

## BP Campus Visit



On November 15, BP will be visiting Georgia Tech to talk with graduate students interested in a career in Geotechnical Engineering.

While on campus, we will be interviewing for a job opening for MS/PhD students graduating by Aug 2007. These interviews will be scheduled with the students prior to our visit to campus. If you have not already applied for this position and are interested in an interview, please contact Tracy Otterson at 713-805-5047 [otterstm@bp.com](mailto:otterstm@bp.com)

BP's Geotechnical specialist, Eric Liedtke, will give a presentation on technical challenges facing the industry. All graduate students and faculty are welcome to attend.

### **Presentation Topic: Overview of Offshore Geotechnical Engineering at BP-2006**

**TIME:** 2:00 – 3:00  
**LOCATION:** Mason-142A

Over the past 10 years BP has been involved worldwide in a number of challenging deepwater projects. These projects have provided a variety of geotechnical problems such as siting facilities in water depths ranging from 1200 to 2200 m on very rugged seafloor slopes, developing novel site investigation tools for deepwater, providing the technology for new anchoring systems and providing soil stiffnesses for the fatigue assessment of catenary and top tension risers. The presentation will provide an overview of these geotechnical challenges. A cornerstone of the BP geotechnical work has been the use of centrifuge model testing to verify analytical models. Several examples highlighting the use of this technique will be presented. The work on the fatigue of risers has also been particularly interesting, requiring a re-evaluation of the methods used to determine soil stiffnesses. Many times the fatigue damage is caused by lower (less than those associated with extreme events such as hurricanes) loading events and has required the evaluation of soil stiffness at very small displacements. For the catenary riser case, however, cyclic loading plays a critical part in determining the overall soil response. The results from various programs to assess the fatigue problem will be presented.

The intent of the presentation is to: 1) highlight the very important and diverse role geotechnical engineering plays in the development of deepwater projects and 2) provide a starting point for vigorous discussion with students on future industry challenges.