



# MicroNews

Winter 2005 Newsletter  
of the Microbeam Analysis Society

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

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## PRESIDENTIAL MESSAGE

Dear MAS Members,

It is my pleasure to serve the Microbeam Analysis Society this year in the role of President. The MAS is rich in tradition and consists of member scientists, like you, who are passionate about the field and future of microbeam analysis. First, I would like to thank our outgoing President, Paul Carpenter, for his excellent leadership this past year. As President, Paul played a critical role in leading initial discussions within MAS Council as well as with MSA Council and the joint MAS/MSA Merger Committee regarding the possible merger of the Microbeam Analysis Society and the Microscopy Society of America. Simultaneously, he worked to advance the visibility of MAS and to serve our membership by identifying and arranging for additional MAS sponsored Topical Conferences.

*M&M2004.* Microscopy and Microanalysis 2004, held last August in Savannah, GA, was a great success. The Savannah site was beautiful, complete with river, historic homes, and Spanish moss. The Program Chair, Ian Anderson, and his committee, including Bob Price, Ernie Hall, Elliot Clark, Paul Kotula, and John Henry Scott, put together a fantastic scientific program with 17 tutorials and over 750 invited and contributed platform and poster presentations. The bus and ferry transportation worked better than we had anticipated. I extend a special thanks to Sara Miller, who served both as Local Arrangements Chair and MSA President, for the exceptional southern hospitality.

*UPCOMING MEETINGS.* The 15<sup>th</sup> Annual Goldschmidt Conference will be held in Moscow, Idaho, May 20-25, 2005. In addition to supporting the travel of students to this MAS Topical Conference, MAS is sponsoring several of the symposia including those entitled “Advances in *in-situ* microanalysis of trace elements”, “Isotopic ratio measurement using microbeam methods: where do we stand and where are we going?”, “Nearly nano-compositional imaging at the sub-micrometer scale using ion beam mass spectrometry to study earth and planetary issues”, “Recent advances in electron microbeam induced X-ray microanalysis: instrumentation, hyperspectral data handling, and applications to geochemistry”, and “Recent developments in microbeam cathodoluminescence with applications to mineralogy”.

I look forward to seeing you at Microscopy and Microanalysis 2005, which will be held at the Hawaii Convention Center in Honolulu, HI from July 31<sup>st</sup> until August 4<sup>th</sup>. The Hawaii location will draw scientists from Pacific Rim nations. In addition to MAS, MSA and IMS, co-sponsors of this meeting include The Australian Microscopy and Microanalysis Society, the Australia Microbeam Analysis Society, Microscopy New Zealand, and the Committee of Asia-Pacific Societies for Microscopy. The Program Committee, headed by Bob Price, Paul Kotula, and John Henry Scott, has assembled a comprehensive scientific program. Please see the meeting website for complete details: <http://mm2005.microscopy.org>.

**ELECTIONS.** This past fall we held an election for a new President-elect, a Treasurer, and two Directors. We welcome Raynald Gauvin (President-elect), Harvey Freeman (Treasurer), Dan Kremser (Director), and Lou Germinario (Director) to MAS Council. MAS Council thanks Masashi Watanabe and Jerry Delaney for running for the Director positions. Both candidates had significant support from the MAS membership.

**SUSPENSION OF MAS/MSA MERGER DISCUSSIONS.** In recent years, the Microbeam Analysis Society (MAS) and the Microscopy Society of America (MSA) have considered merging. Last spring, a joint MAS/MSA Merger Committee was established to address the feasibility of creating a merged society. Through a series of productive conference calls, the committee identified several possible governing structures as well as possible names for a merged society. A survey of the MAS and MSA memberships regarding these possible governing structures and society names was conducted in August at the M&M 2004 meeting in Savannah and again in late October via the web. In February 2005, the MSA Council voted “*to suspend further discussion about a merger for the time being.*”

**MAS PLANS.** The MAS Council and the Long Range Planning Committee are considering new initiatives for MAS including expanding our Topical Conference Program and co-sponsoring technical meetings with other groups/societies. These initiatives will be conveyed to the membership via MicroNews and our website, [www.microbeamanalysis.org](http://www.microbeamanalysis.org).

