

The University of Kansas

Lawrence, KS 66045

Jie Han, Ph.D., PE, F.ASCE

Professor

Department of Civil, Environmental, Architectural Engineering
Learned Hall, 1530 West 15th Street

Tel: (785) 864-3714

Fax: (785) 864-5631

E-mail: jiehan@ku.edu

EDUCATION

Ph.D., Civil Engineering, the Georgia Institute of Technology, 1997

MS, Civil Engineering, the Georgia Institute of Technology, 1995

Certificate, Composites Engineering, the Georgia Institute of Technology, 1995

MS, Geotechnical Engineering, Tongji University, P.R. China, 1989

BS, Geotechnical Engineering, Tongji University, P.R. China, 1986

PROFESSIONAL REGISTRATION

Licensed P.E. in Civil Engineering in Georgia since 1998 (License No. 024539)

TEACHING EXPERIENCE

Professor, Department of Civil, Environmental, and Architectural Engineering, THE UNIVERSITY OF KANSAS, August 2010 – present; Associate Professor, August 2004 – August 2010 (tenured in August 2008)

Courses Taught

- Materials for Transportation Facilities (undergraduate course, Spring 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014)
- Foundation Engineering (undergraduate course, Spring 2005)
- Geotechnical Engineering Testing (graduate course, Fall 2004, Spring 2007, Fall 2008, Fall 2010, Fall 2012, Spring 2015)
- Designing with Geosynthetics (graduate course, Spring 2005, Fall 2009, Spring 2012, Spring 2014)
- Ground Improvement (graduate course, Fall 2005, Spring 2008, Spring 2011, Fall 2014)
- Advanced Foundation Engineering (graduate course, Spring 2006, Fall 2007, Spring 2010, Spring 2013, Spring 2015)
- Principles of Pavement Design (graduate course, Fall 2006, Spring 2009, Fall 2011, Fall 2013)

Advising

- 17 Ph.D. students (2004 – present), 7 graduated
- 17 MS students (2005 – present), 13 graduated
- 22 visiting professors/scholars and 11 visiting Ph.D. students (2004 – present)
- More than 200 undergraduate students (2004 – present)

Graduate advisory committee

- 8 Ph.D. students (2004 – present)
- 8 MS students (2004 – present)

Assistant Professor, Department of Civil Engineering, WIDENER UNIVERSITY, August 2001 – August 2004 (promoted to Associate Professor)

Courses Taught

- Soil Mechanics (undergraduate course, Fall 2001, Spring & Fall 2002, Spring 2003, Fall 2003; Spring 2004)
- Foundation Engineering (undergraduate course, Spring 2002, Spring 2003, Spring 2004, Summer 2004)
- Geosynthetics (graduate course, Summer 2002)
- Performance Evaluation of Constructed Facilities (graduate course, Fall 2002)
- Material Engineering (undergraduate course, Summer 2003)
- Senior Project (Fall 2002, Spring 2003, Fall 2003, Spring 2004)
- Railway Systems Design for Operations, Short Course (May 21-23, 2003)
- Sophomore Undergraduate Research (Fall 2002)
- Junior Undergraduate Research (Fall 2002, Fall 2003, Spring 2004)

Advising

- 15 Undergraduate students (2001- 2004)
- 2 MS graduate student (2002 – 2004)

Instructor, GEORGIA INSTITUTE OF TECHNOLOGY, USA, 1994 - 1997

Courses Taught

- Soil Lab Testing (graduate course, Winter 1997)
- Construction Materials (undergraduate course, Fall and Winter 1994; Spring and Summer 1995)

Lecturer, TONGJI UNIVERSITY, CHINA, 1989 - 1993

Courses Taught

- Soil Improvement (undergraduate course, Fall 1989, Spring 1991)
- In-Situ Testing (undergraduate course, Summer 1993)
- Underpinning (undergraduate course, Spring 1992, Spring 1993)
- Geology Field Trip (undergraduate course, Summer 1990)

Advising

- 2 MS graduate students (1989-1993)
- 50 undergraduate students (1989-1991)

WORK / RESEARCH EXPERIENCE

Professor, Department of Civil, Environmental, and Architectural Engineering, THE UNIVERSITY OF KANSAS, August 2010 – present; Associate Professor, August 2004 – August 2010

Research Topics

- Composite behavior of geosynthetic-reinforced soil systems
- Reduction of soil moisture by wicking fabric
- Calibration of Mechanistic-empirical Design Guide
- Load rating of bridge culverts
- Behavior of steel-reinforced HDPE plastic pipes
- Capacity of bridge pile foundations under scour conditions
- Behavior of geocell-reinforced bases

