

October Dinner Meeting

October 24, 2006
The Cardinal Room in the
ISU Memorial Union,
Ames, Iowa.

4:00 - 6:00 PM: Dr. Eliot Winer (*ISU ME Professor*)
“Cutting Edge VR, Computational, and Interface
Technologies”

6:00 - 6:30 PM: Social Hour

6:30 - 7:30 PM: Dinner

7:30 PM: Ed Merwald (*VP Engineered Products – Emerson
Process Management\Fisher Controls*)
“Global Technology, Culture, and Leadership”

Registration Deadline is October 19th by noon.
<http://sections.asme.org/centraliowa/calendar.htm>

November Meeting Preview

Advances in Precision Engineering
Thursday, November 10, 2005
Ramada Inn
West Fourth & Commercial, Waterloo, IA

INSIDE THIS ISSUE

- 1 **Local Section News**
- 2 **ITI Aids in Fight Against Terrorism**
- 2 **Water Quality Conference in Las Vegas**
- 3 **Early Career Forum**
- 4 **How I Became A Mechanical Engineer**
- 5 **ASME E-Library Expands Titles**

Local Section News

October 2006

A big thank you to Mike Conn, Design Engineer at Vermeer Company, for arranging the September 26 tour of their Trenchless Equipment plant. Louis Hartke, Vermeer Project Engineer, presented the technology used in guiding the boring bit in their trenchless equipment. This demonstrates again that our Central Iowa companies are leading edge on numerous technologies.

October 24 will be our annual joint meeting with the ISU Student section. ISU Engineering Professor Dr. Eliot Winer will present a 4:00 p.m. survey of some of the newest VR, computational, and interface technologies out there. While most of these are not ready for practical applications, it is a fun talk that really shows the cutting edge of what is being developed. These technologies will play a major role in the next 10-25 years. After dinner we will hear from Ed Merwald, VP Engineered Products at Emerson Process Management\Fisher Controls. Ed will share his views on “Global Technology, Culture and Leadership”.

I have recently been recruiting engineers on campuses for coop programs and full-time employment. Campuses are hosting record numbers of companies in their career fairs for students graduating soon! Some universities are seeing a decline in high school students’ interest in science and math. As an engineering society and as a country, we need to encourage our young folks’ interest in science and engineering if we are to sustain our position in the world economy. Support your local elementary & high school science and math programs.

Ray Micheel, P.E., 2006-7 Section Chair
ray.micheel@emersonprocess.com

ASME To Hold Conference on Water Quality in Las Vegas



ASME's Environmental Engineering Division will sponsor the 1st Water Quality, Drought, Human Health and Engineering Conference, Oct. 18-20, 2006, in Las Vegas, Nev.

The forum will address advances in water quality technology and provide solutions-based discussion and information exchange regarding activities and plans for improving the quantity and quality of water, the impact on human health and engineering and current policies from state and federal agencies.

For additional information or to register, visit <http://www.asmeconferences.org/water06/>

Applicants Needed: ECLIPSE

Applications for the Early Career Leadership Internship Program Serving Engineering are due by Dec. 1 for internships beginning at the 2007 Summer Annual Meeting. Women, non-traditional engineers and engineers in the workforce between three and 10 years are encouraged to apply.

For additional information and an application, go to http://www.asme.org/Governance/Volunteer/Early_Career_Leadership.cfm. ASME staff contact: Mary James Legatski, legatskim@asme.org

Plan to attend "Strategic Diversity: Envisioning the Future of Engineering" at the upcoming 2006 Congress in Chicago!

This workshop, sponsored by the Center for Leadership & Diversity, will engage participants of different backgrounds, experiences, ages, gender and ethnicity, in an exercise of forward outlook into a successful future state of the Engineering Profession. The desired outcome of the workshop is the collective wisdom (Voice-of-the-Customer) of a diversely representative group of ASME members that provide a common vision and a common language to enhance the strategic direction of ASME. All Congress attendees are welcome to participate. There is no cost to attend. For additional information, contact Mary James Legatski at legatskim@asme.org.

ASME-ITI AIDS IN FIGHT AGAINST TERRORISM



The ASME Innovative Technologies Institute, LLC (ASME-ITI), has announced the commencement of a \$5 million contract with the U.S. Department of Homeland Security (DHS) for continued work using its risk analysis methodology known as RAMCAP (Risk Analysis and Management for Critical Asset Protection).