I look forward to working with you in the coming year to preserve and carry forward the great traditions of MAS. Do not hesitate to contact me or other members of MAS Council to share ideas, offer suggestions, or voice concerns.

Sincerely,

Inga Musselman  
MAS President 2004-2005

## EDITOR'S NOTE

I Know, I Know, I Know!!! I'm Late, I'm Late, I'm Late!!!

My sincere apologies for being so late to publish this issue of MicroNews. It is now so late that I'm now calling it the Winter 2005 issue instead of the Fall 2004 issue as you may have noticed on the front page. I expect that the next issue will be in early summer with the Spring-Summer 2005 title, and I invite readers to send me contributions that may be of interest to the MAS membership. Since MicroNews is now web-based, the size restrictions we had for the printed version no longer apply. I do request, though, that the documents you send for publication are in WORD, preferably in Times New Roman size 10 font, with NO paragraph formatting changes within the document. And PLEASE, PLEASE do not send in double-columns. I can easily do that with my publishing program.

Thanks for your patience.

Respectfully,

Ryna Marinenko, MicroNews Editor

## MEMBERSHIP SERVICES

As we end 2004, I hope we can all look back and reflect upon our good fortunes. As a society, 2004 was a good year. The MAS and the field of microanalysis continue to play a major role in the world of microscopic examination. Our presence can be seen in the number of papers in the Microscopy and Microanalysis Journal and the number of sessions at the M&M meetings.

Unfortunately, membership numbers have been on the decline over the last several years, a trend that holds true for most professional societies. Although stabilized above 400, we keep hoping for an upswing. Despite this, our voice is strong, and we need it to be as loud as ever. Your MAS officers have your best interests in mind and want your opinions. So email any of the officers or me and I will pass it on. And please participate in any upcoming polls

Looking ahead, 2005 holds excitement with the continued emergence of better instrumentation and new techniques, the M&M 2005 in Hawaii this August, and the EMAS/IUMAS meeting in Florence, Italy this May. I hope that 2005 is a good year for you and for MAS.

Best Regards,

Lou Ross, Membership Services

## MAS TOUR SPEAKER PROGRAM

The MAS Affiliated Regional Societies contact list is on webpage <http://www.microbeamanalysis.org/masjh/as.php>. If you note any mistakes, please contact me. I expect a few societies have changed officers recently and may want a new MAS contact listed.

As usual, three new speakers were chosen by representatives of the various affiliated societies at the AReS meeting during M&M2004 in Savannah, GA this August. The new speakers, their affiliations, and the titles of their talks are as follows.

1. John Mackenzie of North Carolina State University will speak on "Digital Imaging Workflow in Microscopy and Microanalysis".
2. Joe Michael of Sandia National Laboratories asks (and answers?) the question "EBSD to materials: Is diffraction in the SEM actually useful?".
3. Dale Newbury of NIST will regale folks with not one but two talks! One is "Blunders in automatic qualitative energy dispersive x-ray microanalysis: an emerging crisis that threatens our credibility as an analytical community". The other talk is "Silicon Drift Detectors (SDD): x-ray spectrometry and spectrum imaging above 100,000 cps and what to do with all this data".

We are having a quiet tour speaker year since M&M2004 except for Dennis Ward, who has been the favored speaker of the Fall. At this time, MAS has sent Tour Speakers to 3 societies. Another tour is scheduled and may be completed before this issue of MicroNews comes out.

