FACULTY & STAFF

GULF OIL SPILL

In the weeks following the BP Deepwater Horizon explosion and its subsequent spewing of millions of gallons of crude oil into the Gulf of Mexico, Robert Moreau, director of Southeastern's Turtle Cove Environmental Research Station in Pass Manchac, pulled together some of his fellow scientists. With no firm funding in hand – only concern about the impact the oil could have on the environment and people in the area – Southeastern's scientists and faculty mobilized to record any possible effects the disaster could have on the region.

 "Hurricane season was upon us, and all it would have taken is a few feet of storm surge to breech the preparations that parishes had set up at the Rigolets and Chef passes," Moreau said.

Before the oil had ventured into the Ponchartrain Basin, Turtle Cove staff members Fred Stouder and Hayden Reno, along with several graduate students, began collecting water and other samples to establish baseline data. Samples were returned to Southeastern's chemistry and biology departments to be analyzed for possible oil-related contaminants.

"While much of Lake Ponchartrain Basin is relatively protected from the spill, the basin's role as a nursery and breeding grounds for economically important species of fish and invertebrates makes it crucial that we monitor the hydrocarbon levels in the waters," explains Philip Voegel, Southeastern environmental and analytical chemist.

He said samples of surface and bottom water were brought to the lab, where they were analyzed to determine hydrocarbon content and other contaminants using gas chromatography and mass spectrometry and following methodology prescribed by the Environmental Protection Agency. The samples were studied using appropriate solvents and concentrated prior to analysis. It's the CSI approach to determining contamination, he explained.

PHOTO: Southeastern environmental and analytical chemist Philip Voegel reviews the work of student Kaitlin Guice as she performs a chemical analysis of water taken from the Lake Pontchartrain Basin.