



**California/Nevada Section
Bimonthly Update
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Fourteenth Edition**

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*** UCD BAE Prof. S. Milton Henderson Remembrance**

S. Milton Henderson, Professor Emeritus of Biological and Agricultural Engineering at U C Davis, passed away on March 13, 2008. An event recognizing his professional achievements will take place on Wednesday, May 14, 2008 at the Heidrick Western Center for Agricultural Equipment on the U C Davis campus at 4:30 to 6:00 PM. A map and directions to the Western Center are available at <http://wcae.ucdavis.edu/MapDirections.jpg>. Parking is available on the premises at no charge. If you have any questions, please contact Professor Emeritus William J. Chancellor at wjchancellor@ucdavis.edu or 530-753-4292.

*** Sponsor Highlight - Ag Industrial Manufacturing**

Ag Industrial Manufacturing (A.I.M.) is a complete agricultural manufacturing, engineering and design facility. The Golden Retriever Pipe Handling Machine, manufactured by A.I.M., is designed to operate with CertainTeed Golden 2000 Cert-a-Loc pipe and fittings. Highlights of the machine include: handles 3-12 inch pipe sizes with simple adjustments; retrieves more than ¼ mile of 3 inch pipe; accommodates sled couplings, risers with sprinklers, valve risers, and bolt-on steel saddles without damage; attaches to Cat II 3-point hitch positioned in center or on either side of machine; powered by tractor's auxiliary hydraulic system; operates with open or closed center hydraulic system; requires only 6+ GPM flow at 2,500 psi; includes four sets of pneumatic wheels to grip and propel pipe; equipped with individual hydraulic valves to open and close each set of wheels; unique parallel linkage for drive wheels provides 3-point grip on pipe regardless of size; work station between pairs of drive wheels provides room for one operator to remove or install couplings; hydraulically adjustable end wings provide smooth transition for pipe to move in and out of machine to aid assembly; and simple manual hydraulic controls for adjusting end wings, clamping, and propelling pipe. More information can be found at www.agindustrialmanufacturing.com.



* **Asian and Pacific Islander History Month (May) – Zhongli Pan**

In honor of Asian and Pacific Islander History Month, we honor Zhongli Pan, Associate Adjunct Professor in UC Davis' Biological & Agricultural Engineering Department. He is also a Research Engineer at the USDA ARS Western Regional Research Center.

Professor Pan was recently awarded the Herbert L. Rothbart Outstanding Early Career Research Scientist Award to Zhongli Pan by USDA ARS.

Professor Pan's current research focuses on: 1) improving the values of agricultural products and their components through new and improved postharvest and processing technologies, 2) characterizing the physical, chemical, and rheological properties of agricultural and food products, and 3) modeling and optimizing food processing for improved food quality and ensured food safety. One of his current research areas is to develop infrared radiation heating technology for drying, blanching, disinfection and disinfestation of food and agricultural products (fruit, vegetables, grains and nuts) resulting in three recent patent applications. Another research area is related to development of an ultrasonic assisted extraction process for producing value-added products from the by-products of fruits and vegetable processing.

Dr. Pan also conducts research on rice milling and utilization of rice processing by-products including the mechanism of rice damage during milling process caused by milling conditions and drying history. Another project involves the development of bio-based products from the by-products of rice processing and production, such as using rice bran is used for making adhesives and rice straw for manufacturing particle boards.

More on Prof. Pan can be found at: <http://engineering.ucdavis.edu/>;
<http://www.ars.usda.gov/pandp/people/people.htm?personid=34979>; and
http://bae.engineering.ucdavis.edu/pages/faculty/pan_z.html.

* **Ag Engineering Exam Review**

Help is available for candidates preparing to sit for the Ag PE exam. A web-based Ag PE Exam Review will be held May-September to prepare examinees for the annual October exam. Registration is now open at <http://www.bae.ncsu.edu/www3/pe/index.htm>. One webinar attendee said "The webcasts and study manual from PEI were very helpful in preparing for the exam." Another noted "The quality of presentations and presenters was wonderful. And the webinar on-line program was really easy to use and interactive."

The exam is improving. Arcane questions are being eliminated, making it more a test of minimal competence (as it is supposed to be) than one of specialized knowledge. The pass rate for first-time takers was 72% in 2007 and 75% in 2006. That is among the highest of all disciplines. It is not impossible to pass the Ag PE. With reasonable preparation, a competent engineer will pass.

If you have any webinar questions, contact Rod Huffman at rod_huffman@ncsu.edu. Examination application information for California is at <http://www.dca.ca.gov/pels/> and for Nevada is at <http://boe.state.nv.us/>.

* **CSU Fresno's Advanced Technologies Enterprise Student Club**

The department of Industrial Technology in the College of Ag Sciences and Technology at California State University, Fresno has an Advanced Technology Enterprise student club. Advanced Technologies Enterprise (ATE) was founded to give Industrial Technology Students the opportunity to work with state of the art technologies such as Computer Numerical Controlled (CNC) machines, lasers, and various auxiliary systems associated with manufacturing. Along with the technology comes the exposure to marketing, product development, production scheduling, and personnel issues. ATE provides facilities for meaningful undergraduate and graduate research, and a

demonstration facility for automated manufacturing systems. ATE generates financial resources through the sale of unique products to the University and to the private sector which are used for the advancement of ATE. The club is involved in several agricultural related applications like making custom products and custom laser engraving agricultural products including wine glasses, packaging, etc. For more information, please contact the Department of Industrial Technology at (559) 278-2145.

*** National Volunteer Week**

"Volunteer to Change the World" is the theme for National Volunteer Week 2008 which is April 27 - May 3. National Volunteer Week offers opportunities for us to thank some of America's most valuable assets - our volunteers - and to recognize the myriad of ways they improve our communities. This special week reflects the on the power that volunteers have to "Change the World" - as volunteers encourage those they help and motivate others to serve!

ASABE CA/NV thanks all of you that have volunteered your time, energy, effort, and resources to build your Section!

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- For previous editions of the Update, please visit www.asabecanv.org.
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- If you have ideas for Update items or would like to get involved in the leadership group, let us know.