The societies visited, the speakers, and the dates are:

Society	Speaker	Date
Metro	Vicenzi	Nov. 10, 2004
M <sup>3</sup> S – MdWst	Ward	Nov. 19, 2004
MSNO	Ward	Oct. 26, 2004
CDMMS	Ward	Dec. 15, 2004

Remember, MAS pays for the visit by our tour speakers (as long as you go through me) so you get a speaker for your program (once a year) at no cost to your society. But you have to initiate the request or nothing happens.

Respectfully Submitted,

Paul F. Hlava

## MICROSCOPY & MICROANALYSIS 2005

Aloha,

Microscopy and Microanalysis 2005 promises to be a dynamic meeting that will prove that good science transcends national boundaries. In addition to the usual sponsoring societies, The Microscopy Society of America (MSA) and the Microbeam Analysis Society (MAS), the International Metallographic Society (IMS) will again be a co-sponsoring societies of the meeting. We are also fortunate that with the prime location of the meeting in Hawaii, many of the Pacific Rim Microscopy Societies will be joining us. These include the Committee of Asia Pacific Societies for Microscopy (CAPSM), the Australian Microscopy Society (AMS), the Australian Microbeam Analysis Society (AMAS) and Microscopy New Zealand (MNZ). This truly international representation will provide attendees the opportunity to observe how microscopy and microanalysis are advancing multiple fields of science in much of the world. The M&M 2005 Executive Program Committee, comprised of co-chairs from each of the participating societies, has put together a comprehensive scientific program that will address a variety of cutting-edge topics in the applications of microscopy in the biological and physical sciences and in the development of new instrumentation and techniques.

The program will begin on Saturday, July 30, with a pre-meeting congress entitled "Biophotonics and Live Cell Imaging". The pre-meeting congress will continue on Sunday along with a number of topical short courses addressing digital imaging, image analysis and specimen preparation. Examples of biological topics that will be addressed during the week of the meeting include Tracking and Tagging of Stem Cells, Use of Green and Other Fluorescent Proteins, Cell Communication and Pathology, and the use of microscopy in the study of Viruses, Infectious Diseases and Their Associated Pathologies. Topical symposia in the physical sciences will examine the role of microscopy and microanalysis in the study of Extraterrestrial Materials, Catalysts, and Metallographic Techniques, Applications and Failure Analysis. In joint sessions for biological and materials scientists several symposia will address the development and imaging of a variety of Nanoparticles, Biopolymers and Biomembranes. Instrumentation and Techniques Development sessions will also address a number of state-of-the-art instruments and techniques including Aberration Corrected Electron Microscopy, ESEM, FIB, Advanced Detectors, Spectral Imaging Techniques, FRET, and Tomography. Of special interest will be the Presidential Symposium, "The Golden Anniversary of Imaging Atoms" that will review the past 50 years of imaging at the atomic level and provide keynote addresses concerning the present and future technology

for high resolution imaging of the atom. Supplementing the topical sessions will be a number of Tutorials and Ask-the-Experts sessions that will provide the opportunity to learn the basics behind many popular techniques and, as always, the commercial exhibits will provide the unique opportunity for hands-on learning with the largest variety of state-of-the-art instrumentation found at any microscopy meeting worldwide.

The poster sessions will again provide the best venue for discussions and exchange of scientific information, and to facilitate communication, we have made arrangements to have appropriate kegs of beverages available on the exhibit floor during the 3:30-5PM afternoon poster sessions. To promote this interaction, posters should be put up Monday morning and not removed until after the Wednesday afternoon Poster Session ends. We encourage you to consider submitting posters, and especially look forward to student participation through this mechanism. Please review the specific guidelines for the poster honors and prizes, such as the MSA Traveling Poster Exhibit and the Diatome Award that includes a first prize of an all expense paid trip for two to Switzerland and second and third prizes of Swiss watches.

It is the sincere hope of the Executive Program Committee that the Scientific Program that has been developed will be of interest to all that comprise the scientific community of the Pacific Rim Countries. We hope to meet and interact with as many of you as possible in Hawaii.

