>
</tr>
<tr>
<td>CS-109-03</td>
<td>Healthcare Compliance with ASHRAE Standard 188P: Prevention of Legionellosis Associated with Building Water Systems</td>
</tr>
<tr>
<td>CS-109-04</td>
<td>Nosocomial Mycosis Outbreak Control and Prevention</td>
</tr>
<tr>
<td>CS-109-05</td>
<td>Addressing Legionella and Waterborne Pathogens in Hospitals with a Water Risk Assessment Plan</td>
</tr>
<tr>
<td>CS-109-06</td>
<td>Evacuate or Investigate? Pre-planning Saves Disruption and Dollars</td>
</tr>
<tr>
<td>CS-110-01</td>
<td>Sit/Stand Workstation Guidelines to Avoid Health Consequences Associated with Prolonged Occupational Sitting or Standing</td>
</tr>
<tr>
<td>CS-110-04</td>
<td>A Case Study with the Revised AIHA Ergonomic Toolkit</td>
</tr>
<tr>
<td>CS-111-07</td>
<td>A Wireless Hand-held Sensor for Real-time Monitoring of Volatile Organic Compounds</td>
</tr>
<tr>
<td>CS-112-02</td>
<td>Managing Heat Stress Aligned with the Thermal Work Limit</td>
</tr>
<tr>
<td>CS-112-03</td>
<td>Reduction of Occupational Injuries in the German Industry Within a Two Stage Project: Results of an Epidemiological Follow-up Study and Application of a Tool for Prevention: The Prevention-Index (PI)</td>
</tr>
<tr>
<td>CS-112-09</td>
<td>Eliminating Musculoskeletal Injuries — An Early Capture Approach</td>
</tr>
<tr>
<td>CS-113-01</td>
<td>Cfd Driven Method For HVAC-Induced Cross-draft Optimization Aimed at Promoting Chemical Hood Containment Performance</td>
</tr>
</tbody>
</table>

www.AIHce2012.org
CS-113-04 An Evaluation of TVOC Measurements Using GC-MS and GC-FID Coupled With Thermal Desorption Methodology...... PO 113 ... Indoor Environmental Quality – II ..........................4:00 p.m.–4:20 p.m. 53
CS-113-05 Determination of Tobacco Smoke Using VOC Markers ............ PO 113 ... Indoor Environmental Quality – II ..........................4:20 p.m.–4:40 p.m. 53
CS-113-06 Ultrafine Particulates From Smoke Testing of Plumbing Stacks to Locate Sewer Gas Leaks in a High-Rise Building .. PO 113 ... Indoor Environmental Quality – II ..........................4:40 p.m.–5:00 p.m. 53
CS-113-07 Formaldehyde Exposure Assessment during the Application of Professional Hair Smoothing Products ................................ PO 113 ... Indoor Environmental Quality – II ..........................5:00 p.m.–5:20 p.m. 53
CS-114-02 Generating Meaningful Environmental Information in the Midst of an Emergency Response ................................ PO 114 ... Industrial Hygiene General Practice ..........................3:20 p.m.–3:40 p.m. 53
CS-114-03 A Case Study in Perimeter Monitoring — Emergency Style.... PO 114 ... Industrial Hygiene General Practice ..........................3:40 p.m.–4:00 p.m. 53
CS-114-04 Subway Chemical Detection: A Proposed System Process for a Detect-to-Warn Capability to Save Lives .................... PO 114 ... Industrial Hygiene General Practice ..........................4:00 p.m.–4:20 p.m. 53
CS-114-05 Evaluating Slips and Falls — A Tale of Two Restaurants ...... PO 114 ... Industrial Hygiene General Practice ..........................4:20 p.m.–4:40 p.m. 53
CS-114-06 Challenges Associated With Sampling for Nickel Carbonyl During Nickel Catalyst Changeouts .......................... PO 114 ... Industrial Hygiene General Practice ..........................4:40 p.m.–5:00 p.m. 53
CS-114-07 Lead Exposure Due to Use of Powder Actuated Tools ......... PO 114 ... Industrial Hygiene General Practice ..........................5:00 p.m.–5:20 p.m. 53
CS-114-08 Industrial Hygiene Exposure Factors at Offshore Oil and Gas Platforms ................................ PO 114 ... Industrial Hygiene General Practice ..........................5:20 p.m.–5:40 p.m. 53

POSTERS

CS-403-03 X-ray Exposure in the Orthopedic and Neurosurgical Operation Theatre .......................................................... PS 403 ... Ionizing Radiation ..........................................................10:00 a.m.–Noon 73
CS-403-07 Heavy Metal Contamination Analysis of Soils, Sediments and Fluids with Field Portable XRF .......................... PS 403 ... Sampling and Laboratory Analysis .........................................10:00 a.m.–Noon 73
CS-404-01 Creation of a Series of Home Healthcare Workers Fast Fact Cards .......................................................... PS 404 ... Health Care Sites/Industry ................................................10:00 a.m.–11:00 a.m. 73
CS-404-03 Reduction of Excessive Formaldehyde Levels in Residential Construction through Engineering Controls PS 404 ... Indoor Environmental Quality ................................................10:00 a.m.–11:00 a.m. 73
CS-404-05 Legionnaires’ Disease in Workers at an Automobile Shredding Facility .......................................................... PS 404 ... Industrial Hygiene General Practice ..........................10:00 a.m.–11:00 a.m. 73
CS-404-06 Carbon Dioxide Exposures at Meat Batching Operations PS 404 ... Industrial Hygiene General Practice ..........................10:00 a.m.–11:00 a.m. 73
CS-404-07 Hexavalent Chromium Exposure Control During Hard Facing .......................................................... PS 404 ... Industrial Hygiene General Practice .......................................10:00 a.m.–11:00 a.m. 73
CS-404-09 Selecting that New Industrial Hygiene and Safety Inspection Instrument .......................................................... PS 404 ... Industrial Hygiene General Practice .......................................10:00 a.m.–11:00 a.m. 73
CS-404-10 Hexavalent Chromium Surface Contamination from Stainless Steel Welding Activities ................................ PS 404 ... Industrial Hygiene General Practice .......................................10:00 a.m.–11:00 a.m. 73

Wednesday, June 20

<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Abstract Title</th>
<th>Session Number</th>
<th>Session</th>
<th>Presentation Time</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-116-01</td>
<td>Assessment of Antineoplastic Contamination in a Chemotherapy Suite of a Hospital</td>
<td>PO 116</td>
<td>Health Care Industries – II</td>
<td>10:00 a.m.–10:20 a.m.</td>
<td>57</td>
</tr>
<tr>
<td>CS-116-02</td>
<td>Thinking Outside the Nosecone: A Case Study Discussing a Novel Solution to Control Waste Anesthetic Gas Exposure in a Vivarium</td>
<td>PO 116</td>
<td>Health Care Industries – II</td>
<td>10:20 a.m.–10:40 a.m.</td>
<td>57</td>
</tr>
<tr>
<td>CS-116-03</td>
<td>The Importance of Good Chemical Management in Hospitals</td>
<td>PO 116</td>
<td>Health Care Industries – II</td>
<td>10:40 a.m.–11:00 a.m.</td>
<td>57</td>
</tr>
<tr>
<td>CS-116-05</td>
<td>Respiratory Protection Quality Improvement Project in a Healthcare Facility</td>
<td>PO 116</td>
<td>Health Care Industries – II</td>
<td>11:20 a.m.–11:40 a.m.</td>
<td>57</td>
</tr>
<tr>
<td>CS-116-06</td>
<td>Industrial Safety Science: The Value Stream of Industrial Hygiene In Healthcare</td>
<td>PO 116</td>
<td>Health Care Industries – II</td>
<td>11:40 a.m.–12:00 a.m.</td>
<td>57</td>
</tr>
<tr>
<td>CS-118-01</td>
<td>Chemical Safety in the Norwegian Oil &amp; Gas Industry – A Large Industry Project</td>
<td>PO 118</td>
<td>Safety</td>
<td>10:00 a.m.–10:20 a.m.</td>
<td>58</td>
</tr>
<tr>
<td>CS-118-02</td>
<td>Sampling in the Southwestern United States: A Successful Approach to Dealing with Site Specific Safety Issues</td>
<td>PO 118</td>
<td>Safety</td>
<td>10:20 a.m.–10:40 a.m.</td>
<td>58</td>
</tr>
</tbody>
</table>
SCIENTIFIC RESEARCH

