

Local Section News

Minnesota Section Tours and Seminar

ASME Minnesota recently conducted two tours. The tours were an opportunity to see two local industries and to meet with other ASME members.

Moorhead Machinery & Boiler Co.

On December 1st Moorhead Machinery & Boiler Co. hosted a tour for ASME. The tour consisted of a description of various projects and experiences working with shop fabrication, field mechanical maintenance, repair, renovation, and erection services. Much of Moorehead's work is for the Power Generation industry, however, the firm has been involved in some unique projects. One such project was the erection of the artistic centerpiece for the city of St. Louis Park while another project involved working with an engineer from Denmark to build a heat exchanger for the sugar beat industry in northwestern Minnesota. The work at Moorhead Machinery & Boiler Co. makes use of ASME codes and standards and includes heat exchangers, pressure vessels, silos, water towers, tanks, and turbines. During the shop floor walking tour given by Moorehead Engineer Mike Craemer there was an opportunity to view extremely large capacity presses in action and see a large-scale heat exchanger in the middle of the rebuilding process.

Local Section News

Minnesota Section Tours and Seminar Continued

Moorehead employees about 20 people in their fab shop and 20 in the office, although the number of employees increases for on-site field work. The company was founded in 1917, and has been at its present location since 1957. For ore information about Moorhead Machinery & Boiler Co. and photos of some of their projects, visit: www.mmbco.com. Approximately 15 ASME members attended the tour. Moorehead was very gracious to give us the opportunity to tour their facility.

Summit Tour

The ASME students and professionals came together on December 10th to take in a tour at the Twin Cities' own Summit Brewing Co.. The tour consisted of a description of the brewing process, a walking tour through the facility while describing function and origin of the brewing equipment, and finally an opportunity to cash in your three chips to sample your choice of the final products. The brewing process is highlighted below.

Milling: First Step in the brewing process is milling the barley malt into grist. **Mashing:** The grist is cooked in hot water to convert the starches in the malt to fermentable sugars. **Lautering:** The sweet liquid, called wort, is separated from the spent grain in a lauter tun. The spent grain is provided to local farmers to supplement the cattle's diet. **Boiling:** The wort is boiled and hops are added to provide the right amount of bitterness and aroma. **Whirlpool:** The hopped wort is spun in a whirlpool, which separates the spent hops and unwanted proteins. **Fermentation:** Yeast is added, which with the brew produces alcohol and carbon dioxide. **Filtration** and finally **Packaging.** For more information about Summit Brewing Co. and the brewing process visit: www.summitbrewing.com

Upcoming tours include The Otto Bock Technical Center (performs fabrication of prosthetic and orthotic devices). Friday Feb. 24 9:50 AM. E-mails have been sent with more information on these tours. See the website at <http://www.asme-mn.org> for more information.

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E-Week

E-week is the 19th-25th this year. This year's theme is Connecting Educators to Engineering with the corporate sponsor being Northrop Grumman and the professional society is Society of Women Engineers. There is a website at www.eweek2006.org with more details. SWE-MN is sponsoring a lot of local events from February 18-25 that week and looking for volunteers. Contact cg@swe-mn.org to volunteer for these career guidance activities to reach students and teachers in various grades. Their website at www.swe-mn.org/Volunteer.

The Career Guidance Committee is planning at least 4 great E-week activities and are looking for more volunteers to help. Other events are:

Feb 11 [Girl Scout Patch Day](#) Guidant, 8:00am to 1:00pm
Feb 18 [What makes a Bicycle?](#) National Engineers Week Kick-off Event Southdale Center, Edina, 10:00am to 4:00pm
Feb 21 Fuel Cell Car Experiment Fridley High School
Feb 22 Connecting Educators to Engineering Day Osceola, WI and Lakeville, MN
Feb 23 Sparks, Slime, and Speed Science Museum of Minnesota, St. Paul, 4:00pm to 7:00pm
Feb 25 CHEMFEST with ITAS The Works, Edina

ASME SEEKS FEDERAL FELLOWS TO SERVE AT OSTP

ASME is currently seeking applications from individuals interested in serving as a Federal Fellow with the Office of Science and Technology Policy and the U.S. Department of Homeland Security.

