PITTCON™ CONFERENCE & EXPO 2015

March 8-12, 2015 ▪ Ernest N. Morial Convention Center ▪ New Orleans

Networking sessions run the gamut

NEW ORLEANS—Ranging from general interest to nanotechnology, these two-hour sessions at Pittcon 2015 will provide a unique networking opportunity for attendees with similar interests to meet and resolve problems, discuss new techniques or brainstorm new ideas in an informal setting.

All networking sessions are included in the cost of a Pittcon 2015 registration, and there is no need to sign up in advance. Conferees will be able to network with other colleagues working on similar problems in their field of interest.

Of general interest will be such sessions as Getting the Most out of your Pittcon Experience, Challenges and Opportunities for Analytical Science in Asia, Challenges and Opportunities for Analytical Science in Latin America and Creating a More Effective Lab Safety Program.

In the nanotechnology space will be sessions like Nanotechnologies—Measurement Techniques for the Characterization of Nano-objects, Food Microbiome and Nanotechnology and Particle Size Analysis: Modern Challenges and Solutions.

Finally, in the pharmaceutical area, there are the sessions titled Quality by Design for Development of Analytical Methods and Analysis of Excipients in Bioformulations.

Walter H. Coulter Lecture features Naomi J. Halas

NEW ORLEANS— Pittcon is pleased to announce that Naomi J. Halas, Stanley C. Moore Professor of Electrical and Computer Engineering at Rice University, will be the Wallace H. Coulter Lecture speaker. The lecture, "Plasmonics: Shedding Light on Cross-Cutting Science and Technologies," will take place Sunday, March 8, at 4:30 p.m. in the Ernest N. Morial Convention Center. A mixer will immediately follow the lecture.

About Pittcon

PITTSBURGH—Pittcon is a registered trademark of The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, a Pennsylvania non-profit organization. Co-sponsored by the Spectroscopy Society of Pittsburgh and the Society for Analytical Chemists of Pittsburgh, Pittcon is the premier annual conference and exposition on laboratory science. Proceeds from Pittcon fund science education and outreach at all levels, kindergarten through adult. Pittcon donates more than a million dollars a year to provide financial and administrative support for various science outreach activities, including science equipment grants, research grants, scholarships and internships for students, awards to teachers and professors, and grants to public science centers, libraries and museums. Visit pittcon.org for more information.

Pittcon 2015 provides breadth and depth

Pittcon maintains its reach into pharma, biotech and life sciences while adding a new focus on a younger demographic

BY LLOYD DUNLAP

NEW ORLEANS—*DDNews* pre-show features always aim to inform our readers about what's new and important about the upcoming event—in effect, to answer the question, "Why should I attend?" This year, in this introduction, we've added a very contemporary measure—what's trending at Pittcon 2015? To find out, we asked Senior Marketing Communications Specialist Marian Nardozzi.

"I think the main concept here is how we use social media to build and expand our reach to expose new people and the 'younger' audience who might not know about Pittcon—pre-show, during the event and post-show. I guess the short of it is that these social network platforms are serving as tools to keep people informed about the conference on many levels."

"We are definitely reaching the younger demographic. As a side note, among Twitter, Facebook and LinkedIn, we have twice as many followers as Facebook. Our numbers across all platforms are steadily rising each month," Nardozzi adds. "Perhaps altering the equation, we are also using Facebook this year as a registration tool to have the ability to register directly from Facebook or for followers to send the registration to others in their group. We have found that the number-one way that new Pittcon conferees have found out about Pittcon is through colleague referral, and social networks greatly impact this process in a positive way."

Also, Nardozzi says, that means exhibitors use it before and during conference week as a platform to let conferees know that they will be at Pittcon and what they will have going on in their booths.

"Our short course instructors also use it to build awareness for their course to help

Pittcon attracted 102 new exhibitors for its 2015 conference and exhibition. Pictured here is the expo area at Pittcon 2014.

promote attendance. We also use social networking to distribute interesting articles and educational information to our audience by posting links/news/findings from different journals and magazines," Nardozzi explains. "Finally, we also use these platforms in an entertaining way for conferees to post photos of themselves at Pittcon—typically we run a contest with viewers to vote on their favorite pic."

Whether representing the younger set (or not), Nardozzi adds that Pittcon's reach does indeed continue to expand, noting, "Approximately 40 percent of our attendees are first-timers every year. The most common comments we get are about the sheer size of the show. First-time attendees can sometimes be overwhelmed by the size of the expo floor and the number of the technical presentations. The key to a successful week is pre-planning and organization especially for the first-time attendee. I believe that is the most important message you can get out to first-time attendees."

