



Surface water treatment and goal-oriented strategies

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The September 14 cluster meeting will feature two exciting speakers. Robert Moorhead will examine current and upcoming “state-of-the-art” technology in surface water treatment. His presentation will focus on innovative and cost-reducing designs for both recently built and soon-to-be-constructed surface water treatment facilities. The role of technology in treatment operations and the production of safe and aesthetically pleasing drinking water for the community will be emphasized. Moorhead is currently Chief of Operations for the City of Fresno, Surface Water Treatment Facility. He has a BS in Environmental Health (Water/Wastewater), an MBA and over 25 years of experience at three different conventional water treatment plants (average size of 40 MGD). He has also served as Laboratory Director of a Title 22 ELAP certified water treatment laboratory and as an instructor of Water Science at Fresno City College.

Jon White will discuss Netafim’s quest for the Baldrige National Quality Award. This award is a much talked about and often elusive goal for many companies. White’s presentation is an insight into how Netafim USA is approaching the goal, what they have learned so far and what tools they believe are proving successful. White has been employed by Netafim USA for six years, the last three years as its Vice President of Operations. He has worked in the supply chain field for sixteen years in both the U.S. and Europe. Before Netafim USA, he worked for Pirelli Cables Ltd in the supply and manufacture of fiber optic and power cables to distributors/contractors throughout the U.S. and the United Kingdom. Prior to that, he was a mining engineer with British Coal. He earned his Bachelors degree in Mechanical Engineering from the University of Leeds, England.

Congressmen aim to develop water plan for the Valley

A bipartisan group of San Joaquin Valley congressmen are working on a plan that will address long-term water use issues facing San Joaquin Valley residents. The San Joaquin Valley Regional Water Plan is being developed by Congressmen George Radanovich, Devin Nunes, Dennis Cardoza, and Jim Costa. The plan will address water use issues in the eight-county region of Stanislaus, San Joaquin, Merced, Madera, Fresno, Kings, Kern, and Tulare counties. “By coming together as an eight-county region, we can have a united focus to attract resources from local, state and federal sources,” said David Zoldoske, director of *Fresno State’s Center for Irrigation Technology (CIT)* and one of the project facilitators. A first step will be to catalog existing water resources and to outline projected regional needs. Support staff from CIT and the *California Water Institute* were involved in preparing an online survey. The survey is now available to gather information on water supply, water quality, environmental restoration/enhancement, and flood control.

Anyone who resides in the region and represents urban, agricultural or environmental water users is encouraged to participate. Input from both the public and private sectors is welcomed and encouraged. If you are interested in participating in the survey or for more information on water issues, visit www.californiawater.org or call (559) 298-6072 ext. 201.

New testing facility grand opening scheduled for December 2006



Left: Test pit and channel take shape, June 2006



Right: Test and certification building floor prior to concrete pour, July 2006.



Left: Floor and channel complete by August 2006



Right: Framing is underway, September 2006.

Careers in Manufacturing Technology ends summer program

The *Careers in Manufacturing Technology* (CIMT) internship program concluded its fourth year with a final Training Academy session on Thursday, August 10. Six companies hosted seven community college students over the summer in a variety of positions ranging from maintenance mechanics to welders and CAD operators. Students participated in Training Academy sessions where they learned about manufacturing flow processes and precision measurement. They also toured local manufacturing companies and the *International Center for Water Technology*. During the final Training Academy, students made presentations about their experiences in the CIMT program and networked with local company representatives. For more information about the CIMT internship program, please contact Manjit Atwal at (559)294-6023 or e-mail manjitm@csufresno.edu.



Pictured from left to right: David Tikkanen, Academy instructor, Robert Ochoa - Dinuba Vocational Center/Training Institute, Elias Rangel - Dinuba Vocational Center/Training Institute, Tanner Silva - Reedley College, Eduardo Gonzalez - Reedley College, Oscar Romero - Reedley College, and Roy Martin- Fresno City College

ICWT and CVBI partner to create a new innovation program

Successful track records in technology development and business success will be at the heart of a partnership between The *International Center for Water Technology* (ICWT) and the *Central Valley Business Incubator* (CVBI). The partnership will also bring together university, industry and government partners into a strong working relationship.

Using a wide variety of technical and business resources, the partnership will develop the *Water Innovation & Successful Entrepreneurs* (WISE) program. The program will integrate the activities involved in research, technology transfer, commercialization, workforce education, and will establish an infrastructure to enable innovation. Initially the program will target innovations in water and renewable energy.

“Many innovative ideas fail because they lack either the technical refinement or business expertise to move from concept to the marketplace” according to David Zoldoske, director of ICWT. “The WISE program will support these creative ideas from the research and development stage into commercial products.”

The concept of the WISE Program is to take creative ideas that come from either academic or business entrepreneurs and support their development into commercial operations. Activities will include a systematic review of the proposed technology and an evaluation of the business potential for the innovation. A custom plan will be developed for each participant. The WISE Program will be housed in the new facility currently under construction on the California State University, Fresno campus.

