

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION



Pittsburgh Local Section Newsletter October 2016

Inside this issue: September Meeting Review Continued

ndustrial Scientific Meeting Review	3	

Corporate Sponsor

Member News

co.po.a.o opo	
Renewals	

Project Pittsburgh	
AIHA Meeting	
Schedule	

OSHA Trade Release
Reports Drop in Rate
of Recordable
Workplace Injuries

Sensor Technology	
Summit - The Future of	
Sensors	

AIHA Distinguished	
Lecturer Program -	
Accepting	
Applications	

Meeting Review - Particulates Seminar September 22, 2016

Submitted by Frank Pokrywka, University of Pittsburgh, Secretary - Pittsburgh AIHA

The Pittsburgh AIHA held a Particulates Seminar at the KML Regional Council of Carpenters Council Building on September 22, 2016. Thank you to speakers Dr. Dietrich Weyel (Occupational Health Consultants),



Debbie Dietrich (SKC, Inc.), Sandi Linsatas & Mark Sullivan (HazDust) and Keith Rickabaugh (RJ Lee Group) who presented during this half-day session. Thank you to Frank Pokrywka, Pittsburgh AIHA Secretary, who coordinated the event and provided the following review:

With every breath, all of us are exposed to particulate matter. For most, the type and amount of dust we take in is not a significant health concern. But for some occupations the physical and chemical properties along with the concentration of inhaled particulates can have serious health consequences. The Particulate Seminar presented by the Pittsburgh Local Section meeting on September 27th re-introduced many of us to some of the things about dust that we may have forgotten. In addition, several of the speakers spoke about the new OSHA standard and sampling issues that we all need to learn more about.

Dieter Weyel gave a brief refresher on aerosol physics and how particles behave in air and in our lungs depending on their size, shape, density and surface area. He also discussed how important these physical properties are when assessing exposure hazards, capturing particles on filters or transporting them through exhaust ventilation.

Debbie Dietrich from SKC talked about the "new" OSHA silica standard and the personal sampling equipment needed to "properly" measure occupational exposures (4um cut point). Her discussion focused on how important it was to know about the different kinds of personnel cyclones, filter cassettes, cowls and filter materials available when planning a sampling strategy. In addition, she explained that one must know how sample pump flow rates can bias exposure results depending on the particle size (inhalable, thoracic or respirable) you are trying to measure for regulatory comparison or exposure risk.





Sandy Linsatas (pictured at left) and Mark Sullivan from Environmental Devices Corporation discussed the use of real time aerosol monitors for rapid determination of particle counts and dust concentrations in the workplace in clean rooms and during IAQ investigations. After a brief explanation of how each type of aerosol monitor worked they spoke on the advantages and disadvantages of each type along with design features, capabilities and costs. Further discussion focused on the need to establish better criteria for comparing particle counts based on size, numbers and surface area.

(Continued on page 2)

(Continued from page 1)

Mark went on to explain how manufacturers are striving to match the research need with those of field investigators to advance the capture and sharing of real time data over phone lines and the internet.

Keith Rickabaugh from RJ Lee also gave an interesting overview of the OSHA silica standard pointing out many of the specific differences, exemptions and start dates for the standard as it applies to General Industry, Construction, Shipbuilding and Fracking industries. He spoke about the monitoring requirements for various work applications focusing on how sample collection, detection limits and interferences could impact laboratory analytical efforts. Keith concluded with an interesting presentation on RJ Lee's work with NASA on a project to perform particulate sampling on board the international space station in response to indoor air pollutants in space and how these stray particles might compromise the mission.

RJ Lee Project Update from Keith Rickabaugh: Just thought you would like to know that our thermophoretic sampler (TPS100) along with a specially designed passive sampler was launched into space on October 17 and docked with the International Space Station on Sunday Oct. 23.The

TPS100 was modified for sampling in near zero gravity and if all goes well, samples will be collected in the ISS starting mid-February. Once sampling is completed, the samples will be returned to Earth where we will analyze the collected particulate matter.

We have an article on the samplers and the experiment on our website which can be found at the following link:http://www.rjlg.com/2016/10/particle-sampling-space-new-frontier/. Check it out!