The Pittcon website also features "Pittcon at a Glance," which provides all the information on exhibitors, the technical program and

PITTCON CONTINUED ON PAGE 20

2015 AWARD RECIPIENTS

PITTCON WILL BE honoring several scientists who have made outstanding contributions to analytical chemistry and applied spectroscopy.

PITTSBURGH SPECTROSCOPY AWARD

Alfred G. Redfield is a member of the National Academy of Sciences and a fellow of the American Academy of Arts and Sciences. His additional awards after 2003 include the Biophysics Prize, American Physical Society, Max Delbruck Prize in Biological Physics and the Russell Varia Lecture and Prize. During his more than 60-year career, he has published more than 200 papers.

PITTSBURGH ANALYTICAL CHEMISTRY AWARD

Andrew G. Ewing is a professor at Chalmers and Gothenburg Universities in Sweden. His group has pioneered chemical measurements at single cells, capillary electrophoresis, electrochemical imaging, biological mass spectrometry imaging and new electrochemical strategies to quantify the contents of nanometer transmitter vesicles. He is a member of the Royal Swedish Academy of Sciences.

PITTSBURGH CONFERENCE ACHIEVEMENT AWARD

Ryan C. Bailey is an associate professor in the Department of Chemistry at the University of Illinois at Urbana-Champaign. His research group focuses on developing enabling approaches for high information content bioanalysis at the level of genomics, transciptomics, proteomics and epigenomics with applications both in clinical diagnostics and fundamental biology.

PITTCON HERITAGE AWARD

A. Blaine Bowman is a pioneer in the commercialization of ion chromatography and the leading figure in the success of the Dionex Corporation. Bowman was Dionex's CEO from its creation in 1980 until 2002 and a director of the firm until its acquisition by ThermoFisher Scientific in 2011.

ACS DIVISION OF ANALYTICAL CHEMISTRY AWARD FOR YOUNG INVESTIGATORS IN SEPARATION SCIENCES AWARD

Dwight Stoll is an associate professor of chemistry at Gustavus Adolphus College in St. Peter, Minn. He has authored or coauthored 35 peer-reviewed publications in separation science and over 80 conference presentations. His primary research focus is on the development of two-dimensional liquid chromatography for both targeted and untargeted analyses.

CHROMATOGRAPHY FORUM OF THE DELAWARE VALLEY DAL NOGARE AWARD

Mark R. Schure is chief technology officer of Kroungold Analytical and is an adjunct professor of chemical engineering at the University of Delaware. His contributions to separation science include detailed theory, simulations and experimental investigations in 2D chromatography, chromatographic mechanism, capillary electrophoresis and field-flow fractionation. He has published over 100 papers.

RALPH N. ADAMS AWARD

John R. Yates is the Ernest W. Hahn

RECIPIENTS CONTINUED ON PAGE 21

Short-course classes cover a wide range of drug discovery and other areas of interest to attendees.

PITTCON

CONTINUED FROM PAGE 19

short courses, all sortable by different criteria (date, methodology, application, etc.). And for those who prefer the hard copy, a final program is available onsite and will be posted to the website in PDF form approximately a week before the conference. Nardozzi points out that this is a "static document" and does not contain the most recent updates.

As it now stands, the program features a host of presentations relevant to drug discovery. One of those is the Undergraduate Poster Session, titled "Exploration of Active Ingredients Contained Within 'Legal High' Supplements: Elucidation and Characterization of Synthetic Drug Compounds."

A few symposia should also be of interest to those in the drug discovery space, such as "Addressing the Throughput Challenges of MS-Based Screening Using Various Front-End Automation Technologies," "Methodologies and Analytical Approaches for the Crystallization and Structure Determination of G Protein-Coupled Receptors" and "Preparative Two-Dimensional Chromatography for Drug Discovery and Development."

In addition, the Organized Contributed sessions offer such fare as "Chiral Method Development in SFC with Laser Polarimeter Detection," "Fast Detection and Identification of Totally Unknown Drugs, Metabolites and Other Xenobiotics Using HRMS-Based Data Mining Technology: Current Status and Challenges" and "SFC Technology and Applications for Supporting Early Drug Discovery Programs."

For some other offerings of interest, see the story "Drug discovery offerings" at right.

