

April 2004 Event

ASME St. Louis Section presents Dinner and speaker presentation of **Development of Super High Strength Steel and Copper Alloys**

Wednesday, April 14th, 2004

Tom Bever, Event Captain

314-353-8558

Please join us for a congenial dinner and presentation showing the development of super high strength steel and copper alloys for pressure vessels used in petrochemical plants.

The speaker will be **Dr. Maan H. Jawad**, noted engineer and scientist., President of **Global Engineering and Technology**, consulting on repairs, alterations and engineering services to the power and petrochemical Industry. Previously, Jawad was President of **Nooter Consulting Services** and Vice President - Research and Development of the Nooter Corporation and a member of the Nooter Corporation Board of Directors. Nooter fabricates and field erects boilers and pressure vessels for the power generation and petro-chemical industries and is employee owned with annual sales of 800 million dollars.

High strength steel alloy (3Cr-3W with 110 ksi tensile) is being developed for possible use by refineries and chemical plants. The U.S. Department of Energy in conjunction with Oak Ridge National Lab and Nooter undertook an extensive research program for the development of this new alloy. This is for possible replacement or augmentation of steels used at elevated temperatures above 950 degF which require expensive post weld heat treatment and use large quantities of energy. The new steel (3Cr-3W) is being developed without the need to post weld heat treat.

High Strength copper alloy (Cu-Be with 110 ksi tensile) is being developed to be stronger than many available steel, aluminum, titanium, or nickel alloys used by the petrochemical industry. The copper alloy designation is C17510.

A summary of the advantages and disadvantages of using these alloys will be presented together with status regarding submittal of data for possible inclusion in the ASME Boiler and Pressure Vessel Code.



Dr. Jawad has been very active on various technical committees of the American Society of Mechanical Engineers related to boilers and pressure vessels. He was a member of the ASME Boiler and Pressure Vessel Main Committee, Section VIII, Subgroup Design, Subgroup Materials, and Subgroup Toughness. Presently he is a member of the Subgroup on Elevated Temperature Design and an honorary member of the Main Committee.

Date: Wednesday, April 14, 2004

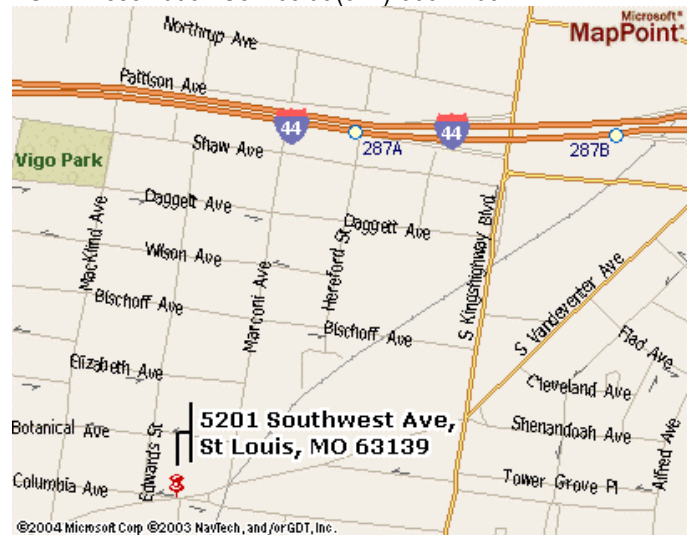
Time: cash bar 5:30, dinner 6:00, presentation 7:00 p.m.

Dinner: Individuals may order from Favazza's menu

Place: Favazza's Restaurant, 5201 Southwest Avenue, St. Louis, MO 63139 meeting room.

Cost: Your cost of dinner from the menu.

Reservations: Required by Monday, April 12, 2004. Call the ASME Reservation Service at (314)-353-2463.



Directions: From Interstate 40 or 44 take Kingshighway Blvd south to Southwest Ave, then west on Southwest Ave.

For additional information: contact the event captain: Tom Bever at 314-353-8558 or email: bevert@asme.org

Message from the Section Chair:

This note is a reminder that **Alan Pilch**, chair of student section University of Missouri at Rolla, has recently been recommended for the ASME Charles T. Main Award.

The Charles T. Main Award was established in 1919 in honor of the 37th president of ASME to encourage student members to become active in leadership and service for a period of more than one year to the programs and operation of a student section of the society.

Alan's many efforts to promote ASME at the UMR campus and to work with other students on behalf of ASME are highly commendable.

Tom Mull

**Please join us at the next
St. Louis Section Board Meeting
6:00 p.m. Tuesday, April 20th
at Laclede Street Bar and Grille
3818 Laclede Avenue
near Saint Louis University Campus**

Listen to what is going to happen by joining us at the next Board meeting. This is the opportunity to voice your input into what the St. Louis section should be doing for you.


