

## Multi-Scale Characterization of Pavement Materials

Chair: Prof. Huiming Yin  
Columbia University

10:00 – 12:30; June 8, 2009  
Room 477

- ? 160 Guoqing Jing, Juan Martinez & Samuel Masson (France)  
*Polygon Ballast under Different Cyclic Loading Force Amplitude*
- 164 Benjamin Lai, Cathrina B. Barros & Huiming Yin (USA)  
*Investigation of Rheological Behavior of Asphalt Binder Modified by the Advera Additive*
- 170 Ewan Y.G. Chen & Ernian Pan (USA)  
*Consolidation of Flexible Pavement Based on A Viscoelastic-Elastic-Poroelastic (VE-E-PE) Model*
- 172 Minkyum Kim & William G. Buttlar (USA)  
*A Two-Phase Sequential Differential Scheme Modeling Approach for Asphalt Mixtures*
- 183 Konrad Mollenhauer, Katharina Metzker, Holger Lorenzl & Michael P. Wistuba (Germany)  
*A Continuum Mechanical Multi-Component Model for Asphalt Mixtures. Part I: Experiments for Parameter Identification and Model Verification*
- 184 Bjorn Brodersen, Ursula Kowalsky & Dieter Dinkler (Germany)  
*A Continuum Mechanical Multi-Component Model for Asphalt Mixtures. Part II: Parameter Identification and Simulation*
- 233 Roberto Soares, Yong-Rak Kim & David H. Allen (USA)  
*FEM Multiscale Analysis of Asphaltic Pavements Including Damage*