



2016 Annual Business Meeting

Wednesday, July 27, 2016
5:15-6:15 pm ♦ Room C111
Columbus Convention Center



2015-2016 Highlights

- Mission, Vision, and Goals update for Society
- Finances are Strong
- Established Goldstein Award for Early Career Scholars
 - Chose first three recipients
- 6th Annual Meal with a Mentor - 78 Students
- Creating Commercial Director position
- Developing synergies with MSA
- Established goals for capital utilization
- New Logo



MAS Executive Council Members



President
Tom Kelly



President-Elect
Masashi Watanabe



Secretary
Heather Lowers



Treasurer
Dan Kremser



Director
Keana Scott



Director
Brendan Foran



Director
Kat Crispin



Director
Yoosuf Picard



Director
Julie Chouinard



Director
Vin Smentkowski



MAS Committee Chairs



Strategic Planning
Rhonda Stroud



Finance
Joe Michael



Awards
Nicholas Ritchie



Education
Inga Musselman



AReS & Tour
Speakers
Valerie Woodward



Topical
Conferences
Paul Carpenter



Computer Activities
Nicholas Ritchie



International Liaison
Paul Carpenter



Archivist
John Fournelle



Sustaining
Membership
Lucille Giannuzzi



Student Liaison
Sahar Hihath



MicroNews
Assel Aitkaliyeva



Corporate Liaison
Vern Robertson



Membership Services
Karen Wright



MAS Open Leadership Positions

- Web guru in training
- Membership Committee Chair
- Finance Committee Chair
- MicroNews Team member
- Strategic Planning Committee Chair
- Awards Committee member



Kelly Presidency Agenda

- Ad Hoc Commission on Capital Utilization
 - Tom Kelly, Chair
 - Joe Michael, Chair, Finance Committee
 - Rhonda Stroud, Chair, Strategic Planning Committee
 - Dan Kremser, Treasurer
 - Keana Scott, Lucille Gianuzzi, Yoosuf Picard, Jon McCarthy, Elaine Schumacher
- Establish our strategic vision for the purpose and stewardship of our capital



Kelly Presidency Agenda

- Continue to strengthen our strategic alliance with MSA
 - MAS co-organize/adopt FIG structure
 - Tighter integration of Sustaining Memberships
 - Tighter integration of Regular Memberships
 - MAS share business office costs



Goals for 2015-2020

- Organize at least one Topical Conference per year. ☒
- Define roles for Council to facilitate Topical Conferences.
- Establish data management infrastructure that supports the vision of the Society. (2015-2016)
 - Establish committee for this purpose. ☒
 - Overhaul the website. ☒
 - Institutional memory (job descriptions for each Society position) ☒
 - Develop robust social media. ☒
 - Establish data handling system for Society business. ☐
 - Establish membership and skills database. ☐
- Establish communications system for Society business. (2015) ☐
- Develop new logo and branding. (2015) ☒
- Streamline business processes. (2015-2016)
 - Investigate Drohan Management Group ☐



Goals for 2015-2020

- Clarify disposition of reserve fund. (2015) ☒
 - Financial targets should be determined as part of the Reserve fund deliberations.
- Increase base membership by 20% (540 members)
 - Sustaining membership numbers should increase
- Establish a robust archive process. ☐
- Establish student participation in Council. ☒
 - Create student liaison position.
- Establish student grant program for research and travel. ☒
- Establish a rotating corporate liaison position. ☐
- Set up MAS booth at multiple conferences per year. (Ongoing)
 - Promote and cosponsor symposia at other professional meetings.



Conclusions of the Ad Hoc Committee on Capital Utilization

	Weight =	9	3	7	
Conclusion		Relevance	Urgency	Cost	
Potential Undertaking					
Support Early Career Scholar research (Goldstein Award)					
Support Early Career Scholar travel (Goldstein Award)					
Redesign our web presence, create content that appeals to our members and non-members					
Introduce tutorials onto our web page					
Use social media for general promotion of microscopy					
Invest in TCs to make them even stronger which should pay back down the road					
Support a Standards Committee for Microanalysis					
Promote microscopy (outreach) outside of our immediate community					
send tour speakers to a broader spectrum of events					
send booth to trade shows					
vine competition					
Support of a "Microscopy Museum"					
Have a traveling tabletop SEM with EDS for outreach (especially to NSF sponsored sites)					
Initiate a program to encourage employers to allow staff to conduct volunteer work during business hours					
Use proceeds of capital to minimize dues increases					



Secretary's Report

Heather Lowers



2015 Business Meeting Minutes

- see Word document



Treasurer's Report

Dan Kremser

MAS Operating Budgets 2013-2014-2015-2016-2017										
	2017	2016		Actual	2015	Actual	2014	Actual	2013	Actual
	Budget	Budget	31-Dec	15-Jul	Budget	31-Dec	Budget	31-Dec	Budget	31-Dec
Income										
Individual Member Dues	11000.00	11000.00		4,925.00	12000.00	13870.00	12000.00	9798.00	13500.00	11105.00
Sustaining Member Dues	17000.00	17000.00		17,450.00	17000.00	18050.00	17000.00	15450.00	14900.00	14900.00
M&M Co-Sponsor Share	30000.00	30000.00		40,623.72	30000.00	12999.99	32000.00	27283.30	27000.00	26785.03
MAS Topical Conferences	0.00	4000.00		31,928.45	0.00	7981.40	4000.00	0.00	10000.00	10752.85
Dividends & Interest	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	36.09
Fiori Fund	300.00	400.00		116.00	400.00	415.00	400.00	320.00	500.00	255.00
Chodos Fund	700.00	800.00		295.00	800.00	1160.00	900.00	815.00	900.00	915.00
M&M Journal Subscriptions	1000.00	1000.00		725.00	1000.00	1755.00	1200.00	1010.00	1400.00	1210.00
Corporate Award Sponsorship	3500.00	3500.00		2,500.00	3500.00	3500.00	3500.00	3500.00	3500.00	3500.00
Miscellaneous Income- Investment Acnt	0.00	5000.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Goldstein Scholars Fund	5000.00	5000.00		2,500.00	0.00	5500.00				
FIGMAS	300.00	0.00		200.00						
Total Income	68800.00	77700.00		101,263.17	64700.00	65231.39	71000.00	58176.30	71700.00	69458.97
	2017	2016			2015		2014		2013	
Expenses	Budget	Budget			Budget		Budget		Budget	
Society Management	5250.00	3500.00		1,349.46	3500.00	3369.94	3500.00	3304.94	3100.00	3279.75
PayPal Fees	1200.00	1200.00		1,993.79	1200.00	1033.64	1200.00	898.89	1200.00	963.90
Winter Council-MAS and MSA	1000.00	0.00		719.80	16000.00	11093.73	0.00	286.20	18000.00	15056.33
Member Office	700.00	700.00		477.11	700.00	0.00	700.00	550.52	1200.00	1398.99
Sustaining Member Office	1000.00	1000.00		0.00	1200.00	1170.07	1000.00	1393.70	500.00	1061.06
MSA Sustaining Memberships	6000.00	6000.00		5,874.93	5500.00	5872.11	5100.00	0.00	5100.00	7426.40
M&M Journal Subscriptions	2000.00	2000.00		0.00	2000.00	0.00	2000.00	0.00	2000.00	0.00
General Tour Speaker Program	6000.00	6000.00		0.00	6000.00	981.06	6000.00	2597.77	5500.00	4355.70
Foreign Society Reciprocity	10000.00	9500.00		0.00	9500.00	5628.98	6000.00	3160.00	5000.00	4997.93
MAS Sponsored Conferences	1000.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	915.99
Topical Conferences	0.00	0.00		0.00	4000.00	232.00	2000.00	2000.00	2000.00	0.00
MAS Social at M&M	5000.00	5000.00		0.00	6000.00	4000.00	6000.00	6000.00	4500.00	5014.20
M&M Meeting Awards	15750.00	15750.00		0.00	15750.00	12976.94	15120.00	13649.93	12600.00	12388.49
Corporate Award Sponsorship	4000.00	4000.00		500.00	4000.00	3500.00	4000.00	4000.00	4000.00	4000.00
IUMAS-6	0.00	0.00		0.00	12000.00	28016.50	15000.00	15000.00	15000.00	15000.00
Insurance	2000.00	2000.00		784.00	2000.00	1180.00	2000.00	1194.00	3200.00	956.00
Goldstein Scholar Awards	5000.00	5000.00		0.00						
ECS Funding International CoSponsor	4100.00	5000.00		3,799.62						
Total Expense	70000.00	66650.00		15498.71	89350.00	79054.97	69620.00	54035.95	82900.00	76814.74
NET INCOME	-1200.00	11050.00		85764.46	0.00	-13823.58	1380.00	4140.35	-11200.00	-7355.77
MAS Liquid Assets: Banking and PayPal: \$ 176,140.00										
Charitable Fund Totals: \$22,801.06, Chodos: \$1675.78, Fiori: \$13125.28, Goldstein: \$8000.00										
EBSD 2016 TC owed to Univ of Alabama: \$24K										
Meeting and Society Expenses expected: \$40K										
Propose transfer to Investments: \$55K--32K from TC profit and 23K from Checking										
Respectfully submitted,										
Dan Kremser										
Treasurer 2015-2016									Summer Council July 24, 2016	

July 27, 2016

MAS Annual Business Meeting 2016

14

Summary

MAS Liquid Assets: Banking and PayPal: \$ 176,140

Amount in Chodos Fund: \$1675

Amount in Fiori Fund: \$13,125

Amount in Goldstein Scholars Fund: \$8000

Scholar Fund Totals: \$22,800

EBSD 2016 TC owes U Alabama: \$24,000

Meeting and Society Expenses: \$40,000

Transfer \$55,000 to Investment Fund

MAS is in good financial shape.



Finance Committee Report

Joe Michael, Chair

Rhonda Stroud (ex-officio Strategic Planning)

Tom Kelly (President)

Dan Kremser (Treasurer)

Jim McGee

Pat Camus

Ken Sparks, Morgan Stanley



MAS Endowment Account

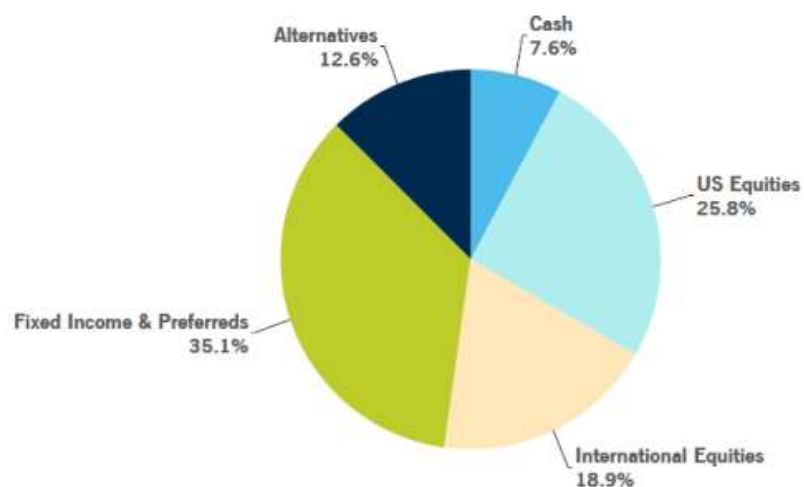
CHANGE IN VALUE AND RETURN % (NET OF FEES)

	Quarter to Date 06/30/16-07/11/16	Year to Date 12/31/15-07/11/16	Performance Inception 10/08/12-07/11/16
Beginning Total Value	\$368,738.61	\$363,493.89	\$299,700.00
Net Contributions/Withdrawals	0.00	0.00	30,550.11
Investment Earnings	5,215.66	10,460.37	43,704.15
Ending Total Value	\$373,954.26	\$373,954.26	\$373,954.26
TIME WEIGHTED RATE OF RETURN			
Return % (Net of Fees)	1.41%	2.88%	3.67%
S&P 500 Total Return	1.90	5.81	12.94
Barclays Aggregate	0.60	5.95	2.83
Citi 90-Day Treasury	0.01	0.13	0.07



