

Water Technology Cluster Update

## Vapor compression distillation and non-chemical water treatment services to be topics at December ICWT meeting

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The next ICWT meeting on December 18 will feature Richard Hodgin of Hyrdorchanger and Leon E. Shapiro, western regional manager of VRTX Technologies, a leading provider of non-chemical water treatment services based in San Antonio, Texas.

Kicking off the morning is Richard Hodgin of Hydrochanger. Hodgin will be presenting a leading non-chemical water conditioning system that has applications in water treatment throughout the world.

Hodgin is a design engineer who has been in the water specialty treatment business for 26 years. He was VP of Carefree Water Products specializing in medical water purification systems. Hodgin is the inventor of the Hydrochanger products.

Next, Leon Shapiro will discuss the use of hydrodynamic cavitation to treat cooling tower and evaporative condenser water without chemicals to achieve proper scale, corrosion and bacteria control. Shapiro will also explore the idea of using the blow-down water from these types of systems for landscape irrigation.

Prior to his work specializing in energy efficient HVAC and water conservation, Shapiro practiced law for 13 years. He is a member of the Refrigeration Engineers and Technicians Association (RETA), the United States Green Building Council (USGBC), and the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE).

## SpacePro – now availabe online!

SpacePro (Sprinkler Profile and Coverage Evaluation), a powerful analytical tool for irrigation design evaluation, is now available in an online version. This means SpacePro can be accessed from anywhere in the world at any time.

This web-based tool allows designers to:

- share files company-wide with password-protected online access.
- upload previously-created SpacePro profiles or create your own online.

Signup online and receive a one-week trial to see how SpacePro Online works for you!

The subscription price is \$49 per year for current registered SpacePro users and \$99 per year for new users. To learn more or sign up for your free trial, visit http://www.cati.csufresno.edu/cit/space/signup.asp.



## ICWT Export Development Program update

## Time is running out for your buyers to claim funding for inbound trade missions to the World Ag Expo

ICWT is partnering with the U.S. Department of Commerce to recruit potential buyers from Mexico and Chile to attend the World Ag Expo this February. Contact us soon, as funding is limited.

Participants will not only have the opportunity to network with other water technology professionals and businesses, but they will also be able to learn about cutting-edge applications. Providing these programs is part of the ICWT Export Program's mission to establish international relationships and open opportunities for trade.

Just as with the outbound mission to Mexico City for EnviroPro, half of hotel and air expenses will be paid by the grant program. If you are interested in having customers, agents or representatives from Mexico or Chile participate, contact Dan Clawson at <u>dclawson@csufresno.edu</u>.

## Export Program participates in EnviroPro



Last month, ICWT Export Program participants attended the EnviroPro tradeshow in Mexico City. Companies included: Innovative Water Technologies, Spectrum Technologies and Mazzei Injector Corporation.

The trip was a great success for the businesses that attended as they were introduced to potential buyers, dealers and government officials. Half of the trip's hotel and air fees and all tradeshow expenses for the three companies were paid by the Export Program.

Participants also had the opportunity to attend a market briefing as part of the Market Development Cooperator Program (MDCP). During the briefing, companies heard several presentations regarding future water projects and programs for which their technology might be used. They also had an opportunity to meet with the directors of major water utilities in Mexico.

## Implementation of Renewable Energy in the Emerging Markets of Africa, Latin America, and the Caribbean Conference to be help April 27 – 29, 2009

The California Center for International Trade Development will be holding a conference at the Hotel Nikko in San Francisco on April 27-29, 2009.

Who should attend? Energy technology providers (public/ private sectors); investors; community implementers/policy makers from the Emerging Markets and from California/ United States

#### CONFERENCE OBJECTIVES:

What works and what doesn't? Successes, challenges, and potentials for solutions with implementation of renewable energy will be discussed.

How to get it done! Familiarize participants with strategies for infrastructure development, (e.g., large scale off-grid/grid

installations), implementation of policy, financing utility-scale projects, current technologies, including optional site visits to solar installation/manufacturers, wind farms, bio-fuel plants, to demonstrate technologies and applications that are examples of intelligent and creative renewable energy strategies.

The conference is an opportunity for one-on-one match making to create Renewable Energy Partnerships between California/ United States companies/agencies and the Emerging Markets. For more information on participating, exhibiting, partnering, and/or co-sponsoring contact the Bay Area Center for International Trade Development Skyline College 3300 College Drive, Bldg. 5 San Bruno, CA 94066 USA 650-738-7098 <u>krausn@smccd.edu</u> and provide complete contact information, including mailing address.

## Does your company need qualified manufacturing workers?

The CIMT internship program could be the best place to start. This program provides students from Fresno City and Reedley colleges the opportunity to intern with local companies during the summer break (2-4 months). Students are available for the following positions: welder, CNC operator, CAD designer, CNC programmer (CAM), maintenance mechanic, electrical systems technology and machinist. The internship application process begins on January 15, 2009. Up to 100 students from manufacturing-related programs at Fresno City and Reedley colleges are expected to attend the March 19 CIMT Career Expo. This is a great opportunity for interested companies to meet students and begin the recruiting process for summer internship positions. Plus, you can share valuable information on career paths within your company, helping students envision their future careers. For more information about CIMT or to sign up as a Career Expo exhibitor, visit <u>www.cimtinternships.org</u> or e-mail Laura Ramos at <u>lramos@csufresno.edu</u>.