All Federal Fellow applicants must be ASME members and U.S. citizens. Applicants are encouraged, though not required, to have at least five years of professional experience, an advanced engineering degree, professional engineer registration, and some public policy experience.

For additional information, contact Kathryn Holmes at holmesk@asme.org or visit <http://www.asme.org/gric/Fellows/fellowshome.html>

Call for Nominations: 2006 ASME Johnson & Johnson Medal

The Center for Leadership & Diversity is actively soliciting nominations for the 2006 ASME Johnson & Johnson Consumer Companies, Inc. Medal.

This medal recognizes outstanding contribution by an individual, company, government entity, school, or other organization towards developing and implementing practices, processes and programs that value and strategically manage diversity and inclusiveness. The award includes a medal, certificate and honorarium of \$1,000. In addition, travel expenses of the recipient are reimbursed, in accordance with ASME Policy -4.5, to allow the recipient to attend the meeting at which the presentation of the medal is made.

The first recipient of the Medal, Dr. Joseph Bordogna, was recognized during the Honors Assembly at the 2005 Congress.

Nominations, along with a completed nominations packet, must be received no later than Feb.1, 2006. The ASME JJCCI Medal Nominations Committee will review the nominations, and a recommendation will be made to the Committee on Honors by no later than March 1, 2006.

Award applicants should be able to:

- Demonstrate alignment to the core values of ASME
- Demonstrate the effectiveness of their practices, processes and programs towards increasing the numbers of women and minorities within the multi-disciplines of mechanical engineering
- Demonstrate the impact of programs that are designed to include diverse participants and that create positive work and achievement environments for all participants.

In addition, award applicants:

- Must be a member of ASME or of a recognized engineering society;
- If an institution or organization, must have had an established program for a minimum of two years with more than 25 active participants; and,
- Must not have been involved in litigation related to discrimination or harassment within the past three years.

Additional information, as well as the nomination form itself, may be found at <http://www.asme.org/honors/ms71/saa/johnson.html>.

U-View A look at ASME Student Sections in our area.

All nine of the ASME Student sections that are part of the Minnesota Senior Section have been active this fall and plan on many activities over the next few months.

The nine schools are; University of Manitoba, Winnipeg, University of St. Thomas, St. Paul, University of Wisconsin Stout, Menomonie, St. Cloud State University, University of Minnesota Twin Cities, Minnesota State University Mankato, North Dakota State University, Fargo, University of Minnesota Duluth, University of North Dakota, Grand Forks

All these schools are looking for engineers in industry to get involved with their programs. They would like to have mechanical engineers talk to their groups about what they do in their jobs. These students, the future of our engineering profession, are getting the academic qualifications to become practicing engineers, but often have little exposure to engineers practicing in the industry. If you would like to meet with an ASME student section, get in contact with the ME department directly or contact me at lucasg1@asme.org. I have personally had the opportunity to meet with most of the schools this year and am very impressed with a the quality of the students, their motivation, and their desire to make a difference.

The big upcoming event for all of the student sections is the Spring Student Conference that will be held this year at the University of Missouri in Rolla, Missouri on March 3-5 2006. Here many of students and student teams will compete in the ASME Design contest, the Oral Presentation contest, the Poster and Web Page contests, and an impromptu design contest. There will also be various training sessions and opportunities for students of all the schools in District "C" to meet each other and exchange ideas. Submitted by: George Lucas, Chair College Relations

University of Manitoba

At the University of Manitoba student section, we are all quite busy. ASME and CSCE have a lot of similar members. Almost all of the active ASME members are helping out CSCE (civil engineers) with the GNCTR (Great northern concrete toboggan). We are finishing up the concrete sleigh, putting together the tech display, tech presentation, costumes and props. We are leaving for Montreal to compete Jan. 31.

