

## **SPECIAL PRESENTATIONS**

By



**Dr. Priscilla Nelson**  
**Department of Civil and Environmental  
Engineering**  
**New Jersey Institute of Technology**

Friday, 16 March 2012

9:30 AM in Room 2321 Engineering Hall

### **Me, Myself and I – a woman in engineering (life overview) with Q&A session following**

Professor Nelson has an international reputation in geological and rock engineering, and the particular application of underground construction. She also has worked in the areas of critical infrastructure, emergency response and disaster recovery. Dr. Nelson has published more than 120 technical and scientific publications in refereed journals and conference proceedings. She is a Distinguished Member of the American Society of Civil Engineers (ASCE), former president of the Geo-Institute of ASCE, a lifetime member and first president and Fellow of the American Rock Mechanics Association, and a Fellow of the American Association for the Advancement of Science (AAAS). She was elected Chair of the Division of Engineering of AAAS in 2007. In addition to these positions, she has many other professional affiliations including: Sigma Xi, Tau Beta Pi, the American Underground-Construction Association, the Association of Engineering Geologists, the International Tunneling Association, the Society of Women Engineers, and the American Society for Engineering Education (ASEE). Dr. Nelson has been a part of several major construction projects, including field engineering responsibilities during construction of the Trans-Alaska Pipeline System, and serving as a consultant to the U.S. Department of Energy and the State of Texas for the Superconducting Super Collider project. She received Presidential appointments to the U. S. Nuclear Waste Technical Review Board in 1997 and 2001.

3:00 PM in Room 2255 Engineering Hall

### **Risk and Risk Management for Construction (focus on the underground)**

Building on the baselines to create project risk registries leads to the opportunity to quantitatively assess risk and its management. The importance of project control systems for management of process and execution risks becomes clear, but requires particular frameworking for management of risk and construction on underground projects. Probabilistic approaches are introduced as methods to manage across stakeholders and across complex projects with interdependencies.