



ASME International

Section News

From the Northern New Mexico Sub-Section

March 2001

Northern New Mexico Sub-Section

April Meeting

“Long Term Ecological Perspectives on Fire in the Los Alamos Landscape”

Wednesday April 11, 2001- Central Avenue Grill

Social gathering - 5:30, Dinner - 6:00, Talk - 7:00

The speaker will be Dr. Craig Allen of the USGS at Bandelier National Monument. Dr. Allen received a BS and MS from the University of Wisconsin at Madison and a Ph.D. from the University of California at Berkeley. An abstract of his presentation is included below. The meeting will be held at the Central Avenue Grill and will include a Mexican buffet for dinner. Cost is \$15.00 plus tax. Reservations needed by Monday April 9th to Richard Browning; please send email to rvb@lanl.gov, or call 667-4618. Information is also available on the sub-section web page at: <http://www.asme.org/sections/nnmss/index.html>

Relatively frequent surface fires recurred for centuries in ponderosa pine and mixed conifer forests of the Southwest, including the Jemez Mountains, before intensive livestock grazing and active fire suppression by government agencies began. Local fire history data sources include charcoal from bog sediments extending back 9000 years, dendrochronologically-dated fire scar collections from over 600 trees at 42 localities (with over 4000 pre-1900 fire scar dates extending back to 1422 AD), and mapped records of ~5000 suppressed fires for the period 1909-1996 AD. The available evidence suggests that extensive (>100 ha) stand-replacing fires rarely (if ever) occurred in pure, Southwestern ponderosa pine forests before the middle of the 20th century. Extensive crown fires did occur before 1900 in higher elevation mixed conifer and spruce fir forests in the Southwest, but lower elevation mixed conifer forests burned primarily as surface fires, and stand-opening events were probably of limited size (<100 ha) in these forests. Repeat photography and tree-ring records of aspen and conifer ages document the occurrence of 19th century crown fires at relatively high elevations. The anomalousness of recent stand-replacing burns in ponderosa pine and some lower elevation mixed conifer forests - in terms of severity, extent, and impacts on soils - is attested to by: (1) the long-term history of sustained surface fires recorded by fire-scarred trees within stands that have now been completely destroyed by late 20th century crown fires; (2) extreme erosion following stand-replacing fires, in some cases removing soils and sediments that have accumulated for tens of thousands of years; (3) the lack of identifiable "landscape-scars" persisting from the 19th century, such as those created by recent large crown fires (e.g., the La Mesa, Dome, and Cerro Grande fires); and (4) absence of ponderosa pine recruitment, or very slow rates of recruitment into the large holes created by stand-replacing fires in the Southwest over the past 30 years. 20th century landscape scars created by stand-replacing fires in ponderosa pine and lower elevation mixed conifer are long-lasting legacies of human error in managing these ecosystems. Fire history data and evidence of extreme geomorphic responses following extensive crown fires provide strong justification for management programs aimed at preventing the future occurrence of these ecological disasters.

INSIDE THIS ISSUE

- 1 Northern New Mexico Sub-Section Meeting
- 2 Young Engineers, Scholarship Available, and Distributed Power Conference
- 3 Partners in Mechanical Engineering, Mentor a Student, Pass the PE, and Membership Drive
- 4 Online Web Forum, and Alliance for Distance Learning

Young Engineers to Take Center Stage

The **Fourth Young Engineers Satellite Broadcast** is scheduled for March 28, 2001, 12 noon – 1:30 PM (EST). The topics for discussion will be: *Keeping Up with Technical Information After Graduation*, *Job Search Skills*, *Networking Skills*, and *Expectations of the Professional World*. On the panel will be Board on Public Information Vice-President Elect Stacey Swisher Harnetty, who will be acting as moderator, Jill Clauss, John Kendig and Scott M. Blair.

Be sure to click on our website, www.asme.org/pro_dev/satellitebroadcast.html view the broadcast.

ASME/FIRST SCHOLARSHIP

Attention all ASME members and student members active with FIRST Teams:

There's still time to nominate a deserving high school senior, who is interested in mechanical engineering or mechanical engineering technology, and who has been a standout on a FIRST team, to win the \$5,000 ASME/FIRST Scholarship this year!!

Scholarship application materials must be postmarked by March 1, 2001.

Download the simple application from the ASME website:

<http://www.asme.org/educate/k12/first/firstscholarship.htm>

For inquiries, please contact Theresa Oluwanifise or Edie Ervin at the ASME Education Department
OluwanifiseT@ASME.org, or
ErvinE@ASME.org, or 1-800-843-2763.

DISTRIBUTED POWER CONFERENCE

SPONSORED BY

ASME OREGON SECTION

WHEN: April 24 & 25, 2001

WHERE: Portland, Oregon

TOPICS INCLUDED: Fuel Cells, Co-Generation, Micro Turbines, Environmental, Regulatory Issues, Regional Energy, Utility Interconnection, Venture Capital.