# Free Dec 11 irrigation technology seminar to help growers learn how to increase irrigation efficiency by improving system performance

One of the easiest ways for growers to improve their irrigation efficiency is by installing and maintaining a well-designed system with good distribution uniformity that operates at its optimum level. The Center for Irrigation Technology (CIT) at California State University, Fresno is holding a seminar to help growers learn how this can lead to saving water and energy while producing a profitable crop. The December 11 workshop will discuss well efficiency, pump efficiency, irrigation efficiency, along with system evaluations, to provide growers with background for more efficient water use.

The free seminar will be held December 11, 2008 from 8:30 am to 12:30 pm and will begin at the Water & Energy Technology Lab, Chestnut and Barstow Avenues, Fresno State. The seminar will conclude with hands-on demonstrations on the Fresno State

Farm. A number of irrigation experts and companies will also be on hand to answer questions.

"Operating Irrigation systems as designed and maintaining that performance level is one of the simplest ways for growers to get the most bang-for-their buck." commented David Zoldoske, CIT Director. "It's no different than keeping your car in good operating condition. "It keeps water and energy costs down and increases crop performance," added Zoldoske.

Anyone interested in attending this free event can register online by visiting <u>www.californiawater.org/IrrigationTech</u> or by calling (800) 845-6038; seating is limited. More Irrigation Tech Seminars will be scheduled in 2009 - visit www.californiawater. org/IrrigationTech to find out about upcoming event dates.

## Computer Aided Manufacturing (CAM) is back in full force at Fresno City College with the help of their new Career Advancement Academy

When you walk into the FCC Computer Aided Manufacturing classroom in T- 103 you will see 20 to 25 eager students on computers learning how to design various tools with specialized software programs. This class trains students in concept design. It is an essential part of learning how to design various products which also includes the setup and construction of their project.

The new Career Advancement Academy (CAA) at Fresno City College is now providing specialized training which started during the 2008 summer session with students enrolled in various automotive and welding courses. The CAA is also providing basic skills classes in English and math. "There is an identified need for students in vocational education to acquire the English, math, computer training and job readiness skills necessary to seek full time employment," said Vicki Pontius, Career Advancement Academy Director. "These types of skills were identified by local employers as the missing piece for people who were looking for entry level jobs," she added.

"The mission of a community college is to provide the education and training needed for students to join the workforce and become successful in their careers and lives," said Rick Christl, Dean of Instruction for the Applied Technology (cont. from pg. 3) Division. "We are now providing more access to the students who need it most through the new Career Advancement Academy," he said. Nationally 83 percent of employers say they need employees with computer experience For more information regarding the CAA or the new CAM classes please call the Applied Technology Dean's office at 559-442-6400 or email Vicki Pontius at vicki.pontius@fresnocitycollege.edu.

### September meeting wrap up

Dr. Andrew Rogerson dean of the school of Science and Math at California State University, Fresno focused on the scale of the problems facing industry intent on designing an effective ballast water treatment system. The nature of organisms in the water were reviewed as will the various treatment technologies being considered. The challenge is compounded by the lack of a clear treatment standard and by inconsistent treatment verification methods.

Ramesh Rengarajan - GE has put together about 65 different acquisitions in the last 5 years, which ranged because the water treatment industry is very fragmented. GE works on putting together a portfolio of solutions for world water problems. Eighty percent of the water problems are in Middle East and Asia. GE has established R&D centers in China and India. Ramesh has been coming to Fresno and has been working with David Zoldoske specifically because problems need to be solved locally. Water safety and security are number one priority because it causes liability and the reputation of the company. The minute you have a contaminant it becomes an outbreak. GE wanted to develop a real time online measurement system. 3 Today they have developed a methodology. A GE objective is not to use chemicals in the treatment of water.

Kathryn Studwell presented on the findings of an international dynamics study developed by the Scottish Economic Development. Kathryn Studwell, has over 25 years experience in designing and facilitating collaborative approaches to regional economic development and has extensive expertise in the formation of industry cluster organizations. Studwell has completed over twenty cluster studies for a broad range of industry groups including: food and agriculture; semiconductor; biotech; plastics; aerospace; optics; water flow technology; and software

#### Both presentations can be found on <u>www.icwt.net</u>

## WATER CLUSTER MEETING

Central Valley Business Incubator 1630 E. Shaw, Suite 163 Fresno, CA 93704 December 18, 2008 9 A.M. – 11 A.M.

Please RSVP to <u>Iramos@csufresno.edu</u> or (559)278-2066 From The North • Take Hwy 99 South • Take SHAW AVE. exit - Exit 140 • Take RIGHT onto W. SHAW AVE • Left onto N. 9TH ST. • Turn RIGHT onto E. SHAW AVE. (frontage road) • End at 1630 E. SHAW AVE.

From The South

Take Hwy 99 North
Merge onto CA-41 N toward Yosemite/Airport
Take SHAW AVE. exit towards CLOVIS
Turn RIGHT onto E. Shaw AVE. (frontage road)
End at 1630 E. SHAW AVE.

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