Graduate Student Profile

In Geoscience Newsletters throughout the year, we will profile of one of our geoscience graduate students, so that we can learn more about them!

Piyumi Obeysekara is a newer face than most in Beach Hall. Piyumi joined the Center’s graduate program this Spring as a first semester graduate student.

In May 2005, Piyumi graduated from University of Peradeniya (Sri Lanka) with a first class honors degree in Zoology and won the University Award for Academic Excellence for the academic year 2004/2005.

Piyumi defended her B.Sc thesis on Diversity and Taxonomy of Freshwater Cladocera in selected reservoirs of Sri Lanka. As an undergraduate, she participated in several anti-Malaria research programs which were organized by the International Water Management Institute (IWMI) in the dry zone of Sri Lanka.

After graduation Piyumi started her carrier as an Assistant Lecturer in the Department of Zoology at University of Peradeniya. During this time she was involved in several collaborative research projects with the Water Resources and Drainage Board of Sri Lanka. She mainly focused on the applications of fresh water Cladocera as a bio-indicator in environmental assessment studies. After one year she joined the Faculty of Natural Sciences in the Open University of Sri Lanka as a Lecturer in Zoology.

Piyumi has always been excited about the real world applications on the subject Zoology, especially in the arena of water resources, management, and conservation. She realized that the Center for Integrative Geosciences would be an excellent place to do graduate studies because it has an interdisciplinary approach where she can explore the environment from many different perspectives.

Her current research area mainly concentrates on the distribution of freshwater mussels with relation to the fluvial geomorphology in the Eightmile River, Connecticut. Piyumi states that during every second she would like to sense the beauty of nature.

Teale Luncheon in Geosciences

Thursday, March 22nd at noon, the Center for Integrative Geosciences will be hosting a luncheon with Dr. Richard Somerville—distinguished lecturer from Scripps Institute of Oceanography. He will be talking about ‘Climate, Climate Change, and the Intergovernmental Panel on Climate Change’ for the Thursday evening Teale Lecture.

Time: 11:45am
Location: 233 Beach Hall—Library

All are welcome to join us and meet the Teale lecturer!

RSVP is required to attend! Please RSVP to geology@uconn.edu or 486-4432!

Please RSVP by Tuesday, March 20th if you would like to attend!

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In the News for Geosciences:
- Iran contains the world’s second-largest reserve of conventional crude oil, trailing only Saudi Arabia (and Canada, if including oil sand reserves), according to a survey in the Dec. 18, 2006, Oil & Gas Journal. Despite this strong oil reserve position, however, new research suggests that Iran could run out of exportable oil within a decade. This projection comes from a new survey of Iran’s oil economy conducted by Roger Stern, an economic geographer at Johns Hopkins University. Stern based his finding on the simple economic principle of supply and demand: If domestic demand for oil grows faster than the growth of production, then the amount of oil available for export will decrease.
IMPORTANT ANNOUNCEMENTS!

Professor Emeritus Randy Steinen was on Connecticut NPR show ‘Where we Live’ on Monday March 5, 2007, talking about the geologic history of Connecticut. You can listen to the talk here through NPR! - http://www.publicbroadcasting.net/wnpr/news.newsmain?action=article&ARTICLE_ID=1048813&sectionID=760

Courses:

New Course for Fall 07: NRME 353 Digital Terrain Modeling with Tom Meyer. This course is meant to be a practical, hands-on exploration of modeling natural surfaces. Topics include kriging estimation, logistic regression, polynomial surface patches (e.g., triangulated irregular networks) and tensor product surfaces. Emphasis is on learning how to do the modeling, rather than in-depth treatments of the underlying mathematics. MWF 1-1:50.

New Course for Fall 07: GEOL 356 / NRME 356 Ground Water Modeling Applications with Gary Robbins

3 credits Class meets 5 - 8 pm, Wednesdays LERIS Laboratory 303

The course will cover how to use Visual Modflow in addressing ground water flow, resource and contamination problems. Students will get hands-on experience each week in using modeling software.

