Alhce

→ INNER HARBOR BALTIMORE

May 21-26, 2016 - AIHce2016.org

Final Program

2016



Pathways to Progress

Alhce 22016

The Solution is Clear

Gastec's Single-Stroke Sampling is Fast and Accurate.....

with no chance of errors that can occur with squeezetype pumps. Sampling with some competitor pumps may require as many as 100 strokes! The Gastec pump requires one stroke or less for most applications.

This means:

- · Less Sampling Time
- · Less Chance of Errors
- No Miscalculated Strokes

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

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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.

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equipped with diamond cutting edge for maximum durability. Discarded tips are safely deposited in the pump head.

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easy and secure tube
insertion that firmly
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Tube for leak-proof
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Pre-Calibrated, One-Stroke, Piston-Design Pump

built tough with corrosion-resistant metal alloy to withstand the harshest environments.

LIFETIME WARRANTY.

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Thermal Ring

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

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





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AlHce2016

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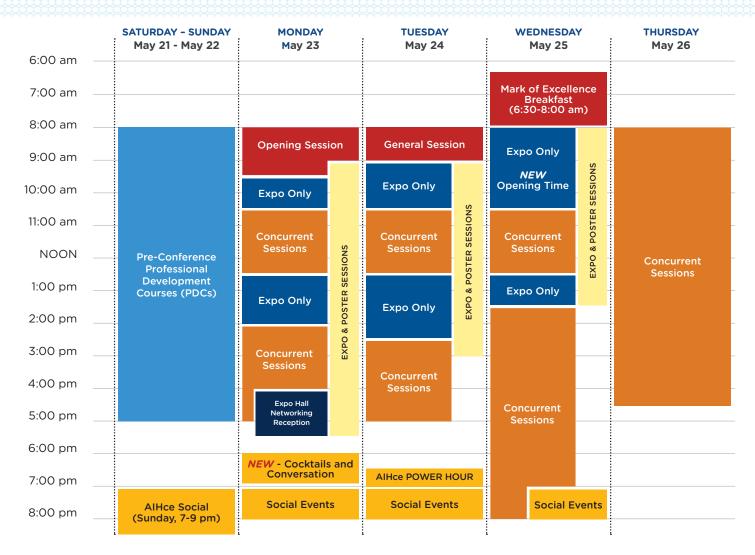
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- NEW dBadge2 personal noise dosimeter and Apex2 5 liter/min air sampling pump are rated Intrinsically Safe for use in locations classfied as "Hazardous"
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AlHce At A Glance



Pathways to Progress



LEARN

AIHce is the best source of sciencebased education for every IH/OH specialty.



EARN

AlHce provides you the opportunity to earn up to 52 CM credit hours!



CONNECT

AIHce boasts innovative sessions, extended breaks, interactive workshops, and fun social events.



DISCOVER

AlHce's Expo brings you face-to-face with hundreds of industry partners sharing the latest solutions and technologies.



VOLUNTEER

AIHA* and ACGIH* volunteers help develop guidelines, propose standards, provide education, and much more!

General Information

Conference Location

Conference events are held at the Baltimore Convention Center (BCC) unless otherwise noted. This includes most education sessions (some will be held at the Hilton Baltimore), the Expo, Speaker Ready Room, and the CareerAdvantage Development Fair. Volunteer groups and committees will meet at the Hilton. A full listing of events can be found in the Schedule-at-a-Glance in the Final Program and on the AIHce 2016 Mobile App.

Registration and Information Desk Hours

Pratt Street Lobby, BCC

Friday	5:00 p.m7:00 p.m
Saturday	7:00 a.m.–5:30 p.m
Sunday	7:00 a.m.–7:30 p.m
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

Registrants must wear a name badge to be admitted to all AIHce sessions and events. Tours, AIHF activities, and selected social activities require a ticket. Once tickets are purchased, fees are nonrefundable; however, ticket exchanges may be permitted pending availability. After one initial reprint, there is a \$5.00 charge for a lost badge or ticket replacement.

AlHce 2016 Expo

Exhibit Halls E,	F, and Swing, BCC
Monday	9:00 a.m.–5:30 p.m.
Tuesday	9:00 a.m.–3:00 p.m.
Wednesday	
NEW Opening Time	! 8:00 a.m1:30 p.m.

Speaker Ready Room

Room 330, BCC

Friday3:00 p.m5:00 p.m	١.
Saturday - Sunday 7:00 a.m5:30 p.m	١.
Monday - Tuesday 7:30 a.m5:30 p.m	١.
Wednesday 7:30 a.m6:30 p.m	١.
Thursday7:30 a.m2:30 p.m	١.
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Check-in is mandatory. Visit the Speaker Ready Room at least 60 minutes prior to the start of the session.

Complimentary WIFI

Wireless Internet access is available throughout the BCC.

- Network: AIHce2016
- Password: IHLife16

Children

Children and young adults 18 and under are not permitted in courses or in the Expo during move-in/move out.

First Aid and Assistance Registration, Pratt Street Lobby

First aid needs will be handled by the BCC's Public Safety Officers. Visit the Information Desk to call Public Safety.

Lost and Found

Information Desk, Pratt Street Lobby, BCC

Technical Tours

http://aihce2016.org/learn/technical-tours/

Board the bus at the Pratt Street Entrance, BCC (ground level) at least 15 minutes prior to published tour departure. Requirements for participation vary by tour.

Don't Forget to Complete Your Evaluation!

PDC evaluations will be emailed to those who have attended courses or you can access them via the AIHce mobile app. To evaluate the technical sessions, use the mobile app, select the session you want to evaluate, and click on the evaluation button. Your feedback is appreciated and will be used to improve AIHce.

Certification

http://aihce2016.org/learn/certification/

For detailed information about CIH requirements, contact ABIH directly at www.abih. org or visit the ABIH Booth (Booth 335) while onsite.

Recharge Lounges

Exhibit Halls E, F, and Swing, BCC

Do your gadgets need a boost after all the note taking, tweeting, and mobile app surfing you've been doing? Visit the three recharge stations in the Expo:

• Booth 762 sponsored by

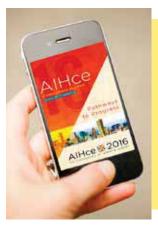


 Booth 1249 sponsored by



• Booth 500 sponsored by





Being a Nerd is Cool Sometimes ... Especially if You're an AIHce 2016 "App Nerd"!

Download the AIHce 2016 mobile app today and rock that App Nerd ribbon* proudly!

- Access maps and search exhibitors
- Network with other attendees
- **NEW**: Play the *Game of IH Life* for a chance to win prizes
- NEW: Available even when Wi-Fi or cellular isn't
- Interact through social media (#AIHce16)

*Grab your App Nerd Ribbon at the self-serve ribbon display at Registration.

Co-sponsored by Sitehawk and ION Science.







Special Events

Sunday, May 22



AIHce Social

SUNDAY, 7:00 P.M.-9:00 P.M.

Key Ballroom, Hilton **Baltimore**

Kick off the conference with food, drinks, live music, and fun at the newly renamed AIHce Social



Monday, May 23

First Timer's Orientation **Breakfast**

Sponsored by



Monday, 6:30 A.M.-7:30 A.M. Holiday Ballroom 6, Hilton

First time attending? Hear tips on how to maximize your overall conference experience and meet other first-time conferencegoers.



Expo Hall Networking Reception

Monday, 4:00 p.m.-5:30 p.m.

Exhibit Halls E, F, and Swing, BCC

Mix, mingle, sip, and network at the Expo Hall Networking Reception. This is the perfect opportunity to meet exhibitors, browse the posters, visit with colleagues, and learn about new products and services from AIHA and ACGIH. Plus. a free drink ticket is included with registration!

Tuesday, May 24

30th Annual AIHF FunRun

Sponsored by



TUESDAY, 6:30 A.M.-8:00 A.M.

Lace up your running shoes and run 5k or walk 2k. Fee \$45. All participants must check-in at the FunRun desk. Hours: Sunday, 12:00 p.m.-5:00 p.m., Monday, 8:00 a.m.-5:00 p.m.



AIHce POWER HOUR

Tuesday, 6:30 p.m.-7:30 p.m.

Key Ballroom 5-12, Hilton

A legendary event in its day, the once-famous "MSA Power Hour" is now an official AIHce mega-event! This is the place to see and be seen!

Wednesday, May 25



Mark of Excellence **Breakfast**

Wednesday, 6:30 a.m.-8:00 a.m.

Ballroom, BCC

The AIHce Mark of Excellence Breakfast is a celebration of the extraordinary contributions made by members and the volunteer community to the industry and the profession. This signature event will feature entertainment, awards, networking, and a delicious breakfast buffet.

- Connect with leading and emerging industry trail-
- Pay tribute to those whose exemplary dedication to the industry and the profession has made a positive and lasting impact.
- Capitalize on engaging your professional peers exchange ideas, insights, and solutions.
- Renew your excitement about industrial hygiene!

You won't want to miss this prestigious and fun-filled event!

This event is included in your registration, but pre-registration is required.

Cocktails & Conversations

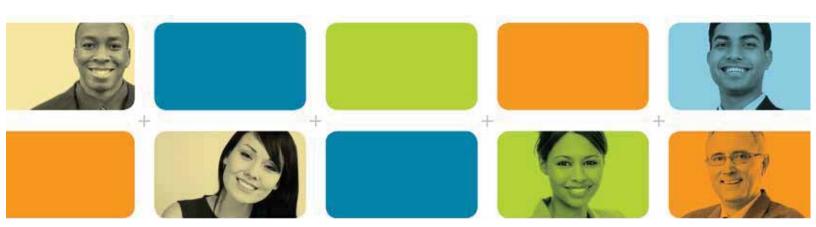
Monday, 6:00 p.m.-7:00 p.m.

Where do we meet? See page 17 for topics and locations.

Often people come to AIHce and wish they had an opportunity to connect with others who share a common interest in a particular topic. Cocktails and Conversation gives people a place and a purpose to gather, meet each other, and talk about a topic or subject of interest. We give you a time and place where you can meet for drinks (cash bar) and discussion.

CareerAdvantage Development Fair

The Baltimore Convention Center • Room 328



In today's job market, it is vital to be equipped with the knowledge and skills to position yourself as a strong candidate—whether as an active job seeker or an employed IH professional. Stop by the *CareerAdvantage* Development Fair at AIHce and get the tools you need to begin improving your career today.

Take a look at this year's lineup of informative seminars and workshops.

Career Portfolio — Taking Control of Your Career

Monday, May 23, 11:15 AM - 12:15 PM

A career portfolio is a visual representation of your abilities, skills, capabilities, knowledge, qualities — and it represents your potential. Physically, it's a collection of things — tangible materials — that represent work-related events in your life. Seminar attendees will gain insight regarding how to organize and prepare a portfolio of accomplishments to support their success in job-hunting, employee evaluations, and promotions.

Get Noticed — Interview Do's and Don'ts, Resume and Cover Letter Tips

Monday, May 23, 1:30 PM - 2:30 PM

Tips for getting your resume into the hands of the hiring manager will be provided to attendees in this interactive seminar. We will discuss the appropriate information to include on your resume, as well as editing and formatting solutions to highlight key points for hiring and human resources managers. The presentation will also include quick tips and do's and don'ts that participants can use to review their resumes. Additionally, seasoned hiring managers from within the industry will provide their perspective regarding what they look for in an interview and things that turn them off during a candidate interview.



Mock Interviewing

Tuesday, May 24, 10:00 AM - Noon

See yourself through an employer's eyes when you meet with an experienced hiring manager during a mock interview. You will receive helpful feedback and learn how to make the most effective presentation of skills, abilities, and professionalism. Reserve your slot today by contacting Wanda Barbour at wbarbour@aiha.org to schedule your own personal session.

Speed Networking

Tuesday, May 24, 3:00 PM - 4:00 PM

Build lasting connections with colleagues from all levels and industries at this innovative and fun networking "Bingo" event. It's simple! Introduce yourself to a new colleague as you try to match what you learn about them with a bingo spot description. Use this opportunity to learn more about them before you move on to your next connection. There will be prizes for the top networkers! Don't forget to bring plenty of business cards and your "Bingo"-game face for mingling.

Résumé Critiquing

MONDAY, MAY 23, 9:00 AM – 10:00 AM AND 3:00 PM – 4:00 PM TUESDAY, MAY 24, 9:00 AM – 10:00 AM AND 1:00 PM – 3:00 PM WEDNESDAY, MAY 25, 9:00 AM – NOON

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.

Student and Young Professional Activities



Students and Early Career Professionals Track

The following technical sessions were assembled for students and those new to the profession:

- RT 213 Perspectives on Preparation for the CIH Exam v11.0 Monday, May 23 at 2:00 - 4:30 p.m. Rooms 321-323, BCC
- RT 227 The 7 Habits of Highly Effective Industrial Hygiene Leaders Tuesday, May 24 at 2:00 – 5:30 p.m. Rooms 318 - 320, BCC
- RT 238 Expecting the Unexpected: Incident Preparedness and Response for the Early Career Professional Wednesday, May 25 at 1:30 - 5:00 p.m. Rooms 347 - 348, BCC
- SP11 Exposure Decision Analysis Toolkit for Educators (and Students) Thursday, May 26 at 8:00 a.m. - 5:00 p.m., Calloway Room, Hilton Baltimore Hotel

First Timers Orientation Session

Sponsored by DuPont

Monday, May 23, 6:30 a.m.-7:30 a.m.

Holiday Ballroom, Hilton **Baltimore**

Is this your first time attending AlHce? If so, please join us at the First Timers Orientation Session and learn how to make your first AIHce your best experience of the year.

Student Table Topics

Monday, May 23, 12:00 p.m.-1:00 p.m. Expo Hall

Topics address issues of specific interest to young industrial hygienists or to hygienists new to the profession. Seating is firstcome, first-serve. The first 25 attendees to appear at this session will receive a discounted voucher for lunch.

- Breaking Down Barriers
- Career Paths in Industrial Hygiene
- CIH Exam 101
- Field Work and Travel for the Industrial Hygienist
- Industrial Hygiene in the Oil & Gas Industry
- Networking for the Industrial Hygienist

Mentoring Program Networking Event

Sponsored by ABIH

Hosted by the AIHA Mentoring and **Professional Development Committee**

MONDAY, MAY 23, 6:00 P.M.-8:00 P.M. Pratt Street Ale House. 206 W. Pratt Street

This invitational only event is open to all participating members of AIHA's Mentoring Program, as well as individuals interested in being a mentor or having a mentor!

To learn more about the AIHA Mentoring Program, please visit the AIHA Mentoring Booth #551 in the expo hall.

Volunteer Group Meetings

Monday, May 23 – Wednesday, May 25

Unless otherwise noted, Volunteer Group meetings are open to everyone. Over the course of three days, more than 47 volunteer groups will meet to discuss a variety of technical and non-technical topics, including many that address the specific needs of IH students and young professionals. The list of Volunteer Group meetings can be found on pages 102-104.

Student Local Sections Council Business Meeting

TUESDAY, MAY 24, 11:00 A.M. - 12:30 P.M.

Labrobe, Hilton Baltimore

Expand your network and join the conversation! This is your opportunity to meet student local section officers and members, learn about the role of student local sections, and share best practices. Anyone interested in creating a student local section is invited to attend.

26th Annual Student Poster Session

WEDNESDAY, MAY 25, 10:00 A.M.-NOON

Expo

Check out the scientific findings of your peers! Students will be on hand to discuss their research methods and results. Two posters will be selected "Best of Session."

Awards given by AIHA Volunteer Groups will be presented at 12:30 p.m. next to the student posters.

Awards and Recognition

2016 AIHA® Awards

Edward J. Baier Technical Achievement Award



This award is given to the individual or group of individuals, company, or academic institution, organization, or association that has made the most significant contribution to industrial hygiene in recent years through technical expertise, innovations, or scientific advancement. The 2016 recipient is **Susan Ripple, MS, CIH, FAIHA**. Susan has been a leading figure in ensuring that IH

professionals have access to exposure level guidance, chairing the WEEL and ERPG Committees, serving on the AIHA Guideline Value work group to transition limit setting activities within AIHA technical committee structures, and assisting in forming the WEEL Committee under the Occupational Alliance for Risk Assessment (OARS) structure as the inaugural chair of the OARS Advisory Board. Susan is respected for her technical contributions and her credibility implementing these developments in her own practice. Her passion for the field and true engagement in the mission to protect worker health is evident and inspires others.

Distinguished Service Award



This award recognizes distinguished service in the advancement of industrial hygiene, unique technical contributions to the aims and goals of AIHA®, proven leadership in the industrial/occupational hygiene profession, influence on public policy or social reform, or public and community service. The 2016 recipient is **Barbara Dawson**, **CIH**, **CSP**. Barbara, the Global Occupational

Health Competency Leader for the DuPont Company, has been a strong leader and contributor to AIHA and the profession for many years, serving AIHA as a Board Director and President, and ABIH as Director and Chair. She has also been active at the Committee level as past Chair of Gas and Vapor Detection committee and at the Delaware Local Section President, twice. She was a key AIHA participant in the NIOSH Total Worker Health Affiliate Program and is a long-time supporter of the AIH Foundation. Barbara has collaborated on a number of peer-reviewed publications in the Journal of Occupational and Environmental Hygiene and the Annals of Occupational Hygiene.

Donald E. Cummings Memorial Award



This award is bestowed upon an individual who has made outstanding contributions to the knowledge and practice of the professions of industrial hygiene and who has been acknowledged for his/her contributions outside the field of industrial hygiene. The recipient presents the Cummings Memorial Lecture at AlHce. The 2016 recipient is **Fred Boelter, CIH, PE, BCEE, FAIHA**.

Fred has nearly 40 years of experience in industrial hygiene, environmental engineering, and risk management, specifically source-pathway-receptor analysis, risk-based assessments, and exposure reconstruction. Fred is an AIHA Fellow, a former chair-

person of the AIHA Risk Assessment Committee, and a previous recipient of the Edward J. Baier Technical Achievement Award. He is a thought leader regarding the inclusion of technical innovations, scientific advancements, and interaction with other scientific disciplines into the modern practice of industrial hygiene. His level of engagement and activity has also encouraged other current and future leaders and is an important mentor to the AIHA Risk Assessment Committee; through his vision the committee and its leaders hope to continue to increase their impacts.

Kusnetz Award



This award honors 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 currently employed in the private sector; exhibits high ethical standards and technical abilities; has provided for the highest standards of health and safety protection; and shows promise of leadership in the industrial hygiene

profession. The 2016 recipient is **Shannon Gaffney, PhD, MHS, CIH.** Shannon's passion, knowledge of the profession, and impeccable listening/communication skills were instrumental in the success of the Student and Early Career Professionals Committee (SECP) as well as many other volunteer groups and projects, including the Permanent Conference Committee, Joint Industrial Hygiene Ethics and Education Committee, ABIH Role Delineation and Task Analysis Panel, and the ACGIH Board of Directors. She has authored more than 50 peer-reviewed publications on topics including asbestos, benzene, carbon monoxide, plutonium, formaldehyde, lead, beryllium, silica, and pesticides. The combination of her educational background, technical expertise, and excellent leadership abilities has enabled numerous accomplishments in her work for ChemRisk, and in her many volunteer activities within the profession.

Alice Hamilton Award



This award 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. The 2016 recipient is Mary O'Reilly,

CIH, PhD, CPE. Mary has been involved in occupational hygiene for more than 25 years has been a member of the AIHA Local Section since 1987, and an AIHA Fellow since 2008. She has worked for a variety of state and federal agencies, as well as served on the Board of Directors for Workplace Health Without Borders. Mary received the Outstanding Individual Contributor award in 2014. She has been an Adjunct Assistant Professor for several colleges and universities, is constantly in demand as a speaker and presenter, and has authored numerous publications. She has been involved with every U.S. industrial hygiene organization and has supported organizations and activities whose mission is to promote or improve worker health.

Congratulations to our 2016 Award recipients for their enduring professional dedication. All will be honored during the AIHce 2016 Mark of Excellence Breakfast on Wednesday, May 25 6:30 a.m. in the Ballroom.



Social Responsibility Award



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 issues. The 2016 recipient is Irvin Fischer, CIH, CSP, **RES**. Irvin immigrated to Israel from the United States with the intent of establishing

an Industrial Hygiene Unit in a university and medical facility. At that time, a project was being developed in Nahariya, a town on the Mediterranean in the far north of Israel, where a children's recreational park was under construction and adjacent to an asbestos cement manufacturing plant, in an area where there was significant asbestos contamination on and in the ground. By being the first CIH to move to Israel and by offering his valuable time and experience to prevent the development of a potentially hazardous situation, Irvin raised the social consciousness about the importance of expertise in public safety and industrial hygiene, directly influencing the inclusion of CIHs at the top level of Israeli government. Irvin is a role model for competent professional leadership and work in a tough environment.

Yant Award





This award is presented annually for outstanding contributions in industrial hygiene or allied fields to an individual residing outside the United States. The recipients will present the William P. Yant Award Lecture at AlHce. 2016 marks the first time that AIHA will honor two individuals. The 2016 recipients are Roger Alesbury, BA, MSc, Dip OH, CFFOH and Stephen Bailey, MSc, CSci, CChem, FRSC, CFF0H, CMIOSH. For many years, both held global responsibilities with senior management positions in multi- national corporations, Roger in the oil industry and Steve in pharmaceuticals. Both saw the need for a concerted approach from the global community in industrial hygiene, rather than one based on fragmented national or company requirements. Their vision was to have trainees

develop transferable practical skills using peer-reviewed training materials made available to everyone. Using the contacts throughout their global networks, they took an inclusive approach that complements and builds on established programs for training and qualifications, filling in the gaps to create an overarching, consistent international framework. In 2010, their vision was formalized by the formation of the Occupational Hygiene Training Association (OHTA). The core principle behind OHTA leverages IH resources in support of a common goal. In 2015, Roger and Steve negotiated a change to the governance of OHTA so it includes an IOHA representative and the Executive Directors of AIHA, BOHS, and AIOH as directors; the national IH societies now have voting rights.

President's Award

This award is presented annually 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 and honored at the President's Reception on Wednesday, May 25, during AlHce 2016.

2016 AIHA Fellow Award Winners

The 2016 AIHA Fellow Award winners will be honored during the AlHce Mark of Excellence Breakfast on Wednesday, May 25th and again at the AIHA Fellows SIG meeting, Wednesday afternoon. Members chosen to be Fellows were nominated by colleagues in the profession 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.

Smyth Award



This award is presented to an individual who has recognized the needs of the industrial hygiene profession and has made major contributions to fulfill those needs, thereby contributing to the improvement of the public welfare. The recipient will present the Smyth Award Lecture at AIHce. The 2016 recipient is Michael Ellenbecker, ScD, CIH. Michael has a distinguished

career in improving the occupational health and safety profession and public welfare. He has inspired, mentored, and taught industrial hygienists throughout his 32 years as a professor. For the past twenty-five years, first as Deputy Director and for the past eleven years as Director, Michael has led the Toxics Use Reduction Institute (TURI) at UMass Lowell. For the past ten years, working with his colleague Dr. Candace Tsai, he has pioneered the development of innovative exposure assessment methods for evaluating worker exposures to engineered nanoparticles, and the evaluation of engineering controls to limit exposure. This collaboration has culminated in an important new book, Exposure Assessment and Safety Considerations for Working with Engineered Nanoparticles, published in 2015.

2016 ACGIH® Awards



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 Stephen J. Reynolds, PhD, CIH, FAIHA. Steve is a Professor and Associate Head in the Department of Environmental and Radiological Health Scienc-

es, Colorado State University; a faculty member in the Department of Environmental and Occupational Health of the Colorado School of Public Health; Director of the High Plains Intermountain Center for Agricultural Health and Safety (HICAHS); was founding Co-Director, now Deputy Director for the Mountain and Plains Education Research Center (MAP ERC); and heads MAP ERC's Industrial

Awards and Recognition

Hygiene training program. He joined ACGIH® in 1995 and served on the ACGIH® Board of Directors (2008-2011) and as its Chair (2010), along with serving on both the Agricultural Safety and Health and Bioaerosols Committees. He has also served as Chair of AIHA's International Affairs Committee (2004-2005) and was named a Fellow of the American Industrial Hygiene Association (2010). He is board certified in Industrial Hygiene and has more than 30 years of experience in exposure assessment and occupational health.

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 Vickie L. Wells, MS, CIH, CSP. Vickie is the Director of Occupational Safety and Health for the San Francisco Department of Public Health. She has worked for the city and county of San Francisco since 1987, provid-

ing testimony for the Board of Supervisors on regulatory issues and assisting city departments in developing and implementing occupational safety and health programs and policies. She received her MS degree in Environmental Health/Industrial Hygiene from the University of Cincinnati, Kettering Laboratory. Vickie has served in leadership positions with the Board of California Hygiene Council (CIHC), the National Advisory Committee on Occupational Safety and Health (NACOSH), as well as serving on the ACGIH® Board of Directors (1999-2005) and as Chair (2004).

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 William D. Wagner. Bill completed Graduate Studies in Toxicology, Industrial Hygiene, and Occupational Health. He joined the U.S. Public Health Service, Division of Occupational Health, Toxicology

Section in 1952, and over the next 40 years served as Chief, Biological Support Branch, Chief, Document Development Branch, and Chief, Senior Review Activity for the Division of Standards Development and Technical Transfer of NIOSH. Bill has been a member of ACGIH® and TLVs® for Chemical Substances Committee. He retired in 1999, but consulted with ACGIH® on their legal defense in the early 2000's. In 2002, ACGIH® established the William D. Wagner Award, presented annually to a person in the field of national and international worker health and safety who has followed Bill's outstanding example of commitment and dedication to the creation and dissemination of OEVs.

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 who demonstrates significant contribution to the profession. This year's recipient is **Enjoli DeGrasse Parson**, MSPH, CIH. Enjoli earned an MS degree in Public Health with a specialty in Industrial Hygiene, Risk Assessment and Toxicology from Tulane University. She works with the International Brother-



hood of Teamsters (IBT), providings technical and regulatory support to rank-and-file Teamster members and others on a variety of worker safety and health issues. Enjoli is a member of ACGIH® and AIHA, serving on AIHA's Social Concerns Committee, the AIHA Minority Special Interest Group, and the AIHA Potomac Local Section. She has participated in several National Academy

of Sciences Institute of Medicine workgroups and provided input to the Institute of Medicine Board of Health Science Policy on Personal Protective Equipment for Healthcare Workers in the Workplace against Novel H1N1 Influenza A. She continues to look for ways to promote industrial hygiene by being a part of a workgroup focusing on the development of the next generation of labor safety and health activists.

Robert T. Hughes Memorial Award



This award was established in 2015 and is being presented for the first time. It recognizes outstanding individuals in the field of industrial ventilation. This year's Hughes Award recipient is Gerry A. Lanham, PE. Gerry is the Past President of KBD/Technic, Inc., a CECO Environmental Company. He has more than 46 years of experience in the design, testing, and installation of industrial

ventilation systems and is co-author of a patent for HVAC controls and a system for protection against biohazard attack. He earned a BS in Mechanical Engineering and an MBA in Advanced Business Economics. Gerry has been a member of ACGIH®'s Industrial Ventilation Committee since 1996 and is its current Chair. In addition, he has served on numerous other committees, including the American Society of Heating, Refrigeration and Air Conditioning Engineers; the American Foundry Society (10-E Committee and MACT Task Force); the Association of Energy Engineers; and the ANSI B-11 Coolant Delivery System Ventilation Standard Committee.

AIHA® Volunteer Groups

Lila Albin Award

Since 1997, the AIHA® Indoor Environmental Quality (IEQ) Committee has evaluated journal articles and would recognize one each year. The paper must: (a) be peer reviewed and published in the Journal of Occupational and Environmental Hygiene; (b) provide practical information and expand knowledge base of IEQ professionals; (c) address a critical IEQ issue; and (d) present the topic clearly and engagingly. In 2012, the award was renamed in honor of the late Lila Albin, PhD, CIH. This year's recipient will be Paloma I. Beamer, Kevin R. Plotkin, Charles P. Gerba, Laura Y. Sifuentes, David W. Koenig, and Kelly A. Reynolds for "Modeling of Human Viruses on Hands and Risk of Infection in an Office Workplace Using Micro-Activity Data," in the Journal of Occupational and Environmental Hygiene, 12:4, 266-275.

Larry and Ruth Birkner Award

The Birkner Award is given to David E. Downs, CIH, CSP, QEP, CPEA 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 industrial hygiene management and will be presented at the annual Management Committee meeting.

Rachel Carson Award

AIHA® Environmental Issues Committee bestows this highest honor to Joan Plisko, Ph.D. in recognition of her environmental advocacy in the spirit of Rachel Carson. This award is bestowed upon an environmental health and safety (EH&S) professional who has attained outstanding success and distinction in their environmental and industrial health and safety business, profession, or life's work.

Chaffin Award

The AIHA® Ergonomics Committee presents the Chaffin Award to Carisa Harris-Adamson for her Best Ergonomic Related Podium Presentation, Physical Workplace Factors Associated with Carpal Tunnel Syndrome: A Pooled Prospective Study, and to Cathy White for her Best Roundtable Presentation, Building a Proactive Ergonomics Strategy. The award, established in 2008, honors Dr. Donald B. Chaffin's many contributions to the field of ergonomics and to AIHA®. The award was established to recognize excellence in the field of ergonomics and encourage conference participation.

Rochelle Crew Memorial Award

This award is given by the AIHA® Construction Committee to honor the memory of Rochelle Crew, a former member of the committee and long-time construction safety PDC instructor. The award is given to the best construction-related paper, presentation, or PDC presentation at the previous year's AIHce. This year's award goes to Mason Knowles for Contractor's Perspective on SPF Misapplication.

H. Kenneth Dillon Memorial Award

This award is presented by the AIHA® Biosafety and Environmental Microbiology Committee to honor the memory of Dr. Ken Dillon, a former AIHA® fellow and the principal instructor for several years of the popular PDC, Prevention, Determination, and Remediation of Biological Contamination in Indoor Environments. The award is given to the best student poster presented at AlHce on biosafety or microbiology.

Donna Doganiero Award

The AIHA® Safety Committee presents Jonathan Klane, M.S.Ed., CIH, CSP, CHMM with the Best Safety Related Crossover Session Award for his AIHce presentation, Safety Training Games: Let's Play! The Safety Committee bestows this award in the name of Ms. Donna Doganiero, a truly outstanding individual, to recognize her achievements and vision in continuing to move the field of industrial safety and hygiene forward.

The Golden Seed Award

The AIHA® 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 Mark of Excellence Breakfast to Dianna H. Bryant, CIH, CSP.

John A. Leonowich Award for Educational **Excellence in Nonionizing Radiation**

The John A. Leonowich Award is presented to Jeff Bajema of Illinois State University to honor his educational excellence in nonionizing radiation and pursuit of NIR initiatives through research or education. This award is bestowed upon a student who is actively pursuing NIR initiatives through research or education. The award recognizes the achievements made by current students in advancing both theirs and the professions understanding of nonionizing radiation.

Margaret Samways Memorial Student Poster Award

This award honors the memory of Margaret Samways, past Chair and long-time member of the AIHA® Communication and Training Methods Committee. The award will be presented on Wednesday at the Student Poster and Awards Ceremony.

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 the previous year in the Journal of Occupational and Environmental Hygiene are reviewed by the AIHA® Aerosol Technology Committee. This year's award is presented to Nicole Neubauer and Gerhard Kasper, for their paper, "Detection of Airborne Carbon Nanotubes Based on the Reactivity of the Embedded Catalyst" in the Journal of Occupational and Environmental Hygiene, 12:182-188 (2015).

Upton Sinclair Memorial Lecture

The Upton Sinclair Memorial Lecture on EHS Investigative Reporting is hosted by the AIHA® Social Concerns Committee. Journalist Sarah Maslin Nir will discuss her expose, Unvarnished: Behind the Story that Revealed the True, Human Cost of Those Nice Nails on Tuesday, May 24.

John M. White Award

The John M. White Award was established by the AIHA® Respiratory Protection Committee to encourage scientific and application-oriented research in respiratory protection. This year's award goes to Shuang Gao, Jinyong Kim, Michael Yermakov, Yousef Elmashae, Xinjian He, Tiina Reponen & Sergey A. Grinshpun for their paper Penetration of Combustion Aerosol Particles Through Filters of NIOSH-Certified Filtering Facepiece Respirators (FFRs), Journal of Occupational and Environmental Hygiene, 12:10, 678-685 (2015)

2015 AIHA® Bestseller

This award is presented to the editors of the publication that sold the most copies during the year. The 2015 Bestseller is presented to Steven D. Jahn, William H. Bullock, and Joselito **S. Ignacio**, the editors of *A Strategy for Assessing and Managing* Occupational Exposures, 4th edition. From June to December of 2015, AIHA® sold 462 copies of this publication. This award will be presented at the Mark of Excellence Breakfast.

Awards and Recognition

2015 Critics' Choice Award

This award honors a publication completed in 2015 and evaluated by members of the AIHA® Publications Committee. The committee selected this publication based on its impact on the profession, originality, and the quality of writing. This year's recipients William Kerbel, J. David Krause, Brian G. Shelton, and John P. Springston, the editors of Recognition, Evaluation, and Control of Legionella in Building Water Systems. This award will be presented at the Mark of Excellence Breakfast.

2015 Breakout Bestseller Award

This award is presented to the editors of a publication completed in 2015 that was newly added to the AIHA® Bestseller list. The recipients this year are **William Kerbel, J. David Krause, Brian G. Shelton,** and **John P. Springston**, the editors of *Recognition, Evaluation, and Control of Legionella in Building Water Systems*. This award will be presented at the Mark of Excellence Breakfast.

AIHA Local Section Awards

Michigan Industrial Hygiene Society Best Paper Award

The Michigan Industrial Hygiene Society Best Paper Award was established by MIHS in 1957 for recognition of an outstanding publication in the American Industrial Hygiene Association Journal. In 1989, the MIHS Board of Directors voted to also recognize the authors of the best paper in applied industrial hygiene from the Applied Occupational and Environmental Hygiene Journal. Both journals combined in 2004 to form the current Journal of Occupational and Environmental Hygiene. MIHS continues to present a Best Paper Award each year to the authors of the outstanding article selected from this journal. This year's winner will be recognized at Wednesday's Mark of Excellence Breakfast.

ABİH Recognition for Your Great Achievements...



John Henshaw, CIH Lifetime Achievement Award



Carter Ficklen, CIH Impact Award

This year, the American Board of Industrial Hygiene® (ABIH®) will recognize the professional accomplishments of two outstanding Certified Industrial Hygienists® by presenting them with the Lynn C. O'Donnell Lifetime Achievement Award, the highest honor given by ABIH for exemplary contributions to the practice of occupational and environmental hygiene culminating over a lifetime of work, and the ABIH Impact Award, given for making a major contribution to the practice of occupational and environmental hygiene.

Please join us for the ABIH Forum on Monday, May 23rd from 2:00 to 3:30 PM at the AIHce meeting in Baltimore, MD where we will celebrate and thank these remarkable professionals, and be sure to visit the ABIH booth at the AIHce Expo.



Request your free consultation on how to begin your own journey to success by becoming a Certified Industrial Hygienist®.

Contact us at (517) 321-2638 or abih@abih.org

As the premier credentialing organization for Industrial Hygiene (Occupational- and Environmental-Health and Safety), the American Board of Industrial Hygiene® serves its credentialed practitioners by establishing and administering a valid, reliable, and rigorous credentialing process to protect the public and meet the needs of employers.



Real-time Personal Wearable Particle SENSOR

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- Dual display particle counts and mass concentration
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Friday/Saturday At-a-Glance

Friday, May 20

AIHA

3:00 PM - 5:00 PM

Speaker Ready Room, Room 330

5:00 PM - 7:00 PM

Registration, Pratt Street Lobby

Saturday, May 21

7:00 AM - 7:30 AM

Monitor Meeting for Saturday PDCs, Room 330

7:00 AM - 5:30 PM

- Registration, Pratt Street Lobby
- Speaker Ready Room, Room 330

8:00 AM - Noon

- PDC 201 Effective Occupational Safety and Health Leadership, Room 322
- PDC 202 Job Hazard Analysis, Room 323

8:00 AM - 5:00 PM

- PDC 101 Managing Radiation Safety Programs for Industrial Hygienists, Room 318
- PDC 102 Welding: Identifying Exposures and Controls, Room 328

PDC 103 - Global Hazard Communication - the GHS. *Room 329*

- PDC 104 Global Occupational Health Concerns in Developing Countries: A Partner for Social Justice, *Room 337*
- PDC 105 Asbestos and Other Fibrous Materials: Risk Assessment, Characterization, Communication. Room 338
- PDC 106 Exposure Judgment: Improving Inhalation Assessments, *Room 343*
- PDC 107 Evaluating Data Quality for Exposure Assessment, *Room 341*
- PDC 108 Legionella and Other Waterborne Pathogens: Recognition, Evaluation, and Control, Room 342
- PDC 109 Understanding and Using ANSI/AIHA/ ASSE Z9.2-2012 Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems, Room 345
- PDC 110 Combustible Dust Hazards, Prevention, and Mitigation Practices, Room 346
- PDC 111 Noise Exposure Assessment:
 Sampling Strategy and Data Acquisition, Room 344

- PDC 112 Theory and Application of the 4 Gas/ PID Sensor Technologies, *Room 349*
- PDC 113 The Worst Plant: A Virtual H&S Audit, Room 350
- PDC 114 Allergens in the Workplace: Strategies for Prevention of Occupational Allergy and Asthma, Room 319
- PDC 115 If I'm Teaching, Why Aren't They Learning?!, Room 347
- PDC 702 Exposure Assessment Strategy for Managing Occupational Exposures, Room 336
- PDC 703 Creation, Measurement, and Communication of EHS Business Value. *Room 339*
- PDC 704 OHS Management System Auditor, Room 348

Noon - 1:00 PM

PDC Lunches. Room 316

1:00 PM - 5:00 PM

- PDC 301 Smart Devices and the EHS Professional, Room 322
- PDC 302 Selection and Use of Chemical Protective Clothing, Room 323

Events take place at the Baltimore Convention Center unless otherwise noted.



Education Tracks Key



THOUGHT LEADER TRACK

The Thought Leader track is a comprehensive selection of sessions that spotlight important ideas, knowledge, and skills essential for tomorrow's IH thought leaders.



LABORATORY TESTING TRACK

The Laboratory Testing Track is a selection of technical courses and sessions developed for laboratory personnel and persons interested in improving their knowledge of laboratory testing, sampling, and analysis.

Sunday At-a-Glance

Sunday, May 22

AIHA

7:00 AM - 7:30 AM

Monitor Meeting for Saturday PDCs, Room 330

7:00 AM - 5:30 PM

Speaker Ready Room, Room 330

7:00 AM - 7:30 PM

• Registration, Pratt Street Lobby

8:00 AM - 12:00 PM

- PDC 501 Introduction to LASER Safety, Room 322
- PDC 502 Transformational Leadership: The Key to H&S Excellence, *Room 350*
- PDC 503 Nanotechnology: Old Theories and New Concepts, Room 342

8:00 AM - 4:30 PM

• AIHA Board Meeting, Hilton, Paca

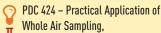
8:00 AM - 5:00 PM

- PDC 401 Bayesian Statistics: Applications in IH Data Interpretation, Hilton, Holiday Ballroom 3
- PDC 402 Strengthening EHS Leadership and Teamwork, Room 318
- PDC 403 Noise Control Engineering, Room 343
- PDC 404 Skin Exposure and Biological Monitoring of Chemicals, *Room 320*
- PDC 406 Hygienists and Hospital Construction: Design to Commissioning, Room 344
- PDC 407 Fall Protection: You Can't Beat Gravity, Room 321
- PDC 408 Building a Successful Consulting Practice, Room 345
- PDC 409 Occupational Exposure Banding in the Workplace (Including Emergency Response Applications), *Room 323*
- PDC 410 How to Integrate Wellness with OEHS, Room 324
- PDC 411 Ergonomics Toolkit: In-Depth Assessment Tools, Room 325
- PDC 412 Advanced Topics: Healthcare Construction and Infection Prevention, Room 326
- PDC 413 Assessing Inhalation Hazards During an Emergency Response, Hilton, Holiday Ballroom 4

PDC 414 – Enhancing the Role of EH&S in Specification, Design, Construction, and Management of Laboratory Hood Ventilation Systems,

Room 319

- PDC 415 Providing Expert Witness Testimony, Hilton, Holiday Ballroom 1
- PDC 416 Designing OHS Roles/Responsibilities with Management Systems, Hilton, Holiday Ballroom 2
- PDC 417 Hearing Protection, Communication, and Hearing Loss Prevention, Room 346
- PDC 419 Methods and Applications for Chemical Detection in Real Time, Hilton, Johnson
- PDC 420 Naturally Occurring Asbestos from A to Z: A Comprehensive Assessment, Hilton, Peale A/B
- PDC 421 The Hierarchy of Occupational Exposure Limits (OELs), *Room 337*
- PDC 422 Introduction to Human Health Risk Assessment, Room 338
- PDC 423 Safe Use of Isocyanates—Industrial Hygiene Approach, *Room 347*



A Hilton, Calloway

- PDC 426 The Proposed OSHA Beryllium Standard: What You Need to Know, *Room 341*
- PDC 702 Exposure Assessment Strategy for Managing Occupational Exposures, Room 336
- PDC 703 Creation, Measurement, and Communication of EHS Business Value, *Room 339*
- PDC 704 OHS Management System Auditor, Room 348

8:30 AM - 4:30 PM

 Analytical Accreditation Board Meeting, Hilton, Johnson

Noon - 1:00 PM

• PDC Lunches, Room 316

12:00 PM - 5:00 PM

Fun Run Registration, Registration, Pratt Street Lobby

1:00 PM - 5:00 PM

- PDC 601 How to Assess and Manage Nanomaterial Risks, Room 322
- PDC 603 What's New in Vapor Intrusion Investigations, Room 342

5:00 PM - 6:00 PM

Biosafety and Environmental Microbiology Committee, Hilton, Tilghman

5:00 PM - 7:00 PM

- Academic Accreditation Committee, Hilton, Douglass
- Exposure Assessment Strategies Committee, Hilton, Ruth
- Healthcare Working Group, Hilton, Latrobe

6:00 PM - 7:00 PM

Biological Monitoring Committee, Hilton, Marshall

7:00 PM - 9:00 PM

 AlHce Social sponsored by Chemwatch, Hilton, Key Ballroom



ACGIH

8:00 AM - 4:00 PM

ACGIH® Board of Directors Meeting (by invitation only), Hilton, Brent

5:30 PM - 7:00 PM

 ACGIH® Membership Reception and Annual Meeting of the Membership, Hilton, Tubman

AIHF

6:00 PM - 7:30 PM

 AIHF Donor Reception (by invitation only), Dempsey's Brew Pub & Restaurant 333 W Camden St Ste 1, Baltimore, MD 21201

JOEH

5:00 PM - 7:00 PM

JOEH Editorial Review Board Meeting (by invitation only), Hilton, Carroll

Ancillary

5:00 PM - 7:00 PM

 International Safety Systems, Inc. (ISS) Forum and Reception (by invitation only), Hilton, Holiday Ballroom 5

Events take place at the Baltimore Convention Center unless otherwise noted.

