



**Toomey**



**Alcantar**

**Two Chemical Engineering Professors Receive NSF Grant  
to Study Efficacy of Natural Dispersants in the Open Sea**

**Tampa, Fla. (November 23, 2010)** – Associate Professor Norma Alcantar and Assistant Professor Ryan Toomey both of Chemical Engineering have received a one-year NSF RAPID grant to study dispersants used in oil spill conditions such as the Macondo Deepwater Horizon site.

The research will focus on testing the efficacy of natural surfactants that may yield important clues for designing non-toxic dispersants. This work represents a first step in understanding dispersant efficiency at the Deepwater Horizon spill site. Two types of surfactant systems will be investigated: synthetic polymeric surfactants (where chemical functionality and architecture can be precisely controlled) and natural polymeric surfactants. The natural surfactants will yield important cues for designing non-toxic dispersants. We will compare their effectiveness to currently used dispersants at the 2010 Deepwater Horizon spill site in the Gulf of Mexico.

*The University of South Florida is one of the nation's top 63 public research universities and one of only 25 public research universities nationwide with very high research activity that is designated as community engaged by the Carnegie Foundation for the Advancement of Teaching. USF was awarded \$380.4 million in research contracts and grants in FY 2008/2009. The university offers 232 degree programs at the undergraduate, graduate, specialist and doctoral levels, including the doctor of medicine. The USF System has a \$1.8 billion annual budget, an annual economic impact of \$3.2 billion, and serves more than 47,000 students on institutions/campuses in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland. USF is a member of the Big East Athletic Conference.*

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