Thank you to the following attendees who participated in the event:

- Lucinette Alvarado Covestro, LLC
- George Bender GHB Consulting Services, LLC
- Darrick Bertig FirstEnergy Corporation
- Tom Blank Babcock & Wilcox
- Barb Cummings AM Health & Safety, Inc.
- Joe Damiano AECOM / US DOE
- Carol Delfino SE Technologies, LLC
- · Sharon Fanchalsky US Micro-Solutions, Inc.
- Dan Flanagan Port Authority of Allegh. County
- Warren Houseman ENTACT, LLC
- Larry Keller LW Keller & Assoc.
- Dennis Kelly Sunoco Logistics Partners LP
- Maureen Kelly Pittsburgh AIHA
- Christy Kirsch Pittsburgh AIHA
- Joe Kuchnicki PSI, Inc.
- · Herb Layman US Micro-Solutions, Inc.
- Evelyn Majoris Covestro, LLC
- Mike McCaffrey- HETI Services
- Barry Momyer AM Health & Safety, Inc.
- Jan Oleszewski US Dept. of Labor OSHA
- · Chris Peightal KTA Tator, Inc.
- Mark Perriello Leader Environmental
- Frank Pokrywka University of Pittsburgh
- Raffie Sessa RCS Health & Safety Consulting LLC
- Mark Shatlock Allegheny Global Environmental, Inc.
- Michele Slinkard CIH Services, Inc.
- Michael Slinkard CIH Services, Inc.
- Rick Slinkard CIH Services, Inc.
- Shen Tian Covestro, LLC
- · Nickole Zovack SKC, Inc.

(Pictured above at right - Rick and Michael Slinkard, Herb Layman, Sharon Fanchalsky and Michael Slinkard.)







1.800.860.1775 | WWW.RJLG.COM



Meeting Review Industrial Scientific Presentation and Facility Tour



On October 12, 2016 Industrial Scientific welcomed the Pittsburgh AIHA for a presentation and tour of their state-of-the-art facilities located at One Life Way in Robinson. The group enjoyed a continental breakfast, followed by a welcome from Justin McElhattan, President and CEO of Industrial Scientific. Justin gave an overview of the history of Industrial Scientific, it founders (including his Grandfather) and how they have grown into the global leader in providing gas detection products and services that it is today. Industrial Scientific and its employees have a singular focus – ending death on the job in this century.

Dave Wagner, Director of Applications Engineering & Product Knowledge then spoke more on Industrial Scientific's history, mission, vision and products. Dave also discussed Sensor technology, iNet® (Gas Detection as a Service) Business Model vs. Traditional Gas Detection during his presentation. The group enjoyed a refreshment break then were led on a tour of Industrial Scientific's 200,000 square foot facility, which opened in June 2015 and houses the company's operations and core services, from customer service to manufacturing, along with over 400 employees. Earlier this year, Industrial Scientific received the Building Excellence Award for their global headquarters building. The award was in the category

"New Construction Over \$25 Million" and was presented by the Master Builders' Association of Western Pennsylvania. The One Life Way location reflects the company's "employees first" mindset by uniting its employees and providing a stimulating environment for collaboration and problem solving. The building offers creative office spaces, state-of-the-art equipment, dining facilities, a fitness room, walking trails, and many more amenities.

Thank you to the following attendees who participated in this great event:

- George Bender GHB Consulting Services LLC
- Margot Bernabo PPG Industries, Inc.
- Renee Cowell Amerisafe Consulting & Safety Services
- Joanna Creely LEC Solutions, LLC
- Matt Dennis Premier Safety & Service, Inc.
- Venkatram Dharmarajan AM Health & Safety
- Dane Mitcheson Amerisafe Consulting & Safety Services
- Frank Pokrywka University of Pittsburgh
- Ryan Reilly Duquesne University
- Keith Rickabaugh RJ Lee Group, Inc.
- Randy Sadler Comtech Industries, Inc.
- Catherine Sayles Covestro, LLC
- Paula Sweitzer Duquesne University
- Anthony Veltri Westinghouse Electric Company
- Michael Wentzel East Liberty Workwear

Member News - AM Health & Safety Hires New Director of Industrial Hygiene and Safety Services



Congratulations to Pittsburgh AIHA Member Barb Cummings, CIH who recently accepted a position with AM Health & Safety as the new Director of Industrial Hygiene and Safety Services.