Conferences:

Presentation at Northeastern Section Meeting of the Geological Society of America in Durham, NH

Strain distribution in slate belts: An example from the Taconic Allochthon, Vermont and New York—Jean Crespi

Water Quality Symposium

2007 New England Private Well Symposium
December 3 & 4, 2007
Hyatt Regency, Newport, Rhode Island

The purpose of the Symposium is to integrate research, extension and educational efforts in the field of private well protection to reduce the risks associated with groundwater use to private well water users.

Symposium themes include presentations and posters on:

- Land Use and Groundwater
- Public Health
- Well Water Treatment
- Legal and Regulatory Issues
- Education and Risk Communication
- Naturally Occurring Contaminants

If you’re a member of a Federal, state, or local water agency or organization, University researcher or educator, Extension professional, or work in the private sector you will not want to miss this exciting opportunity.

Find out more at the symposium website here: http://www.usawaterquality.org/newengland/wellsymposium/

Rock of Ages Display: If you take a look by office 244 in Beach Hall, you will see a new display set up by adjunct professor Susan Nagel. It highlights work she has done with her 103/105 class examining gravestones in the old Storrs Congregational Church cemetery. Stop by and take a look!

Congrats to Dr. Timothy Byrne for 15 years of service here at UConn!

Congratulations to Dr. Magda Abou El Safa, who was a post-doc with the center last spring. She has been promoted to Associate Professor in the Natural Resources Survey Dept. of the Environmental Studies and Research Institute at Menoufiya University, Egypt!

Sed/Strat Search Update: The Search Committee has selected eight candidates from a total of 74 applicants. We are currently waiting for approval to interview. If all goes well, we hope to bring in potential candidates for this faculty position in April. Please stay tuned!
Geoscience Websites of Interest

For each newsletter that comes out, we will try to feature a few great sites related to geosciences that may be of interest to students and faculty associated with the Center. Please feel free to send any sites you find along to Abi, to be included in this section in future editions!

- **Geologic Atlas**, by the Planetary Science Institute—A Photographic Atlas of Rock Breakdown Features in Geomorphic Environments is available for free download from the Planetary Science Institute in Tucson, Ariz. Mary Bourke and Heather Viles edited the atlas with contributions from many geologists and planetary scientists. The atlas is a reference designed for teachers and students with color images and explanations. To download the atlas (15 MB), please visit: http://www.psi.edu/staff/bourkepubs/atlas

- **Good Read**: Shakin’ spaghetti PSU researcher uses pasta to show friction in earthquakes - Uncooked pasta might be providing researchers with a better understanding of the effects of friction in earthquakes, according to a Penn State geoscientist…. http://www.collegian.psu.edu/archive/2003/01/01-21-03dc/01-21-03dscihealth-02.asp

- **Catching Tornadoes** - National Geographic, - It's a technological first. A well-placed probe fitted with 7 video cameras--6 with a 60-degree field-of-view designed to achieve a full 360-degree field-of-view (one failed during deployment, resulting in a 300-degree field-of-view) and one pointing upward—captures footage inside a tornado, providing visual data on ground wind speeds where the storm does the greatest damage. And Tim Samaras with his team of storm chasers are there to make it happen. http://www7.nationalgeographic.com/ngm/0506/feature6/multimedia.htm

More to come in the next edition!

Upcoming Events

- **STAY TUNED FOR FACULTY SEARCH CANDIDATE TALKS IN MARCH AND APRIL!!!**

- **Thursday, March 22, Teale luncheon** with Dr. Richard Somerville. —lunch provided! Come meet the Teale Lecturer at 12:00 noon—233 Beach Hall.

- **Thursday, March 22, Teale Lecture Series**: Richard Somerville - Distinguished Professor, Scripps Institution of Oceanography, 'Climate, Climate Change, and the Intergovernmental Panel on Climate Change', 4:00pm Konover Auditorium, Dodd Center.

