
Minnesota Microscopy Society

Local affiliate of the *Microscopy Society of America*
and the *Microbeam Analysis Society*



Newsletter

October 2006

Minnesota Microscopy Society October Meeting

Thursday, October 12, 2006

Visit to SurModics Inc.

Location

SurModics, Inc.
9924 West 74th Street
Eden Prairie, MN 55344-3523
(See page 2 for a location map.)

Schedule

Arrival at SurModics	4:30 - 5:00 PM
Introduction by K. Wormuth	5:00 - 5:30 PM
Tour	5:30 - 6:30 PM
Dinner at Cam Ranh Bay	7:00 - 8:00 PM

Cost of the Meeting

There is no cost for the meeting, talk and tour. Cost of the dinner is the responsibility of those attending.

Dinner

For those interested, dinner will be at the Cam Ranh Bay, a Vietnamese restaurant. It is located at 8244 Commonwealth Drive, Eden Prairie, MN 55344-5365. More information can be found at: www.camranhbayeddenprairie.com/index.html. A location map can be found on page 2.

SurModics Inc. supplies coating technology to the medical device industry which improve the ease of use and biocompatibility a wide variety of medical devices. In the process of developing new coatings, surface characterization tools facilitate the assessment of coating smoothness, thickness, uniformity, and durability, which helps to speed up the development process. Klaus Wormuth, Director of Characterization Sciences at SurModics will present an overview of SurModics coating technology along with a description of the microscopy capabilities available, highlighting the application of Raman microscopy to drug eluting coatings. The presentation will be followed by a tour of the Surface Characterization lab.

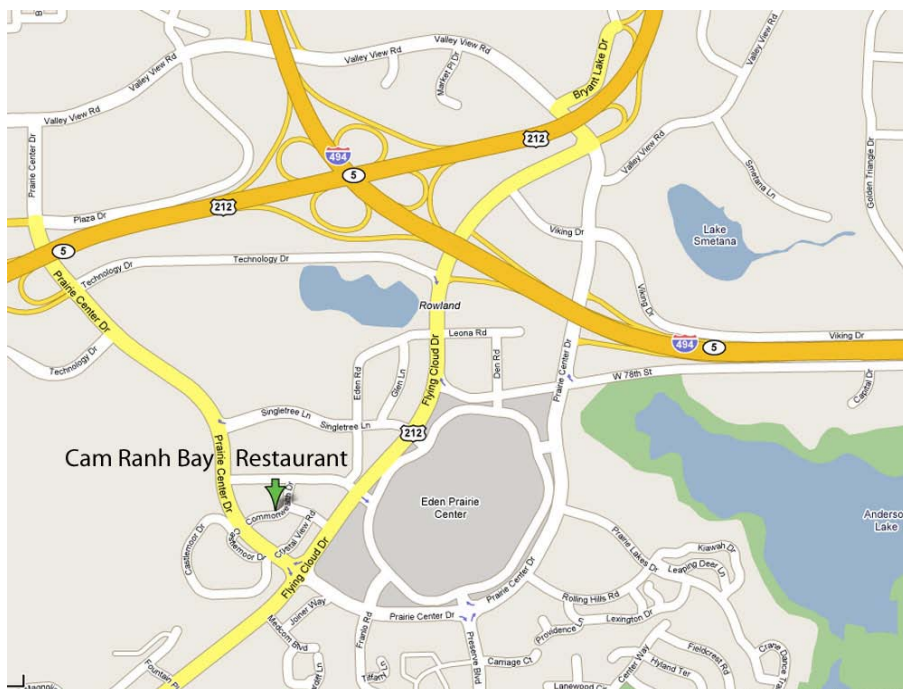
Reservations

Reservations for the meeting **MUST** be made no later than **Monday, October 9, 2006.**

Register by e-mailing Jason Heffelfinger at jason.r.heffelfinger@medtronic.com, or by phone at 763-514-1021. Include your name, company, phone number, e-mail address, and whether you will be attending the dinner after the tour.