Nardozzi also points out that there will also be literally hundreds of presentations covering myriad pharmaceutical issues. Among them are two award presentations, nine symposia and an equal number of workshops, dozens of organized contributed sessions and oral sessions and hundreds of posters. Also covering the life sciences will be 14 symposia, two workshops, 15 oral sessions, six posters and almost three dozen short courses.

And while it may not be of as much importance to many of those in drug discovery, Nardozzi also highlights a dedicated food-science section on the expo floor, appearing for the first time this year and featuring the following exhibitors: Milwaukee Instruments, Alpha MOS America Inc., Bruker, Fluid Management Systems, Optofluidics Inc., ADANI Systems Inc., Horiba Instruments Inc. and USHIO Inc. ■

EDITCONNECT: E021528

Drug discovery offerings

In addition to the symposia, undergraduate poster session and contributed sessions noted in the main article, here are some other offerings of potential interest to drug discovery and development professionals:

Oral Sessions

- Bench Top NMR of Street Drugs – The New Presumptive Drug Test
- Decoupling the Adsorption and Partitioning Mechanism in Hydrophilic Interaction Liquid Chromatography
- EIS Studies of Tethered Artificial Phospholipid Bilayer Membranes and the Effects of Potential Drug Targets
- High Mass Throughput in Natural Product Separation
- Phosphodiesterase Type-5 (PDE-5) Inhibitor Trends in Dietary Supplements
- Purification Support of Late-Stage Functionalization Chemistries for Drug Discovery
- Self-Assembled DNA Immuno-Nanoflowers for Immunostimulation in Cancer Therapy
- The Selection of Functional Ligands for Drug Discovery By Capillary Transient Isotachophoresis Methods

Poster Sessions

- 3D Bioactive Structure Mapping Using 4D-QSAR Model for Flavonoid Binding at the Benzodiazepine GABA-A Receptor Site
- Comparison Between Different Process Methods of Arachidonic Acid in Plasma
- Extraction of β-blockers from Small Volume Biological Fluid Samples Using a New Versatile SPE 96-well Plate Format
- GC-MS Analysis of Essential Oil Extract from the Roots of Carpolobia Lutea - A Potential Tropical Pro-Fertility Plant
- High-Throughput Chromatographic Determination of Alkane-Water LogP Using an Alkylated Poly(Styrene-divinylbenzene) Column and Fast Acetonitrile Gradient
- Increasing Your Hit Rate for Separating Chiral Primary Amines: Which Column?
- Integrated Flash and Preparative LC Capabilities in a Single Instrument Provide a Versatile Purification Platform
- Investigation of Some Novel Schiff Base Metal Complexes of 2-Aminophenol as Potential Antiseptic Agents
- Synergistic Effects of Plant Extracts and Antibiotics on MRSA Isolated from Clinical Specimens
- Vibrational Spectroscopy : A Tool to Determine the Formation of Bioactive Heterocyclic Analogues

Symposia

- Additive 3D Printing for Microreactor Applications and Continuous Flow Chemistry
- Analyze Polysorbate in Monoclonal Antibody Drug Formulations by Multidimensional UHPLC-MS
- Chiral Separation in Doping Detection
- Development of an Analytical Toolbox for Characterization of Protein and Polysaccharide-Conjugate Vaccine Antigens based on Traditional and Novel Column Technologies
- Mass Spectrometry in Biopharmaceutical Process Development
- Mass Spectrometry Provides Key Insights into the Structural Integrity of Antibody-Drug Conjugates
- Perspectives on Implementing Highly Automated Analytical Instruments in a Solid Oral Drug Product Manufacturing Process
- Quantitative THz Spectroscopic Imaging of Pharmaceutical Cocrystals
- Reducing the Burden of Analytical Data Decision Making in High Throughput Parallel Synthesis and Route Scouting

Workshops

- A Review of Applying QbD Concepts for Analytical Development for Pharmaceutical Drug Products
- An Odyssey in Chromatography: Perspectives and Career Development
- Application of Microsampling Techniques for Drug Discovery and Development
- Challenges and Progress in Implementing Dried Matrix MicroSampling Technology in Drug Development
- Evaluation of Standards for Data and Metadata in Analytical Chemistry
- Flexible HPLC Methods in a Pharmaceutical Environment
- IQ Consortium Initiatives with Respect to AQbD/ Analytical Method Lifecycle Management
- The Expanding Family of Superficially Porous Particles and the Benefits for Easy Method Development and Transfer
- Why the Tolerance Intervals Fill the Gap Between Method Validation and QbD Guidances: The USP Trend ■

International Year of Light

PITTCON IS PROUD to be an Associate Sponsor for the International Year of Light and Light-based Technologies (IYL 2015). IYL 2015 is a cross-disciplinary educational and outreach project with more than 100 partners from over 85 countries. As the Pittcon organizers note, "It's been a busy millennium in the world of light science, so to celebrate the International Year of Light 2015, Pittcon has decided to illuminate some of the key bright ideas of the last 1,000 years."