Monday At-a-Glance

Monday, May 23 AIHA

6:30 AM - 7:30 AM

 State of Affairs — Volunteer Breakfast (by invitation only), Hilton, Key Ballroom 9

7:00 AM - 5:30 PM

• Registration, Pratt Street Lobby

7:30 AM - 5:30 PM

Speaker Ready Room, Room 330

8:00 AM - 9:30 AM

Opening General Session



The Right Kind of Crazy: A True Story of Teamwork, Leadership and High Stakes Innovation

Adam Steltzner, Lead Landing Engineer of NASA's Mars Science Laboratory Curiosity Rover Project, Ballroom

8:00 AM - 5:00 PM

• Fun Run Registration, Registration, Pratt Street Lobby

9:00 AM - 5:30 PM

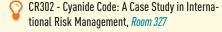
Expo Hall Open with Poster Sessions

Passport to Prizes, Lounges, Expo Learning Pavilions, The Game of Life, Special Displays, Consessions, Exhibit Halls E, F, and Swing

- PS 401 Authors Present 10:00 AM Noon
- PS 402 Authors Present 2:00 PM 4:00 PM

10:30 AM - 11:30 AM

 CR301 - An Industrial Hygienist's Guide to Managing Hazardous Waste, Room 347/348



 CR303 - The Confined Space Inventory: Critical Safety Information for Your Facilities, Room 349/350

- EASC Dermal Team. Hilton, Marshall
- Engineering Industry Special Interest Group, Hilton, Douglass

10:30 AM - 12:30 PM

- P0101 Assessments of Residential and Workplace Environmental Microbiology Exposure, Room 318/319/320
- P0102 Emerging Issues and Lessons Learned in the Oil and Gas Industry, Room 337/338
- P0103 Risk Assessment Science, Room 321/322/323
- RT201 Big Legal and Business Issues in the Small World of Nanotechnology, Room 339/340
- RT202 Case Studies in IH Data Systems, Exposure Risk Assessment and Management, Room 314/315
- RT203 Environmental Due Diligence for Mergers & Acquisitions, Room 341/342
- RT204 International IH Ethics Debate, *Room 316/317*
- RT205 Fatigue and Shiftwork: Why is Everyone So Tired 24/7?, Room 324/325/326
- RT206 Pallet Rack Safety: Part Deux, Room 343/344
- Environmental Issues Committee, Hilton, Ruth
- Real Time Detection Systems Committee, Hilton, Johnson A
- Social Concerns Committee, Hilton, Latrobe

10:30 AM - 12:50 PM

P0104 - Laboratory and Healthcare Issues: Ventilation, Drug Exposures, Dust Control, Microbial Contamination, and Radiation, *Room 345/346*

11:00 AM - Noon

 IL01 - Ask the Expert with Adam Steltzner, Room 336

11:30 AM - 12:30 PM

 Occupational and Environmental Medicine Committee, Hilton, Peale C

12:00 PM - 1:00 PM

 IL02 - Student and Early Career Professionals Table Topics, Exhibit Hall E

12:30 PM - 1:30 PM

- SP02 Jeffrey S. Lee Award Lecture, Exhibit Hall E
- Fall Conference Planning Team Luncheon (by invitation only), Hilton, Stone

1:00 PM - 3:00 PM

AIHA Finance Committee, Hilton, Calloway

1:00 PM - 6:00 PM

SDS & Label Authoring Registry Exam, Hilton, Chase

2:00 PM - 2:30 PM

AIHA Government Affairs Update, Hilton, Mencken

2:00 PM - 3:00 PM

- CR304 It's Age Related: Occupational Health and Safety Issues, Challenges and Solutions, Room 349/350
- SP14 Henry F. Smyth, Jr. Award Lecture: The Challenge of Setting Occupational Exposure Limits for Engineered Nanomaterials, *Room 347/348*

2:00 PM - 3:30 PM

- IL03 Unsolved IH Mysteries Workshop SOLD OUT, Hilton, Poe
- SP16 ABIH Forum, Hilton, Holiday Ballroom 1
- Incident Preparedness and Response Working Group, Hilton, Ruth

2:00 PM - 4:00PM

- SP18 IH Business Cases: Examples, Lessons Learned, *Hilton, Holiday Ballroom 2*
- PS 402 Authors Present, Exhibit Hall E
- Communication and Training Methods Committee, Hilton, Peale C
- Confined Spaces Committee, Hilton, Peale B
- Continuing Education Committee Meeting, Hilton, Tubman B
- Entrepreneur Special Interest Group, Hilton, Peale A
- International Affairs Committee, *Hilton, Key Ballroom 7*
- Minority Special Interest Group, Hilton, Johnson B
- Protective Clothing and Equipment Committee, Hilton, Blake
- Risk Assessment Committee, Hilton, Latrobe

2:00 PM - 4:20 PM

P0105 - Communicating and Training with Confidence, Room 337/338

2:00 PM - 4:30 PM

 RT207- Electronic Cigarette Risks, Emissions, and Controls, Room 316/317

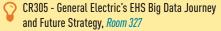
RT208 - IH/OH and the Future of University Curricula. *Room 336*

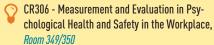
- RT209 Laboratory Design, Construction, and Commissioning: Role of IH, Challenges, and Lessons Learned, Room 339/340
- RT210 Lead Standard—Changes and Challenges, Room 318/319/320
- RT211 Occupational Exposure to Beryllium: Regulatory Activity and an Update on Research on Exposure, Dose and Epidemiology Results, Room 314/315
- RT212 OEHS Management Leadership Skills for the 21st Century, Room 324/325/326
- RT213 Perspectives on Preparation for the CIH Exam v11.0, Room 321/322/323
- RT214 Risk Assessment and Industrial Hygiene Solutions for Semiconductor Industry, Room 341/342
- RT215 The Dangers of Low-Bid Contracting, Room 343/344
- Legal Issues Committee, Hilton, Key Ballroom 9

2:00 PM - 5:00 PM

- P0106 Evaluation of Occupational, Community and Recreational Noise Exposures, Room 345/346
- RT216 Women Leaders in the Occupational Safety and Health Movement, Hilton, Holiday Ballroom 3

3:30 PM - 4:30 PM





4:00 PM - 5:30 PM

Expo Hall Networking Reception



NETWORKING

5:00 PM - 6:00PM

 The Vision of OSH Development in China & the US Over the Next 5 Years - VIP Forum (by invitation only), Hilton, B Holiday Jr BR 1

5:30 PM - 7:00PM

 Mentoring Networking Event (by invitation only), Pratt Street Ale House, 206 W Pratt St, Baltimore, MD 21201

6:00 PM - 8:00 PM

- Ergonomics Committee, Hilton, Tubman
- Laboratory Health and Safety Committee, Hilton, Carroll

6:00 PM - 8:30 PM

• Respiratory Protection Committee, Hilton, Paca

6:30 PM - 8:00 PM

 International Reception (by invitation only), Hilton, Holiday Ballroom 4

ACGIH

10:30 AM - 12:00 PM

FOHS Board of Trustees Meeting (by invitation only), Room 313

AIHF

11:00 AM - 1:00 PM

Guideline Foundation, Hilton, Tubman A

Ancillary

11:00 AM - 12:00 PM

• OHTA Annual General Meeting, Hilton, Paca

5:30 PM - 9:30 PM

 DOE and DOE Contractors Industrial Hygiene Meeting, Hilton, Ballroom 12

6:00 PM - 7:30 PM

 University of Minnesota School of Public Health Alumni Reception, Luna Del Sol, 300 W. Pratt Street, Baltimore, MD 21201

6:00 PM - 8:00 PM

• Harvard Alumni Reception, Hilton, Johnson A

6:00 PM - 9:30 PM

 EMSL Client Appreciation Reception (by invitation only), visit EMSL Analytical, Inc. at Booth 1001

6:30 PM - 8:00 PM

 Johns Hopkins University Reception, Hvatt. Harborview

Where do we meet? There are 10 different discussion topics, taking place on Monday, May 23 from 6:00-7:00 p.m. at the following locations:

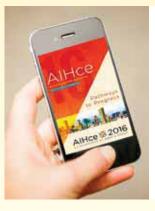
NEW! Cocktails and Conversations

Often people come to AIHce and wish they had an opportunity to connect with others who

share a common interest in a particular topic. Cocktails and Conversation gives people

a place and a purpose to gather, meet each other, and talk about a topic or subject of interest. We give you a time and place where you can meet for drinks (cash bar) and

Topic	Hotel	Location
Toxicology	Holiday Inn	Eden West Bar
Risk Management	Royal Sonesta	Explorers on level 2
Occupational Exposure Limits	Hyatt Regency	Bistro 300 bar on Level 3
IEQ/IAQ	Lord Baltimore	Lobby Bar
Personal Protective Equipment	Days Inn	Restaurant Bar
Sampling & Analysis	Renaissance Harborplace	Watertable Bar, level 5
Engineering Controls & Ventilation	Baltimore Harbor Hotel	Balto Tavern, lobby level
Exposure Assessment	Hilton	Lobby Bar
Prevention Through Design	Hilton	Diamond Tavern back bar
Risk Assessment	Marriott Inner Harbor	Lobby Bar
, ,		+



Full session descriptions on the AIHce Mobile App.

Monday, May 23

Technical Sessions



Opening General Session

8:00 A.M.-9:30 A.M. BALLROOM

The Right Kind of Crazy: A True Story of Teamwork, Leadership and High Stakes Innovation

Presenter: Adam Steltzner, Lead Landing Engineer of NASA's Mars Science Laboratory Curiosity Rover Project

With a rich and varied background, Adam Steltzner had many of the needed skills to lead the landing team for the Curiosity rover. He and his team had to design, build, and fly the systems that, at 50 miles above Mars, slowed the one-ton rover from a speed of nearly 15,000 miles per hour and deliver it safely to the planet's surface. His team would struggle for almost a decade with design challenges and setbacks. How did he keep the team focused and on task? What makes a team gel and enables truly innovative thinking? How do team dynamics drive the process forward or inhibit it? And how can organizational culture create an environment for sustained performance? The challenges he and the team faced and the lessons learned from those struggles can help IH/OH professionals understand how to better lead their own high performing teams, manage innovation and drive towards excellence.

CR301

An Industrial Hygienist's Guide to Managing Hazardous Waste

10:30 AM - 11:30 AM 347/348

Presenter: M. Manna, PPG Industries, Inc., Springdale, PA.

This presentation will review the federal requirements for managing hazardous waste from an Industrial Hygienist's perspective and experience. A large focus of the program will deal with the requirements around large quantity generators of hazardous waste and managing bulk waste tanks, air emissions monitoring for leak detection and repair and an overview of the EPA's recent enforcement activity.

CR302

Cyanide Code: A Case Study in International Risk Management 10:30 AM - 11:30 AM 327

Presenter: L. Renton, BluMetric Environmental Inc., Ottawa, ON, Canada.

The Cyanide Code was developed for gold mining operations to address production, transport, storage, and use of cyanide and the decommissioning of cyanide facilities. Using the nine principles of the "Code", this session provides the pathway for "cradle-to-grave" use of cyanide in gold mining with practical experiences and stories from an approved ICMI (International Cyanide Management Institute) auditor.

CR303

The Confined Space Inventory: Critical Safety Information for Your Facilities

10:30 AM - 11:30 AM

349/350

Presenter: D. Kudlinski, Arcadis, Irvine, CA.

Confined spaces present a major potential health and safety hazard. OSHA requires the employer to conduct a confined space evaluation (inventory) at the workplace in order to decide whether the confined space is a confined space with no additional hazards or a "permit-required confined space" with numerous regulatory requirements and increased hazards and risks. Mr. Kudlinski will go through a typical inventory exercise. New OSHA regulations and ANSI standards will be highlighted.

PO101

Assessments of Residential and Workplace Environmental Microbiology Exposure

10:30 AM - 12:30 PM 318/319/320

Arranger: K. Ong, Saint Louis University, Saint Louis, MO. Moderator: M. Nonnenmann, Occupational and Environmental Health, University of Iowa, Iowa City, IA. Monitors: P. Hauck, Wantagh, NY; R. Saito, University of Texas Health Science Center at Tyler, Tyler, TX.

10:30 AM - 10:50 AM

Exposure of Residential Occupants to In-Home Sewage. H. Burge, EMLab PK, San Bruno, CA.

10:50 AM - 11:10 AM

Airborne Mycobacterium Tuberculosis Profiles in a Hospital with a Nosocomial TB Outbreak. S. Luo, Public Health, Kaohsiung Medical University, Kaohsiung, Taiwan.

11:10 AM - 11:30 AM

Inspection of Building Water Systems for Legionella Control. L. Nguyen Weekes, InAIR Environmental Ltd., Ottawa, ON, Canada.

11:30 AM - 11:50 AM

2015 Bronx Legionellosis Outbreak: A Consultant's Perspective. C. Cooper, Air Quality Science, VERTEX Companies, Kingston, NY; M. Zouak, Airtek Environmental Corp, Long Island City, NY.

11:50 AM - 12:10 PM

Survey for Exposure to Human Pathogens from Pigeon Droppings in a Petroleum Refinery. P. Owens, Shell Oil Company, Martinez, CA.

12:10 PM - 12:30 PM

A Count-Based Method for Improved Quality Control Acceptance Limits of EMLAP Air Direct Fields of Testing. M. Saleh, Sporometrics, Toronto, ON, Canada.





Exhibitor Product Demos and Presentations

9:30 A.M. – 2:00 P.M., EXPO LEARNING PAVILIONS 1 & 2, EXPO HALL

9:30 A.M. - 10:00 A.M.

NIOSH and AIHA present Safety Matters: A Safety & Health **Training for Young Workers**

Expo Learning Pavilion 2



This interactive presentation highlights Safety Matters, a one hour interactive module providing an overview of foundational, workplace safety and health knowledge and skills. During this presentation each section of Safety Matters will be discussed and tips on its use in schools and community-based settings will be presented.

9:30 A.M. - 10:00 A.M.

The Power of the SGS Galson **Bundle**

SGS Galson

Expo Learning Pavilion 1

SGS

Ronald McMahan, Business Development Manager of SGS Galson, presents on leading industrial hygiene laboratories' expanding capabilities — touching on the future of lab interface technologies, evolution of industry and applicationspecific testing kits, and the power of using a single and trusted partner for all ones' sampling needs.

10:10 A.M. - 10:40 A.M.

Vapor Shield Military-Grade Anti-Fog Technology

Edge Eyewear Expo Learning Pavilion 1



Most situations can be handled with standard anti-fog lenses, but for extreme environments Edge® Eyewear developed a revolutionary, military-grade anti-fog technology called Vapor Shield. Whether exposed to hot, cold, or humid conditions, it is completely resistant to fog.

12:30 P.M. - 1:30 P.M.

Jeffrey S. Lee Lecture — From ACGIH® to ATSDR: Protecting Workers and the Public

Expo Learning Pavilion 1



Lecturer: Patrick N. Breysse, PhD, CIH, Director of the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (NCEH/ATSDR)

For over 30 years, Dr. Breysse worked as an occupational and environmental health professional, serving as a teacher, researcher, consultant, and member of ACGIH® leadership. He is now the director of the CDC's National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (ATSDR). ATSDR was created in 1985 as a federal public health agency under the Department of Health and Human Services. Both ACGIH® and ATSDR play vital roles in protecting the health and safety of workers and members of the public by developing and publishing exposure guidelines that properly trained professionals use to make critical decisions about chemical exposures. ACGIH® publishes TLVs®, which are the chemical levels a worker can be exposed to day after day without adverse health effects. During his tenure on the ACGIH® Board of Directors, Dr. Breysse served as Board representative to the Threshold Limit Values for Chemical Substances (TLV®-CS) Committee during a period of time when the TLVs® were challenged in a number of lawsuits. Similarly, ATSDR publishes Minimal Risk Levels (MRLs), which are the level of daily exposure to hazardous substances likely to be without appreciable risk.

With the advent of the 75th anniversary of the establishment of the TLV®-CS Committee, Dr. Breysse will draw on his experience at ACGIH® and ATSDR to explore the similar roles TLVs® and MRLs play in protecting workers and members of the public.

12:30 P.M. - 1:00 P.M.

Gasmet Presents the Model **DX4040 Portable FTIR Gas Analyzer**

Gasmet Technologies **Expo Learning Pavilion 2**



The Model DX4040 portable FTIR gas analyzer can identify "unknown" gases within minutes of arriving at site by searching the NIST/EPA® reference library of over 5,000 gases. Measuring 25 gases simultaneously at sub-ppm levels, the DX4040 is also a cost-effective solution for performing workplace exposure assessments.

1:40 P.M. - 2:10 P.M.

Breakthroughs in Benzene Monitoring

Honeywell Industrial Safety **Expo Learning Pavilion 1**

Honeywell

RAE Systems offers a suite of benzene specific monitoring tools, including the newly released MultiRAE Benzene, a multi-gas plus benzene specific monitor. This presentation will discuss how the right person using the right tool can streamline operations, saving time and money.

1:40 P.M. - 2:10 P.M.

Stop the Mess - Pumps and EHS - Using Engineering Controls for **Chemical Safety**

GoatThroat Pumps Expo Learning Pavilion 2



Learn about point-of-use chemical transfer systems which meet new NFPA30 standards, the value of informed equipment selection vs the hazards of using the wrong equipment, including OSHA's mandate to use engineering workplace controls as the preferred way to minimize worker exposure to hazardous materials and to minimize repetitive motion injuries.

Technical Sessions MONDAY, MAY 23

PO102

Emerging Issues and Lessons Learned in the Oil and Gas **Industry**

10:30 AM - 12:30 PM

337/338

Arranger: M. Hayden, US Navy, Seabeck, WA. Moderator: P. Pirkle, Battelle, Atlanta, GA. Monitors: P. Harnett, COEH, Inc., Ringoes, NJ; J. Crittell, The Woodlands, TX.

10:30 AM - 10:50 AM

Industrial Hygiene Monitoring Strategy for Unconventional Gas Drilling Sites in Texas and Pennsylvania Using the **GGP-U Sampler.** L. Anderson and Y. Zagagi, Golder Associates Inc., Jacksonville, FL; J. Leamont, M. Sanchez, and T. Meijster, Shell Oil Company, Houston, TX.

10:50 AM - 11:10 AM

Impacts to Your DOT-111 Rail Tank Car Fleet. B. Dawson, HSSE, Shell Chemical LP, Houston, TX.

11:10 AM - 11:30 AM

The Effects of Overtime Among Rotating Shiftworkers in the Oil Industry. K. McNamara and W. Robbins, Env Health Sciences, UCLA, Santa Monica, CA.

11:30 AM - 11:50 AM

Analyzing Exposure Data from a Global Dataset. M. Shin, ExxonMobil Biomedical Sciences, Annandale, NJ.

11:50 AM - 12:10 PM

Reducing The Generation of Respirable Crystalline Silica During Hydraulic Fracturing Activities When Using Treated Proppant Sand. M. Navea, Corporate Director - EHS, Preferred Sands, Radnor, PA

12:10 PM - 12:30 PM

Assessment of N.O.R.M in Crude Oil **Process Equipment During Turnaround** Activities. J. Pierreroy, Health, Environment & Safety, Chevron Canada Limited, Delta, BC, Canada. (WITHDRAWN) Heat Stress Management for Heater Hot Spot Repair. L. Yong, ExxonMobil Asia Pacific Pte Ltd, Singapore, Singapore. (WITHDRAWN)

PO103

Risk Assessment Science 10:30 AM - 12:30 PM 321/322/323

Arranger: C. Redinger, Redinger 360, Inc., Harvard, MA. Moderator: A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO. Monitor: J. Persky, Chicago, IL.

10:30 AM - 10:50 AM

Benzene Exposures and Risk Potential for Vehicle Mechanics. P. Williams, E Risk Sciences, LLP, Boulder, CO.

10:50 AM - 11:10 AM

Give 'Em a Break: Getting Aggressive with Understanding Brakes. F. Boelter, RHP Risk Management Inc., Boise, ID; J. Persky, RHP Risk Management Inc., Chicago, IL.

11:10 AM - 11:30 AM

Benchmark Dose Modeling for Respiratory Irritation from 2,3-Pentanedione Exposure. W. Cyrs, D. Dussex, A. Monnot, and M. Glynn, Cardno ChemRisk, San Francisco, CA.

11:30 AM - 11:50 AM

Anthophyllite Asbestos: State of the Art Understanding of Its Toxicological Properties. S. Gaffney, B. Simmons, M. Grespin, L. Garnick, and D. Paustenbach, Cardno ChemRisk, San Francisco, CA; A. Gauthier, Johns Hopkins University, Baltimore, MD.

11:50 AM - 12:10 PM

Ebola and PPE: Developing a Protection Strategy. P. Lilley, US Army, Aberdeen Proving Ground, MD.

12:10 PM - 12:30 PM

The Fluidized Bed Asbestos Segregator (FBAS) as a Risk Assessment Tool for Asbestos in Soil. E. Cahill, EMSL Analytical, Cinnaminson, NJ.

RT201

Big Legal and Business Issues in the Small World of Nanotechnology

10:30 AM - 12:30 PM 339/340

Arranger: D. Dahlstrom, New Era Sciences, LLC, Issaquah, WA. Moderator: D. Dahlstrom, New Era Sciences, LLC, Issaquah, WA. Monitors: W. Collier, Bill Collier & Associates, Mariposa, CA; P. Webb, Colden Corporation, Worcester, MA.

The design, manufacture, distribution, sale and use of engineered nanomaterials (ENM) and products, has far out-paced the progress of product safety and environmental/occupational safety assessment, nanomaterial regulation, and creation of industry-consensus standards. Speakers will highlight legal, business and insurance issues with a view toward practical advice on risk mitigation strategies.

- Legal Risks Associated with Potentially Unsafe Nanomaterials Must be Contemplated by Responsible Parties. W. Rogers, Prince, Lobel & Tye, LLP, Boston, WA.
- The Current Status for Insurance Coverage for Nanotechnology under Various Lines of Liability Coverage. J. Sano, Prince, Lobel & Tye, LLP, Boston, MA; M. Silvestri, CNA Insurance, Boston, MA.

- The Use of Epidemiologic and Biometric Approaches to ENM Worker Risk Mitigation. M. Barrie, Oak Ridge Affiliated Universities, Oak Ridge, TN.
- Sustainable Risk Management of Engineered Nanomaterials in the Workplace. B. Lippy, The Center for Construction Research and Training, Silver

RT202 💟

Case Studies in IH Data Systems, **Exposure Risk Assessment and** Management

10:30 AM - 12:30 PM

314/315

Arranger: S. Battista, 3M Corp Safety and Industrial Hygiene, St Paul, MN. Moderator: J. Campbell, Oak Ridge National Laboratory, Oak Ridge, TN. Monitors: J. Quam, 3M Company, St. Paul, MN; M. Murphy, 3M Corp Safety and Industrial Hygiene, St. Paul, MN.

Prioritizing and managing IH risks in a laboratory or company can be supported by the implementation of software tools. Speakers in our roundtable will share their experiences with different systems, and talk about how systems have shaped their IH practice.

- Strengthening the IH Program Using a DIY Database System. D. Larson, Lawrence Livermore National Laboratory, Livermore, CA.
- Exposure Risk Assessment and Prioritization. L. Edwards, CSX Corporation, Jacksonville, FL.
- Growing Up with Data. R. Newman, Marathon Oil, Findlay, OH.
- Assessing Medical Surveillance Applicability Across Your Enterprise. S. Battista, 3M Corp Safety and Industrial Hygiene, St Paul, MN.

RT203

Environmental Due Diligence for Mergers & Acquisitions

10:30 AM - 12:30 PM

341/342

Arranger: D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. Moderator: M. Norman, Law Office of Margaret Norman, Manhattan Beach, CA. Monitor: S. Celly, Celly Services, Inc., Long Beach, CA.

Conducting an Environmental Due Diligence (EDD) is essential prior to any Merger or Acquisition. The new owner might be able to avoid exposure to liability. Presenters will provide techniques for conducting the EDD, risk assessment and information about remediation concerns.

MONDAY, MAY 23 Technical Sessions

- Mistakes to Avoid When Performing Environmental Due Diligence Surveys.
 R. Deitchman, Harris Corporation, Herndon, VA.
- Checklist for Refinery Remediation Due Diligence. G. Silverberg, Attorney at Law, Wilmington, DE.
- Materiality: The Real Issue Driver— What's Important and What's Not.
 N. Feldscher, New York City Department of Environmental Protection, Corona, NY.
- Health and Safety Considerations in Mergers and Acquisitions. P. Platcow, Philip Platcow, CIH, MS, Chestnut Hill, ME.

RT204 🔽

International IH Ethics Debate 10:30 AM - 12:30 PM 316/3

Arranger: R. Agnew, Oklahoma State University, Stillwater, OK. Moderator: B. Lippy, CPWR, The Center for Construction Research and Training, Silver Spring, MD. Monitor: D. Maser, Enviroair Consultants, Inc., Chesterfield, MI.

Dr. Adnan Ali Hyder will set the ethical framework for industrial hygiene in the global workplace. A debate on several ethical scenarios will be deliberated by members of the Joint Industrial Hygiene Ethics Education Committee and the International Affairs Committee. The audience will use interactive polling software to vote on the most ethical choices. This 2-hour session satisfies the ABIH ethics certification maintenance requirement of 0.33 points per cycle.

- Ethical Framework for Industrial Hygiene in the Global Workplace. A. Hyder, Berman Institute at Johns Hopkins University, Baltimore, MD.
- Ethical Obligations in a Global Supply Chain. M. Katchen, Phylmar Group Inc., Los Angeles, CA.
- Application of the Most Restrictive Doctrine. R. Agnew, Oklahoma State University, Stillwater, OK.
- Robbing Peter to Pay Paul. H. Arabzadeh, HRA Environmental Consultants Inc., Irvine, CA.

RT205

Fatigue and Shiftwork: Why is Everyone So Tired 24/7?

10:30 AM - 12:30 PM 324/325/326

Arranger: S. Gibson, Ergonomics Applications, Salem, SC. **Moderator:** S. Gibson, Ergonomics Applications, Salem, SC. **Monitors:** S. Gallagher, Auburn University,

Auburn, AL; B. Finder, University of Wisconsin-Stout, Menomonie, WI.

When accidents happen whether on the highway, in factories, in the air, or elsewhere, the investigations often reveal that fatigue was a significant contributing factor. Operating in a 24/7 society has a cost: disrupted sleep patterns, insufficient rest, etc. We will discuss many of the problems and how companies have tried to solve them.

- Fatigue and Work: The Science Behind the Problem and Solutions. C. Caruso, CDC/NIOSH, Cincinnati, OH.
- Fatigue and Total Worker Health: Efforts at Dow. K. Millison, Dow Chemical Co., Bristol, PA.
- Implementing a Fatigue Management Process: Lessons Learned. B. Jones, Cheniere Energy, Inc., Cameron, LA.
- Dead Tired: Reducing Fatigue Problems in Transportation. K. Mapp, WMATA, Washington, DC.

RT206

Pallet Rack Safety: Part Deux 10:30 AM - 12:30 PM 343/344

Arranger: L. Sedlak, ITT ICS, Irvine, CA. Moderator: N. Orr, Becton Dickinson, Franklin Lakes, NJ. Monitors: D. Maser, Enviroair Consultants, Inc., Chesterfield, MI; M. McFarland, Joliet Job Corps Center, Joliet, IL.

Pallet rack safety is a complex issue involving the need to understand the engineering and design of systems, safe material handling, fall protection, building layout, fire protection, and the regulatory landscape. Speakers will discuss what factors go into the design of systems, material handling, employee safety, customer safety and a system to maintain a safe environment.

- Pallet Rack Safety Revisited. L. Sedlak, ITT ICS, Irvine, CA.
- Design and Loading of Custom Rack Systems. J. Lucas, Master Engineers & Designers, Lynchburg, VA.
- Fire Protection in Racking Systems.
 B. Wunderlich, Factory Mutual Engineering, Reston, VA.
- Implementing and Auditing Pallet Rack Safety Programs—Practical Aspects of Pallet Rack Safety in Manufacturing and Industrial Distribution Facilities.
 D. Hancock, Spectrum Brands HHI, Wyomissing, PA.

PO104 <u>↓</u>

Laboratory and Healthcare Issues: Ventilation, Drug Exposures, Dust Control, Microbial Contamination, and Radiation

10:30 AM - 12:50 PM

345/346

Arrangers: M. Jones, Iowa City VA Health Care System, Iowa City, IA; L. Wong, EH&S, University of California Office of the President, Oakland, CA. Moderators: M. Hayden, US Navy, Seabeck, WA; J. Rice, Risk Management, Intermountain Healthcare, Salt Lake City, UT. Monitors: M. Jones, Iowa City VA Health Care System, Iowa City, IA; M. Miller, FBI Laboratory, Quantico, VA.

10:30 AM - 10:50 AM

Vortex Ventilation in the Laboratory Environment. L. Meisenzahl, Research, Vortex Hoods, LLC, New Castle, USA Minor Outlying Islands.

10:50 AM - 11:10 AM

Hazardous Drug Handling and Contamination in Research Labs. T. Barton, Environmental Health and Safety, St. Jude Children's Research Hospital, Memphis, TN.

11:10 AM - 11:30 AM

Hazardous Drug Exposure: Assessment and Hazard Communication. P. Lilley and J. Mancini, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD.

11:30 AM - 11:50 AM

Protecting Nurses from Antineoplastic Drug Exposures. T. Smith, Applied Health Science, Indiana University School of Public Health-Bloomington, Bloomington, IN; H. Woldu, University of Georgia, Athens, GA; D. DeJoy, University of Georgia, Athens, GA; A. Dyal, Kennesaw State University, Marietta, GA.

11:50 AM - 12:10 PM

Compliance with ICRA Dust Control in a Hospital. R. Beall, Entek Consulting Group, Inc., Rocklin, CA.

12:10 PM - 12:30 PM

Evaluation of Microbial Surface and Air Contamination Using Active UV-C Technology in a Healthcare Setting. L. Lee, American Green Technology, South Bend, IN.

12:30 PM - 12:50 PM

Serious Questions About Radiation Measurements. R. Johnson, Radiation Safety Counseling Institute, Rockville, MD.

Technical Sessions MONDAY, MAY 23

ILO1

Ask the Expert with **Adam Steltzner**

11:00 AM - 12:00 PM

Presenter: Adam Steltzner, Lead Landing Engineer of NASA's Mars Science Laboratory Curiosity Rover Project. **Moderator:** L.F. Grimsley, Tulane University, New Orleans, LA.

This special interactive session follows the Opening Session presentation, "The Right Kind of Crazy: A True Story of Teamwork, Leadership and High Stakes Innovation" and provides a unique opportunity for Q&A with our keynote speaker, Adam Steltzner, lead landing engineer of NASA's Mars Rover Project.

IL02

Student and Early Career Professionals Table Topics

12:00 PM - 1:00 PM

EXPO HALL

Facilitated by members of AIHA's Students and Early Career Professionals Committee, 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.

- Career Paths in Industrial Hygiene -T. Blank, BWSR, LLC, Pittsburgh, PA.
- Industrial Hygiene in the Oil & Gas Industry - J. Sheffer, ExxonMobil, Houston, TX.
- Field Work and Travel for the Industrial Hygienist - J. Hoover, Steel Dynamics, Inc., Fort Wayne, IN.
- CIH Exam 101 N. Greeson, Duke University, Hillsborough, NC, K. Schmid, Praxair, Saint Paul, MN, and A. Sauter, Liberty Mutual Insurance, Warrenville,
- Networking for the Industrial Hygienist - B. Kissel, Cornell University, Ithaca,
- Breaking Down Barriers J. Moore, Georgia-Pacific, Atlanta, GA.

SP02

Jeffrey S. Lee Lecture— From ACGIH® to ATSDR: Protecting Workers and the Public

12:30 PM - 1:30 PM



Lecturer: Patrick N. Breysse, PhD, CIH, Director of the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (NCEH/ATSDR)

For over 30 years, Dr. Breysse worked as an occupational and environmental health professional, serving as a teacher, researcher, consultant, and member of ACGIH® leadership. He is now the director of the CDC's National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (ATSDR). ATSDR was created in 1985 as a federal public health agency under the Department of Health and Human Services. Both ACGIH® and ATSDR play vital roles in protecting the health and safety of workers and members of the public by developing and publishing exposure guidelines that properly trained professionals use to make critical decisions about chemical exposures. ACGIH® publishes TLVs®, which are the chemical levels a worker can be exposed to day after day without adverse health effects. During his tenure on the ACGIH® Board of Directors, Dr. Breysse served as Board representative to the Threshold Limit Values for Chemical Substances (TLV®-CS) Committee during a period of time when the TLVs® were challenged in a number of lawsuits. Similarly, ATSDR publishes Minimal Risk Levels (MRLs), which are the level of daily exposure to hazardous substances likely to be without appreciable risk.

With the advent of the 75th anniversary of the establishment of the TLV®-CS Committee, Dr. Breysse will draw on his experience at ACGIH® and ATSDR to explore the similar roles TLVs® and MRLs play in protecting workers and members of the public.

CR304 🔓

It's Age Related: Occupational Health and Safety Issues, **Challenges and Solutions**

2:00 PM - 3:00 PM

349/350

Presenter: J. Chappel, Training and Education, CCOHS, Hamilton, ON, Canada.

Explore in this session how age-related changes affect workers and what workers will need from a health and safety perspective. Discover how your organization can help aging workers adapt effectively to tasks that involve sitting, standing, performing computer work, or carrying heavy loads. Learn how you can help both the workplace and workers by implementing often simple workplace solutions.



Henry F. Smyth, Jr. Award Lecture: The Challenge of Setting Occupational Exposure Limits for **Engineered Nanomaterials**

2:00 PM - 3:00 PM

347/348



Presenter: M. Ellenbecker. University of Massachusetts Lowell, Lowell, MA.

This presentation will focus on the broad issue of the need to work safely with a new material such as ENMs, and the specif-

ic issue of setting OELs for ENMs, using CNTs as a prime example. To quote from an article Dr. Smyth wrote in July, 1946:

"It is clearly the duty of a manufacturer to delay production of a chemical until the health hazards are well enough defined so that protection of his workers is possible. It is also his duty not to sell a chemical for an application in which it would endanger the health of the public, and to inform customers, by proper labeling and otherwise, of the hazards of the compounds they buy."

This approach is not being followed with regard to engineered nanomaterials. It is hoped that this presentation will generate discussion and activities to help rectify this unfortunate situation.

MONDAY, MAY 23 Technical Sessions

ILO3

Unsolved IH Mysteries Workshop 2:00 PM - 3:30 PM HILTON, POE

Instructor: Fred Boelter. RHP Risk Management, Inc., Chicago, IL.

Pre-registration required.

Test your knowledge! Actual IH case studies are worked through in this team challenge. Participants are given all the data - players, circumstances, and timelines - but not the outcomes. At the end of the session, the facilitator explains what actually occurred.

SP16

ABIH Forum

2:00 PM - 3:30 PM

HILTON,

HOLIDAY BALLROOM 1

The ABIH Impact Award, Lifetime Achievement Award, and lecture will be presented, followed by a discussion of the implementation of the American Board of Industrial Hygiene's strategic initiatives with the opportunity for attendees to engage Board members and staff in open dialog about the future of the organization and profession.

SP18

IH Business Cases: Examples, Lessons Learned

2:00 PM - 4:00 PM

HILTON,

HOLIDAY BALLROOM 2

Moderator: E. Biddle, WVU, Morgantown, \/\\/

Student Presenters: J. Brown, Z. Harman, J. Kirelawich, West Virginia University, Morgantown, WV; K. Smith, University of Central Missouri, Warrensburg, MO.

See the next generation of Occupational EHS professionals use the skills and knowledge outlined in the AIHA Body of Knowledge for Business Case Development in their educational setting. These students from WVU Safety Management program have developed Business Cases for real world scenarios from a variety of industries that address numerous hazards and risk levels, and use differing levels of hierarchy of control.

PO105

Communicating and Training with Confidence

2:00 PM - 4:20 PM

337/338

Arranger: J. Zey, SEPAS, UCM, Warrensburg, MO. Moderator: S. Viet, Westat, Rockville, MD. Monitors: D. Robbins, Emirates National Oil Company, Dubai, United Arab Emirates; S. Williams, Alcoa Inc., Pittsburgh, PA.

2:00 PM - 2:20 PM

Using Technical Videos for Effective Communication and Training. M. Strange and B. Bethel, ESIS Health, Safety, & Environmental Services, Sonora. CA.

2:20 PM - 2:40 PM

Crisis Communication: Translating Technically Rich Data into Understandable and Actionable Information. W. Weisman and R. Campbell, Consulting, Newport News, VA.

2:40 PM - 3:00 PM

Improving Staff Ability to Access Safety Data Sheets. T. Barton. Environmental Health and Safety, St. Jude Children's Research Hospital, Memphis, TN.

3:00 PM - 3:20 PM

Insights on the Underlying Ethical Rationale for Occupational Health from Mosaic Law. C. Keil, Wheaton College, Wheaton, IL.

3:20 PM - 3:40 PM

Graduate Development Program (GDP) for Industrial Hygienists at a Mining Company. F. Crowne, Goldcorp, Toronto, ON, Canada.

3:40 PM - 4:00 PM

U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) Ebola Virus Disease Testing Mission in West Africa. R. Schoepp, US Army Medical Research Institute of Infectious Diseases (USAMRIID), Ft Detrick, MD.

4:00 PM - 4:20 PM

Residential Ventilation and Its Effect on Inhalation Exposure. M. Jayjock, Jayjock Associates, LLC, Langhorne, PA.

RT207

Electronic Cigarette Risks, **Emissions, and Controls**

2:00 PM - 4:30 PM

316/317

Arranger: C. Marcham, Embry Riddle Aeronautical University. Daytona Beach. FL. Moderator: C. Marcham, Embry Riddle Aeronautical University, Daytona Beach, FL. Monitors: D. Hurley, North Carolina Research Campus, Kannapolis, NC; V. Hawkins, U.S. Army Public Health Command, MD.

Electronic cigarette (e-cig) use has increased significantly. Whether e-cigs present a lower health risk is still undetermined. Challenges in quantifying risks and potential exposures include the diversity of the devices, e-liquid constituents and use patterns. In this discussion, the public health, occupational health, and regulatory aspects of e-cigs will be explored.

- Harms of Electronic Cigarettes to Users and Non-Users. M. Drummond, Johns Hopkins University, Baltimore, MD.
- Risk Assessment of Electronic Cigarettes. M. O'Reilly, School of Public Health, Manlius, NY.
- Electronic Cigarettes and Fine Particulate Matter (PM) Exposure. A. Rossner, Clarkson University, Potsdam, NY.
- The Evolution of E-Cigarettes & Regulations/Policies. T. Froehlig, Amtrak, Washington, DC.
- FDA Regulation of Electronic Nicotine Delivery Systems. E. Durmowicz, Office of Science FDA Center for Tobacco Products, Silver Spring, MD.

RT208 💟

IH/OH and the Future of **University Curricula**

2:00 PM - 4:30 PM

336

Arranger: D. Zalk, LLNL, Livermore, CA. Moderator: S. Hicks, University of Central Missouri, Warrensburg, MO. Monitors: K. Milani, San Francisco Department of Public Health, San Francisco, CA; M. Phibbs, Deerfoot Consulting, Inc., Calgary, AB, Canada.

The established IH/OH core curriculum that produced generations of qualified professionals has stood the test of time, but is there room for improvement? Topics like control banding, PtD, and Bayesian statistics find their way to IH/OH field practitioners, but are inconsistently introduced in academics. This roundtable summarizes university curricula's current state and gathers affected experts to initiate dialogue and develop a path forward for this issue.

- The Academic Climate in Today's Industrial Hygiene and Related Programs: A Survey of Faculty Challenges and Opportunities. R. Lewis, Saint Louis University, St Louis, MO.
- Building the Bridge: Where Research, Academia, and Global Practice Meet. D. Zalk, UIC, San Jose, CA.
- Changing the Scope of IH Practice for Credentials through Academic Study. S. Ripple, Susan Ripple Consulting, LLC, Midland, MI.

Technical Sessions MONDAY, MAY 23

- NIOSH Efforts to Advance Occupational Safety and Health through Academic Programs and Curriculum Development for Young Workers. T. Lentz, CDC/ NIOSH, Cincinnati, OH.
- ABET's Impact on the IH/OSHE Field.
 J. Zey, UCM, Warrensburg, MO; S. Hicks, University of Central Missouri, Lees Summit, MO.

