Date: Tuesday, Oct. 21, 2014  
12:00pm - 12:50pm

Location: Gilman Hall 50

Speaker: Harald Cordes  
Principal Tunnel Engineer, Parsons Brinckerhoff

**State-of-the-Art Tunneling Methodologies and their Applications in the Greater Baltimore Region**

State-of-the-Art tunneling techniques such as Sequential Excavation Method, also known as New Austrian Tunneling Method, mechanized tunneling with Tunnel Boring Machines, immersed tunnel construction and conventional cut-and-cover techniques will be introduced and their typical range of application will be explained. Actual tunnel projects that apply these methodologies in North America and in particular in the greater Baltimore Region, will be presented. This will include the Baltimore Red and Purple Line, the WMATA Extension to Dulles Airport, DC Water’s Clean River Program, the Midtown Tunnel in Norfolk and the East Side Access Project in New York City.

**About the Speaker**

Harald Cordes has over 17 years of experience in design and construction of transportation, water, and infrastructure projects. He has extensive exposure to tunneling projects in the design office and on site, including planning, design, and site supervision of tunnels in softground and rock using a variety of techniques. Most of these techniques include Sequential Excavation Method for tunnels and station caverns and TBM tunneling. Mr. Cordes received his civil engineering education in Germany and spent the first several years of his career working in Germany and the Netherlands.

Mr. Cordes joined Parsons Brinckerhoff in 2006 and is currently an Engineering Manager with the Geotechnical and Tunneling Group in its Washington D.C. office.