Bob Price, Program Chair  
Paul Kotula, Program Vice Chair  
John Henry Scott, MAS Program Co-Chair  
George Vander Voort and Elena Manilova. IMS Program Co-Chairs  
Mary Ng Mah Lee, CAPSM Program Co-Chair  
Kath Smith, AMMS Program Co-Chair  
Brendan Griffin, AMAS Program Co-Chair

— John Henry Scott

Update: The Program Production Meeting (PPM) for M&M 2005 was held March 11-13, 2005, and our August meeting in Honolulu promises to reach new heights of technical excellence. A record-breaking 1100 abstracts were accepted for presentation at the meeting (up sharply from the last few years), and an impressive list of over 40 countries will be represented at the meeting. As expected, the Pacific island venue has attracted many new faces from Europe, Asia, the Pacific Rim and around the world. I'm looking forward to an exciting exchange of new ideas and new science in August.

John Henry

## MAS and the 15<sup>th</sup> Goldschmidt Conference

MAS will be a Sponsoring Society for the 15<sup>th</sup> annual Goldschmidt Conference in Moscow Idaho, **20 - 24 May 2005**. The Goldschmidt Conference is the premier annual meeting in geochemistry and mineralogy. This meeting in Idaho will cover the full range of geochemistry from cosmochemistry to the origin of life. It will be special because 2005 is the 50th Anniversary of the Geochemical Society. The conference also takes place during the bicentennial of the Lewis and Clark expedition - the Corps of Discovery. The 2005 conference will feature several microanalysis related sessions. Ed Vicenzi, MAS Director, is a co-organizer of the microanalysis portion of the program and Greg Meeker is the MAS representative to Goldschmidt 2005. Additional information will be passed on as it becomes available. The web site for Goldschmidt 2005 is <http://www.the-conference.com/2005/gold2005/index.php>.

## MEETINGS & COURSES

### Meetings

**Materials Research Society Spring Meeting**, Mar. 28 – Apr. 4, 2005, San Francisco, CA  
Contact: [www.mrs.org](http://www.mrs.org)

**SCANNING 2005**, Apr. 5-7, 2005, Monterey, CA,  
Contact: [scanning@fams.org](mailto:scanning@fams.org) [www.scanning.org](http://www.scanning.org)

**15<sup>th</sup> Annual Goldschmidt Conference**, May 20 – 24, 2005, Moscow Idaho  
Contact: <http://www.the-conference.com/2005/gold2005/index.php>

**IUMAS 2005, Third Meeting of the International Union of Microbeam Analysis Societies**, May 22-26, 2005, Florence, Italy  
Contact: [luc.vantdack@ua.ac.be](mailto:luc.vantdack@ua.ac.be), or <http://www.emas.ac.uk/emas2005>

**7MCM, 7th Multinational Congress on Microscopy**, June 26-30, 2005, Portoroz, Slovenia. Contact: <http://mcm2005.ijs.si>

**MICROSCOPY & MICROANALYSIS 2005**, Aug. 1-5, 2005, Honolulu, Hawaii  
Contact: Mary Beth Rebedeau, Chicago: Fax (708)361-6166, email: [MSA@tradeshownet.com](mailto:MSA@tradeshownet.com), or web: [msa.microscopy.com](http://msa.microscopy.com)

**American Chemical Society Fall Meeting**, Aug. 28-Sept. 1, 2005, Washington, DC  
Contact: [www.chemistry.org](http://www.chemistry.org)

**SIMS XV: 15th International Conference on Secondary Ion Mass Spectrometry**, Sept. 12-16, 2005, Manchester, UK  
Contact: David Sykes [d.e.sykes@lsaltd.co.uk](mailto:d.e.sykes@lsaltd.co.uk)  
[www.meeting.co.uk/confercare/simsxv/](http://www.meeting.co.uk/confercare/simsxv/)

