

Education

- Ph.D.** Civil Engineering- Pavements and Materials Engineering (August 2009)
Texas A&M University, College Station, Texas
Dissertation: "Cross-Anisotropic Characterization and Performance Prediction of Hydraulically and Chemically Bounded Granular Materials to be used in Pavement Foundations"
- M.S.** Transportation Engineering (2001)
Tarbiat Modares University, Tehran, Iran
Thesis: "Verification of the Rejuvenating Agents used in Hot in-Place Recycling of Bituminous Mixes"
- B.S.** Civil Engineering (1998)
Azad University of Tehran, Iran

Professional Experience

- Assistant Professor, Civil Engineering Department, University of Texas at El Paso (UTEP), November 2012-present, El Paso, Texas
- Senior Research Engineer, December 2011- October 2012, Aircraft Operating Surfaces, Engineering Science Division, Applied Research Associates Inc., Panama City, Florida
- Senior Research Engineer, November 2009- December 2011, Aircraft Operating Surfaces, Engineering Science Division, Applied Research Associates Inc., Atlanta, Georgia
- Assistant Transportation Researcher, August 2009 – November 2009, Texas Transportation Institute, Texas A&M University, College Station, Texas
- Graduate Research Assistant, January 2004 – August 2009, Texas Transportation Institute, Texas A&M University, College Station, Texas
- Transportation and Traffic Engineer, 1998-2003, Shabdar Engineering Consultants, Tehran, Iran.
- Assistant Site Engineer for Highway Construction, Widening and Geometric Design of the Karaj Express Way, 1994-1998 Dismar Saz Co., Tehran, Iran.

Research Experience

- "Development of Anisotropic Pavement Performance Prediction Models Calibrated for Military Runways". White paper submitted to The Air Force Research Laboratory (AFRL), Panama City, FL May 2011.
- "Pelletized Asphalt Technology for High-Performance Pavement Repair Materials". Proposal Submitted to Mississippi Department of Transportation (MDOT), May 2011.
- "Application of Alkali-Activated Geopolymers for Heat Resistant Military Airfield Pavements" Proposal Submitted to The Air Force Research Laboratory (AFRL). In Response to BAA1002TYN-LGCB-ASRD, September 2010 Panama City FL.
- AFRL (Air Force Research Laboratory), "Performance Evaluation of Precast Slabs for Contingency Rigid Airfield Pavement Damage Repair" Air Force Research Laboratory, Tyndall Air Force Base, Panama City FL, 2010.
- AFRL (Air Force Research Laboratory), "Research Plan and Experiment Design for Evaluation of the Efficiency of Accelerated damage Repair (ADR) kit for Sustainment Repair

- of Airfield Runways” Air Force Research Laboratory, Tyndall Air Force Base, Panama City FL, 2010.
- ICAR-508A: “Methodology for Designing Aggregate Mixtures for Base Courses” International Center for Aggregate Research, Austin TX, 2009
- ICAR 508/B: TTI-PAVE User’s Design Manual, International Center for Aggregate Research, Austin TX, 2009
- Inverted Pavement Design for LuckStone Ltd. Richmond, VA, September 2008.
- ICAR 506: “Phase One Acceptability Criteria for High Fines Content Unbound Aggregates Pavement Layers”, International Center for Aggregate Research, Austin TX, 2007
- Determination of Anisotropic Material Parameters to be Used in Mechanistic Design of Highway SH-130, Round Rock, Austin, Texas, 2007

Technical Presentations

- “Mechanistic Performance Characterization of Pavements Incorporating Recycled materials”, Presented in GeoCongress-2012 Symposium, Oakland CA, March 26th, 2012.
- “Performance Characterization of Precast Concrete Panels for Rapid Repair Military Runways”, Transportation Systems Workshop, Austin, Texas March 8th, 2012.
- “Mechanistic Characterization and Performance Evaluation of Recycled Aggregate Systems”, 91st Annual Meeting of Transportation Research Board (TRB), January 2012, Washington D.C.
- “Use of Recycled Aggregate Systems as Unbound Aggregate Base layers”, Presentation in American Society of Civil Engineering (ASCE) Annual Meeting in St. Augustine FL, July 15th, 2011.
- “Field Evaluation of Rigid Pavement Repairs using Precast Concrete Panels”, Presentation in American Society of Civil Engineering (ASCE) Annual Meeting in St. Augustine FL, July 15th, 2011.
- “Anisotropic Characterization of Pavement Foundations” Presentation in 2011 Engineering Mechanics Institute EMI-2011 conference, Boston, MA. June 3rd 2011.
- “Inverted Pavement Demonstration/Workshop”, Technical Seminar and Technology Transfer Workshop on Inverted Pavements. Manassas VA. May 25th, 2011.
- “Performance Related Aggregate Testing protocol for Sustainable Design of Recycled Pavements”, International Symposium on Testing and Specification of Recycled Materials for Sustainable Geotechnical Construction, Baltimore MD, February 2nd 2011.
- “Pre-cast Concrete panels for Contingency Repair of Airfield Runways”, Presented at 90th Annual Meeting of Transportation Research Board, January 25th 2011, Washington D.C.
- “Performance Evaluation of Pre-cast Slabs for Contingency Rigid Airfield Pavement Damage Repair”, Presented at Pavement Evaluation Conference, Roanoke, VA October 26th 2010.
- “Application of FWD in Performance Characterization of Pre-Cast Panels used in Rapid Repair of Severely Damaged Airfield Runways” Presented at 19th Annual FWD (Falling Weight Deflectometer) Users Group Meeting, Gainesville, FL September 20th 2010.
- “Review and Update on Current ICAR Design Project”, ICAR Technical Advisory Committee and FHWA (Federal Highway Administration) Technical Work Group, Alexandria Virginia, June 30th, 2010.
- “Evaluation of the Impact of Lime on Pavement Performance using Dynamic Mechanical Analysis” National Lime Association (NLA) meeting, University of Nevada at Reno, October 6th 2009, Reno Nevada.
- “New Design Methodology for Pavement Foundations”, 17th Annual ICAR (International Center for Aggregate Research) Symposium, May 2009, Austin, Texas.
- “VDOT & Luck Stone By-Pass Project: Use of Inverted Base Techniques”, 2nd National Aggregate Base Conference, March 2009, Orlando, Florida.
- “Material Factors That Influence Anisotropic Behavior of Aggregate Bases”, 87th Annual Meeting of Transportation Research Board, January 2008, Washington D.C.
- “Anisotropic Modeling of Unbound Aggregate Bases”, Invited Speaker, Aggregate Base Symposium Kansas-Missouri, Kansas, May 2007.

