

PUBLICATIONS BY LTRC PERSONNEL: FY 2010-2011

Abu-Farsakh, M., Yoon, S., Ha D., Marr, W., Yu X., and Zhang, Z., 2011 "Development of a Substructure Instrumentation System for Monitoring a Smart Pier at the New I-10 Twin Span Bridge," *ASTM Geotechnical Testing Journal*, Vol. 34, No. 4, pp. 332-343.

Abu-Farsakh, M., Yu X., Pathak B., and Zhang, Z., 2011 "Field Testing and Analyses of a Batter Pile Group Foundation under Lateral Loading," proceedings of the 90th TRB annual meeting, Washington, D.C.

Abu-Farsakh, M., Pant R., Gautreau G., Yu X., and Zhang, Z., 2011 "A Case Study on Estimating the Embankment Settlement from Piezocone Penetration Test Data proceedings of the 90th TRB annual meeting, Washington, D.C.

Abu-Farsakh, M., Souci G., Voyiadjis G., and Chen Q., 2011 "Evaluation of Factors Affecting the Performance of Geogrid-Reinforced Granular Base Material Using Repeated Load Triaxial Tests," proceedings of the 90th TRB annual meeting, Washington, D.C.

Abu-Farsakh, M. and Yu, X., 2010, "Interpretation Criteria to Evaluate Resistance Factors for Axial Load Capacity of Drilled Shafts," *Journal of the Transportation Research Board*, Vol. 3, No. 2202, Bridge-Engineering, pp. 20-31.

Abu-Farsakh, M., Yoon, S., Ha D., Marr, W., Zhang, Z., and Tsai, C., 2010 "A Smart Health Monitoring System for the New I-10 Twin Span Bridge over Lake Pontchartrain," *ASCE Geotechnical Special Publication No. 199*, Advances in Analysis, Modeling and Design, GeoFlorida 2010, West Palm Beach, FL, pp 960-969.

Antipova, A., F. Wang and C. Wilmot. "Urban Land Uses, Socio-Demographic Attributes and Commuting: A Multilevel Modeling Approach." *Applied Geography*, 31, 2011. pp. 1010-1018.

Al Shamsi, K., Mohammad, L.N., "Estimating Optimum Compaction Level for Dense-Graded Hot-Mix Asphalt Mixtures. *The Journal of Engineering Research*, Vol. 7, No.1, 2010, pp. 11-21.

Bae, A., Mohammad, L. N., Elseifi, M., Button, J., and Patel, N. "Effects of Temperature on the Interface Shear Strength of Emulsified Tack Coats and Its Relationship to Rheological Properties." *Journal of the Transportation Research Board*, 2010, pp. 102-109.

Cai, C.S., Archana Nair, Miao Xia and Shuang Hou (2011) "Development and Performance Assessment of a FRP Wrapped Balsa Wood Bridge Deck in Louisiana" Louisiana Transportation Conference, Jan. 9-12, Baton Rouge, Louisiana.

Chen Q., and Abu-Farsakh M., 2011. "Field performance of a new approach slab system." *ASCE Geotechnical Special Publication No. 224: Geotechnical Risk Assessment and Management*, pp. 1036-1043.

Chen Q., and Abu-Farsakh M., 2011 "Numerical Analysis to Study the Scale Effect of Shallow Foundation on Reinforced Soils," *ASCE Geotechnical Special Publication No. 211*, Geo-Frontiers 2011, Advances in Geotechnical Engineering, Dallas, TX, pp. 595-604.

Chen, Q., and Abu-Farsakh, M. Y., 2010 "Field Rutting Performance of Various Base/Subbase Materials under Two Types of Loading," *Journal of the Transportation Research Board*, No. 2186, Soil Mechanics, pp. 90-100.

Coco, M.L., Machtmes, K., & Cavin, G. (2010). Training skilled and unskilled workers in an Immersive Virtual Learning Environment. Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) Orlando, FL, November 2010, Paper #10023.

Dylla, H., Hassan, M., Schmitt, M., Rupnow, T., Mohammad, L., and Wright, E., "Effects of Roadway Contaminants on Titanium Dioxide Photodegradation of Nox." *Journal of the Transportation Research Record*, 2011, In press.

