

MicroNews

Spring 2000 Newsletter of the Microbeam Analysis Society

http://www.microanalysis.org/

PRESIDENT'S MESSAGE

Dear Members.

The Microbeam Analysis Society continues to be a vibrant and active professional organization. We have been fortunate to receive help in this endeavor from dedicated MAS Council members, several of whom are retiring. We are lucky that Ryna Marinenko, who was Past-President last year, will continue to work with the Society as *MicroNews* Editor. Retiring Directors are Cathy Johnson and Don Parker. Thanks for your contributions!

Congratulations to our new MAS Council Members. Our President-Elect is Rich Linton of the University of North Carolina. Edgar Etz will continue for another term as MAS Secretary. The two new Directors are Valerie Woodward of BF Goodrich and Richard Leapman of the National Institutes of Health.

Our members continue to be serviced by our stalwart appointed officers. Lou Ross works hard to see that every microanalyst in the country is aware of MAS membership opportunities. Those companies wishing to learn of Sustaining Member benefits should contact Cathy Johnson. All MAS Affiliated Regional Societies have the opportunity to take advantage of our Tour Speakers by contacting Paul Hlava. John Mansfield and Paul Carpenter continue to provide MAS with web and internet services. Finally, as I mentioned above, Ryna Marinenko continues to supply MAS members with this publication, which provides upto-date information on society activities.

This is an extraordinary year for the Microbeam Analysis Society. Not only do we have

our annual meeting at the Microscopy and Microanalysis 2000 meeting in Philadelphia, but many of us will be also travelling to the IUMAS meeting in Kona, Hawaii, sponsored by the International Union of Microbeam Analysis Societies (IUMAS), of which MAS is a charter member.

Philadelphia is a great American city that has literally remade itself in the last decade. Philly has every big city amenity from a famous art museum to a spectacular zoo. The M&M 2000 meeting will be the world's largest and most significant annual event with microanalysis (and microscopy) as the primary focus. Scott Walck is the MAS representative on the Program Committee and has worked hard to highlight microanalysis. For example, entire symposia will be held on:

Quantitative X-ray Microanalysis Electron Backscatter Diffraction in the SEM

Microprobe Age-Dating of Minerals Electron Energy Loss Spectrometry Microanalysis of Pharmaceuticals New X-ray Detectors

Chemical Mapping through Spectrum Imaging

X-ray Microanalysis at Low Voltages X-ray Microanalysis of Rough Surfaces Problem Elements and Spectrometry Problems

This is one of the strongest lists of microanalysis program activities that we ever have had in the M&M meeting series. Remember to

stop by the MAS booth to get your ticket to the renowned MAS social.

Finally, at the Philadelphia meeting I will be presenting this year's Presidential Awards during the MAS Presidential Happenings on Tuesday (August 15, 2000). Raymond Egerton of Portland State University in Oregon will receive the Presidential Science Award for his extensive work on electron energy loss spectrometry — he wrote the book! Ryna Marinenko of NIST will receive the Presidential Service Award for her multifaceted efforts on behalf of the society. The Heinrich Award, for an outstanding scientist under the age of 40, will be presented to Harald Ade of North Carolina State University.

Please stop by the MAS booth at the Philadelphia meeting, August 13-17, 2000. Perhaps I'll see you in Kona, as well.

Charles Lyman, MAS President

EDITOR'S NOTE

I want to thank the contributors to MicroNews, not just for this issue but for all past issues as well. Without your superb cooperation and willingness to write articles, I would not be able to put this publication together. It is fun working with you all. Also, lots of thanks to John Henry Scott of NIST who meticulously proofreads MN's.

The most difficult contributors to contact are the Local Affiliated Societies. Please make sure that the current email of your society contact is sent to Paul Hlava. For this issue I heard from several LAS's about upcoming meetings in the spring. Note that some are in very nice venues. Thank you.

Ryna Marinenko, MicroNews Editor

MEMBERSHIP SERVICES

As of January the Microbeam Analysis Society stands at 610 members. Thank you for renewing your membership. Unfortuantely this total includes 247 members who have have not renewed for 2000. A second notice will be sent out at the end of March. It is the policy of our society to remove members who do not stay current and therefore they must renew their membership by the end of April.

