# Minnesota Microscopy Society

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

# Newsletter

October 2002



# **MMS 35 Year Anniversary Celebration**

◆ 19th Century Everyday Wear

by Ann Frisina, Minnesota Historic Society

**◆ 35 Year Retrospective on Microscopy** 

by Richard Zeyen, University of Minnesota

8

# Tour of Conservation Laboratories, Minnesota History Center Tuesday, October 22, 2002

This is the 35 year anniversary of the Minnesota Microscopy Society, and we are going to be celebrating at the Minnesota History Center. One of our speakers will be Richard Zeyen, who has twice been president of our Society. Our second speaker will be Ann Frisina, researcher and textile curator at the Minnesota History Center. We will also be touring the Objects, Textile and Paper Conservation Labs. For those who want to come early or stay late, the History Center Museum will be open and available for exploration at no charge.

#### Location

Minnesota History Center, 345 West Kellogg Blvd., St. Paul, MN (see location map on page 2)

# Schedule

| Tour of MHS Labs        | 5:10 PM - 6:10 PM |
|-------------------------|-------------------|
| Registration and social | 6:10 PM - 6:30 PM |
| Dinner                  | 6:30 PM - 7:30 PM |
| Business meeting        | 7:30 PM - 7:45 PM |
| Talk - Ann Frisina      | 7:45 PM - 8:15 PM |
| Dessert                 | 8:15 PM - 8:30 PM |
| Talk - Richard Zeyen    | 8:30 PM - 9:00 PM |

Please try to arrive by 5:00 PM; we will meet outside the Honeywell Commons conference room. The tours are in secured areas so you must arrive on time to be included.

#### **Dinner**

The dinner will be a special catered meal, with three choices to pick from. Be sure to include your choice of entre (beef, chicken, or veggie) with your reservation. See page 2 for the complete menu.

# **Cost of the Meeting**

The cost for the meeting and dinner is \$20 for members and \$10 for students. Because this is our anniversary party, the cost of the dinner is being subsidized by the Society. This subsidy will be approximately \$10 per person.

#### Reservations

Reservations for the meeting MUST be made no later than Wednesday, October 16, 2002. Contact Mike Coscio at mike.coscio@medtronic.com or by phone at 763-505-4561 to make your reservation. Because of the high cost of this meeting to the Society, those who make reservations and don't show will be charged for the cost of the dinner.

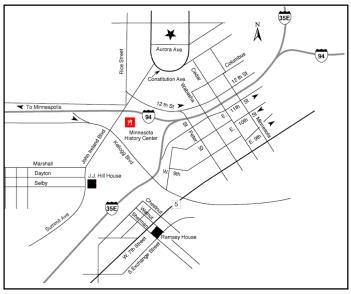
## **Bring Photos**

This is an historic meeting, so we hope to have photos from the early years of the Society. If you have photos of members or events from our earlier years, please bring them to the meeting for display.

# 35 Year Retrospective on Microscopy

Richard Zeyen, Dept. of Plant Pathology University of Minnesota 1991 Upper Buford Circle St. Paul, Minnesota

Richard Zeyen has been a member of MMS since the late 1960's, and served twice as president. He got his start in electron optics using a TEM as a tool in his investigation of a small RNA plant virus for his doctoral research. Later Richard was asked to develop an electron optical facility for the Minnesota Agricultural Experiment Station at the University of Minnesota. Thirty years later he is still doing electron microscopy, and he will be talking about some of the changes that have taken place in our field over these years.



Location map of the Minnesota History Center.
Parking in History Center ramp.

# A Look at 19th Century Everyday Wear Through Analysis and Construction Techniques and its Publication on the Internet.

Ann Frisina
Textile Conservator
Minnesota Historical Society
345 Kellogg Boulevard West
St. Paul, Minnesota 55102
651-297-5490
ann.Frisina@mnhs.org

The Minnesota Historical Society was the fortunate recipient of a collection of work garments that were spun, dyed, woven, and constructed by Anna Persdotter Larson, a Swedish immigrant (b.1830). Anna immigrated to a Minnesota farm with her husband and two daughters in 1882. It is common to find ethnic costumes worn only on special days documenting traditional dress of first generation immigrants. These 45 surviving garments are of special interest however, because they comprise a large collection of items used as everyday wear, items that are usually lost to their use and reuse.

