

Minnesota Microscopy Society Newsletter

Local affiliate of Microscopy Society of
America
Local affiliate of Microbeam Analysis Society



MMS March 1997 NEWSLETTER

MMS March Meeting

"Reflected Light Confocal Imaging and Profilometry"

THURSDAY, MARCH 19, 1998

Dinner (optional)

MAMA D'S ITALIAN RESTAURANT 5:30 - 7:00 PM

Talk & Tour

KOVEX Corporation 7:30 - 9:00 PM

Speakers:

Matthew C. Boettner, President and CEO of Kovex Corporation
Bruce E. Batten, Ph.D. and VP of Marketing and Sales

Topic:

Reflected Light Confocal Imaging and Profilometry

- **5:30 to 7:00 PM.** Dinner at Mama D's, 3551 Lexington Avenue N., Arden Hills, located in Arden Plaza, 3 blocks south of I-694 at Cty. Rd. E. Mama D's will allow everyone to order off the regular menu. Most of the items fall in the \$8 to \$11 price range. They are located just down the street from Kovex.
 - **7:00-7:30 PM.** Meet at KOVEX Corporation, 3711 Lexington Ave. N., Arden Hills, at the corner of Gray Fox Road and Lexington.
 - **7:30 - 9:00 PM** Presentation and demonstration at Kovex.
-

ABSTRACT

Matthew C. Boettner, President and CEO of Kovex Corporation, and Bruce E. Batten, Ph.D., and VP of Marketing and Sales, will be giving a presentation on confocal microscopy. The emphasis of the presentation will be on reflectance type confocal imaging and will include a description of the Kovex laser scanning method.

Reflectance confocal microscopy is used to generate three dimensional (3D) images of a samples surface which can be examined and viewed with a computer system. Typically 3D confocal images are generated by scanning a focused beam of light relative to a sample specimen and then detecting the light which is reflected (or emitted) from the sample. A computer notes the three dimensional position of the reflected light when it is detected and this information is then used to generate an image. The Kovex technique incorporates a proprietary laser point scanning and tracking system which yields specific advantages over other techniques.

Please RSVP by noon on Wednesday March 18th to Mark Cavaleri, MMS Program Co-Chair We need to give an attendance number to Mama D's and Kovex.

Mark E. Cavaleri: e-mail: mecavaleri@mmm.com. phone: (612)733-3247.

It is preferred if everyone who has e-mail please respond to Mark by e-mail.

If you would prefer to get future announcements like this one via e-mail rather than mailed hard copy, that's great. It saves MMS production & postage costs. Please indicate your preference in your reservation note to Mark.

MMS PROJECT MICRO MEETING

**Bell Museum, U. of Minnesota, East Campus
Saturday, March 21, 1998
10:00am-4:00pm**

The Bell Museum has again invited us to set up and demonstrate the Project Micro kits at their ScienceFest. This is being run in conjunction with The **Jason Project**. Last year we (together with the Imaging Consortium from the St. Paul campus) had around 10 volunteers, and were able to show the microscopy kits to more than 200 kids. This year we would like a few more volunteers - even if you can only come and help set-up or clear away the room.

If you are interested in volunteering or need further information, please contact Stuart McKernan (612-626-7942, stuartm@tc.umn.edu) by Thursday, March 19th.

The Microscopy Society of America, in collaboration with Project MICRO (Microscopy In Curriculum - Research Outreach) and local societies like MMS, is putting MSA members into middle schools nationwide to teach microscopy. The program manual is part of the outstanding Great Explorations in Math and Science (GEMS) series of the Lawrence Hall of Science (<http://www.lhs.berkeley.edu/GEMS/html>).

Project Micro Contacts are:

Rodney Rappe, (612) 704-3564, RGRappe@Imation.com,

Stuart McKernan, (612) 626-7942, 626-7530 FAX, stuartm@maroon.tc.umn.edu.

Tina Schwach, (612) 681-0112H, 624-1295W, schwa044@maroon.tc.umn.edu

Ev Osten, (612) 736-0104, 733-0648 FAX, efosten@mmm.com,

Caroline Schooley, MSA Educational Outreach Coordinator, Box 117, Caspar, CA 95420. e-mail: schooley@mcn.org. Phone/FAX(707)964-9460.