Dylla, H., Hassan, M. M., Mohammad, L., and Rupnow, T., "Evaluation of the Environmental Effectiveness of Titanium Dioxide Photocatalyst Coating for Concrete Pavements." *Journal of the Transportation Research Record*, No. 2164, 2010, pp. 46-51.

Elseifi, M., Mohammad, L., Glover, I., Negulescu, I., Daly, W., and Abadie, C., "Relationship between Molecular Compositions and Rheological Properties of Neat Asphalt Binder at Low and Intermediate Temperatures." *ASCE Journal of Materials in Civil Engineering*, Vol. 22, No. 12, 2010, pp. 1288-1294.

Elseifi, M., Mohammad, L., Dessouky, S., Yang, W., and Ying, H., "A Viscoelastic Model to Describe the Constitutive Behavior of Straight Asphalt Binder at Low Temperatures." *ASCE Engineering Mechanics Special Publication*, 2010, In press.

Gudishala, R. and Wilmot, C. "Development of a Time-Dependent, Audio-Visual, Stated Choice Method of Data Collection for Hurricane Evacuation Behavior", *Journal of Transportation Safety and Security*, 2, 2010. pp. 171-183.

Idewu, W. and B. Wolshon "The Joint Merge and its Impact on Merging Speeds in Construction Zone Lane Reduction Areas," *Transportation Research Record: Journal of Transportation Research Board*, No. 2169, 2010, pp. 31-39.

Hassan, M., Dylla, H., Rupnow, T., Mohammad, L.N., and Wright, E., "Evaluation of the Durability of Titanium Dioxide Photocatalyst Coating for Concrete Pavement." *Journal of Construction and Building Materials*, 2010, pp. 1-9.

Hassan, M., Mohammad, L., and Dylla, H., "Effect of ultrafine/nano titanium dioxide on the performance grade of asphalt binders." *Proceedings of the 2nd International Conference on Construction in Developing Countries*, Cairo, Egypt, August 3-5, 2010, pp. 429-436.

Hassan, M., Mohammad, L., Cooper, S., Dylla, H., "Evaluation of Titanium Dioxide as a Photocatalytic in Asphalt Binder." Journal of the Transportation Research Record, 2011, In press.

Icenogle, Patrick. "Performance of Superpave Projects in Louisiana." TRB Publication.

Ishak, S., H.C. Shin, B. Sridhar, and D. Zhang. "Characterization and Development of Truck Axle Load Spectra for Future Implementation of New Pavement Design Practices in Louisiana", Transportation Research Record, Journal of the Transportation Research Board, No. 2153, 2010. pp. 121-129.

Ishak, S., C. Mamidala, and Y. Qi. "Stochastic Characteristics of Freeway Traffic Speed during Breakdown and Recovery Periods", Transportation Research Record, Journal of the Transportation Research Board, No. 2178, 2010. pp.79-89.

Korkut, M., S. Ishak, and B. Wolshon, "Freeway Truck Lane Restriction and Differential Speed Limits: Crash Analysis and Traffic Characteristics," Transportation Research Record: Journal of Transportation Research Board, No. 2194, 2010, pp. 11-20.

Korkut, M., S. Ishak, and B. Wolshon. "Freeway Truck Lane Restriction and Differential Speed Limits: Crash Analysis and Traffic Characteristics", Transportation Research Record, Journal of the Transportation Research Board, No. 2194, 2010. pp.11-20.

Mohammad, L., N., Elseifi, M., and Cooper, S., "Laboratory Evaluation of Asphalt Mixtures Containing Sustainable Technologies." Journal of the Association of Asphalt Paving Technologist, Vol. 80, 2011, In press.

Mohammad, L.N., Hassan, M., and Patel, N., "Effects of Tack Coat Shear Bond Characteristics on Pavement Performance at the Interface." Journal of the Transportation Research Record, 2011, In press.