This talk will present an examination of construction techniques, and dye analysis of the garments followed by a review of conservation issues, decisions and resulting treatments. While the actual garments will be exhibited, analysis and treatment information will also be provided on the Minnesota Historical Society web site as a way of disseminating it to scholars and the general public. By documenting and preserving the physical evidence contained in these garments we gain a fuller image of Anna Pers-dotter Larson's life in rural Minnesota.

# Menu

Romaine salad with olive oil poached tomato, basil croustade and balsamic glaze crusty rolls and butter, plus your choice of one of the following:

- ◆ Pan Roasted Crispy Chicken with rustic baked potato, grilled asparagus and sweet & sour cranberry syrup,
- ◆ Braised Shaker Style Beef Pot Roast with buttermilk whipped potatoes, green beans and baby carrots,
- ◆ Wild Mushroom Fettuccini with roasted shallots, forest mushrooms and caramelized truffled vidalia broth. (Meal includes iced tea and lemonade; dessert includes coffee, hot tea)

# **MMS November Meeting**

# Project MICRO Volunteer Training Workshop Thursday, November 14, 2002

Be a volunteer for Project MICRO (Microscopy In Curriculum - Research Outreach) and perform microscope demonstrations at science fairs and middle schools. At this workshop you will learn how to present ten different microscope demonstrations, including "Up Close" (make your own microscope), "Fingerprints", "Fabrics", and "Watery World". This workshop and supper are FREE! So, come and join the fun of volunteering and encourage kids of all ages to explore science through microscopy!

#### Location

Roseville Skating Center Banquet Facilities - Raider Room 2661 Civic Center Drive, Roseville, MN 55113

## **Schedule**

Supper 5:30 PM - 6:30 PM Training 6:30 PM - 7:30 PM

# **Supper**

Pizza and pop

Cost of the Workshop ... totally FREE !!!!

## Reservations

Reservations for this workshop MUST be made no later than Tuesday, November 12. Contact Ann Palmer at palme003@umn.edu or 612-626-3708 to make your reservation or request more information.

## **Directions**

<u>From St. Paul</u>: Take 35E north to Hwy 36, go west to Lexington and then north to County Road C. Turn left on County Road C and then right on Civic Center Drive.

<u>From Minneapolis</u>: Take 35W north to Hwy 36, go east to Snelling and then north to County Road C. Turn right on County Road C, drive 3/4 mile, and turn left on Civic Center Drive.

On Civic Center Drive, drive up the hill and turn left, then right, drive past the Banquet Facilities Building (on your left) and into the parking lot. Enter Banquet Facilities Building, walk up the stairs and follow the Project MICRO signs to the Raider Room.

# Workshop on Techniques in Microwave Specimen Processing

October 23-25, 2002

The workshop will be held at the College of Biological Sciences Imaging Center. This three day long workshop will give hands-on experience on how microwave processing has evolved into a methodology that greatly reduces processing times without sacrificing quality, and can be utilized for a variety of techniques to process samples for microscopy. The workshop sets the trend by assembling a wide range of detailed protocols that are being used today to improve sample preservation, productivity, and to reduce costs. For more information contact Mark Sanders (612-624-3454, msanders@cbs.umn.edu).

# Project MICRO Event - <u>Volunteers Needed</u> Saturday, October 5, 2002

The Minnesota Microscopy Society will be presenting Project MICRO demonstrations at the 3M Teachers Workshop/Visiting Wizards Super Science Saturday on October 5, 2002. The event runs from 9:00 a.m. to 3:00 p.m. at the 3M Center in Maplewood.