Created and developed by ASME-ITI and adopted by DHS, RAMCAP is a framework for analyzing and managing the risks associated with terrorist attacks against critical infrastructures. The purpose of RAMCAP is to provide essential information to government decision makers about consequences and vulnerabilities in the private sector, which owns 85 percent of the nation's critical infrastructure. RAMCAP is unique in that it facilitates the comparison of risks within a sector and across multiple sectors by employing a common terminology and standardized measurement metrics. The process is then tailored to specific aspects of various sectors of the critical infrastructure in documents called Sector-Specific Guidance documents (SSGs) that enable companies to identify and report on the vulnerabilities and potential consequences of terrorism by providing guidance on how to complete both preliminary and in-depth assessments. For more information about the ASME-ITI visit <http://www.asme-iti.org/about/us.cfm>

Call for Nominations:

Committee On Ethical Standards

ASME is currently accepting nominations to fill a vacant position on the Committee on Ethical Standards and Review, for a four-year term, beginning in 2007. The requirements include a minimum of ten years dedicated service to ASME including five years experience in activities beyond the local section, a commitment to upholding ethics in engineering practice, and licensure as a professional engineer. Forward nominations to David Soukup, Managing Director, Centers, at soukupd@asme.org

2007 Johnson & Johnson Consumer Companies, Inc. Medal



The Johnson & Johnson Award, first presented in 2005, recognizes outstanding contribution to the promotion of diversity and inclusiveness within the engineering community. This award is open to ASME members and individuals who are members of a recognized/engineering or professional society.

The deadline for all nominations is Feb. 1, 2007. For additional information and forms, visit http://www.asme.org/Governance/Honors/SocietyAwards/Johnson_Johnson_Consumer.cfm, or contact ASME staff contact: Mary James Legatski, legatskim@asme.org

Diversity Action Grants Now Available!

Encourage your local ASME student section to apply for a Diversity Action Grant by the Nov. 1 deadline! This program enables ASME Student Sections to sponsor events which:

- Promote the inclusion of women and under-represented minorities in ASME Student Sections and in mechanical engineering,
- Inspire K-12 students to excel in science, technology, engineering and mathematics (STEM) education and/or,
- Assist minority - and/or women-owned businesses solve engineering design problems.

For more information, visit: http://www.asme.org/Communities/Diversity/Diversity_Action_Grant.cfm or contact Mary James Legatski at legatskim@asme.org

Early Career Forum & Career Fair

A two-day career enhancement and networking program for early-career engineers
Nov. 5–6, 2006 Chicago Hilton, Chicago, Ill.

Join other early career engineers at the Early Career Forum & Career Fair, held in conjunction with the 2006 ASME International Mechanical Engineering Congress & Exposition. The Forum will give you first hand advice and information on issues relevant to your career. Senior-level engineering students will also benefit from this important event, featuring top industry pros presenting key trends, opportunities, and expectations in the field.

Featuring:

- Joseph A. Ahearn, Senior Vice President, **CH2M HILL** (*Engineering Services*)
- Todd Allen, Manager, **Johnson & Johnson** (*Pharmaceuticals*)
- Jeff Dinski, BSME, Formerly a Writer/Producer with **NBC, ESPN, MSNBC** (*MBA Graduate Student at Harvard Business School*)
- Larry Dickinson, Ph.D., Founding Principal, **3F, LLC** (*Textiles and Composites*)
- Laura Wojcik, Ph.D., P.E., Senior Director, **Packer Engineering** (*Biomedical*)
- Julie Maupin, Engineer, **Gas Technology Institute**

And meet representatives from

- Toyota
- UOP (a Honeywell Company)
- National Council of Examiners for Engineering and Surveying (NCEES)
- Grogan Advisory Services
- and others...

Participate in the one-day program (advance fee: \$25 or onsite fee: \$30), or get even more valuable insights when you include a second day of special ASME conference sessions (advance fee: \$150/\$200 or onsite fee: \$175/\$225 – member/nonmember rates). For more information, click: http://www.asme.org/Communities/EarlyCareer/Forum/Upcoming_Events.cfm

REGISTER by Nov. 1, 2006 and Win \$200!

When you register by Nov. 1, 2006 you will be entered into a drawing to win a \$200 American Express gift card. The gift card will be announced and awarded at the Early Career Forum on Sunday, November 5, 2006. The winner must be present to win.

Register now: www.asmeconferences.org/congress06/confregistration.cfm

HOW I BECAME A MECHANICAL ENGINEER



Darrell W. Pepper, Ph.D, professor and director of the Department of Mechanical Engineering at the University of Nevada, Las Vegas remembers his first introduction to ASME in 1964 when he was a high school senior: "We had taken our senior trip to New York and the World's Fair in May. I recall going to Tad's Steakhouse in Times Square (when steaks were \$1.99) and sitting next to a mechanical engineer attending an ASME meeting in New York. My friends and I became entranced as we listened to him tell us about the breath and depth of mechanical engineering and the myriad activities of its professional society.