MAS Endowment Account

ASSET ALLOCATION



As of July 11, 2016

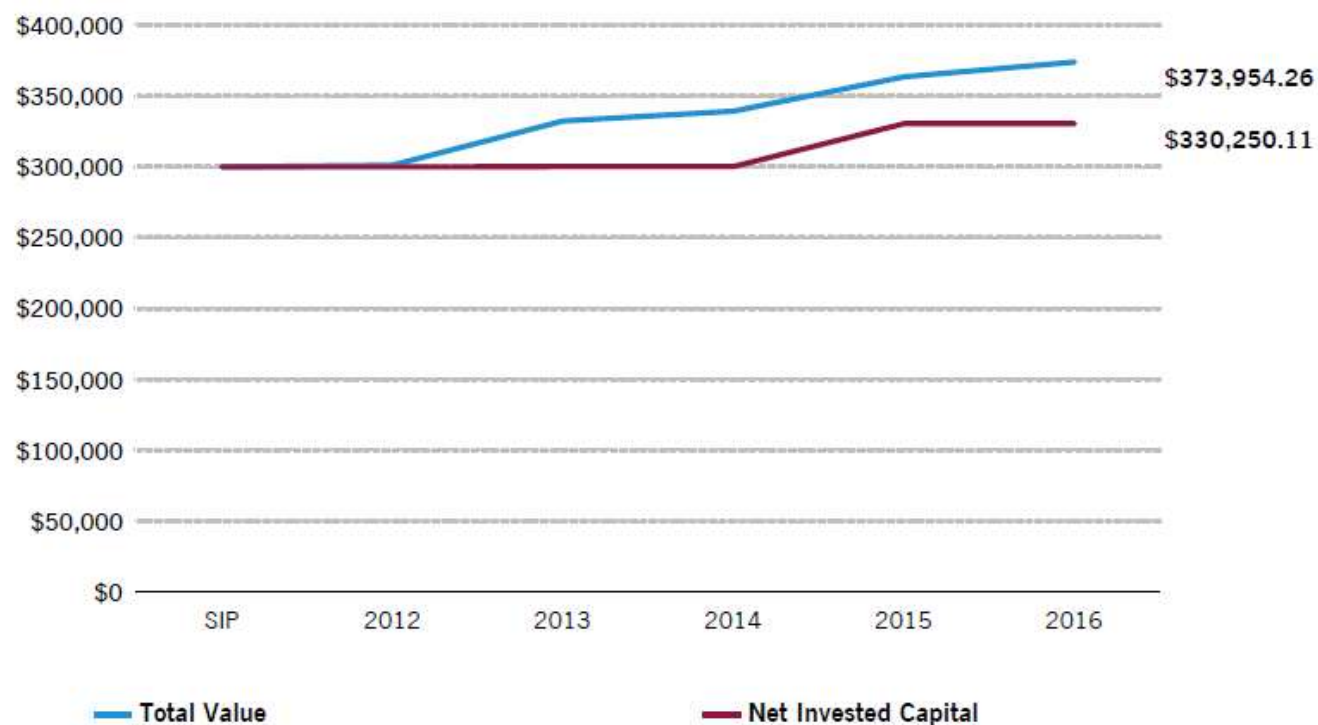
Investment Policy Statement

Equity	50%	± 15%
Fixed Income	35%	± 15%
Alternative Instruments	10%	± 10%
Cash	5%	-5% / +10%



MAS Endowment Account

TOTAL VALUE VS. NET INVESTED CAPITAL





MAS Endowment Account

Recommendations:

No major changes suggested at this time – We weathered the January 2016 market sell-off and Brexit!

The Finance Committee is comfortable with our current portfolio

We continue to meet with Ken Sparks via teleconference on a regular basis.



Strategic Planning Committee Report

Rhonda Stroud (Chair)

Yoosuf Piccard, Masashi Watanabe, Karen Wright, Dan Kremser



Past Initiatives- Goldstein Early Career Scholars

- 3 Applications received and awards made in first round,
- Funds received from Springer for first year
- Education committee working to fine tune process



New Initiatives

1. Code of Conduct Policy

- General agreement among both MAS and MSA leadership that we want to provide a welcoming environment to promote broad engagement of microscopy and microanalysis community.
- Should we adopt a statement, similar to that of societies such as MRS, in order to encourage that positive environment

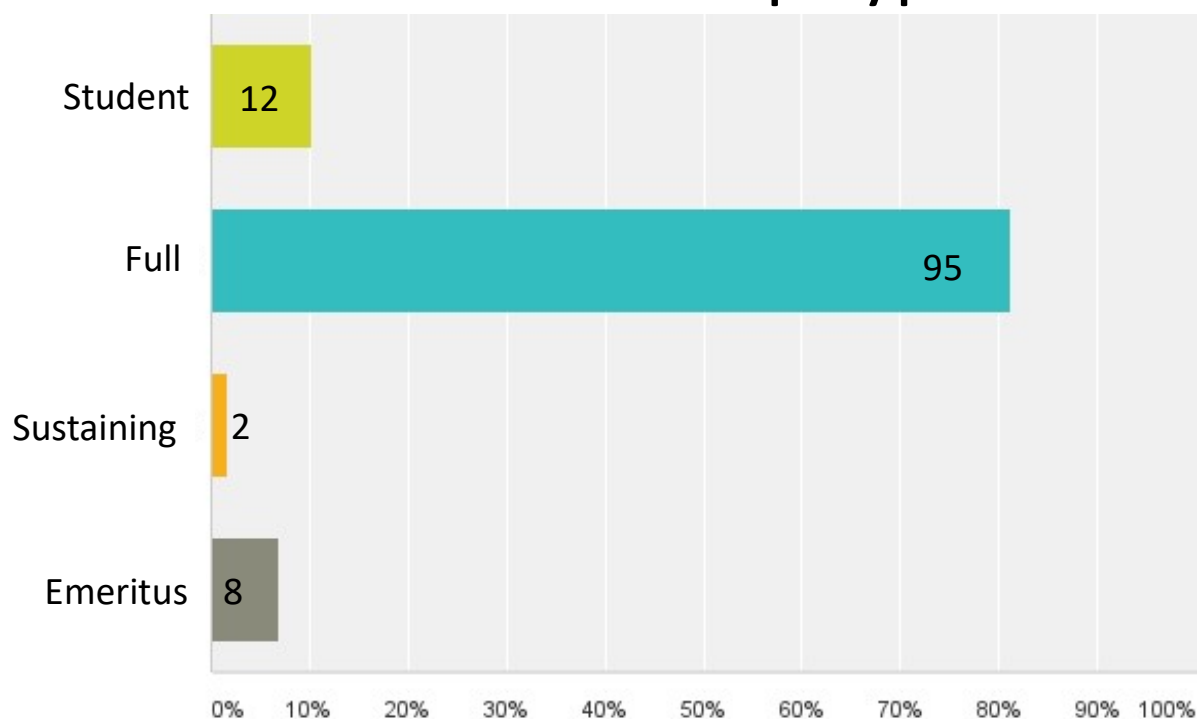
2. Member Survey (<https://www.surveymonkey.com/r/BXVZFZX>)

- better understand who we are, so we can best serve the members



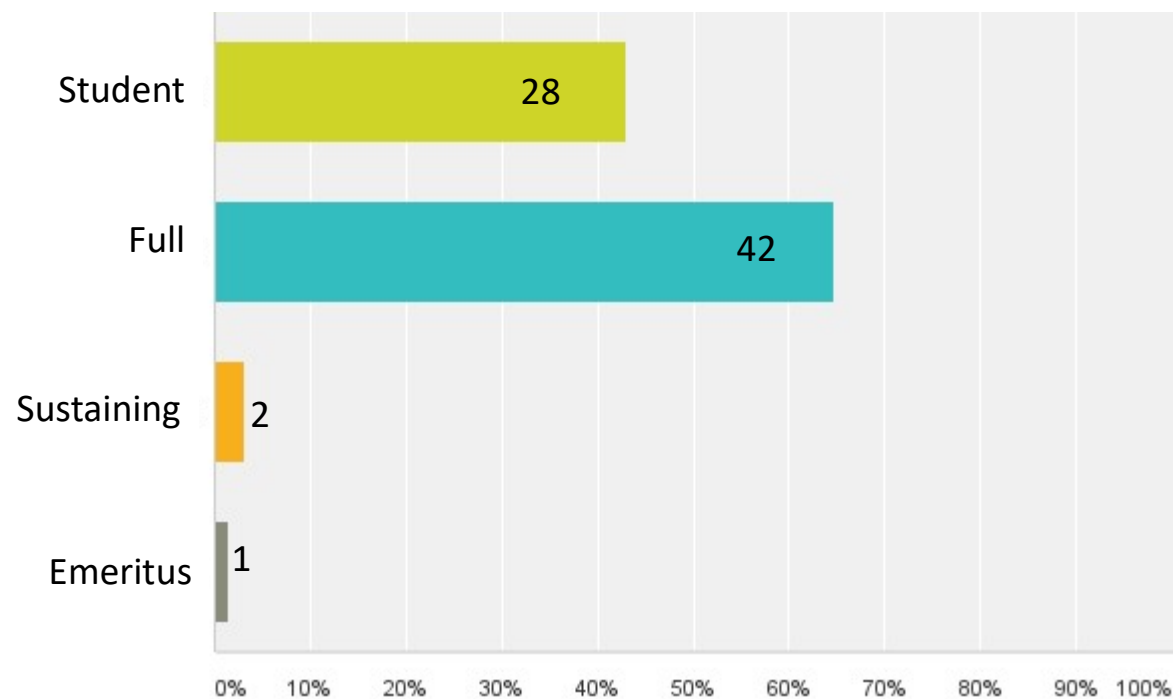
Survey Results (As of 7/22)

Membership Type





- Type of prior membership



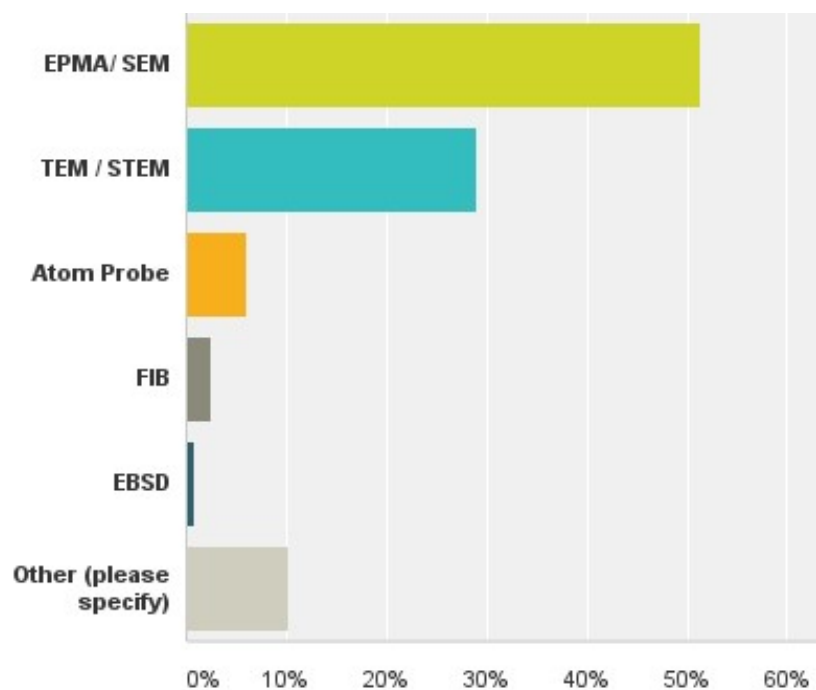


- Q4: Are you a joint member with MSA?
 - 63% Yes, 37% No
- Q5: Are you a member of an affiliated regional society (ARes)?
 - 36% Yes, 64% No

