

NEWS AND VIEWS



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July 2014

Announcements

ASMS Asilomar Conference Advances in Glycomics and Glycoproteomics: Methods and Applications

October 10 - 14, 2014

Asilomar Conference Center
Pacific Grove, CA

Organizers

Yehia Mechref, *Texas Tech University*

Carlito Lebrilla, *University of California, Davis*

www.asms.org/conferences/asilomar-conference

See announcement to follow for more details.



ASMS Fall Workshop Ion Mobility Mass Spectrometry

November 6 - 7, 2014

Seattle Crowne Plaza
Seattle, Washington

Organizers

Matthew Bush, *University of Washington*

Alexandre Shvartsburg, *Pacific Northwest
National Laboratory*

www.asms.org/conferences/fall-workshop

See announcement to follow for more details.



ASMS Sanibel Conference Security and Forensic Applications of Mass Spectrometry

January 22 - 25, 2015

Hilton Clearwater Beach
Clearwater Beach, Florida

Organizers

Jose Almirall, *Florida International
University*

Glen Jackson, *West Virginia University*

www.asms.org/conferences/sanibel-conference

See announcement to follow for more details.



Awards



Dr. **Benjamin A. Garcia**, Presidential Associate Professor of Biochemistry and Biophysics at the University of Pennsylvania School of Medicine, was awarded the 2014 Pittsburgh Conference Achievement Award at the recent Pittcon Conference held March 2-6 in Chicago, Illinois. Sponsored by the Society for Analytical Chemists of Pittsburgh (SACP) the award is presented annually 'to

recognize individuals for outstanding achievements in the fields of analytical chemistry and/or applied spectroscopy within 10 years after completion of their Ph.D. work', and was given in recognition of Dr. Garcia's research into the development and application of mass spectrometry based proteomics for solving difficult problems in chromatin biology and epigenetics.

Associate Professor **Shabaz Mohammed**, Departments of Chemistry and Biochemistry, University of Oxford, UK, has been awarded the 2014 Joseph Black Award from the Royal Society of Chemistry 'for his seminal contributions to the teaching and practice of analytical chemistry and his inventive developments in chromatographic separations and proteomic characterization.'

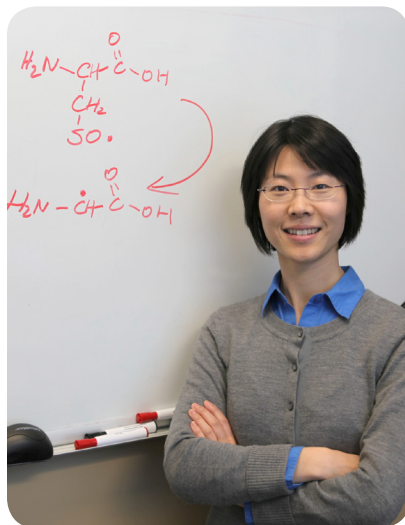
Selected by the RSC Analytical Division Awards Committee, and sponsored by the Analytical Chemistry Trust Fund, the award recognizes a young scientist in any field covering the practice and teaching of analytical science.



Professor **Evan R. Williams**, University of California, Berkeley, has been awarded the 2014 Theophilus Redwood Award from the Royal Society of Chemistry. Sponsored by the Analytical Chemistry Trust Fund, the award is given annually to a leading analytical scientist who is also an outstanding communicator. Professor Williams was cited 'for

his pioneering work on the development of new methods for molecular structural analysis and the application and teaching of such methods to enhance the understanding of structures and structural changes’.

2013 ASMS Research Award Winner Article “Highlight”



Professor Yu Xia

The ASMS annually presents two Research Awards to academic scientists within four years of joining the tenure track faculty or equivalent in a North American university. The purpose of these awards, fully sponsored by Thermo Scientific and Waters Corporation, are to promote academic research by young scientists in mass spectrometry. The award winners for

2013 are Dr. Yu Xia, Assistant Professor in the Department of Chemistry at Purdue University, and Dr. Matthew F. Bush, Assistant Professor in the Department of Chemistry at the University of Washington.

