

Breaking news about water resources research and education at Texas universities

February 27, 2008

H-E-B to promote Junior Master Gardener program

The grocery story chain, H-E-B, is promoting the <u>Junior Master Gardener</u> (JMG) 4-H program and providing a source of revenue to support JMG teacher/leader training programs and JMG curricula for schools.

Beginning March 8, 2008, 41 H-E-B grocery and H-E-B Texas Backyard Stores will sell tomatoes and peppers for \$1.99 per 4" pot. These plants will have a special tag that promotes the JMG 4-H project and Texas AgriLife Extension Service. Texas Department of Agriculture has provided funds to have point of purchase signs and posters in the stores where the plants are sold, said **Lisa Whittlesey**, AgriLife Extension program specialist and National JMG coordinator.

The JMG program will receive \$1 for each plant sold to fund JMG teacher/volunteer training programs at 10 H-E-B Texas Backyard Stores in August, Whittlesey said. H-E-B plans to raise more than \$25,000 to support this effort, she said.

"We are very excited about this alliance and know that this will be just the beginning of many other projects with HEB," she said.

JMG is a national 4-H youth gardening program that grows good kids through igniting a passion for learning, success, and service through a unique gardening education.

Introduction to Flow Measurement for Groundwater Management Districts course set

The Lower Rio Grande Valley Agricultural Water Conservation Demonstration Initiative (ADI) is offering a short course on the selection, installation, calibration, and operation of flow meters for groundwater pumping measurement on March 26-28, 2008, at the Flow Meter Calibration (FMC) Facility in Harlingen.

The course is designed for groundwater management, district managers, and employees. During the course, participants will have hands-on experience with measurement of flow and calibration of flow meters. The FMC has a large pipe manifold system that can be used to calibrate 6-inch to 24-inch diameter flow meters using a computer-controlled 10,000-gallon calibration tank and pumping system. The training will be held in the on-site classroom.

Early registration is due by **March 19**. The course is limited to 20 students and costs \$500 per student. For more information, please contact **Tom McLemore** at 956.423.7015 or tmclemore@hidcc1.org.

TAIA 2008 South Texas Conference held in Uvalde

The <u>Texas Agricultural Irrigation Association's</u> (TAIA) 2008 South Texas Conference on Irrigation Management with Limited Water Availability was held at the <u>Texas AgriLife Research and Extension Center at Uvalde</u> on February 19.

More than 60 growers, researchers and agency and industry personnel attended. Nine irrigation exhibitions with new technologies and equipment were available for attendees to view and discuss.

Presentation topics included managing irrigation for water use efficiency, in-season irrigation management, precision irrigation of row crops and vegetable crops, water: to sell or not to sell, and economics of water application. The day concluded with a field tour of crops grown at the Center.

For more information, visit the <u>TAIA Web site</u> or the <u>Uvalde center's Web site</u>.

Texas Watch changes name to Texas Stream Team

Texas State University's <u>River Systems Institute</u> and the Texas Watch Program, in coordination with the <u>Texas Commission on Environmental Quality</u> and the <u>Environmental Protection Agency Region 6</u>, have changed the name and identity of the Texas Watch program to <u>Texas Stream Team</u>, "Caring For Our Waters." The name change will help a growing need for the program to work with private landowners, the agricultural community, and watershed stakeholders, according to the <u>Texas Stream Team Web site</u>.

"We anticipate that our new name, Texas Stream Team, will strengthen our growing relationship with stakeholders in watersheds across the state and facilitate our collective efforts to preserve and protect our water resources," according to the Web site.

Texas Stream Team is a network of trained volunteers and supportive partners working together to gather information about the natural resources of Texas and to ensure the information is available to all Texans. For more information, visit the <u>Texas Stream Web site</u>.

Texas A&M University Distinguished Lecture Series continues

Multi-Scale Processes in Earth Systems, a distinguished lecture series hosted by Texas A&M University's Departments of <u>Biological and Agricultural Engineering</u>, <u>Civil Engineering</u>, <u>Petroleum Engineering</u>, <u>Atmospheric Sciences</u>, <u>Geology and Geophysics</u>, <u>Mathematics</u>, <u>Ecosystem Science and Management</u>, and <u>Water Management & Hydrologic Sciences</u>, has three more spring semester lectures. The lectures begin with a reception at 3:30 p.m. in Scoates Hall foyer on the A&M campus with the presentation following at 4:10 p.m. in Scoates Hall, Room 208.