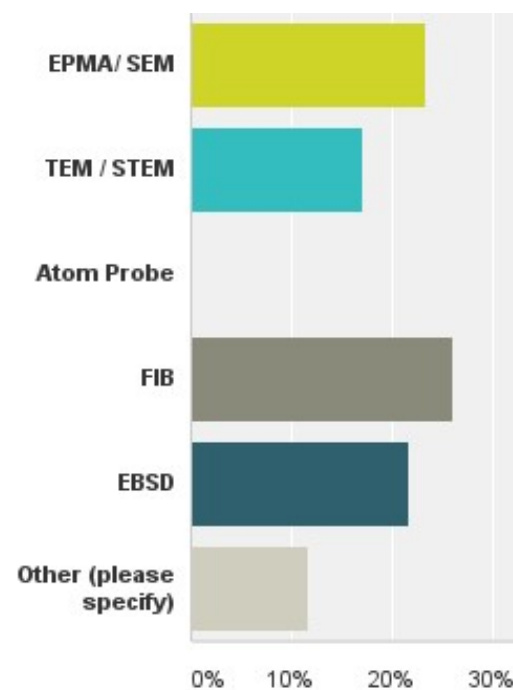


Microanalysis Specialties

Primary

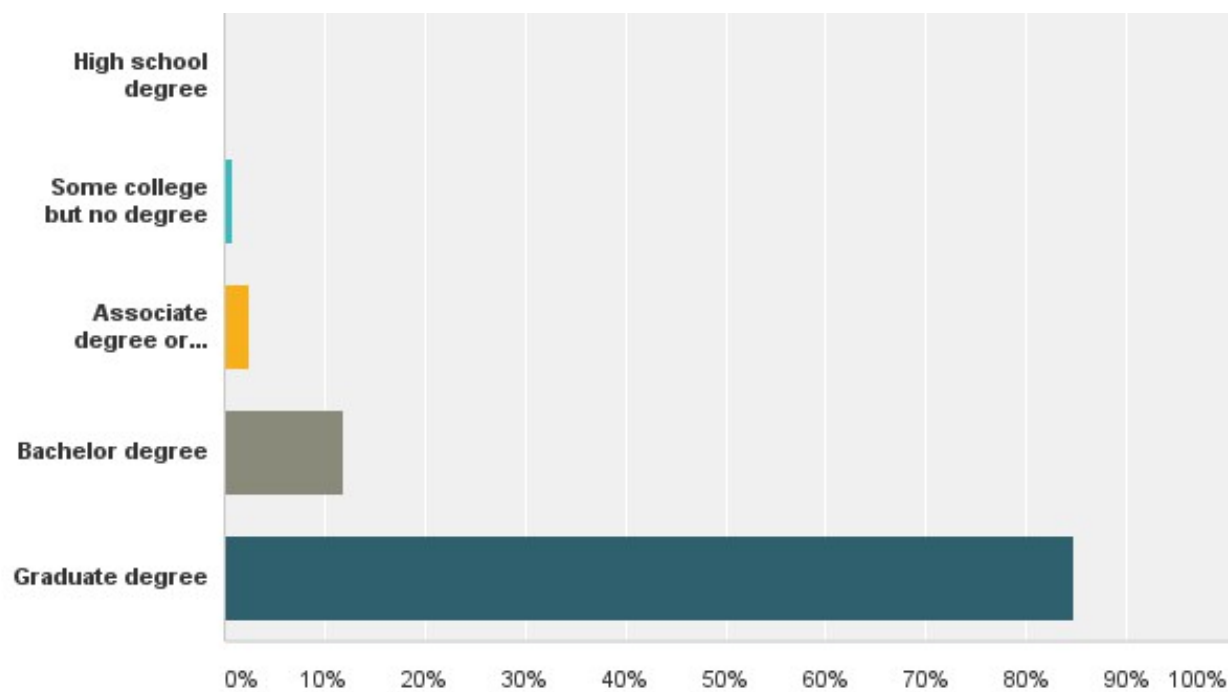


Secondary



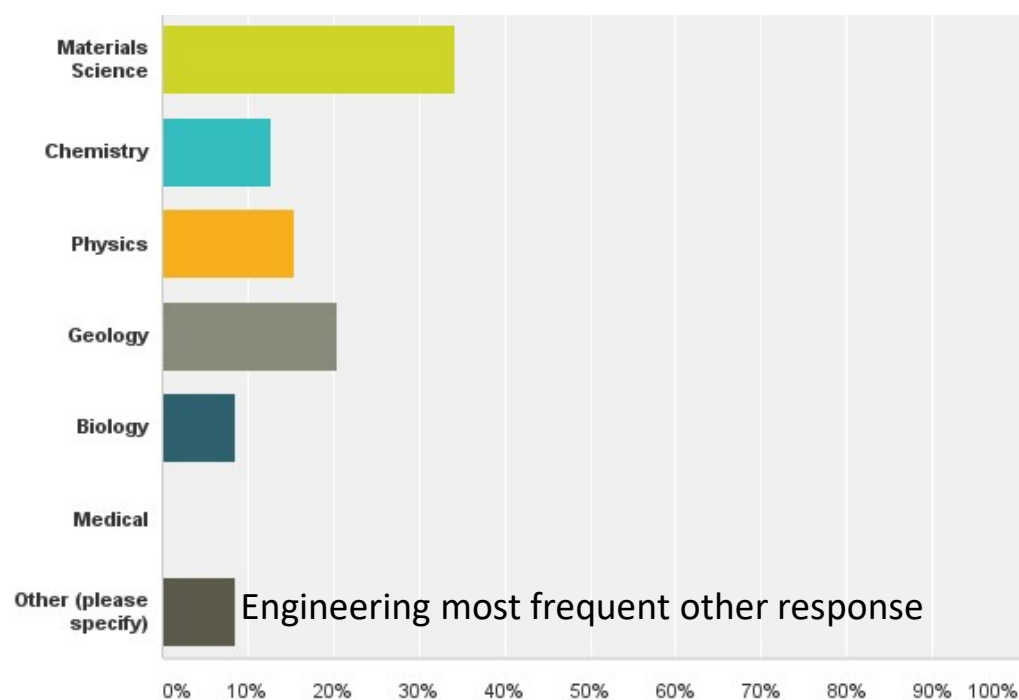


Education Level



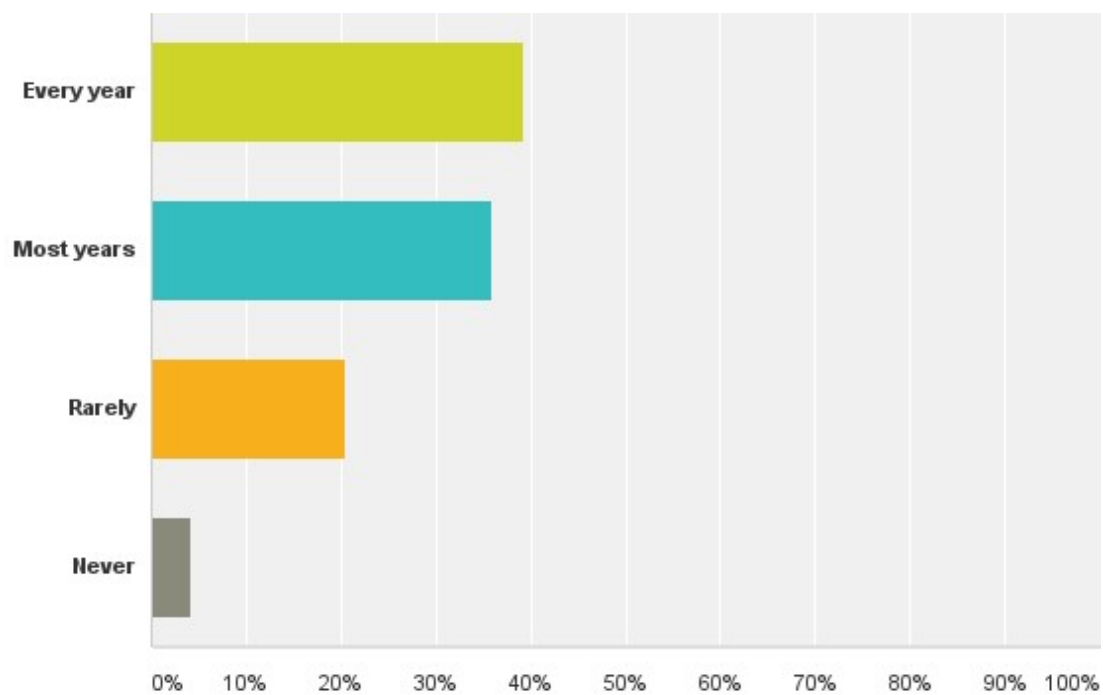


Field of Highest Degree



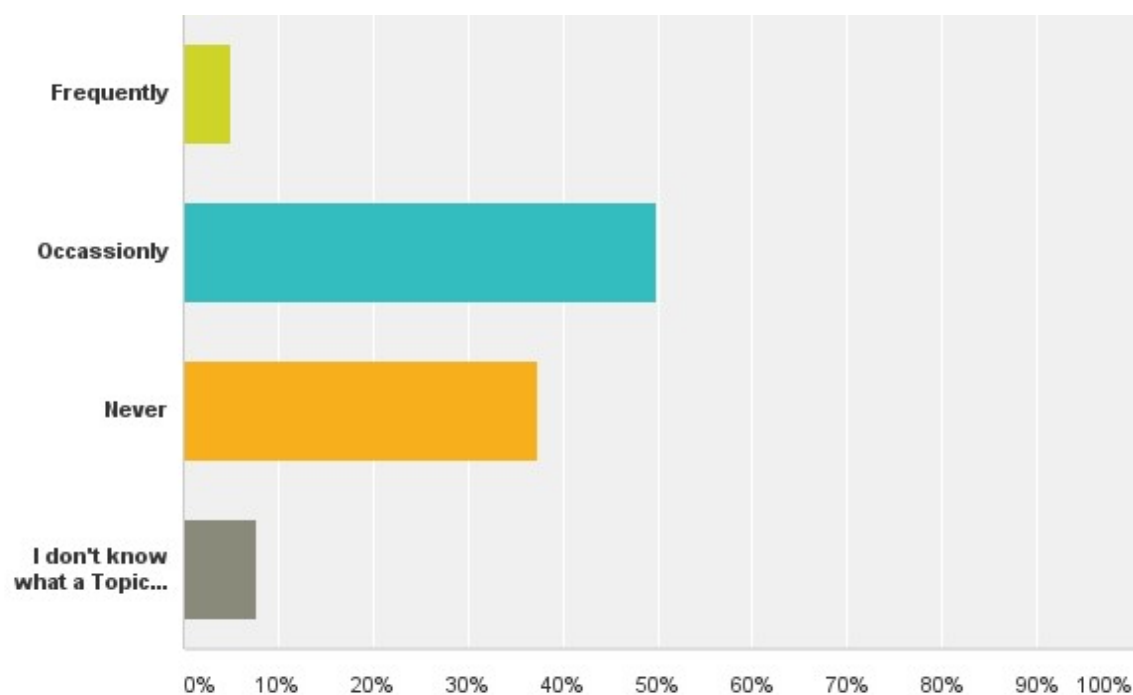


M&M Attendance



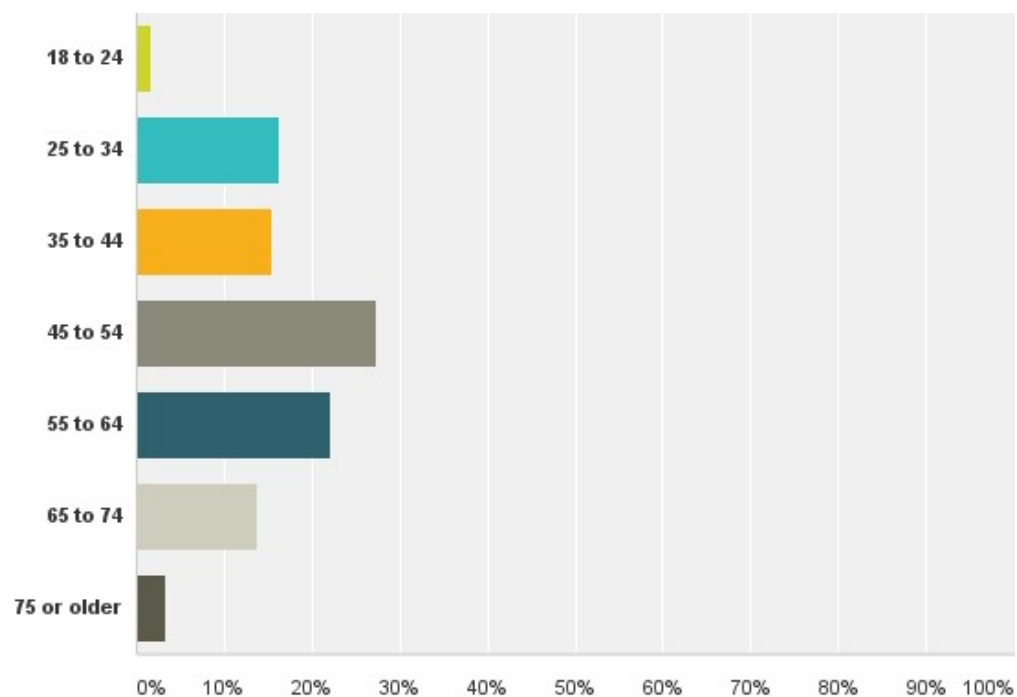


Topical Conference Attendance





Age and Gender



27% Female
73% Male



Most Valued Benefits / Areas to Improve

- Networking by #1 reason for being a member
- TC's, organizing symposia, Meal with Mentor, keeping knowledge current, discount registration, and journal access also mentioned
- Easy joint renewal
- More frequent communication requested,
- Better, more up to date web site
- Career development / job listings
- Electronic delivery of educational / training materials
- More opportunities for engagement for younger members



K.F.J. Heinrich Award Eligibility Criterion

- Currently
 - "This award honors a scientist under the age of forty for distinguished technical contributions to the field of microanalysis"
- Accepted change
 - "This award honors a scientist less than 15 years from their terminal degree in the field who has made distinguished technical contributions to the field of microanalysis"



Topical Conference Committee

Paul Carpenter, Chair

Committee Members

Andrew Deal

John Fournelle

Heather Lowers

Chad Parish

Scott Wight



MAS Topical Conferences 2016

- EBSD 2016, May 24-26, 2016, Univ. of Alabama: Luke Brewer, EBSD 2016 planning chair
<http://www.microprobe.org/topical-conferences/ebsd-2016/welcome>
- EPMA 2016, May 16-19, 2016, Univ. Wisc.-Madison: Paul Carpenter, EPMA 2016 planning chair
<http://www.microprobe.org/topical-conferences/epma-2016-1/epma-2016>
- Both TCs a major success scientifically, socially, and financially
- National Science Foundation grant funds to support (domestic) MAS Early Career Scholars
Funds received: EPMA 2016 22.5K, EBSD 2016 20K
- MAS council funds 5K for co-sponsorship of ECS: two AMAS, two EMAS (two for each TC)
Thank you MAS council for this significant ECS support and first co-sponsorship with IUMAS member societies!



