

# Minnesota Microscopy Society

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



**Newsletter**

**October 2011**

## Minnesota Microscopy Society – Sigma Zeta Joint Meeting

### Date

Tuesday, October 25, 2011

### Schedule

- 4:30 – 5:30 p.m. Social hour with nibbles
- 5:30 – 6:15 p.m. Dinner - Buffet
- 6:15 – 6:30 p.m. “About” Sigma Zeta & MMS
- 6:30 – 7:30 p.m. Speakers

### Location

Bethel University  
Community Life Center  
3900 Bethel Drive  
St. Paul, MN 55112

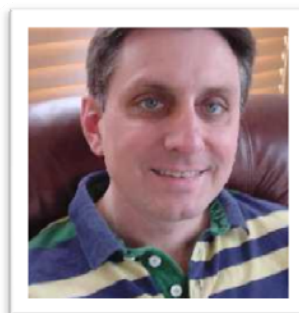
Map/directions:

<http://www.bethel.edu/about/maps-directions/>

### Registration

The cost of the meeting is \$15. Registration deadline is **Thursday, October 20**. Register by emailing [reservations@mnmicroscopy.org](mailto:reservations@mnmicroscopy.org) or calling Bede Willenbring (H.B. Fuller Company) at 651-236-5470 (9a – 5p). Include your name, company, phone number and email address.

## “Undergraduate Science and the Medical Device Industry”



**Ken Rohly, PhD**

Professor of  
Analytical and  
Inorganic Chemistry,  
Bethel University



**Lance Lohstreter**

Senior Scientist,  
Core Technologies,  
Medtronic, Inc.





## Undergraduate Science and the Medical Device Industry

KEN ROHLY, PH.D. AND LANCE LOHSTRETER, M.S.

### Abstract

The medical device industry is a significant piece of Minnesota's economy, and it depends on having a strong technical workforce to deliver current and new life-extending and saving therapies. Much of the foundational science that is done in this industry and others is taught in the undergraduate years. This presentation will illustrate common tools and processes applied to the development and study of medical devices and will focus on showing how a strong understanding of the content of a bachelor's level education lays a solid foundation for being a successful contributor in today's technical workforce.

### Speaker Bios

**Ken Rohly** is Professor of Chemistry at Bethel University and Senior Principal Scientific Consultant for Medtronic, Inc. He received his B.A. in chemistry from Spring Arbor University (MI) and his Ph.D. in inorganic chemistry from the University of Pittsburgh. He has been teaching at Bethel University for more than 24 years and has consulted for a number of local companies, of which Medtronic has been the primary focus. For more than 21 years, Ken's research has centered around issues relating to biomaterials used for devices implanted in the body. Past projects range from the controlled release of therapeutic active agents to metal-ion-induced oxidation of polyetherurethanes to protein and cellular interactions with metallic biomaterials. Current projects include the study of metal and metal oxide surfaces and how they interact with the body upon implantation. We utilize state-of-the-art surface analytical methods to characterize materials. Ken has participated in more than 100 Medtronic projects and supervised 85 undergraduate research student projects.

**Lance Lohstreter** is a Senior Scientist working on microscopy and surface analysis in the Core Technologies group at Medtronic. He is a graduate of Bethel College ('01, B.S., Physics) and the University of Minnesota ('03, M.S., Physics).



## 2011:

- November 4**      **What:** **Iowa Microscopy Society (IMS) Fall Meeting**  
**Location:** University of Iowa  
 Eckstein Medical Research Building, Room 283  
 Iowa City, IA 52242  
**Details:** Pre-registration is not required, attendance is free (membership in IMS or MSA is highly encouraged). Lunch will be provided for IMS members. Watch the [IMS website](#) for updates and talk time schedules as the program is solidified.

- November 5**      **What:** **Microscope Day**  
**Time:** 1:00 – 4:00 pm  
**Location:** Minnesota Science Museum  
 St. Paul, MN