I have recruited about 25 frosh (first year engineers) and trying to get them all to help out with GNCTR and the fishing rod. After GNCTR we are going to fabricate the fishing rod. We have some concepts done and hope to be able to finish the design during our spring break. Our current plan is to bring about 10 people to Rolla, Missouri for the ASME Spring Student Conference. Submitted by Jason Jason Dacquisto, President ASME Student Section

Minnesota State University Mankato

This past semester for ASME at MSU has been a very exciting. We have had guest speakers from Akkerman, Mike Rehnalt and Lars Tiegen. Mike and Lars spoke about their company, which builds and sells tunneling equipment, and some of the problems incurred while tunneling under things such as water and buildings. Also, we have had an engineer from the Nuclear Regulatory Commission, Luke Haeg. Luke spoke about his job at the NRC and how some of the things we learn in class apply directly to real world situations. He also spoke about all of the safety precautions used on reactors now and how these precautions work.

Not only have we had guest speakers but we have also gone on an MTS tour, which gets better every time we take it. We also plan on taking a tour of the Kato Engineering plant in Mankato this month. We will be trying to go on one tour per month this semester as with last semester to try to keep the interest of our members.

Since MSU doesn't offer much in the way of 3-D modeling for the lower level students, ASME in cooperation with Akkerman's Mike Rehnalt has offered an IRONCAD seminar. This will be design to give students experience with an easy to use 3-D modeling software package to give them something to offer while trying to get summer internships. Hopefully by doing this we can help our members gain valuable experience during this upcoming semester, which are all eagerly awaiting. Submitted by Aaron Magnuson, Officer ASME Student Section

North Dakota State University

NDSU's Student Section of ASME is continuing the tradition of excellence. This past semester was quite busy, and this spring semester will continue the trend. Recently, the annual Rat-Trap car race was held. This year the race was a traditional side-by-side drag race. Winners were given cash prizes. Next month, the annual "Thermoboat" race will be held at the school swimming pool. In this event, vessels, powered by thermal reactions, race across the pool. Cash prizes are awarded to the top three contestants.

We plan to tour several local or near by companies to view their engineering operations. The annual spring trip is being planned to possibly travel to the Twin-Cities area to tour a few select corporations. Other events are being planned and modified quite often. I would like to use this opportunity to invite anyone who is interested in presenting or offering a tour to NDSU's ASME Section to contact me with details. That is what is happening at NDSU!

Submitted by Nathan J. Tabbut, President, NDSU ASME Student Section

Saint Cloud State University

The student section of ASME at SCSU had its first meeting on the 20th of September with a talk from Mr. George Lucas from the Minnesota section. Student recruitment started immediately. The recruitment started on a slow note but eventually 26 members registered. We hope that we will get more members this semester depending on the enrolment. During the fall semester, the section carried tours to a number of sites. Among them were New Flyer and Park Industries. We also have tours planned for this semester including tours to Becker power plant and Grede Foundry.

The student section of the ASME made a donation to support a senior design project completing and racing a formula SAE car. This is in addition to the donations from the university and other donors. For the first time the car was tested on a track. At the moment, minor adjustments are being done to finalize the car.

Submitted by Jackson Omanga, ASME Student Section Treasurer

University of St. Thomas

This year, five new officers have been appointed, and a new direction of leadership has emerged. A record forty students showed up for our kickoff meeting in which sectional college relations chair George Lucas spoke about ASME opportunities. Thus far this year, president, Hezbon Mose and officer, Henrik Impola traveled with advisor Mike Hennessey to Iowa City and the University of Iowa for the ASME section leadership conference on Sept. 24th. They have emerged from the conference with new ideas for the club and have established themselves as ambitious leaders who will bring the club back into the student eye. On Oct. 20, a volleyball match was held between UST-ASME and the Society of Women Engineers (SWE) at St. Thomas. The match resulted in a resounding victory for UST-ASME. Another match has been scheduled for the spring semester. UST-ASME also was victorious in the UST annual Nerd Bowling Event. This contest pits ASME up against SWE, Physics, Math and Economics Clubs.

Currently, ASME has been actively volunteering member hours for cleanup and service activities around campus. They have donated 12 hours to the Salvation Army Headquarters in Roseville stringing Christmas lights onto the world's largest kettle. This kettle will be on display during the Holiday season downtown and will be featured in People Magazine. UST-ASME also donated 20+ hours in a fall clean up event on campus. At this event, students cleaned, raked, bagged and disposed of leaves in an effort to contribute to the community surrounding St. Thomas. There was also an opportunity in December for ASME to tour The Summit Brewery in St. Paul. Many members were present and students were exposed to the fluid dynamics and heat transfer problems encountered on a large scale in the distilling process. It was a terrific opportunity to apply class work to the real world environment.