RT209 <u>□</u>

Laboratory Design, Construction, and Commissioning: Role of IH, Challenges, and Lessons Learned 2:00 PM - 4:30 PM 339/340

Arranger: M. Fahim, North Carolina State University, Raleigh, NC. Moderator: D. Harrington, Genentech, South San Francisco, CA. Monitors: M. Miller, FBI Laboratory, Quantico, VA; M. Manna, PPG Industries, Inc., Springdale, PA.

Designing and commissioning of a safe and dependable laboratory is not without challenges for EH&S professionals. Presenters will share the experiences and lessons learned by those involved in laboratory design, commissioning, modifications and change of application. Lessons learned can assist IH's to play a significant role during design and commissioning of laboratory systems.

- Laboratory Health & Safety: Industrial Hygiene in Design and Construction Operations. J. Nesbitt, Mayo Clinic, Rochester, MN.
- Potent Compound Laboratory, Lessons Learned. C. Reihman, SafeBridge Consultants, Mountain View, CA.
- Laboratory Fume Hood Performance and Its Related Factors. K. Ahn, University of Wisconsin-Whitewater, Whitewater, WI.
- A Case Study: Chemical Vapor Condensation in Fume Hood Duct System. W.
 Mele and D. Hall, Chemistry and Industrial Hygiene, Wheat Ridge, CO.
- Emergency Eyewash and Safety Showers: Lessons Learned During Selection, Installation, and Maintenance. M. Fahim, North Carolina State University, Raleigh, NC.

RT210

Lead Standard—Changes and Challenges

2:00 PM - 4:30 PM

318/319/320

Arranger: D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. Moderator: M. Norman, Law Office of Margaret Norman, Manhattan Beach, CA. Monitors: S. Celly, Celly Services, Inc., Long Beach, CA; L. Vance, VCU, Richmond, VA.

NIOSH is currently assessing data for evaluating its guidance for lead exposures using current risk assessment modeling techniques. NIOSH used the California OEHHA model in a pilot-risk assessment to better understand the relationship between airborne lead exposure and blood lead levels (BLLs) for exposed individuals. The results of this pilot-risk assessment will be discussed, as well as activities anticipated by NIOSH to update its guidance for occupational lead exposures.

- California OSHA Plans to Update their Lead Standard. S. Smith, Cal/OSHA, Fair Oaks, CA.
- NIOSH Efforts to Refine an Airborne Lead Standard. R. Niemeier, CDC/ NIOSH, Cincinnati, OH.
- Challenges of Testing Lead in Biological Matrices. L. Blum, NMS Labs Inc., Willow Grove, PA.
- Is the Proposed California Lead Standard Scientifically Acceptable and Practical? S. Que Hee, Univ. California Los Angeles, Los Angeles, CA.
- Will Lowering the PEL Produce a Significant and Effective Change in Protection for Workers and Their Families? D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA.

RT211

Occupational Exposure to Beryllium: Regulatory Activity and an Update on Research on Exposure, Dose and Epidemiology Results

2:00 PM - 4:30 PM

314/315

Arranger: M. Ruskin, USDOL/OSHA, Washington, DC. **Moderator:** D. Valiante, USDOL/OSHA, Washington, DC. **Monitors:** J. Lawless and P. Andrews, USDOL/OSHA, Washington, DC.

Workers who inhale beryllium particles are at risk of developing a serious beryllium-related lung disease called chronic beryllium disease (CBD). Presenters will provide an overview of the rulemaking

status at OSHA and DOE, the collaborations between labor and Materion, the leading manufacture of beryllium, and an update of the critical research at NIOSH and National Jewish Health.

- Occupational Exposure to Beryllium— OSHA Regulatory Update. T. Defoe, USDOL/OSHA, Washington, DC.
- Regulatory Update on Chronic Beryllium Disease Prevention Program (10 CFR 850). J. Rogers, Department of Energy, Washington, DC.
- Summary of NIOSH Research on Exposure, Dose and Epidemiology Results.
 M. Virji and A. Stefaniak, CDC/NIOSH, Cincinnati, OH.
- Research Updates on Genetic and Exposure Interactions in Chronic Beryllium
 Disease (CBD) and Beryllium Sensitization (BeS). L. Maier and P. Mzor,
 National Jewish Health, Denver, CO.
- Model Beryllium Standard: Industry and Labor Collaboration. M. Wright, United Steelworkers of America, Pittsburgh, PA.

RT212

OEHS Management Leadership Skills for the 21st Century 2:00 PM - 4:30 PM 324/325/326

Arranger: D. Wynn, EPA, Manassas, VA. **Moderator:** D. Wynn, EPA, Manassas, VA. **Monitor:** W. Odden, US Air Force, Garden Ridge, TX.

Awareness of essential management leadership skills for the Industrial Hygienists will be provided in this session. Five core attributes of a successful OEHS manager are presented: leading people, leading change, results driven, business acumen, and forming coalitions. Practical insights and approaches and resources for further professional development are organized to provide an understanding of the skills, abilities and attitudes needed by EHS profession.

- Leading Change. C. Redinger, Redinger 360, Inc., Harvard, MA.
- Leading People. C. Hovde, Caterpillar Inc., Peoria, IL.
- Results Driven. P. Esposito, STAR, Arnold, MD.
- Business Acumen. A. Leibowitz, EHS Solutions LLC, Alexandria, VA.
- Building Coalitions/Communication.
 P. Greaney, WorkCare, Anaheim, CA.

MONDAY, MAY 23 Technical Sessions

RT213

Perspectives on Preparation for the CIH Exam v11.0

2:00 PM - 4:30 PM

321/322/323

Arranger: C. Ficklen, Mission Technologies, Inc., Hampton, VA. Moderator: A. Fleeger, ExxonMobil Corporation, Houston, TX. Monitors: B. Geyer, IHA/NASA Agency Occupational Health, Kennedy Space Center, FL; J. Gifford, Genesis Energy, L.P., Houston, TX.

For IHs the most recognized professional credential is the Certified Industrial Hygienist (CIH) obtained through the American Board of Industrial Hygiene. Presenters will cover requirements to sit for the exam and information on preparation strategies. Lessons learned from those who were not successful initially will be given. The session will benefit students entering the profession, current professionals working to obtain the CIH, and their employers. Please note that this session is not intended to take the place of an exam review course.

- Get the Right Start on Your Quest for the CIH® Credential. U. Chung, ABIH, Lansing, MI.
- Concentration Barriers in Studying for the CIH Exam. R. Knazik, TEL, Albany,
- What Doesn't Kill You Makes You Stronger. N. McClellan, AbbVie, North Chicago, IL.
- Preparing for the Exam and Succeeding When You Don't Have a Traditional IH Background. D. Hollins, Cardno, San Francisco, CA.
- Putting It All Together. C. Ficklen, Mission Technologies, Inc., Hampton, VA.

RT214

Risk Assessment and Industrial Hygiene Solutions for Semiconductor Industry

2:00 PM - 4:30 PM

341/342

Arranger: A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO. Moderator: C. Torres, Gates Corporation, Denver, CO. Monitors: R. Strode and D. Hall, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

The roots of success in OHS programs for the semiconductor industry relate to comprehensive hazard identification, risk assessment, knowledge of the manufacturing processes, flexibility in the applied solutions, and effective management. Speakers will discuss advantages of standard specifications for management

systems and effective risk communication. The most up-to-date methodologies of engineering nanoparticles exposure and risk assessment will be reviewed, focusing on the semiconductor facilities.

- Cancer Incidence and Mortality in British Semiconductor Industry: Recent **Updates.** D. McElvenny, The Institute of Occupational Medicine, Edinburgh, United Kingdom.
- Methodological Principles of Hazard Identification and Risk Assessment in High-Tech Industry Sectors. A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.
- Employee Health Concerns in the Semiconductor Industry: The Importance of Hazard Assessment and Health Risk Communication. P. Harper, Ramboll Environ, Phoenix, AZ.
- Occupational Health and Safety Management Systems in Semiconductor Industry—How ISO/OHSAS Works in Practice. R. Tubby, Intel Corporation, Portland, OR.

Occupational Exposure to Engineered

Nanomaterials: Analytical Considerations and Risk Assessment. A. Segrave, Bureau Veritas North America, Inc., Kennesaw, GA; S. Brenner, SUNY, Albany, NY.

RT215

The Dangers of Low-Bid Contracting

2:00 PM - 4:30 PM

343/344

Arranger: S. Fess, KEMRON Environmental Services / Xerox Corporation, Webster, NY. Moderator: M. Soltis, Evoqua Water Technologies LLC, Warrendale, PA. Monitor: S. Mahoney, Con Edison of NY, Inc., Bronx, NY.

With tight budgets and construction costs climbing, owners are often tempted to award jobs to the lowest bidder. Can cheap also be safe? This question and more will be discussed from a variety of construction industry participants. Alternatives such as responsible bidding laws and best-value contracting will be discussed. The AIHA Construction Committee pre-qualification document will also be highlighted.

- The Low Bid Contractor—An Insurance Industry Perspective. C. Heinlein, American Contractors Insurance Group, Wexford, PA.
- Dangers of the Low Bid—An Owner's Perspective. S. Fess, KEMRON Environmental Services / Xerox Corporation, Webster, NY.

- Understanding the Risks of Contracting and Avoiding Unrealistic Bids. W. Piispanen, AECOM, Boise, ID.
- The Danger of the Low Bid Contracting Method—Something Has to Give. J. Brownlie, Crosby Brownlie, Inc., Roch-
- The Foundation for Fair Contracting— **Helping Create Equal Opportunities** for Responsible Contractors. M.Szollosi, ACT Ohio, Columbus, OH.

PO106

Evaluation of Occupational, **Community and Recreational Noise Exposures**

2:00 PM - 5:00 PM

345/346

Arranger: C. Tinner, Safety, WestRock, Cottonton, AL. Moderator: C. Achutan, University of Nebraska Medical Center, Omaha, NE. Monitors: R. Godwin, USMC CMC Safety Division, Arlington, VA; M. Geiger, Pentagon Liaison Office, Naval Safety Center, Fairfax, VA.

2:00 PM - 2:20 PM

Development and Translation of a Job **Exposure Matrix for Occupational Noise** in the US and Canada. R. Neitzel, B. Roberts, K. Sun, R. Long, and S. Ramdas, University of Michigan School of Public Health, Ann Arbor, MI.

2:20 PM - 2:40 PM

What Can More Than 30 Years and 700.000 Measurements Tell Us About Noise Exposure in the Mining Industry? B. Roberts, R. Neitzel, K. Sun, R. Long, and S. Ramdas, University of Michigan School of Public Health, Ann Arbor, MI.

2:40 PM - 3:00 PM

Descriptive Evaluation of Noise Dosimetry Values in the Defense Occupational and Environmental Health Readiness System—Industrial Hygiene Component (DOEHRS-IH). L. Whitehead, D. Tucker, D. Gimeno, K. Whitworth, and J. Betancourt, University of TX Health Sci. Ctr. at Houston, Houston, TX; S. Leonard, Hearing Center of Excellence, San Antonio, TX; A. Zhang, Knowesis, Inc., Fairfax, VA: A. Senchak, Walter Reed National Military Medical Center,

Bethesda, MD. 3:00 PM - 3:20 PM

Are Noise and Neurotoxic Chemical Exposures Related to Workplace Traumatic Injuries? C. Estill, S. Wurzelbacher, and T. Morata, CDC/NIOSH, Cincinnati. OH; C. Rice, A. Bhattacharya, and M. Rao, University of Cincinnati, Cincinnati, 0H.

Technical Sessions MONDAY, MAY 23

3:20 PM - 3:40 PM

Correlating Worker Position Through Time with Noise Exposure Measurements for the Prioritization of Noise Source Mitigation. J. Leasure, Associates in Acoustics, Austin, TX. (WITH-DRAWN)

3:40 PM - 4:00 PM

Exploration of Potential Applications for Noise Relative Risk Visualization Tools. E. Jones, ExxonMobil Biomedical Sciences, Inc., Annandale, NJ.

4:00 PM - 4:20 PM

Noise Control for Portable Ventilation Blowers. D. Chute, Atrium Environmental Health and Safety Services, LLC, Reston, VA.

4:20 PM - 4:40 PM

Case Study: Industrial Facility Community Noise. D. Driscoll, Associates in Acoustics, Evergreen, CO.

4:40 PM - 5:00 PM

Indoor Hockey Officials' Noise Exposure, Temporary Hearing Loss, and Effect of Helmet Visor Length on Exposure to Whistle Noise. K. Adams and W. Brazile, Environmental & Radiological Health Sciences, Colorado State University, Fort Collins, CO.

RT216

Women Leaders in the Occupational Safety and Health Movement

2:00 PM - 5:00 PM

HILTON, HOLIDAY BALLROOM 3

Arranger: S. Schneider, Laborers' Health & Safety Fund of North America, Washington, DC. Moderators: S. Schneider, Laborers' Health & Safety Fund of North America, Washington, DC; P. Stanch, NASA, Johnson Space Center, Houston, TX; S. McAllister, CAL/OSHA CALICO Lab, San Leandro, CA.

Women have been instrumental in the occupational safety and health field ever since Alice Hamilton and Harriet Hardy pioneered the field in the early 1900s. Women have led AIHA for many years and the profession is increasingly becoming dominated by women. Each speaker will review some of the highlights of their career in safety and health and their views on where the field is headed next.

- Labor's Contribution to Occupational Safety and Health. P. Seminario, AFL-CIO, Washington, DC.
- Creating Change from the Inside.
 D. Berkowitz, National Employment Law Project, Washington, DC.
- Advocating for Safety and Health for Teachers. D. Alexander, American Federation of Teachers, Washington, DC.
- Occupational Safety and Health is a Public Health Problem. L. Davis, Massachusetts Department of Public Health, Boston, MA.
- Worker Safety & Health—Building Visibility. L. Welch, The Center for Construction Research and Training, Silver Spring, MD.
- Building Worker Safety and Health as a Union Attorney. V. Bor, Sherman Dunn, Washington, DC.

CR305 💡

General Electric's EHS Big Data Journey and Future Strategy 3:30 PM - 4:30 PM 327

Presenter: C. Johnson, General Electric, Keene, NH.

GE is well recognized for having a mature, digitized set of EHS program administration and recordkeeping tools. This position has allowed us to collect a comprehensive EHS data set; however, we still have huge opportunities to fully harness the power of our 'big data' through advanced analytics and data visualization. In this session you will understand GE's overall strategy on Big Data and how the EHS function fits in.

CR306 🔓

Measurement and Evaluation in Psychological Health and Safety in the Workplace

3:30 PM - 4:30 PM

349/350

Presenter: B. Baxter, Employment and Social Development Canada, Labour Program, Gatineau, QC, Canada.

Psychological health and safety is a growing concern in workplaces around the world. This presentation will focus on current indicators of a psychologically healthy workplace and challenges associated with the measurement of psychological health in the workplace. This will include an exploration of the role of health and safety officers in evaluation and assessment as well as a discussion on the potential role of industrial hygienists and technical experts.



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- Beryllium/High Fired Beryllium
- Methamphetamine/Illicit Drugs
- **Dietary Supplements**
- Pesticides/Herbicides
- Perchlorate
- White Phosphorus

- Silica/Particulate (Respirable/Total)
- **Amines**
- TEM Characterization of Nanoparticles
- Vermiculite/Asbestos
- **Explosives**
- **Hexavalent Chromium**
- **Antineoplastics**
- Diacetyl/Acetoin



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CANADA



Tuesday At-a-Glance

Tuesday, May 24 AIHA

7:30 AM - 5:30 PM

- Registration, Pratt Street Lobby
- Speaker Ready Room, Room 330

8:00 AM - 9:00 AM

General Session





David Michaels

John Howard

The AIHce Morning Show: Pathways to Progress in Science and Practice

David Michaels, PhD, MPH; Assistant Secretary of Labor, OSHA, Washington DC; John Howard, MD, MPH, JD, LLM; Director, CDC/NIOSH, Washington DC, Dan Anna, PhD, CIH, CSP; President, AIHA, *Ballroom*

9:00 AM - 10:30 AM

Coffee & Danish in the Expo Hall

Meet with exhibitors while enjoying coffee and a snack, Exhibit Halls E, F, and Swing

9:00 AM - 3:00 PM

Expo Hall Open with Poster Sessions

Passport to Prizes, Lounges, Expo Learning Pavilions, The Game of Life, Special Displays, Consessions, Exhibit Halls E, F, and Swing

- PS 403 Authors Present 10:00 AM Noon
- PS 404 Authors Present 1:00 PM 3:00 PM

10:00 AM - Noon

PS 403 Authors Present, Exhibit Hall E

10:30 AM - 11:30 AM

- CR307 ErgoMatrix: An Introductory Comparison of Common Ergonomics Analysis Tools, Room 327
- CR308 Global Changes to Glove Standards and What It Means for Your PPE Choices, Room 336
- IL04 Ask the Expert with Dr. John Howard & Dr. David Michaels, Room 318/319/320
- SP04 16th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting, Room 339/340
- AIHA Publications Committee Meeting, Hilton, Blake
- EASC Math Modeling Team, Hilton, Marshall

10:30 AM - 12:30 PM

- P0107 Chemical & Physical Aspects of Exposures in the Built Environment, Room 324/325/326
- P0108 Industrial Hygiene Applications: Nanotechnology, Drugs, and Other Agents, Room 341/342
- P0109 Innovations in Risk Assessment & Management, Room 316/317
- P0110 New Advances in Construction and Confined Space Safety, Room 321/322/323
- P0111 Preparedness and Response to Ebola, and Other Healthcare-Related Issues, Room 343/344
- RT217 Occupational Exposure Banding in Industry and Emergency Response Applications, Room 314/315
- RT218 Prevention of Lead Poisoning in Children and Adults: Old Problem, New Challenges, Room 345/346
- SS001 The Why and How of Sampling and Analyzing Biomolecules, *Room 347/348*
- Computer Applications Committee, Hilton, Key Ballroom 11
- Hazard Prevention and Engineering Controls Committee, Hilton, Key Ballroom 10
- Mentoring and Professional Development Committee, Hilton, Holiday Ballroom 2
- Stewardship and Sustainability Committee, Hilton, Holiday Ballroom 1

11:00 AM - Noon

 SP05 - Skin Notations and Skin Contamination, Room 349/350

11:00 AM - 12:30 PM

 Student Local Section Council Business Meeting, Hilton, Latrobe

12:30 PM - 1:30 PM

- IL05 NIOSH Tech Talks: Current Topics, Exhibit Hall E
- SP06 William P. Yant Award Lecture: Stronger Together: Working Together to Grow Industrial Hygiene and Tackle the Global Burden of Occupational Illness, Exhibit Hall E

1:00 PM - 3:00 PM

PS 404 Authors Present, Exhibit Hall E

2:00 PM - 3:00 PM

 SP22 - Tales from the Crypt (and Basement): Unusual IAQ Investigations and Remediations, Room 349/350

2:00 PM - 3:30 PM

- IL06 Unsolved IH Mysteries Workshop -SOLD OUT, Hilton, Poe
- Local Section Officer Training Session, Hilton, Peale AB

2:00 PM - 4:00 PM

- Academic Special Interest Group, Hilton, Peale C
- Green Building Working Group, Hilton, Carroll B
- Management Committee, Hilton, Latrobe
- Nanotechnology Working Group, Hilton, Holiday Ballroom 1
- Non-lonizing Radiation Committee, Hilton, Johnson B
- Sampling and Laboratory Analysis Committee, Hilton, Tubman

2:00 PM - 4:30 PM

RT219 - Emerging Issues and Solutions in Higher Education, *Room 327*

RT220 - GHS in the Laboratory Environment: Impacts and Opportunities,

Room 337/338

- RT221 New Confined Spaces in Construction Standard, Room 316/317
- SS002 Investigating Dermal Exposures: Sampling, Assessment, and Control Strategies, Room 324/325/326

2:00 PM - 4:40 PM

 P0112 - Outstanding Environmental and Occupational Health Issues: Comparing the Situation in the United States and Globally, Room 343/344

2:00 PM - 5:00 PM

- RT222 Integrating Cumulative Risk Assessment into the Practice of Occupational Health, *Room* 321/322/323
- RT223 Life Cycle of a Hazardous Drug, Room 341/342
- RT224 Real-Time (Direct Read) and Field Portable Instruments for Real-World Solutions in the Oil and Gas Industry: Instrument Selection and Applications for Worker Protection, Room 339/340
- RT225 Worker Participation in Community-Based Research, Room 345/346

2:00 PM - 5:30 PM

- RT226 Crude Oil Derailments-Lessons Learned on How to Respond Safely and Effectively, Room 347/348
- RT227 The 7 Habits of Highly Effective Industrial Hygiene Leaders, Room 318/319/320

2:00 PM - 6:00 PM

- RT228 Managing a Respiratory Protection Program: Applied Best Practices, Room 336
- RT229 Results of Interesting and Unusual NIOSH Health Hazard Evaluations, Room 314/315

3:00 PM - 5:00 PM

- Exposure and Control Banding Committee, Hilton, Key Ballroom 4
- Joint Industrial Hygiene Ethics Education Committee, Hilton, Blake

3:30 PM - 5:00 PM



ILO7 - Ignite: Enlighten Me but Make it Quick! Offering Enlightenment and Knowledge—In a Hurry!, Ballroom

4:00 PM - 6:00 PM

- Ionizing Radiation Committee, Hilton, Ruth
- Occupational and Environmental Epidemiology Committee, Hilton, Brent
- Safety Committee, Hilton, Paca

5:00 PM - 6:00 PM

Aerosol Technology Committee, Hilton, Tubman

6:00 PM - 8:30 PM

• Noise Committee, Hilton, Holiday Ballroom 1

6:30 PM - 7:30 PM

 AlHce POWER HOUR sponsored by MSA, Hilton, Key Ballroom 5-12



AIHF

4:00 PM - 5:00 PM

AIHF Board of Trustees Meeting, Hilton, Marshall

JOEH

2:00 PM - 4:00 PM

 JOEH LLC Board Meeting (by invitation only), Hilton, Carroll A

Ancillary

10:30 AM - 12:30 PM

 Workplace Health Without Borders meeting, Hilton, Key Ballroom 1/2

4:30 PM - 6:00 PM

- Philadelphia Universities Reception, Hilton, Johnson

 A
- University of Central Missouri Alumni & Friends, Hilton, Holiday Ballroom 3
- Univ. of Texas, Univ. of Houston Clear Lake, & Univ. of N. Texas Health Sci. Center, Hilton, Calloway A

4:30 PM - 6:30 PM

University of Michigan Alumni and Friends Reception, Hyatt, Harborview

6:00 PM - 8:30 PM

SKC International Dist. Reception (by invitation only), Hyatt, Pisces

6:45 PM - 8:15 PM

 Purdue University Alumni Gathering, Hyatt, Key Ballroom 2



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Session Format Key

CR = EHS Crossover Program

IL = Interactive Learning

P0 = Podium Session

PS = Poster Session

RT = Roundtable

SS = Science Symposium

SP = Special Session

TT = Technical Tour

Tuesday, May 24

Technical Sessions

General Session

8:00 A.M.-9:30 A.M. BALLROOM

The AIHce Morning Show: Pathways to **Progress in Science and Practice**

Host: Dan Anna, PhD, CIH, CSP; President, AIHA.

Guests: David Michaels, PhD, MPH; Assistant Secretary of Labor, OSHA, Washington DC; John Howard, MD, MPH, JD, LLM; Director, CDC/NIOSH, Washington DC.









Join Dr. Dan Anna and his quests, Dr. David Michaels and Dr. John Howard for a moderated, thought-provoking discussion about current and future OEHS issues. The audience will have the opportunity to virtually ask questions both in advance and during the session. Don't miss this unique opportunity to hear from both OEHS leaders, in one session, about the issues that impact you every day.

The "show" continues in an Ask the Expert session with Dr. Michaels and Dr. Howard after the General Session.

CR307

ErgoMatrix: An Introductory Comparison of Common Ergonomics Analysis Tools

10:30 AM - 11:30 AM

Presenter: G. Downey. Fitts Department of Industrial and Systems Engineering, The Ergonomics Center of North Carolina (NC State University), Bartlesville, OK.

There are numerous industrial ergonomics analysis tools available to safety professionals. The NIOSH Lifting Equation, RULA, Strain Index, REBA, OWAS...and the list goes on. Choosing the correct tool for the situation can be confusing. Attendees will be introduced to a matrix that lists features of common industrial ergonomics analysis tools in order to help make the proper tool selection more straightforward.

CR308

Global Changes to Glove Standards and What It Means for **Your PPE Choices**

10:30 AM - 11:30 AM

Presenter: J. Conley, Mechanical Industrial, DuPont Protection Technologies, Richmond, VA.

Proposed changes have been submitted for both the ANSI/ISEA 105 Hand Protection Selection Criteria and the EN 388 European regulatory standard for protective gloves. It is important for everyone involved in the design, development, and specification of cut-resistant apparel and PPE to understand how these changes will affect the

choices they will need to make for their employers, employees and themselves.

Ask the Expert with Dr. John Howard & Dr. David Michaels

10:30 AM - 11:30 AM

318/319/320

Moderator: Aaron Trippler, AIHA, Falls Church, VA.

This special interactive session follows the General Session presentation "The AIHce Morning Show: Pathways to Progress in Science and Practice" and provides an opportunity for interaction with our keynote presenters.

SP04

336

16th Annual Upton Sinclair Memorial Lecture for Outstanding **EHS Investigative Reporting**

10:30 AM - 11:30 AM 339/340

Unvarnished: Behind the Story That Revealed the True, Human Cost of Those Nice Nails



Presenter: Sarah Maslin Nir, The New York Times, New York, NY.

The New York Times' blockbuster expose on the New York City nail salons revealed an industry where

labor exploitation was endemic. But it also delved deeper: Through 13 months of reporting, in four languages, the author, Sarah Maslin Nir revealed a workforce

plaqued with health issues, where skin, eye, and respiratory ailments were commonplace among manicurists, and the specter of more grievous ailments such as miscarriages, and even cancer, loomed large. Following the publication of the two part series in May, Governor Andrew M. Cuomo instituted a new law in New York State that raised health and safety standards in salons, and reshaped the industry. The story has had wider ranging effects, with new laws being developed as far away as California, and raised a new consciousness among consumers.

PO107

Chemical & Physical Aspects of Exposures in the Built **Environment**

10:30 AM - 12:30 PM

324/325/326

Arranger: G. McCaslin, SeaCast, Marysville, WA. Moderator: J. Birkebak, Assured Bio Labs, LLC, Oak Ridge, TN. Monitor: L. Monteith, Dept. of Env. & Occ. Health Sciences, Univ. of Washington, Seattle, WA.

10:30 AM - 10:50 AM

Indoor Air Monitoring in Day-Care Centers. H. Lin, Public Health, Kaohsiung Medical University, Kaohsiung, Taiwan. 10:50 AM - 11:10 AM

Formaldehyde Emissions from Small Chamber Testing of Laminate Flooring and Comparison to Exposure Modeling. J. Lotter, K. Unice, P. Ruestow, A. Abelmann, H. Fritz, E. Beckett, J. Bare, and J. Pierce, Cardno ChemRisk, Chicago, IL.





Exhibitor Product Demos and Presentations

9:00 A.M. - 2:05 P.M., EXPO LEARNING PAVILIONS 1 & 2, EXPO HALL

9:00 A.M. - 9:30 A.M.

Improvements in Real-time Personal Aerosol Monitoring

TSI Incorporated **Expo Learning Pavilion 2**

An introduction to the new SidePak AM520 Personal Aerosol Monitor. Learn how this second generation personal aerosol monitor provides an easier approach to personal exposure monitoring and task-based sampling to help industrial hygienists assess a worker's "exposure trail" to dusts, fumes, mists, and smoke.

9:00 A.M. - 9:30 A.M.

Overcoming the Challenge of Bulky and Obtrusive **Personal Monitors for Exposure** Assessment in the Occupational **Environment**

RTI International Expo Learning Pavilion 1

aerosol.

RTI will present its MicroPEM™ personal exposure monitor, a significant advancement in personal particulate matter exposure assessment. User-friendly and easily deployed, the MicroPEM™ produces reliable real-time data that approaches analytical desktop instrument performance in a miniaturized, wearable form. Built-in accelerometers determine individual activity levels while predicting how fast individuals breathe pollutants in their environment. This advancement enables Industrial Hygienists to calculate potential dosage - how much pollutant enters the respiratory system - in real time. The Micropem also collects a filter sample for

gravimetric and chemical analysis of the

9:40 A.M. - 10:10 A.M.

Comprehensive Air Quality Monitorina

Airy Technology **Expo Learning Pavilion 1**

Introducing the Airy Technology line of air quality monitors, and highlight the features and benefits that allow a single instrument to monitor in real time for Particulates, PM Values, Temperature / Relative Humidity, CO2, and TVOC. View data remotely, and log results in a large data buffer for trending / analysis.

10:20 A.M. - 10:50 A.M.

The Migration to Mobile: The Evolution of EHS Auditing **Software**

Dakota Software Expo Learning Pavilion 2



SOFTWARE

The purpose of presentation is to demonstrate how mobile technology can enhance EHS audit and management programs. This session will cover some of the common concerns of integrating mobile devices into EHS Auditing and management programs including connectivity, security, and multi-user auditing.

12:30 P.M. - 1:00 P.M.

MapAtWork: A Fit for **Purpose Software for Making Interpolated Contour Maps Based** on Measurements dGm^R

DGMR Software Expo Learning Pavilion 1

Erwin will present and explain the MapAtWork software for mapping any airborne contaminant or human comfort survey data at workplaces. MapAtWork has been developed by DGMR Software BV in the Netherlands out of a need for a more efficient solution for the creation of interpolated contour maps based on measurements.

12:30 P.M. - 1:30 P.M.

Yant Award Presentation — Stronger Together: Working Together to Grow Industrial Hygiene and Tackle the Global **Burden of Occupational Illness**



Expo Learning Pavilion 2

Presenters: Roger Alesbury CFFOH and Stephen Bailey CFFOH, Occupational Hygiene Training Association (OHTA), Derby, UK.



A decade ago, a shortage of industrial hygienists appeared to be evidence of a long-term trend. In 2009, the Occupational Hygiene Training Association (OHTA) was

established to help address this problem. This presentation will explain why OHTA was needed and how far it has come. Lessons learned will be shared and ideas for future collaboration and development will be explored, focusing on solutions rather than barriers.

1:40 P.M. - 2:10 P.M.

Emerging Trends in Particle Detection Technology

Nanozen

Expo Learning Pavilion 1



Nanozen discusses the benefits that new particle sensor technology brings to the Industrial Hygiene industry and market. Nanozen Industries Inc. was incorporated in 2007 out of the University of British Columbia to focus on providing product solutions to combat peoples' exposure to dangerous airborne particles.

Technical Sessions TUESDAY, MAY 24

11:10 AM - 11:30 AM

Air Corrosivity Monitoring in Museums. E. Light and R. Gay, Building Dynamics, LLC, Ashton, MD; C. Grzywacz and C. Hawks, National Gallery of Art, Washington, DC; K. Horiuchi, ALS Global, Simi Valley, CA; K. Makos, Research Collaborator, Smithsonian, Washington, DC.

11:30 AM - 11:50 AM

Assessment of Indoor Formaldehyde Concentrations Following the Installation and Removal of Laminate Flooring.

J. Pierce, A. Abelmann, P. Ruestow, J. Lotter, E. Beckett, and H. Fritz, Cardno ChemRisk, Chicago, IL; J. Bare and K. Unice, Cardno ChemRisk, Pittsburgh, PA.

11:50 AM - 12:10 PM

A Review of the Health Effects of MVOCs. H. Burge, EMLab PK, San Bruno,

12:10 PM - 12:30 PM

Research Report: New "Green" Tracer for Measuring Air Movement in Buildings. C. Cooper, Air Quality Science, VERTEX companies, Kingston, NY.

PO108

Industrial Hygiene Applications: Nanotechnology, Drugs, and Other Agents

10:30 AM - 12:30 PM

341/342

Arranger: P. Webb, Colden Corporation, Worcester, MA. Moderator: P. Webb, Colden Corporation, Worcester, MA, Monitors: J. Baker, Bureau Veritas North America Inc., The Woodlands, TX; A. Archer, MedImmune, Gaithersburg, MD.

10:30 AM - 10:50 AM

Methodology for the Assessment, Evaluation, and Control of Potential **Exposure to Engineered Nanomaterials** (ENM). C. Penniall, S. Maberti, B. Janke, and A. Jachak, ExxonMobil, Spring, TX.

10:50 AM - 11:10 AM

Adsorption Efficiency Comparison of Fabricated Buckypapers (BPs) for Volatile Organic Compound (VOC) Sampling and Analysis. J. Oh and C. Lungu, Environmental Health Sciences, University of Alabama at Birmingham, Birmingham, AL; E. Floyd, University of Oklahoma, Oklahoma City, OK.

11:10 AM - 11:30 AM

Investigation of Airborne Particulate Matter on the International Space Station (ISS) Using a Thermophoretic Sampler. K. Rickabaugh, G. Casuccio, and K. Bunker, RJ Lee Group, Inc., Monroeville, PA; M. Meyer, NASA, Cleveland, 0H.

11:30 AM - 11:50 AM

A Standardized Approach for the Generation and Characterization of Aerosols Released from Composite Nanomaterials in Industrial Scenarios. L. Cena, D. Farcas, and A. Erdely, EAB, CDC/NIOSH, Morgantown, WV; J. Kang, West Virginia University, Morgantown, WV.

11:50 AM - 12:10 PM

Models—What Can They Tell Us? A. Havics, PH2, LLC, Avon, IN.

12:10 PM - 12:30 PM

The Use of Surrogate Sampling for **Evaluating the Efficiency of Engineering** Controls During Hazardous Drug Compounding. E. Higgins, Environmental Health & Engineering, Inc., Needham,

PO109

Innovations in Risk Assessment & Management

10:30 AM - 12:30 PM 316/317

Arranger: C. Redinger, Redinger 360, Inc., Harvard, MA. Moderator: C. Redinger, Redinger 360, Inc., Harvard, MA. Monitors: E. Rasmuson, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO; A. Rossner, Institute for a Sustainable Environment, Clarkson University, Potsdam, NY.

10:30 AM - 10:50 AM

How to Evaluate the Science in a Scientific Study. A. Havics, PH2, LLC, Avon, IN. 10:50 AM - 11:10 AM

Big Data and Assessing Exposures & Risks: When Too Much Seems Like Never Enough. J. Persky, RHP Risk Management Inc., Chicago, IL; B. Heckman, RHP Risk Management Inc., Carlisle, PA; F. Boelter, RHP Risk Management Inc., Boise, ID.

11:10 AM - 11:30 AM

Expected Quantitative Results Based on Qualitative Evaluation. M. DaSilva, Doulos Ambiental, São Paulo, Brazil.

11:30 AM - 11:50 AM

National Aeronautics and Space Administration, NASA, Astronaut Occupational Surveillance Program and Lifetime Surveillance of Astronaut Health, LSAH: Astronaut Exposures and Risk in the Terrestrial and Spaceflight Environment. S. Keprta, W. Tarver, M. Van Baalen, and T. McCoy, NASA Johnson Space Center, Houston, TX.

11:50 AM - 12:10 PM

Semi-Quantitative Risk Assessments: It Is About the Controls! P. Esposito, STAR Consultants, Inc., Arnold, MD.

12:10 PM - 12:30 PM

Risk Management Best Practices to Reduce Injuries and Maximize Economic Benefits in U.S. Mining. S. Griffin, D. Bui, G. Gowrisankaran, E. Lutz, C. He, C. Hu, J. Burgess, The University of Arizona, Tucson, AZ.

PO110

New Advances in Construction and Confined Space Safety

10:30 AM - 12:30 PM 321/322/323

Arranger: G. Mellor, Civil Engineering, Omega Environmental Services, S. Hackensack, NJ. Moderator: V. Kero, Omega Environmental Services, S. Hackensack, NJ. Monitors: S. Hueth, Industrial Hygiene, US Army, Joppa, MD; G. Mellor, Civil Engineering, Omega Environmental Services, S. Hackensack, N.J.

10:30 AM - 10:50 AM

Preserving the Health of Tunnelers **During Construction: A Case Study of** Applying a Program Approach to Occupational Hygiene on Australia's Longest Underground Rail Tunnels: The Sydney Metro Northwest Rail Link. K. Cole,

Ventia, Kingsgrove, NSW, Australia.

10:50 AM - 11:10 AM

Developing a Comprehensive Manual to Prevent Fatal Incidents in Confined Spaces in South Korea. T. Kim, Changwon National University, Changwon, Korea (the Republic of); K. Ahn, University of Wisconsin-Whitewater, Whitewater, WI.

11:10 AM - 11:30 AM

Breathe Freely Initiative in the UK Construction Industry by BOHS. T. Boyle, British Occupational Hygiene Society, Pride Park, United Kingdom.

11:30 AM - 11:50 AM

Many Pieces to the Puzzle: Successful Implementation of Engineering Controls for Dusts & Fumes in Construction. P. Susi, CPWR, Marlton, NJ.

11:50 AM - 12:10 PM

Findings from the FACE Reports on Worker Fatalities in Confined Spaces. K. Ahn and S. Choi, University of Wisconsin-Whitewater, Whitewater, WI; T. Kim, Changwon National University, Changwon, Korea (the Republic of).

12:10 PM - 12:30 PM

The New EM385-1-1: Are You Prepared for Compliance? P. Rice, ClickSafety/ Ahtna Netiye, Walnut Creek, CA.

TUESDAY, MAY 24 Technical Sessions

PO111

Preparedness and Response to Ebola, and Other Healthcare-**Related Issues**

10:30 AM - 12:30 PM

343/344

Arrangers: R. Brown, Gloves By Web, Mequon, WI; M. Jones, Iowa City VA Health Care System, Iowa City, IA. Moderator: K. Garq, US Department of Veterans Affairs, Tacoma, WA. Monitors: G. Byrns, Illinois State University, Normal, IL; R. Phalen, School of Science and Computer Engineering, University of Houston Clear Lake, Houston, TX.

10:30 AM - 10:50 AM

Managing the Potential Hazards from Electromagnetic Interference (EMI) with Personal Medical Electronic Devices in Workplaces. J. Bowman, CDC/NIOSH, Cincinnati, OH; G. Calvert, CDC/NIOSH, Cincinnati, OH; G. Girard, Medtronic, PLC, Minneapolis, MN; D. Witters, Food and Drug Administration, Rockville. MD.

10:50 AM - 11:10 AM

Developing an Effective and Flexible Ebola Preparedness Plan. M. Tortora, Safety & Security, CT Children's Medical Center, Middletown, CT.

11:10 AM - 11:30 AM

Ebola Virus Disease Waste Management in the Medical Treatment Facility. L. Baetz, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD.

11:30 AM - 11:50 AM

U.S. Army Medical Research Institute of Infectious Diseases Support in the Ebola Effort. N. Woollen, Army Medical Research and Materiel Command. Ft Detrick. MD.

11:50 AM - 12:10 PM

Acute Symptoms and Exposure to Hydrogen Peroxide, Acetic Acid and Peracetic Acid in Hospital Cleaning Staff. B. Hawley, M. Casey, M. Virji, and J. Cox-Ganser, Respiratory Health Division, CDC/NIOSH, Morgantown, WV.

12:10 PM - 12:30 PM

Effect of Multiple Alcohol-Based Hand **Rub Treatments on Tensile Strength** and Elongation of Thirteen Brands of Medical Exam Nitrile and Latex Gloves. P. Gao, G. Niezgoda, and R. Shaffer, CDC/ NIOSH, Pittsburgh, PA; M. Horvatin and R. Weible, URS Corporation, Aiken, SC.

RT217 🔽



Occupational Exposure Banding in Industry and Emergency **Response Applications**

10:30 AM - 12:30 PM

314/315

Arranger: L. McKernan, CIH, CDC/NIOSH, Cincinnati, OH. Moderator: S. Derman, Medishare Environmental Health & Safety Services, Cupertino, CA. Monitor: M. Seaton, CDC/NIOSH, Cincinnati, OH.

Chemicals are being introduced at a rate that significantly outpaces the development of Occupational Exposure Limits (OELs). The objective of this roundtable is to examine the proposed NIOSH approach to derive an Occupational Exposure Band and the application of the OEB in emergency response scenarios. Presenters will highlight the array of different information sources and types of OEBs and control banding strategies, their uses and limitations, and the linkage between them.

- Using Occupational Exposure Bands to Support Occupational Exposure Limit Development. A. Maier, University of Cincinnati, Cincinnati, OH.
- Updates on the NIOSH Occupational Exposure Banding Process. L. McKernan, CDC/NIOSH, CIH, Cincinnati, OH.
- Potential Applications of Occupational Exposure Banding during Incident Response Activities. J. Ignacio, US Dept. of Homeland Security, Waldorf, MD.
- Banding Strategies as a Key Component of Multidisciplinary EHS Teams. D. Zalk, LLNL. Livermore. CA.

RT218 🔓

Prevention of Lead Poisoning in Children and Adults: Old Problem, **New Challenges**

10:30 AM - 12:30 PM

345/346

Arranger: A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO. Moderator: D. Goldsmith, George Washington University, Silver Spring, MD. Monitors: R. Strode and D. Hall, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

New scientific facts have brought lead again into focus of public health and industrial hygiene professionals. Recent publications suggest that lead in blood is a predictor of elevated mortality in workers. Leading international experts, members of AIHA, the International Society for Environmental Epidemiology (ISEE) and other organizations, will have an opportunity to discuss the outstanding issues of lead poisoning prevention.