One of the advantages of belonging to the MAS is the networking resource it provides. With this in mind, Membership Services will issue a directory of members around the end of May. This directory will be very similar in content to the one issued in 1998 but with a few changes. The major change will be in the format, 8 1/2 by 11, along with larger, readable print.

I remind you to contact me with suggestions or comments to better serve you, our valued members.

Lou Ross, Membership Services

MEETINGS AND SHORT COURSES

Meetings

MICRO 2000 and UK Scanning Probe Microscopy 2000, Apr. 11-13, 2000

London, UK

Contact: The Administrator, Royal Micro. Soc., 37/38 St Clements, Oxford, OX4 1AJ, UK. Tel:+44 (0)1865 248768, Fax:+44 (0)1865 791237, email:info@rms.org.uk

SCANNING 2000 Conference and Exhibition, May 9-12, 2000, San Antonio,

Contact: Tony Bourgholtzer: Fax (201)818 0086, email: scanning@fams.org

EMAS 2000 Regional Workshop: Electron Probe Microanalysis Today - Practical Aspects, May 17-20,

2000, Trest, Czech Republic

Contact: Secretariat, Fax: +42-0-2-688 60 95, email: masek@mbox.troja.mff.cuni.cz, or www.mff.cuni.cz/eng/news/emas2000.htm

AVS Topical Meeting: Surface Analysis

2000, June 7-9, 2000, Penn State Univ,

University Park, PA

Contact: Jeffrey Shallenberger: Fax: (814)863-8561 email: jxs124@psu.edu, internet: http://www.outreach.psu.edu/C&I/SurfaceAnalysis2000

7th Asia-Pacific Conference on Electron Microscopy,

June 26-30, 2000, Singapore

Contact: Conf Secretariat: Fax +65 776 4971, email: micngml@nus.edu.sg, or www.med.nus.edu.sg/micsoc/7apem

IUMAS 2000, July 8-15, 2000, Kona, Hawaii. Contact:David B. Williams, (610)758-4224 FAX: (610)758-4244; Email: DBW1@lehigh.edu

EUREM 2000: 12th European Congress on Electron

Microscopy, July 9-14, 2000, Brno, Czech Republic Contact: Fax +42 0 541514337, email: eurem200@isibrno.cz, Internet: www.eurem2000.isibrno.cz

MICROSCOPY & MICROANALYSIS 2000, Aug. 13-

17, 2000, Philadelphia, PA

Contact: Mary Rebedeau, Chicago. Fax (708) 361-6166, email: msa@tradeshownet.com, Internet: www.msa.microscopy.com

Eastern Analytical Symposium, Oct. 29- Nov. 3, 2000,

Atlantic City, NJ, USA

Contact: EAS hotline: Tel: (302)738-6218 email: easinfo@aol.com, or www.eas.org

MICROSCOPY & MICROANALYSIS 2001, Aug. 5-9, 2001, Long Beach, CA

EMAS 2001 - 7th European Workshop on Modern Developments and Applications in Microbeam

Analysis, May 6-10, 2001, Tampere, Finland Contact: Luc Van"t dack, Secretary, Univ. Antwerp: Fax: +32 3 820 23 76 and email: vantdack@uia.ua.ac.be or web site: http://www.emas.ac.uk

MICROSCOPY & MICROANALYSIS 2002, Quebec City, Quebec, Canada

ICEM 2002 - 15th International Congress on Electron Microscopy, Sept. 1-6, 2002, Durban, South Africa Contact: Robin Cross, Fax +27 46 622 4377, email: eurc@giraffe.ru.ac.za, Internet: www.ru.ac.za/affiliates/emu/icem2002.htm

Short Courses

Intro to XPS, Scanning Auger Microscopy and SIMS,

Guildford, UK, Apr. 3-7, 2000, U. Surrey Contact: Fax: +44 01483 876291, email:

