



## LTRC Seminar Series: 2010 TRB Paper Presentations

March 23–24, 2010

TTEC Auditorium

### Tuesday, March 23

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7:30 – 8:00 Registration

8:00 – 8:15 Welcome

8:15 – 9:30 Session 1: Geotechnical Papers

*CPT Sounding and Pile Driving: Case History of I-10 Twin Span Bridges in Louisiana*  
Nickel, Chris - Louisiana Department of Transportation and Development

*Instrumentation Plan for Monitoring the New I-10 Twin Span Bridge*  
Abu-Farsakh, Murad Yusuf - Louisiana Transportation Research Center

*Calibration of Resistance Factor for LRFD Design of Drilled Shafts in Louisiana*  
Xinboa Yu - Louisiana Transportation Research Center

9:30 - 10:00 Break

10:00 – 11:45 Session 2: Pavement Papers (Part I)

*Implementation of Stabilized Blended Calcium Sulfate Materials in Flexible Pavement Design and Construction*  
Wu, Zhong - Louisiana Transportation Research Center

*New Approach to Indexing Localized Roughness of Pavement*  
Martinez, Mark - Louisiana Transportation Research Center

*Field Rutting Performance of Various Base and Subbase Materials under Two Types of Loading*  
Chen, Qiming - Louisiana Transportation Research Center

*Mitigating Transverse Joint Faulting in Jointed Concrete Pavement with Polyurethane Foam*  
Gaspard, Kevin - Louisiana Transportation Research Center

11:45 – 1:00 Lunch (on your own)

1:00 - 2:00 Session 3: Pavement Papers (Part II)

*Characterization and Development of Truck Axle-Load Spectra for Future Implementation of New Pavement Design Practices in Louisiana*  
Shin, Hak-Chul - Louisiana State University

*Estimation of Resilient Modulus of Subgrade Soils Using Falling-Weight Deflectometer*  
Mohammad, Louay N. - Louisiana Transportation Research Center

2:00 - 2:30 Break

- 2:30 – 3:00      Session 4: Policy Paper
- Examining the Linkages between Electronic Roadway Tolling Technologies and Road Pricing Policy Objectives*  
Iseki, Hiroyuki - University of New Orleans
- 3:00 – 4:15      Session 5: Materials Papers (Part 1)
- Effect of Application Methods on Effectiveness of Titanium Dioxide as Photocatalyst Compound to Concrete Pavement*  
Hassan, Marwa M. - Louisiana State University
- Evaluation of Environmental Effectiveness of Titanium Dioxide Photocatalyst Coating for Concrete Pavement*  
Hassan, Marwa M. - Louisiana State University
- Effects of Temperature on Interface Shear Strength of Emulsified Tack Coats and Its Relationship to Rheological Properties*  
Bae, Abraham - Louisiana Transportation Research Center

## Wednesday, March 24

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- 8:00 – 9:45      Session 6: Material Papers (Part II)
- Effects of Pavement Surface Type and Sample Preparation Method on Tack Coat Interface Shear Strength*  
Mohammad, Louay N. - Louisiana Transportation Research Center
- Reliability Analysis of Cone Penetration Test Measurements in Calculating Undrained Shear Strength of Soil*  
Okeil, Ayman M. - Louisiana State University
- Investigation of Use of Limestone Screenings in Roadway Construction*  
Rupnow, Tyson - Louisiana Transportation Research Center
- FRP Configuration Effect on Reliability of Flexurally Strengthened Concrete Beams*  
Okeil, Ayman M. - Louisiana State University
- 9:45 – 10:15      Break
- 10:15– 11:30      Session 7: Traffic Papers (Part I)
- Passenger-Car Equivalent of Trucks under Lane Restriction and Differential Speed Limit Policies on Four-Lane Freeways*  
Qi, Yan - Louisiana State University
- Crash Analysis and Traffic Characteristics under Freeway Truck Lane Restriction and Differential Speed Limit Policies*  
Ishak, Sherif - Louisiana State University
- Quantifying Crash Risk under Inclement Weather with Radar Rainfall Data and Matched-Pair Method*  
Sun, Xiaoduan - University of Louisiana
- 11:30 – 1:00      Lunch (on your own)
- 1:00 – 2:00      Session 8: Pavement Papers (Part III)
- Development of Flexible Pavement Index Based Performance Models for Network Pavement Management System in the State of Louisiana*  
Khattak, Mohammad Jamal - University of Louisiana, Lafayette
- Developing Embedded Wireless Strain/Stress/Temperature Sensors Platform for Highway Application*  
Lian, Kun - Louisiana State University

2:00 – 2:30 Break

2:30 – 3:45 Session 9: Traffic Papers (Part II)

*Stochastic Characteristics of Freeway Traffic Speed during Breakdown and Recovery Periods*  
Qi, Yan - Louisiana State University

*Operational Assessment of Joint and Conventional Lane Merge Configurations for Freeway Work Zones*  
Ishak, Sherif - Louisiana State University

*Joint Merge and Its Impact on Merging Speeds in Construction Zone Lane Reduction Areas*  
Wolshon, Brian - Louisiana State University

3:45 – 4:00 Closing Remarks