Mohammad, L.N., and Nazzal, M., "Performance Evaluation and Environmental Impact Assessment of Asphalt Treated Mixtures Used in Low-Volume Roads." 10th International Conference on Low-Volume Roads. Transportation Research Record, 2011, In press.

Mohammad, L. N., Nazzal, M., and Auston, A., "Evaluation of a New Generation of Asphalt Treated Mixtures." ASCE Special Technical Publication No. 203, Paving Materials and Pavement Analysis, 2010, pp. 240-247.

Mohammad, L., Cooper, S., and Elseifi, M., "Characterization of HMA Mixtures Containing High Reclaimed Asphalt Pavement Content With Crumb Rubber Additives." ASCE Journal of Materials in Civil Engineering, 2010, In press.

Mohammad, L. N., Bae, A., Elseifi, M., Button, J., and Patel, N. "Effects of Pavement Surface Type and Sample Preparation Method on Tack Coat Interface Shear Strength." Journal of the Transportation Research Board, 2010, pp. 93-101.

Mohammad, L.N., Elseifi, M., Patel, N., "The Effect of Tack Coat Material, Application Rate, and Pavement Surface Types on the Interface Shear Strength." Proceeding of the 5th International Conference on Bituminous Mixture and Pavements, Thessaloniki, Greece, June 1-3, 2011, p. 795-804.

Mohammad, L.N., Bae, A., Elseifi, M., and Patel, N., "Factors that Influence the Performance of Interface Shear Strength of Pavement Interlayers." Proceeding of the 24th Australian Road Research Board Conference, Melbourne, Australia, October 12-15, 2010.

Mohammad, L., Elseifi, M., and Cooper, S., "Laboratory Evaluation of Sulfur-Extended Asphalt Mixture," Proceeding of the 2nd International Conference on Construction in Developing Countries, Cairo, Egypt, August 3-5, 2010, pp. 677-684.

Nair, A., and Cai, C.S. (2011). "Damage characterization of glass fiber reinforced plastics by applying pattern recognition techniques to acoustic emission data" The 2011 ASCE-Engineering Mechanics Institute Conference, June 2-4, Boston, MA.

Naghawi, H. and B. Wolshon, "Transit-Based Emergency Evacuation Modeling with Microscopic Simulation," Journal of Transportation Safety and Security, Vol. 2, No. 2, June, 2010. pp. 184 - 201.

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Nazzal, M., Mohammad, L. N., "Estimation of Resilient Modulus of Subgrade Soils for Design of Pavement Structures." ASCE Journal of Materials in Civil Engineering, Vol.22, No.7, 2010, pp. 726-734.

Nazzal, M. and Mohammad, L.N., "Estimation of the Resilient Modulus of Subgrade Soils Using Falling Weight Deflectometer." Journal of the Transportation Research Record, 2010, pp. 1-10.

Nazzal, M., Abu-Farsakh, M., and Mohammad, L.N., "Implementation of a Critical State Two-Surface Model To Evaluate the Response of Geosynthetic Reinforced Pavements." ASCE's International Journal of Geomechanics, Vol. 10, No. 5, 2010, pp. 202-212.

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Okeil, A. M., Cai, C.S. and Hossain, T. (2011) "Monitoring and Assessment of Continuity in a Prestressed Concrete Girder Bridge," Proceedings of the 1st Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2011), Dubai, United Arab Emirates.

Pathak B., Abu-Farsakh M., and Yu X., 2011 "Interpretation of Lateral Load Test of Batter Pile Group using High Order Polynomials Curve Fitting," *ASCE Geotechnical Special Publication No. 211*, Advances in Geotechnical Engineering, Geo-Frontiers 2011, Dallas, TX, pp. 152-161.

Rupnow, T.D., Wang, K., Schaefer, V.R., and Tikalsky, P.J. "A Simple Method for Characterizing and Predicting Temperature Behavior of Ternary Cementitious Systems." *Journal of Construction and Building Materials*, Elsevier, Vol. 25, Issue 5, May 2011, pp. 2290-2297.

