SUSTAINABILITY SPOTLIGHT

Vasilii Petrenko
Professor of Earth & Environmental Science

Dr. Vasilii Petrenko, sitting across from me at his desk, held up his water bottle as a visual. After a complicated summary of his post doctoral work, he described to me the size of the ice cores he collected in Greenland. His water bottle is comparable in diameter to the smaller cores that he drilled — samples, Petrenko tells me, that he collected using a chainsaw.

Specializing in climate dynamics and variability, Petrenko is filling a gap in research at the University of Rochester and providing a new perspective on global climate issues as he joins the department of Earth & Environmental Science.

Petrenko received an undergraduate degree in chemistry at the University of New Hampshire, then continued on to receive his masters in education at Harvard University. Upon taking two earth science courses during his masters program, Petrenko discovered a new passion. “I got really fascinated by the subject,” said Petrenko. “The climate aspect was just really interesting to me.” Petrenko taught middle school and high school for a while, but eventually he pursued his new interest in the area of earth sciences. In 2008, Petrenko received his Ph.D in Earth Sciences at the Scripps Institution of Oceanography, where he first began working on glacial ice cores.

His postdoctoral work was done at the University of Colorado. During that time, he traveled to Greenland and Antarctica to collect ice cores for his research involving the reconstruction of past carbon monoxide concentrations. “I find it fun and incredibly exciting to be out in these places,” said Petrenko. “Going out to Greenland and Antarctica, studying the glaciers, is definitely my favorite part of my work.” While he is hoping to continue with a lot of the same research, Petrenko will also delve into a newer area: the production of carbon-14 in glacial ice by cosmic rays. By studying the geologic record of past climate, scientists like Petrenko will have a better grasp on how the Earth’s environment will respond to changing atmospheric compositions.

Petrenko is also very happy to be back to teaching. One reason that he chose the University of Rochester is because it has a greater emphasis on teaching than many other research universities. "I'm psyched to be back to teaching," said Petrenko, just as students are excited to have a new professor on board at the U of R.

Rachel Goldstein
University of Rochester ’13
**HIGHLIGHTS**

**Sustain-A-Bowl**
Grassroots has created a new sustainable competition this fall called Sustain-A-Bowl, an expanded version of UR Unplugged. Sustain-A-Bowl is a campus-wide competition that promotes decreasing energy consumption in dorms and increasing student participation in sustainable activities on campus. Each dorm will compete to earn points for decreasing the amount of energy used this year compared to the energy used the same week last year. Dorms can also earn points by participating in events held by Grassroots and other sustainable groups on campus, or by hosting their own events. For more information, check out the UR Sustain-A-Bowl Facebook page or contact ur.sustainabowl@gmail.com. Sustain-A-Bowl will be held from Friday, October 14th until Friday, November 11th, so keep your eyes peeled!

**Danforth Renovation: Behind the Scenes**
Beyond the aesthetic appeal of the new and improved Danforth Dining Center at the University are a multitude of creative sustainability initiatives. Take a seat and you will find that you are sitting on a chair made out of 111 recycled Coke bottles. When these Emeco chairs first entered the market, they diverted 3.5 million bottles out of landfills! During the demolition phase of the Danforth renovation, 75% of the total waste material was diverted back to the manufacturing process. This prevented 100.95 tons out of 133.84 from being disposed in landfills and incineration facilities. The design of Danforth utilizes natural light in a way that reduces the light energy consumption. Meanwhile, the spaces that are lit use LED lighting and day lighting controls. These are only a few of the main sustainable solutions that were woven into the renovation, greatly reducing the environmental and energy impacts of the dining facility.

**Environmental Programs Abroad**
A variety of study abroad opportunities for students interested in environmental issues are surfacing through IES. Students can travel to the Galápagos Islands to study evolution, ecology & conservation, marine ecology, or politics & the environment. The Galápagos Islands Program is new this fall 2011. The Freiburg Environmental Studies & Sustainability Program began last fall, 2010, and focuses on sustainable management of natural resources, with a special emphasis on forest management. The city of Freiburg is well-known for its progressive thinking on environmental issues, and its development of eco-friendly technologies and architecture. A Social & Environmental Change program, located in Costa Rica, will begin in the fall of 2012. Check them out at UR Study Abroad.