- Laterally loaded drilled shafts in MSE walls
- Properties of recycled asphalt pavements
- Micromechanical analyses of geotechnical problems
- LRFD analysis for drilled shafts based on O-cell tests
- Reinforcement-drainage geosynthetics in embankment/wall construction with marginal backfill
- Geosynthetic-reinforced pile-supported embankments
- Numerical and limit equilibrium methods for reinforced earth structures
- Tolerable strains of asphalt overlays
- Moisture sensitivity of HMA (Superpave) mixtures
- Geomechanical model for recovery of coalbed methane

Affiliated Faculty, Center for Global and International Studies, THE UNIVERSITY OF KANSAS, August 2009 - present

Courtesy Faculty, Environmental Studies, THE UNIVERSITY OF KANSAS, August 2005 - present

Professor, Center for East Asian Studies, THE UNIVERSITY OF KANSAS, August 2010 – present;
Associate Professor, October 2004 – August 2010

Assistant Professor, Department of Civil Engineering, WIDENER UNIVERSITY, August 2001 – August 2004 (promoted to Associate Professor)

Research Topics

- Geosynthetic-reinforced pile-supported embankments
- Analysis and design of multi-tier mechanically stabilized earth wall systems
- Geosynthetically reinforced embankments on deep mixed columns
- Design of geosynthetic reinforced earth walls in limited space
- Tensile stiffness effects on performance geosynthetic-reinforced slopes
- Consolidation characteristics of soil-cement column foundations
- Load transfer mechanisms in underpinned foundations using micropiles
- Design of geosynthetic-reinforced unpaved roads
- Influence of curing conditions on soil-cement strength
- Permeability of floor concrete
- Development of a geotechnical testing box

Visiting Associate Professor, Lowland Institute, SAGA UNIVERSITY, JAPAN, August 2002 – September 2002

Research Topics

- Embankments over deep mixed columns
- Influence of deep mixing on properties of surrounding soil

Design Engineer, Senior Engineer, Manager of Research & Technology Development, TENSAR EARTH TECHNOLOGIES, INC., April 1997 – August 2001

Responsibilities

- Management of research and technology development projects
- Development of design methodologies and software for geosynthetics related applications: reinforced foundations, geosynthetic reinforced/piled embankments, subgrade improvement and base reinforcement, surficial slope stability, and service state design methods of MSE walls
- Principal contact to governmental agencies (NSF, FHWA, State DOTs, etc.), professional

organizations (ASCE, NCMA, NAGS, etc.), and university professors for research collaborations and technical support

- Technical support or training for design engineers, salespersons, and clients
- Technical presentations to graduate and undergraduate students at universities, engineers at governmental agencies including State DOTs, and consulting firms

Research Assistant, GEORGIA INSTITUTE OF TECHNOLOGY, September 1993 - March 1997

Research Topics

- A study of fiber reinforced polymeric piles and pile-sand interactions (NSF CMS 9457549)
- The influence of geomembrane surface roughness on interface strength
- Optimum design of Stone Matrix Asphalt Mixes (GDOT Research project No. 9217)
- Membrane penetration in triaxial tests

Lecturer, TONGJI UNIVERSITY, P. R. OF CHINA, March 1989 - September 1993

Research Topics

- Soil-structure interactions of underpinned foundations using micropiles
- Selection of soil improvement techniques in Shanghai
- Experimental and theoretical studies of composite grounds
- Soil improvement for soft clays using stone columns and deep soil mixing columns
- Quality control in the construction using the dynamic compaction method
- A feasibility study of subgrade improvement for an airfield
- Controlling of displacements induced by pile driving in the construction of a 38-story building
- The Shanghai soil improvement design and construction code
- Prevention grouting for protecting existing buildings during the excavation and sheetpiles pulled out
- Properties of cement-treated soils

RESEARCH INTERESTS

- Geosynthetic reinforced earth structures (walls, slopes, embankments, foundations, pavements, etc.)
- Ground improvement (stone columns, deep mixed columns, micropiles, etc.)
- Buried structures
- Soil-structure interactions
- Pile foundations
- Geomechanics
- Geomaterials
- Roadway Engineering
- Asphalt technology and pavement design
- Numerical analysis
- Load Resistance Factor Design (LRFD) in geotechnical engineering

