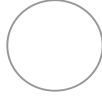




Arizona Imaging and Microanalysis Society

Using light, electrons, ions, electromagnetism and x-rays

AIMS Newsletter Volume 10, Issue 1



PRESIDENT'S NOTE

Tom Zega (UA), AIMS 2015-2016 President



Photographer: Adam Blumer/College of Engineering Source: College of Engineering

Greetings Fellow Microscopists,

The 2016 AIMS conference is scheduled for Thursday Marcy 24, 2016 at the University of Arizona, in the South Ballroom of the Memorial Student Union. *We hope that you will join us to learn from and network with colleagues and vendors!*

This year's conference invited speakers include:

- Dr. Nabil Bassim from the U.S. Naval Research Laboratory
- Dr. Khanh Kieu from the College of Optical Sciences at the University of Arizona
- Dr. Maitrayee Bose, Department of Chemistry and Biochemistry at Arizona State University
- Dr. Carla Cabral, Department of Neurology at the University of Arizona

The 2016 AIMS conference will also include a student poster session with several poster awards and a vendor fair. To register for the conference go to: <http://azmicroscopy.org/membership-account/membership-levels/> and select the appropriate level of membership (student \$5/year and regular member \$10/year). Students interested in presenting a poster will need to email their abstract to the AIMS Secretary, Brooke Massani at bbeam@email.arizona.edu, by Wednesday March 16th at 5pm. Poster guidelines and evaluation criteria are included in the AIMS email announcement. Due to limited seating, only those registered for conference attendance will be admitted to the luncheon.

Many thanks to the AIMS 2016 sponsors who have already committed to support the meeting! **Platinum** (FEI, Hitachi HTS, and Photometrics/QImaging), **Gold** (Boeckler Instruments/RMC, EDAX/Ametek, Gatan, North Central Instruments & Leica Microsystems, Olympus America) and **Silver** (Ted Pella). It's not too late to sponsor the



2016 meeting! To sign up and pay using paypal go to: <http://azmicroscopy.org/membership-account/membership-levels/> and select the level of support.

PAST PRESIDENT'S NOTE

Aubrey Funke (NAU), AIMS President 2014-2015

We had a wonderful meeting in 2015 at Northern Arizona University where we had the pleasure of learning from some truly talented speakers! Dr. Gerard van Belle, Senior Research Scientist at Lowell Observatory and Navy Precision Optical Interferometer, discussed the concepts of long baseline optical interferometry and its use. Microscopy Society of America Past-President, Jeanette Killius, from Northeast Ohio Medical University, discussed her light microscopy and TEM studies of the neural pathways associated with hearing and how they are used to identify and classify AC axons and IC neurons within the brain. From NAU we welcomed Rob Diller who spoke about evaluating biocompatibility of biomaterials through the use of digital imaging of histology and quantitative morphometry. Many thanks to the AIMS 2015 **Platinum** (*EMS/Diatome, FEI, Hitachi HTS, and Photometrics/QImaging*), **Gold** (*Boeckler Instruments/RMC, Bruker Nano, EDAX/Ametek, Gatan, Hamamatsu, JEOL, North Central Instruments & Leica Microsystems, Olympus America, Oxford Instruments, Tescan, and Ted Pella*) and **Silver** (*AMT Imaging, Azmark Aero Systems, and SPI Supplies*) sponsors. 2015 was a truly great meeting that couldn't have happened without the support of our sponsors, talented speakers, and generous AIMS members. Thank you to all who participated!

2015 STUDENT AWARDS – WINNERS

Again, many thanks to the AIMS Platinum sponsors for their support for the \$150 student awards. The winners were:

Rob Diller - Department of Biological Sciences, Northern Arizona University
Kyle McMinimy - Department of Biological Sciences, Northern Arizona University
Jordan Muller - Department of Biological Sciences, Northern Arizona University
Jeff Watson - Department of Biomedical Engineering, University of Arizona

2015 BUSINESS MEETING - SUMMARY

Here is a quick overview of the AIMS business meeting.

