



## Professional Development

The AIMS meeting is not only a great way to connect with colleagues and future collaborators, it also provides an opportunity for students to learn about new technologies and participate in the student poster sessions. For more information check out our website at <http://azmicroscopy.org>.

## Upcoming Deadlines for the 2015 Meeting

- Student Poster Registration: March 6, 2015
- Member Registration: March 6, 2015
- Vendor Registration: March 1, 2015

### Why do we have registration deadlines?

Organizing a meeting takes a lot of work. When you are a non-profit organization, you must rely on the support of sponsors to host events. Until you know the level of your support, your budget cannot be confirmed making it difficult to plan for expenses such as room reservations, catering, student awards, honorariums and printing fees. It is also important to know how many attendees to expect to correctly estimate the amount of catering needed or venue space required. Support your local microscopy chapter and register as a member/attendee or sponsor of the event soon!  
<http://azmicroscopy.org/membership-account/membership-levels/>

### Why should you attend an AIMS Conference?

- ⇒ Learn what types of microscopy are going on in Arizona
- ⇒ Learn about new advances in microscopy
- ⇒ Meet future collaborators and microscopy vendors
- ⇒ Students can win poster awards



Arizona Imaging and Microanalysis Society

Attn: Page Baluch

9920 S. Rural Road #108-84

Tempe, Az, 85284-4100

AZMICROSCOPY.org

ISSUE

08

Fall  
2014

BI-ANNUAL  
NEWSLETTER FOR  
AZ MICROSCOPY  
PROFESSIONALS



Arizona Imaging and Microanalysis Society

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

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## Presidents Note

Welcome back to another great year of microscopy! Its been a long time, but this year we will again host the annual conference in Flagstaff. You are all welcome to attend our meeting on Friday March 13, 2015 in beautiful Flagstaff Arizona at the Northern Arizona University campus in the Dubois Center Ballroom. Due to the long commute for many of our members, the event will start a little later, beginning at 11:30am and running until 5:30pm. On page 2 you will find the tentative agenda. Vendors will be able to access the Dubois Center Ballroom beginning at 10:30am to set up.

Registration for the conference is a two step process. You must first register for membership online at [www.azmicroscopy.org](http://www.azmicroscopy.org) at the student, individual or corporate level then register for free admission to the AIMS conference. Corporate members have the option to register at various sponsorship levels. Gold level and above

Include a table at the conference Again this year, vendors who sponsor at the Platinum level will have first choice of their table location at the event.

During the meeting there will be a student poster session. Students are encouraged to register and present their work. There will be prizes for the best biological and best materials based posters.

Finally I want to thank our ASU board members, Page Baluch, Chuck Kazilek and Peter Crozier, for putting on a great conference last year at the Arizona State University Tempe Campus. Our next 2016 meeting will be held at the University of Arizona.

I look forward to seeing you in March!

Sincerely,

Aubrey Funke

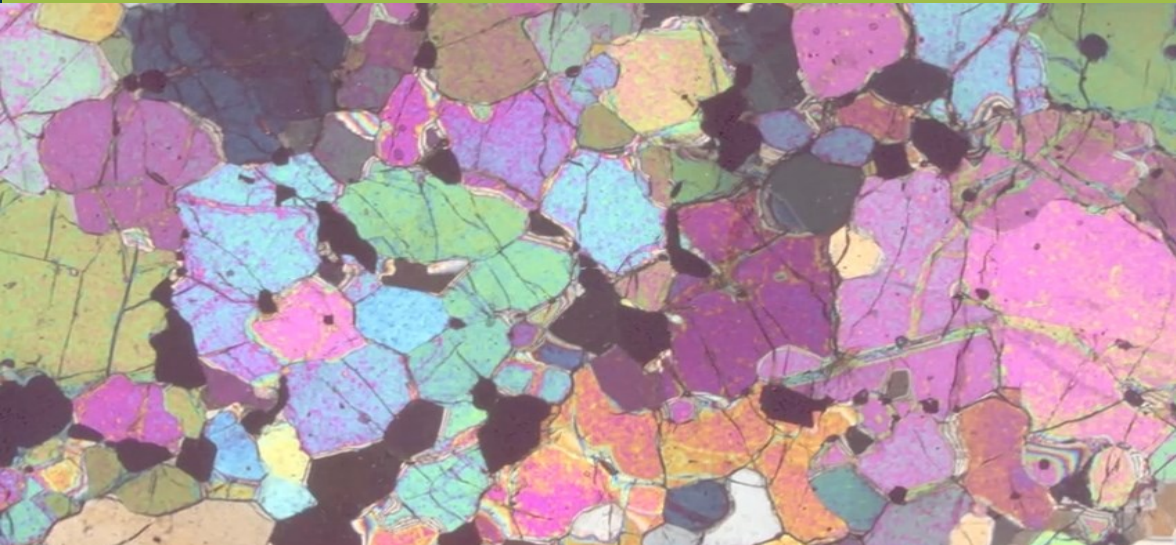
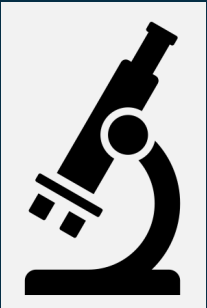
2015 AIMS President



