
Minnesota Microscopy Society

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



Newsletter

September 2006

Minnesota Microscopy Society September Meeting

Thursday, September 14, 2006

Edward Zaccaro

The 10 Things All Future Mathematicians and Scientists Must Know (But are Rarely Taught)

Location

Macalester College
Science Building
Snelling Avenue & St. Clair Avenue
St. Paul, MN

Schedule

Registration	5:00 - 6:00 PM
Dinner	6:00 - 7:00 PM
Talk	7:00 - 8:00 PM

Cost of the Meeting

Cost for the meeting and dinner is \$25.00 for members, \$35.00 for nonmembers, and \$12.50 for students.

Dinner

The dinner will be a buffet, and will include Caesar salad, rolls and butter, chicken parmesan, baby red potatoes, a medley of steamed vegetables, wild mushroom stack, and double chocolate layer cake.

Reservations

Reservations for the meeting **MUST** be made no later than **noon on Monday, September 11, 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.

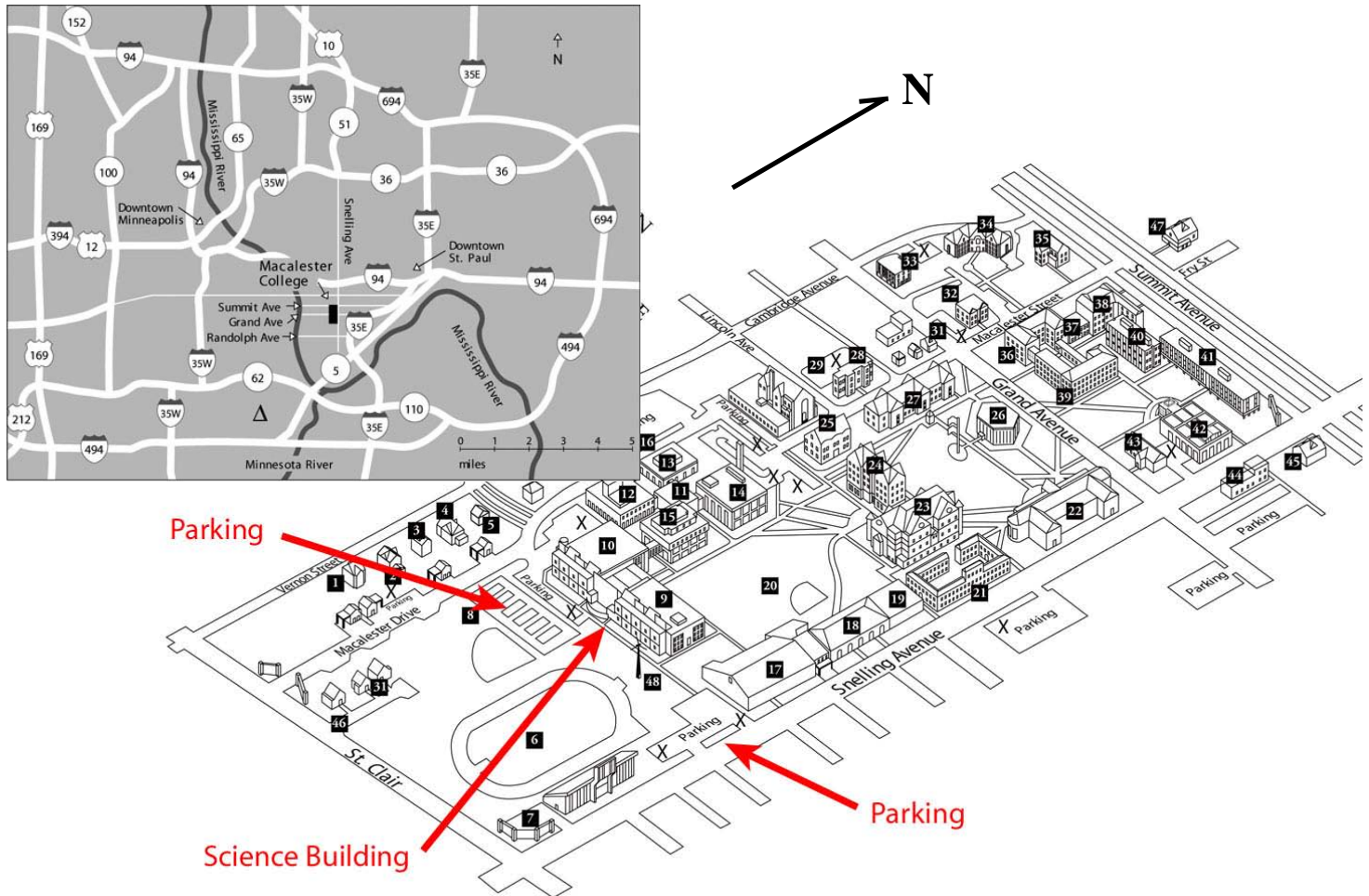
Abstract

Mathematicians and scientists have been closely tied to many famous disasters. The Challenger explosion, the failure of the Mars Explorer, and the Kansas City Hyatt Regency walkway collapse all involved thinking errors. Our current and future mathematicians and scientists must know how to prevent tragedies such as these from occurring. Because science and mathematics instruction is often dominated by facts and calculation, students are rarely exposed to these important concepts. Also included in the presentation will be "The Five Most Perplexing Math Problems Ever Devised". The solutions to these problems seem straightforward and simple, but the obvious answers are incorrect. To find the correct solutions, normal thinking patterns must be changed.

Biography

Ed has been involved in education in various forms since graduating from Oberlin College in 1974. He has taught students of all ages and abilities, but his focus for the past ten years has been working with mathematically gifted students. Ed holds a Masters degree in gifted education from the University of Northern Iowa.

Location Maps for the September Meeting



Map of the Macalester College campus. The MMS meeting is being held in the Olin-Rice Science Center (building 9-10 on the map). Enter through the main door connecting the two buildings.

Directions and Parking. The most convenient way to get to Macalester College is to drive down Snelling Avenue to St. Clair Avenue. Turn west on St. Clair Avenue. Go about a block to Macalester Drive and turn north (right). About a block further north, there is a parking lot on the right side. The parking lot is directly in front of the Science Building.

Future Events

MMS October Meeting

Thursday, October 12, 2006

Tour of SurModics

SurModics is a leading provider of surface modification solutions for medical device and biomedical applications.

Location SurModics, Inc.
9924 West 74th Street
Eden Prairie, MN

Dinner Location To be announced.

Transitions

Stuart McKernan has left the Characterization Facility at the University of Minnesota and can now be found at the 3M Corporate Research Laboratory.

Gary Hawkinson has left as sales manager for ThermoNORAN and is now with FEI.

Ruth Murray was promoted from being Midwest Regional Sales Managers for Oxford Instruments to their National Sales Manager.

New Web Site Server

The Minnesota Microscopy Society's Web server has been moved from the University of Minnesota to GoDaddy. The Web address has not changed. It is still www.MNmicroscopy.org. If you have any difficulty accessing the site contact our Webmaster Stuart McKernan at smckernan@mmm.com.

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 To be announced.

Location Como Park Conservatory Visitors Ctr.

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 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.

Microscopy & Microanalysis 2007

Location

Broward County Convention Center,
Fort Lauderdale, Florida

Dates

August 6 - August 9, 2007

More Information

<http://microscopy.org/MMMeetings/MM07/>

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	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
Russel Pykki	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
Gary 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

September 14, 2006

***Talk: The 10 Things
 ... Must Know***