**FEMMS 2005: Frontiers in Electron Microscopy in Materials Science**, Sept. 25-30, 2005, Kasteel Vaalsbroek The Netherlands  
Contact: [femms2005@fz-juelich.de](mailto:femms2005@fz-juelich.de) [www.er-c.org/femms2005](http://www.er-c.org/femms2005)

**AVS 52nd International Symposium and Exhibition**, Oct. – Nov. 4, 2005, Boston, MA.  
Contact: [www.avs.org](http://www.avs.org)

**8th Inter-American Congress of Electron Microscopy**, Sept. 25-30, 2005, Havana, Cuba  
Contact: CIASEM: <http://ciasem2005.cigb.edu.cu>

**FACSS:2005**, Oct. 9-13, 2005, Quebec, CA  
Contact: [www.facss.org](http://www.facss.org)

**Eastern Analytical Symposium**, Nov. 14-17, 2005, Garden State Convention Center, Somerset NJ.  
Contact: [www.eas.org](http://www.eas.org)

**Materials Research Society Fall Meeting, Boston**, Nov. 28-Dec. 2, 2005, Boston, MA  
Contact: [info@mrs.org](mailto:info@mrs.org) [www.mrs.org](http://www.mrs.org)

**MICROSCOPY & MICROANALYSIS 2006**, Aug. 6-10, 2006, Chicago, IL  
Contact: Mary Beth Rebedeau, Chicago: Fax (708)361-6166, email: [MSA@tradeshownet.com](mailto:MSA@tradeshownet.com), or web: [msa.microscopy.com](http://msa.microscopy.com)

**ICEM XVI**, Sept. 3-8, 2006, XVI Internat. Cong. on Elect. Microsc., Sapporo, Japan  
Contact: email: [xvi\\_icem@nims.go.jp](mailto:xvi_icem@nims.go.jp) or web: <http://edpex104.bcasj.or.jp/jsm/eng/icem/icemxvi/html>

**MICROSCOPY & MICROANALYSIS 2007**, Aug. 5-9, 2007, Ft. Lauderdale, FL  
Contact: Mary Beth Rebedeau, Chicago: Fax (708)361-6166, email: [MSA@tradeshownet.com](mailto:MSA@tradeshownet.com), or web: [msa.microscopy.com](http://msa.microscopy.com)

**MICROSCOPY & MICROANALYSIS 2008**, Aug. 3-7, 2008, Albuquerque, NM  
Contact: Mary Beth Rebedeau, Chicago: Fax (708)361-6166, email: [MSA@tradeshownet.com](mailto:MSA@tradeshownet.com), or web: [msa.microscopy.com](http://msa.microscopy.com)

## Courses

**TEM Specimen Preparation Training School**, Apr. 18-20, 2005, Gatan Inc., Pleasanton, CA  
Contact: [www.gatan.com/training/index.html](http://www.gatan.com/training/index.html)

**EM Specimen Preparation Training School**, Apr. 21-22, 2005, Gatan Inc., Pleasanton, CA  
Contact: [www.gatan.com/training/index.html](http://www.gatan.com/training/index.html)

**Advanced Techniques in SEM and Microanalysis for Materials Characterization Course**, May 9-13, 2005, McGill University, Montreal, CA  
Contact: [raynald.gauvin@mcgill.ca](mailto:raynald.gauvin@mcgill.ca) [WWW.McGill.ca/MinMet/ebeamworkshop](http://WWW.McGill.ca/MinMet/ebeamworkshop)

**Lehigh Univ. Microscopy Schools**, June 5-17, 2003, Bethlehem, PA  
Contact: Sharon Coe: [slc6@lehigh.edu](mailto:slc6@lehigh.edu) or [www.lehigh.edu/microscopy](http://www.lehigh.edu/microscopy)

**SEM and X-ray Microanalysis**, June 6-10, 2005  
**Intro. to SEM and EDS**, June 5, 2005  
**Problem Solving with Electron Microscopy and X-ray Microanalysis.**, June 16-20, 2005  
**Quantitative X-ray Microanalysis of Bulk Specimens and Particles**, June 13-17, 2005