Monday, June 18

<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Abstract Title</th>
<th>Session Number</th>
<th>Session</th>
<th>Presentation Time</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-101-01</td>
<td>Occupational Exposure Modeling Uncertainty Investigation with Monte Carlo Simulation</td>
<td>PO 101</td>
<td>- Part 1</td>
<td>10:30 a.m.-10:50 a.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-101-02</td>
<td>A Graphical Explanation of When to Use Frequentist, Maximum Likelihood, or Bayesian Analysis for Air Sampling Data</td>
<td>PO 101</td>
<td>- Part 1</td>
<td>10:50 a.m.-11:10 a.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-101-03</td>
<td>Reconstructing Exposures (1973–2010) to Elongated Mineral Particles (EMPs) on Minnesota’s Iron Range Based on Different Size-based Definitions</td>
<td>PO 101</td>
<td>- Part 1</td>
<td>11:10 a.m.-11:30 a.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-101-04</td>
<td>Using Computational Fluid Dynamics (CFD) to Assist in the Determination of Sample Placement with Respect to Topographic Features for Airborne Outdoor Dust Exposure Assessment</td>
<td>PO 101</td>
<td>- Part 1</td>
<td>11:30 a.m.-11:50 a.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-101-05</td>
<td>Characterization of Formaldehyde Exposure Resulting from the Use of Four Professional Hair Straightening Products</td>
<td>PO 101</td>
<td>- Part 1</td>
<td>11:50 a.m.-12:10 p.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-101-06</td>
<td>Confidence Limits for the Symmetric-Range Accuracy</td>
<td>PO 101</td>
<td>- Part 1</td>
<td>12:10 p.m.-12:30 p.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-102-05</td>
<td>Evaluation of Elevator Shafts as a Pathway for Fungal Spores and Particles to Enter a Hospital Housing Immuno-Compromised Patients</td>
<td>PO 102</td>
<td>- Indoor Environmental Quality – 1</td>
<td>11:50 a.m.-12:10 p.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-103-02</td>
<td>Detection of Micro-Holes and Tears in Disposable Nitrile Gloves</td>
<td>PO 103</td>
<td>Laboratories, Analytical and Research</td>
<td>10:50 a.m.-11:10 a.m.</td>
<td>33</td>
</tr>
<tr>
<td>SR-103-04</td>
<td>Permeation of Benzyl Alcohol through Disposable Nitrile Gloves</td>
<td>PO 103</td>
<td>Laboratories, Analytical and Research</td>
<td>11:30 a.m.-11:50 a.m.</td>
<td>34</td>
</tr>
<tr>
<td>SR-104-03</td>
<td>Comparison of Total, Inhaleable and Respirable Manganese Particle Size Fractions in Shipyard Welding Processes</td>
<td>PO 104</td>
<td>Exposure Assessment Standards and Challenges</td>
<td>2:40 p.m.-3:00 p.m.</td>
<td>37</td>
</tr>
<tr>
<td>SR-104-04</td>
<td>Developing Exposure Parameters for Uncommon Exposures</td>
<td>PO 104</td>
<td>Exposure Assessment Standards and Challenges</td>
<td>3:00 p.m.-3:20 p.m.</td>
<td>37</td>
</tr>
<tr>
<td>SR-104-05</td>
<td>An Exposure Assessment Strategy and JEM for a Semiconductor Industry</td>
<td>PO 104</td>
<td>Exposure Assessment Standards and Challenges</td>
<td>3:20 p.m.-3:40 p.m.</td>
<td>37</td>
</tr>
</tbody>
</table>
SR-104-08 Systematic Bias Associated with Using STEL and Ceiling Samples to Calculate TWAs
SR-105-02 Physical Characterization of Multi-Walled Carbon Nanotube Aerosol Particles
SR-105-04 Development of a Small, Battery-Operated Nanoparticle Sizer
SR-105-06 Evaluation of Nanoparticle Dispersion and Containment of a New Nanomaterial Fume Hood Using Computational Fluid Dynamics
SR-105-07 Occupational Exposure Assessment in Carbon Nanotube and Nanofiber Primary and Secondary Manufacturers: Mobile Direct Reading Sampling
SR-106-08 Are Occupational Psychosocial Stressors and Coping Mechanisms Predictive of Occupational Injuries and Illnesses?
SR-107-01 Computational Fluid Dynamics (CFD) Investigation of Particle Bounce on Human Aspiration Efficiency
SR-107-02 Particle Size Distributions of Welding Fume Measured in the Breathing-Zone and in an Emission Chamber
SR-107-03 Measurement of Carbon Nanotubes deposition in the Human Nasal Airway
SR-107-05 The Size Segregating Characteristics of Two Prototype Cyclones Used to Sample Diesel Particulate Matter and Coal Dust
SR-107-06 Evaluating the Inter-instrument Variability and Comparative Performance of the XMX/2L-MIL Biological Air Sampler versus the AGI-30 Air Sampler
SR-107-07 Use of Activity-Based Sampling (ABS), the Releasable Asbestos Field Sampler (RAFS), and the Fluidized Bed Asbestos Segregator (FBAS) for Soil Asbestos Risk Assessment
SR-107-08 Capture and Retention Efficiency of Aerosol Particles as a Function of Particle Size, Sampling Flow Rate, and Collection Media for the XMX/2L-MIL Biological Air Sampler
SR-107-09 Effects of Spray Surfactant and Particle Charge on Respirable Dust Control

POSTERS
SR-401-06 Occupational Health Surveillance Program for Swine Workers
SR-401-07 Quantitative Model Evaluation: Lessons Learned from Getting the Predictions Right
SR-401-11 Evaluation of a Risk Management Approach to Safety Program Improvement in the Mining Industry
SR-401-12 The HSWI: Health and Safety Workplace Index. A New Method for Managing the Residual Risk in Oil & Gas Plants
SR-402-01 Impact of Apparent Density and Moisture Absorption Rate on Airborne Emission of Nanopowders
SR-402-02 Penetration of Charged Particles through Metallic Tubes
SR-402-03 Characterization of a Vibrating Mesh Aerosol Generator
SR-402-04 Fine Particle Exposures during Vehicle Fire Suppression: Mobile Direct Reading Sampling
SR-402-05 The Environmental Fate of Polybrominated Diphenyl Ethers in Taiwan — The Application of Food Web Model
SR-402-09 Exposure to o-Toluidine, Aniline, and Nitrobenzene in a Rubber Chemicals Manufacturing Plant: A Retrospective Exposure Assessment Update

SR-402-09 Exposure to o-Toluidine, Aniline, and Nitrobenzene in a Rubber Chemicals Manufacturing Plant: A Retrospective Exposure Assessment Update
<table>
<thead>
<tr>
<th>Index of Case Study &amp; Scientific Research Abstracts</th>
</tr>
</thead>
</table>