You may register by February 20, 2001 for \$350.00 (\$400.00 after).

For details and registration go to
<http://www.asme-distributed-power.com/>

Keep Your Address Information Up-to-Date Online!

Did you know that newsletters with incorrect addresses cause delays, cost extra postage for your Section, and extra work for volunteers, who must correct addresses and re-mail newsletters?

Did you know that you could update your ASME records online?

Just log onto: <http://www.asmeny.org/memberaddr/html/security.htm>
and follow the easy instructions.

You can also call InfoCentral at 800-843-2763

2001 Partners in Mechanical Engineering Program

The Board on Minorities and Women is now accepting proposals for its 2001 Partners in Mechanical Engineering program. Grants are now being offered on a first-come, first-serve basis to ASME Sections for projects that stimulate partnering and involve collaboration with a local section or chapter of an organization that supports the participation of women and underrepresented groups in engineering.

Grants range from \$500 to \$1,500 per ASME Section. Proposals should be submitted by June 30, 2001 (end of the ASME fiscal year) and will be evaluated as they are submitted. An application is available on-line at <http://www.asme.org/bmw> or by contacting Sonya Engle at 202/785-3756; engles@asme.org.

MENTOR A MECHANICAL ENGINEERING STUDENT ONLINE!

Today's students need the advice of working engineers who have on the job experience. Most students get top notch technical training from their academic programs, but need the benefit of experience to find out what they need for the job. As a mentor, you are in the unique position of letting students benefit from your experience.

For more information, and to register to become a mentor, log onto www.asme.org/ementoring

Alert to All Members!

Here's your chance to receive a prize from ASME!

ASME is giving away a *PARATOOL* to every member that recruits two or more new paid ASME members during the month of February and March.

By sponsoring a new gold member you also get a chance to win a Palm VII in our monthly drawing. Your name will also be entered automatically into the grand prize drawing for a Gateway Profile computer.

All new paid member applications must be received by March 31, 2001 to be eligible, so don't delay!

For more info, click on <http://www.asme.org/membershipdrive/prizes.html>

Pass the PE Exam in 2001!

Was passing the PE Exam in April one of your goals for the new year? If so, ASME International – Professional Development can help you.

The *PE Online* review course was developed to assist engineers preparing for the second part of the licensing exam, *The PE Exam: Principles and Practice of Mechanical Engineering*. It is available online and ready to help you achieve your goals.

This interactive, online review program contains over 200 problems with solutions. The answers include concise summaries of relevant equations and concepts tested in the problem. The program is divided into eleven modules that cover the sixteen areas tested in the exam. Plus, *PE Online* features the availability of Professor Aggarwal of Gannon University to answer your questions, via e-mail. The amount of time you may spend online studying the text or working the problems is unlimited.

For a demo and more information, please check log onto <http://peonline.asme.org> or call Kathy Warner at (212) 591-7411 (warnerk@asme.org)

Engineers Needed to Participate in Online Web Forum for Teachers

ASME, through the Board on Pre-College Education and in collaboration with City College of New York (CCNY) Schools of Engineering and Education, and the Center for Children and Technology (CCT) of Education Development Center, anticipates being funded by the National Science Foundation for the creation of an on-line web forum to help teachers integrate engineering concepts targeted at the elementary grades into their classrooms.

Five engineers are needed to participate as on-line project advisors. Project advisors would lend their expertise to provide insight into the design of everyday objects (e.g. cartons, boxes and bags; nail clippers, umbrellas and flashlights; signs, symbols and maps; and designed environments such as classrooms.

Engineers will also contribute to a website that will feature the work and personal backgrounds of engineers involved and include workplace applications from the same technologies the teachers are exploring.

To learn more about how to get involved in this exciting opportunity contact Wilvena Gordon at gordonw@asme.org or call 800-843-2763, ext. 7079

ASME Launches New Alliance for Distance Learning Courses

ASME International, *Professional Development*, has announced its new alliance with the International Institute for Learning, Inc. ("IIL")

IIL is one of the world's leading eLearning, executive development and management training providers. The company offers a variety of business training products, courses and consulting services.

Through an arrangement with IIL, ASME members receive a discount on Software courses such as: *Project Management Basics* (CD-ROM), *Project Management IQ* (CD-ROM), *Project Management IT System*, and *The Project Manager's Toolkit*.

Discounts are also offered on video courses including: *Accelerated Improvement in Healthcare Quality*, *Breakthrough Results with Benchmarking*, *Best Practices for Global Competitiveness*, *Doing Business in Asia*, *Doing Business in Latin America*, *Doing Business in Southeast Asia*, *Internal Benchmarking and Transferring of Best Practices*, *Knowledge Management*, *The Strategic Corporate University*, and *The Kerzner Approach to Project Management Excellence*, among other titles.

Take advantage of the discount offered to ASME members. Brush up on management skills or learn how to conduct business overseas. For more information, contact Kathy J. Warner at 212-591-7411 warnerk@asme.org or visit www.asme.org/asmevirtualcampus.