## Geosciences

DEPARTMENT OF PHYSICS AND GEOSCIENCES

**Newsletter** 

VOLUME 1, ISSUE 1

APRIL 2007

## **Faculty News**



**Dr. James Norwine** has been on sabbatical leave to write a book and teach classes for 1 year at Western State College of Colorado. He will be back at TAMUK in the Fall, 217.78 621.12 Tm0.0005 Tc 2(7. 0 TD0.8 29 With T50.2elp of Associate Vice

### **Geosciences Newsletter**

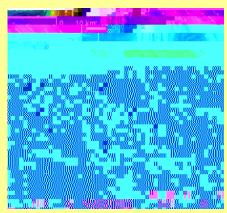
APRIL 2007

# **Department of Physics and Geosciences Texas A&M University - Kingsville**

Faculty News

## Department of Physics and Geosciences Texas A&M University - Kingsville

#### Research and Publications



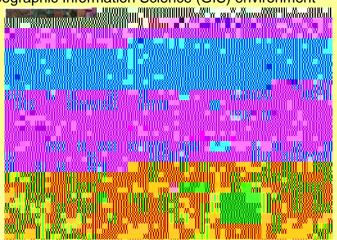
**Dr. Yu** has collaborated with Dr. Hongxing Liu at Texas A&M University – College Station on the issue of Antcarctic Glacier movement using Radar Remote Sensing techniques. They have developed the new methods to calculate and calibrate glacial ice stream velocity using SAR interferometry as a part of research on the investigation of mass balance of the world's largest glacial basin. Two papers are accepted for publication in worlds' well known journals in Remote Sensing.

Hongxing Liu, **Jaehyung Yu**, Zhiyuan Zhao, and Kenneath Jezek, 2007, Least Square Approach on mosaicing and calibration of ice velocity information derived from RADAR remote sensing technique. International Journal of Remote Sensing, in press.

Hongxing Liu, **Jaehyung Yu**, Zhiyuan Zhao, and Kenneath Jezek, 2007, Incorporation of Flow Stripes for Calibrating Surface Velocity Measurements from Interferometric SAR data. Photogrammetry and Remote Sensing, in press.

In addition, **Dr. Yu** assisted by Samuel Cantu (Geosciences Major) is working on two projects for South Texas area. The project is assessing hurricane and storm surge damages for Corpus Christi, TX. This study simulates the flood and storm surge area in Geographic Information Science (GIS) environment

and provides accurate quantitative damage estimations in terms of life and properties based on different water level. On the other hand, Dr. Yu and two Geosciences majors (Samuel Cantu and Marshal Saenz) have studied NAFTA impact on landuse and landcover in South Texas area. This study identifies the details of land-use/land-cover change on Commercial/industrial, water body, esidential, agriculture and vegetation for 8 years during post NAFTA period. They are presenting the findings in an international conference which will be held in San Francisco, CA from April 17 to April 21, 2007.



**Jaehyung Yu**, Samuel Cantu, and Joon-yeol Oh, 2007, GIS-based flood and storm surge damage assessment of Corpus Christi, TX. The 2007 Annual meeting of the Association of American Geographers, San Francisco, CA, April 17-21, 2007.

Samuel Cantu, Jaehyung Yu, and Marshal Saenz, 2007, Monitoring Land-use/Land-cover change of

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#### Research and Publications

**Dr. Aiguo Bian** and his advisor, Prof. Hongbin Zhan, from Texas A&M University at College Station, published a paper in Journal of Hydrology, in which they proposed a new method to calculate leakage from surface water body to groundwater aguifer trigged by pumping.

Hongbin Zhan, Aiguo Bian. 2006, A method of calculating pumping induced leakage. Journal of Hydrology, 328, 659-667.

**Dr. Darlene J. Occeña-Gutierrez**, a visiting lecturer in the Department of Physics and Geosciences, is working on an article from her dissertation research on tropical cyclone preparedness. Her work focuses on spatial vulnerability of island environments. The article on "Small-island coping patterns toward the tropical cyclone in Northern Philippines" examines how an island community located along the track of tropical cyclones adapts and copes with the hazard. Darlene received her Ph.D. in Geography from Texas State University-San Marcos in December 2006.

### Geosciences Club News



#### Meeting on 3-20-2007

At 12:30pm, the Geosciences Club meeting began with a short set of announcements regarding the immediate plans for "Spring Fling", the "Bigger Event", and the "Student Leadership Recognition Award Dinner". Shortly thereafter, Scott Bick, Field Engineer for UNAVCO, showed geosciences students the different aspects of his job. UNAVCO is a cooperative of government and universities to share and use geoanalytical equipment for research. For more information about finding eTm0 Tc0 Tw( )TjET/Cs6 csshares6 688627

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### **Geosciences Newsletter**

**Department of Physics and Geosciences** 



## Department of Physics and Geosciences Texas A&M University - Kingsville

### **Alumnus Report**

#### **Eric Beller**

Eric Beller received his baccalaureate degree from Texas A&M University-Kingsville in August, 1999. In January 2000 he took a position with the Texas Commission on Environmental Quality in Austin in the Municipal Solid Waste Permits Section. Mr. Beller's title is an Environmental Permit Specialist. When someone wishes to open a new solid waste facility, they must obtain a permit from his department. Part of an application for a new landfill is a Geology report that includes subsurface cross-sections, geotechnical lab results, piezometric groundwater maps, and a proposed groundwater monitoring system. He has worked at TCEQ for 7 years now. In December 2006 he received his Professional Geoscientist's license after taking the ASBOG exam. He can be reached at his work email address <a href="mailto:ebeller@tceq.state.tx.us">ebeller@tceq.state.tx.us</a>.

#### **Norma Martinez**

Norma Martinez received her baccalaureate degree from TAMUK (class of 1980) and Masters degree from Baylor University in Geology. She is the EHS Manager of OXEA Corporation in Bishop Texas. Ms. Martinez is the Manager for all EHS functions and EHS management systems of this chemical intermediates manufacturer. This company is the result of purchase by Advent International (Frankfurt Germany) of Celanese Chemicals (Dallas Texas) polyolefins and oxo-derivatives. I represent OXEA at state and national level industry groups. She can be reached by email at <a href="mailto:norma.martinez@oxea-chemicals.com">norma.martinez@oxea-chemicals.com</a>.

#### Jon Pollock

Jon Pollock received his Bachelors degree in Geography (2005) from TAMUK. He is currently working for the Chief Operating Officer and Director Harry Anthony at Uranium Energy Corporation. Mr. Pollock assists in the oversight of daily operations and exploratory drilling currently underway at the Weesatche Project in Goliad, Texas. He can be reached at his work email address at <a href="mailto:jmp5er@yahoo.com">jmp5er@yahoo.com</a>.

#### Juan Uribe

Juan Uribe received his Masters degree from TAMUK (class of 1991). Mr. Uribe is a geophysicist currently working at Repsolypf in Houston, Texas. Repsol is a oil and gas exploration company that is ranked number 8 in the world. He is the manager of geophysical operations worldwide. He can be reached at his work email address at jfuribeu@repsolypf.com.

## Summer Internship and Jobs

Several of the Uranium mining companies located in the South Texas Area has expressed interest in hiring student geology interns for the summer.

Students will have to register at Career Services with Karen Engebrecht for all internship opportunities. Please contact:

Karen Nelson Engebrecht, Director/ Career Services Center / Texas A&M University - Kingsville Eckhardt Hall-104 / 361.593-2218 (office) / 361.593-4088 (fax) kakne00@tamuk.edu / www.tamuk.edu/csc

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