Last year, UST-ASME competed in the regional student design competition at the University of North Dakota. This year they will compete in the competition at the University of Missouri-Rolla. The design challenge for this year is a fishing rod that can be used by handicapped persons without the use of their extremities. The club is extremely excited to participate and is looking forward to this opportunity. They feel that our work allows for St. Thomas engineering students to experience real world problems, encounter current professionals in their field, and interact socially with their peers. Our exposure and connection as part of a well known national organization has gone a long way towards providing leadership opportunities to students.

Submitted by Henrik Impola, Officer, St. Thomas Student Chapter ASME

University of Minnesota Twin Cities

The University of Minnesota ASME student section has been busier than ever and has a vast assortment of activities planned for the upcoming semester.

This past semester, the chapter invited two new companies to its monthly meetings which included Medtronic and 3M. A larger than expected turnout arrived for both meetings and the students were glad for the new exposure to these businesses. An impromptu design competition was held in the middle of November with sponsorship from Andersen Windows, drawing both lower division mechanical engineering students as well as the usual crowd more familiar with the monthly activities. This was thanks to an improvement in advertising methodology. The officers have a few social activities planned to kick off the spring semester, including a Minnesota Wild Hockey game and BBQ. With hopes of warmer weather, a host of new activities are being decided upon to expand membership and awareness on campus.

Submitted by Mark Bliss

Co-President University of Minnesota Student Chapter ASME

University of Minnesota Duluth

The University of Minnesota Duluth has growing and exciting programs in Mechanical and Industrial Engineering. Our student section is a combined group of ASME and IIE student sections that we call MIE.

Last fall UMD had ABET on-site for the Initial Accreditation visit for the Mechanical Engineering program. Initial indicators are positive as UMD awaits ABET's final decision in Summer '06. UMD's Industrial Engineering program has been accredited since 1989.

Some events that we have planned for the winter and spring include:

February 23-26, 2006

University of Nebraska - Lincoln

UMD plans on attending the Institute of Industrial Engineers' Regional Conference. Activities include a Technical Paper Competition, workshops, along with social activities with other college groups.

March 3-5, 2006

University of Missouri - Rolla

UMD will compete at the Regional Student Conference held in Rolla, MO. Students will enter in the: "*Sip-and-Puff*" *Controlled Fishing Rod for Quadraplegics*, the same competition in which UMD took first place at the National Competition in 2001.

May 17-20, 2006

Romeo, MI

UMD is currently designing its first ever Formula SAE Car. UMD plans to enter the '06 competition.

MSPE (Minnesota Society of Professional Engineers) is a relatively new student group at UMD that encompasses all of the engineering disciplines. MSPE promotes professionalism, integrity, and the advantages of pursuing your professional engineering license.

Submitted by Brian English, President, Mechanical and Industrial Engineering Club

University of North Dakota

Fall 2005 proved to be an eventful semester for the UND ASME Chapter. As a recap, we hosted 4 meetings which included presentations by Don Peterson (UND Alumni), George Lucas, and representatives from 3M. We had our share of fun activity while golfing, bowling, playing cricket, and at our annual Fall Semester Banquet where we honor the graduating class. Simplot, in Grand Forks, exposed the secret of making McDonald's fries by hosting a very interesting tour to our group. We hope to continue to offer a variety of activities for the group during the spring semester through professional presentations and tours. More importantly, a big goal for our group this semester will be the inclusion of the younger engineering students into ASME both through membership and leadership roles. We are looking forward to a great semester.

Submitted by Chad Nordquist, President, Student Section ASME

University of Wisconsin Stout

The University of Wisconsin Stout section of ASME is doing really well. As a group we decided to not participate in the human powered vehicle competition to give more time to devote the ASME design contest held in March at the Student Conference to be held in Missouri. We will have more than one team with different automated casting machines. For one of the newest student sections, we plan to make a strong showing. .

Submitted by Carl Brauch, President, Student Section ASME

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