Location Maps for the October Meeting

Location map for SurModics. The simplest route to SurModics is to follow Hwy 169 to Valley View Road. Follow this west to Washington Avenue. Go south on Washington Avenue to 74th Street, then west on 74th Street 0.2 miles to SurModics (9924 W. 74th Street)



Location Map For the Cam Ranh Bay Restaurant.
8244 Commonwealth Drive,
Eden Prairie.

The Minnesota Microscopy Website <http://www.MNmicroscopy.com> has an improved link to the upgraded membership directory. To access it you will need a username and password. For now we have set up a group access to the database, so you can log in with the username “mms” and the password “camera” There are a few minor upgrades to the layout that are in process, after which you will be able to update your address and description fields online. Until then the database will be read-only. Any feedback on the database (or the website in general) will be most welcome, and should be addressed to Stuart McKernan smckernan@mmm.com.”

Future Events

MMS November Meeting

What To Do with a Variable Pressure or Environmental SEM And How To Do It (Or At Least How It Ought To Work)

Speaker Brendan J Griffin
The University of Western Australia

Date Thursday, November 9, 2006

Location Como Park Conservatory Visitors Ctr.
For a location map go to:
http://www.comozooconservatory.org/como_park/map.shtml

Initial results with variable pressure scanning electron microscopes (VPSEM) can be frustrating, and challenges are faced when investigating new materials. This talk will help overcome some of these rough patches. Brendan taught this as a short course at the M&M 2006 conference in Chicago this past August. This talk will be cover many of the topics included in that short course.

Brendan Griffin is the Director of the Western Australian Centre for Microscopy and Microanalysis and was an original ESEM developer in 1990. He is a leading authority on environmental SEM and has developed a new imaging procedure called charge contrast imaging or CCI. He has developed extensive training programs in SEM, VPSEM, EPMA and digital image processing, and has taught over 1,000 staff and students in basic SEM techniques.

Reservations

Reservations for the meeting **MUST** be made no later than **noon on Monday, November 6, 2006**. Register by e-mailing Bede Willenbring at Bede.Willenbring@hbfuller.com, or by phone at 651-236-5470. Include your name, company, phone number, and e-mail address.

EBSD Workshop

What EBSD Can Do For You

Sponsors: Oxford Instruments
University of Minnesota.

Dates: October 25th and 26th

Locations: University of Minnesota,

For those of you unfamiliar with EBSD technology, it is a technique that allows crystallographic information to be obtained from samples using a Scanning Electron Microscope. The information can be used for:

- Texture/preferred crystallographic orientation analysis
- Failure analysis, including:
 - Analysis of grain boundary and crystallographic orientation control of crack propagation path
 - Orientation determination of grains at crack initiation site
- Grain size analysis
- Grain boundary characterization
- Strain analysis
- Phase identification by crystallography

Schedule:

October 25

8:30 - 9:00 Coffee and Donuts
Amundson Hall, Rm 210

9:00 - 11:30 EBSD Technical Presentation
by Scott Sitzman
Amundson Hall, Rm 210

12:00 - 1:00 Lunch Sponsored by Oxford
CharFac lunchroom, Shepherd Lab

1:00 - 5:00 Samples run on Oxford's EBSD
CharFac, Shepherd Lab

October 26

9:00 - 4:00 Samples run on Oxford's EBSD
CharFac, Shepherd Lab

The workshop is free, but registration is required by October 20th. Contact Kara Noack (Oxford's Midwest regional Sales Manager) at noack@ma.oxinst.com to register or for more information.

Sustaining Members

Sustaining members are the backbone of financial support for the Society. These members make it possible for the Society to support Project Micro and to cover many expenses of the regular meetings and the Spring Symposium. We greatly appreciate the continued support of these individuals and corporations. To become a Sustaining Member, complete and return the MMS membership form at the end of the newsletter.

