

Minnesota Microscopy Society Newsletter



Local affiliate of Microscopy Society of
America

Local affiliate of Microbeam Analysis Society

MMS September 1998 NEWSLETTER

MMS FALL BUFFET DINNER and TALK

Date: September 17, 1998 5:00 - 8:00 PM

Location: Campus Club, 401 Coffman Memorial Union, 300 Washington Ave. S.E., University of Minnesota.

Following our 10th Annual MMS Fall Buffet Dinner at the Campus Club, which had an attendance of 30 members, there was a short business meeting. President Sue Ockerstrom outlined the program of society meetings, Gib Ahlstrand received the thanks of the society for his work as Newsletter Editor over many years and Stuart McKernan outlined the plans for the Project Micro Program for the upcoming year, and called for more volunteers from the society.

Professor Marc D. Porter, Director of the Microanalytical Instrumentation Center at Iowa State University, gave the after-dinner talk on "*Scanning Probe Microscopy: From Concepts to Applications*".

The talk covered some of his recent work in scanning probe microscopy (SPM). Looking at the origins of macroscopic processes at interfacial architectures, he noted that they are generally defined by the architecture of an interface at nanometer length scale. Scanning probe microscopy (SPM) has emerged as one of the premier microscopic characterization techniques for characterizing the surface of organic monomolecular films. After a brief description of the underpinnings for some of the most used imaging modes (i.e., topographic, friction, adhesion, and tapping), examples of characterizing interfaces in terms of their two-dimensional spacing, composition, and orientation were presented. The talk was well illustrated and the different parts were interestingly linked together by such things as "Blondie": an albino penguin, and a far-side cartoon.

We hope to see you all at the next meeting.

Stuart McKernan

1998 / 1999 Season Meetings

September 17,1998	Marc Porter
October, 1998	MMS Project MICRO Event TBA
October, 15 1998	Speaker: C. Barry Carter U. of Minnesota, East Campus
November, 1998	MMS Field Trip TBA
March, 24 1999 Note: Traditional Location: St. Louis Park VFW	Annual joint meeting with ASM. Acoustic Microscopy Speaker: Joseph Sigmund, SONIX
May 1998 The Midway Sheraton.	Spring Symposium. Topic: Latest Trends in Microscopy.

MMS PROJECT MICRO MEETING

We are starting the coming year on a very high note. Firstly, thanks to Sally Cameron of Leeds Precision Instruments, we now have many illuminators for our microscopes, and to misquote an old proverb - many lights make hands work. We also have been offered about 140 microscopes through the efforts of Stan Erlandsen, University of Minnesota, for the society's educational outreach program. We have also been in contact with the Science Museum of Minnesota, who are very interested in working with us (or vice versa) to put on a family microscopy course at the museum beginning in the new year. Finally, the "Microworld Festival" book is now in print, and it is time to start using it in earnest, rather than the beta testing we have been doing so far. If you are interested in finding out more about volunteering for these activities, or are planning to carry on with your present project, or if you are interested in expanding Project Micro into a school you are interested in, please let me know.

We will be having an organizational meeting in the week following the Fall Buffet meeting. If you are interested in attending please e-mail me your preferred date. I will notify everyone of the final date and location of meeting soon after September 11.

Finally, for those of you who volunteered last year, we would like a brief end of year report on what you did and how it went for the beta testing evaluation, and to help us planning for next year.

Stuart McKernan

Project Micro Contacts are:

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For more information, check Project MICRO web site at: <http://www.msa.microscopy.com/ProjectMicro/>

or the Lawrence Hall of Science (<http://www.lhs.berkeley.edu/GEMS/html>)

MMS Membership directory

MMS has put out a membership directory which is available to all members and other friends of the Society. Please check your name, address, affiliation, phone number, e-mail address, web site or whatever in the directory, and contact Stuart McKernan at (612)626-7942, 626-7530 FAX, or by e-mail at: stuartm@tc.umn.edu if you find anything that needs updating. You may also check out your entry and send in updated information over the web at <http://www.charfac.umn.edu:591/MMS/>

MMS Notices and Announcements

The University of Minnesota Microscopy and Imaging Consortium

is proud to announce the following

Workshop

Title: Microwave Specimen Processing and Imaging in the Biomedical Sciences

When: October 28 - October 30, 1998

Where: University of Minnesota, College of Biological Sciences, Imaging Center

Tuition: \$300.00 (Includes lunches and refreshments)

Application Deadline: October 19, 1998

For admission application, information, and any questions, contact:

Mark A. Sanders, Program Director, Imaging Center,

23-35 Snyder Hall, 1475 Gortner Ave., University of Minnesota

Twin Cities Campus, St. Paul, MN 55108,

612-624-3454, fax: 612-625-5754, msanders@biosci.umn.edu.