TEACHING INTERESTS

- Basic and advanced soil mechanics
- Shallow and deep foundations
- Materials for transportation facilities
- Geosynthetics
- Ground improvement
- Earth retaining structures and slope stability
- In-situ testing and instrumentation

- Pavement design

HONORS / AWARDS

- Co-author, the Fumio Tatsuoka Best Paper Award, Transportation Infrastructure Geotechnology, Springer, 2014
- 2014 Associate Editor of the Year Award, ASCE Journal of Geotechnical and Geoenvironmental Engineering
- International Geosynthetic Society (IGS) Award, September 24, 2014
- Elected to ASCE Fellow, September 11, 2014
- Best Paper Award, GeoShanghai International Conference 2014, May 27, 2014
- Lecturer of the Seventh Sun Jun Lecture, China, October 25, 2012
- Miller Scholar Award, FY2011-2012, School of Engineering, the University of Kansas
- Recipient, 2011 Shamsheer Prakash Annual Prize for Excellence in the Practice of Geotechnical Engineering
- Miller Scholar Award, FY2010-2011, School of Engineering, the University of Kansas
- Recognition Award for Establishing GeoShanghai International Conference, 2010 GeoShanghai Organizing Committee, June 3, 2010
- Bellows Scholar Award, FY2008-2009, School of Engineering, the University of Kansas
- Guest Professor, Wenzhou University, China, 2009 - 2012
- Campus Life Enrichment Committee (CLEC) Lecture “Geosynthetic Reinforcement and Recent Developments”, invited, Georgia Southern University, Statesboro, GA, Nov. 21, 2008
- Miller Scholar Award, FY2007-2008, School of Engineering, the University of Kansas
- Best Paper Award, Soil Mechanics Section, Transportation Research Board, 2008
- Guest Professor, Huazhong University of Science and Technology, China, 2008 - 2011
- 2007 Miller Professional Development Award for Distinguished Service to the Engineering Profession, the University of Kansas
- Graduate Recruiting Award, Department of Civil, Environmental, and Architectural Engineering, the University of Kansas, 2007
- Big 12 Faculty Fellowship, the University of Kansas, 2007
- Bellows Scholar Award, FY2005-2006, School of Engineering, the University of Kansas
- Recognition Honor for Outstanding Contributions to the Organization of GeoShanghai International Conference 2006, Department of Geotechnical Engineering, Tongji University, China, June 2006
- Guest Professor, Southeast University, China, 2006 - 2009
- Hua Ying Fellow, Southeast University, China, 2005
- Widener Provost’s Faculty Development Option Award, awarded on March 3, 2003
- The Japan Society for the Promotion of Science (JSPS) Short-Term Invitation Fellowship for Research in Japan, awarded by the Japan Society for the Promotion of Science and recommended by U.S. National Science Foundation, 2002.
- Invited Top Name Speaker, “Geosynthetic-Reinforced and Pile Supported Embankments”, ASCE/Pa
- DOT Geotechnical Seminar, Hershey, PA, April 14-16, 1999
- “Whatever It Takes” - Software Development Award, Tensar Earth Technologies, Inc., 1998
- Distinguished Future Leader in Geosynthetics, presented by the North American Geosynthetic Society and the Industrial Fabrics Association International, 1997.
- Finalist Paper for the General Award Competition at the Conference of Geosynthetics’97
- Finalist Paper for the Student Paper Award Competition at the Conference of Geosynthetics’97
- Co-author of the 2nd Best Book “Soil Improvement and Underpinning”, awarded by Ministry of Construction, the People’s Republic of China, December 1996
- Outstanding Young Faculty Award in Tongji University, 1992
- Outstanding Young Faculty Award in Shanghai, 1992