Upon graduation from high school, all of us enrolled as mechanical engineering students in the fall in our selected universities. We still feel that it was the best decision and career choice we ever made. Over the years, I have been involved in numerous activities ranging from chasing tornadoes (for the U.S. Dept. of Energy and Nuclear Regulatory Commission), dealing with hazardous releases into the atmosphere, to developing CFD algorithms for the national aerospace plane program and scramjet propulsion. Other diverse efforts have included working on nuclear waste problems for the Yucca Mountain Repository, groundwater transport of plutonium and tritium from the Nevada Test Site, solar powered airplanes and thin solar panels, giant Frisbees (world's largest), and wind energy modeling for the western United States. In 2004 I spent a year as an ASME Congressional Fellow in the office of U.S. Senator Dianne Feinstein (D-Calif.), and became involved with water and contaminant issues while serving as her science and engineering advisor. Having been a member of ASME for many years, I have watched the organization evolve into a major internationally recognized and respected society. When ASME speaks, people listen — this is especially true on the "Hill," the U.S. House and Senate.

Recently ASME has begun to make serious inroads into such fields as nanotechnology, renewable energy, and transportation, to name just a few. ASME has enabled me to explore these new areas and become acquainted with world experts — the workshops and technical conferences sponsored by ASME have been, and continue to be, outstanding. Read Dr. Pepper's complete story on ASME Connections <http://www.asme.org/About/Connections/>

"Tips for Tenure and Promotion: A Symposium for New and Prospective Faculty" – Free Event!

Session 1: Expectations of New Faculty for Promotion and Tenure
Session 2: Panel on Scholarship, Teaching and Service
Session 3: Hints for Successful Proposal and Funding Opportunities

When: Tuesday, Nov. 7, 2006

Where: ASME Congress (IMECE), Chicago, IL

Audience: New and prospective faculty, including graduate students thinking about a career in academia.

Cost: Free to anyone registered for the ASME Congress. However, you must register separately for this event to secure your seat.

http://www.asme.org/Education/College/Faculty/Tips_Tenure_Promotion.cfm

Organized by
Joseph J. Rencis, University of Arkansas
Mohammad N. Noori, Cal Poly San Luis Obispo

Call For Applications – ASME/ABET

Have an interest in undergraduate education? If so, we need your help! We are currently seeking for new ASME/ABET Program Evaluators.

Role of a Program Evaluator

Contribute to the continuous improvement of mechanical engineering, mechanical engineering technology, or related degree programs by evaluating them against a set of criteria. These criteria outline the requirements for faculty, facilities, curriculum, and other key program areas. In doing so, Program Evaluators help to assure the quality and vitality of Mechanical Engineering and Mechanical Engineering Technology degree programs. It's a lot of work, but it's also very professionally and personally rewarding.

Minimum Qualifications:

- Demonstrates interest in improving education.
- Demonstrates desired competencies outlined in ABET's Competency Model.
- At least one degree in mechanical engineering, mechanical engineering technology, or a closely related discipline. Graduate degree preferred.
- 10+ years of work experience. Management experience a plus.
- ASME member or willingness to become a member prior to applying to serve as an evaluator.

How to Apply

Applications are due by **Oct. 15**. To obtain an application and for more information, please visit http://www.asme.org/Education/College/ABET/Become_Evaluator.cfm Minorities, women, and engineers working in industry are especially encouraged to apply.

For more information, contact Amy Bentow, manager, Education at bentowa@asme.org or 212-591-7880.

ASME E-Library Expands to 75 Titles – Free to members!

In early Sept. 2006, ASME members gain access to 75 interactive, user-friendly references available on the newly expanded ASME e-Library powered by Knovel. To take advantage, members simply access ASME.org and log onto the members-only page. Members pay no charges for access.

Selecting from a large, diverse collection that includes *Mark's Standard Handbook for Mechanical Engineers*, *Handbook of Materials Selection*, *Mechanical Engineer's Reference Book*, *Structural and Stress Analysis*, *Pipeline Rules of Thumb*, *Mechanics of Materials*, and *the Manufacturing Engineer's Reference Book*, members enjoy additional benefits unavailable from printed references. Using embedded analysis software, they quickly locate data, analyze it, and export the results. For a complete listing of available titles, visit the e-library pages in Members only.

For the initial session on the expanded ASME e-Library, each individual can log onto the member-only page and register. For future sessions, the individual can simply log onto the members-only page and click on an icon, which opens the collection for use.

ASME Low Interest Student Loans

The ASME Winter/Spring 2006 Student Loan Application is now available online. The application postmark deadline is **Oct. 15, 2006**. Don't miss out on this opportunity, the loan rate is only 4.3%. Applicants must:

- Be ASME Student Members in good standing
- Be enrolled in full-time academic studies in the **U.S., Canada or Mexico** and making satisfactory progress in his or her degree program in Mechanical Engineering, Mechanical Engineering Technology or closely related program
- Have a minimum GPA of:
2.20 on a 0 to 4.00 scale for undergraduate students; 3.20 on a 0 to 4.00 scale graduate student; Have a demonstrated financial need.

For details and an application form, visit: http://www.asme.org/Education/FinancialAid/Loans/Student_Loan_Funds.cfm.

Local Section

Return Address
Street Number and Name
City, State 98765-4321

POSTAGE

ADDRESS SERVICE REQUESTED

Mailing Address
Street Number and Name
City, State 98765-4321