Course Description

Designed primarily for research scientists, technicians, postdoctoral trainees and advanced graduate students in animal, plant, medical sciences. Biologists seeking a comprehensive introduction to specimen processing, microscopy and video-imaging will benefit greatly from this workshop. There are no specific prerequisites, but an understanding of the basic principles of optics is desirable. Limited to 12-15 students.

The three day course consists of lectures, laboratory demonstrations, exercises and discussions that will enable the participant to prepare specimens for immunocytochemistry at both the light and electron microscope levels.

Students will obtain and interpret microscope images of high quality, to perform quantitative optical measurements, and to produce photographic and video records for documentation and analysis.

Topics to be covered include: (principles of microwave processing for biological materials (immunolocalization for light and electron microscopy (principles of microscope design and image formation (bright field, dark field, phase contrast, differential interference contrast, interference reflection, and fluorescence and confocal scanning microscopy (video imaging, recording, and enhancement (analog and digital image processing and analysis.

Students will have direct hands-on experience with state-of-the-art microwave processors, microscopes, video cameras, recorders and image processing equipment provided by major optical and electronics companies. Instruction will be provided by experienced staff from universities and industry. Students are encouraged to bring their own biological (primary cultures, cell lines, etc.) and material specimens and to discuss individual research problems with the faculty.

Microscopy & Microanalysis '99

July 12-16, 1998

Atlanta, Georgia

Microscopy and Microanalysis '99 will be held in Portland from Sunday 1st August to Thursday 5th August. Expect to see the call for papers at the beginning of November. We have arranged a very strong scientific program, and the Local Arrangements Committee have some great ideas for the meeting. One is a competition to find the "best" micrograph of Mt. St. Helens volcanic dust, a competition they have tentatively titled "show us your ash". Samples of ash were available at the meeting in Atlanta, but I have a couple of extra samples if anyone would like one. The second event they have arranged is a post-conference cruise to Alaska. Again details were available at the Atlanta meeting, and will be provided in the call for papers, but if you are interested see me at the Fall Meeting. This should be another very good meeting, and I hope to see many of you there.

For information and registration materials, contact **MSA Meeting Manager**, The Rebedeau Group, 1-708-361-6000, MSA@tradeshownet.com, or the Web site at: <http://www.MSA.Microscopy.Com>.

Gib Ahlstrand

After many years as the MMS Newsletter editor, Gib Ahlstrand (Minnesota Ag. Experiment Station, University of Minnesota) is retiring from that function. Gib has also served as an MMS president and Board Member and is a prime example of the purely volunteer, involved effort that keeps our local microscopy society active, aware, and a benefit to people working in the wide variety of areas that utilize microscopy, or people who are interested in, or just curious about, microscopy. Many thanks to Gib for his service! Future Newsletters will be a team function and Gib will help us out. The Newsletter is already appearing on the MMS web page (thanks to Gib and Stuart), and we plan on weaning as many people as we can from the hardcopy Newsletter and switching them to the on-line Newsletter - we'll have more about that in a later mailing.

NOTE: To all of our readers: If you are interested in getting your quarterly newsletters and other announcements from MMS electronically, we strongly encourage those who are technologically enabled to begin accessing the MMS Newsletter via our web site (see top of this sheet) and to subscribe to other flyers and announcements via e-mail. As a reminder, an e-mail notice would be sent out to all web site viewers when each new newsletter is posted on our web site. Other short meeting announcements will be sent out by e-mail in addition to being posted on our web site. However, hard copy announcements via U.S. Postal Service will continue to be available for those who have no web access or prefer to get hard copy mailings. Finally, if you have no interest in remaining on our mailing list, please also indicate that choice.

Communicate your preferences to MMS Webmaster [Stuart McKernan](#)
phone: (612)624-6009

- Notices, announcements via E-mail. E-mail address:
 - Newsletter via MMS web site. (also give e-mail address above).
 - Send my newsletter and announcements by U.S. Postal Service, as before.
 - Remove my name from MMS mailing list.
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