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- “Optimizing the Performance of Base Layers with High Fines Content”, presented at 15th annual ICAR Symposium, April 2007, Austin, Texas.
- “Evaluation of Impact of Fines on the Performance of Lightly Cement Stabilized Aggregate Systems”, Presented at 86th Annual Meeting of Transportation Research Board, January 2007 Washington D.C.
- “Characterization of the Bitumen Additives in Recycled Asphalt”, First National Symposium on Polymer Modified Binders, Dec 17th 2002, Iran Polymer Institute. Tehran, Iran.

Refereed Publications

- “Mechanistic Performance Characterization of Pavements Incorporating Recycled materials”, Proceeding of the GeoCongress-2012 Symposium, Oakland CA, March 2012.
- Saeed A., Ashtiani R., Boudreau R., “Performance Related Aggregate Testing Protocol for Sustainable Design of Recycled Pavements”, Journal of ASTM International (JAI), Vol. 8, No. 7. July 2011.
- Ashtiani R., A. Saeed and M. Hammons, “Mechanistic Characterization and Performance Evaluation of Recycled Aggregate Systems”. Submitted to ASCE Journal of Geomechanics, December 2011.
- Salehi Ashtiani R., A. Saeed and M. Hammons, “Pre-cast Concrete panels for Contingency Repair of Airfield Runways”, Submitted to International Journal of Pavement Engineering, October 2011 (Under Review).
- Salehi Ashtiani R., D. N. Little and E. Masad, “A Neural Network based Model for Estimation of the Anisotropic Parameters in Unbound Aggregate Systems”, Submitted to International Journal of Pavement Engineering (Under Review), 2011.
- Salehi Ashtiani R., R. Lou and R.L. Lytton, “Performance Prediction and Moisture Susceptibility of Anisotropic Foundations”; ASCE (American Society of Civil Engineers) Paving materials and Pavement Analysis, Geotechnical Special Publication (GSP203), Proceedings of 2010 Geo-Shanghai International Conference, August 2010, pp.327-334.
- Salehi R., D. N. Little and E. Masad. Material Factors That Influence Anisotropic Behavior of Aggregate Bases, in Transportation Research Record (TRR) : Journal of Transportation Research Board, No. 2059 , Transportation Research Board of National Academics, Washington D.C. , 2008, pp.20-30
- Salehi R., D. N. Little and E. Masad. Anisotropy Level Prediction Model for Unbound Aggregate Systems. Published in the Proceedings of the First International Conference on Transportation Geotechnics, UNBAR7, Nottingham, UK, August 2008.
- Salehi Ashtiani R., D. N. Little and E. Masad. Evaluation of Impact of Fines on the Performance of Lightly Cement Stabilized Aggregate Systems. in Transportation Research Record (TRR) : Journal of Transportation Research Board, No. 2026 , Transportation Research Board of National Academics, Washington D.C. ,2007, pp.81-88
- D. Little, Salehi R. and E. Masad, “Characterization of Anisotropic Base Materials with High Fines Content”. Proceedings of the International Conference on Advanced Characterization of Pavement and Soil Engineering Materials, Athens, Greece, June 20-27. 2007.
- Salehi Ashtiani R. and Kavusi A., “Impact Study on the Use of the Heavy Vacuum Slops as Bitumen Rejuvenator for Recycled Asphalts” Esteghlal Highway Research Journal, May 2003 Isfahan, Iran.

Professional Licensing

- Engineer-In-Training, US-Texas Certification (EIT/FE Certified by the Texas Board of Professional Engineers), Texas, 2008

Reza Salehi Ashtiani

- Civil Engineering Practice License, Certificate Acquired from the Ministry of Housing and Urban Development, Tehran, Iran, September 2000

Awards

SIAWE Distinguished Academic Achievement Award, Houston Texas, March 2006

Affiliations

- American Society of Civil Engineers (ASCE) Geo Institute Pavements Committee
- Transportation Research Board (TRB), Numerical Techniques in Pavements Committee
- Transportation research Board (TRB), Mineral Aggregates Committee
- Transportation and Development (ASCE-TD&I)

Professional Service

Reviewer of:

- Transportation research Board (TRB), Mineral Aggregates Committee.
- Geo-Congress Symposium 2012.
- International Journal of Pavement Engineering
- ASCE Journal of Construction Materials
- Eighth International Conference on Bearing Capacity of Roads, Railways and Airfields, Illinois, May 2009.
- Lytton's Symposium, Louisiana 2005