



September 1, 2006

Dear ASABE California/Nevada Section members,

Here is the 4th edition of our Section's bimonthly Email Update.

The Update:

- * New Chairperson of Biological & Ag Engineering at UC Davis
- * AE50 awards: 2 Kubota, 2 FMC, 1 Pace Inc. (Washington/Cali)
- * Irrigation Training and Research Center (ITRC), Cal Poly
- * Student enrollments

*** New Chairperson of Biological & Ag Engineering at UC Davis**

After completing a five year term as Chairperson, Professor Bruce Hartsough stepped down on September 1, 2006, and plans to return to an increased teaching load and his forestry research. Many thanks to Bruce upon whom the officers group who has relied for prompt and valuable advice on Section issues – he was Section Chair a few years ago – and to provide UC Davis updates at the Section meetings he was able to attend. Stepping into the BAE Chairperson position is Professor Mike Delwiche, whose research interest is bio-instrumentation and whose graduate students frequently bring posters to our Section Poster Competition. We hope to see both him and his students next February at the Section meeting in Tulare.

*** AE50 awards: 2 FMC, 2 Kubota, 1 Pace International**

Congratulations to California/Nevada Section Members affiliated with five of this past year's AE50 Awards presented at the Annual International Meeting in Portland, Oregon. *** Food Machinery Corporation's Super-Agi™ is an automated agitating batch retort that "takes on all products, more packages." <http://www.asabe.org/resource/ae5006/AE500608b.pdf> *** Food Machinery Corporation's JSP-1 Jet Stream® Dry Food Surface Pasteurization System also won an AE50 Award. For more info, see "Proven pathogen reduction with dry-food, surface pasteurization system" at <http://www.asabe.org/resource/ae5006/AE500616a.pdf> *** Kubota Tractor Corporation's M105x/M125X Utility/AG tractor series won. "Tractors shift gears in sync with engines, radiator-cooling performances advances" at <http://www.asabe.org/resource/ae5006/AE500615b.pdf> *** Kubota Tractor Corporation's GR2100, GR2000 Lawn & Garden Tractors also won an AE50 Award. A new technology on this tractor series is Glide Steer with "Easy turns and easy on the turf" at <http://www.asabe.org/resource/ae5006/AE500606a.pdf> *** Pace International's PaceSetter picked up one of the awards as well. Read "Variable-rate fruit-coating applicator defines a new Pace" at <http://www.asabe.org/resource/ae5006/AE500618a.pdf> (Although the corporate offices are in Seattle, WA, the work was done in Visalia, CA.) For the rest, <http://www.asabe.org/resource/ae5006/index.html>

*** Irrigation Training and Research Center (ITRC), Cal Poly**

(<http://www.itrc.org>)

The Irrigation Training and Research Center (ITRC) is a center of excellence housed within the BioResource and Agricultural Engineering (BRAE) Department of California Polytechnic State University (Cal Poly) in San Luis Obispo. ITRC's modern engineering offices, in addition to providing professional resources for ITRC staff, house two training rooms and office space for students. Outdoors is the unique Water Delivery Facility to demonstrate pumps, pump testing, flow measurement, SCADA, and canal

automation. Additionally, the outdoor Irrigation Practices Field contains a complete assortment of on-farm and landscape irrigation systems and equipment.

ITRC was officially formed in 1989, and continues to be self-supporting through contracts. Focus areas include:

- Irrigation projects (irrigation district modernization, water balances, river basin return flow issues, SCADA, canal automation, pump automation, flow measurement, energy consumption, and efficiency);
- Farm irrigation (drip, surface, and sprinkler irrigation; drainage; salinity; energy consumption; irrigation evaluations; evapotranspiration; pumps);
- Landscape (primarily development of urban water conservation programs).

The center is run by Dr. Charles Burt (Chairman and Founder) and Dr. Stuart Styles (Director) – both recognized internationally as irrigation experts – with an excellent professional staff of 13 persons. Additionally, 15-25 students are hired at any one time to provide support. ITRC utilizes specialists from within and outside the university to provide additional expertise. As an example, ITRC has worked for several years with an international team to develop sophisticated canal automation algorithms. ITRC is active throughout the western U.S. and the world in irrigation research, technical assistance, and environmental/energy assessments. For example:

- ITRC has numerous active irrigation district modernization projects throughout the western United States. Most involve energy conservation or environmental improvement while simultaneously modernizing irrigation districts.
- The World Bank, FAO/UN, UNDP, and others fund ITRC to provide expertise on irrigation modernization in China, Philippines, Vietnam, Kyrgyzstan, Azerbaijan, India, Pakistan, Mexico, and many other countries.
- Manufacturers hire ITRC for a wide variety of projects ranging from testing of polymers in irrigation on field trials, to determining friction on large diameter pipes, to examining the performance of new sprinklers and drip tape under both field and laboratory conditions.
- ITRC has been a major innovator in water-related peak load reduction and electrical energy conservation.

*** Student enrollments**

Two months ago we wrote about the numbers of graduates, and now we write about the number of enrollments for the coming Fall. CalPoly's Richard Cavaletto reports that there will be 32 new BioResource and Agricultural Engineering students and 20 new Agricultural Systems Management students, with another 6 to 8 students possibly transferring in for the Winter Quarter. UC Davis' Bruce Hartsough reports that there are Statements of Intent to Register from 35 freshmen plus he expects there will be a couple of transfer students from community colleges. He notes that the department also offers minors in Geographic Information Systems and Precision Agricultural with a total of about five to eleven graduates per year.

Regards,
Victor Duraj
ASABE Section Chair

(Thanks to Carolyn Jones, Program Chair, Stuart Styles, Sec/Treas, Bruce Hartsough, Richard Cavaletto, and ASABE's web site www.asabe.org for assisting with this Update.)