Joel Ash	Precision Instruments	
Tony Bourgholtzer	Foundation for Advances in Medicine & Sci.	201-818-1010
Michael Boykin	Mager Scientific, Inc.	734-426-3885
Mike Coscio	Medtronic, Inc.	763-505-4561
Doug D'Arcy	DMS	
Matt Dugas	ARC	651-789-9000
Lester Engel	Engel Metallurgical	320-253-7968
Charles Garber	SPI Supplies	610-436-5400
Larry Hanke	Materials Evaluation & Engineering Inc.	763-449-8870
Gary Hawkinson	FEI Company	608-291-0157
Brad Johnson	North Central Instruments/Leica	612-559-3008
Mark Kelsey	Bruker AXS Microanalysis	708-386-9684
Ken Kilby	Leeds Precision Instruments	612-546-8575
Stacie Kirsch	EMS & Diatome	800-523-5874
David Leland	Thermo Electron Corp.	
Jim Liddle	HITACHI High Technologies America, Inc	847-273-4359
Peter McSwiggen	McSwiggen & Associates	612-781-2282
Robert Mierzwa	JEOL USA, Inc.	920-803-8945
Ruth Murray	Oxford Instruments USA	859-384-9861
Ted Pella	Ted Pella, Inc.	800-237-3526
Russell Pylkki	Aspen Research	651-264-6000
Gary Saxrud	Fryer Company, Inc.	952-942-6747
Jean L. Schlosser	Crane Engineering and Forensic Services	763-557-9090
Michael Smith	Guidant	651-582-4965
Chad Tabatt	Gatan, Inc.	888-778-7933
Augusta Tartarelli	Evans Analytical Group	952-828-6411
Yianni Tousimis	Tousimis	301-881-2450
John Treadgold	Carl Zeiss SMT	630-497-8166
Joe Ullmer	EDAX International	801-495-2750
Bede Willenbring	BY Design of New Hope, Inc.	763-208-7741
Ken Witherspoon	IXRF Systems, Inc.	281-286-6485

If any Sustaining Members are missing from this list, *please* contact either: Jason Heffelfinger (763-514-1021, jason.r.heffelfinger@medtronic.com) or Peter McSwiggen (612-781-2282, PMcS@McSwiggenAssoc.com).

MMS Patron Members

The Minnesota Microscopy Society would like to express sincere thanks to our Patron Members. These members provide financial support to the organization above the standard membership fee. This additional support makes it possible for MMS to maintain its financial well being. To become a Patron Member, complete and return the MMS membership form at the end of the newsletter.

Jackie Aguilera	3M Company, St. Paul	Susan Okerstrom	Medtronic Inc., Brooklyn Center
Tony Anderson	SurModics, Eden Prairie	Ev Osten	3M Company, St. Paul
Erin Brown	Ecolab Inc., St. Louis Park	Ann Palmer	University of Minnesota, Mpls
Mary Buckett	3M Company, St. Paul	Jeff Payne	3M Company, St. Paul
Barry Carter	University of Minnesota, Mpls	Christina Pierce	SurModics, Eden Prairie
Dale Case	Imation, Oakdale	Ky Pham	Medtronic Inc., Mpls
Carolyn Casoria	Honeywell, Mpls	Oanh Pham	3M Company, St. Paul
Ellery Frahm	University of Minnesota, Mpls	Patricia Sanft	H.B. Fuller Co., St. Paul
Chris Frethem	University of Minnesota, Mpls	Mary Swierczek	3M Company, St. Paul
Jason Heffelfinger	Medtronic Inc., Brooklyn Center	Jerry Tangen	JEOL USA, Inc., Monticello
Robert Lundquist	Boston Scientific, Mpls	Ove Thompson	FEI Company, Excelsior
Stuart McKernan	3M Company, St. Paul	Mark Windland	Honeywell, Plymouth
Eric Morrison	Ecolab Inc., Mendota Heights	Klaus Wormuth	SurModics, Eden Prairie

MMS BOARD and OFFICERS 2006-2007

President: Sue Okerstrom, Medtronic Inc.,
7000 Central Ave. NE., Minneapolis, MN 55432
(612) 514-4678; sue.okerstrom@medtronic.com

Past-President: Jason Heffelfinger, Medtronic Inc.,
6700 Shingle Creek Parkway, Brooklyn Center, MN 55350;
(763) 514-1021; jason.r.heffelfinger@medtronic.com

