

PAVEMENT PERFORMANCE PREDICTION SYMPOSIUM

Hilton Garden Inn and University of Wyoming Conference Center — Laramie, Wyoming, July 15, 2010
Sponsored by **Federal Highway Administration** – Organized by **Western Research Institute**

Innovations in Binder Characterization

P3
2010

- 8:00-8:10 am Welcome and Introduction—**Steve Salmans** *Western Research Institute*
- Session 1** **Eric Kalberer, Session Chair**
- 8:10-8:45 Quantitative Issues In Asphalt Infrared Spectra Interpretation
Ron Glaser and Fred Turner *Western Research Institute*
- 8:45-9:15 4mm Diameter Parallel Plate DSR
Mike Farrar *Western Research Institute*
- 9:15-9:50 Hurdles in Bituminous Binder Characterization
Jean-Pascal Planche *Total Refining Marketing*
- 9:50-10:10 Break
- 10:10-10:35 Can X Ray Fluorescence Analysis Be Used to Identify Asphalt Binders?
Terry S. Arnold *Federal Highway Administration*, **Susan P. Needham** *SES Group & Associates, LLC*, and Anant Shastry *TFHRC/ESC Inc.*
- 10:35-11:00 Use of FTIR in Extraction/Recovery of Asphalt Binders
Terry S. Arnold *Federal Highway Administration*, **Anant Shastry** *TFHRC/ESC Inc.*, and Susan P. Needham *SES Group & Associates, LLC*.
- 11:00-12:10 Optimized Asphaltene Determinator and Waxphaltene Determinator Separation Methods for Rapid Characterization of Asphalt Binders
John F. Schabron and Joseph F. Rovani *Western Research Institute*
- 12:10-1:10 pm Lunch
- Session 2** **John Schabron, Session Chair**
- 1:10-1:45 Laboratory Forensic Investigations for Asphalt Paving Issues
Joe Rovani and Jenny Loveridge *Western Research Institute*
- 1:45-2:20 Binder Characterization as Related to Pavement Durability
Charles J. Glover *Artie McFerrin Department of Chemical Engineering and TTI, Texas A&M University System*
- 2:20-2:55 Characterization of Asphalt Emulsions: Present and Future
Delmar Salomon *Pavement Preservation Systems, LLC*
- 2:55-3:15 Break
- 3:15-3:50 Multi-Disciplinary Characterization of Recycled Roofing Materials for Asphalt Pavement Applications
Ken Grzybowski and **Laurand Lewandowski** *PRI Asphalt Technologies, Inc.*
- 3:50-4:25 Effects of Deicing Chemicals on Asphalt
Eric W. Kalberer *Western Research Institute* and **Don Christensen** *Advanced Asphalt Technologies, LLC*
- 4:25-5:00 Nano-Rheology/Nano-Mechanics and Scanning Probe Microscope Imaging Based on Novel Sample Preparation Techniques
Will Grimes, Bill Tuminello and **Troy Pauli** *Western Research Institute*