CONFERENCE CHAIR/COMMITTEE

- Member, International Advisory Committee, International Conference on Soft Ground Engineering (ICSGE2015), Singapore, December 3 to 4, 2015
- Member, Organizing and Technical Committees, International Symposium on Systematic Approaches to Environmental Sustainability in Transportation, Fairbanks, Alaska, USA, August 2-5, 2015,
- Member, International Advisory Committee, Deep Mixing 2015 - An International Symposium on Deep Mixing, San Francisco, USA, June 3 to 5, 2015
- Member, Planning Committee, 57th Annual Asphalt Paving Conference, Lawrence, Kansas, 4 December, 2014
- Conference Chair, the 46th Geotechnical Engineering Conference, Lawrence, Kansas, 13 November, 2014
- Member, Academic Committee, International Conference on Advances in Civil Engineering for Sustainable Development, 27-29 August 2014, at Suranaree University of Technology, Nakhon Ratchasima, Thailand
- Member of Steering Committee, Organizing Committee, and Technical Committee, GeoShanghai International Conference 2014, Shanghai, May 26 to 28, 2014
- Member of Planning Committee, 56th Annual Asphalt Paving Conference, Lawrence, Kansas, 5 December, 2013
- Conference Chair, the 45th Geotechnical Engineering Conference, Lawrence, Kansas, 14 November, 2013
- Co-organizer, Organizing Committee, International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures (Bologna 2013), 14-16 October, 2013
- Member, Organizing Committee, the 1st International Symposium on Transportation Soil Engineering in Cold Regions, Xining, China, 10-11 October, 2013
- Session co-chair, Design and analysis of reinforced slopes, GeoCongress 2013, San Diego, CA, March 3 to 6, 2013
- Conference Chair, the 44th Geotechnical Engineering Conference, Lawrence, Kansas, 8 November, 2012
- Session co-chair, Sustainable Geotechniques, International Conference for Sustainable Design, Engineering, & Construction 2012, Fort Worth, TX, November 7 to 9, 2012
- Member, International Advisory Committee, International Conference on Ground Improvement and Ground Control, Wollongong, Australia, 30 October to 2 November 2012
- Member, Academic Committee, International Symposium on Geotechnical Engineering for High-speed Transportation Infrastructure, Hangzhou, 26 to 28 October 2012
- Member, International Advisory Committee, International Symposium on Coastal Engineering Geology (IS-Shanghai 2012), 20-21 September 2012
- Member, Scientific and Organizing Committees, the 2nd International Conference on Railway Engineering, 20 to 21 July 2012
- Member, Technical Committee, ICTPA 25th Annual Conference & The 9th Asia Pacific Transportation Development Conference, Chongqing, China, 29 June to 2 July, 2012
- Member, Technical Advisory Committee, the 4th International Conference on Grouting and Deep Mixing, New Orleans, Louisiana, USA, 15-18 February, 2012
- Conference Chair, the 43rd Geotechnical Engineering Conference, Lawrence, Kansas, 17 November, 2011
- Member, Technical Committee, the 24th ICTPA Annual Conference & NACGEA International Symposium on Geo-Trans, Los Angeles, USA, 27 to 29 May 2011

- Member, International Advisory Committee, the 3rd International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation 2011 (GEDMAR 2011), Semarang, Central Java, Indonesia, 17-20 May, 2011
- Technical and Proceedings Co-chair, ASCE Geo-Institute Annual Conference – GeoFrontiers 2011, Dallas, Texas, USA, March 13 to 16, 2011
- Conference Chair, the 42nd Geotechnical Engineering Conference, Lawrence, Kansas, November 17, 2010
- Member, International Academic Committee, International Symposium on Geomechanics and Geotechnics: From Micro to Macro, Tongji University, China, October 10 to 12, 2010
- Member, Organizing and Technical Committees, the Second GeoShanghai International Conference, Shanghai, China, June 3 to 5, 2010
- Chair, Planning Committee, 41st Kansas University Geotechnical Engineering Conference, Lawrence, Kansas, November 20, 2009
- Member of Technical Organizing Committee, GeoHunan International Conference on Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics, Hunan, China, August 3-6, 2009
- Chair of Session “New Technologies”, International Symposium on Deep Mixing & Admixture Stabilization, Okinawa, Japan, May 19-21, 2009
- Co-Chair and Editor-in-Chief of proceedings, the US-China Workshop on Ground Improvement Technologies, Orlando, Florida, March 14, 2009
- Member of International Advisory Committee, International Symposium on Lowland Technology, Busan, Korea, September 24 to 26, 2008
- Session Chair for Keynote Lectures, the 4th Asian Regional Conference on Geosynthetics, Shanghai, June 17 to 20, 2008
- Member of International Advisory Committee, Session Chair for Keynote Lectures, Invited Speaker, the 2nd International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation (GEDMAR08), Nanjing, China, May 28 to June 2, 2008
- Session Chair, *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, New Orleans, March 9 to 12, 2008
- Session Co-chair, the 5th International Symposium on Earth Reinforcement (IS Kyushu'07), Fukuoka, Japan, November 14-16, 2007
- Member of Technical Committee, the 1st International Symposium on Geotechnical Safety and Risk, Shanghai, China, October 18-19, 2007
- Member, International Advisory Committee, International Workshop on Constitutive Modelling – Development, Implementation, Evaluation, and Application, Hong Kong, China, January 12 to 13, 2007
- Session Co-Chair, the 8th International Geosynthetics Conference, 18-22 September, 2006, Yokohama, Japan.
- Member of International Advisory Committee and Invited Lecture/Session Chair, International Symposium on Lowland Technology, Saga, Japan, September 14 to 16, 2006
- Member of Organizing Committee and Co-Chair of Technical Committee, Secretary General, GeoShanghai International Conference, Shanghai, China, June 6-8, 2006
- Member of Advisory Committee, 50th Annual Asphalt Paving Conference, 2006
- Member of Organizing Committee, the 2nd World Forum of Chinese Scholars in Geotechnical Engineering, Hohai University, Nanjing, P.R. China, August 20-21, 2005
- Moderator, the 49th Annual Kansas Asphalt Paving Conference, Nov. 3, 2005
- Member of Organizing Committee and Session Chair, the 1st World Forum of Chinese Scholars in Geotechnical Engineering, Tongji University, Shanghai, P.R. China, August 21-23, 2003