Rupnow, T.D., Schaefer, V.R., and White, D.J. "Investigation of the Use of Limestone Screenings in Roadway Construction." *Transportation Research Record 2167*, TRB, National Research Council, Washington, D.C., pp. 53-60

Rupnow, Tyson, Martinez, Mark, and Zhang, Zhongjie. "Implementation of Narrow Contraction Joints in Louisiana: A Cost Benefit Analysis Study." International Conference on Sustainable Concrete Pavements: Practices, Challenges, and Directions. September 15-17, 2010, Sacramento, California.

Saber, A. Alaywan, W., "Full Scale Test of Continuity Diaphragms in Skewed Concrete Bridge Girders," published in the *Journal of Bridge Engineering*.

Schmitt, M, Dylla, H., Hassan, M., Mohammad, L.N., Rupnow T, and. Wright, E. "Impact of Mixed Nitrogen Dioxide (NO₂) and Nitrogen Oxide (NO) Gases on Titanium Dioxide Photodegradation of Nox." Proceeding of the 1st ASCE T&DI Congress: Integrated Transportation & Development for a Better Tomorrow, Chicago, IL, March 13-16, 2011. pp. 731-740.

Xiaoduan Sun, Han Hu, Emad Habib, "Quantifying Crash Risk under Inclement Weather with Radar Rainfall Data and Matched-Pair Method" *Journal of Transportation Research and Security*, Volume 3, No.1, 2011

Tao, M., Mohammad, L., Nazzal, M. Zhang, Z., and Wu, Z., "Application of Shakedown Theory in Characterizing Traditional and Recycled Pavement Base Materials." *Journal of Transportation Engineering*, ASCE, Vol. 136, No. 3, 2010, pp. 214-222.

Titi, H., and Abu-Farsakh M., 2010, "Evaluation of Bearing Capacity of Driven Piles from CPT Data and Development of Design Software," *ASCE Geotechnical Special Publication No. 198*, honoring Clyde N. Baker, *The Art of Foundation Engineering Practice*, pp. 670-686.

Turner, D.A., B. Wolshon, V. Dixit, S. Islam, V. Sisiopiku, M. Anderson, and W. Evans, "Transportation-Oriented Communication with Vulnerable Populations during Major Emergencies," *Transportation Research Record: Journal of Transportation Research Board*, No. 2196, 2010, pp. 159-167.

Walton, F., and B. Wolshon, "Understanding Public Response to Nuclear Power Plant Protective Actions," *Risk, Hazards, and Crisis in Public Policy*, September 2010, Vol. 1, No. 3, pp. 35 - 61.

Wasiuddin, N., Saltibus, N., and Mohammad, L., "A Novel Moisture Conditioning Method for Adhesive Failure of Hot and Warm Mix Asphalt Binders." *Journal of the Transportation Research Record*, 2011, In press.

Wasiuddin, N., Saltibus, N., and. Mohammad, L., "Effects of a Wax-Based Warm Mix Additive on Cohesive Strengths of Asphalt Binders." Proceeding of the 1st ASCE T&DI Congress: Integrated Transportation & Development for a Better Tomorrow, Chicago, IL, March 13-16, 2011. pp. 528-537.

Wolshon B. and B. McArdle, "Traffic Impacts and Dispersal Patterns on Secondary and Low Volume Roadways during Regional Evacuations," ASCE Natural Hazards Review, February 2011, Vol. 12, No. 1, pp. 19 - 27.

Wu, Z. and Chen, X. (2011). "Prediction of Permanent Deformation of Pavement Base and Subgrade Materials under Accelerated Loading." *International Journal of Pavement Research and Technology*, Vol. 4. No.4, pp231-237.

Wu, Z., Gautreau, G and Zhang, Z. "Performance Evaluation of Lime and Cement Treated Soil Layers under Laboratory and Full Scale Accelerated Pavement Testing," *Proceedings of the First T&DI Congress, Chicago, Mar. 13-16, 2011.*

Wu, Z., Mohammad, L., and Zhang, Z. "Accelerated Pavement Testing on Foamed Asphalt Base Materials." *Proceedings of the 11th International Conference on Asphalt Pavements, Nagoya, Japan Aug. 1-6, 2010*

Yu, X. and Abu-Farsakh, M., 2011 "Prediction of Embankment Settlement from PCPT Measurements: a Case Study at Courtableau Bridge," *ASCE Geotechnical Special Publication No. 224: Geotechnical Risk Assessment and Management*, pp. 411-419.