### Tuesday, June 19

<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Abstract Title</th>
<th>Session Number</th>
<th>Session</th>
<th>Presentation Time</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-108-05</td>
<td>Variability Introduced into Allergen Immunoassays during the Dust Extraction Process</td>
<td>PO 108</td>
<td>Exposure Assessment Methodologies – Part 2</td>
<td>11:50 a.m.–12:10 p.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-109-01</td>
<td>Review of the Evidence for Airborne Transmission of Methicillin-Resistant Staphylococcus aureus (MRSA) and its Control</td>
<td>PO 109</td>
<td>Health Care Industries – I</td>
<td>10:30 a.m.–10:50 a.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-110-2</td>
<td>Indoor Environmental Scientific Research to Evaluate the Use of a Novel Air Sampling Cassette to Detect Mold Spores Via PCR Analysis</td>
<td>PO 109</td>
<td>Health Care Industries – I</td>
<td>10:50 a.m.–11:10 a.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-110-3</td>
<td>Whole Body Vibration Exposures among Professional Bus Drivers: A Comparison of Low Floor Bus Designs</td>
<td>PO 110</td>
<td>Ergonomics</td>
<td>10:50 a.m.–11:10 a.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-110-4</td>
<td>Ergonomic Evaluation of Manually Carried Stair Descent Devices used for the Evacuation of High Rise Buildings</td>
<td>PO 110</td>
<td>Ergonomics</td>
<td>11:10 a.m.–11:30 a.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-110-5</td>
<td>Shoulder Muscle Fatigue in Automotive Manufacturing</td>
<td>PO 110</td>
<td>Ergonomics</td>
<td>11:50 a.m.–12:10 p.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-110-6</td>
<td>Musculoskeletal Exposure During Automobile Assembly as a Function of Vehicle Rotation</td>
<td>PO 110</td>
<td>Ergonomics</td>
<td>12:10 p.m.–12:30 p.m.</td>
<td>45</td>
</tr>
<tr>
<td>SR-111-01</td>
<td>Microfabricated Gas Chromatographs with Microsensor Array Detectors for Determinations of Low-Level Complex Vapor Mixture Components</td>
<td>PO 111</td>
<td>Real-Time Detection Systems</td>
<td>10:30 a.m.–10:50 a.m.</td>
<td>47</td>
</tr>
<tr>
<td>SR-111-02</td>
<td>Fast GC-PID/FID Analyses Using Resistively Heated Columns for Rapid Analyses in the Field</td>
<td>PO 111</td>
<td>Real-Time Detection Systems</td>
<td>10:50 a.m.–11:10 a.m.</td>
<td>47</td>
</tr>
<tr>
<td>SR-111-03</td>
<td>Modular Quantitative Air Sampling for Thermal Desorption/Gas Chromatography Analysis in the Field</td>
<td>PO 111</td>
<td>Real-Time Detection Systems</td>
<td>11:10 a.m.–11:30 a.m.</td>
<td>47</td>
</tr>
<tr>
<td>SR-111-04</td>
<td>Solid Phase Microextraction Screening to Determine the Presence of Formaldehyde in Products Containing Concentrations Requiring Disclosure Under the Hazard Communication Standard</td>
<td>PO 111</td>
<td>Real-Time Detection Systems</td>
<td>11:30 a.m.–11:50 a.m.</td>
<td>47</td>
</tr>
<tr>
<td>SR-111-05</td>
<td>Effect of Calibration Environment on the Performance of Two Direct-Reading Organic Vapor Monitors</td>
<td>PO 111</td>
<td>Real-Time Detection Systems</td>
<td>11:50 a.m.–12:10 p.m.</td>
<td>47</td>
</tr>
<tr>
<td>SR-111-06</td>
<td>Design of a Real-Time Monitoring Data Transmission Module for Remote Locations</td>
<td>PO 111</td>
<td>Real-Time Detection Systems</td>
<td>12:10 p.m.–12:30 p.m.</td>
<td>47</td>
</tr>
<tr>
<td>SR-112-04</td>
<td>Estimation and Characterization of Polychlorinated Dibenzo-p-dioxins and Dibenzofurans Generated from an Automobile Foundry Factory in China</td>
<td>PO 112</td>
<td>Topics In Occupational Medicine and Epidemiology</td>
<td>3:30 p.m.–3:50 p.m.</td>
<td>51</td>
</tr>
<tr>
<td>SR-112-05</td>
<td>Diesel Motor Emissions and the Risk of Lung Cancer – A Reanalysis of Epidemiological Evidences</td>
<td>PO 112</td>
<td>Topics In Occupational Medicine and Epidemiology</td>
<td>3:50 p.m.–4:10 p.m.</td>
<td>51</td>
</tr>
<tr>
<td>SR-112-06</td>
<td>Structural Equation in Occupational Exposure and Occupational Cancer Risk Modeling</td>
<td>PO 112</td>
<td>Topics In Occupational Medicine and Epidemiology</td>
<td>4:10 p.m.–4:30 p.m.</td>
<td>51</td>
</tr>
<tr>
<td>SR-112-07</td>
<td>Active Issues in Risk Assessment: Carcinogen Classification</td>
<td>PO 112</td>
<td>Topics In Occupational Medicine and Epidemiology</td>
<td>4:30 p.m.–4:50 p.m.</td>
<td>52</td>
</tr>
<tr>
<td>SR-112-08</td>
<td>Biological Responses of Respirable Silica Dust and their Association with Adverse Health Effects on Workers from Pottery Factory, Tungsten and Tin Mines</td>
<td>PO 112</td>
<td>Topics In Occupational Medicine and Epidemiology</td>
<td>4:50 p.m.–5:10 p.m.</td>
<td>52</td>
</tr>
<tr>
<td>SR-113-02</td>
<td>Monitoring Air Quality in Corrosive Drywall Homes</td>
<td>PO 113</td>
<td>Indoor Environmental Quality – II</td>
<td>3:20 p.m.–3:40 p.m.</td>
<td>53</td>
</tr>
<tr>
<td>SR-113-03</td>
<td>Relationship Between Strontium, Sulfur, and Reduced Sulfur Gases: Imported and Domestic Drywall</td>
<td>PO 113</td>
<td>Indoor Environmental Quality – II</td>
<td>3:40 p.m.–4:00 p.m.</td>
<td>53</td>
</tr>
</tbody>
</table>
INDEX OF CASE STUDY & SCIENTIFIC RESEARCH ABSTRACTS