Treasurer's report: The Society is in good financial shape. The reported balance (as of December 2015) is \$5550. The 2015 meeting came out in the black, further improving the financial stability of AIMS.

Finances were requested and approved for:



- Support for printing costs for the posters for the “Ugly Bug” contest. The Ugly Bug contest is a microscopy-based outreach project (ASU, NAU) to the public schools. The contest was originally started by long-time AIMS member, Marilee Sellers (NAU). For more information, see: <http://askabiologist.asu.edu/activities/ubc>
- Confirmed that the AIMS President has access to some discretionary funds for student travel support for the annual meeting.

Website: Reviewed survey responses from vendors. The venue and setup was very popular. Platinum sponsors were very happy to have their name given towards the poster awards, to be given first choice of vendor table location, and have the opportunity to have an ad included in the program. Positive feedback was also received about the additional 2015 Sponsors link on the website. It was agreed that these benefits continue to be offered to the platinum level sponsors.

2015-2016 Officers: All those present at the business meeting cast their ballots for next year’s slate of officers. The votes were counted by Brooke Beam (UA). Next year’s AIMS officers are:

- President: Tom Zega
- Secretary: Brooke Massani
- Treasurer: Page Baluch Co-Treasurer: Patty Jansma, Aubrey Funke, Peter Crozier [account co-signers]
- Past President: Aubrey Funke
- Corporate Representative: Chris Allen
- Board Member-at-Large: David Elliot, Doug Cromeey, Phil Anderson, Charles Kazilek, Paul Wallace
- Corporate Representative: Chris Allen [NCI]

IMAGING INSTRUMENTATION FUNDED GRANTS

2015 and 2016 has been a successful year for funded grants for state of the art imaging instrumentation at the Arizona Universities. Congratulations to all of the investigators who worked to get these funds!

NSF-MRI: Acquisition of an Analytical Transmission Electron Microscope for High-resolution, Rapid Nanoscale Compositional Mapping of Earth, Planetary, and Advanced Materials
Principal Investigator: Thomas Zega; Co-Principal Investigator: Neal Armstrong, Thomas Sharp, Erica Corral, Weigang Wang. Organization: University of Arizona.

NSF-MRI: Acquisition of Cryo-EM for Southwest Regional Center
Principal Investigator: John Spence; Co-Principal Investigator: Hao Yan, Robert Roberson, Petra Fromme, Ray Carpenter. Organization: Arizona State University.

NIH-SIG: Zeiss Elyra S1 Microscope



Principal Investigator: David Elliott; Co-Principal Investigator: Felicia Goodrum, Henk Granzier, Carol Gregorio, Coen Ottenheijm, Magdalene So, Jean Wilson, and Douglas Cromey. Organization: University of Arizona

Technology and Research Initiative Fund statute (A.R.S. § 15-1648): A Unique Arizona Resource: Three-Photon Microscope
Co-Investigators: Page Baluch, Diane Sterns, and Khanh Kieu. Organizations: Arizona State University, Northern Arizona University, and University of Arizona

MSA/MAS 2016 ANNUAL MEETING



<http://www.microscopy.org/MandM/2016/>

The M&M conference is the premier meeting, spanning the physical, life and analytical sciences, which brings together delegates from around the globe who report on the latest work and advances in microscopy and microanalysis. Whether your interest is in nanotechnology or traditional metallurgy, biology or clinical diagnosis, or the growing field of multifunctional hard/soft materials, you will find a fascinating venue. In addition to our thematic symposia, we also feature a range of educational opportunities ranging from "Back to the Basics" tutorials, to in-depth, multi-day intensive workshops, as well as the chance to network with your peers. We encourage all of you, whether newcomers or veterans of M&M, to submit a paper on your latest research for presentation in Columbus!