- Health Effects of Low Level Lead Exposure in Adults and Implications of a New Lead Standard in California. M. Kosnett, University of Colorado School of Medicine, Denver, CO.
- Lead Poisoning and Healthy Housing: New International Developments. D. Jacobs, National Center for Healthy Housing, Washington, DC.
- Blood Lead Level in Adults: Health Effects Based on Mortality Data in UK. D. McElvenny, Institute of Occupational Medicine, Edinburgh, United Kingdom.
- Utilizing Mathematical Modeling in Setting of Occupational and Environmental Standards for Lead: How Toxicokinetics Approaches Help? A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

SS001 <u>八</u>

The Why and How of Sampling and Analyzing Biomolecules

10:30 AM - 12:30 PM

Arranger: R. O'Mara, Eli Lilly and Company, Indianapolis, IN. Moderator: S. Martens, AbbVie, North Chicago, IL. Monitors: M. Hsieh, Abbvie, Vernon Hills, IL; B. Weaver, Lancaster Laboratories, Lancaster, PA.

Over 90 percent of the pharmaceutical drugs on the market today are considered small molecules (< 1000 Da) and sampling techniques to capture and analytical methods to measure them are readily available. However, the other 10 percent are larger biomolecule drugs and this percentage is increasing. Over the last two years, 80% of the new drugs approved by the FDA have been biomolecule drugs. Biomolecule drugs can be of worker exposure concern, however monitoring for them can require the use of analytical techniques not normally performed on IH survey analyses. Presenters will explain why there is a need to air monitor for large biomolecules, the analytical techniques used to measure them and field results from their work with them.

- Biomolecules and ADCs Inert or Really Bad Stuff. R. Sussman, SafeBridge Consultants, Inc., New York, NY.
- Eli Lilly and Company's Knowledge and Experience with Monitoring Biomolecules. R. O'Mara, Eli Lilly and Company, Indianapolis, IN.
- Challenges of Sampling for Antibody Drug Conjugates. S. Woodcock, Safe-Bridge Consultants, Inc., Mountain View, CA.

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 LC/MS/MS Analysis of Antibody Drug Conjugates (ADCs) and Other Large Biomolecules by Chemical Digestion as an Alternative to ELISA. M. Rog, Bureau Veritas North America, Lake Zurich, IL.

SP05

Skin Notations and Skin Contamination

11:00 AM - 12:00 PM

349/350

Presenters: N. Hudson, CDC/NIOSH, Cincinnati, OH; E. Esswein, CDC/NIOSH, Denver, CO

NIOSH is developing Skin Notation Profiles and technology to detect and decontaminate skin that can result in risks for systemic poisoning. NIOSH has invented, patented and licensed a dermal detection and dermal decontamination method for lead following field studies documenting workers in lead-acid battery plants with skin contamination.

IL05

NIOSH Tech Talks: Current Topics

Purchase lunch and select a discussion — seating is first-come, first-served.

12:30 PM - 1:30 PM EXPO HALL

- Oil and Gas Extraction Chemical Exposures, E. Esswein, NIOSH, Denver, CO.
- Nanotechnology, L. Hodson, NIOSH, Cincinnati, OH.
- Monitoring and Control of Respirable Crystalline Silica Exposure, T. Lee, NIOSH, Morgantown, WV; E. Cauda, NIOSH, Pittsburgh, PA.
- Cleaning and Disinfecting in Healthcare: A Balancing Act, M. Abbas Virji, B. Hawley, R. Lebouf, and M.Humann NIOSH, Morgantown, WV.
- Shift Work, Long Work Hours, and Related Sleep and Fatigue Issues, C. Caruso, NIOSH, Cincinnati, OH.
- Strategies for Managing Health Risks from Workplace Electric and Magnetic Fields, J. D. Bowman, NIOSH, Cincinnati, OH
- NIOSH Center for Direct Reading and Sensor Technologies, D.G. DeBord, NIOSH, Cincinnati, OH; M.D. Hoover, NIOSH, Morgantown, WV.

SP06

William P. Yant Award 12:30 PM - 1:30 PM

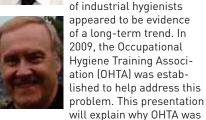
Expo Hali

Stronger Together: Working Together to Grow Industrial Hygiene and Tackle the Global Burden of Occupational Illness



Presenters: Roger Alesbury CFFOH and Stephen Bailey CFFOH, Occupational Hygiene Training Association (OHTA), Derby, UK.

A decade ago, a shortage



needed and how far it has come. Lessons learned will be shared and ideas for future collaboration and development will be explored, focusing on solutions rather than barriers.

SP22

Tales from the Crypt (and Basement): Unusual IAQ Investigations and Remediations 2:00 PM - 3:00 PM 349/350

Putting the skills and knowledge outline in the joint AIHA/IAQA Body of Knowledge for IAQ Practitioners to work.

IL06

Unsolved IH Mysteries Workshop 2:00 PM - 3:30 PM HILTON, POE

Instructor: Bill Adams, SafeX, Inc., Wester-ville, OH

Pre-registration required.

Test your knowledge! Actual IH case studies are worked through in this team challenge. Participants are given all the data – players, circumstances, and timelines – but not the outcomes. At the end of the session, the facilitator explains what actually occurred.

RT219 △

Emerging Issues and Solutions in Higher Education

2:00 PM - 4:30 PM

327

Arrangers: L. Wong, University of California Office of the President, Oakland, CA; J. Klane, Arizona State University, Tempe, AZ. Moderator: L. Wong, University of California Office of the President, Oakland, CA. Monitors: D. Hurley, North Carolina Research Campus, Kannapolis, NC; C. Reihman, SafeBridge, Exton, PA.

Higher education has emerging issues that present some unique challenges to IHs and EHS professionals. Oftentimes the issues are relatively hidden, novel, or specialized. From new technologies (3D printers, laser cutters, photographic drones), Universities in China, pyrophoric chemicals, lab safety culture, and discourse analysis; speakers will weave a common thread throughout the presentations of emerging issues in higher education, hidden concerns, the unique challenges, their novel approaches and recommended solutions.

- Safety in the Arts: Caution—Creative Minds at Work! B. Cooley, University of California Office of the President, Oakland, CA.
- A Survey of Laboratory Safety at Eight Major Universities in China. S. Yu, Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong.
- Protective Gloves for Use When Handling Pyrophoric Chemicals. J. Thompson, Ansell, Pendleton, SC.
- Chemical Handling: Comfort and Dexterity While Using Hand Protection.
 I. Castro-Rodriguez, University of California Berkeley, Berkeley, CA.
- What Did They Write? Using Discourse Analysis of Online Comments to Gauge Safety Attitudes and Culture. J. Klane, Arizona State University, Tempe, AZ.

RT220 🗸 🔓

GHS in the Laboratory Environment: Impacts and Opportunities

2:00 PM - 4:30 PM

337/338

Arrangers: A. Mims, Eli Lilly & Company, Indianapolis, IN; J. Nesbitt, Mayo Clinic, Rochester, MN. Moderator: S. Hemperly, HGST, a Western Digital company, San Jose, CA. Monitors: G. Tomaszewski and C. Davis, Eli Lilly & Company, Indianapolis, IN.

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All provisions of the U.S. adoption of GHS will be fully enforceable as of June, 2016. During the transition, a large amount of learning and implementation has been accomplished. This collection of presentations has been developed with a focus on GHS in the laboratory environment. Challenges with implementation, solutions to common problems, and opportunities to transform the hazard communication process will be discussed.

- The Impact of the GHS on the Lab Standard. D. Deeds, Industrial Health & Safety Consultants, Inc., Shelton, CT.
- Chemical Hazard Banding Using GHS Classification. M. Squillace, Mayo Clinic, Rochester, MN.
- GHS in NASA's Research and Development Laboratories. E. Lackey, NASA, Houston, TX.
- GHS in NASA's Research and Development Laboratories. F. Calovini, NASA, Glenn Research Center, OH.
- GHS and the GE Global Research Lab. E. Leighton, GE Global Research, Niskayuna, NY.

RT221

New Confined Spaces in Construction Standard

2:00 PM - 4:30 PM

316/317

Arranger: C. Dellacqua, Amgen, Thousand Oaks, CA. Moderator: C. Dellacqua, Amgen, Thousand Oaks, CA. Monitors: S. Fess, Xerox Corporation, Webster, NY; M. Cashio, S&ME, Inc., Charlotte, NC.

- OSHA Confined Spaces in Construction. J. Douma, USDOL/OSHA, Washington, DC.
- Confined Spaces in Construction: The OSHA Hits Keep on Coming. T. Krug, EXOSHA, Bartlett, IL.
- An Overview of Current Target Health Hazards(in Construction Operations: Impact of the new Construction Confined Space Standard. S. Rosen, Consultant, New York, NY.
- New Confined Space Standard Examples. T. Niedzwiecki, ERSI, Schenectady,
- New OSHA Confined Spaces in Construction—Excavations. M. Palmer, EnSafe, Inc., Knoxville, TN.

SSO02

Investigating Dermal Exposures: Sampling, Assessment, and **Control Strategies**

2:00 PM - 4:30 PM

324/325/326

Arranger: R. Seymour, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD. Moderator: J. Sahmel, Cardno ChemRisk, Boulder, CO. Monitors: S. Battista, 3M Corp Safety and Industrial Hygiene, St Paul, MN; C. Richard, ATL, Baltimore, MD.

Dermal exposures are often overlooked in occupational exposure assessments. Speakers will cover several topics, including methods used to measure dermal contaminant concentrations, the potential for absorption, sensitization, ingestion via hand-to-mouth transfer, estimating absorbed dose from measured exposures, establishing benchmarks, and an understanding of why these exposures happen and control recommendations.

- You've Got Something on Your Face and Hands: Assessment of Dermal Lead **Concentrations During Army Training** Activities. R. Seymour, P. Lilley, A. Weber, and I. Marti-Sanchez, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD; I. Marti, Merck & Co., Inc., Manati, PR.
- Skin Hydration Measurement Techniques. J. Sahmel, Cardno ChemRisk, Boulder, CO.
- Targeted Risk Assessment: Predicting Skin Exposure and Absorbed Dose. R. Tibaldi. ExxonMobil Biomedical Sciences, Annandale, NJ.
- Development of Benchmarks in Dermal Exposure Assessment. R. Roy, 3M Company, St Paul, MN.
- Skin Sensitizer Lessons Learned for Incident Reduction. B. Solom, 3M Lab Safety, St Paul, MN.

PO112

Outstanding Environmental and Occupational Health Issues: Comparing the Situation in the **United States and Globally**

2:00 PM - 4:40 PM

343/344

Arrangers: L. Wong, EH&S, University of California Office of the President, Oakland, CA; A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO. Moderators: K. Hiteshew, Environmental Profiles, Inc., Columbia, MD. Monitors: D. Hall, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO; J. McIntosh, Marshall University, Charleston, WV.

2:00 PM - 2:20 PM

Rachel Carson Award

2:20 PM - 2:40 PM

Investigation and Remediation of a Former Cadmium Telluride (CdTe) Solar Panel Manufacturing Facility. R. Strode, C. Strode, W. Mele, S. Funk, and D. Hall, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

2:40 PM - 3:00 PM

Environmental Forensic Investigation of Surface Particulates in a Residential Community, Allegedly from Foundry Fugitive Emissions. J. Kominsky, Environmental Quality Management, Inc., Cincinnati, OH.

3:00 PM - 3:20 PM

Nuclear Regulatory Commission Groundwater Supplemental to the Environmental Impact Statement (EIS): A Critique on Scientific and Regulatory Issues. J. Paz, Dr. Jacob Paz Consultant, Henderson, NV.

3:20 PM - 3:40 PM

Asbestos Around the World: Mexico, Ukraine, Tajikistan. A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

3:40 PM - 4:00 PM

What are the Current Global Concerns about Silica Dust Exposures and Health Risks in the Wake of the New OSHA Regulations? D. Goldsmith, George Washington University, Washington, DC.

4:00 PM - 4:20 PM

Industrial Hygiene and Worker Welfare at the Barzan Onshore Project. R. De-Hart, Rasgas Barzan Project, Ras Laffan Qatar, Matthews, NC; R. Zamuco and J. Brand, JGC Corporation, Al Khor, Qatar.

4:20 PM - 4:40 PM

Developing Sustainable Industrial Hygiene Program in the Region by GE. S. Ranpura, EHS, GE, Bangalore, India. (WITHDRAWN)

RT222

Integrating Cumulative Risk Assessment into the Practice of Occupational Health

2:00 PM - 5:00 PM

321/322/323

Arranger: S. Dotson, CDC/NIOSH, Cincinnati, OH. Moderator: R. Niemeier, CDC/ NIOSH, Cincinnati, OH, Monitors: A. Rossner, Clarkson University, Potsdam, NY; B. Beadie, Maul, Foster & Alongi, Inc., Portland, OR.

Occupational health professionals are consistently challenged to answer questions regarding workers' exposures to complex conditions and hazards. This roundtable is

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intended to highlight how cumulative risk assessment (CRA) approaches can assist IH's in making better informed decisions aimed at increasing our ability to protect workers' safety and health.

- The Promise of Cumulative Risk Assessment. F. Boelter, RHP Risk Management Inc., Boise, ID.
- Drivers for Cumulative Risk Assessment: What Are They and Why Are They Important to Occupational Hygiene
 Now? T. Lentz, CDC/NIOSH, Cincinnati, OH.
- Approaching Problem Formulation for Cumulative Risk Assessment in Occupational Settings. M. Fox, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.
- Cumulative Risk Assessment Challenges and Data Needs. P. Williams, E Risk Sciences, LLP, Boulder, CO.
- Practical Application of the Principles of Cumulative Risk Assessment in the Practice of Occupational Risk Analysis.
 A. Maier, University of Cincinnati, Cincinnati, OH.
- Building the Foundation for Occupationally-Based Cumulative Risk Assessments. S. Dotson, CDC/NIOSH, Cincinnati, OH.

RT223

Life Cycle of a Hazardous Drug 2:00 PM - 5:00 PM 341/342

Arranger: S. Carry, Kaiser Permanente, Oakland, CA. Moderator: J. Rice, Intermountain Healthcare, Salt Lake City, UT. Monitors: M. Jones, Iowa City VA Health Care System, Iowa City, IA; M. Zock, FedEx Ground, Moon Township, PA.

Organizations struggle implementing the myriad of requirements and guidance that pertain to the management of hazardous drugs. Presenters will take attendees on a journey of the life cycle of a hazardous drug to provide compliance and operational insights on the management of hazardous drug programs.

- Hazardous Drugs Make Medicines.
 M. Stone, Biogen, Research Triangle Park, NC.
- Development of the NIOSH List of Hazardous Drugs. T. Connor, CDC/NIOSH, Cincinnati. OH.
- Hazardous or Not? The Industrial Hygiene Dilemma. A. Scott, Children's Hospital of Philadelphia, Philadelphia, PA.

- Update on Engineering Controls for Compliance with USP Chapter. J. Wagner, Controlled Environment Consulting, Hellertown, PA.
- Is It a Hazardous Drug, a Hazardous Waste, or Both? C. Smith, WMSS PharmEcology Services, Milwaukee, WI.
- Operational Impacts of Adhering to NIOSH and USP 800 Standards. C. Bennett, Kaiser Permanente, Fresno, CA.

RT224 🔓



2:00 PM - 5:00 PM

339/340

Arranger: J. Snawder, CDC/NIOSH, Cincinnati, OH. Moderator: K. Murray, BP America, Houston, TX. Monitors: R. Brauch, Casella CEL Inc., Williamsville, NY; L. Anderson, Golder Associates, Wexford, PA.

Chemical detection and exposure assessment is a cornerstone of occupational safety and health. Direct reading and field portable instruments are used throughout the oil and gas industry to alert workers to unsafe atmospheres, to determine average exposures over time, identify hazard sources and patterns of individual worker exposures.

- Overview of Instruments and Applications for Real-Time Monitoring by NIOSH for Field Studies and Exposure Assessment Research. J. Snawder, CDC/NIOSH, Cincinnati, OH.
- Using Direct-Reading Instruments for Determining Compliance with OSHA Requirements. T. Pearce, USDOL/OSHA, Edmond, OK.
- My Four-Gas Monitoring Program Is My Industrial Hygiene Program. M. Ndonga, Encana Oil & Gas (USA) Inc., Denver, CO.
- Determination of Brief, Transient Hydrocarbon Exposures During Crude Oil Tank Gauging. P. Smith, USDOL/OSHA, Sandy, UT.
- Applications for Direct Reading Instruments at an Oil Refinery. P. Owens, Shell Oil Company, Martinez, CA.
- Use of Real-Time Respirable Dust Monitoring and Silica Measurement in the Field to Assess Efficacy of Dust Controls. E. Cauda and A. Cecala, CDC/ NIOSH, Pittsburgh, PA.

RT225

Worker Participation in Community-Based Research

2:00 PM - 5:00 PM

345/346

Arranger: A. Parker-Vega, UMass Lowell, Lowell, MA. **Moderator:** N. Townsend, Chevron, San Ramon, CA. **Monitors:** P. Stanch, NASA, Johnson Space Center, Houston, TX; S. McAllister, OSHA/CAL.

CBPR has a strong following in environmental health, but it is rarely discussed in Industrial Hygiene. What techniques can Industrial Hygienists use to work together with workers to better understand, characterize, and control the hazards in the workplace? What benefits does the CBPR approach bring? What are some of the challenges?

- Worker Engagement in Industrial Hygiene and Its Impact on Improving Health and Safety in the Workplace.
 R. Sabty-Daily, UCLA Labor Occupational Safety and Health Program, Los Angeles, CA.
- Using CBPR Principles in a Silica Exposure Assessment at a Metal Filter Manufacturing Plant. G. Siwinski, CNY Occ. Hlth. Clinical Center, Syracuse, NY.
- Work Environment Interventions for the Prevention of Chronic Kidney Disease of Non Traditional Causes (CKDnT) Among Sugarcane Cutters in Central America.
 I. Weiss, La Isla Foundation, New York City, NY.
- Community Engagement with Navajo Uranium Miners and Families Seeking Compensation. D. Brugge, Department of Public Health and Community Medicine, Boston, MA.
- Engaging Firefighters in Exposure Research and Risk Prevention Strategies. E. Haynes, University of Cincinnati, Cincinnati, OH.
- Screening & Assessing Hepatitis in Non-Healthcare Populations in New Orleans. F. Grimsley, Xavier University of Louisiana, New Orleans, LA.

RT226

Crude Oil Derailments-Lessons Learned on How to Respond Safely and Effectively

2:00 PM - 5:30 PM

347/348

Arrangers: L. Weems, U.S. Army Corps of Engineers, Little Rock, AR; E. Primeau, USCG Atlantic Strike Team, Fort Dix, NJ. Moderator: J. Kivuyo, University of Central Missouri, Warrensburg, MO. Monitor: D. Rude, 3M, Minneapolis, MN.

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The transportation of light crude oil, such as Bakken, by rail has gained a lot of attention over the past few years. This is in part due to past tragic events and the rapid increase in shipments from hydro-fracturing facilities. Presenters will examine how safety and health personnel currently support response operations and what needs to be addressed to ensure that the responders and affected communities are kept safe during future operations.

- Transport by Rail of Crude Oil—How We Got Here. L. Weems, U.S. Army Corps of Engineers, N Little Rock, AR.
- Crude Oil Derailment Response 101. S. Skelton, Center for Toxicology and Environmental Health, Cabot, AR.
- Current Field Operations—How the Railroads Respond. P. Brady, BNSF, Fort Worth, TX.
- The Evolving Role of the IH Before, During and After the Derailment. B. Bullock, CSX, Jacksonville, FL.
- Putting the Pieces Together—The Science Behind the Decision Making. D. Hamlin, GHD, Little Rock, AR.
- In-Situ Burn Guidance for the Safety Officer. E. Primeau, USCG Atlantic Strike Team. Fort Dix. NJ.
- Preparedness Initiatives in Crude by Rail Transport. L. Stainsby, FEMA, Washington, DC.

RT227

The 7 Habits of Highly Effective **Industrial Hygiene Leaders** 2:00 PM - 5:30 PM 318/319/320

Arranger: T. Paz, Architect of the Capitol, Washington, DC. Moderator: N. Greeson, Duke University, Duke University Health System, Durham, NC. Monitors: T. Paz, Architect of the Capitol, Washington, DC; B. Kissel, Cornell University, Ithaca, NY.

Throughout the typical industrial hygiene career, there will be continuous lifelong learning within technical competencies. However, the most distinguished industrial hygiene leaders will tell you that they also developed soft skills to help them advance their careers. In this Roundtable, co-sponsored by the AIHA Mentoring and Professional Development Committee and the Student and Early Career Professionals (SECP) Committee, attendees will hear from some of the most highly regarded leaders in industrial hygiene today about their career journey and the soft skills that helped them become more effective industrial hygienists.

- The Habit of Fostering and Seeking Inter-Professional/Inter-Disciplinary Collaboration. J. Henshaw, ChemRisk, LLC, Sanibel, IL.
- Habits Important to Leadership Success-One Opinion. S. Mansdorf, Sustainability Consultants, Boca Raton, FL.
- Creating a Culture of Habitual Adaptation. F. Boelter, RHP Risk Management, Inc., Chicago, IL.
- The Self-Empowerment Habits. C. Laszcz-Davis. The Environmental Quality Organization, LLC, Lafayette, CA.
- Learning the Good Habits of Others. N. Tresider, Petroch Services Pty Ltd. Melbourne, VIC, Australia.
- Inter-Professional and Interdisciplinary Collaboration—How Teamwork Enables Exceptional Outcomes. D. Doganiero, Army Institute of Public Health, Aberdeen Proving Ground, MD.
- Commitment to Leadership: Committing to the People That Work for You and with You. S. Ripple, Susan Ripple Consulting, LLC, Midland, MI.

RT228

Managing a Respiratory **Protection Program: Applied Best Practices**

2:00 PM - 6:00 PM

Arranger: J. Hauge, 3M, Saint Paul, MN. Moderator: J. Hauge, 3M, Saint Paul, MN. Monitors: P. Swearengen, Avon Protection, Cadillac, MI; M. Parham, Scott Health and Safety, Monroe, NC.

This panel of industrial hygienists will share their lessons learned from administering a respiratory protection program, the challenges they have encountered and how they overcame them. The session will be rounded out by two perspectives on some of the regulatory and consensus standards that guide the efforts of respiratory protection program administrators.

- **Practical Considerations and Lessons** Learned from Managing a Respiratory Protection Program in a Manufacturing Facility for 550 Wearers. D. Westrum, 3M, Hutchinson, MN.
- It's Deer Season and Other Lessons Learned on Campus. P. Kostle, University Health Services/Environmental Occupational Health, Madison, WI.
- **Designing Respiratory Protection Emer**gency Egress from Long Train Tunnels. M. Mitchell, Genesee & Wyoming Railroad Services Inc., Jacksonville, FL.

- Respiratory Protection Challenges: One Organization's Efforts to Manage a Respiratory Protection Program for its Health Care Providers across the Globe. K. Bradford, Department of State, Potomac, MD.
- Inheriting the Respiratory Protection Program at a Modern Research University. D. Toon, University of Massachusetts, Amherst, Amherst, MA.
- Respirator Cartridge Testing: When You Need to Develop Your Own Objective Data to Determine Cartridge Life. M. Schmoldt, Washington River Protection Solutions, Richland, WA.
- Quality Partnerships Enhance Respiratory Protection. R. Metzler, Richard W Metzler Inc., Houston, PA.
- OSHA Regulatory Compliance Requirements for Respiratory Protection Program Administrators. L. Nieves, USDOL/ OSHA, Washington, DC.

RT229

336

Results of Interesting and **Unusual NIOSH Health Hazard Evaluations**

2:00 PM - 6:00 PM

314/315

Arranger: T. Seitz, CDC/NIOSH, Cincinnati, OH. Moderator: T. Seitz, CDC/NIOSH, Cincinnati, OH. Monitors: L. Chen, SUNY, Albany, NY; D. Ceballos, Harvard University, Boston, MA.

In response to Health Hazard Evaluation (HHE) requests, NIOSH teams conduct on-site evaluations to assess the hazards. Potential hazards investigated can include chemical, biological, and physical hazards and stressors. Speakers will present the results of several unique and interesting evaluations. Information about the assessment strategy, evaluation results, practical recommendations for controlling the identified hazards, program evaluation and follow back activities will also be discussed.

- Law Enforcement Agents' Potential Exposures During a Raid of a "Spice" Lab. J. Ramsey and L. Tapp, CDC/NIOSH, Cincinnati, OH.
- Heat Stress, Heat Strain, and Rhabdomyolysis Among Structural Firefighter Cadets and Instructors. M. Methner and J. Eisenberg, CDC/NIOSH, Cincinnati,
- Occupational Exposures in an Understudied Industry: Non-Transplant Anatomical Donation. J. Harney and M. de Perio, CDC/NIOSH, Cincinnati, OH.

Technical Sessions TUESDAY, MAY 24

- Investigation of an Unpleasant Odor at an Aircraft Seat Manufacturer. K. Broadwater, M. de Perio, S. Brueck, N. Burton, A. Lemons, and B. Green, CDC/ NIOSH, Cincinnati, OH.
- Evaluation of Indoor Environmental Quality in a Public Elementary School Where Employees Had Undergone Inappropriate Medical Testing. L. Zwack, E. Page, and G. Burr, CDC/NIOSH, Cincinnati, OH.
- **Evaluation of Noise Exposures at a Gray** and Ductile Iron Foundry. S. Brueck, CDC/NIOSH, Cincinnati, OH.
- Lessons Learned from HHE Program Stakeholders. R. McCleery, D. Wiegand, A. Tepper, S. Ahrenholz, and B. Jenkins, CDC/NIOSH, Cincinnati, OH.
- Insight from Followback Activities— Industrial Hygiene and Occupational Health at Work. S. Ahrenholz, CDC/ NIOSH, Cincinnati, OH.

IL07



Ignite: Enlighten Me but Make it **Quick! Offering Enlightenment and** Knowledge-In a Hurry!

3:30 PM - 5:00 PM

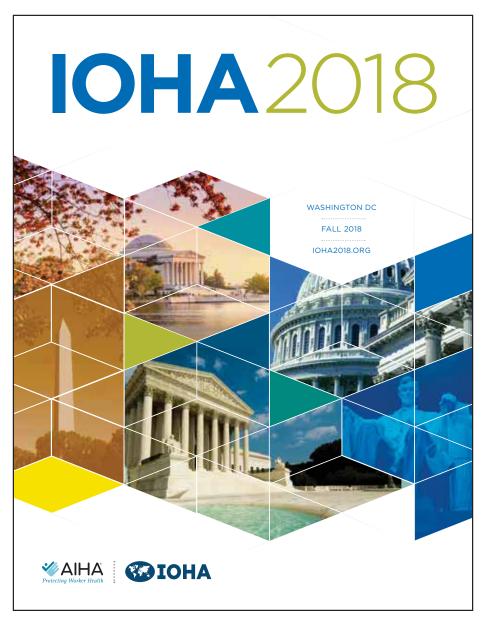
RALLBOOM

Moderator: K. Merritt, NASA/Mission Technologies, Hampton, VA. Arranger/Monitor: M. Milroy, 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 is offering its own version of IGNITE. Learn what is on the mind of your colleagues and friends in this innovative and engaging new format. Find out why this program has become an international phenomenon and why there is always a standing-room only crowd at AlHce! Experience first-hand what is meant by the IGNITE motto, "Enlighten us, but make it quick!"

- So What Is It That You Do Again? J. Kunz, 3M, Esko, MN.
- Knowledge Transfer and Sharing -The Key to a Successful Profession. V. Patel, BP America, Houston, TX.
- Asbestos, Asbestosis, and Family Tragedy ... In The Key of A. C Jones, D. Chute, NAVMEDCEN, Portsmouth, VA.
- Experience The Magic! M. Wan, Ferris State University, Big Rapids, MI.

- The Name Thing. C. Ficklen, Mission Technologies, Inc., Hampton, VA
- Deep Thoughts from an IH Black Sheep. M. Canright, Forensic Analytical Consulting Services, Inc., San Diego, CA.
- "I Am Alice Hamilton". A. Dartt, Golder Associates, St. Charles, MO.
- Heavy Metal Exposures. S. Wilde, Stantec Consulting Ltd., Mississauga, ON, Canada.
- Top Survival Tips for Women in Construction. K. Cole, Ventia, Kingsgrove, NSW, Australia.
- "Culture is the Thing to Catch the Conscious of the "Safety Professional!" (Apologies to Shakespeare). R. Renzi, AECOM, Chelmsford, MA.
- Burn Baby Burn—The Human Cost of Electronic Waste Across the Globe, B. Fontaine, Jr., The Windsor Consulting Group, Inc., South River, NJ.
- Oil Painting: a Hobby or a Group of Hazards? M. Elhelali Ibrahim, Ministry of National Guard, Health Affairs, King Abdulaziz Medical City, Riyadh, Saudi
- The Walking Dead Workforce: Why Sleep and Wellness Matters! K. Trefethen, BSI, San Jose, CA.









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Wednesday At-a-Glance

Wednesday, May 25 **AIHA**

6:30 AM - 8:00 AM

Mark of Excellence Breakfast



(This event is taking place in lieu of a Wednesday morning General Session and is

included in your registration, but pre-registration is required.), Ballroom

7:30 AM - 4:00 PM

Registration, Pratt Street Lobby

7:30 AM - 6:30 PM

Speaker Ready Room, Room 330

8:00 AM - 1:30 PM

New **Opening** Time!

Expo Hall Open with Poster Sessions

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- PS 405 Authors Present 10:00 AM Noon
- Student Poster Awards 12:30 PM 1:00 PM

9:30 AM - 11:00 AM

Past Presidents Forum, Hilton, Carroll

10:00 AM - 11:00 AM



CR310 - Elevating EHS Leading Indicators: From Defining to Designing, Room 337/338



- CR312 Commercial and Industrial Fall Protection Innovations, Room 339/340
- CR313 Industrial Ecology and Workplace Health, Room 341/342
- CR314 It's All About That Dust—NFPA Combustible Dust Standards 2016. Room 343/344

CR315 - The ANSI Z9.11 Laboratory Decommissioning Standard: Recent Revisions and Practical Applications, Room 345/346

10:00 AM - 12:00 PM

- PS 405 Authors Present, Exhibit Hall E
- P0113 Data Analysis in Exposure Assessment, Room 324/325/326
- P0114 Mold and Fungal Contaminants—Detection and Prevention in the Built Environment, Room 321/322/323
- P0115 New Assessment Tools and Interventions to Manage MSD Risk, Room 347/348
- P0116 Non-Routine Industrial Hygiene: Evolving Issues in Emergency Response, Room 349/350
- P0117 Regulatory and Communication Issues in Hazard Assessments, Room 318/319/320
- RT230 Welding Fume Health Hazards, Exposure Assessment and Control. Room 316/317
- SP09 Bayesian and Professional Judgment Users Group (Pre-registration is required). Room 336
- SS003 Progress and Current Issues in Nanotechnology-Occupational Risk Assessment and Management, Room 314/315
- Construction Committee, Hilton, Tubman
- Students and Early Career Professionals Committee, Hilton, Paca

10:30 AM - 12:30 PM

 Local Sections Council Business Meeting, Hilton, Holiday Ballroom 1

12:30 PM - 1:00 PM

• Student Poster Awards Ceremony, Exhibit Hall E, at end of poster aisles

12:30 PM - 1:30 PM

 SP08 - Donald E. Cummings Award Lecture: A Modest Proposal: Leverage Our Deep, Diverse and Adaptive Capacity, Exhibit Hall E

1:30 PM - 3:30 PM

SP20 - AIHA Research Project Updates, Hilton, Holidav Ballroom 3

1:30 PM - 3:50 PM

 P0118 - Health and Safety Risk Assessments, Guidelines, Inspection Methods, and Other Current Topics, *Room 339/340*

1:30 PM - 4:00 PM

 RT231 - Bringing the Science to the PPE Standards—Impact on Pandemic Influenza and Ebola Response Activities, Room 341/342

- RT232 The Importance of the Business Case in Demonstrating the Value of the IH Profession, Room 318/319/320
- RT233 Silica Exposure in Brick and Stone Industry in Developing Economies, Room 327
- RT234 What Do I Need to Know About Nonionizing Radiation?, Room 343/344
- SS004 Wearable Sensors in Occupational Safety and Health Practice, Room 316/317

1:30 PM - 4:10 PM

 P0119 - IH Data: Tools for Exposure Assessment and Epidemiology, Room 321/322/323

1:30 PM - 4:30 PM

- P0120 Advances in Aerosol Technology, Room 345/346
- RT235 Development of NIOSH Recommended **Exposure Limits and Other Authoritative** Recommendations. Room 314/315
- RT236 Emerging Issues in Research and Teaching Laboratories, Room 336
- RT237 Mock Trial: Criminal Trial of CIH and IH Expert Witness Testimony, Room 324/325/326

1:30 PM - 5:00 PM

 RT238 - Expecting the Unexpected: Incident Preparedness and Response for the Early Career Professional, Room 347/348

2:00 PM - 3:30 PM

AIHA-ABIH Joint Interaction, Hilton, Stone

2:00 PM - 4:00 PM

- Indoor Environmental Quality Committee, Hilton. Poe
- Joint EASC/S&S Exposure Assessment Team, Hilton, Brent
- Oil and Gas Working Group, Hilton, Carroll

2:30 PM - 4:00 PM

 Volunteer Group Officer Training Session, Hilton, Holiday Ballroom 2

2:30 PM - 4:30 PM

. SP10 - AlHce Movie Matinee: "The Cost of Construction", Hilton, Holiday Ballroom 5/6

3:00 PM - 4:00 PM

• CR317 - To Reuse or Not to Reuse, That Is the Question, *Room 349/350*

3:00 PM - 5:00 PM

Toxicology Committee, Hilton, Tilghman

4:00 PM - 5:30 PM

Mining Working Group, Hilton, Paca

4:00 PM - 6:00 PM

- AIHA Fellows SIG, Hilton, Peale
- PCC On-site Meeting, Hilton, Calloway A

5:00 PM - 7:00 PM

• Career and Employment Services Committee, Hilton, Blake

5:30 PM - 6:30 PM

 CR318 - You Too Can Deliver a 30% Reduction in Your Contractor EHS Metrics, Room 327

5:30 PM - 7:30 PM

 P0121 - Evaluation of Airborne Contaminants, Room 337/338

RT239 - Hot Topic in Ergonomics: Sit-Stand and Alternative Workstations in the Office Workplace, *Room 314/315*

RT240 - Progress in Improving Occupational and Environmental Health in Bangladesh After the Rana Plaza Building Collapse, *Room 336*

5:30 PM - 8:00 PM

 RT241 - Noise Can Be Beat. We Did It and Won!, Room 324/325/326

RT242 - Strategies for Reactive Chemical Sampling and Analysis, Room 343/344

6:30 PM - 8:00 PM

 President's Reception (by invitation only), Hilton, Key Ballroom 7

ABIH

2:00 PM - 3:30 PM

AIHA-ABIH Joint Interaction, Hilton, Stone

Ancillary

10:00 AM - 12:00 PM

Focus on Accreditation, Hilton, Calloway

1:30 PM - 5:00 PM

 Forest Products Industry Industrial Hygiene Forum, Hilton, Key Ballroom 4



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Wednesday, May 25

Technical Sessions



6:30 A.M.-8:00 A.M.

BALLROOM

The Mark of Excellence Breakfast is a celebration of the extraordinary contributions made by members and the volunteer community to the industry and the profession. Connect with leading and emerging industry trailblazers, pay tribute to those whose exemplary dedication to the industry and the pro-

fession has made a positive and lasting impact, capitalize on engaging your professional peers—exchange ideas, insights, and solutions, and renew your excitement about industrial hygiene! You won't want to miss this prestigious and fun-filled event.

This event is included in your registration, but pre-registration is required.



CR310 💡

Elevating EHS Leading Indicators: From Defining to Designing

10:00 AM - 11:00 AM

337/338

Presenter: J. Inouye, Campbell Institute, National Safety Council, Itasca, IL.

In the latest phase of this ongoing study, EHS experts from Campbell Institute shared a wealth of leading indicator information, leading to the development of a practical guide of EHS leading indicators, with lessons learned. Speaker will provide an overview of the concepts behind a practical approach to leading indicators, as well as specific sample metrics and case studies all organizations can put to use to achieve EHS excellence.

Ergonomic Applications to Improve Laboratory Safety

10:00 AM - 11:00 AM

Presenter: J. McGlothlin, Purdue University, Grand Rapids, MI.

Because of the high-profile and publicized stories about laboratory incidents involving anthrax, Ebola, and avian influenza, this crossover session will highlight the emerging challenges of adverse laboratory incidents being faced today. The goal of this session is to have a better understanding of the rapidly evolving nature of work in the laboratory. and the role that ergonomics can play to improve laboratory function to prevent adverse health and safety outcomes.

CR312

Commercial and Industrial Fall Protection Innovations

10:00 AM - 11:00 AM

339/340

Presenter: D. Kudlinski, Arcadis, Irvine, CA.

When identifying locations with a risk of a fall, a risk assessment is the first step to mitigate the hazard. The implementation of engineering controls is frequently a long-term solution due to the cost and planning required. Nevertheless, the fall risk must be managed somehow. The employer is required to assure that interim controls are reliable and effective safety measures. The marketplace has exploded with innovative fall controls to fit virtually any work task.

CR313

Industrial Ecology and Workplace Health

10:00 AM - 11:00 AM

341/342

Presenter: M. O'Reilly, SUNY Empire State College, Syracuse, NY.

This presentation addresses what industrial hygiene brings to industrial ecology, what industrial hygiene can learn from industrial ecology and why both fields should embrace each other. Industrial hygiene knowledge and skill, from understanding industrial processes to controlling occupational and environmental risk, are essential to the emerging field of Industrial Ecology and sustainability.

CR314

It's All About That Dust—NFPA Combustible Dust Standards 2016

10:00 AM - 11:00 AM

343/344

Presenter: S. Bershad, National Fire Protection Association, Quincy, MA.

Now that NFPA 652, Standard on the Fundamentals of Combustible Dust has been published, the presenter will review how the industry and commodity-specific dust standards (NFPA 664, 654, 61, and 484) interact with NFPA 652 to provide requirements for the protection of facilities with combustible dusts. An update will be provided on the status of the commodity specific standards and how they are evolving to correlate with NFPA 652.

CR315 🔼

The ANSI Z9.11 Laboratory Decommissioning Standard: Recent Revisions and Practical Applications

10:00 AM - 11:00 AM

345/346

Presenter: R. Kleinerman, Kleinerman & Associates, Environmental Health & Safety Consulting, LLC, E. Palo Alto, CA.

The ANSI Z9.11 subcommittee was chartered to develop guidelines on decommissioning a laboratory, with special emphasis on the risk assessment process. This standard assumes that laboratories are inherently safe environments and the decommissioning methods should be selected based on both the risk assessment and future use of the facility. The focus of this session is to provide the an overview of the standard, the "process" for decommissioning a laboratory, and some practical considerations for applying the elements of the standard.





PO113

Data Analysis in Exposure Assessment

10:00 AM - 12:00 PM 324/325/326

Arranger: E. Massawe, N/A, Hammond, LA. Moderator: M. Adams, Farmington, NM. Monitors: R. Rogers, IHFSP, AIPH, Bel Air, MD; J. Lohkamp, ESIS, Inc. - Global Risk Control Services, Dallas, GA.

10:00 AM - 10:20 AM

Aggressive or Passive Particle Sampling: An Evaluation of the Efficacy of Disturbing Settled Dust as Part of an **Exposure Assessment to Environmental** Allergens. R. Allenbrand, Environmental Health, Children's Mercy Hospital, Kansas City, MO.

10:20 AM - 10:40 AM

Historical Levels of Benzene, Hydrogen Sulfide and Noise to Demonstrate Exposure Trends in a Petroleum Refinery. F. Akbar-Khanzadeh, M. Chambers, S. Milz, A. Ames, and M. Valigosky, UT HSC College of Medicine, Toledo, OH.

10:40 AM - 11:00 AM

The Log-Binomial Model for Exposure Data Analysis. T. Mathew, Mathematics and Statistics, University of Maryland Baltimore County, Baltimore, MD; K. Krishnamoorthy, University of Louisiana at Lafayette, Lafayette, LA. (WITHDRAWN)

11:00 AM - 11:20 AM

Preliminary Results on Testing a Field-Based Respirable Silica Monitoring Approach in Surface Copper Mines. E. Cauda and L. Chubb, CDC/NIOSH, Pittsburgh, PA; R. Reed and E. Lutz, University of Arizona, Tucson, AZ.

11:20 AM - 11:40 AM

Toluene Diisocyanate Exposure: Exposure Assessment and Development of Cross-Facility Similar Exposure **Groups Among TDI Production Plants.** B. Doney, P. Middendorf, and W. Miller, CDC/NIOSH, Morgantown, WV; T. Feeley, Covestro LLC, Pittsburgh, PA; R. D'Angelo, Covestro LLC, Baytown, TX; L. Martinez, BASF Corporation, Geismar, LA; J. Cikalo, Dow Chemical Company, Midland, MI.

11:40 AM - 12:00 PM

Estimates of Occupational Inhalation Exposures on the Four Rig Vessels During the Deepwater Horizon Oil Release Cleanup. T. Huynh, University of Alabama at Birmingham, Birmingham,

Exhibitor Product Demos and Presentations

8:00 A.M. – 1:30 P.M., EXPO LEARNING PAVILIONS 1 & 2, EXPO HALL

ILC DOVER

8:40 A.M. - 9:10 A.M.

Improved Worker and Drug Safety through Flexible Containment

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9:20 A.M. - 9:50 A.M.

Aura[™] — New Technology for Personal Air Sampling

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11:50 A.M. - 12:20 P.M.

Bactiquant Water: A Rapid Onsite Screening Tool for Assessing Legionella Risk & Water System Hygiene

Mycometer

Expo Learning Pavilion 1 mycometer

High bacterial loads in water systems increase the risk of the presence of pathogenic bacteria such as Legionella and Pseudomonas. Hospitals, hotels, universities and other facilities with large potable water systems, cooling towers and decorative water features are particularly vulnerable. Although routine biocide treatment will mitigate most concerns, dead legs, scale buildup and biofilms can hide bacterial amplification. Traditional monitoring methods require sample collection and culture plate analysis which can be time consuming,

highly variable and costly. Oftentimes, the risk assessment is conducted when an outbreak has occurred. In these instances, time is of the essence to locate and mitigate the source.