SR-118-8 Confined Space Emergency Response: Assessing Employer and Fire Department Practices .......................... PO 118 ... Safety ................................................................. 12:20 p.m.–12:40 p.m. 59
SR-121-02 An Analysis of Formaldehyde Levels in Travel Trailers .......... PO 121 ... Environmental Issues for the EH&S Practitioners .... 2:10 p.m.–2:30 p.m. 62
SR-121-03 Air Contaminants Inside and Outside Rural Homes near Biosolids-Applied Agricultural Farm Fields .................. PO 121 ... Environmental Issues for the EH&S Practitioners .... 2:30 p.m.–2:50 p.m. 62
SR-121-04 Evaluation of Carbon Monoxide Exposures during the Operation of Recreational Watercraft ....................... PO 121 ... Environmental Issues for the EH&S Practitioners .... 2:50 p.m.–3:10 p.m. 62
SR-121-07 Emission Factors and Exposures from Ground-Level Pyrotechnics ........................................ PO 121 ... Environmental Issues for the EH&S Practitioners .... 3:10 p.m.–3:30 p.m. 62
SR-121-08 Determinations of 1,4-Dioxane and Phthalates in Water Simultaneously by Solid-Phase Microextraction ........ PO 121 ... Environmental Issues for the EH&S Practitioners .... 3:30 p.m.–3:50 p.m. 62
SR-122-05 Evaluation of Exposure to Noise and Hearing Loss among Dentists in Yazd ................................................. PO 122 ... Noise: Evaluation, Control, and Hearing Conservation .... 2:50 p.m.–3:10 p.m. 62
SR-122-07 Peak Noise Exposure during Concrete Gridding in Confined Areas .......................................................... PO 122 ... Noise: Evaluation, Control, and Hearing Conservation .... 3:30 p.m.–3:50 p.m. 62
SR-122-08 Evaluation of Noise Exposure among Brazilian Headphone/ headset Professional Users .................................. PO 122 ... Noise: Evaluation, Control, and Hearing Conservation .... 3:50 p.m.–4:10 p.m. 62
SR-122-09 Noise Exposure Assessment in a Dental School ............ PO 122 ... Noise: Evaluation, Control, and Hearing Conservation .... 4:10 p.m.–4:30 p.m. 62
SR-123-01 Patterns of Respirator Performance and Associated Facial Variability .................................................. PO 123 ... Respiratory Protection .................................. 1:30 p.m.–1:50 p.m. 63
SR-123-02 Development of an Advanced Respirator Fit Test Headform . PO 123 ... Respiratory Protection ......................... 1:50 p.m.–2:10 p.m. 63
SR-123-03 Fit Test of N95 Filtering Facepiece Respirators Used Widely in China .................................................. PO 123 ... Respiratory Protection .... 2:10 p.m.–2:30 p.m. 63
SR-123-04 Computational Fluid Dynamics for Respirator Fit and Leak Locations ................................................. PO 123 ... Respiratory Protection .... 2:30 p.m.–2:50 p.m. 63
SR-123-05 Comparison of a Small-Scale Cartridge Breakthrough Tests to Actual Organic Air-Purifying Respirator Cartridge .... PO 123 ... Respiratory Protection .... 2:50 p.m.–3:10 p.m. 63
SR-123-06 Effect of Aerosol Loading on Breakthrough Characteristics of Charcoal Cartridges .................................. PO 123 ... Respiratory Protection .... 3:10 p.m.–3:30 p.m. 63
SR-123-07 Penetration of Fibers through Faceseal Leakage of N95 Filtering Facepiece Respirators ........ PO 123 ... Respiratory Protection .... 3:30 p.m.–3:50 p.m. 63
SR-123-08 Behavior of Nanoparticle Penetration Through Simulated Filtering Facepiece Respirator Faceseal Leaks: Experiment and Theory ........................................ PO 123 ... Respiratory Protection .... 3:50 p.m.–4:10 p.m. 63
SR-123-09 Total Inward Leakage Of Nanoparticles Through NIOSH- approved N95 Filtering Facepiece Respirators ........ PO 123 ... Respiratory Protection .... 4:10 p.m.–4:30 p.m. 64
SR-123-10 Generation of Vapor-Phase Hydrogen Peroxide Test Atmospheres for the Evaluation of Respirator Cartridges and Air Samplers ........................................ PO 123 ... Respiratory Protection .... 4:30 p.m.–4:50 p.m. 64
SR-124-01 Assessing Building Occupant Indoor Air Quality Expectations Compared to Nationally Recognized Standards ........ PO 124 ... Indoor Environmental Quality – III .... 5:00 p.m.–5:20 p.m. 65
SR-124-03 A Protocol for Identifying Building Odors ..................... PO 124 ... Indoor Environmental Quality – III .... 5:40 p.m.–6:00 p.m. 65
SR-124-04 A Protocol for the Assessment of Smoke Damage ........ PO 124 ... Indoor Environmental Quality – III .... 6:00 p.m.–6:20 p.m. 65
SR-124-05 Indoor Air Quality of Hair and Makeup Trailers in the Vancouver Motion Picture Industry ....................... PO 124 ... Indoor Environmental Quality – III .... 6:20 p.m.–6:40 p.m. 65
SR-124-06 Measured Air Exchange Rates in Two Homes in Rural Peru ... PO 124 ... Indoor Environmental Quality – III .... 6:40 p.m.–7:00 p.m. 65
<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Abstract Title</th>
<th>Session Number</th>
<th>Session</th>
<th>Presentation Time</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-119-05</td>
<td>Reduction of Aflatoxin B1 Mycotoxin Using Allotropic Oxygen</td>
<td>PO 119</td>
<td>...</td>
<td>9:50 a.m.–10:10 a.m.</td>
<td>67</td>
</tr>
<tr>
<td>SR-125-01</td>
<td>Health and Housing Outcomes in Green Renovation</td>
<td>PO 125</td>
<td>...</td>
<td>8:30 a.m.–8:50 a.m.</td>
<td>67</td>
</tr>
<tr>
<td>SR-125-05</td>
<td>Health Status of Corrosive Drywall Home Occupants</td>
<td>PO 125</td>
<td>...</td>
<td>9:50 a.m.–10:10 a.m.</td>
<td>67</td>
</tr>
<tr>
<td>SR-126-06</td>
<td>Risk Assessment for Exposures to Ambient Inorganic Airborne Arsenic in Shymkent, Kazakhstan</td>
<td>PO 126</td>
<td>...</td>
<td>10:10 a.m.–10:30 a.m.</td>
<td>68</td>
</tr>
<tr>
<td>SR-127-07</td>
<td>Urine Color is an Effective Biomarker for Self-monitoring Hydration Status in Army Cadets from the United Arab Emirates</td>
<td>PO 127</td>
<td>...</td>
<td>10:30 a.m.–10:50 a.m.</td>
<td>68</td>
</tr>
<tr>
<td>SR-128-01</td>
<td>The Effect of Concentration, Sorbent Weight and Adsorbate on the Adsorption Capacity of a Novel Fluidized Air Sampling Media Utilizing a Sparging System to Generate VOCs at Different Levels</td>
<td>PO 128</td>
<td>...</td>
<td>1:00 p.m.–1:20 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-02</td>
<td>Development of a Novel Porous Membrane Denuder</td>
<td>PO 128</td>
<td>...</td>
<td>1:40 p.m.–2:00 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-03</td>
<td>A Novel Desorption Technique for Volatile Organic Compounds – Comparison Between Activated Carbon and Carbon Nanotubes</td>
<td>PO 128</td>
<td>...</td>
<td>2:00 p.m.–2:20 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-04</td>
<td>Determining Indoor Airborne Synthetic Musk by Using Poly Urethane Foams (PUF) with the Analysis of Triple Quadrupole GC/MS/MS</td>
<td>PO 128</td>
<td>...</td>
<td>2:20 p.m.–2:40 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-05</td>
<td>Determinations of Airborne 1,4-dioxane in Occupational Settings in Taiwan</td>
<td>PO 128</td>
<td>...</td>
<td>2:40 p.m.–3:00 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-06</td>
<td>Effects of Glove Material on Permeation by a Solvent Mixture Commonly Used in Auto Painting</td>
<td>PO 128</td>
<td>...</td>
<td>3:00 p.m.–3:20 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-07</td>
<td>Comparison of Asbestos Analytical Methods</td>
<td>PO 128</td>
<td>...</td>
<td>3:20 p.m.–3:40 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-128-08</td>
<td>Sampling and Analysis of the Specific Aeroallergens Proteins Tropomyosin and Arginine Kinase in Snow Crab and Northern Shrimp Plants Located in the Province of Québec</td>
<td>PO 128</td>
<td>...</td>
<td>3:40 p.m.–4:00 p.m.</td>
<td>69</td>
</tr>
<tr>
<td>SR-129-05</td>
<td>Science-Based Policy and Practice to Prevent Lead Poisoning in Children in Former Soviet States</td>
<td>PO 129</td>
<td>...</td>
<td>1:00 p.m.–1:20 p.m.</td>
<td>70</td>
</tr>
<tr>
<td>SR-129-06</td>
<td>Research on Radioactivity and Cytotoxicity of Emission Aerosol during Casting Process</td>
<td>PO 129</td>
<td>...</td>
<td>2:40 p.m.–3:00 p.m.</td>
<td>70</td>
</tr>
<tr>
<td>SR-129-07</td>
<td>Development of Silica Precursor Technology on Reducing Welding Fume Toxicity</td>
<td>PO 129</td>
<td>...</td>
<td>3:00 p.m.–3:20 p.m.</td>
<td>70</td>
</tr>
<tr>
<td>SR-129-08</td>
<td>Characterization of Composite Particles Containing Carbon Nanotubes by Scanning-Transmission Electron Microscopy</td>
<td>PO 129</td>
<td>...</td>
<td>3:20 p.m.–3:40 p.m.</td>
<td>70</td>
</tr>
<tr>
<td>SR-129-09</td>
<td>Development of Semi-Empirical Relationship between Fume Exposure and Welding-Related Parameters Using Fractional Factorial Design</td>
<td>PO 129</td>
<td>...</td>
<td>3:40 p.m.–4:00 p.m.</td>
<td>70</td>
</tr>
</tbody>
</table>
Aerosols
PO 107  Aerosols ....................................................................................................................... Monday | 2:00 p.m.–5:10 p.m.  ........................ 39
RT 229  Application of Computational Fluid Dynamics in Industrial Hygiene ............................ Wednesday | 1:30 p.m.–4:30 p.m.  .............. 62

Biological Monitoring
RT 209  Human Biological Monitoring: State of the Art ............................................................ Monday | 2:00 p.m.–5:00 p.m.  ....................... 38
PO 129  Biological Monitoring and Aerosols .............................................................................. Thursday | 1:00 p.m.–4:00 p.m.  .................. 70

