AGGREGATES: ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE, BASES, AND FINES

Tenth Annual Symposium Proceedings
April 14-17, 2002
Baltimore’s Inner Harbor Holiday Inn
Baltimore, Maryland
Session A1

Superpave Issues: Research, State, FHWA, AASHTO Perspectives – Part I
Session Chair: Charles R. Marek, Vulcan Materials Company

A Broad Look at Superpave Projects
John Bukowski, Federal Highway Administration

Paving the Way for Superpave: The Role of the TRB Superpave Committee
Neil Hawks, Transportation Research Board

National Center for Asphalt Technology Test Track Results
E. Ray Brown, National Center for Asphalt Technology
(Presentation Only)

Evaluation of the Effects of Flat and Elongated Aggregate Particles on the Mixture Design and Performance of HMA
Cindy Estakhri, Texas A&M University
Session A2

Superpave Issues: Research, State, FHWA, AASHTO Perspectives – Part II
   Session Chair: Charles R. Marek, Vulcan Materials Company

Maryland DOT Perspective
   Larry L. Michael, Maryland Department of Transportation
   (Presentation Only)

PMA Field Performance on UDOT Projects
   Howard J. Anderson, Utah Department of Transportation

Superpave Issues: Texas DOT Perspective
   Jeffrey Seiders, Texas Department of Transportation
Session B1

State Department of Transportation and Federal Agency Panel
   Session Chair: Charles R. Pryor, Jr., National Stone, Sand, & Gravel Association

Panel discussion on aggregates-related issues in construction, research, specifications (Presentations Only)

Session C1

Aggregates in Concrete Pavements
   Session Chair: George W. Hall, III, Maryland Department of Transportation

The Effects of Mixture Proportioning on the Performance of Portland Cement Concrete
   Pedro Nel Quiroga, Sinan Erdogan, and David W. Fowler, The University of Texas

Evaluation of the FHWA-WES Vibrating Slope Apparatus (VSA)
   Michael P. Dallaire and Marcia J. Simon, Federal Highway Administration/Turner-Fairbanks Highway Research Center

New Aggregate Characterization Tests for Thermal and ASR Reactivity Properties
   Chang-Seon Shon, Seungwook Lim, Dan Zollinger, Shondeep L. Sarkar, and Mukhopadhyay K. Anal, Texas Transportation Institute, Texas A&M University
Session C2

Aggregates in Asphalt Pavements
   Session Chair: Sam R. Johnson, Martin-Marietta Aggregates

Using Dynamic Mechanical Analysis as a Tool to Access the Suitability of Fillers in Asphalt Mixtures Based on the Mastic Properties
   Dallas N. Little and Y. R. Kim, Texas A&M University

A Continuum Damage Framework to Validate a Unified Method of Aggregate Classification Based on Image Analysis
   Eyad Masad, L. Tashman, and Dallas N. Little, Texas A&M University

Bulk Specific Gravity of HMA – Round Robin Test Series Results
   E. Ray Brown, National Center for Asphalt Technology
   (Presentation Only)

Developing a National 4.75 mm Superpave Specification
   Brian G. Birdsall, Martin-Marietta Aggregates
Session D1

Aggregates Characterization - Performance, Testing, Field Evaluation

Session Chair: Randy L. Weingart, Luck Stone Corporation

Investigation of Alkali-Silica Reactivity and Delayed Ettringite Formation in Concrete
Moon Won and Jeffrey Seiders, Texas Department of Transportation

Development of a Methodology for Determining the Testing Frequency of Construction Materials
Zhanmin Zhang, David W. Fowler, and W. Ronald Hudson, The University of Texas at Austin

The Laser-Based Aggregate Scanning System: Current Capabilities and Potential Developments
Hyoungkwan Kim, Alan F. Rauch, and Carl T. Haas, The University of Texas

The Impact of Aggregate Quality on Concrete Performance
Barry P. Hudson, Aggregates Research Industries
Session D2

Aggregates-Related Performance Issues
Session Chair: Anthony I. Johnson, Edward C. Levy Company

AIMS: Aggregate Imaging System for Characterizing Fine and Coarse Aggregate Shape Properties
Thomas Fletcher and Eyad A. Masad, Washington State University

Aggregates Aspects of Pavement Preservation: Results from the FHWA International Scanning Tour
Dennis C. Jackson and James Moulthrop, Koch Industries, Inc.

Skid-Resistant Aggregates in Ontario
Chris Rogers, Bob Gorman, and Becca Lane, Ontario Ministry of Transportation
Session E1

High Fines Content Manufactured Fine Aggregates in Concrete Pavements
Session Chair: Robin E. Graves, Vulcan Materials Company

The Effects of High Fines on the Properties of Concrete
Namshik Ahn and David W. Fowler,
The University of Texas at Austin

Development of the Illinois Department of Transportation Specification for MFA
William M. Sheftick,
Illinois Department of Transportation (Presentation Only)

The Plainfield Project – Field Experience
Charles A. Sanders,
Vulcan Materials Company (Presentation Only)

A Contractor’s Perspective
Wouter Gulden, South East Chapter,
American Concrete Paving Association
(Presentation Only)

Panel Session – Q&A with the presenters