12:30 A.M. - 1:30 P.M.

Cummings Award Presentation — A Modest Proposal: Leverage Our Deep, Diverse and Adaptive Capacity

Expo Learning Pavilion 1



Presenter: Fred Boelter, RHP Risk Management Inc., Boise, ID.

A healthy and sustainable economy will always need healthy workers and a healthy

environment. Our profession has a past and future requiring of us inquisitiveness, endless learning and reinvention. Advances in knowledge and technology, changing expectations, re-definitions of the workplace, blurred lines between occupational and non-occupational. new forms of the built environment, and globalization have placed extraordinary demands on us to meet the needs of stakeholders. Who isn't a stakeholder when questions and concerns arise and decisions are required regarding health, safety and the environment? In this perpetually risky natural and manmade world of ours, stakeholders judge consequences but nevertheless want to feel safe. However, reducing risk is neither free nor absolute. Characterizing, communicating, and managing risk has always been the domain of our profession but risk is a demanding, imprecise, and fickle subject well beyond exposure. Charting a clear pathway rooted in science and packaged in practical if not pragmatic practice allows us to adapt and progress toward expanded and continued leadership and influence.

Technical Sessions Wednesday, May 25

AL; G. Ramachandran C. Groth and S. Banerjee, University of Minnesota, Minneapolis, MN; A. Blair, National Cancer Institute, Gaithersburg, MD; M. Stenzel, Exposure Assessment Applications, Arlington, VA; D. Sandle, L. Engel, and R. Kwok, National Institute of Environmental Health Sciences, Research Triangle Park, NC; P. Stewart, Stewart Exposure Assessments, LLC, Arlington, VA.

PO114

Mold and Fungal Contaminants— **Detection and Prevention in the Built Environment**

10:00 AM - 12:00 PM

321/322/323

Arranger: G. McCaslin, SeaCast, Marysville, WA. Moderator: E. Sobek, Assured Bio Labs, LLC, Oak Ridge, TN. Monitor: E. Pinzer, Office of Healthy Homes, HUD, Washington, DC.

10:00 AM - 10:20 AM

Mold Remediation & Certification Laws in the United States: A Look at Where We Are & What We Need. E. Geltman and A. Hess, Hunter College, CUNY School of Public Health, New York, NY.

10:20 AM - 10:40 AM

What Do Those Spore Trap Categories Mean? H. Burge, EMLab PK, San Bruno, CA.

10:40 AM - 11:00 AM

Airborne Endotoxin and Asthma and Allergy in Elementary School Age Children: A Case-Control Study. Y. Yen, Public Health, Kaohsiung Medical University, Kaohsiung, Taiwan.

11:00 AM - 11:20 AM

IgE Antibodies to Fungi Among Asthmatic Children Living in Homes Damaged by Hurricane Sandy in New York City. A. Divjan, L. Acosta, and M. Perzanowski, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY; M. Little, C. D'Andrea, and N. Clark, New York City Department of Health and Mental Hygiene, New York, NY; E. Sobek, Assured Bio Labs, LLC, Oak Ridge, TN; N. Soffer, Intralytix, Baltimore, MD; B. Green, Allergy and Clinical Immunology Branch, Health Effects Laboratory Division, CDC/NIOSH, Morgantown, WV.

11:20 AM - 11:40 AM

Aspergillus Section Petersonii Sect. Nov. Encompassing Indoor and Soilborne Species with Predominant Tropical Distribution. Z. Jurjevic, Microbiology, EMSL Analytical, Inc., Cinnaminson, NJ; A. Kubátová, Department of Botany,

Faculty of Science, Charles University in Prague, Prague, Czech Republic; M. Kolarík, Institute of Microbiology, Academy of Sciences of the Czech Republic, Prague, Czech Republic; V. Hubka, Department of Botany, Faculty of Science, Charles University in Prague, Prague, Czech Republic.

11:40 AM - 12:00 PM

The Influence of Children Jumping on the Bed on Airborne Endotoxin and PM10/ PM2.5/ PM1 Concentration Profile. Y. Yen, Public Health, Kaohsiung Medical University, Kaohsiung, Taiwan.

PO115

New Assessment Tools and Interventions to Manage MSD **Risk**

10:00 AM - 12:00 PM

347/348

Arranger: K. Clawson, GE, Louisville, KY. Moderator: B. Finder, University of Wisconsin-Stout, Menomonie, Wl. Monitors: E. Gallo, Supply Chain-EHS Program Manager, Walgreens, Deerfield, IL; A. Dartt, Golder Associates Inc., St. Charles, MO; D. Bartlett, PPG Industries, Inc., Allison Park, PA.

10:00 AM - 10:20 AM

The ROI of Onsite Early Intervention to Prevent Strains and Sprains. T. Silva, Atlas Injury Prevention Solutions, Grand Haven. MI.

10:20 AM - 10:40 AM

Ergonomics & the Aging Workforce: What's New with the Aging Population? B. McGowan, Humantech, Inc., Ann Arbor, MI.

10:40 AM - 11:00 AM

Development of a New Assessment **Tool for Musculoskeletal Disorders** Associated with Lifting and Bending. R. Phalen, School of Science and Computer Engineering, University of Houston Clear Lake, Houston, TX.

11:00 AM - 11:20 AM

The Influence of Loading Parameters on Fatigue Life of MSD Tissues. S. Gallagher and M. Schall, Auburn University, Auburn, AL.

11:20 AM - 11:40 AM

Prevalence of Musculoskeletal Discomfort Related to Standing Works—Results from a Multi-Organization Study. Y. Huang, Safety, Health and Environmental Engineering, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan.

11:40 AM - 12:00 PM

Do Sit-Stand Workstations Warrant the Attention They Are Receiving? D. Hunt, Carleton University, Ottawa, ON, Canada.

PO116

Non-Routine Industrial Hygiene: **Evolving Issues in Emergency** Response

10:00 AM - 12:00 PM

349/350

Arranger: L. Weems, Safety and Health, U.S. Army Corps of Engineers, Little Rock, AR. Moderator: L. Weems, Safety and Health, U.S. Army Corps of Engineers, Little Rock, AR. Monitors: E. Primeau, USCG Atlantic Strike Team, Fort Dix, NJ; S. Rosen, DTCC, Wilmington, DE.

10:00 AM - 10:20 AM

Industrial Hygiene OUTSIDE the Fenceline. R. Jarecha, Paulsboro Refining Company, Paulsboro, NJ.

10:20 AM - 10:40 AM

A Comparison of Hazardous Materials Flow in Five Kentucky Counties: Urban vs. Rural Gradient. J. Basham, V. Golla, and R. Taylor, Western Kentucky University, Bowling Green, KY.

10:40 AM - 11:00 AM

Recommendations for Safe Handling of Human Remains Containing Viral Hemorrhagic Fevers (VHFs). J. Shugart, Emergency Preparedness & Response, CDC/NIOSH, Decatur, GA.

11:00 AM - 11:20 AM

Ebola Biosafety and Infectious Disease Response Training Needs Assessment and Gap Analysis for the NIEHS Worker Training Program. J. Rosen, National Clearinghouse for Worker Safety & Health Training, Research Triangle Park, NC; S. Beard, Worker Education and Training Program, NIEHS, Research Triangle Park, NC.

11:20 AM - 11:40 AM

A New Tool for Managing Dermal Risks: **Dermal Exposure Risk Management** and Logic (DERMaL) eToolkit. N. Hudson and S. Dotson, CDC/NIOSH, Cincinnati, OH; A. Maier, Environmental Health, University of Cincinnati, Cincinnati, OH.

11:40 AM - 12:00 PM

Emergency Responder Health Monitoring and Surveillance. C. Dowell, CDC/ NIOSH, Atlanta, GA.

WEDNESDAY, MAY 25 Technical Sessions

PO117

Regulatory and Communication Issues in Hazard Assessments

10:00 AM - 12:00 PM 318/319/320

Arranger: E. Massawe, Hammond, LA. Moderator: M. Adams, Farmington, NM. Monitors: R. Rogers, IHFSP, AIPH, Bel Air, MD; J. Lohkamp, ESIS, Inc.-Global Risk Control Services, Dallas, GA.

10:00 AM - 10:20 AM

Experimental Measurements of the Interzonal Air Flow Parameter (B) for Two-Zone Concentration Modeling. C. Keil, Wheaton College, Wheaton, IL.

10:20 AM - 10:40 AM

Managing Compliance to New N-Methyl Pyrrolidone (NMP) PEL: A Challenge for the IH Professional. A. Torres, Northrop Grumman Corporation, Redondo Beach, CA; N. Mack, Northrop Grumman, Torrance, CA.

10:40 AM - 11:00 AM

Justification for an Occupational Exposure Limit for Shale Gas Mixture.

P. Haas. Ever Green Health and Safety Consulting LLC, Palm Beach Gardens, FL.

11:00 AM - 11:20 AM

Premiering the NIOSH Manual of Analytical Methods, 5th Edition. P. O'Connor, DART, CDC/NIOSH, Cincinnati, OH.

11:20 AM - 11:40 AM

Assessment and Control of Low Observable Sanding Processes on F-22 Aircraft. M. Ferreri and A. Pabon, Bioenvironmental Engineering, US Air Force, Hickam AFB, HI.

11:40 AM - 12:00 PM

What Do You Mean My Laboratory Report May Have Errors? Successful Methods for Identifying, Mitigating, and Managing Data-Related Errors. S. Funk, R. Strode and A. Duane, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

RT230

Welding Fume Health Hazards, **Exposure Assessment and Control** 10:00 AM - 12:00 PM 316/317

Arranger: A. Siert, Xcel Energy, Denver, CO. Moderator: J. Spear, J.E. Spear Consulting, LP, Magnolia, TX. Monitors: J. McInnis, Boilermakers International, Fall River, NS, Canada; G. Beswick, ERM, Coraopolis, PA.

Current research on welding fume health hazards including hexavalent chromium and manganese, exposure assessment and control will be presented by a panel of experts with interaction with the audience.

- Processes, Metallurgy, Exposures and Opportunities for Exposure Reduction in **Electric Power Generation Gas Tur**bine Heat Recovery Steam Generator Construction and Maintenance. A. Siert, Xcel Energy, Denver, CO.
- Current NIOSH Welding Research on Welding Processes, Helmets, and Fume Sampling. M. Keane, CDC/NIOSH, Morgantown, WV.
- A Step-by-Step Guide to Reducing Exposure to Welding Fume. S. Fiore, Hobart Brothers Welding, Troy, OH.
- Advanced Source Capture Technologies for Weld Fume Exposure. A. Hilbert, Miller Electric Mfg. Inc., Appleton, WI.

SP09

Bayesian and Professional Judgment Users Group

10:00 AM - 12:00 PM

Pre-registration is required.

Facilitators: J. Mulhausen, P. Logan, 3M Corporate Industrial Hygiene, St. Paul, MN: P. Hewett, Exposure Assessment Solutions, Inc., Morgantown, WV.

The Bayesian and Professional Judgment Users Group was created to build a network for all professionals that are actively utilizing Bayesian tools and professional judgment within their professional practice. The purpose of this session is to provide a forum for anyone interested in exploring that network and sharing best practices, challenges, and opportunities for strengthening exposure judgments using IH Bayesian tools. Attendees are encouraged to bring any experience (good and bad), tools and checklists to share.

SS003 🔓

Progress and Current Issues in Nanotechnology—Occupational Risk Assessment and Management

10:00 AM - 12:00 PM

Arranger: M. Shepard, Colden Corporation, Ballston Lake, NY. Moderator: M. Shepard, Colden Corporation, Ballston Lake, NY. Monitors: P. Webb, Colden Corporation, Worcester, MA; J. Baker, Bureau Veritas North America Inc., The Woodlands, TX.

The presentations will highlight the current state of the science and practices for nanomaterial risk assessment and management, including updates on key initiatives and research, as well as program management strategies and resources for EHS practitioners.

- Characterizing Toxicity Associated with Occupational Exposures at Different Stages in the Life Cycle of Nanomaterials. J. Roberts, CDC/NIOSH, Morgantown, WV.
- Medical Surveillance and Biomonitoring in Nanomaterial Worker Risk Assessment and Management. M. Barrie, ORAU, Oak Ridge, TN.
- Hazard Communication and Stewardship for Products Containing Nanomaterials. R. Goldman. 3M. Saint Paul. MN.
- Harnessing Sensors for Nano, Nano for Sensors, and Informatics for Impact. M. Hoover, CDC/NIOSH, Morgantown, WV.

SP08

336

314/315

Donald E. Cummings Award Lecture

12:30 PM - 1:30 PM

EXPO HALL

A Modest Proposal: Leverage Our Deep, Diverse and Adaptive Capacity



Presenter: Fred Boelter, RHP Risk Management Inc., Boise, ID.

A healthy and sustainable economy will always need healthy workers and a healthy environment. Our

profession has a past and future requiring of us inquisitiveness, endless learning and reinvention. Advances in knowledge and technology, changing expectations, re-definitions of the workplace, blurred lines between occupational and non-occupational, new forms of the built environment, and globalization have placed extraordinary demands on us to meet the needs of stakeholders. Who isn't a stakeholder when questions and concerns arise and decisions are required regarding health, safety and the environment? In this perpetually risky natural and man-made world of ours, stakeholders judge consequences but nevertheless want to feel safe. However, reducing risk is neither free nor absolute. Characterizing, communicating, and managing risk has always been the domain of our profession but risk is a demanding, imprecise, and fickle subject well beyond exposure. Charting a clear pathway rooted in science and packaged in practical if not pragmatic practice allows us to adapt and progress toward expanded and continued leadership and influence.

Technical Sessions WEDNESDAY, MAY 25

SP20 🔓



AIHA Research Project Updates 1:30 PM - 3:30 PM

HOLIDAY BALLROOM 3

In 2015, AIHA began several research projects to address the strategic content development needs identified by the AIHA Content Portfolio Management Team. Presenters will give you a summary of the work completed to date on three research areas which looked at identifying the emerging trends and needs in the areas of sensor technologies, international IH/OH practice standards, and changing workforces/changing workplaces.

PO118

Health and Safety Risk Assessments, Guidelines, Inspection Methods, and Other **Current Topics**

1:30 PM - 3:50 PM

339/340

Arranger: M. Jones, Iowa City VA Health Care System, Iowa City, IA. Moderator: P. Murcell, KWA Sfty & HazMat Consult Inc., El Dorado, CA. Monitors: D. Maser, Enviroair Consultants, Inc., Chesterfield, MI; M. Soltis, Evoqua Water Technologies LLC, Warrendale, PA.

1:30 PM - 1:50 PM

Developing Scaffold Use Risk Assessment Model for Construction Safety.

K. Czarnocki and E. Czarnocka, Lublin University of Technology, Lublin, Poland; D. Byc, St. John of Dukla Cancer Center, Lublin, Poland.

1:50 PM - 2:10 PM

Facility Safety Guidelines for the Manufacture of Lithium Ion Battery Power Banks. M. Andrew and J. Dakin, Sumerra, Portland, OR.

2:10 PM - 2:30 PM

Health and Safety Risks Associated with Craft Brewing: Characterization of Breweries Within British Columbia. P. Chua, WorkSafeBC, Burnaby, BC, Canada. (WITHDRAWN)

2:30 PM - 2:50 PM

Traffic Flow Risk Assessments: A Tool for Reducing Pedestrian/Vehicle Accidents. N. Orr, Becton Dickinson, Franklin Lakes, NJ.

2:50 PM - 3:10 PM

An Efficient Safety Inspection Method and System for Navy Installations. P. Aysola, A. Harkins, and R. Maiello, Commander Navy in Command, Washington, DC.

3:10 PM - 3:30 PM

Tick-Tock: Safety and Health Considerations Surrounding the Aging Worker. P. Rice, ClickSafety/Ahtna Netiye, Walnut Creek, CA.

3:30 PM - 3:50 PM

Dust Explosions: The Nature of the Problem and Practical Measures for Its Control—Including the Requirements of the New NFPA 652 for Dust Hazard Assessment. V. Ebadat, Chilworth Technology, Inc. - a DEKRA company, Princeton, NJ.

RT231

Bringing the Science to the PPE Standards—Impact on Pandemic Influenza and Ebola Response **Activities**

1:30 PM - 4:00 PM

341/342

Arranger: Z. Zhuang, CDC/NIOSH, Pittsburgh, PA. Moderator: R. Metzler, Richard W Metzler Inc., Houston, PA. Monitors: N. Gaydos, Axiall Corp., Irwin, PA; L. Janssen, Larry Janssen Consulting, LLC, Stillwater, MN.

In general, PPE that offers the highest levels of protection tends to be the most stressful to the wearer. NIOSH Studies are being conducted to better understand and mitigate PPE-related discomfort / heat stress issues in first responders and healthcare workers. Presenters will discuss NIOSH's research findings, an overview of NIOSH's strategies, how the PPE recommendations have changed over time, and describe the recent respirator standards development.

- Standards and Research on Protective Clothing Used in Healthcare for Protection Against Microorganisms in Blood and Body Fluids. L. Portnoff, CDC/ NIOSH, Pittsburgh, PA.
- Design Considerations for B95 Respirators. M. Parham, Scott Health and Safety, Monroe, NC.
- Strategies to Address the Logistical Challenges Associated with PPE Availability. M. D'Alessandro, CDC/NIOSH, Pittsburgh, PA.
- NIOSH's Ebola Response Efforts and Changes in PPE Guidance. C. Dowell, CDC/NIOSH, Atlanta, GA.
- Recent Respirator Standards Development. D. Chirdon, CDC/NIOSH, Pittsburgh, PA.

RT232 🔓



The Importance of the Business Case in Demonstrating the Value of the IH Profession

1:30 PM - 4:00 PM

318/319/320

Arranger: G. Popov, UCM, Overland Park, KS. Moderator: E. Biddle, WVU, Morgantown, WV. Monitors: J. Zey, S. Hicks, UCM, Warrensburg, MO.

A well-developed Business Case links environmental, health and safety (EHS) investments in protecting workers to Business Value. A Business Case, especially one grounded in the AIHA Value Strategy assists in establishing that occupational safety and health activities are more than an expense but can indeed have a positive return on the investment. Perhaps even more important, a Business Case demonstrates that EHS professionals are integral partners in the organization and essential contributors to the bottom line. This roundtable uses real-life cases to demonstrate how an IH can benefit from developing a Business Case.

- Using a Business Case to Determine Program Direction—Strategic Planning. S. Jahn, Jahn Industrial Hygiene, LLC, Aiken, SC.
- Using a Business Case to Select Among Competing Solutions—Government Regulations. J. Onash, Toxics Use Reduction Institute (TURI), Lowell, MA.
- Using Partnerships to Build a Better Business Case—Team Building. S. Gutmann, S. H. Gutmann Consulting, LLC, White Bear Lake, MN.
- Using the Business Case for Prevention through Design (PtD) Interventions— Universal Solution. T. Lyons, Gilbane, Inc., Warwick, NY.
- Using the Business Case for Prevention through Design (PtD) Interventions -Global Perspective. G. Araque, CRP, Bogota, Colombia.

RT233 🔽

Silica Exposure in Brick and Stone **Industry in Developing Economies** 1:30 PM - 4:00 PM

Arranger: W. Carter, University of Findlay, Shaker Heights, OH. Moderator: W. Carter, University of Findlay, Shaker Heights, OH. Monitors: M. Levitsky, Sympatico, Toronto, ON, Canada; M. O'Reilly, School of Public Health, Manlius, NY.

Investigations on silica dust exposure in the brick kiln and stone quarry industries will be presented to provide an opportunity to

WEDNESDAY, MAY 25 Technical Sessions

exchange ideas about protocol and control strategies in diverse global settings associated with the construction material industry.

- Similar Exposure Groups in the Nepal Brick Kiln Industry. S. Thygerson, Brigham Young University, Provo, UT.
- Environmental Health Risk on Juveniles Working in Brick Kilns and Pottery Workshops in Egypt. B. Lofty, University of Cairo, Cairo, Egypt.
- Occupational Exposure Assessment of Workers in Brick Kilns Industry in Pakistan. M. Akram, Columbia University, New York, NY.
- Dust Exposure and Respiratory Health Problems Among Volcanic Blocks Workers in Moshi Rural Tanzania. A. Medard. Acacia Mining Plc (Formerly African Barrick Gold)-North Mara Mine, Dar es Salaam, United Republic of Tanzania.
- Silicosis—Bane of Workers in Stone Quarries and Crushers in India. M. Gupta, Environics Trust, New Delhi, India.

What Do I Need to Know About **Nonionizing Radiation?**

1:30 PM - 4:00 PM

Arranger: W. Ringo, DMR and Associates, Inc., Louisville, KY. Moderator: T. Fuller, Illinois State University, Bloomington, IL. Monitors: C. Duffield, USGS, Washington, DC; J. Lippert, University of Illinois-Chicago, Chicago, IL.

Five noted topic experts will divide the nonionizing portion of the electromagnetic spectrum into energy spectra with occupational significance. The potential hazards, assessment of risk and current knowledge will be discussed for: power frequencies, radiofrequencies not associated with cell phones, radiofrequencies in the cell phone region, visible light, ultraviolet light and lasers.

- Exposure to Power-Frequency Magnetic Fields and Risk of Adverse Reproductive Health Outcomes: The Case for Additional Research. R. Lewis, Exponent, Inc., Oakland, CA.
- The Dangers of the RF Spectrum from 7 kHz to >3 THz: Why a Tinfoil Hat is Just Not Enough Some Days. C. Davis, Los Alamos National Laboratory, Los Alamos, NM.
- Radiofrequency—Do You Hear Me Now? M. Shum, AMEC Environment & Infrastructure, Burnaby, BC, Canada.
- Optical Light—The Eyes Have It. D. Zabel, Dade Moeller and Associates, Richland, WA.

 UV Is Nonionizing Radiation Public Health Enemy Number 1. M. Phillips, University of Oklahoma College of Public Health, Oklahoma City, OK.

SS004 🔓



Wearable Sensors in Occupational Safety and Health Practice

1:30 PM - 4:00 PM

316/317

Arranger: D. DeBord, CDC/NIOSH, Cincinnati, OH. Moderator: J. Quam, 3M Company, St. Paul, MN. Monitors: J. Soo, CDC/ NIOSH/HELD/EAB, Morgantown, WV; K. Carlson, Bureau Veritas of North America, Houston, TX.

The use of sensors has increased exponentially in professional applications and in everyday life. Wearable devices and implantable devices open up a whole new era of participatory research and information sharing. These monitors and sensors make it possible to perform a more comprehensive exposure assessment. Through the use of these technologies, workers can help their employers, supervisors, and colleagues reduce harmful workplace exposures and become active partners in preventing occupational illnesses and injuries.

- Applications of Wearable Sensors in Occupational Health. D. DeBord, CDC/ NIOSH, Cincinnati, OH.
- Wearable Microsystem for Continuous, Quantitative Measurements of Mult-VOC Exposures. E. Zellers, J. Wang, J. Bryant-Genevier, N. Nuñovero, W. Collin, and Z. Lin, University of Michigan, Ann Arbor, MI.
- Empowering Community Residents with Low-Cost Sensors to Collect Environmental Data. E. Seto, University of Washington, Seattle, WA.
- An Inexpensive Monitoring Network to Assess Workplace Exposures. K. Koehler, Johns Hopkins University, Baltimore, MD.
- Mobile Video Exposure Monitoring (Helmet CAM) Progress Update. G. Joy, CDC/NIOSH, Pittsburgh, PA.

PO119

IH Data: Tools for Exposure Assessment and Epidemiology

1:30 PM - 4:10 PM

321/322/323

Arranger: C. Rennix, EpiData Center, Navy and Marine Corps Public Health Center, Williamsburg, VA. Moderator: C. Rennix, EpiData Center, Navy and Marine Corps Public Health Center, Williamsburg, VA. Monitor: T. Carraway, US Dept. of State, Aberdeen, MD.

1:30 PM - 1:50 PM

Epidemiology of Hearing Impairment and Injuries in the U.S. Military.

D. Gimeno, J. Betancourt, and K. Whitworth, The University of Texas School of Public Health, San Antonio, TX; D. Tucker and N. Gorrell, The Geneva Foundation, San Antonio, TX; T. Hammill and M. Packer, Department of Defense Hearing Center of Excellence, San Antonio, TX; A. Senchak, Walter Reed National Military Medical Center, Bethesda, MD.

1:50 PM - 2:10 PM

Outpatient Costs of Hearing Loss in the U.S. Military: Direct Care and Paid Provider Care. H. Alamgir, J. Betancourt, and C. Turner, The University of Texas School of Public Health, San Antonio, TX; D. Tucker and N. Gorrell, The Geneva Foundation, San Antonio, TX; T. Hammill and M. Packer, Department of Defense Hearing Center of Excellence, San Antonio, TX; A. Senchak, Walter Reed National Military Medical Center, Bethesda, MD.

2:10 PM - 2:30 PM

Assessment of Dermatitis Among Chair Sanders. N. Burton and L. Tapp, CDC/ NIOSH, Cincinnati, OH.

2:30 PM - 2:50 PM

Total Exposure Health. R. Hartman, Planned Systems International, Arlington, VA; K. Phillips, Dept. of Defense, Alexandria, VA.

2:50 PM - 3:10 PM

Development of an Explosive Dust Screening App. M. Rollins, Isosceles Group, Brooklyn, CT.

3:10 PM - 3:30 PM

Developing a System to Track OSH Issues with Major Construction Projects. D. Harman and T. Carraway, US Dept. of State. Aberdeen. MD.

3:30 PM - 3:50 PM

Improving the Estimation of the Interzone Air Exchange Rate in the Near Field-Far Field Model by Computational Fluid Dynamic Simulations. W. Chouchen and S. Halle, Mechanical Engineering, Ecole de technologie superieure, Montreal, QC, Canada; M. Debia and C. Castro Ruiz, University of Montreal, Montreal, QC, Canada; A. Bahloul, IRSST, Montreal, QC, Canada.

3:50 PM - 4:10 PM

Heat Stress and Monte Carlo Simulation—A Statistical Approach That Considers Uncertainty in Calculating Work/ Rest Regimen. P. Dessureault and D. Drolet, Industrial Engineering, University of Quebec, Ste-Genevieve-de-Batiscan, QC, Canada.

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PO120

Advances in Aerosol Technology 1:30 PM - 4:30 PM 345/346

Arranger: K. Koehler, Environmental Health Sciences, Johns Hopkins University, Baltimore, MD. Moderator: W. Su, Lovelace Respiratory Research Institute, Albuquerque, NM. Monitors: M. Sheehan, Department of Health, West Chester, PA; P. O'Shaughnessy, Occupational & Environmental Health, The University of Iowa, Iowa City, IA.

1:30 PM - 1:50 PM

Swift Award Presentation 1:50 PM - 2:10 PM

Aerosol and Volatile Organic Compounds Emissions from a Low-Cost 3-D Printer. J. Wang, E. Floyd, and J. Regens, Occupational & Environmental Health, University of Oklahoma Health Sciences Center, Oklahoma City,

2:10 PM - 2:30 PM

Estimation of Airborne Diesel Particulate Matter Concentrations Using Real-Time Aerosol Monitoring Instruments. L. Pahler and R. Larson, DFPM, University of Utah, Salt Lake City, UT.

2:30 PM - 2:50 PM

Performance Testing of a Handheld Nebulizer. T. Yang, N. Yu, S. Huang, and C. Chen, Department of Public Health, National Taiwan University, Taipei, Taiwan; Y. Kuo, Chung Hwa University of Medical Technology, Tainan, Taiwan.

2:50 PM - 3:10 PM

Nearly Real-Time Particulate Counting During Remediation Projects. A. Havics, PH2, LLC, Avon, IN.

3:10 PM - 3:30 PM

Real-Time Particle Size Distribution Measurements of Coarse Coal Dust.

T. Barone, C. Seaman, and S. Mischler, Dust. Ventilation and Toxic Substance Branch, CDC/NIOSH, Pittsburgh, PA; E. Hesse, University of Hertfordshire, Hertfordshire, United Kingdom.

3:30 PM - 3:50 PM

New Methodology for Achieving Inside the Hood Sampling for Welding Operations. R. Aivazian, TCF Risk Management, Casper, WY.

3:50 PM - 4:10 PM

Effects of Pulse Parameters on Welding Fume Aerosol Size Distribution and Respiratory Deposition. J. Wang, M. Bezerra, and J. Regens, Occupational & Environmental Health, University of Oklahoma Health Sciences Center, Oklahoma City, OK.

4:10 PM - 4:30 PM

Study of the Effective Vortex Length of Cyclone. H. Hung, S. Huang, C. Lin, and C.Chen, Department of Public Health, National Taiwan University, Taipei, Taiwan

RT235

Development of NIOSH Recommended Exposure Limits and Other Authoritative Recommendations

1:30 PM - 4:30 PM

314/315

Arranger: S. Dotson, CDC/NIOSH, Cincinnati, OH. Moderator: R. Niemeier, CDC/NIOSH. Cincinnati. OH. Monitors: A. Rossner, Clarkson University, Potsdam, NY; B. Beadie, Maul, Foster & Alongi, Inc., Portland, OR.

The National Institute for Occupational Safety and Health (NIOSH) develops recommended exposure limits (RELs) for workplace hazards to prevent and reduce workers' risks of adverse health effects. Speakers will provide an overview of the REL development process and supplemental activities NIOSH is employing to develop guidance on chemical and non-chemical hazards.

- Developing NIOSH RELs and Authoritative Recommendations. T. Lentz, CDC/ NIOSH/CDC, Cincinnati, OH.
- Understanding and Controlling Heat Stress: Many Risk Factors, Many Recommendations. B. Jacklitsch, CDC/ NIOSH, Cincinnati, OH.
- Understanding the Occupational Risk of 1-Bromopropane. S. Dotson, CDC/ NIOSH, Cincinnati, OH.
- Understanding the Occupational Risk of Silver Nanomaterials. L. Hodson, CDC/ NIOSH, Cincinnati, OH.
- Understanding the Occupational Risks of Toluene Diisocyanate (TDI). N. Hudson, CDC/NIOSH, Cincinnati, OH.
- The NIOSH Approach to Occupational Exposure Banding. M. Seaton, CDC/ NIOSH, Cincinnati, OH.

RT236 🛆

Emerging Issues in Research and Teaching Laboratories

1:30 PM - 4:30 PM

336

Arranger: E. Mellas-Hulett, University of Vermont, Burlington, VT. Moderator: A. Kogut, Clemson University, Clemson, SC. Monitor: P. Harnett, COEH, Inc., Ringoes, NJ.

The mission of research labs is to find the next greatest discovery or develop

innovative and better methods to achieve a goal and advance science. New emerging issues, such as additive manufacturing (3D printing) and nano materials, are being incorporated into everyday teaching and research, with limited direction in safety and health standards. Emerging EHS issues found in research and teaching labs and how institutions are managing to identify the risks and address these safety programs will be discussed.

- Shop Safety. J. Campbell, Yale University, New Haven, CT.
- Studio Arts Safety Training. D. Toon, University of Massachusetts Amherst, Amherst, MA.
- Challenges and Issues in Agricultural IH Research. D. Murphy, The Pennsylvania State University, University Park, PA.
- Managing Engineered Nanomaterials in the Laboratory. M. Shepard, Colden Corporation, Ballston Lake, NY.
- Designing Greener and Safer 3D Printing. J. Cabral, Autodesk, Inc., San Francisco, CA.
- Additive Manufacturing—Top Five Things an EHS Professional Should Know. S. Durgam, GE, Niskayuna, NY.

RT237

Mock Trial: Criminal Trial of CIH and IH Expert Witness Testimony 1:30 PM - 4:30 PM 324/325/326

Arranger: D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. Moderator: S. Sherman, US Department of State, Rockville, MD. Monitors: B. Miller, Health-Safety Services, LLC, Idaho Falls, ID; J. Unmack, Unmack Corporation, San Pedro. CA.

Mock criminal trial involving a CIH and contractor charged with Conspiracy, Violation of Clean Air Act. This Federal Case charges the CIH and contractor with conspiring to issue false asbestos worker certificates and falsifying asbestos results. The contractor is charged with exposing workers and the public to asbestos materials. You might be selected as a juror to help decide this case. A judge will explain the burden of proof in a criminal case.

- Federal Prosecutor. D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA.
- Defense Attorney. M. Norman, Law Office of Margaret Norman, Manhattan Beach, CA.
- **OSHA Inspector.** P. Platcow, New Mexico VA Health Care System, Albuquerque,

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- Expert Witness for Prosecution. D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA.
- CIH Defendant. S. Celly, Celly Services, Inc., Long Beach, CA.
- Expert Witness for Defense. G. Silverberg, Attorney, Wilmington, DE.

Expecting the Unexpected: Incident Preparedness and Response for the Early Career **Professional**

1:30 PM - 5:00 PM

347/348

Arranger: R. Moon, Battelle Memorial Institute, Columbus, OH. Moderators: M. McCoy, GZA GeoEnvironmental, Inc., Waukesha, WI; R. Aivazian, TCF Risk Management, Casper, WY. Monitor: S. Rodriguez, Public Health Command Region Pacific, APO.

Incident preparedness is all about planning and preparing for an incident to improve our response. Through case studies and lessons learned, attendees will learn the basics of what an incident is, how they are managed using the National Incident Management System, and what roles an industrial hygienist and safety professional may hold or support during these responses.

- Emergency Response 101—What Every IH Needs to Know. L. Weems, U.S. Army Corps of Engineers, Little Rock, AR.
- Where Do Industrial Hygienists Fit? S. Graham, US Army, Aberdeen Proving Ground, MD.
- **Emergency Response Training for the** IH Responding. B. Kissel, Cornell University, Ithaca, NY.
- Case Studies on the Role of Industrial **Hygienists in Supporting Operations During Emergency Responses.** C. Walker, CSX Transportation, Inc., Jacksonville, FL.
- Occupational Hygiene Support to Maritime New Zealand During the Initial **Emergency Response Phase Following** the Grounding of the MV Rena Container Ship. D. Miller, RNZAF, Auckland, New Zealand.
- OSHA Has Industrial Hygienists Responding to Emergencies? G. Lamson, OSHA Salt Lake Technical Center, Sandy,
- Lessons Learned: Examples from Responses with the USCG Atlantic Strike Team. E. Primeau, USCG Atlantic Strike Team, Fort Dix, NJ.

SP10

AIHce Movie Matinee: "The Cost of Construction"

2:30 PM - 4:30 PM

HILTON,

HOLIDAY BALLROOM 5/6

Arranger: S. Schneider, Laborers' Health & Safety Fund, Washington D.C.

"The Cost of Construction" is a 90-minute documentary about the dangers of construction work. It focuses on incidents that took place on the Las Vegas Strip in 2008, particularly the City Center project where 8 workers were killed. Through interviews with family members and safety and health officials, the film aims to highlight the personal cost of these preventable tragedies. The film is newly completed in time for AIHce 2016. Jordan Ehrlich, the film maker, will be available for a Q&A session immediately after the film showing.

CR317

To Reuse or Not to Reuse, That Is the Question

3:00 PM - 4:00 PM

349/350

Presenter: S. Lovasic, Technical/R&D, Du-Pont Protection Technologies, Richmond, VA.

When selecting PPE, industrial hygienists have the option of reusable vs. limited use PPE. This presentation will provide an overview of key strengths, weaknesses, performance requirements, effects and risks of repeated decontamination, cleaning, and/or sterilization of PPE for reuse. Also setting performance requirements throughout the expected service life will be discussed. Understanding these trade-offs will aid the IH to select PPE to truly match their hazard scenarios.

CR318

You Too Can Deliver a 30% **Reduction in Your Contractor EHS** Metrics

5:30 PM - 6:30 PM

327

Presenter: A. Kreft, The Dow Chemical Company, Bristol, PA.

Since independent and contingent contractors are now approximately 50% of most industry workforces, they have a strong influence on company EH&S metrics. This presentation will share details about how a reduction in contractor injury/illness rate & severity was achieved in a leading-edge multi-national company through a Contractor Safety Management System. The audience will take away proven knowledge, best practices, actionable solutions and lessons learned in risk management.

PO121

Evaluation of Airborne Contaminants

5:30 PM - 7:30 PM

337/338

Arranger: E. Massawe, Hammond, LA. Moderator: E. Massawe, Hammond, LA. Monitors: R. Rogers, IHFSP, AIPH, Bel Air, MD; J. Lohkamp, ESIS, Inc.-Global Risk Control Services, Dallas, GA.

5:30 PM - 5:50 PM

Road Paving and Asphalt Fumes—What Affects Exposure Levels? M. Shum, L. Clements, L. Kimble, and P. Bergholz, Occupational Hygiene & Safety, AMEC Environment & Infrastructure, Burnaby, BC, Canada.

5:50 PM - 6:10 PM

Formaldehyde Exposure Assessment During the Application of Professional Hair Smoothing Products. M. Posson and R. Kalmes, Exponent, Inc., Oakland,

6:10 PM - 6:30 PM

Application of a Novel Personal Air Sampler. J. Herrington, M. Lininger, J. Konschnik, and S. Kozel, Innovations Group, Restek Corporation, Bellefonte,

6:30 PM - 6:50 PM

Association Between Personal and Area Fiber Concentrations in Brake Repair Shops: Analysis in a Real-Life Setting. L. Méndez García, M. Cely-Garcia, M. Giraldo, and J. Ramos-Bonilla, Civil and Environmental Engineering, Universidad de Los Andes, Bogota, Colombia; P. Breysse, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; M. Duran, C. Torres-Duque, M. Gonzales-Garcia, and P. Parada, Fundacion Neumologica Colombiana, Bogota, Colombia.

6:50 PM - 7:10 PM

Formaldehyde Emissions from Laminate Flooring: Is There a Proposition 65 Exposure Issue? P. Sheehan, A. Singhal, R. Kalmes, and K. Bogen, Exponent, Oakland, CA.

7:10 PM - 7:30 PM

Conducting Smoke Testing for Placement of Near Real Time (NRT) Monitoring Utilizing the EPA DQO Process. J. Brooks, NS&E Environment Safety and

Health, Bechtel, Pueblo, CO.

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RT239 🔓



Hot Topic in Ergonomics: Sit-Stand and Alternative Workstations in the Office Workplace

5:30 PM - 7:30 PM

314/315

Arranger: B. McGowan, Humantech, Inc., Ann Arbor, Ml. **Moderator:** B. McGowan, Humantech, Inc., Ann Arbor, MI. Monitors: M. Werrell, Ergoworks Consulting, Gaithersburg, MD; E. Gallo, Walgreens, Deerfield, IL.

Sit-stand workstations and alternative workstations are currently hot ergonomic topics. There have been many articles in the newspaper, trade publications, and academic journals suggesting a full range of benefits. Our panel of academic experts will discuss the physiological benefits of sit-stand workstations and alternative workstations and the barriers to implementing these workstations and key learnings are discussed by our panel of experienced, industry practitioners.

- Stand Up and Move: Your Musculoskeletal Health Depends on It. K. Davis, University of Cincinnati, Cincinnati, OH.
- Physiological Evidence for Standing Desks in the Workplace. J. Burr, University of Guelph, Guelph, ON, Canada.
- What Works and What Does Not when **Providing Standing Capable Worksta**tions. M. Benden, Texas A&M University, College Station, TX.
- Challenges of Implementing Sit-Stand Workstations in the Office. K. Grosteffon, Humantech, Houston, TX.

RT240 🔓



Arranger: G. Brown, OSHA - Retired, El Cerrito, CA. Moderator: J. Henshaw, Cardo ChemRisk, Sanibel, FL. Monitors: H. Arabzadeh, HRA Environmental Services, Irvine, CA; M. Cooper, Exponent, Menlo Park, CA.

Speakers will highlight the progress made to date and continuing challenges in addressing occupational and environmental health hazards in Bangladesh's export garment industry. Presentations will describe the ongoing factory inspection and hazard correction initiatives; the need for rehabilitation and return-to-work programs for injured workers; efforts to control and reverse industrial pollution of Bangladesh's vital waterways; and initiatives to develop both professional and grassroots capacity in occupational and environmental health.

- Progress in Garment Factory Inspections and the Establishment of a Worker-Community OHS Academy. G. Brown, OSHA - Retired, El Cerrito, CA.
- Self-Efficacy, Disability and Physical Strength of the Injured Workers: Findings from the Rana Plaza Disaster in Bangladesh. H. Alamgir, University of Texas School of Public Health, San Antonio, TX.
- Development of a Training Course for Wastewater Treatment Management. S. Mansdorf, Sustainability Consultants, Boca Raton, FL.
- Building the Environmental and Occupational Safety and Health Center at the Dhaka Community Hospital Trust. D. Dobbin, NIEHS - Retired, Chapel Hill, NC.

RT241

Noise Can Be Beat. We Did It and Won!

5:30 PM - 8:00 PM

324/325/326

Arranger: T. Morata, CDC/NIOSH, Cincinnati, OH. Moderator: R. Neitzel, University of Michigan, Ann Arbor, Ml. Monitors: A. Perkin, Alabama Power Company, Birmingham, AL; M. Geiger, Naval Safety Center, Fairfax, VA.

Efforts to prevent the effects of noise can be frustrating. The presenters are recipients of the Safe-in-Sound Excellence in Hearing Loss Prevention Award™. Their success stories demonstrate that noise control is desirable and within reach, and that noise control benefits extend beyond the prevention of hearing loss. The practical strategies covered will provide guidance on how to achieve excellence in hearing loss prevention.

- Safe-in-Sound™: Awarding Excellence and Innovation in Hearing Loss Prevention. S. Schneider, Laborers' Health & Safety Fund, Washington, DC; T. Morata, CDC/NIOSH, Cincinnati, OH: D. Meinke. University of Northern Colorado, Greeley, CO; R. Neitzel, University of Michigan, Ann Arbor, MI.
- Safe-in-Sound™, Four Years Later. J. Downey, Colgate Palmolive, Piscataway, NJ.
- United Technologies Safe-in-Sound™ Award: UTC Quiet Goal—An Ambitious Approach to Continuous EH&S Improvement. M. Twerdy, United Technologies, Farmington, CT.