Biosafety and Environmental Microbiology
RT 211  Update on Health Effects Research and Guidelines on Mold, Moisture and Damp Buildings  Monday | 2:00 p.m.–5:00 p.m.  ................... 38
PO 115  Environmental Microbiology Research ......................................................................... Wednesday | 10:00 a.m.–Noon  .......................... 57
RT 227  Ten Years Since the U.S. Anthrax Incidents: Engaging the IH Community ................... Wednesday | 1:30 p.m.–4:00 p.m.  ............... 61
PO 119  Biosafety and Environmental Microbiology ..................................................................... Thursday | 8:30 a.m.–10:30 a.m.  ............... 67

Communication and/or Training
RT 207  Effective Adult SH&E Training Techniques: Back to the Basics ..................................... Monday | 2:00 p.m.–4:30 p.m.  .................... 37
CR 325  What Is Wrong with Mandatory Safety Training (and How to Fix It)! ......................... Wednesday | 11:30 a.m.–12:30 p.m. ............... 59
RT 235  How to Effectively Implement the New Hazcom (GHS) — A Chemical User’s Perspective Wednesday | 5:00 p.m.–7:30 p.m.  .......... 65
PO 127  Management and Communication in OSH ...................................................................... Thursday | 8:30 a.m.–11:10 a.m.  .............. 68

Computer Applications
RT 223  Update on New Technology Applications to Leverage Your ES&H Practice .................... Tuesday | 2:30 p.m.–5:30 p.m.  ................. 52

Confined Spaces
CR 301  Innovative Approaches to Eliminating Accidents and Fatalities Inside Confined Spaces and During Use of Inert Gases at Construction Sites .......................................................... Monday | 10:00 a.m.–11:00 a.m.  ............... 33
RT 230  Challenging Confined Spaces ....................................................................................... Wednesday | 1:30 p.m.–4:30 p.m.  ............. 63

Construction Sites/Industry
CR 301  Innovative Approaches to Eliminating Accidents and Fatalities Inside Confined Spaces and During Use of Inert Gases at Construction Sites .......................................................... Monday | 10:00 a.m.–11:00 a.m.  ............... 33
RT 212  Implementing Engineering Controls in Construction ..................................................... Monday | 2:00 p.m.–5:30 p.m.  .................... 39
RT 216  Welding Industrial Survey, Fume Generation and Characterization Studies .................... Tuesday | 10:30 a.m.–12:30 p.m. ............... 46
RT 221  Welding Exposure Assessments and Exposure Database Design ....................................... Tuesday | 1:30 p.m.–5:30 p.m.  .................. 51

Emerging Issues
RT 241  Honoring Your Competitive Edge in the Battle for the Bucks .......................................... Thursday | 1:00 p.m.–5:00 p.m.  .............. 71

Engineering
RT 212  Implementing Engineering Controls in Construction ..................................................... Monday | 2:00 p.m.–5:30 p.m.  .................... 39
PO 120  Engineering Controls — Lessons from Design and Practice ............................................ Wednesday | 1:30 p.m.–4:10 p.m.  .......... 61

Environmental Issues
CR 305  Your Supplier Communication Program for Risk Management ........................................ Monday | 11:30 a.m.–12:30 p.m. ............... 35
CR 309  ISO 14001, Lean and Six Sigma Sustainability Programs .............................................. Monday | 3:30 p.m.–4:30 p.m.  ................. 40
CR 313  Manage Your Chemicals, Manage Your Risk ...................................................................... Tuesday | 11:30 a.m.–12:30 p.m. ............... 48
CR 318  Top Eight Chemical Management Errors and How to Fix Them ....................................... Tuesday | 4:30 p.m.–5:30 p.m.  ................. 53
CR 319  Turbo-Charged Risk Management — Integrating ISO 31000 with ISO 14001 .................. Tuesday | 4:30 p.m.–5:30 p.m.  ................. 53
CR 323  End of an Era? The Phase Out of the ORM-D Exception ..................................................... Wednesday | 11:30 a.m.–12:30 p.m. ............. 59
CR 327  Proactive Management of Hospital Water Supply Systems in Support of the Environment of Care Wednesday | 1:30 p.m.–2:30 p.m.  .......... 61
PO 121  Environmental Issues for the EH&S Practitioners .......................................................... Wednesday | 1:30 p.m.–4:30 p.m.  .......... 62
CR 330  Industrial Ecology: An Industrial Hygiene Approach ............................................................ Wednesday | 4:30 p.m.–5:30 p.m.  .............. 64
CR 334  Understanding Corporate Social Responsibility: New Opportunities for EHS Professionals Thursday | 1:00 p.m.–2:00 p.m.  .................... 69
CR 335  Enhancing Chemical Management within the Framework of Existing TSCA Regulations Thursday | 2:30 p.m.–3:30 p.m.  .......... 71

Ergonomics
RT 208  Leaders and Legends in Ergonomic Modeling ................................................................. Monday | 2:00 p.m.–4:30 p.m.  ............... 37
PO 110  Ergonomics ................................................................................................................... Tuesday | 10:30 a.m.–12:30 p.m. ............... 45
RT 224  Integrating Ergonomics into Green Building Design ..................................................... Wednesday | 10:00 a.m.–Noon  ....................... 57

Ethics
RT 238  Global Professional Ethics Roundtable Discussion ............................................................ Thursday | 8:30 a.m.–11:00 a.m.  ............... 68

Exposure Assessment Strategies
PO 101  Exposure Assessment Methodologies — Part 1 .............................................................. Monday | 10:30 a.m.–12:30 p.m. ............... 33
PO 104  Exposure Assessment Standards and Challenges ........................................................... Monday | 2:00 p.m.–4:40 p.m.  ............... 37
PO 108  Exposure Assessment Methodologies — Part 2 .............................................................. Tuesday | 10:30 a.m.–12:30 p.m. ............... 45