- **Saturday, March 31, CT Land Conservation Council Twenty-fourth Annual Conference Northeast Utilities Berlin, CT 8:30 am to 4:30 pm**

- **Tuesday April 17th Geoscience Seminar Series Presents**: Frank Pazzaglia, Lehigh. ‘Tectonic geomorphology and geodynamic models for Mediterranean subduction’, 3:30pm Beach Hall 233. Reception to follow!

- **Tuesday April 24, Geoscience Seminar Series Presents**: Dr. Igor Ovchinnikov UConn Anthropology. Neanderthals: from odd bones to the genome projects . 3:30pm Beach Hall 233. Reception to follow!

- **Thursday April 26th: EEB Seminar Series presents Gene Hunt, National Museum of Natural History, ‘Climate change and the evolution of body size in deep-sea ostracodes’ 4:00PM in BSP 130**
EPOD from 3/01/2007: A giant auroral bird swoops down towards the fjord in which the island city of Tromso in northern Norway is located. This image was taken from the top of Mt Storsteinen, (420 m or 1,378 ft above the city), which can be accessed by cable car. Interestingly, the Sun was completely blank when this picture was taken -- a sunspot number of zero had prevailed for several days. Nonetheless, a powerful solar wind stream gave rise to this amazing display. Photo taken on February 14, 2007. Photo by Pete Lawrence
2007 GEO Career Fair

Interested in jobs in environmental consulting? GIS? Urban and regional planning?
Come learn about careers in fields ranging from geography, geosciences, and natural resource management.

**When:** Thursday March 29th  
**Time:** 5-7:30pm  
**Where:** Student Union Ballroom  

Sponsored by the Friends of Geography.
Contact Benjamin.spaulding@uconn.edu for more information!

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**Great Quote:** Thanks to R. Thorson for sending this along: “I realized then that being a geologist must be lonely work—to fall in love with shale and sediment and topography, to spend your days unearthing the deepest layers of glacial history and hold it in trust for an oblivious and ungrateful society that lacks interest in anything below the slightest surface.”

From Debra Marquart, 2006, THE HORIZONTAL WORLD, p. 235

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**Did You Know?**

A new feature for our Geoscience Newsletter that reminds us of past Earth events and milestones that occurred around the time our newsletter comes out!

⇒ **March 24: Happy Birthday!** John Wesley Powell, US Geologist and Anthropologist, was born on this day in 1834. Powell was also an explorer of the Grand Canyon, and served as director of the USGS from 1881-1884.

⇒ **March 27: Did you know?** The Great Alaska Earthquake (M 9.2) occurred on this day in 1964. Second-largest earthquake of the 20th century, and largest ever recorded in the Northern Hemisphere.

⇒ **March 9-18th** is National Science Week!

⇒ **March 14: Happy Birthday!** Albert Einstein—German-American Physicist, author of “Theory of Relativity” was born on this day in 1879.

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**GeoTrivia!**

Fun with Geoscience Trivia

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1. What term is given to small V shaped folds in layered rocks (hint-see photo)!?

2. What term is given to the breaking off and floating away of icebergs from a glacial front that has reached the ocean?

3. What term is often given to a black diamond?

Check your answers:

http://www.geosociety.org/GSA_Connection/0702/trivia.htm

These folds are the topic of question 1!
The Center for Integrative Geosciences mission is to offer transdisciplinary programs of instruction and research that advance understanding of the interaction of biological, chemical, geological, and physical processes, including feedback mechanisms, at all spatial and temporal scales that have shaped Earth through geologic time, continue to shape the environment today, and which provide the basis for understanding the present and future impact of human activity on this planet.

*We will be issuing these newsletters monthly throughout the academic year to keep associated students, staff, alumni, and faculty up-to-date on the Center's activities!*

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**Graduate Student Travels**

Two of our current geoscience graduate students have been lucky enough to include travel into their lives recently. Check out these photos from Dave Hoover who spent part of winter break in South Africa, and Megan McCusker who is studying this semester in Brazil!

*Above and to right:* Dave’s images of lions and buffalo bones in South Africa.

*Below and to right:* Megan’s images of where she is studying in Brazil.