**AFM and Other Scanned Probe Microscopies, Intensive Short Course**, June 13-17, 2005, North Carolina State University, Raleigh, NC, USA  
Contact: [Dale.Batchelor@ncsu.edu](mailto:Dale.Batchelor@ncsu.edu) [www.ncsu.edu/aif/afmcourse](http://www.ncsu.edu/aif/afmcourse)

**Practical Digital Imaging Course**, June 13-17, 2005, North Carolina State University, Raleigh, NC, USA  
Contact: [Valerie\\_Knowlton@ncsu.edu](mailto:Valerie_Knowlton@ncsu.edu), or [www.ncsu.edu/cem](http://www.ncsu.edu/cem)

## Affiliated Societies' Meetings

**AREMS**, visit web site for information  
<http://www.uvawise.edu/arems/index.html>

**CSMMS**,  
Contact: Randy Tindall, (573)882-8304 or [tindallr@missouri.edu](mailto:tindallr@missouri.edu), or Lou Ross (573)882-4777 or [rosslm@missouri.edu](mailto:rosslm@missouri.edu)

**MMMS**  
3rd Annual MinnTS (Minnesota Technical Societies) Meeting, March 17th, 2005, Medtronic, Inc.

A consortium of eight local technical societies  
Topic: Biomaterials, two speakers, not confirmed, social and dinner

Spring Symposium, May 6th, 2005, "Cutting Edge Technologies in Microscopy"

Current speakers:

Tom Isabell, JEOL, topic related to aberration corrected electron microscopes

Paul Voyles, University of Wisconsin - topic related to STEM of single atoms.

Duane Kreuger - University of St. Thomas, Optical Microscopy of Polymers, surface profile characterization, confocal laser scanning microscopy, ESEM, and digital image analysis.

visit web site for more information: <http://www.msa.microscopy.com/MSALAS/MMMS/MMMSHomePage.html>

**MMS**, visit web site for information  
<http://www.MNmicroscopy.org>

**MSNO**, visit web site for information  
<http://www.msneo.org>  
Spring Meeting, April 5, 2005  
Contact: Judy Fulton, (330)344-6394, [jfulton@agmc.org](mailto:jfulton@agmc.org)

#### **NCSEMMA**

Contact: Peter Ingram or Ann LeFurgey; email: [p.ingram@cellbio.duke.edu](mailto:p.ingram@cellbio.duke.edu) or [a.lefurgey@cellbio.duke.edu](mailto:a.lefurgey@cellbio.duke.edu)

#### **NESM**

Contact: Rick Rogers, Harvard School of Public Health, Boston, MA, [rogers@bioimage.harvard.edu](mailto:rogers@bioimage.harvard.edu) Tony Garratt-Reed, MIT, Cambridge, MA, [tonygr@mit.edu](mailto:tonygr@mit.edu)

#### **SEMS**

Contact: John Shields, email: [jshields@cb.uga.edu](mailto:jshields@cb.uga.edu) or web: <http://www.biotech.ufl.edu/sems>

## **MAS LISTSERVER**

The Microbeam Analysis Society listserver is operational with low volume and guaranteed spam free. The MAS listserver is a moderated list, which means that every message is approved by a human checker before being passed on to subscribers. This is one way of controlling unsuitable, or unwanted, messages, however it does cause a delay between the time of posting a message and the time it is sent to the readership.

The purpose of the MAS listserver is to provide a forum for the dissemination of Society business and a discussion forum for issues related to microanalysis. This includes but is not limited to electron probe microanalysis, standards, correction procedures, etc. The listserver will not accept attachments, advertisements, resumes, spam, chain letters, political statements, flame wars, anonymous submissions, and others at the discretion of the moderator/checker. The checker monitoring the inputs is a MAS member in good standing that has volunteered to take on this responsibility. There is not any digest options nor is there any searchable archive.