MAS Topical Conferences 2016

- Accomplishments and firsts for TC program in 2016
- EBSD 2016 and EPMA 2016
 - Free advertising by Microscopy Today in Nov. and Jan. issues
 - Use of formalized MAS ECS program
 - NSF grant support for ECS/students
 - Excellent response and support from post-meeting surveys
 - Both TCs financial success
- EPMA 2016
 - International ECS (4) and invited speakers (4)
 - Monday sponsor user meetings (4 day conference)
 - Sponsor demos moved to platform using remote technology
 - Increased coordination with sponsors and scientific program
 - Program guide ISBN number
- EBSD 2016
 - Improvement on historically successful model (5th TC)
 - Highest attendance to date (175, 70 students)
 - Advanced tutorial debut



EPMA 2016 Topical Conference

- EPMA 2016 TC May 16-19, 2016 Univ. Wisconsin-Madison campus
- Organizing committee
Paul Carpenter, John Armstrong, John Fournelle, Raynald Gauvin, Dan Kremser, Heather Lowers, Julien Allaz, Kat Crispin, Nicholas Ritchie, and Anette von der Handt
- Sponsors
National Science Foundation grant (Fournelle, Carpenter)
Platinum level: JEOL USA, Oxford Instruments, Thermo Fisher Scientific, Cameca
Silver level: SPI Supplies, Probe Software, Inc., Gatan, Mager Scientific, ibss group
- Final registration 142 attendees (7 invited, 74 professional, 37 student, 23 sponsor)
- 32 Early Career Scholar awardees, plus 2 international ECS from AMAS and EMAS, and 2 ECS sponsored by international advisors [ECS support from NSF = domestic]



EPMA 2016 Topical Conference

EPMA 2016 program guide pdf available on MAS web site:

<http://www.microprobe.org/topical-conferences/epma-2016-1/epma-2016>



July 27, 2016



IUMAS Annual Business Meeting 2016

Design layout from IUMAS-6 document
Front and back covers here
Julien Allaz -- layout setup
ISBN number – referable



39



EPMA 2016 Attendees and ECS



July 27, 2016



EPMA 2016 Early Career Scholars

Name			Institution		
Mitchell	Awalt		University of Minnesota		
Matthew	Bloodgood		University of Georgia		
Kenneth	Brown		Miami University Ohio		
Bryan	Cockrell		Smithsonian Institution		
Laura	Dafov		UT Austin		
Zhixue	Du		Carnegie Institute of Washington		
Lyndsey	Fisher		Colorado School of Mines		
Jordan	Foote		University of Wisconsin Oshkosh		
Ryan	Gabelman		University of Michigan		
Phil	Gopon		University of Wisconsin Madison		
Sven	Holbik		Florida International University		
Robert	Holder		UCSB		
Alexander	Iveson		Washington State		
Cheryl	Kondratko		MATC, Truax		
Daniel	Korfeh		University of Michigan		
Nikita	La Cruz		University of Michigan		
EMAS & AMAS International ECS					
Ery	Hughes		University of Bristol		
Tim	Murphy		University of Western Sydney		
Name			Institution		
Patricia	Larrea		Miami University Ohio		
Xingtao	Liu		Purdue University		
Ryan	McAleer		USGS		
Will	Nachlas		Syracuse		
Phil	Orlandini		University of Colorado		
Ian	Parker		University of Florida		
Molly	Ray Radwany		University of Minnesota		
Alison	Santos		University of New Mexico		
Michael	Strange		UNLV		
Dai	Tang		Carnegie Mellon University		
Renbiao	Tao		Carnegie Institute of Washington		
Sarah	Valencia		Washington University		
Amanda	Van Lankvelt		University of Massachusetts-Amherst		
Ali	Wiemer		University of Wisconsin Oshkosh		
Orie	Wyatt		Colorado School of Mines		
Johnny	Zhang		University of Minnesota		
International ECS					
Maria	Pilar Ramirez Garcia		University of Leeds		
Chaoyi	Teng		McGill University		



EPMA 2016 Financial Summary

EPMA 2016 TC Financials	
Income	Amount
Corporate Support	\$16,800.00
Registration	\$28,175.00
NSF Funding	\$22,500.00
Monday UserGroup Catering-Food only	\$1,364.70
Parking	\$168.00
Income Total	\$69,007.70

Excellent corporate support and registration
 NSF grant support crucial
 Frugal approach to costs
 Surplus in line with TC guidelines ~20%

Expenses	
Monday UserGroup Catering	\$1,827.40
Monday Social	\$1,863.00
Tues-Wed-Thurs Lunch/Breaks	\$11,264.72
Food/Refreshments Banquet	\$5,369.85
Invited-Registration and Travel	\$7,192.85
ECS Support-NSF	\$18,214.96
ECS Food-NSF	\$1,841.03
Program and Badges-NSF	\$2,444.01
Student Help	\$315.00
Parking	\$528.00
Trinkets	\$978.66
Misc Costs	\$485.27
Fees-Bank and PayPal	\$1,000.34
Expenses Total	\$53,325.09
Total Income-Expenses	\$15,682.61



EPMA 2016 Experience Base: Pros

- EPMA-WDS-EDS microanalysis topic enthusiastically supported
Proof that TC topics can be focused and encompassing
- Format utilized combined technical conference and short course
- MAS-only meeting format alive and well
Provides educational need not addressed by other meetings
- MAS ECS program now emulated by AMAS and EMAS; IUMAS-7 includes ECS structure
- ECS applicants well represented by both abstract-required and no-abstract candidates
- Attendees indicate support for ~ 2-yr repeat timeframe
- No reduced attendance with May/June 2016 competition between EPMA 2016, EBSD 2016, and LMS



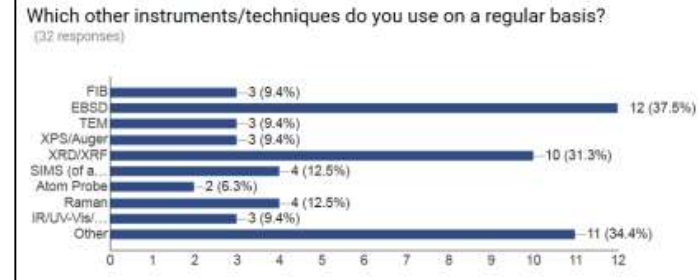
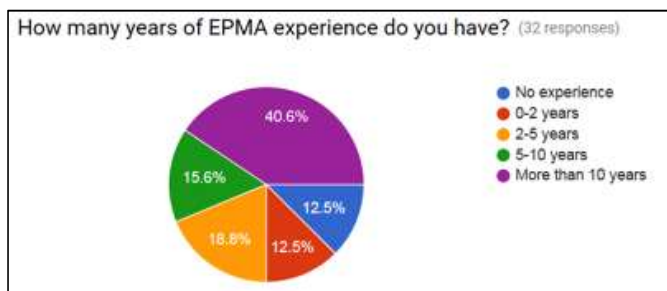
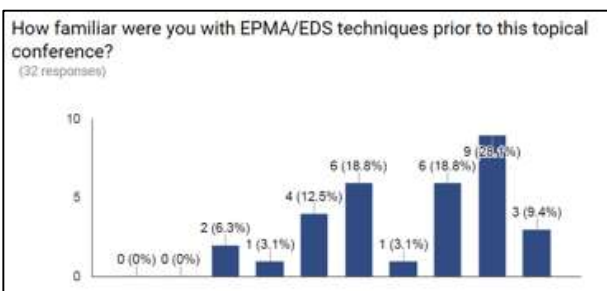
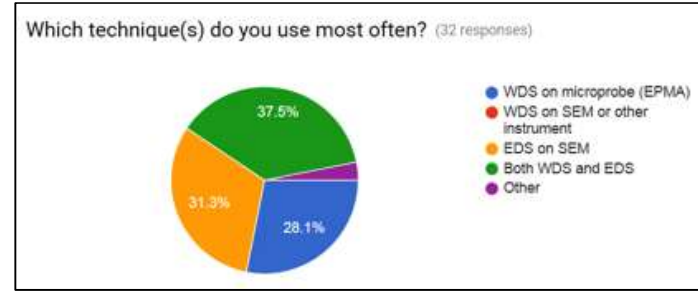
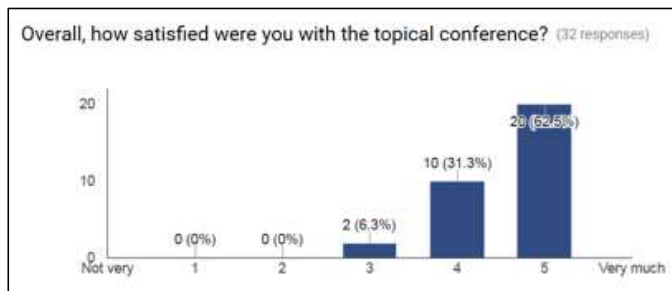
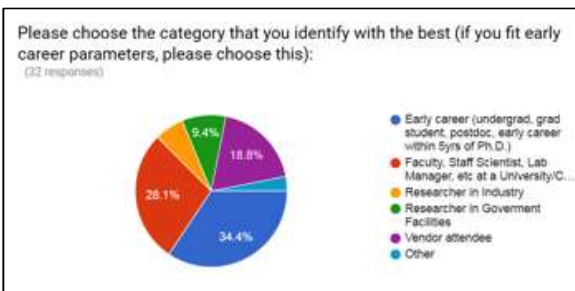
EPMA 2016 Experience Base: Challenges

- Excellent response from some sponsors, poor response from others
Likely due to first EPMA TC and two TCs in May 2016
- Early/extended deadlines required to drive abstracts, registration, ECS candidates, and sponsorship quotas
- Significant effort expended on planning and communication
- Used "ECS" and "Professional" registration classes to simplify our job
Registration list provided to MAS membership
- Results from MSA listserver and mass email announcements doubtful
Required individual emails and word of mouth
- AReS group participation in TC and ECS program is limited
- NSF funds processing problems:
Univ. Wisc.-Madison problems processing and interpretation of NSF guidelines: foreign nationals attending/working at US institutions

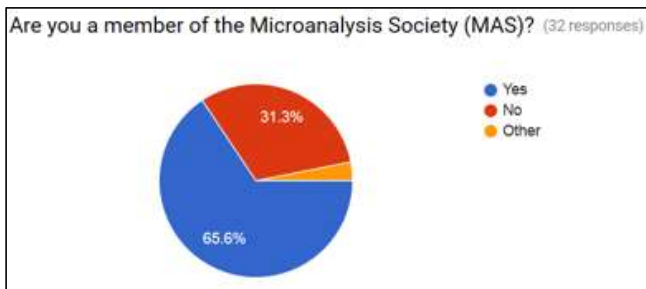


EPMA 2016 Survey Responses: 32 @ 7/20/2016

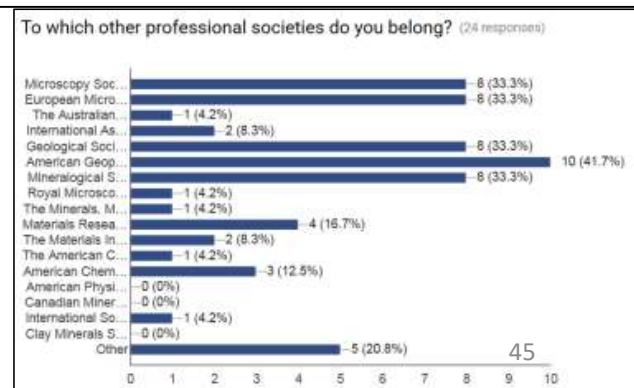
- Google survey set up by Kat Crispin



>~80% Yes response to:
Learn new material?
Recommend EPMA 2016 TC?
Sponsor demos and user meetings?