PRESENTATIONS

Abu-Farsakh, M., Yu X., Pathak B., and Zhang, Z., 2011 "Field Testing and Analyses of a Batter Pile Group Foundation under Lateral Loading," presented at 90th TRB annual meeting, Washington, D.C.

Abu-Farsakh, M., Pant R., Gautreau G., Yu X., and Zhang, Z., 2011 "A Case Study on Estimating the Embankment Settlement from Piezocone Penetration Test Data presented at the 90th TRB annual meeting, Washington, D.C.

Abu-Farsakh, M., Souci G., Voyiadjis G., and Chen Q., 2011 "Evaluation of Factors Affecting the Performance of Geogrid-Reinforced Granular Base Material Using Repeated Load Triaxial Tests," presented at the 90th TRB annual meeting, Washington, D.C.

Abu-Farsakh, M., and Tsi C., 2011 "Instrumentations, Pile Group Load Testing, and Data Analysis," presented at the LA Transportation Conference, Baton Rouge, LA.

Cavin, G., Coco, M.L., Training skilled and unskilled workers in an Immersive Virtual Learning Environment. Transportation Resources Board (TRB) 90th Annual Meeting, Washington, DC, January 2011.

Chen Q., and Abu-Farsakh M., 2011 "Numerical Analysis to Study the Scale Effect of Shallow Foundation on Reinforced Soils," presented at the Geo-Frontiers 2011 conference, Dallas, TX.

Chen Q., and Abu-Farsakh M., 2011. "Field performance of a new approach slab system." presented at the GeoRisk 2011 conference, Atlanta, GA.

Cheng, G. and C.G.Wilmot, "Dynamic Gravity Model for Hurricane Evacuation Planning." 90th Annual Meeting of the Transportation Research Board, Washington D.C., January, 2011.

Cooper, S., Elseifi, M., and Mohammad, L.N., "MEPDG Sensitivity Analysis of Louisiana Hot-Mix Asphalt Mixtures Utilizing a Statistically Based Factorial Design." Presented at the Transportation Research Board 90th Annual Meeting, Washington, D.C., January 23-27, 2011.

Cooper, S., Elseifi, M., Mohammad, L.N., and Hassan, M., "Performance and Cost-Effectiveness of Sustainable Technologies in Flexible Pavements Using Mechanistic-Empirical Design Guide." Presented at the Transportation Research Board 90th Annual Meeting, Washington, D.C., January 23-27, 2011.

Dixit, V., "Regional-Scale Multimodal Evacuation Planning and Analysis" Fifth Annual DHS University Summit, Washington, D.C., March 2011.

Dixit, V., "Validation Techniques for Region-Level Microscopic Mass Evacuation Traffic Simulations," Session 432, 90th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2011.

Dylla, H., Hassan, M., Schmitt, M., Rupnow, T., Mohammad, L., Wright, E., "Effects of Roadway Contaminants on Titanium Dioxide Photodegradation of NOx." Presented at the Transportation Research Board 90th Annual Meeting, Washington, D.C., January 23-27, 2011.

Elseifi, M., Mohammad, L., Cooper, S., "Laboratory Evaluation of Asphalt Mixtures Containing Sustainable Technologies." Presented at the 2011 AAPT Annual Meeting, Tampa, Florida, March 27-30, 2011.

Kevin Gaspard, TRB Jan 2011, "Ascertaining Parametric Correlations between Lock Wheel Friction Testing and Fixed Slip Friction Testing Devices on Louisiana Highways"

Kevin Gaspard, Workshop, Training, and Presentation(s): day workshop; 1) DCP data analysis program training, 2) DCP data analysis, Statewide on 3 separate dates (all districts trained), Alexandria: Dec 2010; Baton Rouge: May 8, 2011; Lafayette: May 18, 2011

Hassan, M., Mohammad, L., Cooper, S., Dylla, H., "Evaluation of Nano Titanium Dioxide Additive on Asphalt Binder Aging Properties." Presented at the Transportation Research Board 90th Annual Meeting, Washington, D.C., January 23-27, 2011.