- Chair of Sessions “Use of Wastes in Construction” and “Landfill Covers and Liners”, the 18th International Conference on Solid Waste Technology and Management, Philadelphia, USA, March 23-26, 2003
- Chair of Session “Advances in Land Disposal and Remediation”, the Seventeenth International Conference on Solid Waste Technology and Management, Philadelphia, October 21-24, 2001
- Member, Local Organizing Committee, International Conference on Site Characterization, Atlanta, March 1998
- Soft Soil Session Chair, First Young Asian Geotechnical Engineers Conference, AIT, Bangkok, Thailand, January 7 – January 11, 1991

PROFESSIONAL COMMITTEE/EDITORIAL BOARD

- Member of Earth Works Committee, Transportation Research Board, 2015 -
- Associate Editor, the Editorial Board of Journal of Materials in Civil Engineering, ASCE, 2014 -
- Editorial Board Member, Geotechnical Research, Institution of Civil Engineers (ICE), 2013 -
- Editorial Board Member, Ground Improvement, Institution of Civil Engineers (ICE), 2013 -
- Editorial Board Member, Transportation Infrastructure Geotechnology, Springer, 2013 -
- Editorial Board Member, Transportation Geotechnics, Elsevier, 2013 -
- Editorial Panel Member, Geosynthetics International, Institution of Civil Engineers (ICE), 2013 -
- Member of Public Relations Committee, International Society of Soil Mechanics and Geotechnical Engineering, 2012 -
- Vice President, International Association of Chinese Infrastructure Professionals, October 2010 –
- Co-Editor, Geotechnical Engineering Journal, Southeast Asia Geotechnical Society, 2010
- Editorial Board Member, Journal of GeoEngineering, Taiwan Geotechnical Society, 2012 -
- Advisory Committee Member, North American Geotechnical Engineers Association, 2010 –
- Editorial Board Member, Frontiers of Structural and Civil Engineering, Springer, 2009 -
- Member, the 10th Editorial Board of Chinese Journal of Geotechnical Engineering, 2008 –
- Member, NCHRP Project Panel E24-31, AASHTO LRFD Design-Construction Specifications of Shallow Foundations for Highway and Bridge Structures, 2006 - 2009
- Panel member, NSF CMS (Civil and Mechanical Systems) Major Research Instrumentation (MRI) Review Panel, 2006
- Member, Editorial Board, Geomechanics and Geoengineering: An International Journal, 2005 -
- Committee Research Coordinator, TRB AFS10 Committee on Transportation Earthwork, 2014 -
- Member, TRB A2K07 Committee on Geosynthetics, 2003 – 2012
- Member, ASCE Geo-Institute Geosynthetic Committee, 2004 –
- Member, ASCE Geo-Institute Soil Improvement Committee, 2004 –
- Associate Editor/Member, the Editorial Board of Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 2002 –
- Member, Advisory Board/Editorial Panel, International Journal of Geomechanics, ASCE, 2000-
- Executive Member, Segmental Retaining Wall (SRW) Standards Committee, the National Concrete Masonry Association (NCMA), 2001 – 2004
- Member, Advisory Board, Center for Geotechnical Composite Systems, Virginia Tech, 2001
- Member, Soil Improvement Committee, the Chinese Society of Soil Mechanics and Foundation Eng., 1990-1993
- Member, Editorial Board of Chinese Journal of Soil Improvement, 1990-1993