AIMS  
Membership

Benefits of being an  
AIMS member :

- Belong to a Chapter of the Microscopy Society of America
- Receive the bi-annual AIMS news-letter
- Registration to the annual meeting is free with membership.
- Keep current on new advancements in microscopy
- Belong to a network of Arizona Microscopists
- It is inexpensive to be a member:  
Students Members \$5  
Regular members \$10



AIMS 2015 Conference Program

March 13<sup>th</sup> , 2015 Northern Arizona University  
Debois Center Ballroom

Check-In  
| 10:30 - 11:30a.m. |

Opening remarks  
Aubrey Funke - AIMS President  
| 11:30 - 11:45a.m. |

Jim Clark, Chief Mechanical Engineer for the Navy Precision Optical Interferometer, Flagstaff, AZ  
| 11:45 - 12:45p.m. |

Buffet Lunch – Debois Ballroom  
| 12:45 - 2:00p.m. |

Jeanette Killius, Microscopy Society of America President, Department of Anatomy and Neurobiology at Northeast Ohio Medical University (NEOMED)  
| 2:00 - 3:00p.m. |

Afternoon Break/Vendor Exhibits/Poster Session  
| 3:00 - 3:45p.m. |

Rob Diller, NAU, Department of Biological Sciences, Flagstaff, AZ  
| 3:45 - 4:45p.m. |

Student Awards and Announcements  
| 4:45 - 5:00p.m. |

Business Meeting  
Annual Society general meeting – open to the public  
| 5:00 - 5:50p.m. |



ATTENTION STUDENTS:

All undergraduate, graduate or postdoctoral students who use microscopy to visualize their research are invited to present their work at the AIMS conference poster session. We will have at least two \$100 awards this year, donated by our Platinum sponsors, for the best posters in the category of either physical or life sciences. Your abstract must be submitted through the AIMS website or emailed to Aubrey Funke (aubrey.funke@nau.edu) by Friday March 6th to be included in the conference program. Below are the guidelines for the poster design and award evaluation.

Student Poster Guidelines:

- ⇒ Applicants must be or have been an undergraduate, graduate or postdoctoral student during the academic year of the meeting.
- ⇒ The work must consist of original research authored by the participant and be co-authored by his/her advisor.
- ⇒ The poster must be formatted to fit within an area of 48 inches wide by 36 inches high.
- ⇒ The poster should contain: title, author and affiliation, abstract, introduction, methods and materials, results, discussion, figures and legends, and references.

Award Evaluation Criteria [The AIMS judges will use the following criteria to evaluate student posters.]

- ⇒ Scientific merit
- ⇒ Soundness of the research proposal
- ⇒ Experimental design and thoroughness of investigation
- ⇒ Validation of conclusions
- ⇒ Application of microscopy/microanalysis in answering the experimental question
- ⇒ Quality of micrographs/images/data
- ⇒ Presentation
- ⇒ Response to questions
- ⇒ Diversity of instrumentation and technique
- ⇒ Clarity and quality of writing
- ⇒ Grammatical correctness

AIMS Conference Venue Information

NAU Interactive Map: <https://www2.nau.edu/nau-map/>  
Flagstaff Hotels: <http://www.flagstaff.com/hotels-near-nau>  
Dubois Center Ballroom: <http://nau.edu/Student-Unions/Ballroom/>  
Flagstaff Restaurants: [http://www.tripadvisor.com/Restaurants-g60971-Flagstaff\\_Arizona.html](http://www.tripadvisor.com/Restaurants-g60971-Flagstaff_Arizona.html)

Corporate  
Sponsors

AIMS is a non-profit organization. Events we host are possible because of sponsorship. Vendors are encouraged to sponsor our yearly meeting at the levels listed below.