Icenogle, Patrick. "Performance of Superpave Projects in Louisiana." Presented at the Transportation Research Board Annual Meeting, Washington, D.C. January 25, 2011.

Icenogle, Patrick. "Project Level Pavement Management." Presented to LADOTD Pavement Management User Group, April 19, 2011.

Icenogle, Patrick. "Evaluation of Surface Resistivity Measurements as an Alternative to Rapid Chloride Permeability Test for Quality Assurance." Presented at the District Laboratory Engineers Meeting, June 7, 2011.

Icenogle, Patrick. "Surface Resistivity Training." Presented to LADOTD Engineering Technicians, June 28, 2011.

Icenogle, Patrick. "Surface Resistivity Training." Presented to LADOTD Engineering Technicians, June 29, 2011.

Idewu, W., "Effect of Vehicle Lane Position on Approaches to Construction Zone Lane-Drop Joint Merges," Session 470, 9th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2011.

Machtmes, K., Coco, M.L., & Cavin, G. (2010). Evaluation of knowledge transfer in an immersive virtual learning environment. Presentation made at the Annual Conference for Teaching and Learning at a Distance, Madison, Wisconsin, August 2010.

Mohammad, L., "Application of Laboratory Performance Tests in the Design of Asphaltic Concrete Mixture." Presented at the Main Road Division of the Abu Dhabi Department of Transport, Abu Dhabi, United Arab Emirates, June 14, 2011. (Keynote speaker)

Mohammad, L., "Asphalt Research Program Louisiana Transportation Research Center." Presented at the Changsha University of Science and Technology, Changsha, China, June 8, 2011.

Mohammad, L., "Mechanistic Analysis of Asphalt Mixtures Containing Sustainable Technologies." Presented at the International Symposium on Pavement and Geotechnical Engineering for Transportation Infrastructure, Nanchang, Jiangxi, China, June 5-7, 2011. (Keynote speaker)

Mohammad, L., "Use of Waste Tires in Asphalt Mixtures: The Sustainable Choice." Presented at the 2011 Institute of Scrap Recycling Industries Convention and Exposition, Los Angeles, California, April 8, 2011.

Mohammad, L., "NCHRP 9-40 Optimization of Tack Coat Materials." Presented at the 38th Annual Asphalt Emulsion Manufacturers Association Meeting, Tucson, Arizona, February 25, 2011.

Mohammad, L., "Applications of Laboratory Performance Tests in the Design of Asphaltic Concrete Mixture." Presented at the 2011 Louisiana Transportation Conference, Baton Rouge, Louisiana, January 9, 2011.

Mohammad, L., "Establishing a Sustainable Materials Research Program for Pavement Engineering." Presented at the Revitalizing Research in Kurdistan International Conference, Erbil, Iraq, December 14-16, 2010.

Mohammad, L., and Cooper, S., "Laboratory Mechanistic Evaluation of HMA Mixtures Containing High RAP Content with Crumb Rubber Additives." Presented at the 2010 SEAUPG Annual Meeting, Oklahoma City, Oklahoma, December 6-8, 2010.

Mohammad, L., "NCHRP Project 9-40: Optimization of Tack Coat Materials." Presented at the 2010 SEAUPG Annual Meeting, Oklahoma City, Oklahoma, December 6-8, 2010.

Mohammad, L.N., "Results of NCHRP 9-40: Tacking Your Way to Performance." Presented at the 54th Annual Kansas Asphalt Paving Conference, Lawrence, Kansas, December 2, 2010.

Mohammad, L.N., "Mechanistic Characterization of Sustainable materials for Pavement Infrastructure." Presented at the 23rd Rhode Island Transportation Forum, Kingston, Rhode Island, October 29, 2010. (Keynote Speaker)

Mohammad, L., "Superpave: Research to Implementation." Presented at the Superpave Seminar for Lafayette Consolidated Government, Baton Rouge, Louisiana, October 20, 2010.