The Teachers Workshop is for elementary and middle school teachers, and runs from 9:00 a.m. to 12:00 p.m. Attendance of about 350 teachers is expected. The 3M Visiting Wizards Super Science Saturday will run from 12:00 to 3:00 p.m. This is for the families of 3M Visiting Wizards, and attendance of 500+ is expected. From 12:00 to 1:00, there will be a chemistry demonstration performed by two professors from the University of Wisconsin - Stevens Point. They will conclude the day's festivities with another show from 3:00 to 3:30, while table displays are being shut down.

This is an excellent opportunity for MMS - Project MICRO exposure and it will be lots of fun for volunteers. Volunteers are needed to help set up the demos before 9:00 a.m., help visitors with demonstrations, and help shut down at 3:00. For more information or to volunteer, please contact Ann T. Palmer at palme003@umn.edu or 612-626-3708.

October 2002 MMS Newsletter Page 4

# **Sustaining Corporate 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.

| Stephen Borden  | Torvac, Inc.                                   | 612-377-2077 |
|-----------------|--|--------------|
| Peter Braverman | Cadmet Inc.                                    | 800-543-7282 |
| Alex Butzer     | North Central Instruments, Inc. / Leica        | 612-559-3008 |
| John Crowe      | Denton Vacuum Inc.                             | 612-377-2077 |
| Andrew Davis    | Cameca Instruments Inc.                        | 203-459-0623 |
| Lester Engel    | Engel Metallurgical Ltd.                       | 320-253-7968 |
| Robert Evans    | Ted Pella, Inc.                                | 800-237-3526 |
| Larry Glassman  | G. W. Electronics, Inc.                        | 770-449-0707 |
| Charles Garber  | SPI  | 610-436-5400 |
| Greg Halvorson  | <b>Solution Partners</b>                       | 952-931-0811 |
| Larry Hanke     | Materials Evaluation & Engineering Inc.        | 612-449-8870 |
| Marie Hansen    | FEI Company                                    | 612-382-5321 |
| Gary Hawkinson  | Thermo NORAN Instruments                       | 608-244-7812 |
| John Humenansky | <b>Physical Electronics</b>                    | 952-828-6387 |
| Stacie Kirsch   | <b>Electron Microscopy Sciences</b>            | 800-523-5874 |
| Betsy Larwa     | Mager Scientific, Inc.                         | 800-521-8768 |
| Robert Mierzwa  | JEOL   | 920-803-8945 |
| Curt Morrison   | <b>Leeds Precision Instruments</b>             | 763-546-8575 |
| Ruth Murray     | Oxford Instruments USA                         | 859-384-9861 |
| Cathy Ryan      | Micro Star Technologies                        | 409-291-6891 |
| Gary Saxrud     | Fryer Company, Inc.                            | 952-942-6747 |
| Jean Schlosser  | <b>Crane Engineering and Forensic Services</b> | 763-557-9090 |
| Gary Smith      | Innovatech Labs, Inc.                          | 952-361-5570 |
| Mary Sullivan   | Scanning / FAMS, Inc.                          | 201-818-1010 |
| Gene Taylor     | M. E. Taylor Engineering, Inc.                 | 301-774-6246 |
| Jim Liddle      | HITACHI High Technologies America, Inc         | 847-273-4359 |
| Callie Thomas   | Tousimis Research Corp.                        | 301-881-2450 |
| John Treadgold  | LEO Electron Microscopy Inc.                   | 630-497-8166 |
| Steve Ziegler   | <b>Digital Instruments</b>                     | 512-912-1615 |

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- 624-7370, mcswi001@umn.edu).

## **MMS Patron Members**

The Minnesota Microscopy Society would like to express a sincere thanks to our Patron Members. These members provide financial support to the organization above the standard membership fee. This type of added 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.