D.Saunders@surrey.ac.uk or www.surrey.ac.uk/MME

Advanced FTIR Microscopy Course, Apr. 10-14, 2000,

McCrone Research Inst., Chicago, IL

Contact: Nancy Daerr, Fax: (312)842-7100, email:

ndaerr@mcri.org, or www.mcri.org

Analytical and Quantitative Light

Microscopy, May 4-12, 2000, MBL,

Woods Hole, MA

Contact: Carol Hamel: Tel: (508)289-7401, email:

admissions@mbl.edu

Quantitative Image Analysis, May 11-17,

2000, NCSU, Raleigh, NC

Contact: Fax (919)515-7614, email: cpe@ncsu.edu,

internet: http://www2.ncsu.edu/cpe

PASEM 2000 Practical Aspects Series of

Short Courses. May 22-June 2, 2000, SEM:

22-26; Advanced SEM: 30-2/6; X-ray Microanalysis: 30-2/6, Univ. Maryland,

College Park, MD

Contact: Tim Maugel: Fax (301)314-9358, email: tm11@umail.umd.edu, internet:

http://www.life.umd.edu/pasem

Lehigh Microscopy School Course, June 11-23, 2000,

Bethlehem, PA, USA:

SEM and X-ray Microanalysis (12-16)

Intro to SEM and EDS (11)

Advanced SEM (19-23)

Quantitative X-ray Microanalysis (19-23)

Analytical EM (19-22)

Atomic Force Microscopy (20-23)

Microdiffraction (19-23);

Cryo SEM (21-23)

Contact: Sharon Coe, Fax: 1 (610)758-4244, or www.lehigh.edu/~inmatsci/Microscourses

Digital and Video Photomicrography Course, June 12-

16, 2000, McCrone Research Institute, Chicago, IL Contact: Nancy Daerr, Fax: (312)842-7100, email: ndaerr@mcri.org, internet: http://www.mcri.org

Scanning Electron Microscopy Course, June 19-23,

2000, McCrone Research Institute, Chicago, IL Contact: Nancy Daerr, Fax: (312)842-7100, email: ndaerr@mcri.org,internet: http://www.mcri.org

5th Ann Intl 11-Day Short Course on 3D Microscopy

of Living Cells, June 19-29, 2000, Vancouver, Canada Contact: Dr. Elaine Humphrey, U. British Columbia, or www.cs.ubc.ca/spider/ladic/course/bulletin.html

INTER/MICRO 2000 Conference and Exhibition,

June 26-29, 2000, McCrone Research Institute, Chicago, USA

Contact: Nancy Daerr, Fax: (312)842-7100, email: ndaerr@mcri.org, internet: http://www.mcri.org

4th Post-Course Workshop on 3D Imaging Processing.

July 1-2, 2000, Vancouver, Canada

Contact: Dr. Elaine Humphrey, U. British Columbia, or www.cs.ubc.ca/spider/ladic/course/bulletin.html

Fluorescence Microscopy Course, July 10-14, 2000,

McCrone Research Institute, Chicago, USA

Contact: Nancy Daerr, Fax: (312)842-7100, email: ndaerr@mcri.org, internet: http://www.mcri.org

Optical Microscopy and Imaging in the

Biomedical Sciences, Oct. 11-19, 2000,

MBL, Woods Hole, MA, USA

Contact: Carol Hamel: Tel: (508)289-7401, email: admissions@mbl.edu, internet:

http://www.courses.mbl.edu

Affiliated Societies Meetings

AREMS, Spring Conf., The Velvet Cloak, Raleigh, NC, Mar. 30-31, 2000

Contact: Ken Culbreth, kculbreth@mail.jus.state.nc.us, or http://www.wise.virginia.edu/cvc/arems/arems.html

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

MSNO, Winery at Wolf Creek, Norton, OH, May 16, 2000, 5-8:30 pm.