President-Elect: Peter Yurek, Medtronic Inc.,
6700 Shingle Creek Parkway, Brooklyn Center, MN 55350;
peter.yurek@medtronic.com

Secretary: Robert Lundquist, Boston Scientific,
One SciMed Place, Maple Grove, MN 55442;
(763) 494-7945; robltt@juno.com

Treasurer: Bede Willenbring, H.B. Fuller Co., St. Paul, MN;
(651) 236-5470; Bede.Willenbring@HBFuller.com

Corporate Liaison: Jason Heffelfinger, Medtronic Inc.,
6700 Shingle Creek Parkway, Brooklyn Center, MN 55350;
(763) 514-1021; jason.r.heffelfinger@medtronic.com

Webmaster: Stuart McKernan, 3M Center,
Bldg. 201-BE-16, St. Paul, MN 55144-1000
(651) 736-5993; smckernan@mmm.com

Newsletter Editor: Peter McSwiggen, McSwiggen & Associates,
2855 Anthony Lane S., Suite B1, St. Anthony, MN, 55418;
(612) 781-2282; PMcS@McSwiggen.com
Copy Editing: Barbara Meier

MAS Representative: Michael Coscio, Medtronic Inc.,
710 Medtronic Parkway, Minneapolis, MN 55432-5604;
(763) 505-4561; mike.coscio@medtronic.com

ProjectMicro Director: Jeff Payne, 3M Center,
Bldg. 201-BE-16, St. Paul, MN 55144-1000;
(651) 733-2352; jjpayne@mmm.com

Other Board Members:

Ev Osten, 3M Center, St. Paul, MN;
(651) 736-0104; efosten@mmm.com

Paul Baker, Medtronic Inc., Minneapolis, MN;
(763) 514-4519; paul.baker@medtronic.com

Mary Swierczek, 3M Center, St. Paul, MN;
(651) 736-5087; mswierczek@mmm.com

Steve Block, JEOL USA, Inc.,
s-block@comcast.net

Ann Palmer, University of Minnesota
Dept. of Pediatrics, Mpls, MN; palme003@umn.edu

Ky Pham, Medtronic Inc., Minneapolis, MN;
(612) 514-4705; ky.pham@medtronic.com

Dwight Erickson, 3M Center, St. Paul, MN;
(651) 736-2830; dderickson3@mmm.com

Minnesota Microscopy Society – Membership Form

All microscopists are urged to support their Society at one of the membership levels offered below. The more dues-paying members we have, the more likely we are to attract sustaining corporate memberships which form the financial backbone of our Society. Often, supervisors will support MMS memberships out of their project budget because they recognize that it is a very inexpensive way to maintain and increase the skills of their microscopists. If you have been a member over the years and recognize the value of MMS to the community of microscopists it serves, consider upgrading your membership this year to the patron or sustaining level. Thank you.

Name _____ Dr _____ Mr _____ Ms _____ Phone (____) _____

Affiliation _____ Position _____

Address _____ ZIP _____

E-mail address _____

Indicate the method by which you would like to receive the Newsletter: mail _____ e-mail/web _____ both _____

Student (\$5) _____ Basic (\$10-\$24) _____ Patron (\$25-\$99) _____ Corporate Sustaining (\$100-) _____

Make checks payable to MMS and mail to our Treasurer:

Bede Willenbring, MMS Treasurer, 4763 Decatur Ave. North, New Hope, MN 55428-4402

or pay by credit card by going to the MMS Web site at: www.MNmicroscopy.org

Check here _____ if you do NOT want your name and address to appear in the Society directory.

Are you an MSA member? _____ MAS Member? _____ Other Professional groups? _____

Area of interest: Bioscience _____ Materials Science _____ Light _____ SEM _____ TEM _____ X-ray _____

Minnesota Microscopy Society
Peter McSwiggen, MMS Editor
McSwiggen & Associates
2855 Anthony Lane South, Ste B1
St. Anthony, MN 55418

Forwarding and Address
Service Requested

October 12, 2006

Visit to SurModics