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

7th ANNUAL METALLOGRAPHIC EVENT

MMS Joint meeting with ASM (American Society of Metals)

OPTICAL INTERFEROMETRY AND ITS APPLICATION TO SURFACE ANALYSIS

Speaker: Don Zipperian

Thursday, April 23, 1998

**Campus Club, West Wing Room
University of Minnesota, East Campus**

The metallographic event is intended to be a fun and educational way for you to share your metallographic work and learn from other's experiences (**Note:** Meeting location is **NOT** the VFW hall this year).

The speaker is **Don Zipperian** from the Measurement Division of Veeco Instruments (formerly Wyko). Don has a PhD in Materials Science from the University of Arizona at Tucson. Prior to joining Veeco, he was assistant director of research at Buehler LTD and process development engineer at Seagate Technology.

The focus of the presentation will be to discuss the technology of **Phase-shifting Interferometry (PSI)** and **Vertical Scanning Interferometry (VSI)** along with its application to measuring 3-D surface features. Optical Interferometry has found applications in the semiconductor, hard disk storage, fiber optics, automotive, paper, film, printing, materials analysis and metallurgy, and printed circuit board industries. Vertical resolutions of 2-3 Angstroms can be obtained with excellent gage repeatability along with very fast measurement capabilities.

As in past years, poster exhibitors will receive a free dinner.

SCHEDULE:

5:30 - 6:30 Poster set-up & social hour.

6:30 - 7:30 Dinner.

7:30 - later Speaker.

Registration: Send entries and questions for the metallographic event to: Larry Hanke, Phone 612-449-8870, FAX 449-8699, or e-mail: hanke@mee-inc.com. Dinner reservations can also be emailed to ASM at jstreff@isd.net.

Rules:

- Photomicrographs should be exhibited on an appropriate board no larger than 16" by 20" or no smaller than 8" by 10". Any number of photomicrographs may be presented on a single board.
- Photomicrographs may be from light microscopes, SEM, TEM, etc.
- Photomicrographs should be of an engineering material.
- **Notification of intent to participate (see FAX below) should be received prior to March 1, 1998.**
- Entries must be of **NEW** work not previously displayed at our meeting.
- Exhibits should include the following information:
 - I. Material(s).
 - II. Equipment used
 - III. Magnification
 - IV. Explanation
 - V. Preparation & microscopy techniques
 - VI. The participants name, address, phone, and organization.

Directions: The Campus Club is in the Coffman Memorial Union , 300 Washington Ave. SE, Mpls. East Campus of UM. From I-280 take University Ave. exit, go westbound on Universtiy Ave. to Washington Ave. (left turn), go on Washington to parking ramps near the Radisson Metrodome Hotel. Coffman Union is just a block further west from the ramp.

Spring Symposium: May 5, 1998

Location: Sheraton Midway

The topic for the Spring Symposium this year will be **Microscopy of Biomaterials**. Prospective speakers are currently being contacted. There will be 3 talks in the morning, 2 in the afternoon.

Vendors: If you would like table space for literature and equipment displays please contact our Vendor Liaison for the meeting, Diana Kittleson, at (612)917-5859, (612)917-5850 FAX. or by e-mail:

dkittleson@pillsbury.com

Complete program and details will be out in the next newsletter.

Back to [Table of Contents](#)

MMS Membership directory

MMS has plans to put out a membership directory available to all members and other friends of the Society. To have your name, address, affiliation, phone number, e-mail address, web site or whatever in the directory, please contact Stuart McKernan at (612)626-7942, 626-7530 FAX, or by e-mail at:

stuartm@tc.umn.edu. If you have already contributed your membership information for 1997/98, we have your current information.

MSA Business Office: NEW Location

The MSA business office is under new management and is at a new location. Please direct all future membership and other communications to:

MSA Business Office, 435 North Michigan Ave., Suite 1717, Chicago, IL 60611-2672. Phone(312)644-1527, FAX(312)644-8557, toll free 1-800-538-3672, e-mail: BusinessOffice@MSA.Microscopy.com

Newsletter Contribution Welcome

Do you have something to say about EM, a new technique, a book you've read that you want to review, a report on an EM meeting or workshop you've attended, or...what? Write it up and send it in on a 3.25 inch disk in Word 5 or 6 for Macintosh. Other text formats are acceptable, or you can e-mail it to:

giba@puccini.crl.umn.edu. Disks will be returned. Send your stuff to newsletter editor Gib Ahlstrand at the address given on the [Board Directory page](#).

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 Newsletter Editor Gib Ahlstrand:**

Gib Ahlstrand: e-mail: giba@puccini.crl.umn.edu phone: (612)625-8249

- 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.
-