



TREASURE VALLEY SECTION

ASME

NEWSLETTER



The American Society of
Mechanical Engineers

October, 2003
Volume 7, Number 2

<http://www.asme.org/sections/tvidaho>

September Meeting Information

Topic: MEMS Fabrication
Date: Tuesday, Oct. 21st
Time: 6:30 PM
Location: BSU Micron Engineering Ctr, Rm 307
Contact: Michael Keyes, 396-4170, or Carl Hamke 331-9774

Oct. 21st Meeting Announcement

Amy J. Moll, Ph.D. and Donald G. Plumlee, P.E., will give a presentation and lab tour of their MEMS work. The current focus for micro-electromechanical (MEMSs) fabrication is based on the use of Si as the primary material. Great progress has been made due to the extensive processing knowledge in the semiconductor device industry. However Si based devices have some limitations. Few materials can be integrated into standard IC processing techniques.

The Ceramic MEMs lab scientists at Boise State University are using the LTCC system to build various devices including a simple pressure sensor and an ion mobility spectrometer (IMS). Designs have also been generated for a micro-combustor, micro-propulsion and micro analytical tools.

The meeting will be held on Tuesday October 21st at the Micron Engineering Center, room 307 located at 1020 Manitou Ave. (the corner of Belmont and Manitou), from 6:30 PM to 9:00 PM. Parking is street only; without a BSU permit. Enter the building off of Manitou. The public is welcome to attend.

Dr. Amy J. Moll has a wide range of experience in the microelectronics field. She joined the faculty at BSU in August, 2000. Dr. Moll received a B.S. degree in Ceramic Engineering from University of Illinois, Urbana in 1987. Her M.S. and Ph.D. degrees are in Materials Science and Engineering from University of California at Berkeley in 1992 and 1994. Following graduate school, Dr. Moll worked for Hewlett Packard for six years both in San Jose, CA and in Colorado Springs, CO.

Mr. Plumlee is certified as a Professional Engineer in the state of Idaho. He has a M.S. in Mechanical Engineering from Boise State University and a BSME from Texas A&M University. He has spent the last two years establishing the Ceramic MEMS laboratory at Boise State University. This has included developing a C-MEMS design/fabrication process using SolidWorks 3D modeling system for the LTCC materials. Prior to arriving at Boise State University, Mr. Plumlee worked for Lockheed Martin Astronautics as a Product Engineer/Project Manager/Mechanical Designer on structural airframe components for several aerospace vehicles.

For more information, please contact Carl Hamke at 331-9774 or Michael Keyes at 396-4170.

Treasure Valley Section Christmas Party

Remember to mark your calendars for the Christmas party extravaganza scheduled for December 2, 2003 at the Sockeye Brewery near the corner of Cole and Ustick in Boise. This year we are planning to invite the other local technical societies to join us for a fun filled evening of fellowship and celebration.



Jon Anson
Section Chair
jon_anson@hp.com
396-2291 (wk)



Eric Wolfe
Section Vice-Chair
ewolfe@idahopower.com



Tim Jaszowskiak
Treasurer
tjaszowskiak@multiquip.com
336-7650 ext. 122



Carl Hamke
Public Information
hamkec@asme.org
377-1120 ex. 28



Alan Russell
Secretary/Newsletter Editor
alan_russell@hp.com
396-4439 (wk)



Mike Keyes
Program Director
michael_keyes@hp.com
396-4170



Judi Steciak
Satellite Programs
jsteciak@uidaho.edu
364-4080 (wk)



Annette Long
Awards & Honors Chair
along@simplot.com
384-8378 (wk)

ASME Group Insurance

The Treasure Valley section encourages its membership to review the ASME Group Insurance Program available to its members. This program may not seem beneficial to members that are enrolled in employer provided programs. However, the ASME Insurance Program is here to provide insurance coverage to its members that are self employed or are employed by firms that do not provide an insurance benefit. The Treasure Valley Section also recommends that ASME members residing within the State of Idaho carefully review the plans available, since not all of these plans provide coverage to Idaho State residents. The Treasure Valley executive committee plans to provide the influence necessary to the ASME Group Insurance Program Office in the hope that we will remedy this situation for our Idaho members.

BSU Mechanical Engineering Society

The BSU Mechanical Engineering Society is a conglomeration of three student chapters: ASME, SAE, and ASHRAE. Treasure Valley ASME has recently received two proposal requests from student project committees: the Mini Baja Vehicle and the Human Powered Submarine. Both these teams are needing to raise approximately \$15,000 to design and build prototypes for the national design competitions. Last season BSU ASME won the regional Micro Baja Completion. We therefore have great confidence in our BSU Team. Treasure Valley ASME is committed to helping the students through partial funding of these projects as well as helping the students organize fund raising activities. We also want to encourage members that have corporate funding channels and/or material, supply and equipment channels to please give generously so these projects become successful learning tools. Donors may receive tax incentives as well as company advertising prominently displayed on project, equipment and display board items.

Stay Current with ASME Online

ASME Members and all others interested in our organization. Please visit www.asme.org online for information regarding the ASME organization as well as articles on technology and issues.

Treasure Valley Section Events Calendar

Date	Time	Event	Location	Contact
10/21	6:30	MEMS Fabrication	BSU	Carl Hamke
11/11	6:00	Boise Geothermal Heating	TBD	Michael Keyes
12/2	6:00	ASME Social	Sockeye Brewery	Carl Hamke
12/9	6:00	BSU Mini Baja Design Review	BSU	Bob Gunning
1/13	7:00	Spokane Waste to Power	U of Idaho-Boise	Bob Gunning
2/10	6:00	Co-Generation	TBD	Michael Keyes
3/9	6:00	Anaerobic Digestion	TBD	Michael Keyes
4/13	6:00	Hybrid Cars	TBD	Michael Keyes