- The Journey Continues. C. Tinner, West Rock, Cottonton, AL.
- 3M Alexandria Safe-in-Sound™ Award: A Systematic Methodology for Exposure Assessment and Noise Reduction. C. Johnson, 3M, St. Paul, MN.

RT242 🛆

Strategies for Reactive Chemical Sampling and Analysis

5:30 PM - 8:00 PM

343/344

Arranger: M. Eide, OSHA retired, Boise, ID. Moderator: S. Iske, University of Central Missouri, Kansas City, MO. Monitors: A. Teague, Analytics Corporation, Ashland, VA; K. Rickabaugh, RJ Lee Group, Inc., Monroeville, PA.

The successful evaluation of exposures to reactive chemicals requires the IH to select the proper sampling media, keeping in mind the type of exposure whether vapor or particulate, and the interferences that may significantly affect the sample results. These presentations show the IH, how an AIHA accredited lab considers and tests these problems to provide the methodology for complex sampling strategies.

- Creating Calibration Standards that Mimic Real Air Samples. G. Oishi, Sigma-Aldrich/Supelco, Bellefonte, PA. (WITHDRAWN)
- Strategy for Sampling Off-Gassing Formaldehyde in Defective Flooring. S. VanEtten, EMSL, Cinnaminson, NJ.
- Method Development for Sampling and Analysis of Quaternary Ammonium Compounds in Air and on Surfaces. R. LeBouf, A. Stefaniak, and M. Virji, CDC/NIOSH, Morgantown, WV.
- Evaluation of Methods for Sampling & Analysis of Peracetic Acid in the Presence of Hydrogen Peroxide and Acetic Acid from Generated Test Atmosphere. C. Manning and B. Quarles, Assay Technology, Livermore, CA.
- Evaluation of Analytical Method for Peracetic Acid in the Presence of Hydrogen Peroxide and Acetic Acid. M. Jordan. Galson Laboratories, East Syracuse, NY.



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Thursday At-a-Glance

Thursday, May 26

7:30 AM - 10:30 AM

Registration, Pratt Street Lobby

7:30 AM - 2:30 PM

Speaker Ready Room, Room 330

8:00 AM - 9:00 AM

- CR319 Getting it Right: Contractor EHS Management in a Complex World, Room 324/325/326
- CR320 I'll Sleep When I'm Dead, Room 341/342

8:00 AM - 10:30 AM

- RT243 Process Safety Management (PSM) Is Evolving—Are You?, *Room 321/322/323*
- RT244 Radiation Safety Program Challenges for IHs. Room 343/344

8:00 AM - 11:00 AM

P0122 - Breathe Easier: Something for Everyone,



- RT245 Interesting OSHA Health Cases—Facts from the Field (Previously Known as the Glen Williamson Forum), Room 314/315
- RT246 Occupational Health and Safety in Africa: Current State and the Path Forward, Room 349/350
- RT247 Wildfires: Resolution of Indoor Environmental Quality Concerns. Room 339/340

8:00 AM - 11:30 AM

 RT248 - Best Industrial Hygiene and Occupational Health Practices in Mining, Room 327

8:00 AM - Noon

 RT249 - Risk Assessment for Asbestos and Other Fibrous Materials: Learning from the Past, Looking into the Future, Room 316/317

SP15 - Industrial Hygiene Analytical Laboratory Management and Operation, Room 337/338

8:00 AM - 5:00 PM

 SP11 - Exposure Decision Analysis Toolkit for Educators (and Students) (Pre-registration required), Hilton, Calloway

8:30 AM - 10:30 AM

Annual Business Meeting, Hilton, Poe

9:00 AM - 11:00 AM

 SP12 - SDS Authoring and Reviewing, and IH Insomnia: What's Keeping You Up at Night? (Pre-registration required), Room 328/329

10:00 AM - 11:00 AM

CR321 - Enhancing Credibility of EHS Data in Sustainability Reporting, Room 324/325/326

 CR322 - Achieving World Class Health & Safety Through Transformational Leadership, Room 341/342

11:30 AM - 12:30 PM

- SP13 Herbert E. Stokinger Award Lecture: Fifty Years of Chasing Paracelsus, Room 336
- SP19 Residential Indoor Air Quality Assessments: Tuning up Your Client's Home, Room 321/322/323

11:30 AM - 4:00 PM

AIHA Board Meeting, Hilton, Paca

1:00 PM - 2:00 PM

 CR323 - Evaluating Fitness for Work to Reduce Exposure Risk, Room 327

1:00 PM - 3:00 PM

 SP21 - Emerging Issues in Beryllium Regulation: DOE and OSHA, Room 339/340

1:00 PM - 3:20 PM

- P0124 Biological Monitoring & Bleeding Edge, Room 337/338
- P0125 Intriguing Unknown and Known IH Hazards, Room 341/342
- P0126 Spectrum of Legal Issues, Room 343/344

1:00 PM - 3:30 PM

 RT250 - Formaldehyde Emissions in the Built Environment, Room 345/346

1:00 PM - 3:40 PM

P0127 - Novel Approaches in Industrial Hygiene Sampling and Analysis, Room 314/315

1:00 PM - 4:00 PM

 RT251 - Ebola: Controlling Risk During the Army's Response, Room 347/348

1:00 PM - 5:00 PM

 RT252 - Notable Confined Space Events and Issues. Room 324/325/326

2:30 PM - 3:30 PM

CR324 - What Your Safety Data Should Be Telling You and Why It Isn't, Room 336

Ancillary

1:00 PM - 7:00 PM

 Pharmaceutical Forum (by invitation only), 5/26/2016 and 5/27/2016, Hilton, Holiday Ballroom 1/2/3

Events take place at the Baltimore Convention Center unless otherwise noted.



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Education Track Key



THOUGHT LEADER TRACK



LABORATORY TESTING TRACK

Thursday, May 26

Technical Sessions

CR319

Getting it Right: Contractor EHS Management in a Complex World 8:00 AM - 9:00 AM 324/325/326

Presenter: J. Inouye, Campbell Institute, National Safety Council, Itasca, IL.

Large or small, organizations increasingly rely on contractors. It's become more difficult to "get it right" in these complex relationships. Research conducted by the Campbell Institute has revealed a simple but comprehensive lifecycle approach that can be used to manage all stages of contractor relationships, from pre-qualification, risk assessment, training, etc. This research outlines the principles all organizations need to consider - it looks critically at where organizations most often struggle and offers suggestions for process improvements.

CR320

I'll Sleep When I'm Dead 8:00 AM - 9:00 AM

341/342

Presenter: M. Harnett, SIX Safety Systems Inc., Calgary, AB, Canada.

Cumulative fatigue and decreased alertness can result in worker impaired performance, reduced health, and a significant increase in risk to an organization's operations. Practical strategies on the best way to optimize personal health, safety and performance while minimizing the consequences of fatigue will be presented. Key topics include an introduction to circadian rhythms, how light exposure affects fatique, and personal strategies to minimize fatigue and promote alertness.

RT243

Process Safety Management (PSM) Is Evolving—Are You? 8:00 AM - 10:30 AM

321/322/323

Arranger: B. Beadie, Maul, Foster & Alongi, Inc., Portland, OR. Moderator: F. Boelter, RHP Risk Management Inc., Boise, ID. Monitors: S. Dotson, CDC/ NIOSH, Cincinnati, OH; A. Rossner, Clarkson University, Potsdam, NY.

Although OSHA's process safety management (PSM) rule has been required since 1992. catastrophic chemical incidents still occur. In 2015, OSHA issued several memorandums explaining PSM enforce-

ment policy changes and there are ongoing discussions about additional changes to chemical safety regulations. Presenters will cover tools, techniques, RAGAGEPs and other resources to protect people from chemical catastrophes and comply with PSM requirements.

- The History and Evolution of PSM. L. Long, USDOL/OSHA, Washington, DC.
- Managing Mechanical Integrity. B. Beadie, Maul, Foster & Alongi, Inc., Portland, OR.
- RAGAGEPs Don't Recognize Grandfathering and Neither Do Damage Mechanisms. T. Elwing, WA Dept. of Labor & Industries, Seattle, WA.
- Incidents that Didn't Occur: Case Studies in Disaster Prevention in Natural Gas Processing Facilities. T. Hicks, Hicks Health & Safety, Golden, CO.
- **Evolution Versus Intelligent Design:** Applying Risk-Based Process Safety to the Upstream Petroleum Industry in Canada. A. Reimer and R. Waterhouse, Enform, Calgary, AB, Canada.

RT244

Radiation Safety Program Challenges for IHs

8:00 AM - 10:30 AM

343/344

Arranger: J. Lewis, Maryland Dept. of the Environment, Baltimore, MD. Moderator: R. Costello, W.L. Gore & Associates, Inc., Elkton, MD. Monitors: J. Lewis, Maryland Dept. of the Environment, Baltimore, MD; M. Carter, Chevron Phillips Chemical Co, Crosby, TX.

In addition, to other hazards, IHs will often find themselves dealing with radiation issues. Radiation safety can present unique challenges in terms of regulatory requirements, different hazard recognition & control strategies, and risk parameters. Presenters will highlight some of the radiation safety challenges faced by IHs and suggest practical solutions to those challenges.

- **Radiation Detection Instrumentation** for Use by the Industrial Hygienist. J. Kenoyer, Dade Moeller & Associates, Inc., Oak Ridge, TN.
- Licensing and Registration of Radiation Source. R. Johnson, Radiation Safety Counseling Institute, Rockville, MD.

- How to Survive a Nuclear Regulatory Commission (NRC) or State Inspection of Your Materials License. R. Reif, Wood Hole Oceanographic Institution, Wood Hole, MA.
- Radon Properties and Hazards. R. Haaker, AQ Safety, Albuquerque, NM.
- Shipping Radioactive Materials—Do It Right the First Time. B. Thomas, Integrated Environmental Management, Findlay, OH.

PO122

Breathe Easier: Something for Everyone

8:00 AM - 11:00 AM

Arranger: G. Olson, TSI Incorporated USA, Shoreview, MN. Moderator: R. McKay, University of Cincinnati, Cincinnati, OH. Monitors: S. Graham, US Army, Aberdeen Proving Ground, MD; S. Norman, Marketing, TSI Inc., Shoreview, MN.

8:00 AM - 8:20 AM

Respirator Probe Bias Evaluation Using the Advanced Headform Respirator Test System. M. Bergman, A. Rizor, E. Brochu, Z. Lei, and Z. Zhuang, CDC/NIOSH/ NPPTL, Pittsburgh, PA.

8:20 AM - 8:40 AM

Field of View Respirator Certification Standards Comparison. K. Coyne, US Army, Aberdeen Proving Ground, MD.

8:40 AM - 9:00 AM

Comparison of Methods Suggested in 29CFR1910.134 for Determining Change Schedules for Air Purifying Respirators. G. Wood, Consultant, Los Alamos, NM; C. Manning, Assay Technology, Livermore, CA.

9:00 AM - 9:20 AM

Can the SWPF Study be the New WPF Study? C. Colton, 3M PSD, St. Paul, MN.

9:20 AM - 9:40 AM

Efficacy for Using Facepiece-Embedded Fans for PAPR-Like Protection. D. Caretti, D. Barker, and D. Wilke, U.S. Army Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD.

9:40 AM - 10:00 AM

Respiratory Protection for Firefighters—Evaluation of CBRN Canisters for Use During Overhaul II: In Mask Analyte Sampling with Integrated Dynamic Breathing Machine. L. Jones, E. Lutz, and J. Burgess, Environmental and Occupational Health, University of Arizona, Tucson, AZ. (WITHDRAWN)

Technical Sessions THURSDAY, MAY 26

10:00 AM - 10:20 AM

Inter-Laboratory Comparison of the Performance of Firefighting Self-Contained Breathing Apparatus. J. Parker, CDC/NIOSH, Pittsburgh, PA.

10:20 AM - 10:40 AM

Do P100 FFRs Perform Better than N95 FFRs When Faceseal Leakage Presents? X. He, J. Zhu, R. Dodrill, and S. Guffey, West Virginia University, Morgantown, WV.

10:40 AM - 11:00 AM

Searching for the Optimal Challenge Aerosol Size Distribution for QLFT. K. Yang, S. Huang, and C. Chen, Department of Public Health, National Taiwan University, Taipei, Taiwan; W. Kuo, Chung Hwa University of Medical Technology, Tainan, Taiwan; C. Chen, Institute of Labor, Occupational Safety and Health, Ministry of Labor, New Taipei City, Taiwan.

PO123 😧

Real Time Detection Systems 8:00 AM - 11:00 AM 347/348

Arranger: W. Groves, Energy and Mineral Engineering, Penn State University, University Park, PA. Moderator: D. Rodabaugh, The Dow Chemical Company, Midland, MI. Monitors: L. Monteith, Dept. of Env. & Occ. Health Sciences, Univ. of Washington, Seattle, WA; D. Grojean, Colorado State University, Mercer Island, WA.

8:00 AM - 8:20 AM

Field-Portable Gas Chromatography-Mass Spectrometry Used to Identify Unknown and Unexpected Airborne Stressors. P. Smith and J. Lodwick, USDOL/OSHA, Sandy, UT.

8:20 AM - 8:40 AM

Evaluating the Usefulness of Gaseous FTIR Spectroscopy. L. Knoch, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD.

8:40 AM - 9:00 AM

Evaluation of Personal Breathing Zone and Area Airborne Diacetyl and Other Volatile Organic Compounds (VOCs) at a Commercial Coffee Roasting Facility via Real-Time Fourier Transformed Infrared Spectroscopy (FTIR). M. McCoy and K. Parr, GZA GeoEnvironmental, Inc., Waukesha, WI; J. Cornish, Gasmet, Bellingham, WA; J. Greivell, RAECO, Butler, WI; M. Haapala, Gasmet Technologies Oy, Helsinki, Finland.

9:00 AM - 9:20 AM

Handheld Non-Dispersive Infrared (NDIR) Sensing for Field Detection of Light Hydrocarbon Gases. J. Hill and P. Smith, USDOL/OSHA, Sandy, UT.

9:20 AM - 9:40 AM

A Portable Colorimetric Biosensor for Real-Time Personal Exposure Assessment to Bisphenol A in Indoor Environments. R. Alkasir, A. Rossner, and S. Andreescu, Clarkson University, Potsdam, NY.

9:40 AM - 10:00 AM

Real-Time Particulate and Toxic-Gas Sensors for Firefighters. F. Takahashi and C. Liu, Chemical Engineering, Case Western Reserve University, Cleveland, OH; P. Greenberg, G. Hunter and M. Kulis, NASA Glenn Research Center, Cleveland, OH; S. Carranza and D. Makel, Makel Engineering, Inc., Chico, CA.

10:00 AM - 10:20 AM

Practicalities & Early Lessons: Small Unmanned Aerial Platforms for Monitoring Stressors. R. Eninger, Systems Engineering & Management, Air Force Institute of Technology, WPAFB, OH; K. Fullerton, US Air Force School of Aerospace Medicine, WPAFB, OH.

10:20 AM - 10:40 AM

Lessons Learned in Selecting an All-Hazards Equipment Suite of Direct Reading Instruments. C. Baker, Alliance Solutions Group, Inc., Helotes, TX; R. Campbell, Alliance Solutions Group, Inc., Newport News, VA; W. Weisman, Consulting, Newport News, VA.

10:40 AM - 11:00 AM

The Role of Data Science on the Industrial Hygiene Team. D. Shaffer, University of Arizona, Tucson, AZ.

RT245

Interesting OSHA Health Cases— Facts from the Field (Previously Known as the Glen Williamson Forum)

8:00 AM - 11:00 AM

Arranger: L. Daniel, USDOL, Atlanta, GA. Moderator: T. Jordan, USDOL/OSHA, Sandy, UT. Monitors: M. O'Donnell, USDOL/ OSHA, McLean, VA; T. Harrison, USDOL, Washington, DC; A. Towey, OSHA Training Institute, Arlington Heights, IL.

314/315

OSHA safety and health professionals have the opportunity to investigate a vast array of physical, chemical, and biological exposures. This session is designed to highlight six OSHA investigations that are outside the norm or of particular interest. During this Forum we will review the findings of some of OSHA's most interesting enforcement cases, serving to enlighten all regarding industrial hygiene practice in American work places.

- Occupational Scleroderma from Respirable Aluminum Exposure. H. Waterhouse, US Dept. of Labor/OSHA, New York, NY.
- Methylene Chloride Overexposure While Deglazing. S. Ford, US Dept,. of Labor/OSHA, Tucker GA.
- TNT Exposure During Mine De-Milling Process. A. Rose, US Dept. of Labor/ OSHA, San Francisco, CA.
- Combustible Dust Hazards and Overexposures to Noise & Particulates Not Otherwise Regulated. T. Parker, US Dept. of Labor/OSHA, Birmingham, AL.
- Heat Stress and Plastic Recycling. J. Gonzalez, US Dept. of Labor/OSHA, Mobile AL.
- Exposure to Formaldehyde at the Anatomy Lab. M. Santiago, US Dept. of Labor/OSHA, Fort Lauderdale, FL.

RT246 💟

Occupational Health and Safety in Africa: Current State and the Path Forward

8:00 AM - 11:00 AM

Arranger: C. Hovde, Caterpillar Inc., Peoria, IL. Moderator: C. Hovde, Caterpillar Inc., Peoria, IL. Monitors: J. Dalhoff, NASA, Center Greenbelt, MD; M. Levitsky, ECOH Management Inc., Mississauga, ON,

Africa is a huge continent with extremely diverse geography, highly developed cities, vast rural areas, high levels of poverty and preventable diseases. Africa contains a rapidly developing economic industry in several areas. Occupational health, safety and environmental regulations are diverse and may not exist. Speakers will provide examples from their experience with EHS hazards, external conditions, and will discuss where they see opportunities for success and development in the future.

- African Workers, European Owner, Chinese Contractor: Managing OHS on a Construction Project in Niger. L. Svirchev, Svirchev OHS Management Systems, Vancouver, BC, Canada.
- Healthcare Waste Disposal in Kenya. M. Tures, St. Paul, MN.
- Training Safety Assistants in Africa: One Federal Agency's Experience. K. Bradford, Department of State, Potomac, MD.
- Occupational Hygiene Education, Networks and Mentorship Programs in East Africa. A. Medard, Acacia Mining Plc-North Mara Mine Site, Tarime, United Republic of Tanzania.

THURSDAY, MAY 26 Technical Sessions

- OH Professional Development—Another Year Goes by in Africa. L. Renton, WESA, a BluMetric company, Ottawa, ON, Canada.
- Challenges in Conducting Baseline and Final Evaluation Studies of USAID **Development Food Assistance Projects** in Sub-Saharan Africa. D. Stukel, Fanta Project, Washington, DC.

RT247

Wildfires: Resolution of Indoor **Environmental Quality Concerns** 8:00 AM - 11:00 AM 339/340

Arranger: M. Posson, Exponent, Inc., Oakland, CA. Moderator: R. Froehlich, Helix Environmental Inc., Dayton, OH. Monitors: D. Hurley, North Carolina Research Campus, Kannapolis, NC; M. McGowan, Round Hill, VA.

Wildfires release smoke that can not only impact the immediate area, but can impact outdoor and indoor environments at great distances. IHs are commonly tasked to investigate the impacts of smoke and assess the potential health risks and remedial measures. Speakers will present and discuss the techniques available to IHs used for assessing contamination and potential health impacts; analyzing available information; interpreting data; and remediating a structure that has potentially been impacted by a wildfire.

- Characterization and Mitigation of Smoke Damage from Wildfires. B. Kovar, Safeguard EnviroGroup, Inc., Glendora, CA.
- Assessment of Smoke Contamination of Surfaces by Optical Microscopy. E. Light, Building Dynamics, LLC, Ashton, MD.
- Other Supplemental Fire Residue Analysis Testing Methods: Scanning and Transmission Electron Microscopy, and pH / Conductivity Analysis. D. Baxter, Environmental Analysis Associates, Inc., San Diego, CA.
- Residual Organic Compounds. A. Delia, Prism Analytical Technologies, Inc., Mt. Pleasant, MI.
- Qualitative Human Health Risk Assessment of Wildfire Residues. E. Medina, Alliance Consulting International, San Diego, CA.
- Structural Fires. M. Rosales, Forensic Analytical, Rancho Dominguez, CA.

RT248

Best Industrial Hygiene and Occupational Health Practices in Mining

8:00 AM - 11:30 AM

327

Arranger: S. Owen, Newmont Mining Corporation, Elko, NV. Moderator: T. Hethmon, Hethmon Associates LLC, Sandy, UT. Monitors: C. Balcaen, Tech Resources, Ltd., Vancouver, BC, Canada; D. Shaffer, University of Arizona, Tucson, AZ.

The mining industry has come a long way from the "pick and shovel" days. Now, hundreds of tons of ore can be moved with a single truck. Metallic compounds can be changed and concentrated with mechanical and chemical processing. Along with these technologies come many challenges, involving hazardous exposures to employees. Presenters will provide a cross-sectional status report on a number methods developed and used by various mining companies to overcome these challenges.

- **Exposure Controls of Asbestos-Bear**ing Dust & Data Handling at a Surface Gold Mine. G. Lachapelle and K. Morin, Agnico Eagle Mines Limited, Toronto, ON, Canada.
- Fetal and Mother Protection for Lead in a Fire Assay Lab with Litharge: Reducing Blood Lead Levels to the BEI®, while Maintaining Legal Compliance. S. Owen, Newmont Mining Corporation, Elko, NV.
- Noise Control Research for Metal/ Non-Metal Mines: Load Haul Trucks & Jumbo Drills. S. Peterson, CDC/NIOSH-OMSHR, Pittsburgh, PA.
- Graduate Development Program— Industrial Hygienists in Mining. F. Crowne, Goldcorp, Toronto, ON, Canada.
- DPM Exposure Estimates—Underground Mine: Correlation to CO and NO2 Surrogates. D. Stephenson, Boise State University, Boise, ID.
- Management of Diesel Exhaust Exposure: Maximizing the Protection of Our People. R. McDonald, BHP Billiton, Melbourne, VIC, Australia.
- Health Hazards Refining of Gold and Silver. H. Beaulieu, Industrial Hygiene Resources, Boise, ID.

RT249

Risk Assessment for Asbestos and Other Fibrous Materials: Learning from the Past, Looking into the **Future**

8:00 AM - 12:00 PM

Arranger: A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO. Moderator: J. Rasmuson, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO. Monitors: D. Hall and R. Strode, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

Continuing the tradition of addressing outstanding issues of asbestos risk assessment with distinguished industrial hygienists, toxicologists and mathematicians from multiple countries and disciplines, this session will help to keep industrial hygienists current with new developments in exposure science and risk assessment methodologies, new analytical methods for asbestos testing, new types of potentially dangerous fibrous materials including zeolites and various amphibole fibers, and advances in toxicology for fibrous materi-

- Iron, Oxidative Stress, and the Biological Effect of Asbestos. A. Ghio, U.S. EPA, Chapel Hill, NC.
- Fibrous Materials and Cancer: Lessons from Asbestos Epidemiology. J. Peto, London School of Hygiene and Tropical Medicine, London, United Kingdom.
- Cancer Potency Factors for Erionite: An Attempt of the Quantitative Estimation. A. Korchevskiy, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.
- Accumulation of Radium in Ferruginous **Bodies with Asbestos Fibers Resulting** in Radiation Hotspots with Malignant Mesothelioma and Other Cancers. E. Nakamura, Okayama University, Misasa, Japan.
- Characterizing Risks from Exposure Modeling: Communicating the Results. F. Boelter, RHP Risk Management Inc., Boise, ID.
- Does Talc Cause Cancer? A 30-year Personal Journey to Yes, Sometimes. B. Case, McGill University, Montreal, QC, Canada.
- Libby, Montana: Lessons in Exposure Monitoring, Employee Protection, Community Contamination, Communication, and Responsibility. O.Crankshaw, Crankshaw Scientific Consulting, Pittsboro, NC.

Technical Sessions THURSDAY, MAY 26

Asbestos-Related Cancer in China:
 Do Existing, Fiber Type Specific Risk
 Assessment Models Fit the Data?
 J. Rasmuson, Chemistry & Industrial
 Hygiene, Inc., Wheat Ridge, CO.

SP15 △

Industrial Hygiene Analytical Laboratory Management and Operation

8:00 AM - 12:00 PM

337/338

Arranger: Robert Lieckfield Jr., CIH, Bureau Veritas North America, Inc., Novi, MI.

Managing an efficient IH analytical laboratory operation in the era of (1) expanding accreditation requirements, (2) recruiting, training, and managing a new generation of staff, (3) applying new technologies, and (4) growing the laboratory business presents new challenges for laboratory professionals. The goal of this session is addressing these challenges and strategies for effectively implementing new approaches to meet these challenges.

Presenters: C. Morton, AIHA, Falls Church, VA; C. Ostrowski, CAO Consulting, Rochester Hills, MI; C. Laszcz-Davis, The Environmental Quality Organization, LLC, Lafayette, CA; T. Martin, Martin Personnel and Placement Services, Oaklyn, NJ; T. Hall, IHSR, LLC, Edmond, OK; A. Gallo, Bureau Veritas North America, Inc., Raynham, MA; T. Gresik, Perkin Elmer, Shelton, CT; J. Unangst, SGS Galson Laboratories, East Syracuse, NY; L. Parker, Bureau Veritas North America, Inc., Novi, MI; D. Kahane, Forensic Analytical, Hayward, CA.

SP11

Exposure Decision Analysis Toolkit for Educators (and Students)

8:00 AM - 5:00 PM

HILTON, CALLOWAY

Pre-registration required

Instructors: J. Muhlhausen and P. Logan, 3M Company, St. Paul, MN.

Note: This workshop is limited to academic faculty and current students in IH training programs. Participants must bring a Windows-based laptop to run the software. It will not run on a Macintosh computer without an emulator.

Are you a student or university educator who has struggled to understand or communicate exposure assessment data analysis skills? Our experts in this Exposure Decision Analysis (EDA) workshop are opening their "Top Secret" toolboxes to

share their skills, knowledge, and techniques with you. Through this dynamic course, you'll find your own educational competencies in this demanding IH/OH practice elevated to a level that gives you the confidence and authority to transfer that knowledge and understanding to others in your classrooms or student peer groups.

Using a mix of slides, hands-on exercises, analysis tools, technology, and personal experiences, our experts will prepare young IHs and their educators for the demanding expectations found in consulting, industry, academia, and government. At the end of this workshop, attendees will have a full toolkit—including presentations, case studies, workshop ideas, and eTools—for use in their classrooms or their first steps into the larger workforce. Walk in a novice; walk out an EDA expert!

SP12

SDS Authoring and Reviewing, and IH Insomnia: What's Keeping You Up at Night?

9:00 AM - 11:00 AM

328/329

Presenter: D. Deeds, Industrial Health & Safety Consultants, Inc., Shelton, CT. Moderator: R. Skoglund, Covestro, Pittsburgh, PA

With the implementation of GHS and HazCom 2012, are you being called upon to author or review SDSs? Do you have a list of questions? Concerns about the hazards of products you are using or making? Are the nuances of SDS information a bit fuzzy? Then this session is for you! This session, facilitated by Registered SDS Authoring Specialists, will be a roundtable discussion where you can bring your issues and get answers. This is not a presentation, but an interactive session, where subject matter experts will address your key issues in small group discussions. This session will be tailored to meet the needs of you, the audience. Participants will be asked to complete a brief online survey prior to the conference in early 2016 to identify the key issues that will be discussed.

CR321 🙄

Enhancing Credibility of EHS Data in Sustainability Reporting 10:00 AM - 11:00 AM 324/325/326

Presenter: L. Barnes, Bureau Veritas North America, Lakewood, CO.

Sustainability reporting is an expectation today with over 90% of the world's

top 250 corporations reporting on their performance. Increasingly, company management and external stakeholders are expressing concern about credibility of sustainability reporting of EHS data. Industrial hygienists and other EHS professionals may be asked to help address such concerns. This presentation will provide practical ideas for improving accuracy and reliability of EHS information used for sustainability reporting.

CR322

Achieving World Class Health & Safety Through Transformational Leadership

10:00 AM - 11:00 AM

341/342

Presenter: R. Fulwiler, Transformational Leadership Associates, Cincinnati, OH.

Transactional leadership, at best, will achieve average results in the work place. Transformational leadership, by focusing on both the worker and the work, engages the head and heart of the worker leading to world class results in health & safety and other critical business output areas. Characteristics of both a transactional and transformational leader along with skill sets on how to become more transformational will be presented.

SP13

Herbert E. Stokinger Award Lecture—Fifty Years of Chasing Paracelsus

11:30 AM - 12:30 PM

336



Lecturer: William D. Wagner, Retired

The Dose Makes the Poison- perfect TLVs® and BEIs®, like the 'Will-o-the-Wisp' or the Pot-of-Gold at the end of the rainbow

cannot ever be achieved, but they continue as vertebrae of a backbone that is the successful practice of global industrial hygiene, toxicology and occupational medicine protecting the health and safety of workers.

This presentation is not on a new chemical or physical agent TLV®, a BEI®, an IH or environmental safeguard, but rather, is a 50 year summary of attempts and successes by so many individuals and events striving to attain the Pot-of-Gold.

THURSDAY, MAY 26 Technical Sessions

SP19

Residential Indoor Air Quality Assessments: Tuning up Your Client's Home

11:30 AM - 12:30 PM 321/322/323

Presenters: John Lapotaire, CIEC, Member IAQA1 and Lydia Lapotaire, CIEC, Indoor Air Quality Solutions, IAQS, Orlando, FL

How one consulting firm conducts an indoor environmental assessment by measuring a home's "vital signs" or indoor environmental conditions will be presented. A home's heating ventilation and air conditioning, HVAC system, and ventilation rate have a substantial impact on the quality of a home's indoor environment. By measuring the home's indoor environmental conditions, well informed recommendations can be made that can be re-measured and validated on a follow-up visit.

CR323

Evaluating Fitness for Work to Reduce Exposure Risk

1:00 PM - 2:00 PM

327

Presenter: P. Greaney, WorkCare, Inc., Anaheim, CA.

How do you know with a reasonable degree of certainty whether a worker is physically and mentally able to safely perform essential job functions? An experienced occupational medicine physician will describe a legally defensible fitness-forwork evaluation process. Industrial hygiene professionals and their EHS colleagues will acquire knowledge and tools to help them: identify potential physical and mental impairments; reduce exposure and liability risks; and protect workers, customers and the general public from harm.

SP21

Emerging Issues in Beryllium Regulation: DOE and OSHA

1:00 PM - 3:00 PM

339/340

Moderator: M. Brisson, Savannah River National Laboratory, Aiken, SC.

Regulations from DOE and OSHA govern beryllium in the workplace. What the regulations don't give you is a framework for best practices to protect worker health. A series of case studies of beryllium worker protection programs, insights into what worked well and lessons learned will be presented.

Speakers:

• S. Jahn, Savannah River Nuclear Solutions LLC, Aiken, SC.

- M. Corbett, Haz IQ Consulting, LLC, Toledo, OH.
- M. Brisson, Savannah River National Laboratory, Aiken, SC.
- M. Ruskin, T. Defoe, USDOL/OSHA, Washington, DC.
- J. Rogers, B. McArthur, Department of Energy, Washington, DC.

PO124

Biological Monitoring & Bleeding Edge

1:00 PM - 3:20 PM

337/338

Arranger: D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. Moderator: S. Que Hee. Env Health Sciences. Univ. California Los Angeles, Los Angeles, CA. Monitor: K. Diep, Corporate Safety, American Airlines, Fort Worth, TX.

1:00 PM - 1:20 PM

Exposure to Lead from Industrial Paints and Coatings: Is This Still a Potential Hazard in Workplaces? D. Radnoff, Alberta Jobs, Skills, Training and Labour, Edmonton, AB, Canada.

1:20 PM - 1:40 PM

Legionella in Residential and Commercial Properties: Routine Monitoring and Prevention. J. Birkebak, C. Lively, M. Reed, and E. Sobek, Assured Bio Labs, LLC, Oak Ridge, TN; P. Riccobono, Conditioning and Control Systems, Inc., Englewood, NJ; J. Leitner and M. Borello, Environmental Building Solutions, LLC. New York. NY.

1:40 PM - 2:00 PM

Passive Wristband Sampler Technology Used to Build Bridges: Pilot Study **Examples.** K. Anderson, Environmental & Molecular Toxicology, Oregon State University, Corvallis, OR.

2:00 PM - 2:20 PM

Piloting Development of a Wearable. Real-Time Heat Strain Monitor. D. Shaffer, University of Arizona, Tucson, AZ.

2:20 PM - 2:40 PM

Analysis of Los Angeles Taxi Drivers' Urinary PAH Metabolites and Their Associations with Occupational Exposure to Traffic Pollutants. N. Yu. Environmental Health Sciences, University of California Los Angeles, Los Angeles, CA.

2:40 PM - 3:00 PM

Application of a Systems Approach to Link Safety and Productivity to Power Hand Tool Evaluation and Procurement. M. Geiger, Pentagon Liaison Office, Naval Safety Center, Fairfax, VA; D. Wasserman, Consulting Engineer, Frederick, MD.

3:00 PM - 3:20 PM

Estimating the Dermal Exposure of Synthetic Musks from Personal Care Products by Using Vertical Diffusion Cell. Y. Hsu, W. Tseng, and S. Tsai, National Taiwan University, Taipei, Taiwan.

PO125

Intriguing Unknown and Known IH Hazards

1:00 PM - 3:20 PM

341/342

Arranger: S. Durgam, General Electric, Fairfield, CT. Moderator: S. Hueth, Industrial Hygiene, US Army, Joppa, MD. Monitors: V. Kero, Omega Environmental Services, S. Hackensack, NJ; J. McNamara, Northrop Grumman Electronic Systems, Baltimore, MD.

1:00 PM - 1:20 PM

Cold Storage of Fumigated Fruit: Worker Illnesses Uncover an Unforeseen Route of Pesticide Poisoning. H. Fong and P. Thhrani, California Department of Pesticide Regulation, Sacramento, CA.

1:20 PM - 1:40 PM

Protecting Workers Who Manufacture the Insensitive Munitions that Protect the Warfighter. L. Kneten, Army Public Health Center, Bel Air, MD.

1:40 PM - 2:00 PM

Hazard Assessment of High-Nitrogen **Explosive Compounds: A Novel in Vitro** Multi-Cellular Approach. T. Maurais, C. Gellasch, and M. Bruggermeyer, DoD, Uniformed Services University of Health Sciences, Bethesda, MD; K. Donohue, N. Garcia-Reyero, E. Perkins, and K. Gust, USACE Engineer Research and Development Center, Vicksburg, MS.

2:00 PM - 2:20 PM

Occupational Exposure Assessment of 1-Bromopropane. Y. Lin, H. Lee, and C. Ko, Fu-Jen Catholic University, New Taipei City, Taiwan; J. Wu, C. Chang, and Y. Dai, Chang Jung Christian University, Tainan, Taiwan.

2:20 PM - 2:40 PM

Isocyanate Exposure Assessment When a Paint Brush and Roller Are Used to **Apply Moisture-Cure Polyurethane** Paint. T. Schoonover, SHARP Research, Washington State Department of Labor & Industries, Olympia, WA.

2:40 PM - 3:00 PM

Use of Aggressive Air Sampling for Assessing the Sufficiency of Indoor Firing Range Cleaning for Lead (Pb) Removal. A. Weber and R. Seymour, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD; B. Grace, Public Health Command-Pacific, Camp Zama, Japan.

Technical Sessions THURSDAY, MAY 26

3:00 PM - 3:20 PM

Material Substitution of Methylene Chloride/Phenol Paint Stripper.

K. Walter, T. Harper, F. Blount, V. Sackmann, and T. Nelsen, Hill AFB, US Air Force, Layton, UT.

PO126

Spectrum of Legal Issues 1:00 PM - 3:20 PM 343/344

Arranger: M. Norman, Law Office of Margaret Norman, Manhattan Beach, CA. Moderator: D. Napier, DNA Industrial Hygiene, Manhattan Beach, CA. Monitors: S. Celly, Celly Services, Inc., Long Beach, CA; L. Vance, Mechanical and Nuclear Engineering, VCU, Richmond, VA.

1:00 PM - 1:20 PM

A Review of the New York City and New York State Legionella Regulations for Cooling Tower Management—Are They **Enough to Prevent Legionellosis Cases?** D. Miskowski, EMSL Analytical Inc., Cinnaminson, NJ.

1:20 PM - 1:40 PM

An Update on USDOL-OSHA's Efforts to Reduce Heat Deaths and Illnesses. G. Lamson, OSHA Salt Lake Technical Center, Sandy, UT; M. Hodgson and S. Arbury, OSHA Office of Occupational Medicine and Nursing, Washington, DC.

1:40 PM - 2:00 PM

The Impact of Key Global Personal **Protective Equipment Selection Criteria** on Standard Development. J. Tremblay, 3M OHESD. St. Paul. MN.

2:00 PM - 2:20 PM

The Eyes Have It! Occupational Vision Is More Than Just Making Certain Workers Use Their PPE Correctly.

M. Pattison, Tri-Service Vision Conservation and Readiness Program, Army Institute of Public Health, Aberdeen Proving Ground, MD.

2:20 PM - 2:40 PM

Evaluation of Occupational Exposure Limits: Lessons Learned from the Alberta Process. D. Radnoff, Alberta Jobs, Skills, Training and Labour, Edmonton, AB. Canada.

2:40 PM - 3:00 PM

The Evolution of PricewaterhouseCoopers' Office Ergonomics and Reasonable Accommodation Process. T. Silva, Atlas Injury Prevention Solutions, Grand Haven, MI. (WITHDRAWN)

3:00 PM - 3:20 PM

Fire and Smoke Damage Investigations and Testing Options. E. Mirica, Materials Science Division, EMSL Analytical, Cinnaminson, NJ.

RT250

Formaldehyde Emissions in the **Built Environment**

1:00 PM - 3:30 PM

345/346

Arranger: C. Marcham, Embry Riddle Aeronautical University, Daytona Beach, FL. Moderator: W. Friedman, HUD, Washington, DC. Monitors: G. Braybrooke, Baltimore, MD; E. Pinzer, HUD, Washington, DC.

Accurately measuring indoor formaldehyde concentrations in a home and determining if building materials or furnishing pose a health risk are complex tasks that require a professional. It is important that those performing the exposure evaluation understand the variables involved and therefore, the collection and analysis of samples that are capable of measuring formaldehyde emissions in a manner that allows meaningful interpretation.

- Mechanisms of Neurogenic Irritation Due to Formaldehyde Exposure. J. Krause, Geosyntec Consultants, Temple Terrace, FL.
- A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates from Composite Wood Products. F. Offermann, Indoor Env Engineering, San Francisco, CA; C. Marcham, Embry Riddle Aeronautical University, Daytona Beach. FL.
- Case Study of Formaldehyde Implicated in Homeowner Adverse Health Effects. D. Peters, Environmental Health Management, Louisville, KY.
- Canadian Department of Health's Efforts in Managing Formaldehyde in Indoor Air. B. Fraser, Health Canada, Ottawa, ON, Canada.
- Formaldehyde IEQ Sampling Assessment Strategies. B. Epstien, Forensic Analytical Consulting Services, Inc., Portland, OR.

PO127 🔼

Novel Approaches in Industrial **Hygiene Sampling and Analysis**

1:00 PM - 3:40 PM

Arranger: M. Hsieh, Abbvie, Vernon Hills, IL. Moderator: S. VanEtten, Chemistry, Rutgers, Mullica Hill, NJ. Monitors: A. Teague, Analytics Corporation, Ashland, VA; J. Cooper, Bureau Veritas, Novi, MI.

1:00 PM - 1:20 PM

Evaluation of Sampling Bias During VOC Exposures Involving Peaks Using Capillary Flow Controllers Coupled with Evacuated Canisters. R. LeBouf, CDC/ NIOSH, Morgantown, WV.

1:20 PM - 1:40 PM

Determinations of Bisphenol A and Bisphenol A Analogues by Solid-Phase Microextraction with On-Fiber Derivatizations. F. Hsu and S. Tsai, Environmental Health, Taipei, Taiwan,

1:40 PM - 2:00 PM

A Review of PCB Analytical Methods for Industrial Hygiene Sampling and Recommended Practices. W. Mills, Engineering Technology, Northern Illinois University, Sycamore, IL.

2:00 PM - 2:20 PM

Sampling and Analysis of Airborne Hazardous Chemicals in Bakeries in Taiwan. P. Chang and S. Tsai, Department of Public Health & Institute of Environmental Health, College of Public Health, National Taiwan University, Taipei City, Taiwan; P. Hung, Institute of Labor, Occupational Safety and Health, Ministry of Labor, Executive Yuan, Taipei City, Taiwan.

2:20 PM - 2:40 PM

Development of a Pre-Filter for Thermal Desorption Tubes. C. Chang, K. Yang, C. Lin, S. Huang, N. Yu, and C. Chen, Department of Public Health, National Taiwan University, Taipei, Taiwan; Y. Kuo, Chung-hwa University of Medical Technology, Tainan, Taiwan; C. Chen, Institute of Labor, Occupational Safety and Health, Ministry of Labor, New Taipei City, Taiwan.

2:40 PM - 3:00 PM

IOM Inhalable and Respirable Sampling Compared to Conventional Total and Respirable Sampling for Assessing Welders Exposure to Manganese. F. Akbar-Khanzadeh, M. Shomody, S. Milz, A. Ames, and M. Valigosky, UT HSC College of Medicine, Toledo, OH.

3:00 PM - 3:20 PM

Treated and Untreated Rock Dusts: Silica Content and Physical Characterization. J. Soo, T. Lee, W. Chisholm, D. Farcas, D. Schwegler-Berry, and M. Harper, CDC/NIOSH/HELD/EAB, Morgantown, WV.