Contact: Valerie Woodward (216)447-5408 or email: woodward@brk.bfg.com, or Mike Mallamaci (330)796-7436 or email: mallamaci@goodyear.com

MSORV, Spring Mtg., May 19, 2000, Proctor & Gamble, 8-4 pm

Contact: Bill Ragland, U. Dayton Res. Inst., 300 College

Park Dr., Dayton, OH 45469 email: william.ragland@afrl.af.mil

SEMS and AIMS, Quality Inn Beachside, Gulf Shores, AL, May 17-19, 2000

Contact: Jim Sheetz, (205)934-5341 or email:

isheetz@uab.edu

SEMS web site: http://www.biotech.ufl.edu/sems/

Society Speaker

Date **Finished**

CSM&MS Anderson

Oct. 22, 1999 MAMAS

Nov.4, 1999

NCSMMA Anderson

Oct 29-31, 1999

SSTP Platek
Sept. 24, 1999 (1999 choice)
SSTP Anderson

Jan. 24, 2000 (2000 choice)

WestMAS Dravid

Nov. 12, 1999

Scheduled

Metro Dravid

Mar. 29, 2000

MSNO Anderson

May 16, 2000

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.

Walck

Respectfully Submitted,

Paul F. Hlava

MAS TOUR SPEAKER PROGRAM

I know that many societies still do not have the correct contact information published on the MAS Affiliated Societies Contact Page. Check yours out and if it is incorrect, get the right information to me.

I have sent reminders to my contacts in the Affiliated Societies that we have speakers and they will travel to your group, at MAS expense, if you request them. We had a good response in the fall but the response for spring visits has been slow. Take a look at the web site, pick a speaker, set up a meeting, and call me to arrange the visit.

By the time you get this issue of MICRONEWS, MAS will have sent Tour Speakers to six societies and we have two more scheduled for the spring. (Hlava's Feb. 10th talk to the AIMS group was changed to a talk on "The Materials Known as Gemstones" and so is not listed as a sanctioned MAS talk.) The societies visited, the speakers, and the dates are:

IUMAS II Kailua-Kona July 9-14, 2000 TECHNICAL PROGRAM

The second conference of the International Union of Microbeam Analysis Societies will have 240 papers presented in fifteen symposia over five days. The program committee has put together a group of outstanding technical symposia. A listing of the symposia and the number of papers (in parentheses) in each symposium are given below.

Plenary Session-International Microbeam Analysis (4)

Session 1 30 Years of Optical Spectroscopy (56)

Session 2 Advances in X-ray Instrumentation (8)

Session 3 Analytical Electron Microscopy–X-rays (20)

Session 4 Biological Microanalysis (7)

Session 5 Electron Diffraction (9)

Session 6 Electron Energy-Loss Spectroscopy (16)

Session 7 LV Scanning Electron Microscopy (13)

Session 8 Monte-Carlo Simulations (10)

Session 9 Particle Microanalysis (9)

Session 10 Quantitative Electron Spectroscopy/Surface Profiling (7)

Session 11 Secondary Ion Mass Spectrometry (19)

Session 12 SPM/Nanomechanics (12)

Session 13 Standardization for Microbeam Analysis (9)

Session 14 Quantitative X-ray Microanalysis (27)

Session 15 General Applications Session (14)

The meeting will start Sunday evening, July 9, with a welcoming reception at the King Kamehameha Hotel. The symposia will start Monday morning at 8:30 a.m. with one of two plenary sessions. Four parallel sessions will continue throughout the week. Wednesday afternoon will be free for snorkeling, golf, or other Hawaiian activities. There will be a second plenary session on Thursday morning and the meeting will close on Friday, July 14 at noon. Opportunities for further family vacations abound and there are many great travel/condo details out there on the web or via your travel agent.