Nominating Committee St. Louis Section members

The nominating committee for next year has been selected. This committee will help start nominations of a slate of candidates for officers of our St. Louis section for the upcoming year. The committee persons selected are: Betty Bowersox, Jim Campbell, Tom Bever, Dave Crawford, and Dave Henkelmann. Your input to this committee is solicited. When candidates are nominated, they can be placed on ballot along with spaces for other write in candidates. All St. Louis section members are urged to participate in nomination and election of officers for the 2004/2005 year.

Student Career Nights


ASME St. Louis Section extends thanks to professionals, teachers, and students participating in evenings of career conversations recently at local universities (UMR, SLU, WASHU). These informal discussions have been made successful by the contribution of time and effort by all.

ASME IS POISED FOR CHANGE



Implement Staged Migration Process
Implement changes in a staged migration process

Major Milestones	2004	2005
1. Five Assemblies	Nov, Jan, Feb	
2. Feedback Incorporated into Plan	March	
3. BoG Approves Plan	March	
4. Begin Transition to New Model	April	
• Launch Council Migration Plans		
• Launch Strategic Management		
• Realign Staff Services and Functions		
• Launch Key Initiatives That Support ASME's Strategy		
5. Transition and Council Migration Deadline		June
6. Continuous Improvement		Ongoing



ASME is poised to become a leader in the global, multi-disciplinary engineering profession. The new ASME will converge many traditional engineering disciplines with more flexible services for promulgation of changing technologies across industrial user groups, governmental regulatory groups, and the academic communities. The new organization will commence effective July 15, 2005. Between now and July 15, 2005, ASME will continue to function in our current organizational structure, with our existing leadership teams providing the needed guidance and support, and for transition planning.

Between March 2004 and July 2005, ASME will begin a 15-month transition period during which implementation details will be developed in each ASME Council to achieve the outcomes of the organizational design approved by our Board. Under the leadership of our ASME Senior Vice-Presidents, each Council will schedule leadership meetings to discuss, identify and recommend the critical functions to continue under the new organizational model. Many Councils have already commenced these discussions. For staff-related activities, the ASME staff will be implementing study efforts similar to those of our Councils.

Please visit the complete Continuity and Change Plan at website <http://www.asme.org/change>.

Volunteers are Needed.

We have received a request from Rockwood School District for a brief presentation on the topic of Simple machines to a group of 6th grade students. The students would like to meet a professional who has worked in positions which use math and science. They would like learn hands-on how machines work. They would like to make the connection between what they are studying now and how that knowledge will someday be needed in their own future.

Please contact Tom Mull at 636-938-6173.

UMR ASME Student Section Wins Regional Awards at Region VII Student Conference, March 11-March 13 2004

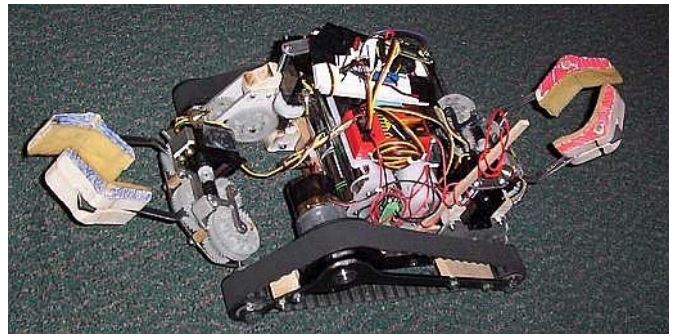


The University of Missouri – Rolla (UMR) Student Section of the ASME is proud to report on the many successes at this year's Regional Student Conference (RSC). This year, 9 students and Student Section Advisor Dr. Brad Miller participated in the conference. In attendance were Student Section Chair Alan Pilch, Vice-Chair Misty Mills, Secretary Angela Berring, and Student Members Cameron Bahram-ahi, Prem Midha, Dustin Mitchell, and Pradeep Nambiath. Student Members Chester Grohs and Bryan Sartin were unable to attend the conference, but worked many long hours to prepare the Design Competition entry.

The conference was marked by significant participation within the Student Section. Angela Berring, Chester Grohs, Prem Midha, and Bryan Sartin entered a device in the Student Design Competition. Dustin Mitchell participated in the Old Guard Oral Presentation Competition. Prem Midha submitted an entry to the Technical Web Design Competition. Alan Pilch gave a training session entitled, "Marketing your ASME Student Section." Besides the individual participation, UMR made the Region take notice with a strong showing in the Ingersoll-Rand Competition and the Early Bird Competition.

Dustin Mitchell received awards for Best Technical Content and Third Place in Region for his oral presentation, entitled, "A Comparison of the Power Output of Five Biodiesels." For his web site titled, "Behavior-Based Control of Multiple Robots," Prem Midha received awards for Best Technical Content and First Place in Region. Student interest in RSC was proven with Second Place in the Early Bird Competition, which is based on attendance and participation in the Friday morning program, and the students proudly received awards for Most Improved Student Section and Third Place in Region for the Ingersoll-Rand Competition, showcasing the incredible improvement in the overall activity of the Student Section program this year.