In this month’s issue of *JASMS*, we are pleased to highlight a research article published by one of the 2013 ASMS Research Award winners, Dr. Yu Xia. This publication, co-authored by Craig A. Stinson, a Ph.D. graduate student in Dr. Xia’s laboratory, was supported by Dr. Xia’s proposal entitled ‘Gas-Phase Ion Chemistry of Bio-Radicals’. The article, entitled ‘Reactions of Hydroxyalkyl Radicals with Cysteinyl Peptides in a NanoESI Plume’, describes the formation of carbon centered radicals from alcohol solvents by UV-photolysis, characterization of their reactions toward disulfide bonds, and evaluation of their potential for increasing sequence information in disulfide linked peptides.

Research in the Xia laboratory is focused on exploring the gas-phase ion chemistry of bio-radicals. With the aid of the ASMS Research Award, Dr. Xia’s group has developed devices to perform radical reactions of peptides and lipids within the plume region of an electrospray ionization (ESI) source. Radical reactions facilitate the formation of gas-phase bio-radical species (e.g. cysteine sulfinyl radicals), allowing detailed investigations of their intrinsic chemical properties (structure, unimolecular dissociation, and reactivity) via mass spectrometry. These fundamental studies provide mechanistic insights into radical transfer and reactions within or between proteins in biological systems, which are important for understanding enzyme cataly-

ASMS Strategic Initiatives

developing new methods for biomolecular structure analysis. Her group has shown evidence that radical reactions can be harnessed to cleave disulfide bonds within peptides and to increase sequence information from disulfide linked peptides (as shown in her research article). They have also recently demonstrated a facile method based on radical reactions of C=C bonds, and subsequent tandem mass spectrometry analysis, to pinpoint C=C bond locations within lipids. Currently, Dr. Xia’s group is developing tools to couple these radical ion chemistry to biological sample analysis.

Dr. Xia earned her bachelor’s degree in chemistry from Lanzhou University, in China, in 1999. In 2002, she earned a master’s degree in organic chemistry from Shanghai Institute of Material Medica, Chinese Academy of Sciences and in 2006, a Ph.D. in analytical chemistry from Purdue University, under the supervision of Prof. Scott A. McLuckey. She was guided by R. Graham Cooks for her post-doctoral training at Purdue University. In 2009, she was appointed as an Assistant Professor in the Department of Chemistry at Purdue University. To date, Dr. Xia has been the author or co-author of 50 publications, and has received funding for her research from the National Science Foundation.

ASMS Strategic Initiatives

The ASMS Board is seeking proposals for strategic initiatives to benefit the membership.

Proposals should include:

- a brief title
- your contact information
- a summary of your idea (no more than 300 words)
- a timeline
- anticipated cost

Please email proposals as a PDF file to office@asms.org. Proposals will be considered by the Board of Directors twice annually (August and February).

Details of new initiatives implemented to date may be found at <http://www.asms.org/member-center/strategic-initiatives>.

Related Events

August 3 – 9, 2014

8th European Summer School - Advanced Proteomics

Brixen/Bressanone, Italy

<http://www.proteomic-basics.eu>

August 10 - 14, 2014

IUPAC International Congress on Pesticide Chemistry

San Francisco, CA

<http://www.iupac2014.org/>

August 11 - 13, 2014

Conference on Small Molecule Science (CoSMoS)

Williamsburg, VA

<http://www.cosmoscience.org>

Related Events *(continued)*

August 24 - 29, 2014

20th International Mass Spectrometry Conference

Geneva, Switzerland

<http://www.imsc2014.ch/>

September 2 - 4, 2014

Mass Spectrometry Applications to the Clinical

Laboratory 2014 EU

Salzburg, Austria

<https://www.msac1.org/>

September 22 - 24, 2014

4th European Lipidomics Meeting

Graz, Austria

http://massspec.uni-graz.at/ELM_2014/

September 28 - October 3, 2014

SciX 2014 presented by FACSS

Reno, NV

<http://www.scixconference.org/>

October 5 - 8, 2014

13th Human Proteome Organization World Congress

Madrid, Spain

<http://www.hupo2014.com/>