The remaining lectures are:

- March 5, Dr. Levent Kavvas, University of California, Davis, "Hydrology"
- March 19, Dr. Soroosh Sorooshian, University of California, Irvine, "Hydrometeorology"
- April 16, **Dr. Keith Loague**, Stanford University, "Hydrogeology/Contaminant Transport"

For more information, visit the <u>Biological and Agricultural Engineering Web site</u> or call 979.845.3931.

BAEN department seeking doctorate students for USDA fellowships

The <u>Biological and Agricultural Engineering Department</u> at Texas A&M University is recruiting qualified minority students for three U.S. Department of Agriculture (USDA) National Needs Fellowships to conduct water resources research. The fellowships, funded through USDA's Cooperative State Research, Education, and Extension Service, are available immediately.

Students must be African-American, Hispanic, or American Indian and be U.S. citizens. Candidates, who can be engineering or non-engineering students, must have completed a master's degree in a water, soil, or environmental discipline and have a grade point average higher than 3.0 on a 4.0 scale for both bachelor's and master's level coursework. They must be pursuing a doctorate in biological and agricultural engineering or water management and hydrologic sciences with a focus in water quality, watershed modeling, geographic information systems, environmental microbiology, or environmental chemistry.

The fellowships are for \$24,000 a year for three years. In addition, each minority doctorate candidate will receive a \$34,000 scholarship from the Alfred P. Sloan Foundation.

U.S. News and World Report ranked the department's agricultural engineering graduate program number 1 in 2007. Faculty expertise includes environmental microbiology, hydrology, uncertainty and risk assessment, wastewater treatment, groundwater remediation, erosion control, constructed wetlands, and modeling.

For more information, contact **Dr. Clyde Munster**, professor, at <u>c-munster@tamu.edu</u> or **Dr. Yonghena Huang** at <u>yhuang@tamu.edu</u>.

Professor publishes three books in 2007

Dr. V.P. Singh, professor and Caroline & William N. Lehrer Distinguished Chair in Water at Texas A&M University's Department of Biological and Agricultural Engineering and Zachry Department of Civil Engineering, published three books during 2007.

"Risk and Reliability Analysis: A Handbook for Civil & Environmental Engineers," co-authored by S.K. Jain and A.K. Tyagi, entails key concepts of risk and reliability that apply to a wide array of problems in civil and environmental engineering.

"Hydrology and Water Resources of India," co-authored by S.K. Jain and P.K. Agarwal, provides a comprehensive overview of water resources of India.

"Elementary Hydraulics," co-authored by J.F. Cruise and M. M. Sherif, blends fluid mechanics, hydraulic science, and hydraulics engineering.

BAEN's study abroad program recruiting students

Texas A&M University's <u>Department of Biological and Agricultural Engineering</u> is recruiting students for its Belgium Study Abroad program for the summer of 2008.

The 2008 program is set for July 9 through August 14 and will offer AGSM 335, AGSM 337, BAEN 460, and BAEN 465. Students who sign-up for the 2008 Study Abroad program will get half-price tuition and fees because of a new university program to encourage students to take classes during the second summer session. **Dr. Cady Engler** and **Dr. Patti Smith** will be the faculty members for this year's program.

Anyone interested in the Belgium Study Abroad program should contact **Dr. Clyde Munster** at <u>c-munster@tamu.edu</u>, Engler at <u>c-engler@tamu.edu</u>, or Smith at <u>p-attismith@tamu.edu</u>.

Biological Systems Simulation Group Conference set

The 38th Biological Systems Simulation Conference is set for April 8-10, 2008, in Temple, Texas.

The conference, sponsored by Texas AgriLife Research and Grassland Soil and Water Research Laboratory of the U.S. Department of Agriculture's Agricultural Research Service, brings together an international group of scientists interested in using integrated systems approaches to study agricultural and natural systems.

Main topics of the workshop are simulating biomass production and composition in bioenergy crops, simulating spatially variable plant and hydrological processes in rangelands and interactive effects of climate change from field to watershed levels. This workshop will help the modeling community focus their innovative modeling efforts in important issues for science while addressing critical issues for the society.