3:20 PM - 3:40 PM

Vermiculite Containing Asbestos & Zonolite Insulation. D. Ewert, Occupational Health Services, RJ Lee Group, Monroeville, PA.

THURSDAY, MAY 26 Technical Sessions

RT251

Ebola: Controlling Risk During the Army's Response

1:00 PM - 4:00 PM

347/348

Arranger: K. Simon, US Army, APG, MD. Moderator: K. Simon, US Army, APG, MD. Monitors: B. Kissel, Cornell University, Ithaca, NY; S. Hueth, US Army, Joppa, MD; S. Battista, 3M Corp Safety and Industrial Hygiene, St Paul, MN.

The Army has responded to the Ebola Virus Disease(EVD) outbreak in Africa and in the US. The military has focused on protecting healthcare workers, laboratory personnel, and other personnel potentially having had contact with EVD patients and or Ebola-associated waste. Several Army agencies have created infection control training protocols to minimize exposures during the detection, diagnoses, and treatment of EVD patients.

- Ebola and PPE: Developing a Protection Strategy. P. Lilley, Army Public Health Center, Aberdeen Proving Ground, MD.
- Effectiveness, Limitations and Optical Radiation Hazards from Lamps Used for Disinfection Against the Ebola Virus.
 S. Wengraitis, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD.
- Ebola Waste Management in the Medical Treatment Facility. L. Baetz, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD.
- U.S. Army Medical Research Institute of Infectious Diseases Support in the Ebola Effort. N. Woollen, U.S. Army Medical Research Institute of Infectious Diseases, Ft Detrick, MD.
- U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) Ebola Virus Disease Testing Mission in West Africa. R. Schoepp, U.S. Army Medical Research Institute of Infectious Diseases, Ft Detrick, MD.
- U.S. Army Edgewood Chemical Biological Center Support in the Ebola Effort.
 C. Chue, US Army Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD.

RT252

Notable Confined Space Events and Issues

1:00 PM - 5:00 PM

324/325/326

Arranger: W. Brown, Retired, Fairborn, OH. Moderator: W. Brown, Retired, Fairborn, OH. Monitors: R. Bowers, Terracon Consultants, Park City, UT; G. Bibbins, San Francisco Water, San Francisco, CA.

Typical and unusual examples of confined space entries and confined space entry program issues encountered in work environments will be discussed. The presenters will describe the conditions encountered, the outcomes of solutions implemented and provide the audience with potential solutions to similar conditions they may encounter.

- Confined Spaces in Agriculture.
 T. Anthony, University of Iowa, Iowa City, IA.
- Unplanned Confined Space Entry.
 T. Corbin, AMEC, Clackamas, OR.
- Engulfment in Bread Water Sludge
 During a Cleanout Operation at a National Bread Manufacturer. T. Krug, Exceptional Occupational Safety and Health Advisors (EXOSHA), Bartlett, IL.
- Natural Ventilation and Isolated Subsurface Structures in the Infrastructure. T. McManus, NorthWest Occupational Health & Safety, North Vancouver, BC, Canada.
- Confined Spaces at the North Slope of Alaska. S. Hueth, Army Public Health Center (Provisional), Aberdeen Proving Ground, MD.
- Gas Detection Considerations During Refinery Catalyst Rebuilding Confined Space Entry Procedures. R. Henderson, GFG Instrumentation, Ann Arbor, MI.
- Adventures in Airflow: Portable Ventilation and Confined Spaces. T. McManus,
 NorthWest Occupational Health & Safety,
 North Vancouver, BC, Canada.
- Methemoglobinemia Resulting from Work in a Methylene Diphenyl Isocyanate (MDI) Tank. P. Smith, USDOL/OSHA, Sandy, UT.

CR324 💡

What Your Safety Data Should Be Telling You and Why It Isn't

2:30 PM - 3:30 PM

336

Presenter: D. Groover, DEKRA Insight, Oxnard, CA.

Leadership needs data to make sound decisions. Safety data may be presented in a way that can lead to confusion or even introduce bias. This talk will touch on all aspects of the data collection, integration, analysis, and presentation processes that must come together to yield valuable insight for leadership. Without all of these processes working in concert, analytics becomes just a buzzword. Using real life examples from client projects, the realities most organizations face as they attempt to harvest insight from their data will be presented.

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Poster Sessions

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Poster Session 401

AUTHOR ATTEND TIME: Monday 10:00 a.m. - Noon

Aerosols

- SR-401-01 Collection Efficiency of Membrane Filters for Respirable Size-Selective Sampling. J. Soo, T. Lee, M. Kashon, and M. Harper, CDC/NIOSH/ HELD/EAB, Morgantown, WV.
- CS-401-02 Respirable Manganese **Exposures During Hand Grinding of** Carbon Steel. A. Sauter, Liberty Mutual Insurance, Waukesha, WI; A. De Guzman, Risk Control Services, Liberty Mutual Insurance Company, Woodbridge, VA.
- SR-401-03 **A Cyclone for End of Shift** Silica Measurement. T. Lee, L. Lee, J. Soo, and M. Harper, Exposure Assessment Branch, CDC/NIOSH, Morgantown, WV; J. Hummer and E. Cauda, CDC/ NIOSH, Pittsburgh, PA.
- SR-401-04 Development and Validation of Sampling and Analytical Methods for Determination of Mold Spores Concentration in Settled Dust of Heating, Ventilation and Air-Conditioning Systems (HVAC). M. Biyeyeme Bi Mve and M. Debia, Environmental and occupational health, University of Montreal, Montreal, QC, Canada; Y. Cloutier, N. Lacombe, and G. Marchand, Institut de recherche Robert-Sauvé en santé et sécurité au travail (IRSST), Montreal, QC, Canada.
- SR-401-05 Silica Exposure During Core Processing in Mining Exploration. S. Kalenge, Occupational Cancer Research Centre, Cancer Care Ontario (CCO), Toronto, ON, Canada; V. Arrandale, Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada.
- SR-401-06 High Flow Rate Thoracic Size Selective Samplers. T. Lee and M. Harper, Exposure Assessment Branch, CDC/NIOSH, Morgantown, WV.
- SR-401-07 Evaluation of Bioaerosol Properties and Antibiotic Resistance in Animal Hospital. C. Lai, M. Wang, and C. Chan, Department of Occupational

- Safety & Health, Chung Shan Medical University, Taichung, Taiwan; W. Lee, Veterinary Medical Teaching Hospital of National Chung-Hsing University, Taichung, Taiwan; A. Kuo, Chung Shan Medical University Hospital, Taichung,
- SR-401-08 Sampling Evaluation of Bioaerosol and Antibiotic-Resistant Characteristics in Intensive Care Unit. C. Lai and N. Wu, Department of Occupational Safety & Health, Chung Shan Medical University, Taichung, Taiwan; Y. Lin and A.Kuo, Chung Shan Medical University Hospital, Taichung, Taiwan.
- SR-401-11 Evaluation of Bacteria Reducing Efficiency Using Bactericide Under Full Scale Field Study-A Negative Pressure Pattern Testing. C. Lai, Y. Wang, Y. Lee, and A. Ku, Department of Occupational Safety & Health, Chung Shan Medical University, Taichung, Taiwan.
- SR-401-12 Physicochemical Properties of the Powder By-Products Generated from a Metallization Process and Its 1st Scrubber in the Semiconductor Industry. K. Choi, M. Jung, and H. An, Samsung Health Research Institute, Samsung Electronics, Yongin-Si, Korea (the Republic of).
- SR-401-13 Experimental Study of Surgical Smoke and Its Control. T. Lee, J. Soo, R. LeBouf, D. Burns, and M. Harper, CDC/NIOSH, Morgantown, WV; D. Novak, CDC/NIOSH, Pittsburgh, PA; J. Bowers, Ruby Memorial Hospital, Morgantown,

Nanotechnology

- SR-401-09 Comparative Evaluation of Strategies for Assessing Occupational Exposure to Carbonaceous Nanomaterials. M. Debia, C. Catto, and M. Skulinova, Environmental and Occupational Health, Université de Montréal, Montréal, QC, Canada; G. L'Espérance and C. Allard, Polytechnique Montréal, Montréal, QC, Canada; J. Kroeger, Raymor Industries Inc., Boisbriand, QC, Canada.
- SR-401-10 Workplace Measurements of Semiconductor Nanowires During Production at a Small-Scale Company. M. Hedmer and H. Tinnerberg, Occupational and Environmental Medicine, Lund University, Lund, Sweden; C. Isaxon, P. Nilsson, J. Rissler, A. Gudmundsson,

M. Bohgard, and J. Pagel, Ergonomics and Aerosol Technology, Lund University, Lund, Sweden; L. Ludvigsson and M. Messing, Solid State Physics, Lund University, Lund, Sweden.

Poster Session 402

AUTHOR ATTEND TIME: Monday 2:00 p.m. - 4:00 p.m.

Industrial Hygiene General Practice

- CS-402-01 Recommendations to Improve Employee Thermal Comfort When Working in 40°F Refrigerated Cold Rooms. D. Ceballos, Environmental Health, Harvard University, Boston, MA: K. Mead and J. Ramsey, CDC NIOSH, Cincinnati, OH.
- CS-402-02 Manganese Exposure and the OSHA Standard: The Relevance of the 5.0 mg/m³ Ceiling PEL. D. Duffy, Health, Safety & Environmental Services, ESIS, Inc., Chicago, IL.
- CS-402-03 Phenol—Side by Side Passive and Active Sampling and Analysis. J. Kenny, ESIS Environmental Health Laboratory, Cromwell, CT; K. Bujak, ESIS Inc. Health, Safety & Environmental, Wadsworth, OH; J. Cochran, ESIS Inc., Health, Safety & Environmental, Austin,
- CS-402-04 Solder Fume Extraction— Do ADB Remove Abietic Acid. J. Lohkamp, A. DiMaggio, and L. Felker, ESIS, Inc. Health, Safety & Environmental, Dallas, GA.
- CS-402-05 Chromium—Total Chrome and Hexavalent Chrome Air Concentrations While Welding Carbon Steel. J. Kenny, ESIS Environmental Health Laboratory, Cromwell, CT; G. Stratton and M. Newport, ESIS Inc. Health, Safety & Environmental, Andover, CT.
- SR-402-06 Reducing Welders' Exposure to Manganese Welding Fume Using Low Manganese Emissions Flux Core Wire. J. Capuzzi, ESIS, Cape May Courthouse,
- CS-402-07 Sensitization to Platinum Salts—Easy to Take the Wrong Approach. A. Smith and H. Meeds, ESIS Health, Safety & Environmental, Philadelphia, PA.
- SR-402-08 Improving the Accuracy of the Well-Mixed Room Model Used in IH Mod for the Estimation of Exposures to Aqueous Solvents. C. Castro Ruiz,

Daily Viewing Schedule

- + PS 401 405 Monday 9:00 a.m. 5:30 p.m.
- PS 401 405 Tuesday 9:00 a.m 3:00 p.m.
- PS 401 405 Wednesday 8:00 a.m. 1:30 p.m.

- D. Bégin, D. Drolet, and M. Debia, Université de Montréal, Montréal, QC, Canada; S. Halle and W. Chouchen, Ecole de Technologie Supérieur, Montréal, QC, Canada.
- SR-402-09 Elemental Properties of Coal Slag Bulk Samples and Measured Airborne Exposures at Two Coal Slag Processing Facilities in the United States. C. Mugford, R. Boylstein, and J. Armstrong Gibbs, Respiratory Health Division, CDC/NIOSH, Morgantown, WV.
- CS-402-10 Auto Correction of Flow Rate in a Personal Air Sampling Pump for Changes in Barometric Pressure. R. Robertson and W. Davis, Sensidyne, LP, St. Petersburg, FL.
- CS-402-11 Analysis of Metals in Paint Using X-Ray Fluorescence Spectroscopy. Y. Zagagi, Golder Associates Inc., Jacksonville, FL.
- CS-402-12 Improving Industrial Hygiene: The Benefits of Organization
 Development. S. Milz, Public Health and Preventive Medicine, University of Toledo, Toledo, OH.
- CS-402-13 The Quantification of Free Drug and Antibody Drug Conjugate (ADC) Molecules Collected During Surface Industrial Hygiene (IH) Monitoring Procedures. N. Tsekhanovskaya, Bioanalytical Services, SafeBridge Consultants Inc., Mountain View, CA.
- SR-402-14 Comparison of Active and Passive Sampling Methods for Formaldehyde in Pathology/Histology Labs. E. Lee, M. Kashon, and M. Harper, HELD/ EAB, CDC/NIOSH, Morgantown, WV; R. Magrm and S. Guffey, West Virginia University, Morgantown, WV.
- CS-402-15 Firing Range Residue Hazard Characterization and Cleanup. T.
 Sleight, Bioenvironmental Engineer, U.S.
 Air Force, Enid, OK.

Poster Session 403

AUTHOR ATTEND TIME:
TUESDAY 10:00 A.M. – NOON

Exposure Assessment Strategies

 SR-403-01 Comparison Measurements of MDI Isocyanate During the Application of Spray Polyurethane Foam Insulation. J. Brown, G. Oishi, O. Shimelis, M. Halpenny, E. Barrey, K. Espenschied, and M. Ye, R&D, Sigma-Aldrich / Supelco, Bellefonte, PA.

- CS-403-02 Consultation, Sampling Strategy Development and Performance of Industrial Hygiene Personal and "Worst-Case" Grab Sample Area Monitoring for Identified Hydrocarbons Related to Potential Oilfield Exposures for Routine Tank Gauging Operations. J. Koehn, L. McKelvey, and J. Wiley, JK, Inc., Houston, TX; R. Acker, Ackcellent Consulting, LLC, Monument, CO; D. Deutsch, Apache Corporation, Houston, TX.
- SR-403-03 Characterization of Naturally Occurring Airborne Diacetyl Concentrations Associated with the Preparation and Consumption of Unflavored Coffee. J. Pierce, A. Abelmann, J. Lotter, C. Comerford, and K. Keeton, Cardno ChemRisk, Chicago, IL; B. Finley, Cardno ChemRisk, Brooklyn, New York, NY.
- SR-403-04 Occupational Exposure to Vapor-Gas, Dusts, and Fumes Among Rural Residents. M. Humann, B. Doney, and P. Henneberger, Division of Respiratory Disease Studies, CDC/NIOSH, Morgantown, WV; B. K. Kelly, The University of Iowa, Iowa City, IA.
- CS-403-05 Options for the Placement of Breathing Zone Air Samples Inside a Welder's Helmet. C. Pomerenke, Liberty Mutual Insurance, Boston, MA.
- CS-403-06 A Quantitative Model to Predict Allergic Contact Dermatitis from Wearable Technology Products.
 A. Singhal, K. Bogen, R. Kalmes, and P. Sheehan, Exponent, Inc., Oakland, CA.
- SR-403-07 A Bayesian Approach for Summarizing Real-Time Exposure Data with Left Censoring. E. Houseman, Oregon State University, Corvallis, OR; M. Virji, Division of Respiratory Disease Studies, CDC/NIOSH, Morgantown, WV.

Noise

- CS-403-08 Noise Exposure Assessment in a Dog Grooming Operation. R. Higley, G. Gruenwald, and T. Knepper, ESIS, Corona, CA.
- CS-403-09 Evaluation of Noise Exposures During High Pressure Washing,
 Piglet Vaccinating and Room Relocation at a Hog Farrowing Facility.
 D. Weber,
 Liberty Mutual Insurance Company,
 Glastonbury,
 CT.
- SR-403-10 Evaluation of Noise in a Division 1 College Football Stadium. M. Valigosky, A. Ames, J. Taylor, F. Akbar-Khanzadeh, and S. Milz, University of Toledo, Toledo, OH.

- SR-403-11 Environmental Noise Evaluation After Implementation of Controls
 Near a Higher Education Research Facility. A. Ames, M. Valigosky, C. Barber,
 F. Akbar-Khanzadeh, and S. Milz, University of Toledo, Toledo, OH.
- SR-403-12 Sound Level Area Assessments Using Noise Mapping. G. Battista and M. Sheehan, West Chester University, West Chester, PA; R. Morrison, The Dow Chemical Co., Collegeville, PA.

Healthcare

 SR-403-13 The Benefits of Quantifying the Parent Product and Its Urinary Metabolites when Assessing Occupational Exposure to Antineoplastic Drugs. C.
 Hon, School of Occupational and Public Health, Ryerson University, Toronto, ON, Canada; C. Barzan, University of British Columbia, Vancouver, BC, Canada.

Environmental Issues

SR-403-14 Development and Administration of a Pilot Environmental
Health Survey in Lucas County, Ohio.
 E. Zgodzinksi, S. Eitniear, G. Bingham,
J. Niese, and B. Sherrick, Toledo-Lucas
County Health Department, Toledo, OH;
A. Ames, M. Valigosky, S. Milz, and F.
Akbar-Khanzadeh, University of Toledo,
Toledo, OH.

Poster Session 404

AUTHOR ATTEND TIME: TUESDAY 1:00 P.M. – 3:00 P.M.

Emerging Issues

SR-404-01 Time Trends in Formaldehyde Emissions from Laminate Flooring Products After Installation. P. Ruestow, J. Lotter, A. Abelmann, H. Fritz, E. Beckett, and J. Pierce, Cardno, Chicago, IL; K. Unice and J. Bare, Cardno, Pittsburgh, PA.

Indoor Environmental Quality

- SR-404-02 Evaluation of Diurnal Variations in Formaldehyde Concentrations
 Following Installation of Laminate
 Flooring Using Real-Time Sampling. H.
 Fritz, J. Lotter, A. Abelmann, P. Ruestow,
 E. Beckett, and J. Pierce, Cardno ChemRisk, Chicago, IL; K. Unice and J. Bare,
 Cardno ChemRisk, Pittsburgh, PA.
- SR-404-14 Measurements of Bisphenol A in Household Dusts in Taiwan by Solid-Phase Microextraction. C. Chang, F. Hsu, Y. Hsu, P. Chang, and S. Tsai, National Taiwan University, Taipei, Taiwan.

Poster Sessions

 SR-404-15 Microbial Secondary Metabolites in Floor Dust of a Water-Damaged Office Building. J. Park, CDC/NIOSH, Morgantown, WV; M. Sulyok, University of Natural Resources and Applied Life Sciences, Tulln, Austria.

Risk Assessment and Management

- SR-404-03 Studies of the Nicotine Personal Sampler Using PUF Media and That Simple Analysis. Y. Suzuki and T. Enomoto, Development and Research Div., SIBATA Science Technology Ltd., Saitama, Japan; Y. Yanagisawa, Tokyo Univ., Tokyo, Japan; M. Noguchi, Sekei Univ., Muasino, Japan.
- SR-404-06 Characterization of Emissions from 3-Dimensional Printing Operations: A Literature Review and Sampling Framework for Future Evaluations. R. Zisook and B. Simmons, Cardno ChemRisk, San Francisco, CA.
- SR-404-07 Female Maximum Acceptable Peak Force for Pulp Pinch Insertion Task in Taiwan. A. Chen and E. Lo. Department of Occupational Safety and Health, China Medical University, Taichung City, Taiwan.
- SR-404-08 Risk-Based Evaluation of the OSHA Oil and Gas Benzene PEL. A. Duane, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.
- SR-404-09 An Analysis of OSHA Violations: Occupational Exposures to Benzene. P. Williams, E Risk Sciences, LLP. Boulder. CO.
- CS-404-10 Vibration Safety Assessment When Operating a Concrete Vibrator. J. Riddar and J. Karlsson, Faculty of Medicine, Lund University, Lund, Sweden.

Healthcare

- CS-404-04 Evaluation of the Stretch-Effect by the Psychosocial Stress of Workers in Small Workplaces. S. Lee, S. Lim, S. Lee, and S. Cho, Gyeonggi Dongbu Workers' Health Center, Seongnam-si, Korea (the Republic of); J. Koo, The Catholic University in Korea, Seoul, Korea (the Republic of).
- SR-404-05 Pilot Study: Antineoplastic Drug Contamination of Surfaces at a Long-Term Care Facility. C. Hon, School of Occupational and Public Health, Ryerson University, Toronto, ON, Canada; E. Jelley, University of Toronto, Toronto, ON, Canada; P. Demers, Occupational Cancer Research Centre, Toronto, ON, Canada.

Occupational and Environmental **Epidemiology**

- SR-404-11 **Organophosphate Expo**sure and Depression in U.S. Air Force Aircraft Maintainers. J. Hardos and D. Ott, USAF School of Aerospace Medicine, Wright-Patterson AFB, OH; L. Whitehead, I. Han, and D. Waller, University of Texas School of Public Health, Houston,
- SR-404-12 An Updated Evaluation of Reported Chrysotile Asbestos: No Observed Adverse Effect Levels (NOAELs) For Lung Cancer and Mesothelioma. J. Pierce and P. Ruestow, Cardno Chem-Risk, Chicago, IL; B. Finley, Cardno ChemRisk, New York City, NY.

Protective Clothing and Equipment

 CS-404-13 Improving Safety Eyewear Fit for the US Workforce. G. Judd, University of Alabama at Birmingham, Birmingham, AL; P. Joe, UAB, Augusta, GA; J. Oh and C. Lungu, Environmental Health Sciences, University of Alabama at Birmingham, Birmingham, AL.

Poster Session 405

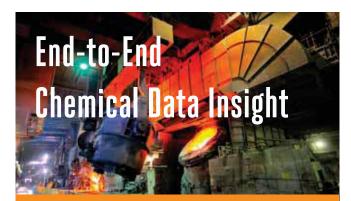
Student Poster Session

AUTHOR ATTEND TIME: Wednesday 10:00 a.m. - Noon

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WEDNESDAY, MAY 25, 2016 12:30 PM - 1:00 PM

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Halls E, F, and Swing

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Monday, May 23 - 9:00 AM - 5:30 PM

(9:30 AM – 10:30 AM and 12:30 PM – 2:00 PM are EXPO ONLY hours)

Tuesday, May 24 - 9:00 AM - 3:00 PM

(9:00 AM – 10:30 AM *and* 12:30 PM – 2:00 PM are EXPO ONLY hours)

Wednesday, May 25 – 8:00 AM – 1:30 PM NEW OPENING TIME!

(8:00 AM - 10:00 AM and Noon - 1:00 PM are EXPO ONLY hours)

Expo Hall Networking Reception

Monday, May 23 - 4:00 PM - 5:30 PM

Be sure to bring the complimentary drink ticket included in your badge materials.

Coffee & Danish in the Expo Hall

Tuesday, May 24 - 9:00 AM - 10:30 AM

Meet with exhibitors while enjoying coffee and a snack.

Passport to Prizes

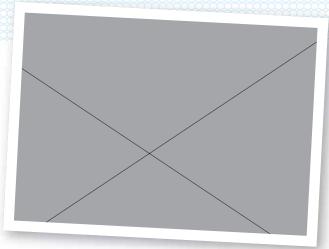
Winning names will be drawn at 12:30 PM on Wednesday

Have your passport stamped by participating exhibitors, and drop your completed entry in the box in the AIHA Booth (Booth 500), by noon on Wednesday, May 25. Winning names will be drawn at 12:30 pm. The Grand Prize is a trip to AIHce 2017 in Seattle Washington. Second Prize is \$1,000.

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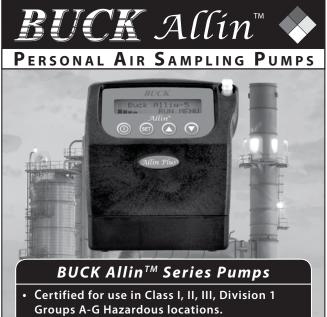
AIHA Laboratory Accreditation Programs, LLC.....Booth 532

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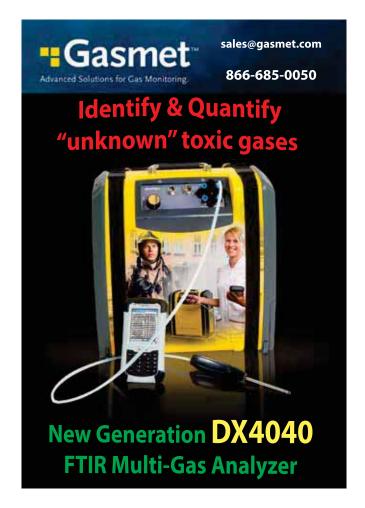
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The El Group, Inc. (El) is an environmental, health and safety (EHS) consulting firm with professional capabilities in the areas of energy and environmental services, industrial hygiene, occupational health, safety and training. Since 1988, El has provided its clients with cost-effective, result-oriented EHS consulting services.

The Ergonomics Center...... Booth 649

3701 Neil Street, Raleigh, NC 27607 919-515-2052

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www.theiia.org

Tiger-Vac Inc. (USA).....Booth 1012

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Travelers Laboratory Booth 613

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TSI, Inc..... Booth 818

500 Cardigan Road. Shoreview, MN 55126 800-874-2811 answers@tsi.com



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U.S. Micro-Solutions, Inc....Booth 1104

1075 South Main Street Suite 104. Greensburg, PA 15601 724-853-4047

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UL - The Wercs Booth 441

23 British American Blvd. Latham, NY 12110 518-763-8900 jon.bang@ul.com www.thewercs.com

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Uniphos Envirotronic, Inc..... Booth 503

2245 Texas Drive, Suite 300 Sugar Land, TX 77479 832-956-0800 www.uniphosamericas.com

Univ. of Illinois/Great Lakes Centers for Occupational & Environmental Safety & Health Booth 553

2121 West Taylor Street, Chicago, IL 60612 **United States** 312-996-6904

http://www.uic.edu/sph/glakes

University of Alabama at Birmingham -Deep South ERC Booth 549

1720 2nd Ave South, Birmingham, AL 35294-0022 **United States** 205-934-7178 uab.edu/dsc



University of Cincinnati Environmental and Occupational Hygiene.... Booth 543

Kettering Lab, 160 Panzeca Way Cincinnati, OH 45267-0056 513-558-2809



http://www.eh.uc.edu/ih/

University of Michigan...... Booth 650

1415 Washington Heights, Ann Arbor, MI 48109-2029 734-936-0749



umcohse-info@umich.edu http://cohse.umich.edu/

The University of Michigan Center for Occupational Health and Safety Engineering (COHSE) serves the region, the nation and the world as a center of excellence for research and graduate education in occupational health and safety. The Center offers graduate and continuing education through the schools of Public Health, Nursing and Engineering.

University of South Florida Sunshine ERC Booth 646 13201 Bruce B. Downs Boulevard, MDC 56

Tampa, FL 33612-3805 813-974-0989 http://health.usf.edu/publichealth/eoh/ index.htm

University of Toledo, Dept of Public Health & Preventive MedicineBooth 652

3000 Arlington Ave., MS 1027, Toledo, OH 43614 **United States** 419-383-3976



University of Washington -Environmental & Occupational Health Sciences Booth 640

4225 Roosevelt Way NE, Suite 100, Seattle, WA 98105 206-616-7843

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The UW Department of Environmental & Occupational Health Sciences is dedicated to creating safer workplace environments and sustainable communities through research and education. Professional development courses and OSHA-authorized training are available through the DEOHS Continuing Education Programs.

UpLifeUSA.....Booth 1152

1508 Bay Rd. Suite N1043, Mlami Beach, FL 33139 310-467-6669 mertt@uplifeusa.com www.hidow.com Portable TENS/EMS Devices

US Navy Recruiting CommandBooth 901

5722 Integrity Drive, Millington, TN 38054 www.navy.com

VelocityEHSBooth 1204

222 W. Merchandise Mart Plaza. Chicago, IL 60654 888-362-2007 velocity@ehs.com

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Wonder Grip USA Inc.....Booth 1067

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Hotels

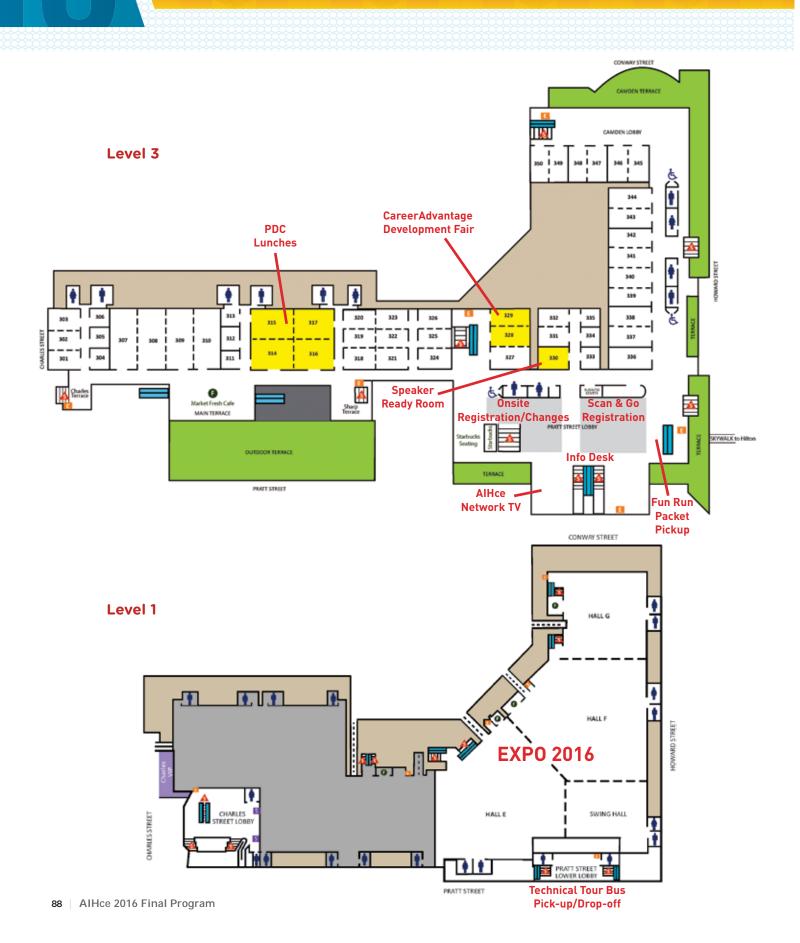


2016 AIHce Hotels

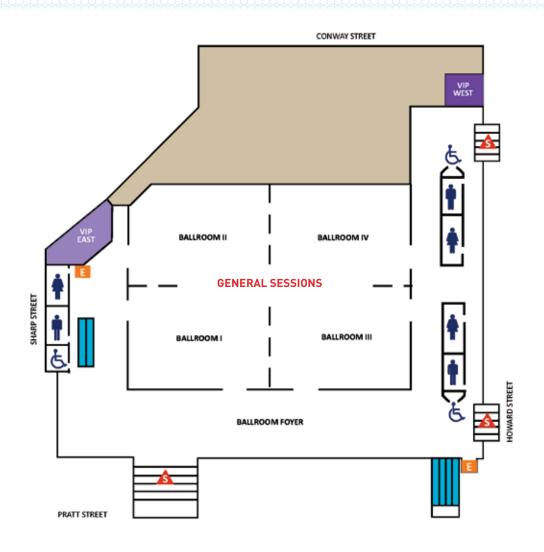
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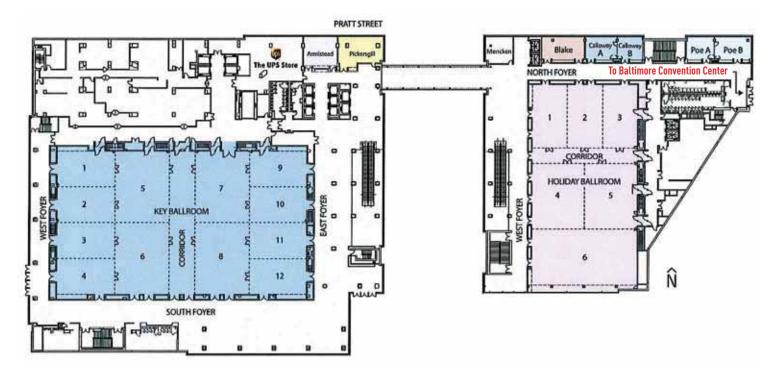
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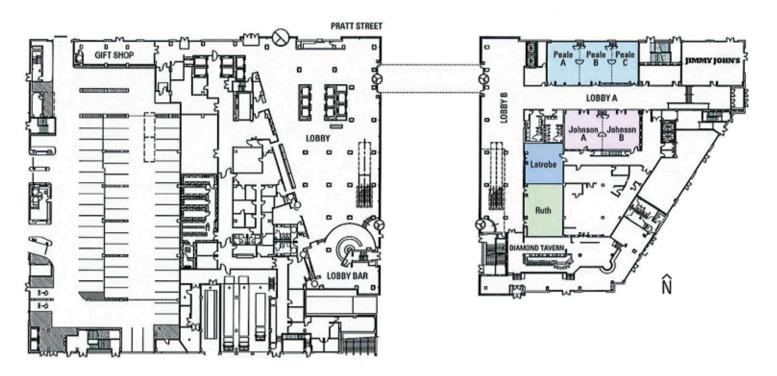
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Second Floor

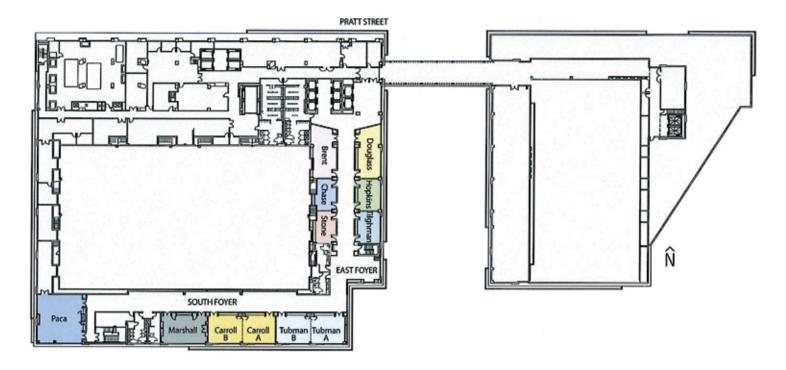


First Floor



Hilton Baltimore

Third Floor





Aerosols	
PS401 - Poster Session 401	Monday, May 23 10:00 AM – 12:00 PM
SS001 - The Why and How of Sampling and Analyzing Biomolecules	Tuesday, May 24 10:30 AM – 12:30 PM
P0120 - Advances in Aerosol Technology	
P0122 - Breathe Easier: Something for Everyone	Thursday, May 26 8:00 AM - 11:00 AM
Big Data: Data Management & Interpretation	
RT202 – Case Studies in IH Data Systems, Exposure Risk Assessment and Management	Monday, May 23 10:30 AM – 12:30 PM
CR305 - General Electric's EHS Big Data Journey and Future Strategy	Monday, May 23 3:30 PM – 4:30 PM
CR321 - Enhancing Credibility of EHS Data in Sustainability Reporting	Thursday, May 26 10:00 AM - 11:00 AM
CR324 – What Your Safety Data Should Be Telling You and Why It Isn't	Thursday, May 26 2:30 PM – 3:30 PM
Biological Monitoring	
PO101 - Assessments of Residential and Workplace Environmental Microbiology Exposure	Monday, May 23 10:30 AM – 12:30 PM
RT210 – Lead Standard—Changes and Challenges	Monday, May 23 2:00 PM – 4:30 PM
PO114 - Mold and Fungal Contaminants—Detection and Prevention in the Built Environment	Wednesday, May 25 10:00 AM – 12:00 PM
P0124 - Biological Monitoring & Bleeding Edge	Thursday, May 26 1:00 PM - 3:20 PM
PO127 - Novel Approaches in Industrial Hygiene Sampling and Analysis	Thursday, May 26 1:00 PM – 3:40 PM
Biosafety and Environmental Microbiology	
PO101 - Assessments of Residential and Workplace Environmental Microbiology Exposure	Monday, May 23 10:30 AM - 12:30 PM
Changing Workforce Demographics/Environment	
CR304 - It's Age Related: Occupational Health and Safety Issues, Challenges, and Solutions	Monday, May 23 2:00 PM - 3:00 PM
CR306 – Measurement and Evaluation in Psychological Health and Safety in the Workplace	
RT222 – Integrating Cumulative Risk Assessment into the Practice of Occupational Health	
RT239 – Hot Topic in Ergonomics: Sit-Stand and Alternative Workstations in the Office Workplace	
Communication and Training	
PO105 – Communicating and Training With Confidence	Monday. May 23 2:00 PM – 4:20 PM
RT208 – IH/OH and the Future of University Curricula	
RT212 - OEHS Management Leadership Skills for the 21st Century	
PO117 - Regulatory and Communication Issues in Hazard Assessments	
Computer Applications	
RT202 – Case Studies in IH Data Systems, Exposure Risk Assessment and Management	
PO117 – Regulatory and Communication Issues in Hazard Assessments	
PO119 – IH Data: Tools for Exposure Assessment and Epidemiology	
Confined Spaces	
CR303 – The Confined Space Inventory: Critical Safety Information for Your Facilities	Monday May 23 10-30 AM = 11-30 AM
PO110 – New Advances in Construction and Confined Space Safety	• •
RT221 – New Confined Spaces in Construction Standard	
RT252 – Notable Confined Space Events and Issues	
NIZOZ NOCIDIO CONTINUO OPUCO EVONO UNIO 100000	Thursday, May 20 1.00 M = 3.00 M

Construction	
RT215 – The Dangers of Low-Bid Contracting	Monday, May 23 2:00 PM – 4:30 PM
PO110 - New Advances in Construction and Confined Space Safety	Tuesday, May 24 10:30 AM – 12:30 PM
PO118 – Health and Safety Risk Assessments, Guidelines, Inspection Methods, and Other Current Topics	Wednesday, May 25 1:30 PM – 3:50 PM
Emerging Issues	
PO102 - Emerging Issues and Lessons Learned in the Oil and Gas Industry	Monday, May 23 10:30 AM - 12:30 PM
SP05 - Skin Notations and Skin Contamination	Tuesday, May 24 11:00 AM – 12:00 PM
RT222 - Integrating Cumulative Risk Assessment into the Practice of Occupational Health	Tuesday, May 24 2:00 PM – 5:00 PM
RT229 - Results of Interesting and Unusual NIOSH Health Hazard Evaluations	Tuesday, May 24 2:00 PM – 6:00 PM
RT236 – Emerging Issues in Research and Teaching Laboratories	Wednesday, May 25 1:30 PM – 4:30 PM
RT239 – Hot Topic in Ergonomics: Sit-Stand and Alternative Workstations in the Office Workplace	Wednesday, May 25 5:30 PM - 7:30 PM
SP21 – Emerging Issues in Beryllium Regulation: DOE and OSHA	Thursday, May 26 1:00 PM – 3:00 PM
P0124 - Biological Monitoring & Bleeding Edge	Thursday, May 26 1:00 PM – 3:20 PM
RT251 - Ebola: Controlling Risk During the Army's Response	Thursday, May 26 1:00 PM – 4:00 PM
Emerging Markets/Global IH/OH Standards of Care	
CR302 – Cyanide Code: A Case Study in International Risk Management	Monday, May 23 10:30 AM – 11:30 AM
RT204 - International IH Ethics Debate	Monday, May 23 10:30 AM – 12:30 PM
RT218 - Prevention of Lead Poisoning in Children and Adults: Old Problem, New Challenges	Tuesday, May 24 10:30 AM – 12:30 PM
RT220 – GHS in the Laboratory Environment: Impacts and Opportunities	Tuesday, May 24 2:00 PM – 4:30 PM
RT233 – Silica Exposure in Brick and Stone Industry in Developing Economies	Wednesday, May 25 1:30 PM – 4:00 PM
RT240 - Progress in Improving Occupational and Environmental Health in Bangladesh After the Rana Plaza	
Building Collapse	
RT246 – Occupational Health and Safety in Africa: Current State and the Path Forward	Thursday, May 26 8:00 AM – 11:00 AM
Engineering	
RT209 - Laboratory Design, Construction, and Commissioning: Role of IH, Challenges, and Lessons Learned	Monday, May 23 2:00 PM – 4:30 PM
RT241 - Noise Can Be Beat. We Did It and Won!	Wednesday, May 25 5:30 PM – 8:00 PM
Environmental Issues	
CR301 – An Industrial Hygienist's Guide to Managing Hazardous Waste	Monday, May 23 10:30 AM – 11:30 AM
CR302 – Cyanide Code: A Case Study in International Risk Management	Monday, May 23 10:30 AM – 11:30 AM
RT203 – Environmental Due Diligence for Mergers & Acquisitions	Monday, May 23 10:30 AM - 12:30 PM
CR306 – Measurement and Evaluation in Psychological Health and Safety in the Workplace	Monday, May 23 3:30 PM – 4:30 PM
P0112 – Outstanding Environmental and Occupational Health Issues: Comparing the Situation	
in the United States and Globally	
CR313 – Industrial Ecology and Workplace Health	
CR315 – The ANSI Z9.11 Laboratory Decommissioning Standard: Recent Revisions and Practical Applications .	Wednesday, May 25 10:00 AM – 11:00 AM
RT240 – Progress in Improving Occupational and Environmental Health in Bangladesh After the Rana Plaza Building Collapse	Wadnaeday May 25 5.20 DM 7.20 DM
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Ergonomics	
RT205 – Fatigue and Shiftwork: Why is Everyone So Tired 24/7?	
CR307 - ErgoMatrix: An Introductory Comparison of Common Ergonomics Analysis Tools	Tuesday, May 24 10:30 AM - 11:30 AM
PO115 - New Assessment Tools and Interventions to Manage MSD Risk	Wednesday, May 25 10:00 AM - 12:00 PM
RT239 – Hot Topic in Ergonomics: Sit-Stand and Alternative Workstations in the Office Workplace	Wednesday, May 25 5:30 PM - 7:30 PM
Ethics	
RT204 - International IH Ethics Debate	
RT212 - OEHS Management Leadership Skills for the 21st Century	
Exposure Assessment Strategies	
RT202 – Case Studies in IH Data Systems, Exposure Risk Assessment and Management	
PS402 - Poster Session 402	Monday, May 23 2:00 PM - 4:00 PM
PS403 - Poster Session 403	Tuesday, May 24 10:00 AM - 12:00 PM
SP05 – Skin Notations and Skin Contamination	Tuesday, May 24 11:00 AM – 12:00 PM
SS002 - Investigating Dermal Exposures: Sampling, Assessment, and Control Strategies	Tuesday, May 24 2:00 PM – 4:30 PM
RT222 – Integrating Cumulative Risk Assessment into the Practice of Occupational Health	Tuesday, May 24 2:00 PM – 5:00 PM
PO113 - Data Analysis in Exposure Assessment	Wednesday, May 25 10:00 AM - 12:00 PM
PO117 - Regulatory and Communication Issues in Hazard Assessments	Wednesday, May 25 10:00 AM – 12:00 PM
RT230 – Welding Fume Health Hazards, Exposure Assessment and Control	Wednesday, May 25 10:00 AM - 12:00 PM
SP09 - Bayesian and Professional Judgment Users Group	Wednesday, May 25 10:00 AM - 12:00 PM
RT233 – Silica Exposure in Brick and Stone Industry in Developing Economies	Wednesday, May 25 1:30 PM – 4:00 PM
P0121 - Evaluation of Airborne Contaminants	Wednesday, May 25 5:30 PM – 7:30 PM
RT242 - Strategies for Reactive Chemical Sampling and Analysis	Wednesday, May 25 5:30 PM – 8:00 PM
SP11 – Exposure Decision Analysis Toolkit for Educators (and Students)	Thursday, May 26 8:00 AM - 5:00 PM
P0125 - Intriguing Unknown and Known IH Hazards	Thursday, May 26 1:00 PM – 3:20 PM
Exposure Banding/OEL Process	
SP14 – Henry F. Smyth, Jr. Award Lecture: The Challenge of Setting Occupational Exposure Limits for	
Engineered Nanomaterials	• •
RT208 – IH/OH and the Future of University Curricula	
RT217 - Occupational Exposure Banding in Industry and Emergency Response Applications	
RT235 – Development of NIOSH Recommended Exposure Limits and Other Authoritative Recommendations	
Hazardous Chemicals	
RT211 – Occupational Exposure to Beryllium: Regulatory Activity and an Update on Research on Exposure, Dose and Epidemiology Results	Monday, May 23 2:00 PM - 4:30 PM
PO107 - Chemical & Physical Aspects of Exposures in the Built Environment	Tuesday, May 24 10:30 AM – 12:30 PM
RT223 - Life Cycle of a Hazardous Drug	Tuesday, May 24 2:00 PM – 5:00 PM
RT226 - Crude Oil Derailments—Lessons Learned on How to Respond Safely and Effectively	
PO113 - Data Analysis in Exposure Assessment	Wednesday, May 25 10:00 AM – 12:00 PM
P0121 - Evaluation of Airborne Contaminants	Wednesday, May 25 5:30 PM – 7:30 PM
P0125 - Intriguing Unknown and Known IH Hazards	Thursday, May 26 1:00 PM - 3:20 PM