MAS Annual Business Meeting 2016



July 27, 2016



EPMA 2016 Survey Responses cont.

What content would have made the Topical Conference more useful?

(6 responses)

A little more time on thin films would have been nice. In general, it was really 5 days worth of material - maybe have the vendors on Day 1, the tutorials on Day 2, and the posters/talks on Day 3-5? That way there is a bit more discussion/interaction time after the sessions, and we aren't finishing at 9pm

The potential increase of EDS into this conference is of interest and could expand the interest. The question is does it reduce the subject matter or is it an opportunity to bring a greater thought to the microanalysis community regarding how to analyze a sample and the use of standards.

More on nitty gritty of sample preparation: mounting, polishing, cleaning

A more concise introduction, and maybe a little longer time to do "live" demos. As we all know 45 minutes isn't a long time for an EPMA analysis along with explanations.

The software demos need to be more longer so that we have time to open the software and follow along

Sample and standard preparation and maintenance.

Why/why not recommend this Topical Conference to others? (6 responses)

Great event - would strongly recommend it to EPMA users of all levels.

I do not think there is anything like this and it fills an important niche.

Opportunity for people doing EPMA to exchange experience

This TC is excellent for students and for a periodic refresher for mid-career scientists.

Content was good and there were a large number of very knowledgeable people attending.

I would recommend this type of intimate and focused conference to others.

Any overall feedback for the event? (6 responses)

Very positive.

Overall an excellent experience. Thank you to all the organizers for their hard work.

good conference. It is put together by a group of hard working dedicated people

Very well organized. Kept to the schedule very well. Very approachable experts.

The User Meetings were very useful. I think by limited attendance, the night sessions may have pushed peoples limit to absorb any more info. It was a little like the "Good Old Days" at Lehigh short course.

Excellent and plenty of time to interact with presenters and other experts in attendance.



EBSD 2016 Report

July 24, 2016

Columbus Convention Center

Luke Brewer (The University of Alabama)

Yoosuf Picard (Carnegie Mellon University)--presenting

Elena Miranda (California State University-Northridge)

Rich Martens (The University of Alabama)

Whitney Behr (University of Texas-Austin)

Joseph Michael (Sandia National Laboratories)



EBSD 2016-Highlights



- Successful fifth installment of ongoing MAS topical conference series
- Hosted by The University of Alabama in Tuscaloosa, Alabama from Tuesday-Thursday, May 24-26, 2016.
- 175 total attendees with 70 students attending.
- Robustly supported by seventeen corporate sponsors who provided \$33,000 in financial support
- Equipment vendors brought 2 field emission gun SEM's, a plasma-FIB, 3 EBSD systems, and a argon ion polisher to the meeting.
- Significant technical programming with 60 technical presentations (platform and posters).
- Financially, the meeting was a success with net proceeds of +\$16,166.
- 84% of post-meeting survey respondents were likely or very likely to attend a future topical conference on EBSD.

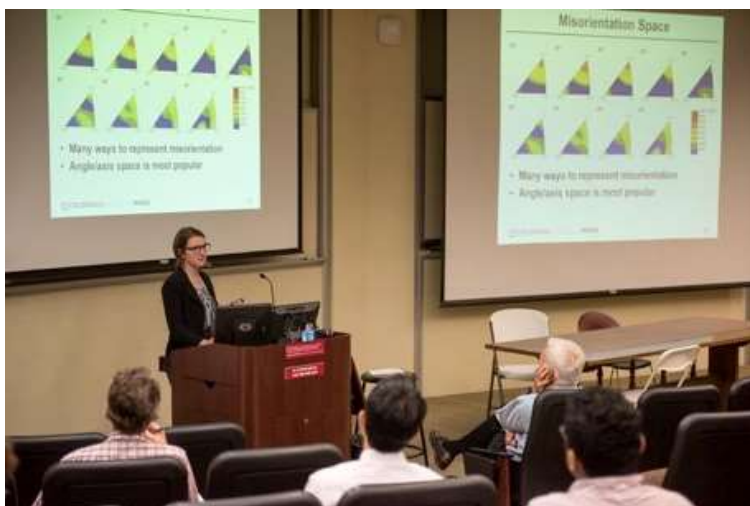
EBSD 2016 attendees gathered in the atrium of Shelby Hall at
The University of Alabama.

July 27, 2016

MAS Annual Business Meeting 2016



EBSD 2016 Technical Programming



Mary O'Brien of the Colorado School of Mines presenting her work, "Characterization of Hydrogen Induced Cracking in Pipeline Steels using Electron Backscatter Diffraction."

- EBSD 2016 had both breadth and depth in technical content. -23 platform presentations with 7 invited talks and 37 poster presentations.
- The platform presentations were presented on Wednesday and Thursday.
- The technical presentations showed a balance between technique development and applications to problems in geology and materials science and engineering.
- Increased fraction of student presenters in 2016; (7/23) platform presentations.
- Invited Presentations at EBSD 2016:
 - "Transmission Kikuchi Diffraction: What Comes Next?" Pat Trimby, Sydney University
 - "Understanding Fatigue Crack Initiation and the Early Stages of Crack Growth using Electron Backscatter Diffraction" Sushant Jha, Air Force Research Laboratory
 - "How to Measure Fracture Opening Rates using Quartz C-Axis Orientations" Estibalitz Ukar, University of Texas at Austin
 - "EBSD of Nuclear and Irradiated Materials" Chad M. Parish, Oak Ridge National Laboratory
 - "High Angular Resolution EBSD: Current Progress, Case Studies and Limitations & Future Potential" T.B. Britton, Imperial College
 - "EBSD Pattern Simulations and Dictionary-Based Indexing" Marc De Graef, Carnegie Mellon University
 - "Orientation-Dispersion Analyses: a Unifying Microkinematic Framework" Seth C. Kruckenberg, Boston College



EBSD 2016: Tutorial and Student Outreach

Graduate student, Mr. Jeffrey Joseph of California State University-Northridge, presenting his poster on Wednesday afternoon, May 25, 2016.



Tutorials:

- Basic EBSD, day-long tutorial was held on Tuesday, May 24, 2016.
- Lectures that covered everything from the basic physics of EBSD to sample preparation to applications in the geological sciences.
- Laboratories in the afternoon, ten groups of 4-5 students had the opportunity to spend an hour in the laboratory on one of six EBSD-SEM platforms to see the basic collection and indexing of EBSD patterns performed in a laboratory setting.
- Advanced EBSD tutorials--new approach in 2016
 - Three advanced tutorials topics: high angular resolution EBSD, precession electron diffraction, and transmission Kikuchi diffraction.
 - A leading academic in the field gave a one-hour lecture on each topic on Tuesday morning.
 - From 1-3PM on Tuesday, laboratory demonstrations were provided so that attendees could see how this data is collected and analyzed in a laboratory setting.

Student Outreach and Involvement:

- The significant student involvement was one of the real highlights for EBSD 2016!
- Record number of students, 70, at the meeting.
- Received NSF funding for student travel (\$22,500).
- Students and early career scholars from four continents, 5 countries, and 18 states at the meeting.
- Thanks to financial support from MAS, AMAS, and EMAS, we hosted two early career scholars from Australia, Dr. Mitchell Nancarrow (University of Wollongong), and from Switzerland, Dr. Ana Teresa Fontenla (CERN).



EBSD 2016: Financials

Budget Summary for EBSD 2016.

Expenses		Income	
Printing/Advertisement	-\$4,411	Registration	+\$20,290
Daily Food	-\$8,276	Corporate Support	+\$33,087
Banquet	-\$11,689	UA Dorms (pass through)	+\$4970
Invited Speakers	-\$4,968		
Bus and Van Rental	-\$3,387		
Miscellaneous (mugs, t-shirts, etc.)	-\$1,339		
Paypal fees	-\$691		
MAS Dues for non-members	-\$2,450		
UA dorms (pass through)	-\$4,970		
Total:	-\$42,181		+\$58,347

Net Total: +\$16,166

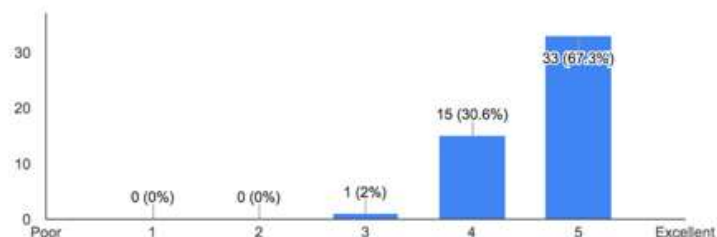
- Suggest using the difference in member/non-member registration, e.g. (\$240/\$200) to pay for 18 months of dues for non-MAS members—recruiting tool!
- NSF funding not reflected in this financial report—went directly to UA and then directly to students for their travel support.

Great appreciation for all of the accounting help from MAS Treasurer-Dan Kremser!!

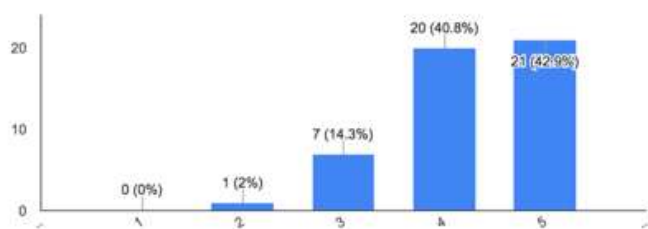


EBSD 2016 Post-Meeting Survey

Please rate the overall quality of the meeting (49 responses)



How likely are you to attend another EBSD Topical Conference in this series? (49 responses)



- Performed post-meeting survey—response rate 49/175
- 98% of respondents rated the meeting overall with a score of $\geq 4/5$.
- 84% of respondents to a post-meeting survey were likely or very likely to attend a future topical conference on EBSD.
- 69% percent of respondents to the survey were not MAS members before the meeting.
- May and June were by far the most popular months suggested for having another topical conference.
- Respondents were split almost exactly into thirds between self-described beginners, intermediate and advanced users of EBSD.
- 84% of respondents gave a $\geq 4/5$ rating to the basic tutorials; advanced tutorials had 74% with a $\geq 4/5$ rating.
- Using a larger space for the poster sessions and providing better internet access during the meeting were the most common suggestions for improving the meeting.



EBSD 2016: Suggestions for Future Meetings

- Future organizers should have intentional discussions about whether bringing an SEM, or similar platform, to a topical conference should be considered as in-kind support and sufficient for platinum sponsorship.
- Perhaps a portion of the registration fees should be used to recruit new MAS members by paying for their dues for 18 months.
- Advanced tutorials do seem to add a welcome aspect to the topical conference; however, they also add to the complexity during the tutorial day.
- Make sure that the equipment vendors are clear about the difference between tutorials and demonstrations and what their role will be during the tutorial day
- Having two MAS topical conferences in the same month does put stress on the overall MAS ecosystem, but it can be done. We would recommend avoiding doing so if possible.
- Providing van rides from/to the airport is welcomed by the meeting attendees, but they should be scheduled at regular intervals and not "on demand." On-demand scheduling is too complicated for the local organizers.
- When scheduling tutorial labs, people must choose whether they will do the basic laboratories or the advanced laboratories. Giving them the option to choose both or mix-and-match will greatly complicate the laboratory scheduling.



A Final Thanks to Our Generous Sponsors!



We make it visible.





MAS Topical Conference Future Plans

- Survey responses strong for EPMA and EBSD TCs offered every 2 years
- Likely future TC schedule to put TCs on one-per-year schedule
 - EBSD 2018
 - EPMA 2019
- There are no MAS TCs currently planned, possible atom probe TC proposal to be received at WC 2017?
- MAS involvement with IUMAS-7 / EMAS / Konstanz 2017



Awards Committee Report

Nicholas W. M. Ritchie (Chair)

Keana Scott

Brendan Foran

Yoosuf Pichard



Awards Committee Goals

- M&M Meeting Awards - Early Career Scholar
- M&M Paper Awards
 - Student, Instrumentation, Invited and Contributed
- Society Awards
 - Heinrich, Duncumb, Presidential Service and Presidential Science



SOCIETY AWARDS

Castaing Award

Best Paper Presented by a Student

Josiah B. Lewis

Laboratory for Space Sciences,
Physics Department,
Washington University, St. Louis, MO, USA.