NIOSH Special Session: Updating the NIOSH Cancer and REL Policies .......................................................... Tuesday | 11:00 a.m.–Noon  ............... 47
RT 220  Reducing Uncertainty in the Semiconductor Industry via Employee Exposure Assessment Tuesday | 1:30 p.m.–5:30 p.m.  .......... 50
RT 221  Welding Exposure Assessments and Exposure Database Design ...................................... Tuesday | 1:30 p.m.–5:30 p.m.  .......... 51
PO 117  Integrating Exposure Assessment, Risk Assessment, and Risk Management ................ Thursday | 10:00 a.m.–Noon  .................... 57
Emerging Issues—Carbon Monoxide: A Persistent Problem .......................................................... Wednesday | 1:30 p.m.–3:00 p.m.  .......... 61
RT 229  Application of Computational Fluid Dynamics in Industrial Hygiene ............................ Wednesday | 1:30 p.m.–4:30 p.m.  .......... 62
SS 003  Exposure Limit Setting Processes: A Multinational Challenge ........................................... Wednesday | 1:30 p.m.–5:30 p.m.  .......... 64
<table>
<thead>
<tr>
<th>Session Code</th>
<th>Session Title</th>
<th>Day</th>
<th>Time</th>
<th>Room</th>
<th>Z117</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 236</td>
<td>Applying Bayesian Data Analysis in the Real World to Solve Real Problems</td>
<td>Wednesday</td>
<td>5:00 p.m.–7:30 p.m.</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>PO 128</td>
<td>Sampling and Analysis: Current Trends in Workplace Exposure Assessments</td>
<td>Thursday</td>
<td>1:00 p.m.–4:00 p.m.</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>SS 004</td>
<td>Assessing Exposure during Disaster Response: The Gulf Oil Spill Experience</td>
<td>Thursday</td>
<td>1:00 p.m.–4:00 p.m.</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Green Building/LEED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 224</td>
<td>Integrating Ergonomics into Green Building Design</td>
<td>Wednesday</td>
<td>10:00 a.m.–Noon</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>PO 125</td>
<td>Green Buildings and the Industrial Hygienist</td>
<td>Thursday</td>
<td>8:30 a.m.–10:30 a.m.</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td><strong>Hazardous Chemicals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR 313</td>
<td>Manage Your Chemicals, Manage Your Risk</td>
<td>Tuesday</td>
<td>11:30 a.m.–12:30 p.m.</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>CR 318</td>
<td>Top Eight Chemical Management Errors and How to Fix Them</td>
<td>Tuesday</td>
<td>4:30 p.m.–5:30 p.m.</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>CR 335</td>
<td>Enhancing Chemical Management within the Framework of Existing TSCA Regulation</td>
<td>Thursday</td>
<td>2:30 p.m.–3:30 p.m.</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td><strong>Healthcare Sites/Industry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 202</td>
<td>Nonionizing Radiation in Health Care Settings</td>
<td>Monday</td>
<td>10:30 a.m.–12:30 p.m.</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>PO 109</td>
<td>Health Care Industries – I</td>
<td>Tuesday</td>
<td>10:30 a.m.–12:30 p.m.</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>CR 317</td>
<td>OSHA in Health Care: Out of Sight and Out of Mind?</td>
<td>Tuesday</td>
<td>3:00 p.m.–4:00 p.m.</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>PO 116</td>
<td>Health Care Industries – II</td>
<td>Wednesday</td>
<td>10:00 a.m.–Noon</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>CR 327</td>
<td>Proactive Management of Hospital Water Supply Systems in Support of the Environment of Care</td>
<td>Wednesday</td>
<td>1:30 p.m.–2:30 p.m.</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td><strong>IH General Practice</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO 108</td>
<td>Socio-Legal and Regulatory Aspects of IH Practice</td>
<td>Monday</td>
<td>2:00 p.m.–4:40 p.m.</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>CR 303</td>
<td>Gearing Up for the Revised NFPA 70E (2012 Edition) Electrical Safety/Arc Flash Requirements</td>
<td>Monday</td>
<td>11:30 a.m.–12:30 p.m.</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>PO 106</td>
<td>Socio-Legal and Regulatory Aspects of IH Practice</td>
<td>Monday</td>
<td>2:00 p.m.–4:40 p.m.</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td><strong>Incident Planning and Response</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR 310</td>
<td>Response Safety and Industrial Hygiene Professionals: Are You Prepared to Respond to a Disaster or Incident?</td>
<td>Tuesday</td>
<td>10:00 a.m.–11:00 a.m.</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>RT 227</td>
<td>Ten Years Since the U.S. Anthrax Incidents: Engaging the IH Community</td>
<td>Wednesday</td>
<td>1:30 p.m.–4:00 p.m.</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>CR 333</td>
<td>Taking Process Safety and Catastrophic Event Prevention to the Next Level</td>
<td>Tuesday</td>
<td>10:00 a.m.–11:00 a.m.</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>SS 004</td>
<td>Assessing Exposure during Disaster Response: The Gulf Oil Spill Experience</td>
<td>Thursday</td>
<td>1:00 p.m.–4:00 p.m.</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>RT 240</td>
<td>Radiation Emergency Response and Annual Memorial Tribute to Dr. Herman Cember</td>
<td>Thursday</td>
<td>1:00 p.m.–4:30 p.m.</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Indoor Environmental Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO 102</td>
<td>Indoor Environmental Quality – I</td>
<td>Monday</td>
<td>10:30 a.m.–12:30 p.m.</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>RT 211</td>
<td>Update on Health Effects Research and Guidelines on Mold, Moisture and Damp Buildings</td>
<td>Monday</td>
<td>2:00 p.m.–5:00 p.m.</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>RT 214</td>
<td>Federal Lead Update Roundtable</td>
<td>Monday</td>
<td>10:30 a.m.–12:30 p.m.</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>RT 218</td>
<td>Exploring New Approaches to Indoor Air Investigations</td>
<td>Monday</td>
<td>10:30 a.m.–1:00 p.m.</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>PO 113</td>
<td>Indoor Environmental Quality – II</td>
<td>Monday</td>
<td>3:00 p.m.–5:20 p.m.</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>PO 124</td>
<td>Indoor Environmental Quality – III</td>
<td>Monday</td>
<td>5:00 p.m.–7:00 p.m.</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td><strong>Interactive Learning Track</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IH Mysteries Workshop</td>
<td></td>
<td>Monday–Tuesday</td>
<td>12:30 p.m.–2:00 p.m.</td>
<td>36, 49</td>
<td></td>
</tr>
<tr>
<td>Luncheon Discussions – Product Steward Luncheon Discussion</td>
<td></td>
<td>Monday</td>
<td>1:00 p.m.–2:00 p.m.</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Luncheon Discussions – Students and Early Career Professionals</td>
<td></td>
<td>Monday</td>
<td>1:00 p.m.–2:00 p.m.</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Luncheon Discussions – NIOSH Tech Talks: Current Topics</td>
<td></td>
<td>Tuesday</td>
<td>12:30 p.m.–1:30 p.m.</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Town Hall: Have We Accomplished All We Can in Protecting Workers?</td>
<td></td>
<td>Tuesday</td>
<td>1:30 p.m.–3:00 p.m.</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>IGNITE</td>
<td></td>
<td>Monday–Tuesday</td>
<td>2:30 p.m.–4:00 p.m.</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Luncheon Discussions – Volunteer Group Tech Talks</td>
<td></td>
<td>Monday–Tuesday</td>
<td>Noon–1:00 p.m.</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td><strong>Ionizing Radiation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 240</td>
<td>Radiation Emergency Response and Annual Memorial Tribute to Dr. Herman Cember</td>
<td>Thursday</td>
<td>1:00 p.m.–4:30 p.m.</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Lab Health and Safety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO 103</td>
<td>Laboratories, Analytical and Research</td>
<td>Monday</td>
<td>10:30 a.m.–12:30 p.m.</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>RT 205</td>
<td>Sustainable Operations and Practices in Lab Environments</td>
<td>Monday</td>
<td>10:30 a.m.–1:00 p.m.</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>RT 225</td>
<td>Methamphetamine Labs: Current Issues</td>
<td>Wednesday</td>
<td>10:00 a.m.–Noon</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td><strong>Lectures and Awards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeffrey S. Lee Lecture</td>
<td></td>
<td>Monday</td>
<td>1:00 p.m.–2:00 p.m.</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>12th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting</td>
<td></td>
<td>Tuesday</td>
<td>10:30 a.m.–11:30 a.m.</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>William P. Yant Award Lecture</td>
<td></td>
<td>Tuesday</td>
<td>12:30 p.m.–1:30 p.m.</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Donald E. Cummings Award Lecture</td>
<td></td>
<td>Wednesday</td>
<td>12:30 p.m.–1:30 p.m.</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Herbert E. Stokinger Award Lecture</td>
<td></td>
<td>Thursday</td>
<td>Noon–1:00 p.m.</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td><strong>Legal, Regulatory, Guidelines and Standards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 201</td>
<td>Mock OSHRC Hearing: Multi-Employer Work Site Liability for Health and Safety Consultants</td>
<td>Monday</td>
<td>10:30 a.m.–12:30 p.m.</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>CR 303</td>
<td>Gearing Up for the Revised NFPA 70E (2012 Edition) Electrical Safety/Arc Flash Requirements</td>
<td>Monday</td>
<td>11:30 a.m.–12:30 p.m.</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>PO 106</td>
<td>Socio-Legal and Regulatory Aspects of IH Practice</td>
<td>Monday</td>
<td>2:00 p.m.–4:40 p.m.</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>CR 309</td>
<td>ISO 14001, Lean and Six Sigma Sustainability Programs ................................. Monday</td>
<td>3:30 p.m.-4:30 p.m.</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 214</td>
<td>Federal Lead Update Roundtable ................................................................... Tuesday</td>
<td>10:30 a.m.-12:30 p.m.</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR 319</td>
<td>Turbo-Charged Risk Management — Integrating ISO 31000 with ISO 14001 ......... Tuesday</td>
<td>4:30 p.m.-5:30 p.m.</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 233</td>
<td>NIOSH Health Hazard Evaluations: Results of Recent Industrial Hygiene Evaluations Wednesday</td>
<td>1:30 p.m.-5:30 p.m.</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT 237</td>
<td>Glen Williamson Forum: OSHA’s Most Interesting Health Cases, 2009-2011 .......... Thursday</td>
<td>8:00 a.m.-Noon</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR 335</td>
<td>Enhancing Chemical Management within the Framework of Existing TSCA Regulations Thursday</td>
<td>2:30 p.m.-3:30 p.m.</td>
<td>71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Management**