Registration is \$300 and \$150 for students. For more information or to register online, visit the conference Web site.

SWAT courses set for April

The <u>Spatial Science Laboratory</u> (SSL) at Texas A&M University is holding Beginner and Advanced Soil and Water Assessment Tool (SWAT) courses in April. The beginner course is April 21-23 and the advanced is April 23-25.

Courses are designed to introduce new users to the SWAT model using ArcGIS-SWAT and advanced users to sensitivity analysis, model calibration, and uncertainty analysis. The advanced users will also have a chance to discuss their individual model issues.

Fees are \$500 per person. Students pay a reduced fee of \$300. For more information or to register for a workshop, please go to <u>SSL's Web site</u> or call Lesli Gomez at 979.862.7956.

Effects of climate change on Texas water resources conference set

The <u>River Systems Institute</u> is hosting "Forecast: Climate Change Impacts on Texas Water," April 28-30, 2008, at the Texas State Capitol Extension in Austin.

The conference is being co-hosted by <u>Texas Water Resources Institute</u> of Texas A&M AgriLife, and the <u>Environmental Sciences Institute</u> at The University of Texas at Austin. Co-sponsors include <u>Guadalupe—Blanco River Authority</u>, <u>Lower Colorado River Authority</u>, <u>Magnolia Charitable Trust</u>, the <u>Jackson School of Geosciences</u> at The University of Texas at Austin, <u>Meadows</u> Foundation, National Oceanic and Atmospheric Administration, and the U.S. Geological Survey.

The conference will feature national climate change scientists who are conducting cutting-edge work in the prediction of global warming and the impending changes on the earth's climate and state scientists who are working to understand the impact on Texas and its water resources.

General registration until March 30, 2008 is \$175, and late general registration, from April 1-28, 2008 is \$200. Student registration is \$35 a day. For more information, visit the conference Website or contact Annette Paulin, conference coordinator, at 512.754.9179 or CCTW08@grandecom.net.

Climate change conference calls for posters

Professionals and students may submit posters of their research for the upcoming conference, "Forecast: Climate Change Impacts on Texas Water." The conference is at the Texas State Capitol Extension April 28-30, 2008. The deadline for submitting a poster abstract is **March 15.**

A limited number of winning posters will be displayed during the conference. Conference registration will be waived for the students presenting the selected posters.

Professionals and students must submit a conference registration form and a poster abstract submission form. Forms are available at conference Web site.

Separations Sciences Lab hosts short course

The Texas A&M University <u>Separations Sciences Lab</u> is hosting its annual Membrane, Filtration, and Separations short course April 6-10, 2008, in College Station, Texas.

The short course provides a broad overview of how membranes can be used for water treatment, especially the desalination of coastal waters, brackish groundwater, and oilfield-produced waters. Sessions of the short course will present an overview about principles of membrane-based treatment methods, challenges associated with membrane fouling, and new research-based technological developments. Speakers include several experts from the desalination industry, agencies, and higher education.

To learn more, visit the lab's <u>Web site</u>, call 979.693.7500 or email Carl Vavra at <u>cjvavra@tamu.edu</u>.

New Publications

Research into the Characterization of Brackish Water and Disposal of Desalination
Reject Water in Saline Aguifers and Depleted Oil and Gas Reservoirs

Ric Jensen, Texas Water Resources Institute Special Report 2008-01

Brackish groundwater is a valuable "drought-proof" resource that is plentiful in much of Texas. If treated by available desalination technologies, brackish groundwater resources could help many regions of Texas cope with pressing water shortages. If put to non-potable uses such as waterflooding, streamflow augmentation, and landscape irrigation, brackish groundwater could free up substantial amounts of drinking water supplies now dedicated to these uses. This publication examines these issues.

"New Waves," an email newsletter of Texas Water Resources Institute, a unit of Texas AgriLife Research and Texas AgriLife Extension Service, publishes timely information about water resources news, results of projects and programs, and new water-related research projects, publications, papers, and faculty, at universities in Texas. If you have information for possible inclusion in "New Waves" please email Kathy Wythe or call 979.845.1862 and include your contact information. All submissions may be edited for grammar and style.

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