In this position, Barb will be responsible for providing HSE technical support, overseeing projects, and ensuring the development of quality products that meet or exceed client needs. Barb will act as Senior advisor for technical matters; assist in business administration/development; and direct the management and development of professional industrial hygiene and safety professionals at AM Health & Safety.

Barb is an accomplished Health & Safety Professional and Certified Industrial Hygienist with extensive experience across manufacturing and field-based consulting environments in the application and management of occupational and product safety.

Previously, Barb worked at PPG Industries, Covestro (formerly Bayer MaterialScience) and Michael Baker Intl. (Baker Environmental).

In addition, Barb holds an M.S. Degree from Duquesne University in Environmental Science and Management, and is an OSHA-Authorized Trainer for General Industry.

To contact Barb at AM Health & Safety, please call 412-429-0560 email to bcummings@amhealthandsafety.com.



Fit Testing

To conduct fit testing, we use the OHD Quantifit to measure exact leakage into the breathing zone of the respirator facepiece. The test is comprehensive and concise. Our operation is completely mobile and we can provide convenient and cost effective service at any location. These services are designed to assist customers with total compliance to the OSHA Respiratory Protection Standard.

How The Quantifit Works.

During a fit test, the respirator inlets are capped with test adapters, and the inhalation valves are removed from the mask. With the test subject holding his or her breath for no more than ten seconds, the Quantifit then establishes and maintains a slight vacuum, or controlled negative

pressure, inside the mask. Since the respirator inlets are sealed, all sources of leakage into the mask are through the face-to-facepiece seal. The volume of air drawn out of the mask by the Quantifit during this short period of time is equal to the leak rate into the mask through the face-to-facepiece seal. It's that simple....



Fit Test Adapters

Are necessary to interface between the respirator and the fit tester. Adapters connect where the APR cartridges or SCBA air hose connects to the respirator. Premier Safety can provide you with the necessary adapters for some of the industry's top manufacturer's respirators including 3M, Dräger, Scott, MSA, North Safety, Survivair, and many more.

Thank You To Our Sponsors

Thank you to the following Pittsburgh AIHA
Corporate Sponsors who have renewed for 2017
(current sponsors will receive a renewal notice via
email in November.)

US Micro-Solutions, Inc.

Herb Layman and Sharon Fanchalsky

FirstEnergy

Darrick Bertig and Shelly Baber

Covestro, LLC

Catherine Sayles and Lucinette Alvarado

We appreciate your continued support of the Pittsburgh Local Section, which allows us to flourish and sponsor quality events and activities, offer scholarships and awards, and support the day-to-day operating expenses of the Pittsburgh AIHA which serves 175+ chapter members.

Projected Meeting Schedule - Pittsburgh AIHA

- ⇒ **December 2016** Business Meeting, Atria's Fox Chapel
- ⇒ **January 2017** East Liberty Workwear (Michael Wentzel) to coordinate speaker
- ⇒ **February 2017** AIHA President's Luncheon at LeMont
- ⇒ **March 2017** Ethics Presentation
- ⇒ **April 2017** MASHA Conference (suggested event)
- ⇒ May 2017 LEEDS Certification, Energy Innovation Center
- ⇒ June 2017 AIHCE or open date
- ⇒ **July 2107** Summer Business Meeting
- ⇒ August 2017 OPEN
- ⇒ **September 2017** Facility Tour (Program Committee to contact PPG Industries)

The Executive Committee will discuss upcoming events at the Business Meeting in December and provide an updated schedule of events in January 2017.



Remember to set your clocks back one hour before going to bed Saturday!

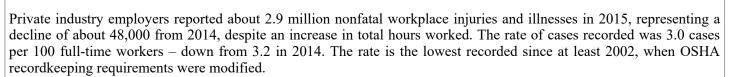
OSHA Trade Release Reports a Significant Drop in the Rate of Recordable Workplace Injuries

OSHA Trade Release —October 27, 2016

Assistant Secretary of Labor Dr. David Michaels encouraged by BLS report on occupational injuries and illnesses in 2015

WASHINGTON – Occupational injury and illness data released on October 27 by the Bureau of Labor Statistics showed a significant drop in the rate of recordable workplace injuries and illnesses in 2015,

continuing a pattern of decline that, apart from 2012, has occurred annually for the last 13 years.