This promises to be a fine technical and social gathering in the long MAS tradition of Vail, Lehigh, Kona, Asheville, Loyola Marymount, and Breckenridge. So come and enjoy it. You can find the necessary hotel and conference registration forms on the web at:

http://www.microanalysis.org/iumas2000/

Click on the fish icon to download the forms. Send the conference registration to Gordon Cleaver, Local Arrangements Chair and the hotel reservation form to the King Kamehameha at the addresses indicated on the forms

David B.Williams, Program Co-Chair

IUMAS II LOCAL ARRANGEMENTS

IUMAS II will meet at the King Kamehameha Hotel at KONA-Kailua on the "Big Island in Hawaii" Sunday, July 9th to Friday, July 15th. A block of 250 rooms reserved for the meeting is available to our attendees at a rate of \$95 plus applicable taxes. The hotel management reminds us that the \$95 rate can be extended to before or after the meeting for registrants, however, May 25th is the drop-dead date after which the rooms will be released for general registration. They expect a sell-out this July so please get your registrations in early.

Our meeting arrangements for Hawaii are progressing as planned. An outstanding list of invited speakers has already confirmed attendance and guarantees a successful meeting. Pre-registration for IUMAS II is \$300.

On site registration will be \$375. Registered Guests (spouses and significant others) pay a \$100 fee and are entitled to the three socials and access to the exhibits area. Students receive a copy of the proceedings included in the \$100 fee. Registration forms for individuals can be pulled off the web at www.microanalysis.org/iumas2000/.

The general meeting area will be the same as in 1987. The large ballroom will provide a meeting area for the plenary session and will break down conveniently into three or four separate session meeting areas. The hallway connecting the ballroom entrances will serve as exhibit space with the back section of the ballroom supplementing if needed. We plan to provide three separate events for attendees. They include a 6 PM Sunday evening welcoming social, a 5:30 PM Monday evening Luau and a Tuesday evening dinner cruise to take place at 5:15 PM. If the number of attendees exceed the capacity of the 5:15 PM dinner cruise vessel, an 8 PM sailing will be scheduled as well. All socials will be held at or originate on the King Kamehameha grounds.

Exhibitor information was mailed out with contract solicitations in January to MAS sustaining members and others that expressed interest in participating in the meeting. To date we have about 1/3 of the available booth spaces still available.

KEAHOLE INTERNATIONAL AIRPORT serving Kona-Kailua was renamed this year to KONA INTERNATIONAL AIRPORT. Please confirm the name change with your travel agent. Most of the flights from the US mainland and overseas arrive at KONA AIRPORT mid afternoon, in time on Sunday to register at the hotel and for the conference prior to the Sunday welcoming social.

Speaking of travel agents, let us remind our friends that the official agent for the meeting is "The Traveling Agent" Betsy Jordan, owner. Betsy can be reached by phone (800) 235-8728, or e-mail, bjordan@traveling-agent.com. Betsy has managed to get control of a few lower cost rooms near the conference hotel for student attendees or others with limited support. She is arranging family vacation plans for some of our group who has decided to extend their visit to Hawaii beyond the conference dates. Betsy can also provide information and arrangements for special individual family activities such as sightseeing by sea cruises, helicopter and airplane tours. The list of possible adventures is too long to fully describe.

The King Kamehameha is central to many local activities and is within walking distance of many local theme and strip shopping malls, convenient fast food places and major retail outlets. Fine dining is available at many restaurants at moderate to higher cost but reasonable cost meals are available along Alii Drive (oceanfront) at numerous locations.

The temperature in the state of Hawaii in the summer is always in the 80's and the relative humidity is usually high, although Kona is on the dry side of the island. Casual dress is the custom for conference attendance as well as most other activities. If you are planning to tour one of the

locations at higher altitude you will need appropriate clothing for cooler climes. Greg Meeker's first volcano tour was quickly over subscribed and he has considered planning a second one. Please check with Greg for availability and requirements. Greg can be reached at USGS, Denver (gmeeker@usgsprobe.cr.usgs.gov).

Gorgon Cleaver Local Arrangements Committee Chairman

M&M 2000 MEETING

If you are planning to attend the Microscopy and Microanalysis 2000 meeting, just a reminder - make your travel plans for Philadelphia, not Hawaii! The official MAS meeting is there. This will be a joint meeting with the Microscopy Society of America (MSA) and the Microscopy Society of Canada (MSC/SMC) and will be held August 13-17, 2000. Detailed information on the meeting can again be found on the web at http://www.msa.microscopy.com. If you are going to Hawaii, sure you will get a little sun and sand, and maybe even a little eye candy, but you will not be able to get a real Philadelphia Cheese Steak sandwich. But if you are planning to go to M&M, you will have a good time - after all, Stacie Kirsch is heading up the local arrangement committee!