Mohammad, L.N., "Application of Mechanistic Tests for Performance of HMA Mixtures." Presented at the Jordanian Ministry of Public Work, Amman, Jordan, August 18, 2010.

Mohammad, L., Elseifi, M., Patel, N., "Field Evaluation of Tack Coat Materials and Application Rates." Presented at the 5th International Conference "Bituminous Mixtures and Pavements," Thessaloniki, Greece, June 1-3, 2011.

Mohammad, L., Hassan, M., "Effects of Tack Coat Shear Bond Characteristics on Pavement Performance at the Interface." Presented at the Transportation Research Board 90th Annual Meeting, Washington, D.C., January 23-27, 2011.

Wasiuddin, N., Saltibus, N., and Mohammad, L., "A Novel Moisture Conditioning Method for Adhesive Failure of Hot and Warm Mix Asphalt Binders." Presented at the Transportation Research Board 90th Annual Meeting, Washington, D.C., January 23-27, 2011.

Mohammad, L.N., Bae, A., Elseifi, M., and Patel, N., "Factors that Influence the Performance of Interface Shear Strength of Pavement Interlayers." Presented at the 24th Australian Road Research Board Conference, Melbourne, Australia, October 12-15, 2010.

Mohammad, L.N., Elseifi, M, and Cooper, S., "Laboratory Evaluation of Sulfur-Extended Warm-Mix Asphalt." Presented at the 2nd International Conference on Construction in Developing Countries, Cairo, Egypt, August 3-5, 2010.

Montz, T., "Integration of Household Decision Making with Dynamic Transportation Modeling to Evaluate Hurricane Evacuation," Fifth Annual DHS University Summit, Washington, D.C., March 2011.

Dr. Ayman Okeil (invited speaker): "Innovative Use of Composites and Structural Health Monitoring to Solve Bridge Problems: Recent Research Efforts at LSU," (Jun. 24, 2011) Invited Presentation, Swiss Federal Structures Laboratories, Zurich, Switzerland.

Dr. Ayman Okeil (invited speaker): “Performance of Continuous Prestressed Girder Bridges: A Structural Health Monitoring Approach,” (Jun. 9, 2011) Invited Presentation, ASCE SEI New Orleans Chapter, New Orleans, LA. (with Hossain, T. and Cai, C.S. .)

“Monitoring and Assessment of Continuity in a Prestressed Concrete Girder Bridge,” (Feb. 9, 2011) First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2011), Dubai, United Arab Emirates. (Presenter: Dr. Ayman Okeil)

“Performance of the Continuity Details for Prestressed Girders in John James Audubon Bridge,” (Jan. 12, 2011) Louisiana Transportation Conference: *Transportation: A Key to a Sustainable Future*, Baton Rouge, LA (Ayman Okeil, Steve Cai, C.S. and Hossain, T.)

Dr. Ayman Okeil (invited speaker): “Performance of Positive Moment Continuity Detail in PC Girder Bridges: A Case Study,” (Nov. 29, 2010) AASHTO Concrete Bridge Committee (T-10), San Antonio, TX.

Pathak B., Abu-Farsakh M., and Yu X., 2011 “Interpretation of Lateral Load Test of Batter Pile Group using High Order Polynomials Curve Fitting,” presented at the Geo-Frontiers 2011 conference, Dallas, TX.

Qi, Y. and S. Ishak. Stochastic Characteristics of Freeway Traffic Speed and Application to Short-Term Speed Prediction, 90th Annual Meeting of TRB, National Research Council, Washington D.C., January, 2011

Qi, Y. and S. Ishak. Application of Hidden Markov Models to Short-Term Speed Prediction during Peak Periods, 90th Annual Meeting of TRB, National Research Council, Washington D.C., January, 2011

Rupnow, Tyson. “A Practical PCC Overlay Design and Construction Example Using the Louisiana Interstate Highway System.” Presented at the Overlay Lunch and Learn, Baton Rouge, LA, December 16, 2010.