Atom-Probe Tomography Measurements of Isotopic Ratios of High-field Materials with Corrections and Standardization: a Case Study of the $^{12}\text{C}/^{13}\text{C}$ of Meteoritic Nanodiamonds

Sponsored by



Birks Award

Best Contributed Paper

Jorg M. Wiezorek

University of Pittsburgh
Pittsburgh, PA, USA

Quantitative Phase Analysis of Rapid Solidification Products in Al-Cu Alloys by Automated Crystal Orientation Mapping in the TEM.

Sponsored by



Cosslett Award

Best Invited Paper

Alexander S. Eggeman

Department of Materials Science and Metallurgy
University of Cambridge, Cambridge, UK

Decomposing Electron Diffraction Signals in Multi-Component Microstructures



Macres Award

Best Instrumentation / Software Paper

Alexi Valery

STMicroelectronics
850 rue Jean Monnet, F-38920
Crolles, France.

Dealing With Multiple Grains in TEM Lamellae Thickness for Microstructure Analysis Using Scanning Precession Electron Diffraction

Sponsored by



K. F. J. Heinrich Award

This award honors a scientist under the age of forty for distinguished technical contributions to the field of microanalysis. The award winner is chosen annually by the MAS President.



Julien Allaz

University of Colorado



Presidential Science Award

This award honors a senior scientist for outstanding technical contributions to the field of microanalysis over a sustained period of time.



Michael J. Jercinovic

University of Massachusetts



Presidential Service Award

This award honors a member of MAS for outstanding volunteer service to the society over a sustained period of time.



Heather Lowers

United States Geological Survey



Peter Duncumb Award for Excellence in Microanalysis



David Muller

Cornell University

I should like to add my own congratulations to David at this presentation – the tenth in the series that bears my name. It has been an education for me to read the citations, and I regret even more not being able to be present myself. Coincidentally it was just 60 years ago in Cambridge that we were first able to image the distribution of selected elements in a sample surface, using characteristic X-ray emission. We were delighted then that we could demonstrate resolutions better than 1 micrometre – it would have been fantasy to foresee the study of single atoms. David and his group have amply demonstrated atomic resolution, complemented by spectral analysis to reveal electronic states within the atom. Perhaps there are similar leaps, as yet unforeseen, to be made in the 60 years to come!

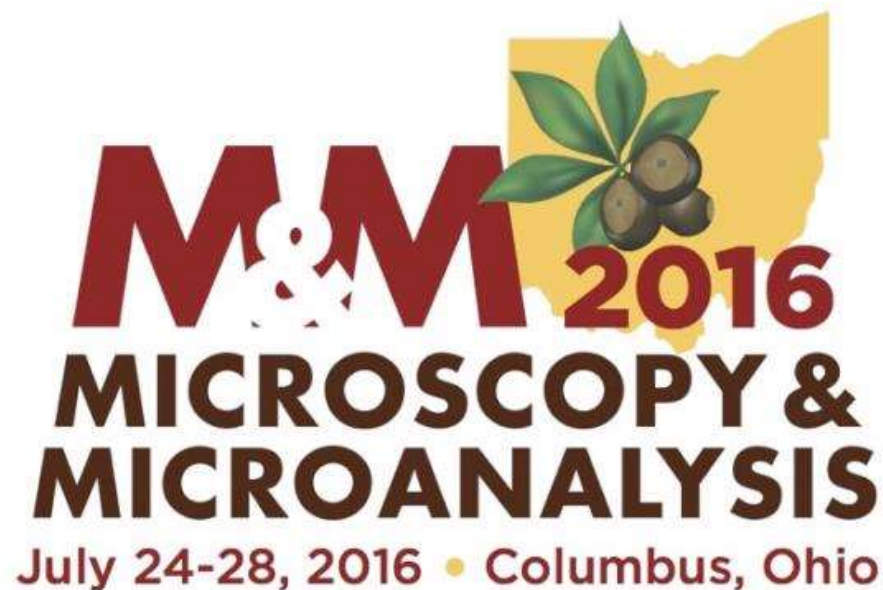
Peter Duncumb - July 2016





Awards Committee

- New members
 - Outgoing directors - Kat Crispin and Yoosuf Picard
 - Looking for two new members. You maybe???
 - Heard any excellent talks at M&M 2016? Tell us about them!
- Duncumb Award
 - Nominations from the membership



M&M 2016 Report

Brian Gorman (MAS Co-Chair)

Welcome to Columbus!



Technical Program

- >1100 abstracts!
- 16 A sessions
- 8 B sessions
- 12 P sessions
- 9 X sessions
- 2 Pre-meeting congresses
- 62 Late breaking posters



M&M 2016 Attendance

- 2756 registrants as of Monday, July 25
 - 1588 attendees
 - 1168 exhibitors
 - Numbers below 2015 but above all previous years
- \$487,000 total meeting revenue



2017 M&M Program: Kat Crispin

- Currently 12-15 sessions of interest to MAS members
- Dedicated microanalysis session - Julien Allaz
 - Covers microanalysis standards and advances in microanalysis
- 2-3 Atom probe symposia
- FIB placeholder session - working on session chair



MAS Logo 3.0

Heather Lowers (Chair)

Julie Chouinard

Tom Kelly

Graphics by Brenna Thibault





MASASHI

Microanalysis Society for Atomic-Scale Hyperspectral Imaging

It's Official





Cooperation on Membership Database with MSA

Vin Smentkowski (Chair)

Dan Kremser, Lucille Giannuzzi, Rhonda Stroud, Karen Wright, Tom Kelly



Membership Portal/Database Project: Details

- MSA and MAS are developing a master microscopy membership database
 - The data base will have many searchable fields
 - This sort of information enables membership demographic planning and study
 - A joint database assembles a larger voice for important microscopy and microanalysis demographics
- This database will facilitate web-based membership renewal
 - Each society will define fields specific to their membership renewal
 - For joint members, one site enables simultaneous renewal to each society
 - Both MAS and MSA will have access to the data base
- Cost to MAS: A one time fee of \$1,000 or less will be billed to MAS in order to implement the above.



Proposal to Create a Commercial Director Position on MAS Council

Brandon Foran
Lucille Giannuzzi
Tom Kelly (Chair)
Vern Robertson



Preface

- MAS Council currently has a non-voting representative for commercial interests (Corporate Liaison)
- We wish to strengthen commercial representation on Council
- Commercial members should have a more direct voice in the Society's governance
- Commercial concerns should feel more "buy-in" with the process of selecting their representative on Council



Background

- Currently there are three Regular Memberships associated with each Sustaining Membership
- It is hoped that if commercial members know they have a voting representative, they may be more likely to bring issues up and seek their representative
- One existing concern that would be addressed: commercial concerns have not been asked their opinion on where to hold meetings or arrange space at meetings
- There is some concern that the elected individual may not have an amicable relationship with other companies. We do not believe that this is the case. Generally companies are looking out for the good of the community



Background

- Does anyone know the original intent of the nonvoting corporate liaisons. Was it to give voice without favoring one company over another?
- A precedent for such a position is the MSA LAS director who is chosen from among the LAS representatives
- Having the commercial community more integrated into MAS governance would be a beneficial outcome
- EMAS added a position on Council for a commercial representative and they provide input on venues, membership dues, etc. They alternate every two years between instrument and detector person



Proposal

- Create one new director position (Commercial Director) to be filled by a person employed by a commercial concern
- This Director would be elected by Sustaining Members
 - Each Sustaining Member company gets three memberships. Each of these members has one vote for this Director position
 - We should keep precise records of each sustaining member and record their votes accordingly
- The pool of candidates for nomination to this Director position shall come from the list of regular members (up to three) registered to each Sustaining Membership
- There shall be at least two candidates nominated each time this position is open
- Any one person may serve one consecutive term
- Each Regular Member of a Sustaining Membership will retain their voting rights of a regular member as well
- This position would be a three-year position with full director voting rights. A change in the Bylaws will be needed to enact this position.

Very strong support among commercial concerns



Bylaws

- Will require bylaw change to add new position to Council
- Requires vote by membership
- Vote will be included in fall 2016 voting



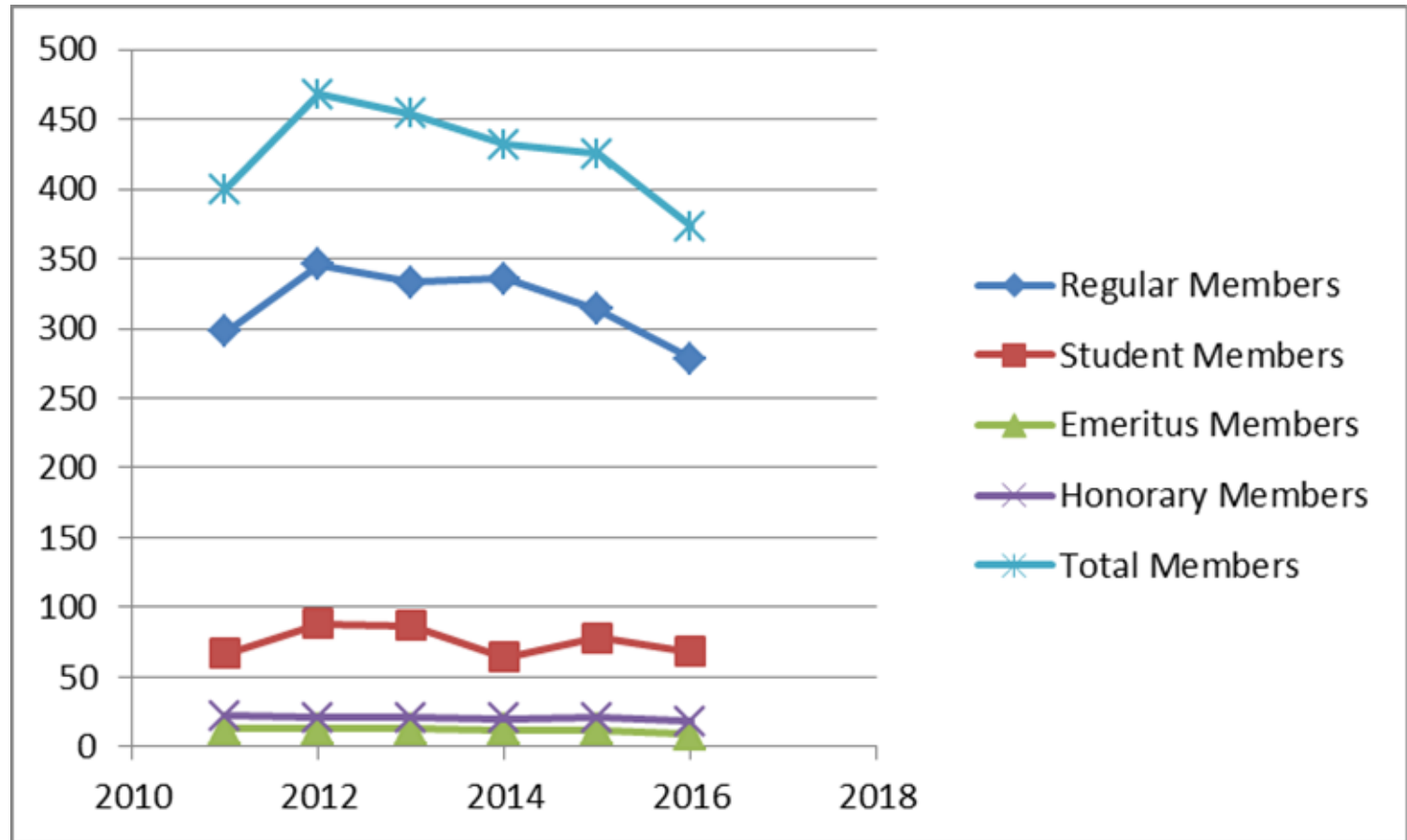
Membership Committee Report

July 24, 2016

Karen Wright, Chair



Membership Committee Report





Possible Emeritus

Gretchen Kunze

Rosalie Semarge-Stern

Cathy Johnson

Ian Anderson

John Armstrong



Education Committee Report

Inga Musselman (Chair)

Abigail Lindstrom, Jessica Riesterer, Keana Scott



Goals and Objectives

- Provide opportunities to assist students and welcome them to the Microanalysis Society
 - MAS Meal with a Mentor
 - Goldstein Scholar Award



2016 MAS Meal with a Mentor

- Purpose:
 - Meet students and introduce them to MAS
 - Discuss opportunities for microanalysis in the workplace
- When: Monday, July 25th, 12:15 - 1:15 pm
- Where: Columbus Convention Center, Eisenman and Trott room
- Who: 78 students; 12 mentors