The National Science Foundation defines innovation as “the transformation of knowledge into the products, processes, systems, and services that fuel economic development, create wealth, and generate improvements in the national standard of living.” Linking science, education and business with the university, industry, and government will create an overall awareness and focus that should attract new ideas and capital.

It is estimated that nearly one-billion people worldwide are denied access to clean drinking water. This problem will only accelerate as the world population moves from its current level of 6.5 billion to 9.1 billion by 2050. Similar changes are expected in California where the current population of 36 million is expected to grow to 48 million by 2030. The demand for potable water will be unprecedented.

It should also be recognized that nearly every drop of developed water has some energy component associated with its movement, treatment or pressurization. In California, it is estimated that 20% of the state’s electrical demand is used to pump water. Any successful effort to reduce water use will have a direct impact on energy demand.

The availability of water and energy resources will be constrained by an ever increasing population. It is incumbent upon researchers and entrepreneurs to help find solutions that provide for economic vitality and environmental mitigation. Water and renewable energy innovation can play an important role in stimulating economic and workforce growth in the U.S.

International Water Technology Conference 2007 Update

Preparations for the *International Water Technology Conference 2007* are well under way. The conference will take place on the campus of California State University, Fresno from April 2-3, 2007. Technical tours are scheduled for April 4. Conference topics will cover a variety of technological issues in irrigation, water supply and water treatment. Opportunities to get involved come in several different forms.

Technical presentations will be 20 minutes long. Anyone interested in making a technical presentation is invited to submit an abstract online via the conference web site. Presenters will be given a 50% discount on a full conference registration.

Poster presentations – Anyone interested in making a poster presentation is invited to submit an abstract online

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**International Water
Technology Conference**

April 24, 2007 • California State University, Fresno



via the conference web site. Posters will be on display for both days of the conference. Poster presenters will be given a 50% discount on a full conference registration.

Exhibitors – Booths will be set up for two full days of the conference with time dedicated for participants to network. The early bird price for a 10' X 10' booth is \$795. Registration, terms and conditions are available at the web site.

Sponsorships are available in a variety of forms and price levels ranging from \$200 to sponsor a block of technical

sessions to \$2,500 for an Inaugural Platinum sponsorship. Details are available at the conference web site.

Conference Attendance – A full conference registration is as low as \$260 and includes access to all technical and poster presentations, exhibits, two keynote lunches, one breakfast and a wine/cheese reception.

Tours – Technical or cultural tours will be available during and after the conference. The conference web site has more detailed information on tours, prices and availability.

Check the *International Water Technology Conference* web site for all the latest information www.icwt.net.

June meeting wrap up

Presentation by Dennis Westcot, Water Quality Natural Resources and Environmental and Regulatory Issues expert. Dennis Westcot discussed the upcoming salt crisis in the central valley. The presentation reviewed current water quality control policies for salt and evaluated whether policies have been followed, whether they would be effective in achieving water quality goals if followed, and whether additional changes in policy are warranted. A copy of his presentation can be found at www.icwt.net.

Presentation by Jose I. Faria, Supervising Engineer with the California Department of Water Resource. Jose I. Faria presented the possible solutions to the California salt crisis. A large amount of land in the valley is seriously impacted. In response, farmers have installed subsurface drainage systems to collect shallow ground water to try to achieve a salt balance. Mr. Faria presented a list of current drainage management activities. A copy of his presentation can be found at www.icwt.net.

To submit articles or for more information contact Laura at 559-278-2066 or by email at lramos@csufresno.edu

WATER CLUSTER MEETING

**September 14, 2006
9 – 11 A.M.**

*Central Valley Business Incubator (CVBI)
2555 Clovis Ave.
Clovis, CA 93612*

**Please RSVP to lramos@csufresno.edu
or (559)278-2066**

From the North: Take Freeway 99 South to Freeway 41 North/41 South. Stay on 41 North/41 South to 180 East (Kings Canyon). Take 180 East to 168 East (Clovis/Huntington Lake). Continue on Freeway 168 East to Shaw Avenue Exit. Turn right onto Shaw Avenue. Follow Shaw to Clovis Avenue and turn right onto Clovis Avenue. Turn left onto Santa Ana (just south of Sierra Vista Mall), and turn into the first driveway on the right. The building will be on your left. There is a sign that reads Central Valley Business Incubator.

From the South: Take Freeway 99 North to Freeway 41 North (Yosemite). Take Freeway 41 North and follow until Freeway 180 East (Kings Canyon). Get on Freeway 180 East (it is helpful to stay in the right lane after merging onto 180 from 41) and follow to Freeway 168 East (Clovis/Huntington Lake). Take Freeway 168 East to Shaw Avenue Exit. Turn right onto Shaw Avenue. Follow Shaw to Clovis Avenue and turn right onto Clovis Avenue. Turn left onto Santa Ana (just south of Sierra Vista Mall), and turn into the first driveway on the right. The building will be on your left. There is a sign that reads Central Valley Business Incubator.