| CR 308 | How to Build a Health and Safety Culture Through PDCA (Plan-Do-Check-Act) Approach Monday | 3:30 p.m.-4:30 p.m. | 40 |
| RT 215 | Sustainability Management: Systems, Process, and Culture .......................... Tuesday | 10:30 a.m.-12:30 p.m. | 46 |
| CR 316 | Incubating Accidents: How Management Fails at Safety .................................. Tuesday | 3:00 p.m.-4:00 p.m. | 52 |
| CR 318 | Top Eight Chemical Management Errors and How to Fix Them ....................... Tuesday | 4:30 p.m.-5:30 p.m. | 53 |
| CR 320 | Achieving World Class Health and Safety Through Transformational Leadership Wednesday | 10:00 a.m.-11:00 a.m. | 56 |
| CR 321 | Assessing Your Safety and Health Management System .................................... Wednesday | 10:00 a.m.-11:00 a.m. | 56 |
| CR 329 | Safety Culture: Motivation and Influence ....................................................... Wednesday | 3:00 p.m.-4:00 p.m. | 64 |
| RT 241 | Honing Your Competitive Edge in the Battle for the Backs ............................... Thursday | 1:00 p.m.-5:00 p.m. | 71 |
| CR 332 | Health and Safety Auditing for Industrial Hygienists ....................................... Thursday | 8:30 a.m.-9:30 a.m. | 67 |
| PO 127 | Management and Communication in OSH ....................................................... Thursday | 8:30 a.m.-11:10 a.m. | 68 |
| CR 335 | Enhancing Chemical Management within the Framework of Existing TSCA Regulations Thursday | 2:30 p.m.-3:30 p.m. | 71 |

**Mold**

| RT 211 | Update on Health Effects Research and Guidelines on Mold, Moisture and Damp Buildings Monday | 2:00 p.m.-5:00 p.m. | 38 |

**Nanotechnology**

| RT 206 | Ask NIOSH Experts: Practical Advice and Lessons from Nanotechnology Field Assessments Monday | 10:30 a.m.-1:00 p.m. | 35 |
| PO 105 | Nanotechnology: Assessment and Control ..................................................... Monday | 2:00 p.m.-4:40 p.m. | 37 |
| SS 002 | Exposure Scenarios for Nanomaterial Workers and Workplaces: Trends and Hot Issues Tuesday | 1:30 p.m.-5:00 p.m. | 50 |

**Noise**

| RT 203 | What Is 85/3, and Why Noise Is More Hazardous Than You Think ....................... Monday | 10:30 a.m.-12:30 p.m. | 34 |
| RT 222 | Bang! Impulse and Impact Noise: Measurement, Auditory Effects, and Hearing Protectors Tuesday | 2:30 p.m.-5:30 p.m. | 52 |
| PO 122 | Noise: Evaluation, Control, and Hearing Conservation ..................................... Wednesday | 1:30 p.m.-4:30 p.m. | 62 |
| RT 239 | Innovative Hearing Conservation — Preventing Noise-Induced HL in “Kids” of All Ages Thursday | 8:30 a.m.-11:00 a.m. | 68 |

**Nonionizing Radiation**

| RT 202 | Nonionizing Radiation in Health Care Settings ............................................... Monday | 10:30 a.m.-12:30 p.m. | 34 |

**Occupational Epidemiology**

| CR 311 | Specifying Work Clothing to Match WorkplaceHazards ................................... Tuesday | 10:00 a.m.-11:00 a.m. | 44 |
| SS 004 | Assessing Exposure during Disaster Response: The Gulf Oil Spill Experience Thursday | 1:00 p.m.-4:00 p.m. | 70 |

**Occupational Medicine**

| PO 112 | Current Topics in Occupational Medicine and Epidemiology ................................... Tuesday | 2:30 p.m.-5:30 p.m. | 51 |

**Protective Clothing and Equipment**

| CR 311 | Specifying Work Clothing to Match Workplace Hazards ................................... Tuesday | 10:00 a.m.-11:00 a.m. | 44 |
| CR 324 | Safety Eyewear and ANSI Standards — Seeing is Believing! ............................ Wednesday | 11:30 a.m.-12:30 p.m. | 59 |

**Real-Time Detection Systems**

| SS 001 | Closer to Spock’s Tricorder — The Latest in Real-Time Detection ...................... Monday | 2:00 p.m.-5:30 p.m. | 39 |
| RT 213 | Addressing Background Sources of VOCs During Vapor Intrusion Investigations .......................................................... Tuesday | 10:30 a.m.-12:30 p.m. | 46 |
| PO 111 | Real-Time Detection Systems .......................................................................... Tuesday | 10:30 a.m.-12:50 p.m. | 46 |
| RT 232 | The Next Generation of Technical Leaders: IH Student Research Showcase .......... Wednesday | 1:30 p.m.-4:30 p.m. | 63 |

**Respiratory Protection**

| PO 123 | Respiratory Protection ..................................................................................... Wednesday | 1:30 p.m.-4:50 p.m. | 63 |

**Risk Assessment and Management**

| CR 313 | Manage Your Chemicals, Manage Your Risk .................................................... Tuesday | 11:30 a.m.-12:30 p.m. | 48 |
| RT 220 | Reducing Uncertainty in the Semiconductor Industry via Employee Exposure Assessment Tuesday | 1:30 p.m.-5:30 p.m. | 50 |
| CR 319 | Turbo-Charged Risk Management — Integrating ISO 31000 with ISO 14001 ......... Tuesday | 4:30 p.m.-5:30 p.m. | 53 |
| PO 117 | Integrating Exposure Assessment, Risk Assessment, and Risk Management ........ Wednesday | 10:00 a.m.-Noon | 57 |
| PO 126 | Risk Assessment/Risk Management Case Studies ............................................ Thursday | 8:30 a.m.-10:50 a.m. | 68 |

**Safety**

| CR 301 | Innovative Approaches to Eliminating Accidents and Fatalities Inside Confined Spaces and During Use of Inert Gases at Construction Sites Monday | 10:00 a.m.-11:00 a.m. | 33 |
| CR 302 | Mission Possible: Creating Top Gun Safety Leaders ......................................... Monday | 10:00 a.m.-11:00 a.m. | 33 |
| CR 303 | Gearing Up for the Revised NFPA 70E (2012 Edition) Electrical Safety/Arc Flash Requirements Monday | 11:30 a.m.-12:30 p.m. | 35 |
| CR 304 | TOR — A Better Way To Investigate Accidents ............................................... Monday | 11:30 a.m.-12:30 p.m. | 35 |
| CR 306 | The Criticality of Understanding Potential ....................................................... Monday | 2:00 p.m.-3:00 p.m. | 36 |
| CR 307 | The Synergy of Environmental Health and Safety and Sustainability .................. Monday | 2:00 p.m.-3:00 p.m. | 36 |
| SS 001 | Closer to Spock’s Tricorder — The Latest in Real-Time Detection ...................... Monday | 2:00 p.m.-5:30 p.m. | 39 |
| CR 308 | How to Build a Health and Safety Culture Through PDCA (Plan-Do-Check-Act) Approach Monday | 3:30 p.m.-4:30 p.m. | 40 |
| CR 310 | Response Safety and Industrial Hygiene Professionals: Are You Prepared to Respond to a Disaster or Incident? | Tuesday | 10:00 a.m.–11:00 a.m. | 44 |
| CR 311 | Specifying Work Clothing to Match Workplace Hazards | Tuesday | 10:00 a.m.–11:00 a.m. | 44 |
| CR 312 | Behavior Engineering – Design Your Workplace to Promote Safe Behaviors | Tuesday | 11:30 a.m.–12:30 p.m. | 47 |
| CR 315 | Case Studies of Two Young Worker Fatalities: Focus on Prevention | Tuesday | 3:00 p.m.–4:00 p.m. | 52 |
| CR 316 | Incubating Accidents: How Management Fails at Safety | Tuesday | 3:00 p.m.–4:00 p.m. | 52 |
| CR 317 | OSHA in Health Care: Out of Sight and Out of Mind? | Tuesday | 3:00 p.m.–4:00 p.m. | 52 |
| CR 320 | Achieving World Class Health and Safety Through Transformational Leadership | Wednesday | 10:00 a.m.–11:00 a.m. | 56 |
| CR 321 | Assessing Your Safety and Health Management System | Wednesday | 10:00 a.m.–11:00 a.m. | 56 |
| CR 322 | How to Develop and Sustain an Effective Accident Investigation Program | Wednesday | 10:00 a.m.–11:00 a.m. | 56 |
| RT 226 | Under Pressure! Compressed Gases and Cryogens: A Comprehensive EDHS Prospective | Wednesday | 10:00 a.m.–Noon | 58 |
| PO 118 | Safety | Wednesday | 10:00 a.m.–12:40 p.m. | 58 |
| CR 324 | Safety Eyewear and ANSI Standards — Seeing is Believing! | Wednesday | 11:30 a.m.–12:30 p.m. | 59 |
| CR 325 | What Is Wrong with Mandatory Safety Training (and How to Fix It)! | Wednesday | 11:30 a.m.–12:30 p.m. | 59 |
| CR 326 | Private Sector Preparedness — Is Your Company Ready for Certification? | Wednesday | 1:30 p.m.–2:30 p.m. | 60 |
| CR 328 | Accident Investigation — Effective Techniques and Documentation | Wednesday | 3:00 p.m.–4:00 p.m. | 64 |
| CR 329 | Safety Culture: Motivation and Influence | Wednesday | 3:00 p.m.–4:00 p.m. | 64 |
| CR 331 | Safety Contacts: Caught You Doing Something Right | Wednesday | 6:00 p.m.–7:00 p.m. | 65 |
| CR 333 | Taking Process Safety and Catastrophic Event Prevention to the Next Level | Thursday | 10:00 a.m.–11:00 a.m. | 68 |
| CR 332 | Health and Safety Auditing for Industrial Hygienists | Thursday | 8:30 a.m.–9:30 a.m. | 67 |