2016 Goldstein Early Career Scholars

Michelle Thompson, University of Arizona

Doug Perovic, University of Toronto

Madeleine Kelly, Carnegie Mellon

Mary Grace Burke, University of Manchester, UK

David Misch, Montanuniversitaet Leoben, Austria

Joyce Schmatz and Johannes Klaver, RWTH Aachen University



July 27, 2016



MAS Annual Business Meeting 2016

91



Goldstein Scholar Award

- Purpose:
 - Promote advancement for early career members of the Microanalysis Society
 - Increase interactions of junior and established microanalysts
 - Advance state-of-the-art in microanalysis measurements
- Co-sponsors: Meteoritical Society and Springer
- Inaugural awards:
 - Madeleine Kelly, Carnegie Mellon University
 - David Misch, Montanuniversitaet Leoben
 - Michelle Thompson, University of Arizona



Affiliated Regional Societies (AReS) and Tour Speakers (TS)

Kerry Siebein (Chair)
Katherine Crispin



AReS and Tour Speaker Committee Update

AReS:

- AReS Luncheon was changed to a combined breakfast with the MSA LAS. The joint MAS AReS/MSA LAS breakfast will be held on Tuesday morning, July 26, at 7:15 am in the Eisenman/Trot Room (2nd level), Columbus Convention Center
- AReS webpage was updated in July 2016
- There are 20 AReS, 17 of which are MSA LAS

Tour Speakers:

- Two tour speaker engagements were held this spring: March 2016 Nabil Bassim at AIMS and April 2016: Scott Walck at MMS.
- Two new tour speakers were added for 2016: Vin Smentkowski and Lucille Giannuzzi
- The TS web page was updated to include the new tour speakers
- AReS can use MAS members in good standing as tour speakers if an official tour speaker is not available and they have a high level of expertise in the topic area



Sustaining Members Committee Report

Lucille Giannuzzi (Chair)
Kat Crispin, Cathy Johnson



32 Sustaining Members 2016

Sustaining Member	
Advanced MicroBeam, Inc.	
Applied Physics Technologies, Inc.	
Bruker Nano Analytics	
CAMECA Instruments Inc.	
Carl Zeiss Microscopy, LLC	
Diatome US	
EDAX Inc.	
Electron Microscopy Sciences	
EXpressLO LLC	
FEI Company	
Gatan Inc.	
Geller MicroAnalytical Laboratory, Inc.	
Hitachi High Technologies America, Inc.	
ibss Group, Inc.	
IXRF Systems, Inc.	
JEOL USA, Inc.	
Lehigh Microscopy School	
Leica Microsystems Inc.	
MAS, LLC	
Micron, Inc.	
Oxford Instruments America, Inc.	
PNDetector GmbH	
Probe Software, Inc.	
PulseTor LLC	
SEMTEC Laboratories, Inc.	
SEMTEC Solutions, Inc.	
South Bay Technology, Inc.	
SPI Supplies/Structure Probe, Inc.	
Ted Pella, Inc.	
TESCAN USA	
Thermo Fisher Scientific Inc.	
XEI Scientific, Inc.	
21	joint thru MAS
5	joint thru MSA
6	MAS only
32	TOTAL

- All paid!
- No change in number compared to 2015
 - 26 joint SMs
 - 6 MAS only SMs
- 24 SMs exhibiting at M&M2016
- **PROMOTION:** Any new (non 2016) SM can pay for 2017 now to receive remaining 2016 benefits.



Recognition of Sustaining Members

- Prominent display on MAS website
- Displays/signage/floor emblem at M&M
- Plaques at M&M (mailed to those not at M&M)
- M&M Booth Visits
- M&M Proceedings (hand delivered at M&M or mailed)
- MAS Social Invitation
- MAS/MSA SM Breakfast Invitation
- 3 members per SM are MAS individual members
- 1 ticket to Sunday night M&M reception (2 per joint SM)
- 2 points for each year of SM towards M&M booth priority (started in 2016).

Two company representatives are cordially invited to attend a reception hosted by the

Microanalysis Society

Wednesday, July 27, 2016

(Immediately following the MAS Member Business meeting at 5:15 PM)

Huntington Park, 330 Huntington Park Lane

6:30 - 8:30 pm

We gratefully acknowledge your

2016 Sustaining Membership and continued support!

Please stop by the MAS booth to obtain your badge stamp for admittance.



You are cordially invited to attend the

SUSTAINING MEMBERS BREAKFAST MEETING

of the

Microscopy Society of America and the Microanalysis Society

Thursday, July 28, 2016, from 8:30 am to 10:00 am

GCCC 2nd level Eisenmann/Trott rooms (old: B200-201)





Computer Activities

Nicholas W. M. Ritchie (Chair)

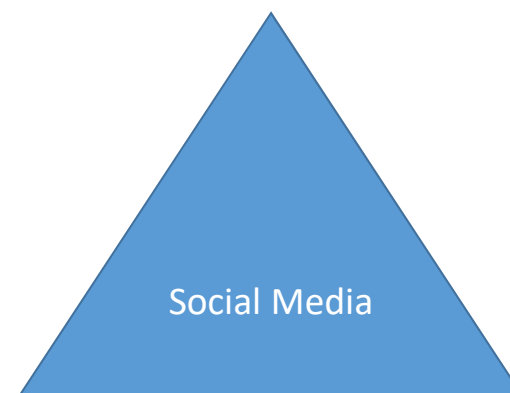
Yoosuf Pichard

Jeff Davis



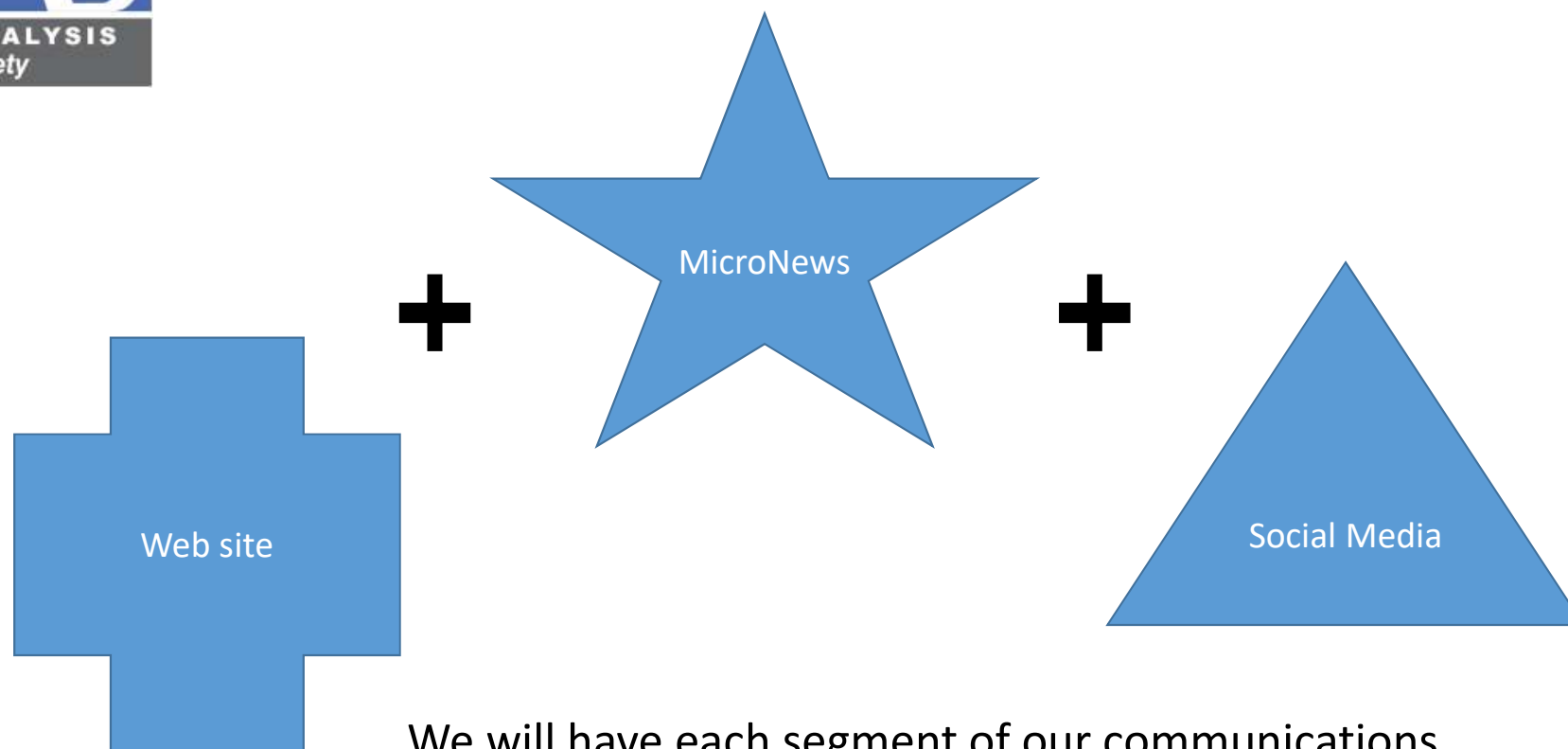
Web Site

- We've been using Plone to host our site since 2009
- It was a large step forward from our static HTML site
- Provides a lot of first rate features
 - Calendar
 - News feed
- Interface is clean but a little dated
- The biggest problem is (and always has been) developing content





Next Step in Web Site Evolution



We will have each segment of our communications work together to generate and advertise content that supports our membership.



MAS International Liaison

Paul Carpenter
MAS International Liaison



MAS International Liaison Activities 2016-2017

- MAS has important involvement with IUMAS:
Ed Vicenzi IUMAS council chair
Paul Carpenter, MAS intl. liaison
- IUMAS-7 conference organized by EMAS, May 7-11, 2017, Konstanz Germany
- See EMAS site <https://www.microbeamanalysis.eu/>
- IUMAS-7 has EPMA and other microanalysis topical content via program and pre-conference workshops
- Plenary session layout, invited speakers give platform talks, contributed give poster presentations
- Early Career Scholar program has been adopted in modified form by EMAS



Sunday 7th – Thursday 11th May 2017

•Sunday

- Registration and welcome reception
- Optional short courses

•Monday to Thursday

- Tutorial lectures
- Round Table discussions
- Young Scientists session
- Poster sessions
- Commercial Exhibition

EMAS

IUMAS

SAVE THE DATE	 7-11 May 2017 Konstanz, Germany				
	<table border="0"> <tr> <td style="vertical-align: top;"> EMAS 2017 IUMAS-7 </td> <td style="vertical-align: top;"> 15th European Workshop on Modern Developments and Applications in Microbeam Analysis 7th Meeting of the International Union of Microbeam Analysis Societies </td> </tr> </table>				EMAS 2017 IUMAS-7
EMAS 2017 IUMAS-7	15th European Workshop on Modern Developments and Applications in Microbeam Analysis 7th Meeting of the International Union of Microbeam Analysis Societies				

• Registration Includes

- Lunches
- Coffee breaks
- Workshop dinner
- Book of Abstracts
- Proceedings volume



SCIENTIFIC PROGRAMME

The programme will consist of invited plenary lectures delivered by worldwide experts, young scientist session, poster sessions and oral poster presentations, and round-table discussions at the end of each session, as well as a series of 1/2-day short courses on the Sunday preceding the workshop/meeting.

The main topics to be dealt with during this workshop will include:

- **Pushing the limits - EPMA:** low-voltage X-ray microanalysis, applications of soft X-ray microanalysis, trace element microanalysis, detection limits, thin film microanalysis;
- **Modelling:** overview of modelling tools; DFT;
- **Detector technologies:** direct electron detectors; newest developments in wavelength-dispersive and energy-dispersive X-ray spectrometry;
- **Surface characterisation:** nanosurface characterisation using nano-IR and nano-Raman; nanoSIMS;
- **Cathodoluminescence:** cathodoluminescence microanalysis; in-SEM cathodoluminescence analysis;
- **Pushing the limits - general:** scanning transmission electron microscopy (STEM); quantitative electron energy-loss spectroscopy (EELS); high-angular resolution electron backscatter diffraction (EBSD); integration of atom probe and electron backscatter diffraction;
- **Applications:** material science, geological science, environmental studies, astrophysics, microelectronics, forensics, cultural heritage and archaeology, nanomaterials, surfaces and interfaces, catalysts, sensors, ...