Offerings include:

Timeline of Light Technologies
Ocean Optics will be sponsoring an exciting interactive display, "Timeline of Light Technologies." The display, a museum-type theme, will show the history of light technologies over the years and bring awareness for the problem-solving potential of light technology.

Light, Color and Spectroscopy
This Pittcon spectroscopy workshop will be presented to the Renew School in New Orleans on Feb. 9.

The International Year of Light—SAS
This special session, "Fundamental Science-driven Infrared Spectroscopic Imaging for Clinical Diagnostic Systems," will be presented by the Society of Applied Spectroscopy (SAS), on March 9 beginning at 9:45 a.m.

The Early Days of Modern Infrared Spectroscopy: The First Three Years of FT-IR
The Coblentz Society/SAS will present a "60-Year Celebration of the Coblentz Society" symposium organized by Peter Griffiths on March 9 at 8:35 a.m. ■

Pittcon 2015 will offer a huge range of poster presentations, just as it did in 2014 here and in years past.

One thing you won't see in this photo from Pittcon 2014 is a dedicated food-science section on the expo floor, new for this year's event.

Exhibits at Pittcon, as illustrated in this 2014 event booth interaction, offer the chance for attendees to speak with technology providers and others.

RECIPIENTS

CONTINUED FROM PAGE 20

Professor at The Scripps Research Institute. His research interests include development of integrated methods for tandem mass spectrometry analysis of protein mixtures, bioinformatics using mass spectrometry data and biological studies involving proteomics.

RSC—ROBERT BOYLE PRIZE FOR ANALYTICAL SCIENCE AWARD

Eric Bakker began postdoctoral work at the University of Michigan and later became a full professor at Auburn University. After serving as a professor at Purdue University, he led the Nanochemistry Research Institute at Curtin University in Perth, Australia, before moving back to Switzerland in 2010 as chair of analytical chemistry at the University of Geneva.

SEAC—CHARLES N REILLEY AWARD

Hubert Girault is a professor of physical and analytical chemistry at the Ecole Polytechnique Fédérale de Lausanne, Switzerland. His research interests span many aspects of electrochemistry from charge transfer reactions at soft interfaces to electrochemical imaging and new electrochemical ionization techniques for mass spectrometry.

SEAC—ROYCE W. MURRAY AWARD

Thomas Hamann earned his Ph.D. at Caltech and was a postdoctoral scholar at Northwestern University before starting his independent career at Michigan State University, where he is currently the James Dye Professor of Materials Chemistry. His research focuses on understanding electron-transfer and photocatalytic reactions at semiconductor surfaces.

THE COBLENTZ SOCIETY/ABB—BOMEM-MICHELSON AWARD

David Jonas, a professor at the University of Colorado, is internationally recognized for his pioneering work in phase-resolved nonlinear optics and his exploitation of that work to demonstrate femtosecond two-dimensional (2D) Fourier transform spectroscopy. This optical analog of 2D NMR is becoming widely used in electronic and vibrational spectroscopy.

THE COBLENTZ SOCIETY—WILLIAMS-WRIGHT AWARD

Jagdeesh Bandekar works as a technical development leader in the Adhesives Bonding Group at Dow Automotive Systems in Auburn Hills, Mich. His industrial experience in three companies includes chemicals, polymers, bulk and specialty gases and thin films. He has been involved in R&D, new product development, evaluating and implementing emerging technologies. He has also taught and carried out research at universities.

THE LCGC LIFETIME ACHIEVEMENT IN CHROMATOGRAPHY AWARD

After receiving a Ph.D. in analytical chemistry from the University of Virginia, Joseph Jack Kirkland performed research at DuPont for 40 years. He is best known for his work in HPLC, having produced eight books, more than 160 papers and 36 patents. He has received many international awards for his work and now is vice president of R&D for Advanced Materials Technology Inc.

THE LCGC EMERGING LEADER IN CHROMATOGRAPHY AWARD

Caroline West is an associate professor in analytical chemistry at the University of Orleans, France. Her scientific interests lie in fundamentals of chromatographic selectivity in SFC and HPLC. Her work is essentially devoted to improving the understanding of chromatographic chiral and achiral separations to facilitate method development. ■