To participate you first must SUBSCRIBE:

- (1) Send a text only (not html) email to [majordomo@microprobe.org](mailto:majordomo@microprobe.org) in the body of the message: subscribe maslistserver
- (2) There will be a delay while your subscription is approved.
- (3) Once you are subscribed to SEND A MESSAGE to all subscribers:

Send email to [maslistserver@microprobe.org](mailto:maslistserver@microprobe.org) the label `<maslistserver>` will automatically be appended to the subject line of every message to make filtering messages easier. You will only be allowed to send a message from the email address you subscribed as. There will be a delay before your message goes out to subscribers while it is approved.

If you have any questions or problems with the process please let us know at [webmaster@microprobe.org](mailto:webmaster@microprobe.org).

Scott Wight

MICROBEAM ANALYSIS SOCIETY, INC.

BUDGET FOR 2005

INCOME & EXPENSE

Income:

Member Dues (Budget: 343 Reg., 20 Stu., 11 Emer.)	\$ 8730
Sustaining Member Dues (Budget: 21)	7875
National Meeting (M&M '04)	15442
M&M Journal (Budget: 114 N.A. @\$15, 17 For. @\$38)	2356
Schwab Dividends & Interest	6570
Checking Acct. Interest	20
Wiley Royalty to Fiori Fund	115
Contributions to Fiori and Potter Funds	2400
Corporate Paper Award Reimbursements	1500
Total Income	<u>\$45008</u>

Expense:

(10) Society Management (Accounting, Ins., Fees, Misc.)	\$ 9448
(11) Membership Office	1500
(15) Executive Council (Travel, Meetings, Accommodations)	12000
(17) Foreign Society (MAS, EMAS) reciprocity	1000
(20) MicroNews	0
(22) WWW Maintenance	740
(30) M&M Journal Subscr. (114 N.A. @\$15, 17 For. @\$30)	2220
(40) Tour Speaker Fiori Fund	900
(42) Potter Fund Student Support (M&M '05)	600
(45) General Tour Speaker Program	2000
(50) Topical Conference (NIST)	0
(52) MAS Conference Sponsorship ('05- Goldschmidt)	3500
(55) Topical Conference @ M&M '05 (?)	0
(60) MAS Functions @ M&M '05	5000
(70) MAS Directory	0
(80) Student Support @ M&M '05	4600
(85) Paper Awards (Corp. sponsored)	1500
Total Expense	<u>\$ 45008</u>

Approved by MAS Council, February 6, 2005

Submitted by Harvey A. Freeman, Treasurer  
 hfreeman@capecod.net  
 February 7, 2005

## EXECUTIVE COUNCIL

### President

#### Inga Holl Musselman

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#### Raynald Gauvin

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### Past President

#### Paul Carpenter

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#### Valerie Woodward

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### John Henry Scott (2004-2006)

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### Daniel T. Kremser (2005-2007)

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## HONORARY MEMBERS

L. S. Birks (Deceased)  
I. B. Borovskii (Deceased)  
Raimond Castaing (Deceased)  
Arthur A. Chodos  
V. E. Cosslett (Deceased)  
Peter Duncumb  
Charles E. Fiori (Deceased)  
Raymond Fitzgerald  
Theodore Hall  
K. F. J. Heinrich

James Hillier  
Joseph I. Goldstein  
L. L. Marton (Deceased)  
Robert E. Ogilvie  
Jean Philibert  
Stephen J. B. Reed  
Ryuichi Shimizu  
Gunji Shinoda (Deceased)  
Georges Slodzian  
Oliver C. Wells

## ADDITIONAL REPRESENTATIVES

### **Accountant, Dues and Mailing List**

#### **William S. Thompson**

c/o Microbeam Analysis Society  
P.O. Box 502; Fairport, NY 14450-0502  
(716)586-4985; thompso@eznet.net

### **Affiliated Regional Societies**

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