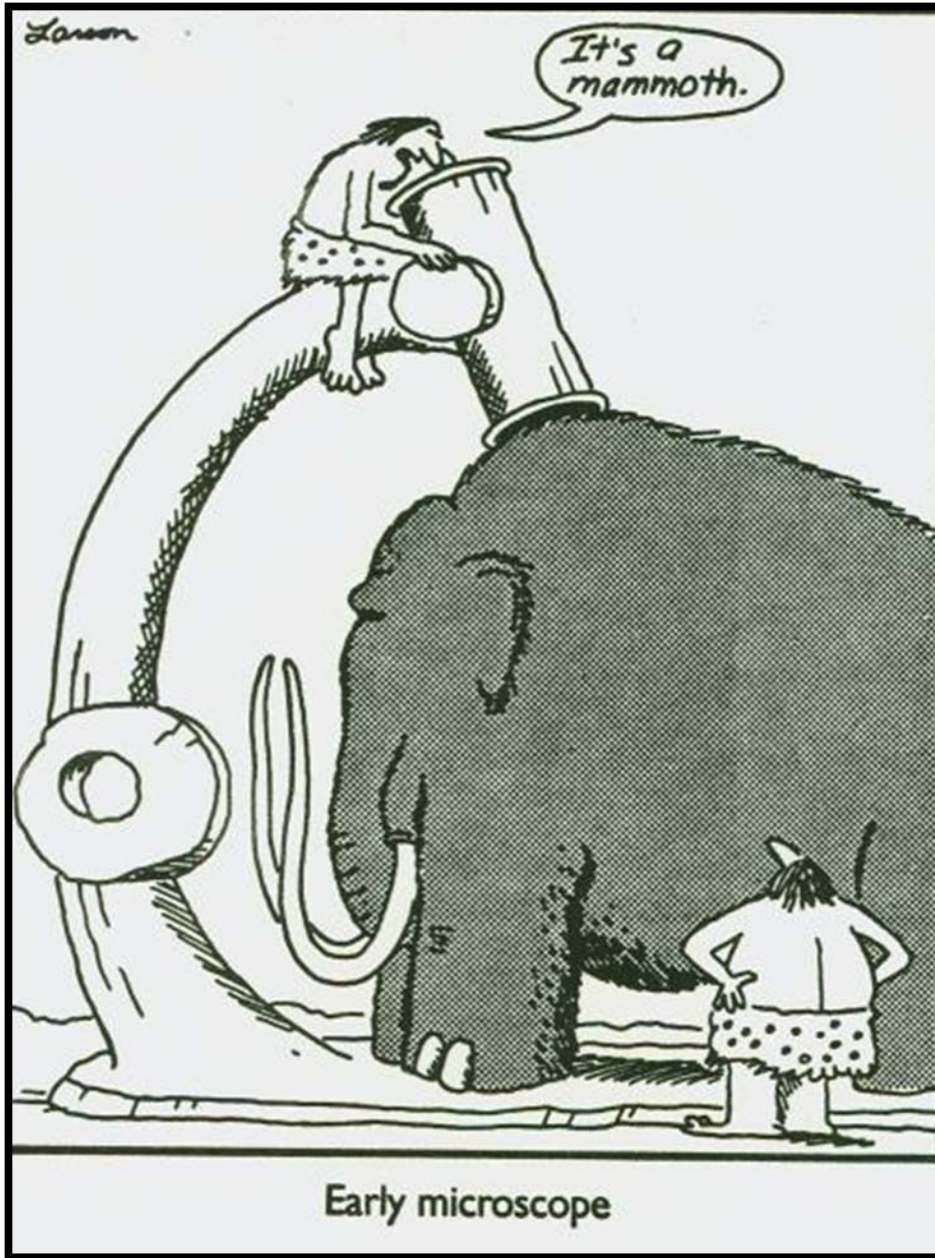
Anyone interested in volunteering or to suggest activity ideas, please contact Ann Palmer – [palme003@umn.edu](mailto:palme003@umn.edu).

## 2012:

- March 15**      **What:** **MinnTS**  
**Location:** to be determined
- May 4**      **What:** **Spring Symposium**  
**Location:** Minnesota Science Museum  
 St. Paul, MN



On the Lighter Side



## MMS Corporate Sponsors

Corporate Sponsors 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. MMS gratefully acknowledges the Corporate sponsorships provided by the following companies in 2009-2010. To become a Corporate Sponsor, complete and return the MMS membership form at the end of the newsletter.

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The Minnesota Microscopy Society would like to express sincere thanks to our Sustaining and 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 or Sustaining Member, complete and return the MMS membership form at the end of the newsletter.

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

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[jason.r.heffelfinger@medtronic.com](mailto: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](mailto:smckernan@mmm.com)

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**Reminder:** Membership in MMS runs from  
 January through December.  
*Have you paid your 2011 dues?*

Please visit the MMS website, <http://www.mnmicroscopy.org/MMSform.pdf>, for a fill-and-print pdf version of the membership form.

## Minnesota Microscopy Society – Membership Form

All microscopists are urged to support their Society at one of the membership levels offered below. 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 \_\_\_\_\_

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**\*A legible e-mail address is critical for delivery of your newsletter.  
 Newsletters are sent via email only.**

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

Are you an MSA member? \_\_\_\_\_ MAS member? \_\_\_\_\_

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