Ronald Adkins, 3M Company, St. Paul Gib Ahlstrand, Imaging Center, U of M Paul Baker, Medtronic Inc., Minneapolis Barry Carter, University of Minnesota, Mpls Michael Coscio, Medtronic Inc., Minneapolis Kevin Cowden, Medtronic Inc., Brooklyn Center Stan Erlandsen, Cell Biol. & Neuroanatomy, U of M Chris Frethem, Cell Biol. & Neuroanatomy, U of M Kathryn Hanna, College of Biol. Science, U of M Mike Herron, Medicine, University of Minnesota Stuart McKernan, University of Minnesota, Mpls

Susan Okerstrom, Medtronic Inc., Brooklyn Center Ev Osten, 3M Company, St. Paul Ann Palmer, Dept. of Pediatrics, U of M Jeff Payne, 3M Company, St. Paul Dan Schaub, Philips Electron Optics, Inc., Oronoco Gordon Schrank, St. Cloud State University Carolyn Sutherland, Otolaryngology, U of M Jerry Tangen, JEOL USA, Inc., Monticello, MN Greg Trettel, BF Goodrich Aircraft Sensors, MN Rae Vigeant, Random Microscopy Services, St. Paul Bede Willenbring, H.B. Fuller Co., St. Paul

## MMS BOARD and OFFICERS 2002-2003

**President:** Mary Swierczek, 3M Center, Bldg. 201-BE-16, St. Paul, MN 55144; (651) 736-5087; Fax (651) 733-0648, mjswierczek@mmm.com

**Past-President:** Peter McSwiggen, University of Minnesota, Dept. of Geology & Geophysics, Minneapolis, MN 55455; (612) 624-7370, mcswi001@umn.edu

**President-Elect:** Ann Palmer, Univerity of Minnesota Dept. of Pediatrics, MMC 491, 420 Delaware St., MN, 55455; (612) 626-3708, palme003@umn.edu

**Secretary:** Jacque Aguilera, 3M Center, Bldg. 201-BE-16, St. Paul, MN 55144; (651) 736-5087; Fax (651) 733-0648, jmaguilera@mmm.com

**Treasurer:** Dwight Erickson, 3M Center, Bldg. 251-1A-03, St. Paul, MN, 55144; (651) 736-2830, Fax (651) 736-7496, usmmm214@ibmmail.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, IT Characterization Facility, University of Minnesota, Minneapolis, MN, 55455; (612) 624-6009, FAX (612) 626-7530, stuartm@umn.edu Newsletter Editor: Peter McSwiggen, University of Minnesota, Dept. of Geology & Geophysics, Minneapolis, MN 55455; (612) 624-7370, mcswi001@umn.edu

Copy Editing: Barbara Meier

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

#### **Other Board Members:**

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

Jeff Payne, 3M Center, St. Paul, MN; (651) 733-2352, jjpayne@mmm.com

Sue Okerstrom, Medtronic Inc., Minneapolis, MN; (763) 514-4678, sue.okerstrom@medtronic.com

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

Diana Kittleson, Pillsbury Technology East, St. Paul, MN; 651-917-5859, dkittleson@pillsbury.com

#### Your MMS Annual Membership dues are payable in September/October!

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   |             | Pos             | ition        |              |  |  |  |
| Address   | ZIP         |                 |              |              |  |  |  |
| Indicate the method by which you would like to receive the Newsletter: mail e-mail/web both   |             |                 |              |              |  |  |  |
| E-mail address  |             |                 |              |              |  |  |  |
| Check here if you do NOT want your name and address to appear in the Society directory.   |             |                 |              |              |  |  |  |
| Area of interest: Bioscience Materi   | als Science | SEM _           | TEM .        | X-ray _      |  |  |  |
| Membership level: Basic \$10 Patron 2   | ≥ \$25 C    | Corporate Susta | aining \$100 | Student \$5_ |  |  |  |
| Make checks payable to MMS and mail to our treasurer:<br>Dwight Erickson, MMS Treasurer, 3M Center, Bldg. 251-1A-03, Saint Paul, MN 55144-1000. |             |                 |              |              |  |  |  |

**Minnesota Microscopy Society** 

Peter McSwiggen, MMS Editor University of Minnesota 310 Pillsbury Drive, SE, Minneapolis, MN 55455 October 22, 2002

35 Year Anniversary Celebration

Forwarding and Address Correction Requested