Assistant Secretary of Labor for Occupational Safety and Health issued the following statement:

"We are encouraged to see the significant decline in worker injury and illness rates. This is the result of the relentless efforts of employers, unions, worker advocates, occupational safety and health professionals, and federal and state government agencies ensuring that worker safety and health remains a top priority every day."

"Despite the decline, approximately 2.9 million private sector workers suffered nonfatal injuries and illnesses last year. That is still far too many. At OSHA, we will continue to do all that we can to continue driving the rate down."

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's working men and women by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov.



Sensor Technology Summit - The Future of Sensors

AIHA.org - Sensor Technology Summit Webpage



On July 18 and 19, 2016 at the AIHA offices in Falls Church, VA, this unprecedented Summit discussed, among many other questions, the following:

- What emerging sensing technologies are relevant to industrial hygiene?
- What if you had access to validated direct read instrumentation, specific to the needs of the industrial hygienist, which incorporated the latest sensing technologies?
- What improvements to detection, monitoring, prediction and worker health might be possible by 2021?
- What changes in hazard sensing performance, regulation, access, and education are needed to make that 2021 vision a reality?

From this summit, a summary report was developed titled *The Future of* Sensors. As noted in the preface of this report - The current pace of science and technology development is widely acknowledged to be advancing at exponential levels. This rate of change has enormous implications for advanced sensors in the workplace and their potential to improve the protection of worker health. We are now at an inflection point: the convergence of technology and market trends has enabled a sensors renaissance and created a window of opportunity for the field of Industrial Hygiene and Occupational Hygiene (IH/OH). To effectively engage in this new era, IH/OH professionals and allied stakeholders need to understand these enabling technology shifts and act, together. We, as a community, can help decide how best to accelerate the adoption of the most promising and appropriate sensing technologies in the next few years and beyond. The American Industrial Hygiene Association (AIHA) sees a great opportunity for the entire IH/OH community to develop strategies to prioritize areas for sensor and instrument development; validate and test new technologies; and establish the protocols, training, and regulations to ensure their effective use (Figure 1 - Industrial Hygiene Stakeholder Community for Sensor Adoption).



The 100 page summary report can be found on the AIHA Guideline Foundation webpage. The Foundation was formed in 2009 and is dedicated to developing and disseminating occupational and community exposure guidelines for chemical and physical agents and stressors. As a 501(c)(3) nonprofit organization, the AIHA Guideline Foundation conducts research to educate the public. *The Future of Sensors* report is the result of just one research initiative, which was gifted by AIHA in order to further the Foundation's mission of delivering research intended to educate the public about protecting worker health. Read more about the AIHA Guideline Foundation on their webpage.



AIHA Distinguished Lecturer Program - Accepting Applications AIHA.org

The AIHA Distinguished Lecture Program focuses on providing lectures on national and international occupational and environmental health issues that affect the practice of industrial hygiene. The AIHA Fellows SIG is proud to host this program that features prominent experts in industrial hygiene who are prepared to lecture on recent research and new developments and topics of interest that affect workplace safety and the environment. The Distinguished Lecturers are drawn from the AIHA membership, they and their lectures have been reviewed thoroughly by a DL Review Team as to their quality and timeliness.

Individuals interested in becoming a Distinguished Lecturer (DL) must be an AIHA Member. Applications must be completed online between October 1, 2016 to February 15, 2017. All submissions are evaluated by the Fellows SIG Review committee. The DL program is a modification and expansion of AIHA's former "Speakers Bureau." The first group of AIHA Distinguished Lecturers was selected in 2015.

Note that the review process occurs from January through March. Applicants will be notified by April 1st regarding the status of their application. Once approved, the applicant will be an AIHA Distinguished Lecturer for two years from the date of acceptance notification. To remain active, the Distinguished Lecturer must resubmit the application for review every two years. For more information and to see the current list of Distinguished Lecturers - see the Distinguished Lecturer Program Webpage.