We just spent a few days in Philly for the Program Planning Meeting. The program looks very good and MAS is well represented. I was a little afraid that the IUMAS meeting would dilute the microanalysis portion of the M&M meeting, but that turned out not to be the case. In fact, the M&M program complements the IUMAS nicely. So if you can do it, go to both meetings. Because of the breadth and diversity of the meeting, overlapping sessions in the program are unavoidable, but we tried to avoid them as much as we could in the interests of MAS members. You will find that there is also good continuity in the topics held in the same room throughout the meeting. The rooms in the Pennsylvania Conference Center are quite large, such that overcrowding for a popular talk should be minimized. Speaking of the Conference Center, it is rather exceptional. The court area is very large with many of the rooms having an alcove area. There are large, comfortable stuffed chairs and sofas arranged for the ubiquitous chats used to catch up with old friends and where the real business of science can be done. You will absolutely love the art displayed throughout the Pennsylvania Conference Center and there are a lot of things to do around the immediate area.

There were only a few minor changes to the program previously published in the *Call for Papers*. The most significant is that we decided to create a *Ceramics & Minerals* symposium (#7, G. Meeker, P. Hlava), with Ceramics the

morning platform session, a poster session, and a Minerals afternoon platform session. The symposium, "Microprobe: Age-Dating of Minerals" has been melded into the same symposium. There is a minimum of recycled, same-old, same-old talks. What is exciting about the program is the amount of new, instructional, and cutting edge information that will be presented. I would particularly like to point out a few. Balancing the *Electron Energy Loss Spectroscopy* and Imaging symposium (#9, J. Hunt and G. Botton) is Jim Bentley's tutorial on *Energy-Filtered Imaging*. This is intimately related to The Theory and Practice of Scanning Transmission Electron Microscopy (#8, N. Browning). Two problem areas of microanalysis are addressed in the sessions X-ray Microanalysis of Rough Surfaces (#25, R. Gauvin and E. Lifshin) and Low Voltage Scanning Electron Microscopy and Microanalysis. (#24, E. Boyes, P Echlin, and D. Joy). Dale Newbury's Problem Elements and Spectrometry Problems II (#26) addresses specific analytical problem areas with five dynamic, invited speakers. Ian Anderson and Paul Kotula had very definite ideas on what should be presented in Spectrum Imaging: Applications and Methods of Analysis (#23) and it should prove to be one of the more forward-thinking symposia. Ron Anderson and Jose Mascorro will again be having the Problem Solving with the Experts sessions. These have been very popularl and I highly recommend that you bring your most frustrating problems to talk about. Often in the past, questions that have been posed have been answered by audience members. Get an early seat for the talks in New Detectors -Benefits and Drawbacks, (# 20, J. Mancuso and J. McCarthy) because even with the large rooms, that one may fill up to capacity. There has been a great deal of interest recently in analytical methods for ESEM and variable pressure systems and the Working with ESEM and Other Variable Pressure Systems symposium (#27, E. Doehne, M. Phillips, and M. Füting) addresses those issues. In addition to Jim Bentley's tutorial, you will find Microscopy and Microanalysis over the Net (Nestor Zaluzec) and Atom Probe Tomography (Mike Miller) as well as a Short Course on Basic Introduction to X-ray Energy Dispersive Spectroscopy (PK Carpenter). One fundamental truth for TEM analysis is that if you can't prepare the sample you can't examine it. With that in mind, check out Applications and Developments of Focused Ion Beams (#3, L. Giannuzzi).

So "Ring in the Millennium in Philadelphia" with the Microscopy and Microanalysis 2000 Meeting at the Pennsylvania Conference Center August 13-17. And there is just one more point I would like to make: if you are on a low carbohydrate diet, the Philly Cheese Steak tastes almost as good without the bun!