2004 Student Design Competition Region VII Winners



The ASME Student Section at Southern Illinois University at Edwardsville placed first in the 2004 Student Design Contest held at the Regional Student Conference in Lincoln, Nebraska on March 11th-13th. SIUE competed against ten teams from other Region VII universities for first place in the design competition. For several months leading up to the competition, SIUE students worked diligently on a radio-controlled robot to take to Lincoln. The competition, nicknamed "Mine Madness," involved building a device that could traverse a field containing obstacles and acquire landmines (simulated by cylindrical objects of varying dimensions), transporting them safely across the field to a disposal area. Size and power restrictions were specified by the contest rules. The device could be no larger than 30cm x 30cm x 30cm, and had to use ordinary batteries. The mines are given point values that are awarded to the team once their vehicle deposits the mines into the disposal area. Each team had a three-minute time limit to dispose of as many of the six mines as they could. SIUE was the highest scoring team and took home the trophy.



The student chapter at SIUE relies on fund-raising and donations to keep its Design Team going. SIUE's Mechanical Engineering Department, the ASME St. Louis Section, and various other sponsors have been generous and supportive of the team's effort. Chad Burns, ME Senior and Design Team Captain, says "This project offers engineering students a chance to apply their education to 'real-life' applications. Of course, it's a lot of fun too." The team is looking forward to the National Championship which will be held in Anaheim, California this November. The SIUE team plans on upgrading the Rover for its next challenge.

ASME B31.3 PROCESS PIPING SEMINAR

A 5-day course covering design, construction, and mechanical integrity of process piping.

This course covers design, fabrication, examination, erection and testing requirements of ASME B31.3. The course is specifically designed to cover the Code requirements from design through start-up of new piping systems, as well as standards of inspection and repair of in service piping systems as provided in API 570, Piping Inspection Code. Similarities and differences with ASME B31.1 are also discussed.

This course provides a working knowledge of the Code, how it is organized, its intent, the basis for the requirements, including both design and construction aspects. It provides a foundation of knowledge necessary for those responsible for assuring the mechanical integrity of existing piping systems, as well as for those responsible for designing and constructing new piping systems.

Instructor **Dr. Charles Becht** has more than 25 years experience in the design, design auditing, analysis, check-out, development, troubleshooting and failure analysis of process and power equipment and structures.. Dr. Becht is the Chairman of three ASME committees including the Post Construction Standards Committee and is Vice Chairman of ASME B31.3. He is the author of the ASME Press book, *Process Piping: The Complete Guide ASME B31.3*, a copy of which will be given to participants.

Instructor **Don Frikken** had been with Solutia, Inc. and Monsanto Company for 34 years; working on a wide range of activities including piping and mechanical design, project engineering, and engineering standards, specializing in piping design. Don is a member of several ASME committees and is past Chair of the ASME B31.3.

When: April 26-30, 2004

Where: Holiday Inn Southwest, St Louis

Cost: \$1875

For more info contact: dfrikken@becht.com

Website: <http://www.becht.com/Course/B313.htm>

BECHT ENGINEERING COMPANY, INC.

Upcoming May 2004 STL Event

Dinner and presentation of

GE Transportation Military Engine Operations Aircraft Div.

David Henkelmann, Event
Captain



Join ASME for a high-tech evening of military aircraft engines and latest advances in aerospace turbine applications. Leslie Voetter, GE Transportation Senior Representative, and Marco Levy, GE Transportation, Boeing military aircraft

engine operations, will be providing a exciting technology overview, challenges, accomplishments and future insight into aviation engine systems.

This will be a reception, dinner and presentation event. This is a joint meeting with SAE.

Details including topic details, menu, times, directions and pricing will be provided in the May ASME St. Louis Section Newsletter.

Reservations: required by Friday, May 7th, by calling the ASME Reservation Service at (314) 353-2463.

When: Wednesday evening, May 12th.

Where: The Engineer's Club of St. Louis.

For additional information, please contact David Henkelmann at 314-579-7089 or email: David.Henkelmann@ge.com.

St. Louis Section
The Engineer's Club of St. Louis
4359 Lindell Blvd.
St. Louis, MO 63108

ASME 2003/2004 St. Louis Section Board

Chair	Vice Chair	Secretary	Treasurer	First Past Chair	Second Past Chair	Newsletter Editor
Thomas Mull	Dr. S. Karunamoorthy	James Campbell	Sridhar Condoor	James LaBlance	David Henkelmann	Duane Meyer
Thomas Mull & Associates	St. Louis University	Busak+Shamban Midwest	St. Louis University	EDM Incorporated	General Electric Co.	Benham Engr.
636-938-6173	314-977-8442	618-654-9080	314-977-8444	314-231-5485	314-579-7089	314-542-9604
mullt@worldnet.att.net	karunamoors@slu.edu	jim.campbell@busaks-hamban.com	condoor@slu.edu	Jim.lablance@edm-inc.com	David.henkelmann@ndsys.ge.com	dgmeyer@gtw.net