Healthcare	
PO104 – Laboratory and Healthcare Issues: Ventilation, Drug Exposures, Dust Control, Microbial Contamination,	
and Radiation	
PO111 – Preparedness and Response to Ebola, and Other Healthcare-Related Issues	
PS404 – Poster Session 404	
RT223 - Life Cycle of a Hazardous Drug	
RT231 – Bringing the Science to the PPE Standards—Impact on Pandemic Influenza and Ebola Response Activities	es Wednesday, May 25 1:30 PM – 4:00 PM
IH Business Case Development	
SP18 - IH Business Cases: Examples, Lessons Learned	Monday, May 23 2:00 PM – 4:00 PM
CR310 – Elevating EHS Leading Indicators: From Defining to Designing	Wednesday, May 25 10:00 AM – 11:00 AM
RT232 – The Importance of the Business Case in Demonstrating the Value of the IH Profession	Wednesday, May 25 1:30 PM – 4:00 PM
Incident Preparedness and Response	
RT217 - Occupational Exposure Banding in Industry and Emergency Response Applications	Tuesday. May 24 10:30 AM - 12:30 PM
RT226 – Crude Oil Derailments—Lessons Learned on How to Respond Safely and Effectively	
PO116 - Non-Routine Industrial Hygiene: Evolving Issues in Emergency Response	• •
RT238 – Expecting the Unexpected: Incident Preparedness and Response for the Early Career Professional	
Indoor Environmental Quality	M
RT207 – Electronic Cigarette Risks, Emissions, and Controls	
P0107 - Chemical & Physical Aspects of Exposures in the Built Environment	• •
SP22 – Tales from the Crypt (and Basement): Unusual IAQ Investigations and Remediations	
P0114 - Mold and Fungal Contaminants—Detection and Prevention in the Built Environment	
RT247 – Wildfires: Resolution of Indoor Environmental Quality Concerns	
SP19 - Residential Indoor Air Quality Assessments: Tuning up Your Client's Home	
RT250 – Formaldehyde Emissions in the Built Environment	Thursday, May 26 1:00 PM – 3:30 PM
Industrial Hygiene General Practice	
PS401 - Poster Session 401	Monday, May 23 10:00 AM – 12:00 PM
ILO3 - Unsolved IH Mysteries Workshop	Monday, May 23 2:00 PM – 3:30 PM
SP16 - ABIH Forum	Monday, May 23 2:00 PM – 3:30 PM
PS402 - Poster Session 402	Monday, May 23 2:00 PM – 4:00 PM
PS403 - Poster Session 403	Tuesday, May 24 10:00 AM – 12:00 PM
PS404 - Poster Session 404	Tuesday, May 24 1:00 PM – 3:00 PM
ILO6 - Unsolved IH Mysteries Workshop	Tuesday, May 24 2:00 PM – 3:30 PM
RT229 - Results of Interesting and Unusual NIOSH Health Hazard Evaluations	Tuesday, May 24 2:00 PM – 6:00 PM
PS405 – Student Poster Session	Wednesday, May 25 10:00 AM – 12:00 PM
RT230 – Welding Fume Health Hazards, Exposure Assessment and Control	Wednesday, May 25 10:00 AM – 12:00 PM
RT237 – Mock Trial: Criminal Trial of CIH and IH Expert Witness Testimony	Wednesday, May 25 1:30 PM – 4:30 PM
RT245 – Interesting OSHA Health Cases—Facts from the Field (Previously Known as the Glen Williamson Forum)	Thursday, May 26 8:00 AM - 11:00 AM
RT246 – Occupational Health and Safety in Africa: Current State and the Path Forward	Thursday, May 26 8:00 AM – 11:00 AM

Interactive	
ILO1 – Ask the Expert with Adam Steltzner	Monday, May 23 11:00 AM – 12:00 PM
ILO2 – Student and Early Career Professionals Table Topics	Monday, May 23 12:00 PM – 1:00 PM
ILO3 - Unsolved IH Mysteries Workshop	Monday, May 23 2:00 PM – 3:30 PM
ILO4 - Ask the Expert with Dr. John Howard & Dr. David Michaels	Tuesday, May 24 10:30 AM - 11:30 AM
ILO5 - NIOSH Tech Talks: Current Topics	Tuesday, May 24 12:30 PM – 1:30 PM
ILO6 - Unsolved IH Mysteries Workshop	
ILO7 – Ignite: Enlighten Me but Make it Quick! Offering Enlightenment and Knowledge—In a Hurry!	Tuesday, May 24 3:30 PM – 5:00 PM
International	
RT208 – IH/OH and the Future of University Curricula	Monday, May 23 2:00 PM – 4:30 PM
RT218 - Prevention of Lead Poisoning in Children and Adults: Old Problem, New Challenges	Tuesday, May 24 10:30 AM – 12:30 PM
RT219 – Emerging Issues and Solutions in Higher Education	Tuesday, May 24 2:00 PM – 4:30 PM
PO112 - Outstanding Environmental and Occupational Health Issues: Comparing the Situation	
in the United States and Globally	
RT233 – Silica Exposure in Brick and Stone Industry in Developing Economies	• •
RT246 – Occupational Health and Safety in Africa: Current State and the Path Forward	Thursday, May 26 8:UU AM - 11:UU AM
Ionizing Radiation	
RT244 – Radiation Safety Program Challenges for IHs	Thursday, May 26 8:00 AM – 10:30 AM
Laboratory Health and Safety	
PO104 – Laboratory and Healthcare Issues: Ventilation, Drug Exposures, Dust Control, Microbial Contamination, and Radiation	Monday, May 23 10:30 AM – 12:50 PM
RT209 – Laboratory Design, Construction, and Commissioning: Role of IH, Challenges, and Lessons Learned	Monday, May 23 2:00 PM – 4:30 PM
RT219 - Emerging Issues and Solutions in Higher Education	Tuesday, May 24 2:00 PM – 4:30 PM
RT220 - GHS in the Laboratory Environment: Impacts and Opportunities	Tuesday, May 24 2:00 PM – 4:30 PM
CR311 - Ergonomic Applications to Improve Laboratory Safety	Wednesday, May 25 10:00 AM – 11:00 AM
CR315 - The ANSI Z9.11 Laboratory Decommissioning Standard: Recent Revisions and Practical Applications	Wednesday, May 25 10:00 AM - 11:00 AM
RT236 – Emerging Issues in Research and Teaching Laboratories	Wednesday, May 25 1:30 PM – 4:30 PM
SP15 - Industrial Hygiene Analytical Laboratory Management and Operation	Thursday, May 26 8:00 AM – 12:00 PM
Legal, Regulatory, Guidelines, and Standards	
RT201 – Big Legal and Business Issues in the Small World of Nanotechnology	Monday, May 23 10:30 AM – 12:30 PM
RT203 - Environmental Due Diligence for Mergers & Acquisitions	Monday, May 23 10:30 AM – 12:30 PM
RT206 - Pallet Rack Safety: Part Deux	Monday, May 23 10:30 AM – 12:30 PM
RT210 – Lead Standard—Changes and Challenges	Monday, May 23 2:00 PM – 4:30 PM
RT211 – Occupational Exposure to Beryllium: Regulatory Activity and an Update on Research on Exposure, Dose and Epidemiology Results	Monday May 23 2:00 PM _ 7:30 PM
RT228 – Managing a Respiratory Protection Program: Applied Best Practices	
RT237 – Managing a Respiratory Protection Program: Applied Best Practices	
RT244 – Radiation Safety Program Challenges for IHs	
RT245 – Interesting OSHA Health Cases—Facts from the Field (Previously Known as the Glen Williamson Forum)	
P0126 – Spectrum of Legal Issues	• •
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Management	
RT212 - OEHS Management Leadership Skills for the 21st Century	Monday, May 23 2:00 PM – 4:30 PM
RT214 - Risk Assessment and Industrial Hygiene Solutions for Semiconductor Industry	Monday, May 23 2:00 PM – 4:30 PM
RT215 – The Dangers of Low-Bid Contracting	Monday, May 23 2:00 PM – 4:30 PM
RT227 - The 7 Habits of Highly Effective Industrial Hygiene Leaders	Tuesday, May 24 2:00 PM – 5:30 PM
RT232 – The Importance of the Business Case in Demonstrating the Value of the IH Profession	Wednesday, May 25 1:30 PM – 4:00 PM
CR318 - You Too Can Deliver a 30% Reduction in Your Contractor EHS Metrics	Wednesday, May 25 5:30 PM – 6:30 PM
CR319 – Getting it Right: Contractor EHS Management in a Complex World	Thursday, May 26 8:00 AM - 9:00 AM
CR322 - Achieving World Class Health & Safety Through Transformational Leadership	Thursday, May 26 10:00 AM - 11:00 AM
Mining	
RT248 – Best Industrial Hygiene and Occupational Health Practices in Mining	Thursday, May 26 8:00 AM - 11:30 AM
Nanotechnology	
PS401 – Poster Session 401	Monday, May 23 10:00 AM – 12:00 PM
RT201 - Big Legal and Business Issues in the Small World of Nanotechnology	Monday, May 23 10:30 AM - 12:30 PM
SP14 - Henry F. Smyth, Jr. Award Lecture: The Challenge of Setting Occupational Exposure Limits for	
Engineered Nanomaterials	
PO108 – Industrial Hygiene Applications: Nanotechnology, Drugs, and Other Agents	
SS003 – Progress and Current Issues in Nanotechnology—Occupational Risk Assessment and Management	
RT235 – Development of NIOSH Recommended Exposure Limits and Other Authoritative Recommendations	Wednesday, May 25 1:30 PM – 4:30 PM
Noise	
PO106 – Evaluation of Occupational, Community, and Recreational Noise Exposures	Monday, May 23 2:00 PM – 5:00 PM
PS403 - Poster Session 403	Tuesday, May 24 10:00 AM - 12:00 PM
RT241 – Noise Can Be Beat. We Did It and Won!	Wednesday, May 25 5:30 PM – 8:00 PM
Nonionizing Radiation	
RT234 – What Do I Need To Know About Nonionizing Radiation?	
Occupational and Environmental Epidemiology	
RT218 - Prevention of Lead Poisoning in Children and Adults: Old Problem, New Challenges	Tuesday, May 24 10:30 AM - 12:30 PM
RT222 – Integrating Cumulative Risk Assessment into the Practice of Occupational Health	Tuesday, May 24 2:00 PM - 5:00 PM
PO119 - IH Data: Tools for Exposure Assessment and Epidemiology	Wednesday, May 25 1:30 PM – 4:10 PM
P0121 – Evaluation of Airborne Contaminants	Wednesday, May 25 5:30 PM – 7:30 PM
Oil and Gas	
RT224 – Real-Time (Direct Read) and Field Portable Instruments for Real-World Solutions in the Oil and Gas	
Industry: Instrument Selection and Applications for Worker Protection	Tuesday, May 24 2:00 PM – 5:00 PM
RT243 - Process Safety Management (PSM) Is Evolving—Are You?	Thursday, May 26 8:00 AM - 10:30 AM
Posters	
PS401 - Poster Session 401	Monday, May 23 10:00 AM - 12:00 PM
PS402 - Poster Session 402	Monday, May 23 2:00 PM – 4:00 PM
PS403 - Poster Session 403	Tuesday, May 24 10:00 AM - 12:00 PM
PS404 - Poster Session 404	
PS405 – Student Poster Session	Wednesday, May 25 10:00 AM - 12:00 PM

Protective Clothing and Equipment	
CR308 – Global Changes to Glove Standards and What It Means for Your PPE Choices	Tuesday May 24 10:30 AM = 11:30 AM
P0111 – Preparedness and Response to Ebola, and Other Healthcare-Related Issues	
RT231 – Bringing the Science to the PPE Standards—Impact on Pandemic Influenza and Ebola Response Activities	
RT251 – Ebola: Controlling Risk During the Army's Response	
	111u13uay, 11ay 20 1.00 1 11 - 4.00 1 11
Real-Time Detection Systems	
RT224 – Real-Time (Direct Read) and Field Portable Instruments for Real-World Solutions in the Oil and Gas Industry: Instrument Selection and Applications for Worker Protection	Tuesday, May 24 2:00 PM – 5:00 PM
SP20 – AIHA Research Project Updates	Wednesday, May 25 1:30 PM – 3:30 PM
SS004 – Wearable Sensors in Occupational Safety and Health Practice	Wednesday, May 25 1:30 PM – 4:00 PM
P0123 - Real Time Detection Systems	Thursday, May 26 8:00 AM - 11:00 AM
Respiratory Protection	
RT228 – Managing a Respiratory Protection Program: Applied Best Practices	Tuesday, May 24 2:00 PM – 6:00 PM
RT231 - Bringing the Science to the PPE Standards—Impact on Pandemic Influenza and Ebola Response Activities	Wednesday, May 25 1:30 PM - 4:00 PM
P0122 – Breathe Easier: Something for Everyone	
Risk Assessment and Management	
P0103 – Risk Assessment Science	Monday May 23 10-30 AM = 12-30 PM
RT207 – Electronic Cigarette Risks, Emissions, and Controls	
RT214 – Risk Assessment and Industrial Hygiene Solutions for Semiconductor Industry	
P0109 – Innovations in Risk Assessment & Management	
PS404 – Poster Session 404	
SS002 – Investigating Dermal Exposures: Sampling, Assessment, and Control Strategies	
RT222 – Integrating Cumulative Risk Assessment into the Practice of Occupational Health	
SS003 – Progress and Current Issues in Nanotechnology—Occupational Risk Assessment and Management	
RT235 – Development of NIOSH Recommended Exposure Limits and Other Authoritative Recommendations	
RT249 – Risk Assessment for Asbestos and Other Fibrous Materials: Learning from the Past,	
Looking into the Future	Thursday, May 26 8:00 AM – 12:00 PM
Safety	
CR303 – The Confined Space Inventory: Critical Safety Information for Your Facilities	Monday, May 23 10:30 AM - 11:30 AM
RT205 – Fatigue and Shiftwork: Why is Everyone So Tired 24/7?	Monday, May 23 10:30 AM – 12:30 PM
RT206 – Pallet Rack Safety: Part Deux	Monday, May 23 10:30 AM – 12:30 PM
CR304 – It's Age Related: Occupational Health and Safety Issues, Challenges, and Solutions	Monday, May 23 2:00 PM – 3:00 PM
CR305 – General Electric's EHS Big Data Journey and Future Strategy	Monday, May 23 3:30 PM – 4:30 PM
CR307 - ErgoMatrix: An Introductory Comparison of Common Ergonomics Analysis Tools	Tuesday, May 24 10:30 AM – 11:30 AM
CR308 – Global Changes to Glove Standards and What It Means for Your PPE Choices	Tuesday, May 24 10:30 AM – 11:30 AM
RT226 - Crude Oil Derailments—Lessons Learned on How to Respond Safely and Effectively	Tuesday, May 24 2:00 PM – 5:30 PM
CR310 – Elevating EHS Leading Indicators: From Defining to Designing	.Wednesday, May 25 10:00 AM – 11:00 AM
CR311 - Ergonomic Applications to Improve Laboratory Safety	.Wednesday, May 25 10:00 AM – 11:00 AM
CR312 - Commercial and Industrial Fall Protection Innovations	.Wednesday, May 25 10:00 AM – 11:00 AM
CR314 - It's All About That Dust—NFPA Combustible Dust Standards 2016	.Wednesday, May 25 10:00 AM – 11:00 AM
PO118 – Health and Safety Risk Assessments, Guidelines, Inspection Methods, and Other Current Topics	Wednesday, May 25 1:30 PM – 3:50 PM
CR 317 – To Reuse or Not to Reuse, That Is The Question	Wednesday, May 25 3:00 PM - 4:00 PM

CR318 – You Too Can Deliver a 30% Reduction in Your Contractor EHS Metrics	Wednesday, May 25 5:30 PM – 6:30 PM
CR319 – Getting it Right: Contractor EHS Management in a Complex World	Thursday, May 26 8:00 AM - 9:00 AM
CR320 - I'll Sleep When I'm Dead	Thursday, May 26 8:00 AM - 9:00 AM
RT243 - Process Safety Management (PSM) Is Evolving—Are You?	Thursday, May 26 8:00 AM – 10:30 AM
CR321 - Enhancing Credibility of EHS Data in Sustainability Reporting	Thursday, May 26 10:00 AM - 11:00 AM
CR322 - Achieving World Class Health & Safety Through Transformational Leadership	Thursday, May 26 10:00 AM - 11:00 AM
CR323 – Evaluating Fitness for Work to Reduce Exposure Risk	Thursday, May 26 1:00 PM - 2:00 PM
RT252 – Notable Confined Space Events and Issues	
CR324 – What Your Safety Data Should Be Telling You and Why It Isn't	Thursday, May 26 2:30 PM – 3:30 PM
Sampling and Laboratory Analysis	
SS001 - The Why and How of Sampling and Analyzing Biomolecules	Tuesday, May 24 10:30 AM – 12:30 PM
RT242 - Strategies for Reactive Chemical Sampling and Analysis	
PO127 - Novel Approaches in Industrial Hygiene Sampling and Analysis	Thursday, May 26 1:00 PM - 3:40 PM
Science Symposia	
SS001 - The Why and How of Sampling and Analyzing Biomolecules	Tuesday, May 24 10:30 AM – 12:30 PM
SS002 - Investigating Dermal Exposures: Sampling, Assessment, and Control Strategies	Tuesday, May 24 2:00 PM – 4:30 PM
SS003 - Progress and Current Issues in Nanotechnology—Occupational Risk Assessment and Management	Wednesday, May 25 10:00 AM – 12:00 PM
SS004 – Wearable Sensors in Occupational Safety and Health Practice	
Sensor Technologies	
RT224 – Real-Time (Direct Read) and Field Portable Instruments for Real-World Solutions in the Oil and Gas	
Industry: Instrument Selection and Applications for Worker Protection	Tuesday, May 24 2:00 PM – 5:00 PM
SS003 - Progress and Current Issues in Nanotechnology—Occupational Risk Assessment and Management	
SP20 – AIHA Research Project Updates	Wednesday, May 25 1:30 PM – 3:30 PM
SS004 – Wearable Sensors in Occupational Safety and Health Practice	
P0123 - Real Time Detection Systems	Thursday, May 26 8:00 AM - 11:00 AM
Social Concerns	
RT216 – Women Leaders in the Occupational Safety and Health Movement	Monday, May 23 2:00 PM - 5:00 PM
RT225 – Worker Participation in Community-Based Research	Tuesday, May 24 2:00 PM – 5:00 PM
SP10 – AlHce Movie Matinee: "The Cost of Construction"	
RT240 - Progress in Improving Occupational and Environmental Health in Bangladesh After the Rana Plaza	
Building Collapse	Wednesday, May 25 5:30 PM - 7:30 PM
Special	
SP01 - Opening Session – The Right Kind of Crazy: A True Story of Teamwork, Leadership and High Stakes Inno	
SP02 – Jeffrey S. Lee Award Lecture	Monday, May 23 12:30 PM - 1:30 PM
SP14 – Henry F. Smyth, Jr. Award Lecture: The Challenge of Setting Occupational Exposure Limits for	Manday May 22 2.00 DM 2.00 DM
Engineered Nanomaterials	
SP16 - ABIH ForumSP18 - IH Business Cases: Examples, Lessons Learned	
SP10 - In Business cases: examples, Lessons Learneu	
SPO4 – 16th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting	
SP05 – Skin Notations and Skin Contamination	
SP06 – William P. Yant Award	
OF OU TERMOUTE I. TUTE AWAIT	146344y, 174y 24 12.30 171 - 1.30 171

Special (continued)	
SP22 – Tales from the Crypt (and Basement): Unusual IAQ Investigations and Remediations	Tuesday, May 24 2:00 PM - 3:00 PM
SP07 – Mark of Excellence Breakfast	Wednesday, May 25 6:30 AM - 8:00 AM
SP09 – Bayesian and Professional Judgment Users Group	Wednesday, May 25 10:00 AM - 12:00 PM
SP08 - Donald E. Cummings Award Lecture	Wednesday, May 25 12:30 PM – 1:30 PM
SP20 – AIHA Research Project Updates	Wednesday, May 25 1:30 PM - 3:30 PM
SP10 – AlHce Movie Matinee: "The Cost of Construction"	Wednesday, May 25 2:30 PM - 4:30 PM
SP15 - Industrial Hygiene Analytical Laboratory Management and Operation	Thursday, May 26 8:00 AM – 12:00 PM
SP11 – Exposure Decision Analysis Toolkit for Educators (and Students)	Thursday, May 26 8:00 AM - 5:00 PM
SP12 – SDS Authoring and Reviewing, and IH Insomnia: What's Keeping You Up At Night?	Thursday, May 26 9:00 AM - 11:00 AM
SP13 – Herbert E. Stokinger Award Lecture	Thursday, May 26 11:30 AM – 12:30 PM
SP19 - Residential Indoor Air Quality Assessments: Tuning up Your Client's Home	Thursday, May 26 11:30 AM – 12:30 PM
SP21 – Emerging Issues in Beryllium Regulation: DOE and OSHA	Thursday, May 26 1:00 PM - 3:00 PM
Stewardship and Sustainability	
SP12 – SDS Authoring and Reviewing, and IH Insomnia: What's Keeping You Up At Night?	Thursday, May 26 9:00 AM - 11:00 AM
Students and Early Career Professionals	
ILO2 – Student and Early Career Professionals Table Topics	Monday, May 23 12:00 PM – 1:00 PM
RT213 – Perspectives on Preparation for the CIH Exam v11.0	Monday, May 23 2:00 PM - 4:30 PM
RT227 - The 7 Habits of Highly Effective Industrial Hygiene Leaders	Tuesday, May 24 2:00 PM – 5:30 PM
RT238 – Expecting the Unexpected: Incident Preparedness and Response for the Early Career Professional	Wednesday, May 25 1:30 PM – 5:00 PM
Toxicology	
RT211 - Occupational Exposure to Beryllium: Regulatory Activity and an Update on Research on Exposure, Dos	
and Epidemiology Results	
RT218 - Prevention of Lead Poisoning in Children and Adults: Old Problem, New Challenges	
RT249 – Risk Assessment for Asbestos and Other Fibrous Materials: Learning from the Past, Looking into the F	FutureThursday, May 26 8:00 AM – 12:00 PM



Make the most out of AIHce and take advantage of all the conference has to offer!

Browse the Expo, attend committee meetings, and network with colleagues at social events without worrying about what sessions you're missing. After the conference, you will receive online access to recorded presentations that can be viewed on your computer, tablet, or smart phone at your leisure.

AIHce On Demand is an optional purchase with your conference registration.

Fall Conference



October 24 – 26, 2016 * PDCs October 22 – 23 & 26

Network with your IH/OEHS colleagues and keep up with the latest ideas and techniques in the profession.

AIHA's Fall Conference offers an intimate and collaborative environment to help you stay on top of your game. Tracks will include:

- ★ Enterprise Risk Assessment and Management
- ★ Emergency Response & Preparedness
- ★ Management/Leadership
- ★ Thought Leader

Join us in October at the Grand Hyatt in San Antonio, Texas!

Registration opens in July, check www.AIHAFaIIConference.org for updates.







Meetings and Networking Events

AIHA

ACADEMIC ACCREDITATION COMMITTEE

Sunday, May 22, 5:00 PM - 7:00 PM, Hilton, Douglass

ACADEMIC SPECIAL INTEREST GROUP

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Peale C

AEROSOL TECHNOLOGY COMMITTEE

Tuesday, May 24, 5:00 PM - 6:00 PM, Hilton, Tubman

AIHA-ABIH JOINT INTERACTION

Wednesday, May 25, 2:00 PM - 3:30 PM, Hilton, Stone

AIHA ANNUAL BUSINESS MEETING

Thursday, May 26, 8:30 AM - 10:30 AM, Hilton, Poe

AIHA BOARD OF DIRECTORS MEETING (BY INVITATION ONLY)

Sunday, May 22, 8:00 AM - 4:30 PM, Hilton, Paca

AIHA BOARD OF DIRECTORS MEETING (BY INVITATION ONLY)

Thursday, May 26, 11:30 AM - 4:00 PM, Hilton, Paca

ANALYTICAL ACCREDITATION BOARD MEETING

Sunday, May 22, 8:30 AM - 4:30 PM, Hilton, Johnson

BIOLOGICAL MONITORING COMMITTEE

Sunday, May 22, 6:00 PM - 7:00 PM, Hilton, Marshall

BIOSAFETY AND ENVIRONMENTAL MICROBIOLOGY COMMITTEE

Sunday, May 22, 5:00 PM - 6:00 PM, Hilton, Tilghman

CAREER AND EMPLOYMENT SERVICES COMMITTEE

Wednesday, May 25, 5:00 PM - 7:00 PM, Hilton, Blake

COMMUNICATION AND TRAINING METHODS COMMITTEE

Monday, May 23, 2:00 PM - 4:00PM, Hilton, Peale C

COMPUTER APPLICATIONS COMMITTEE

Tuesday, May 24, 10:30 AM - 12:30 PM, Hilton, Key Ballroom 11

CONFINED SPACES COMMITTEE

Monday, May 23, 2:00 PM - 4:00 PM, Hilton, Tubman

CONSTRUCTION COMMITTEE

Wednesday, May 25, 10:00 AM - 12:00 PM, Hilton, Tubman

CONTINUING EDUCATION COMMITTEE MEETING

Monday, May 23, 2:00 PM - 4:00 PM, Hilton, Tubman B

EASC DERMAL TEAM

Monday, May 23, 10:30 AM - 11:30 AM, Hilton, Marshall

EASC MATH MODELING TEAM

Tuesday, May 24, 10:30 AM - 11:30 AM, Hilton, Marshall

ENGINEERING INDUSTRY SPECIAL INTEREST GROUP

Monday, May 23, 10:30 AM - 11:30 AM, Hilton, Douglass

ENTREPRENEUR SPECIAL INTEREST GROUP

Monday, May 23, 2:00 PM - 4:00PM, Hilton, Peale A

ENVIRONMENTAL ISSUES COMMITTEE

Monday, May 23, 10:30 AM - 12:30 PM, Hilton, Ruth

ERGONOMICS COMMITTEE

Monday, May 23, 6:00 PM - 8:00 PM, Hilton, Tubman

EXPOSURE AND CONTROL BANDING COMMITTEE

Tuesday, May 24, 3:00 PM - 5:00 PM, Hilton, Key Ballroom 4

EXPOSURE ASSESSMENT STRATEGIES COMMITTEE,

Sunday, May 22, 5:00 PM - 7:00 PM, Hilton, Ruth

FALL CONFERENCE PLANNING TEAM LUNCHEON (BY INVITATION ONLY)

Monday, May 23, 12:30 PM - 1:30 PM, Hilton, Stone

FELLOWS SIG

Wednesday, May 25, 4:00 PM - 6:00 PM, Hilton, Peale

FINANCE COMMITTEE

Monday, May 23, 1:00 PM - 3:00 PM, Hilton, Calloway

GREEN BUILDING WORKING GROUP

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Carroll B

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HAZARD PREVENTION AND ENGINEERING CONTROLS COMMITTEE

Tuesday, May 24, 10:30 AM - 12:30 PM, Hilton, Key Ballroom 10

HEALTHCARE WORKING GROUP,

Sunday, May 22, 5:00 PM - 7:00 PM, Hilton, Latrobe

INCIDENT PREPAREDNESS AND RESPONSE WORKING GROUP

Monday, May 23, 2:00 PM - 3:30 PM, Hilton, Ruth

INDOOR ENVIRONMENTAL QUALITY COMMITTEE

Wednesday, May 25, 2:00 PM - 4:00 PM, Hilton, Poe

INTERNATIONAL AFFAIRS COMMITTEE

Monday, May 23, 2:00 PM - 4:00 PM, Hilton, Key Ballroom 7

INTERNATIONAL RECEPTION (BY INVITATION ONLY)

Monday, May 23, 6:30 PM - 8:00 PM, Hilton, Holiday Ballroom 4

IONIZING RADIATION COMMITTEE

Tuesday, May 24, 4:00 PM - 6:00 PM, Hilton, Ruth

JOINT EASC/S&S EXPOSURE ASSESSMENT TEAM

Wednesday, May 25, 2:00 PM - 4:00 PM, Hilton, Brent

JOINT INDUSTRIAL HYGIENE ETHICS EDUCATION COMMITTEE

Tuesday, May 24, 3:00 PM - 5:00 PM, Hilton, Blake

LABORATORY HEALTH AND SAFETY COMMITTEE

Monday, May 23, 6:00 PM - 8:00 PM, Hilton, Carroll

LEGAL ISSUES COMMITTEE

Monday, May 23, 2:00 PM - 4:30 PM, Hilton, Key Ballroom 9

LOCAL SECTIONS COUNCIL BUSINESS MEETING

Wednesday, May 25, 10:30 AM - 12:30 PM, Hilton, Holiday Ballroom 1

LOCAL SECTION OFFICER TRAINING SESSION,

Tuesday, May 24, 2:00 PM - 3:30 PM, Hilton, Peale AB

IV

MANAGEMENT COMMITTEE

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Latrobe

MENTORING AND PROFESSIONAL DEVELOPMENT COMMITTEE,

Tuesday, May 24, 10:30 AM - 12:30 PM, Hilton, Holiday Ballroom 2

MENTORING NETWORKING EVENT (BY INVITATION ONLY)

Monday, May 23, 5:30 PM - 7:00PM, Pratt Street Ale House, 206 W Pratt St, Baltimore, MD 21201

MINING WORKING GROUP

Wednesday, May 25, 4:00 PM - 5:30 PM, Hilton, Paca

MINORITY SPECIAL INTEREST GROUP

Monday, May 23, 2:00 PM - 4:00PM, Hilton, Johnson B

N

NANOTECHNOLOGY WORKING GROUP

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Holiday Ballroom 1

NOISE COMMITTEE

Tuesday, May 24, 6:00 PM - 8:30 PM, Hilton, Holiday Ballroom 1

NON-IONIZING RADIATION COMMITTEE

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Johnson B

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OCCUPATIONAL AND ENVIRONMENTAL EPIDEMIOLOGY COMMITTEE

Tuesday, May 24, 4:00 PM - 6:00 PM, Hilton, Brent

OCCUPATIONAL AND ENVIRONMENTAL MEDICINE COMMITTEE

Monday, May 23, 11:30 AM - 12:30 PM, Hilton, Peale C

OIL AND GAS WORKING GROUP

Wednesday, May 25, 2:00 PM - 4:00 PM, Hilton, Carroll

P

PAST PRESIDENTS FORUM

Wednesday, May 25, 9:30 AM - 11:00 AM, Hilton, Carroll

PCC ON-SITE MEETING

Wednesday, May 25, 4:00 PM - 6:00 PM, Hilton, Calloway A

PRESIDENT'S RECEPTION (BY INVITATION ONLY)

Wednesday, May 25, 6:30 PM - 8:00 PM, Hilton, Key Ballroom 7

PROTECTIVE CLOTHING AND EQUIPMENT COMMITTEE

Monday, May 23, 2:00 PM - 4:00PM, Hilton, Blake

PUBLICATIONS COMMITTEE MEETING

Tuesday, May 24, 10:30 AM - 11:30 AM, Hilton, Blake

R

REAL TIME DETECTION SYSTEMS COMMITTEE,

Monday, May 23, 10:30 AM - 12:30 PM, Hilton, Johnson A

RESPIRATORY PROTECTION COMMITTEE

Monday, May 23, 6:00 PM - 8:30 PM, Hilton, Paca

RISK ASSESSMENT COMMITTEE

Monday, May 23, 2:00 PM - 4:00 PM, Hilton, Latrobe

S

SAFETY COMMITTEE

Tuesday, May 24, 4:00 PM - 6:00 PM, Hilton, Paca

SAMPLING AND LABORATORY ANALYSIS COMMITTEE

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Tubman

SDS & LABEL AUTHORING REGISTRY EXAM

Monday, May 23, 1:00 PM - 6:00 PM, Hilton, Chase

SOCIAL CONCERNS COMMITTEE

Monday, May 23, 10:30 AM - 12:30 PM, Hilton, Latrobe

STATE OF AFFAIRS — VOLUNTEER BREAKFAST (BY INVITATION ONLY),

Monday, May 23, 6:30 AM - 7:30 AM, Hilton, Key Ballroom 9

STEWARDSHIP AND SUSTAINABILITY COMMITTEE,

Tuesday, May 24, 10:30 AM - 12:30 PM, Hilton, Holiday Ballroom 1

STUDENT LOCAL SECTION COUNCIL BUSINESS MEETING,

Tuesday, May 24, 11:00 AM - 12:30 PM, Hilton, Latrobe

STUDENTS AND EARLY CAREER PROFESSIONALS COMMITTEE

Wednesday, May 25, 10:00 AM - 12:00 PM, Hilton, Paca

Т

TOXICOLOGY COMMITTEE

Wednesday, May 25, 3:00 PM - 5:00 PM, Hilton, Tilghman

V

VOLUNTEER GROUP OFFICER TRAINING SESSION

Wednesday, May 25, 2:30 PM - 4:00 PM, Hilton, Holiday Ballroom 2

ABIH

AIHA-ABIH JOINT INTERACTION

Wednesday, May 25, 2:00 PM - 3:30 PM, Hilton, Stone

ACGIH

ACGIH® BOARD OF DIRECTORS MEETING (BY INVITATION ONLY)

Sunday, May 22, 8:00 AM - 4:00 PM, Hilton, Brent

ACGIH® MEMBERSHIP RECEPTION AND ANNUAL MEETING OF THE MEMBERSHIP

Sunday, May 22, 5:30 PM - 7:00 PM, Hilton, Tubman

FOHS BOARD OF TRUSTEES MEETING (BY INVITATION ONLY)

Monday, May 23, 10:30 AM - 12:00 PM, Room 313

AIHF

AIHF BOARD OF TRUSTEES MEETING

Tuesday, May 24, 4:00 PM - 5:00 PM, Hilton, Marshall

AIHF DONOR RECEPTION (BY INVITATION ONLY),

Sunday, May 22, 6:00 PM - 7:30 PM, Dempsey's Brew Pub & Restaurant, 333 W Camden St., Ste. 1, Baltimore, MD 21201

GUIDELINE FOUNDATION

Monday, May 23, 11:00 AM - 1:00 PM, Hilton, Tubman A

JOEH

JOEH EDITORIAL REVIEW BOARD MEETING (BY INVITATION ONLY)

Sunday, May 22, 5:00 PM - 7:00 PM, Hilton, Carroll

JOEH LLC BOARD MEETING (BY INVITATION ONLY)

Tuesday, May 24, 2:00 PM - 4:00 PM, Hilton, Carroll A

Meetings and Networking Events

Ancillary

DOE AND DOE CONTRACTORS INDUSTRIAL HYGIENE MEETING

Monday, May 23, 5:30 PM - 9:30 PM, Hilton, Ballroom 12

EMSL CLIENT APPRECIATION RECEPTION (BY INVITATION ONLY)

Monday, May 23, 6:00 PM - 9:30 PM, visit EMSL Analytical, Inc. at Booth 1001

FOCUS ON ACCREDITATION

Wednesday, May 25, 10:00 AM - 12:00 PM, Hilton, Calloway

FOREST PRODUCTS INDUSTRY INDUSTRIAL HYGIENE FORUM

Wednesday, May 25, 1:30 PM - 5:00 PM, Hilton, Key Ballroom 4

HARVARD ALUMNI RECEPTION

Monday, May 23, 6:00 PM - 8:00 PM, Hilton, Johnson A

INTERNATIONAL SAFETY SYSTEMS, INC. (ISS) FORUM AND RECEPTION (BY INVITATION ONLY)

Sunday, May 22, 5:00 PM - 7:00 PM, Hilton, Holiday Ballroom 5

JOHNS HOPKINS UNIVERSITY RECEPTION

Monday, May 23, 6:30 PM - 8:00 PM, Hyatt, Harborview

OHTA ANNUAL GENERAL MEETING

Monday, May 23, 11:00 AM - 12:00 PM, Hilton, Paca

PHARMACEUTICAL FORUM (BY INVITATION ONLY).

Thursday, May 26, 1:00 PM - 7:00 PM, Hilton, Holiday Ballroom 1/2/3 Also held Friday, May 27

PHILADELPHIA UNIVERSITIES RECEPTION

Tuesday, May 24, 4:30 PM - 6:00 PM, Hilton, Johnson A

PURDUE UNIVERSITY ALUMNI GATHERING

Tuesday, May 24, 6:45 PM - 8:15 PM, Hyatt, Key Ballroom 2

SKC INTERNATIONAL DIST. RECEPTION (BY INVITATION ONLY)

Tuesday, May 24, 6:00 PM - 8:30 PM, Hyatt, Pisces

UNIVERSITY OF CENTRAL MISSOURI ALUMNI & FRIENDS

Tuesday, May 24, 4:30 PM - 6:00 PM, Hilton, Holiday Ballroom 3

UNIVERSITY OF MICHIGAN ALUMNI AND FRIENDS RECEPTION

Tuesday, May 24, 4:30 PM - 6:30 PM, Hyatt, Harborview

UNIVERSITY OF MINNESOTA SCHOOL OF PUBLIC HEALTH ALUMNI RECEPTION

Monday, May 23, 6:00 PM - 7:30 PM, Luna Del Sol, 300 W. Pratt Street, Baltimore, MD 21201

UNIV. OF TEXAS, UNIV. OF HOUSTON CLEAR LAKE, & UNIV. OF N. TEXAS HEALTH SCI. CENTER

Tuesday, May 24, 4:30 PM - 6:00 PM, Hilton, Calloway A

WORKPLACE HEALTH WITHOUT BORDERS MEETING

Tuesday, May 24, 10:30 AM - 12:30 PM, Hilton, Key Ballroom 1/2



Board and Conference Committees

Thank You...

to the following volunteers for their time and expertise in assembling the AIHce 2016 program.

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President Elect: Rachel Seymour, MSPH, CIH Past President: Michele Twilley, DrPH, CIH

Secretary: Michelle Coutu, MSPH

Treasurer: Aaron Barrett

AIHA Chesapeake Local Section Members:

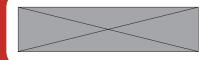
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SAVE the DATE





The next generation of respiratory protection



It started with the Pureflo ESM, the first head top PAPR combining Head, Eye/Face protection and an APF of 1000. Then we added the Pureweld for protection against welding fume and Hexavalent Chromium. Next was the P-Series designed for the pharmaceutical industry. Our NEW HYDRA PAPR and Supplied Air Systems complete the Pureflo range and offer the same protective head top along with new filters plus heating and cooling options.













Experience the Power of a TOUCH

The New AirChek TOUCH Air Sample Pump from SKC



AirChek® TOUCH
5 to 5000 ml/min



easiest pump you will ever use

TOUCH screen for intuitive operation and calibration — the easiest pump you will ever use

Supercharged battery power for over 20 hours of run time

Flow range and features to help you power through multiple sampling applications

See the power the SKC AirChek **TOUCH** sample pump brings to you!

Visit AlHee Booth 401