### Sampling and Laboratory Analysis

| PO 103 | Laboratories, Analytical and Research | Monday | 10:30 a.m.–12:30 p.m. | 33 |
| RT 205 | Sustainable Operations and Practices in Lab Environments | Monday | 10:30 a.m.–1:00 p.m. | 35 |
| RT 209 | Human Biological Monitoring: State of the Art | Monday | 2:00 p.m.–5:00 p.m. | 38 |
| RT 213 | Addressing Background Sources of VOCs During Vapor Intrusion Investigations | Tuesday | 10:30 a.m.–12:30 p.m. | 46 |
| RT 214 | Federal Lead Update Roundtable | Tuesday | 10:30 a.m.–12:30 p.m. | 46 |
| RT 218 | Exploring New Approaches to Indoor Air Investigations | Tuesday | 10:30 a.m.–1:00 p.m. | 47 |
| RT 225 | Methamphetamine Labs: Current Issues | Wednesday | 10:00 a.m.–Noon | 58 |
| RT 236 | Applying Bayesian Data Analysis in the Real World to Solve Real Problems | Wednesday | 5:00 p.m.–7:30 p.m. | 65 |
| PO 128 | Sampling and Analysis: Current Trends in Workplace Exposure Assessments | Thursday | 1:00 p.m.–4:00 p.m. | 69 |

### Stewardship and Sustainability

| RT 205 | Sustainable Operations and Practices in Lab Environments | Monday | 10:30 a.m.–1:00 p.m. | 35 |
| CR 307 | The Synergy of Environmental Health and Safety and Sustainability | Monday | 2:00 p.m.–3:00 p.m. | 36 |
| CR 309 | ISO 14001, Lean and Six Sigma Sustainability Programs | Monday | 3:30 p.m.–4:30 p.m. | 40 |
| RT 215 | Sustainability Management: Systems, Process, and Culture | Tuesday | 10:30 a.m.–12:30 p.m. | 46 |
| RT 217 | GHS – The New OSHA Hazard Communication | Tuesday | 10:30 a.m.–1:00 p.m. | 47 |
| RT 219 | Downstream User Obligations Under REACH | Tuesday | 1:30 p.m.–5:30 p.m. | 50 |
| RT 228 | Trends in Green Chemistry: From Policy Reform to Innovation | Wednesday | 10:00 a.m.–12:30 p.m. | 58 |
| RT 234 | Sustainability/CSR Reporting and the OHS Missing Link | Wednesday | 1:30 p.m.–3:30 p.m. | 61 |
| RT 235 | How to Effectively Implement the New Hazcom (GHS) — A Chemical User’s Perspective | Wednesday | 5:00 p.m.–7:30 p.m. | 65 |
| CR 334 | Understanding Corporate Social Responsibility: New Opportunities for EHS Professionals | Thursday | 1:00 p.m.–2:00 p.m. | 69 |

### Students and Early Career Professionals

| RT 204 | Oh, the Places You’ll Go! Perspectives on IH Career Paths | Monday | 10:30 a.m.–1:00 p.m. | 34 |
| Luncheon Discussions — Students and Early Career Professionals | Monday | 1:00 p.m.–2:00 p.m. | 36 |
| RT 210 | Perspectives of Preparation for the CIH Exam v6.0 | Monday | 2:00 p.m.–5:00 p.m. | 38 |
| RT 231 | The Future of EHS: Past to Present | Wednesday | 1:30 p.m.–4:30 p.m. | 63 |
| RT 232 | The Next Generation of Technical Leaders: IH Student Research Showcase | Wednesday | 1:30 p.m.–4:30 p.m. | 63 |

### Symposia

| SS 001 | Closer to Spock’s Tricorder — The Latest in Real-Time Detection | Monday | 2:00 p.m.–5:30 p.m. | 39 |
| SS 002 | Exposure Scenarios for Nanomaterial Workers and Workplaces: Trends and Hot Issues | Tuesday | 1:30 p.m.–5:00 p.m. | 50 |
| SS 003 | Exposure Limit Setting Processes: A Multinational Challenge | Wednesday | 1:30 p.m.–5:30 p.m. | 64 |
| SS 004 | Assessing Exposure during Disaster Response: The Gulf Oil Spill Experience | Thursday | 1:00 p.m.–4:00 p.m. | 70 |
WHO SAYS YOU CAN’T HAVE IT ALL?
With AIHce On Demand, you can.

Access all digitally captured AIHce sessions online as multimedia recreations that include speaker presentations synched to PowerPoint slides.

- Attend the expo, meetings and social events worry-free, without missing important sessions.
- No need to choose between several great sessions.
- Review favorite sessions you attended and would like to revisit.
- Download sessions to your computer or laptop or to your iPod or iPad for portable listening/viewing.

Don’t delay, purchase AIHce On Demand today and pay only $75!
After AIHce, the price will increase to $195.

Visit the AIHce On Demand counter in the Crossroads Lobby at the Indiana Convention Center for demos, information and order forms.

*Please note, if you purchased the Best Value or Premium Registration package during registration, you will receive a code via email to access AIHce On Demand after AIHce 2012.
The global leader in analytical testing services.

Come see us at AIHce 2012 in booth #833!

Full-service environmental and industrial hygiene testing laboratories including:

- Vapor Intrusion/TO-15
- Lead
- Beryllium
- Methamphetamine
- Dietary Supplements
- Pesticides
- Perchlorate
- White Phosphorus
- Amines
- TEM characterization of nanoparticles
- Vermiculite
- Diacetyl/Acetoin
- ... and much more!

Salt Lake City ∙ 960 West LeVoy Drive ∙ Salt Lake City, UT 84123 ∙ Toll Free: +1 800 356 9135 ∙ Phone: +1 801 266 7700
Cincinnati ∙ 4388 Glendale Milford Rd. ∙ Cincinnati, OH 45242 ∙ Toll Free: +1 800 458 1493 ∙ Phone: +1 513 733 5336

ALS Environmental Laboratory Locations Across the United States
Cincinnati ∙ Everett ∙ Fort Collins ∙ Holland ∙ Houston ∙ Jacksonville ∙ Kelso ∙ Middletown ∙ Rochester ∙ Salt Lake City ∙ Simi Valley ∙ Spring City ∙ Tucson ∙ York

www.alsglobal.com  RIGHT SOLUTIONS RIGHT PARTNER
50 Years of Sampling Innovations
Join the celebration at AIHce Booth 503
www.skcinc.com