GENERAL INFORMATION

The Final Announcement will be distributed in September 2016 to those returning the attached form. A substantial reduction of the registration fee will apply to all students. Moreover, a number of Early Career Scholarships will be available for bona-fide students, young scientists and technicians (under 30 years of age). Details will be given in the final announcement.

WORKSHOP SECRETARIAT

EMAS 2017 Workshop Secretariat
c/o University of Antwerp
Department of Chemistry
Campus Drie Eiken, Universiteitsplein 1
2610 Antwerpen-Wilrijk, Belgium
telefax: +32-3-265.23.43
e-mail: luc.vantdack@uantwerpen.be
www.microbeamanalysis.eu

INTERNATIONAL SCIENTIFIC COMMITTEE

Gianluigi Botton	Canada
François Brisset	France
Paul K. Carpenter	U.S.A.
Miran Čeh	Slovenia
Zejun Ding	P.R. China
Stuart L. Kearns	Great Britain
Young-Woon Kim	South Korea
Enrico Langer	Germany
Michael B. Matthews */**	Great Britain
Silvia Richter */**	Germany
Yahachi Saito	Japan
Giovanni Valdrè	Italy
Edward P. Vicenzi *	U.S.A.
Richard Wührer	Australia

* Chairpersons of the International Scientific Committee

** Chairpersons of the Local Organising Committee



IUMAS-7 short courses

- Six half-day short courses to be held Sunday May 7, 2017
Each course 50 euro for registrants, 150 euro for non-registrants
- Cost not covered by registration or included in ECS awards
 - Introduction to EBSD (François Brisset)
 - Advanced EPMA, incl. calcZAF (Paul K. Carpenter & Stuart L. Kearns)
 - Electron microscope maintenance (Richard Wührer)
 - Advanced spectral imaging, mapping and phase mapping (Hans Dijkstra)
 - Monte Carlo simulation (Philippe T. Pinard & Silvia Richter)
 - Introduction to atom probe (Tom Kelly)



MAS support for IUMAS-7 ECS/IUMAS scholarships

- EMAS has requested that each IUMAS society provide list of 4 candidates for award consideration:
Top two from this list of 4 will be ECS awardees for each IUMAS society
Remaining two will automatically be considered for IUMAS scholarships
- **Candidates to be identified and selected by MAS**
ECS/attendees of EPMA 2016, EBSD 2016, M&M 2016, ArES
Suggest MAS Awards committee, TC groups, MM session chairs ID
- **Deadlines:** Nov. 1 2016 deadline for candidate selection by MAS
Nov 15th 2016 deadline submission of list to IUMAS-7 ISC
- Travel estimate for LAX-Zurich, SBB rail to Konstanz, one pre-conference workshop:
RT airfare \$1400, extra bag \$200, RT rail SBB \$100, PCW \$50, total \$1750 per candidate
- Suggest **MAS sponsor two ECS for total of \$3500**



IUMAS-7 Early Career Scholars

Bursaries

The European Microbeam Analysis Society (EMAS), the International Union of Microbeam Analysis Societies (IUMAS), and the 8 IUMAS member societies¹ are providing significant financial support to allow and encourage promising early career scientists and technicians to attend the joint EMAS/IUMAS meeting in 2017.

Early Career Scholarships

16 Early Career Scholarships (ECS) are being offered, with 2 being allocated to each member society. EMAS will provide free student registration and accommodation² for all 16 awards. In addition, each of the member societies will provide matching travel support to their awardees.

Special IUMAS Scholarships

IUMAS is providing additional support for 10 early career scientists and technicians. Unsuccessful applicants for an ECS will automatically be considered for one of the 10 Special IUMAS Scholarships (SIS). Each successful awardee will receive free student registration and accommodation². These awards do not include travel support.



Rules for Applications

All applicants are required to submit an abstract for a poster contribution and a letter of support from their supervisor or line manager to the their local IUMAS member society, with eligibility being based on the member society's local rules. The member society will confirm the eligibility of their applications. The local member society will choose their four best applications and pass these, along with their recommended order of merit, on to the EMAS 2017/IUMAS-7 International Scientific Committee (ISC). The final decision and notification of the awarded scholarships will be made by the ISC.

Applicants can also apply for a Young Scientist Session (YSS) slot – see www.microbeamanalysis.eu for details.

Key Dates

- 1st Nov 2016 Closing date for ECS applications to local IUMAS member society.
- 15th Nov 2016 Closing date for ECS applications to be passed to ISC.
Closing date for YSS applications.
- 19th Dec 2016 ECS and SIS notifications sent out.
- 15th Jan 2017 YSS notifications sent out.
- Early Jan 2017 On-line registration goes live (www.microbeamanalysis.eu)

¹ IUMAS Member Societies: Australian Microbeam Analysis Society (AMAS), European Microbeam Analysis Society (EMAS), Korean Society of Microscopy (KMS), Japan Society for the Promotion of Science (JSPS), US Micro-Analysis Society (MAS), Microscopical Society of Canada (MSC), Standard Administration of People's Republic of China (SAPRC), Brazilian Society for Microscopy and Microanalysis (SBMM).

² Registration includes all coffee breaks and lunches during the Workshop, along with tickets for the Welcome Reception and Workshop Dinner. Accommodation will be for up to 4 nights in a twin shared room in a hotel assigned by EMAS.



2016 Nominating Committee

Masashi Watanabe, Chair
Keana Scott, Brendan Foran
And Tom Kelly



Nominating Committee Report

- President
 - Rhonda Stroud, Naval Research Laboratory
- Treasurer
 - Elaine Schumacher, McCrone Associates
- Director
 - Emma Bullock, Carnegie Institution of Washington
 - Roseann Csencsits, Schafer Vallecitos Laboratory
 - Andy Herzing, NIST
 - Yimei Zhu, Brookhaven National Laboratory



President-Elect: Rhonda Stroud



MAS involvement:

- Member since 2005
 - MAS Tour Speaker (2006-2008)
 - MAS Director (2011-2013)
 - MAS Strategic Planning Chair (2015-2017)
-
- Rhonda Stroud received her B.S. (1991) from Cornell University, and her Ph.D. in Physics from Washington University in St. Louis in 1996.
 - She joined the Naval Research Laboratory in Washington, DC as an NRC Postdoctoral Fellow in 1996, and converted to civil servant in 1998, and promote to head of the Nanoscale Materials Section in 2007.
 - She is a Fellow of the American Physical Society and The Meteoritical Society.
 - Rhonda Stroud's research focus is on the use of electron, ion and x-ray microscopies to investigate the structure and composition of materials at micrometer to picometer scales. Her research interests span many classes of materials, from quasicrystals and oxide electronics to aerogel nanocomposites and nanoparticles formed in supernovae. She pioneered the use of focused ion beam microscopy for enabling coordinated structure-isotope studies in planetary materials.



Treasurer: Elaine Schumacher



MAS involvement:

- Member since 1998
- MAS Director (2012-2014)

- Elaine Schumacher received a B.S. in Chemistry (1988) from Elmhurst College, Illinois.
- She worked at UOP LLC from 1980-2001, where her microscopy experience included use of dedicated STEM, TEM and VP-SEM to characterize zeolites, supported metal catalysts, filamentous carbon and novel mixed metal oxides.
- Since 2001, Elaine has been a Senior Research Scientist at McCrone Associates, an independent consulting laboratory, where she applies analytical electron microscopy techniques to a variety of materials and characterization problems.
- Elaine served for ten years on the Executive Council of the Midwest Microscopy and Microanalysis Society, acting as President, Materials Science Director and Program Coordinator. She has been an invited speaker at M&M, meetings of the Southeastern Microscopy Society, and the 2009 MAS Topical Conference, *Microanalysis of Particles*. She has also co-chaired M&M symposia on real world microscopy and microscopy education.



Emma Bullock



MAS and community involvement:

- Member since 2015
- Lehigh Microscopy School (2016)
- Smithsonian Science Education Center Teacher training (2015-2016)
- Smithsonian Meteorite tour organizer (2010-2015)
- Earthcube Workshop logistician (2013)
- Emma Bullock received a B.Sc. in Geochemistry from the University of Manchester, United Kingdom in 2001. This was followed by a Ph. D. in Meteoritics (2006) from the Open University and the Natural History Museum, in the United Kingdom.
- In 2006, Emma moved to the United States to take up a three-year postdoctoral research fellowship at the Smithsonian Institution in Washington, DC. A year at the University of Chicago followed in 2009, then in 2010 she returned to the Smithsonian in the role of Geologist.
- In May 2015, Emma joined the Microbeam team at the Carnegie Institution of Washington, where she currently runs the FIB SEM, electron microprobe, and FE SEM laboratories.
- Throughout her career, Emma has utilized electron beam instruments to explore the mineralogy, chemistry and texture of meteoritic materials. Her work has explored the relationships of mineral phases, and their alteration through the action of water, using combined SEM and electron microprobe work. She has also analysed the earliest-forming solids in our Solar System, and samples returned from Comet Wild2. In her role at the Carnegie Institution, she has analysed samples created in the laboratory that explore the high-temperature and high-pressure worlds below the Earth's surface.



Candidate for Director: Roseann Csencsits

MAS involvement:

- Member since 1984



- Roseann Csencsits earned a B.S in Chemistry from Montclair State College in 1980 and M.S. and Ph.D. in Materials Science from the University of California, Berkeley in 1986 and 1988.
- She is Group Leader of Microbeam Analyses at Schafer Vallecitos Laboratory in Sunol, CA.
- Previously she was “Scientist-In-Charge” of Ken Downing’s Structural Biology cryo-TEM facility at Lawrence Berkeley National Lab (2006-2015), Collaborative Scientist in EM, EDS and EELS at Argonne National Lab (1992-2002), Research Scientist at Brown U (1992), and Senior Engineer at Digital Equipment Corporation (1989-1992).
- Roseann has co-authored over 30 microscopy papers and is the current President of the Northern California Society for Microscopy (NCSM).



MAS Director Candidate: Andrew Herzing

MAS involvement:

- Member since 2007
- Poster judge at M&M 2008 and 2010



- Andrew Herzing received his B.S. (2002), M.S. (2005), and Ph.D. (2007) in Materials Science and Engineering Lehigh University.
- He was a National Research Council postdoctoral associate at the National Institute of Standards and Technology (NIST) from 2007-2009.
- In October 2010, he joined the Material Measurement Laboratory at NIST as a Staff Scientist in the Materials Measurement Science Division.
- Andy's research expertise is in the use of electron microscopy and spectroscopy techniques for the characterization of nano- and atomic-scale features in a wide variety of materials. Most recently, his efforts have focused on three-dimensional metrology development and the application of electron energy-loss spectroscopy for the characterization of photovoltaic and plasmonic nanostructures.



Yimei Zhu candidate for a Director position



MAS involvement:

- Member since 1988
- Delivered 25 invited talks and 2 whole-day lectures of tutorials, coauthored 150 extended abstracts, and was on the program committees 8 times for its annual meetings
- Received Ph.D from Nagoya University (1987), joined BNL as Assistant Scientist (1988) and is currently Senior Physicist at the Dept of Cond. Matt. Phys. and Mat. Sci. and Director of Institute for Advanced Electron Microscopy at BNL, and Adjunct Professor at Columbia U (Appl. Phys & Math) and Stony Brook U (Phys. & Astro. And Mat. Sci. & Eng)
- Published 450 peer reviewed journal articles on electron microscopy, excluding proceedings and extended abstracts, and delivered 250 invited talks, over 200 of which were at international conferences and workshops.
- APS fellow (2006) and Inaugural Fellow of MSA (2009).
- Built strong microscopy facilities at BNL, acquired 11 S/TEMs (5 aberration corrected ones with unique features).
- Original member of the DOE 2000 Materials Microcharacterization Collaboratory project and the TEAM project.
- Organizer for DOE/BES Principle Investigators Meeting on Electron and Scanning Probe Microscopy (2014), and DOE Workshop on Future Electron Scattering (2015) and on Basic Research Needs for Innovation and Discovery of Transformative Experimental Tools (2016).
- Instrumentation development on ultrafast electron microscope (2.8MeV-120fs), secondary-electron imaging at atomic resolution, GHz resonance excitation for magnetic imaging; received R&D 100 Award, Microscopy Today Innovation Awards and US patents for the development.
- Method development on valence-electron mapping, magnetic phase imaging, measurement of static displacement and atomic vibration.
- Material characterization on strongly correlated electron systems, superconductors, energy materials and nanomaterials.



Beads of Office Wisconsin White Oak Gavel

It's all yours Masashi



Take me out to the Ballpark

MAS Social

Follow the  cots to

Huntington Park

Home of the Columbus Clippers

330 Huntington Park Lane