Rupnow, Tyson. “Achieving Quality Concrete Pavements – Part 2: Module1: State-of-the-Practice Techniques for Ensuring Quality Materials on the Job.” Presented for the American Concrete Paving Association Meganar #6, November 18, 2010.

Rupnow, Tyson. “Aggregate Gradation Workshop.” Presented at the Aggregate Gradation Workshop, Baton Rouge, LA, July 14, 2010.

Rupnow, Tyson. “Cement Task Force Update.” Presented at the Fall Meeting of the TTCC/NCC. Sacramento, CA, September 14, 2010.

Rupnow, Tyson. “Concrete 101: Concrete Placement and Finishing.” Lafayette, LA, July 18, 2010.

Rupnow, Tyson. “Concrete 101: Concrete Placement and Finishing.” Lafayette, LA, October 21, 2010.

Rupnow, Tyson. “Concrete 101: Concrete Placement and Finishing.” Lake Charles, LA, October 20, 2010.

Rupnow, Tyson. “Concrete 101: Concrete Placement and Finishing.” Monroe, LA, September 22, 2010.

Rupnow, Tyson. "Concrete 101: Concrete Placement and Finishing." New Orleans, LA, November 10, 2010.

Rupnow, Tyson. "Concrete 101: Concrete Placement and Finishing." Shreveport, LA, September 21, 2010.

Rupnow, Tyson. "Concrete 101: Good Practice for Site Preparations for Concrete Placement." Houma, LA, December 15, 2010.

Rupnow, Tyson. "Concrete 101: Good Practice for Site Preparations for Concrete Placement." Lafayette, LA, October 21, 2010.

Rupnow, Tyson. "Concrete 101: Good Practice for Site Preparations for Concrete Placement." Monroe, LA, September 22, 2010.

Rupnow, Tyson. "Concrete 101: Good Practice for Site Preparations for Concrete Placement." New Orleans, LA, November 10, 2010.

Rupnow, Tyson. "Concrete 101: Good Practice for Site Preparations for Concrete Placement." Shreveport, LA, September 21, 2010.

Rupnow, Tyson. "Concrete 101: Mix Design for Strength and Durability." Houma, LA, December 15, 2010.

Rupnow, Tyson. "Concrete 101: Mix Design for Strength and Durability." Lafayette, LA, July 18, 2010.

Rupnow, Tyson. "Concrete 101: Mix Design for Strength and Durability." Lafayette, LA, October 21, 2010.

Rupnow, Tyson. "Concrete 101: Mix Design for Strength and Durability." Lake Charles, LA, October 20, 2010.

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Rupnow, Tyson. "Concrete 101: Principals of Hot and Cold Weather Concrete." Houma, LA, December 15, 2010.

Rupnow, Tyson. "Concrete 101: Principals of Hot and Cold Weather Concrete." Lafayette, LA, October 21, 2010.

Rupnow, Tyson. "Concrete 101: Principals of Hot and Cold Weather Concrete." Lake Charles, LA, October 20, 2010.

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Rupnow, Tyson. "Concrete 101: Principals of Hot and Cold Weather Concrete." New Orleans, LA, November 10, 2010.

Rupnow, Tyson. "Concrete 101: Principals of Hot and Cold Weather Concrete." Shreveport, LA, September 21, 2010.

Rupnow, Tyson. "Evaluation of Cement and Fly Ash Treated Recycled Asphalt Pavement and Other Aggregates for Base Construction." Final Report Presented to the Project Review Committee. Baton Rouge, LA, June 27, 2011.

Rupnow, Tyson. "Evaluation of Ternary Cementitious Combinations." Final Report Presented to the Project Review Committee. Baton Rouge, LA, June 27, 2011.

Rupnow, Tyson. "Hot Weather Concrete." Presented at the ACI Luncheon. New Orleans, LA, June 23, 2011.

Rupnow, Tyson. "Introduction to Concrete Overlays." Presented at the CAAL Lunch and Learn, October 26, 2010, Covington, LA.

Rupnow, Tyson. "Introduction to Concrete Overlays." Presented at the Construction Specifications Institute 2010 Winter Seminar, December 10, 2010, Baton Rouge, LA.

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