- Basic corporate membership: \$60, includes link on the AIMS website
- Gold membership: \$200, includes a table at the annual meeting and link on the AIMS website.
- Platinum membership: \$500, includes a poster award named after the sponsor, first choice of table location at the annual meeting, advertisement in the conference program and link on the AIMS website.

If you are interested in being a sponsor for our annual meeting you can register directly online through paypal or contact [sales@azmicroscopy.org](mailto:sales@azmicroscopy.org)



## 2014-2015 Platinum Corporate Sponsors

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With Platinum sponsorship we presented 6 awards at the 2014 meeting!

### Student Poster Awards

Congratulations our 2014 conference poster award winners.

### Undergraduate Category

- **AIMS EM Award:** Jonathan Zalamous
- **AIMS Light Microscopy Award:** Minamia Tokuyar

### Graduate Category

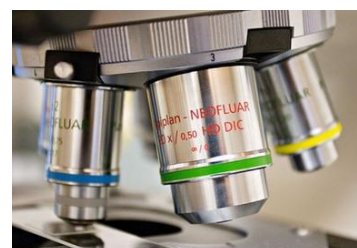
- **FEI Award:** Ji Xu
- **EMS Award:** James 'Bo' Faust
- **Photometrics Award:** Richard Vreeland
- **Zeiss Award:** Rishabh Shetty
- **AIMS runner up award:** Otto Schwake

### AIMS Travel Award

- Crystal Ewen

### Image Ethics Workshop

During the 2014 meeting we added a half day workshop dedicated to Image Ethics. Our colleagues from the University of Arizona, **Brook Beam-Massani**, **Doug Cromey** and **David Elliot**, brought their workshop to ASU. They did a great job describing how to properly collect, process and analyze true images. This event was sponsored by **Lumen Dynamics** which provided catering throughout the event. We received many compliments and positive feedback from the event suggesting that we continue to add it to the agenda at a future meeting. A big thank you to all who helped make this a great event, especially Brook, Doug and David!



## 2014 AIMS Meeting Highlights



### 2014 AIMS Speakers

We had a great set of speakers for the AIMS 2014 meeting. From ASU we welcomed Jingyue Liu who spoke about aberration correction and Jason Newbern who presented information about imaging the nervous system. There was a local photographer, Michael Traynor, who presented information about what makes up a picture. And lastly, we had two great visiting speakers, Bill Landis from the University of Akron who spoke about tissue engineering and Catherine Galbraith from OHSU who presented information on developing super resolution techniques in her Nano to Micro talk.



## Arizona Microscopy News

**USA Today:** Increasingly, dispensaries and patients are turning to laboratories to evaluate plants.

An article published in the Arizona Republic on January 6th, was picked up by USA Today about private research groups screening medical marijuana from dispensaries to screen for molds or pesticides. In addition to testing for contaminants that may cause illness in those with a weakened immune system, the AZ Med Testing company can also measure the amount of active cannabinoids in the dispensary samples. For the full article see <http://tinyurl.com/microscope-drug-screen>

**ASU 2015 Winter School on High Resolution Electron Microscopy**

The LeRoy Eyring Center for Solid State Science again offered their Electron Microscopy School during January 2015 to provide advanced training to scientists who use TEM microscopes for material science studies. The course demonstrated environmental electron microscopy, focused ion beam methods and techniques of specimen preparation. For more information about this or future events visit their website at <http://le-csss.asu.edu/winterschool>

**Ever hear of a Foldscope?**

Stanford researcher Manu Prakash developed a microscope that can fit into your pocket! It's a 50-cent print-and-fold paper microscope that uses a watch battery, LED and a few optical units that can magnify objects up to 2,000 times. The original goal of this project was to provide an inexpensive way for people working in clinics of developing countries to identify and diagnose diseases like Malaria. It has gained attention by educators who are encouraged to sign up for beta testing at [www.foldscope.com/beta-signup](http://www.foldscope.com/beta-signup)

## Microscopy Outreach

Did you know that each year AIMS sponsors the **Ugly Bug Contest**? SEM images of various bugs are scanned and colorized then assembled into really cool posters, educational activities and coloring pages for kids. We kick the event off each year at the Flagstaff Festival of Science. For more information check out: <http://askabiologist.asu.edu/activities/ubc>



## 2014-2015 Gold Corporate Sponsors

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