Scott Walck MAS M&M Program Co-chairman

MICROBEAM ANALYSIS SOCIETY

1999 YEAR-END REPORT INCOME AND EXPENSE

INCOME					<u>Actual</u>			<u>Budget</u>
Member Dues (507 Regular, 24 Student, 16 Emeritus) Sustaining Member Dues (28) National Meeting (M&M '98) M&M Journal fees (Domestic, Foreign, Air Mail) Schwab Dividends & Interest Interest on Rochester checking acct. Income, Misc. & M&M '99 Wiley Royalty to Fiori Fund Contributions to Special Funds Corporate Paper Award Reimbursements					\$	12879.00 9800.00 9207.00 3163.25 13627.70 56.66 1825.51 207.92 484.00 1500.00 52751.04	\$	13000.00 8050.00 — 4370.00 11009.00 191.00 — 450.00 — 1000.00 38070.00
EXPENSE								
 (10) Society Management (11) Membership Office (15) Executive Council (17) Foreign Society Reciprocity (20) MicroNews (22) WWW (30) M&M Journal (subsidy to members) (40) Fiori Fund Tour Speakers (42) Potter Fund Support (45) General Tour Speaker program (50) Topical Conferences , M&M '99 (55) Computer Workshop @ M&M'99 (60) MAS Functions @ M&M '99 (70) MAS Directory (80) Student Support @ M&M '99 (85) Paper Awards (Corp. sponsored) (00) MAS in 2000 (Kona) 					\$	10601.13 1387.88 11535.86 500.00 1886.19 70.00 4366.04 1157.89 - 0 - 2571.26 6712.72 333.82 6772.73 - 0- 4999.52 1500.00 3899.93 58294.97	\$ \$	8200.00 1300.00 12120.00
Net Income & Expense					\$	======= (5543.93)	\$	====== (14640.00)
Society Assets: 1994 through 1999								
Total Assets	1994 \$ 171,670	1995 190,287	1996 189,528	1997 192,832		1998 194,749	1999 189,9	

Harvey A. Freeman, Treasurer 958 Long Pond Road, Brewster, MA 02631 e-mail: <a href="mailto: reaman@capecod.net <a

January 15, 2000

MICROBEAM ANALYSIS SOCIETY

BUDGET FOR 2000 AS APPROVED 1/22/2000	INCOME and EXPENSE			
<u>Income</u>				
Member Dues (512 Regular, 24 Student, 16 Emeritus) Sustaining Member Dues (28) National Meeting (M&M '99) M & M Journal subscriptions Schwab Dividends & Interest Interest on Rochester checking account Wiley Royalty to Fiori Fund Contributions to Fiori & Potter Funds Corporate Paper Award Reimbursements	\$ 13000.00 9800.00 11950.00 3200.00 12000.00 100.00 180.00 450.00 1500.00 \$ 52180.00			
<u>Expense</u>				
 (10) Society Management (Accounting, Insurance, Fees, Misc.) (11) Membership Office (15) Executive Council (Travel, Meetings, Accomodations) (17) Foreign Society (EMAS & AMAS) Reciprocity (20) MicroNews (22) WWW Maintenance (Subject to change) (30) M & M Journal (subsidy to members) (40) Tour Speaker - Fiori Fund (42) Potter Fund Support (45) General Tour Speaker program (50) Topical Conference @ M&M2000 (55) Computer Workshop @ M&M2000 (60) MAS Functions @ M&M2000 (70) MAS Directory (80) Student Support: M&M 2000 MAS @ Kona (85) Paper Awards (Corp. sponsored) (00) MAS in 2000 (Kona) 	\$ 10000.00 1300.00 12000.00 500.00 3500.00 500.00 4400.00 500.00 — 2500.00 — 1000.00 6000.00 3000.00 4000.00 1200.00 1500.00 \$ 56900.00			
	=====			

Net Income & Expense

Harvey A. Freeman, Treasurer 958 Long Pond Road, Brewster, MA 02631 e-mail: <a href="mailto: hfreeman@capecod.net

January 31, 2000

(4720.00)

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