New Earth and Environmental Sciences Professor Publishes Research, Shares Experiences

Perhaps best known for his recent work surrounding the 2010 Deepwater Horizon explosion and oil spill in the Gulf of Mexico, in which he and his colleagues from Texas A&M found that naturally-occurring bacteria which exist in the Gulf had consumed and removed at least 200,000 tons of oil and natural gas that had spewed out of a ruptured well head, Professor John Kessler joined University faculty in the Department of Earth and Environmental Sciences this fall.

Kessler, a chemical oceanographer, focuses on isotope biochemistry, specifically surrounding methane dynamics within the oceanic system, and conducts this research with a goal of quantifying feedback associated with global climate change. After completing a Bachelor of Science in Chemistry and Mathematics from Gettysburg College, Kessler began working in an atmospheric chemistry lab, which opened his eyes to geochemistry. “I was instantly hooked. I realized that a reaction beaker did not have to be a glass jar in a sterile lab; it could be the entire ocean. The nerd in me sprang to life and my mind still races with an unending list of hypotheses to test,” Kessler said.

From that point forward, Kessler has deep-dived into a plethora of unique and interesting opportunities. He has analyzed the air in the encasing surrounding the U.S. Constitution and Declaration of Independence; rode a three-person submarine to the ocean’s bottom to collect samples of gas bubbling from the seafloor; helped design and build instrumentation for the next Mars rover; and experienced a sea of other opportunities.

At the University, Kessler plans to teach courses that will interweave the fundamentals of ocean chemistry and isotope geochemistry with global climate change, and conduct research to quantify the sources, sinks, and fluxes of oceanic methane using analytical chemistry measurements.

He encourages students interested in oceanography and climate science to “put that education into action. Even if you are unsure of what you want to research, don’t sit on the sidelines. Take advantage of research opportunities in the lab and in the field.” Kessler’s research and experiences reflect an insightful, thought-provoking career, and the University and its students welcome him with open hands.
HIGHLIGHTS

Recycling Efforts at Eastman Expand

Following the University’s example of easy accessibility to recycling, the Eastman School of Music upgraded its recycling receptacles in time for the start of the academic year. Eastman Environmental Services Supervisor Mary Santiago worked with University Recycling Coordinator Amy Kadrie to analyze Eastman facilities and develop improvements. Upgrading the recycling bins in the dormitory and academic buildings was the primary focus; previous recycling bins were not clearly marked, resulting in contamination by trash.

The “trios” at the left are dispersed throughout the River Campus and are now available at Eastman, ready for use in the Student Living Center, floors, lounges, game rooms, and kitchens, as well as in the Kodak Theater lobby, Eastman Hatch Recital Hall and the second floor Cominsky Promenade.

Rent a Bicycle from City Cycles

With many warm days of autumn still ahead, students are encouraged to rent a bicycle from City Cycles, the University’s free bicycle lending library for undergraduates and members of the Goergen Athletic Center. City Cycles strives to make bicycling an “attractive and sustainable mode of transportation,” according to their site. To begin, visit City Cycles’ site to fill out a waiver agreement, check availability, reserve equipment up to an hour beforehand, receive email reminders, and more.

The program also offers repair services to bicycle owners; on-campus services are offered every Tuesday by the Towpath Bike Shop of Pittsford, NY from 1:00 to 3:00 p.m. on the Wilson Commons Quad.

City Cycles was founded by University alumni Andrew Hall (‘07) and Adam Baratz (‘07) in 2004 with the goal of creating a nationwide model for university bicycle lending.

New Sustainability Resource Appears on Online Map

“My Town Rochester” is a new, free resource for the Rochester community, striving to provide Rochester denizens with a virtual place to browse sustainability-relevant news, energy research, environmentally friendly events, and more. The site features a variety of posts from city officials and “aims to help people in the community live more sustainably by encouraging the use of renewable energy and lessening our impact on the environment,” according to Media Relations Specialist Sara Gonzalez.

My Town members can take advantage of the various features of the site and even publish their own content. Recent posts include a look at upcoming events in Rochester and innovative city projects. The site is sponsored by Johnson Controls, a longtime Rochester business and local employer. Visit “My Town Rochester” to join the growing community.