

April 15, 2009

## **PROGRAM**

**17<sup>th</sup> Annual ICAR Symposium  
May 4-5, 2009  
The University of Texas at Austin  
Pickle Research Campus Commons**

**Monday, May 4, 2009**

**8:00 Registration**

**9:00 AM Opening Session**

**Moderator:** *David W. Fowler, The University of Texas at Austin, Director, ICAR*

### **Aggregates Research Outlook**

*Cheryl Richter, Research Program Manager, Office of Infrastructure R&D, Federal Highway Administration*

### **High Fines Pavement Test Sections**

*Meredith McElroy Joyce, David W. Fowler, The University of Texas at Austin*

**10:00 – 11:55 AM**

**Session A1: Characterizing Aggregates for Hot Mix Asphalt, I**

**Chair: Chris Rogers**

**Deterioration of an Asphalt Airport Runway Due to Wetting and Drying of the  
Aggregate - an Experience From the West Indies**

*Chris Rogers, Consultant*

**Impact of Dust on Aggregate Surfaces on the Performance of HMA Mixtures**

*Amit Bhasin, The University of Texas at Austin*

**A Method for Predicting Asphalt Mixture Skid Resistance Based on Aggregate  
Characteristics and Gradation**

*Arash Rezaie and Eyad Masad, Texas A&M University*

**Development of Aggregate Blending Charts Based on Strength of Asphalt Mixtures**

*Enad Mahmoud and Eyad Masad, Texas A&M University*

**12:00 – 1:00 PM Lunch**

**1:15 – 3:00 PM**

**Session B1: Aggregates in Bases**

**Chair: Caroline Herrera, Texas Department of Transportation**

**Applying the New Design Methodology**

*Dallas N. Little, Texas A&M University*

**Types and Amounts of Fines Affecting Unbound Aggregate Behavior**

*Erol Tutumluer, The University of Illinois at Urbana-Champaign*

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**Performance of Inverted Sections**

*Reza Ashtiani*

**Measuring Compactive Energy in the Laboratory**

*Caroline Herrera, Texas Department of Transportation*

**3:00 PM Break**

**3:20 – 5:30 PM**

**Session C1: Aggregates in Concrete, I**

**Chair: Eric Koehler**

**Ensuring Concrete Performance for Various Aggregates**

*Eric P. Koehler, Ara Jeknavorian, Byong-Wa Chun, Peter Zhou, W.R. Grace, and Co.*

**Some Thoughts on The Chemical Compositions of Fly Ash**

*Lianxiang Du, University of Alabama at Birmingham*

**The Role of Aggregate Microfines in the Alkali Silica Reaction: Enemy or Ally?**

*Jose F. Munoz, Jessica M. Sanfilippo, Steven W. Cramer, M. Isabel Tejedor, Marc A. Anderson, University of Wisconsin-Madison*

**The Use of Fossils and Mineral Specificity in Forensic Concrete  
Petrography**

*Tom Patty, Wiss, Janny, Elstner Associates*

**Shape Comparison of Crushed Wilson Quarry Aggregates in a Size Range of 75  
Micrometers to 30 mm**

*Edward J Garboczi, National Institute of Standards and Technology and Michael Taylor, Granite Rock Co.*

**5:30 PM Adjourn until 8:30 AM Tuesday.**

**Tuesday, May 5, 2009**

**8:30 – 10:20**

**Session D1: Aggregates in Concrete, II**

**Chair: Robin Graves**

**Optimization of Aggregates in Concrete Mixtures**

*Marc Rachad, David W. Fowler, The University of Texas at Austin*

**Research in MFA in Concrete Paving**

*David W. Fowler The University of Texas at Austin*

**Designing a New Crushing Technique to Combine Impact and Compression  
Fracturing in a Rock Crushing Chamber**

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*Roy B. Miller, Mechanical Test Engineer*

**The Effects of Supplementary Cementing Materials on Alkali Carbonate Reaction**

*Medhat H. Shehata and Steven Jagdat, Ryerson University, and Chris Rogers, Consultant*

**Microfines For Improving Workability in Mortar**

*Thomas Matthews, Blue Mountain Minerals*

**10:20 Break**

**10:35 – 12:00 AM Session E1**

**Department of Transportation/Federal Agency Panelists Discuss Current Aggregates-Related Issues in Their Organizations**

**Chair:**

**Panel Members:**

**TBD**

**12:00 – 1:00 PM Lunch**

**1:00 – 2:45 PM**

**Session F1: Miscellaneous Aggregates Topics**

**Chair: Sam Johnson**

**Micro-Deval Results**

*Steve Senior, Ontario Ministry of Transportation*

**Recent Developments in Alkali Silica Reaction**

*Kevin J. Folliard, The University of Texas at Austin*

**TxDOT's Annual ASTM C 1260/1567 Proficiency Program**

*Ryan Barborak, Texas Department of Transportation*

**Kemco Dry Sand Making System V7-To Turn Surplus Crusher Dust into Premium Sand**

*Makoto Hashimoto, Kemco Inc*

**2:45 – 3:00 PM Break**

**3:00 – 4:00 Special Session**

**Engineering Ethics**

*Lance Kinney, P.E., Texas Board of Professional Engineers*