GRANTS

- Defining the Boundary Conditions for Composite Behavior of Geosynthetic Reinforced Soil (GRS) Structures, Co-PI, funded by National Cooperative Highway Research Program (NCHRP), 2014-

2016

- Testing Aggregate Backfill for Corrosion Potential, Co-PI, funded by Kansas Department of Transportation, 2014-2016
- Field monitoring of MSE walls To investigate secondary reinforcement effects, PI, funded by Kansas Department of Transportation, 2013-2015
- Establishing a design procedure for buried steel-reinforced HDPE plastic pipes – A field study (Phase II), PI, funded by Kansas Department of Transportation, 2013-2015
- Pullout resistance of MSE wall strip reinforcement in uniform aggregate, PI, funded by Kansas Department of Transportation, 2013-2015
- Development of Design Method for H2Ri Wicking Fabric in Pavement Structures, PI, funded by Tencate, 2013-2015
- Experimental Evaluation of Performance of GeoTerra Systems, PI, funded by the Presto Geosystems
- Pavement Deterioration Due to Horizontal Fracturing and Wind Farm Development in Kansas, Co-PI, funded by Kansas Department of Transportation, 2013-2014
- Calibrating Mechanistic-empirical Pavement Design Guide for Kansas, PI, funded by Kansas Department of Transportation, 2012-2014
- Resilient Behavior of TriAX Geogrid-reinforced Working Platforms over Weak Subgrade, PI, funded by Tensar International, 2012-2013
- Development of Resistance Factors for Piles from PDA Data, Co-PI, funded by Kansas Department of Transportation, 2012-2013
- Vertical Reinforcement Spacing for MSEW and RSS Structures, PI, funded by Maccaferri through the Collin Group, 2012 to 2015
- Protection of underground pipes and utility lines using geosynthetics, PI, funded by the University of Kansas, 2011-2012
- Improved Load Rating Factors for Low-fill Box Structures, PI, funded by Kansas Department of Transportation, 2011-2012
- Onsite use of Recycled Asphalt Pavement Materials with Geocells to Reconstruct Damaged Pavements by Heavy Trucks, PI, funded by Mid-America Transportation Research Center, 2010-2011
- Establishing a Design Procedure for Buried Steel-Reinforced HDPE Plastic Pipes, PI, funded by Kansas Department of Transportation, 2010-2012
- Geotechnical Solutions for Soil Improvement, Rapid Embankment Construction, and Stabilization of the Pavement Working Platform, funded by Strategic Highway Research Program (SHRP 2 Project R02), Phase II, Co-PI, 2008-2011
- Experimental and Micromechanical Studies on Soil Arching under Static Loading, PI, funded by KU GRF, 2009 to 2010
- Capacity of Scour Damaged Bridges (Part II), Co-PI, funded by Kansas Department of Transportation, 2009-2010
- Substituting Geosynthetics For Shotcrete Facing on Soil Nailed Walls, Co-PI, funded by Kansas Department of Transportation, 2009 to 2010
- Experimental Study of Innovative Geogrid Products for Subgrade Improvement, PI, funded by Tensar International, 2009
- Numerical Analyses of Rammed Pier Systems, PI, funded by Geopier Foundations, 2008-2009
- Development of a Mechanistic Response Model for Geocell-reinforced Aggregate Bases, PI, funded by Geosynthetics Research Institute, 2008-2009
- Slope Reinforcement using Helical Anchors, Co-PI, funded by Earth Contact Products, 2008
- Feasibility Study for Reducing Flowability of Vacuum Tower Bottoms using Aggregate, PI, funded by Frontier El Dorado Refining Company, Kansas, 2008
- Laboratory Study of Characteristics of Recycled Asphalt Pavements (RAP) in Kansas, PI, funded by Kansas Department of Transportation, 2008-2010
- Lateral Load Capacity of Drilled Shaft Short Rock Sockets, Co-PI, funded by Kansas Department

- of Transportation, 2008-2009
- Tolerable Strains for HMA Overlays over Concrete Pavements, PI, funded by Kansas Department of Transportation, 2007-2009
- Evaluation of Data for MSE Walls with Drilled Shafts, Co-PI, funded by Kansas Department of Transportation, 2007-2009
- Capacity of Pile-Founded Bridges Under Scoured Conditions, Co-PI, funded by Kansas Department of Transportation, 2007-2009
- Evaluation of Performance of Geocell-Reinforced Bases, PI, Kansas Department of Transportation and Kansas University Transportation Research Institute, 2007-2008
- REU Supplement: U.S.-Japan Cooperative Science: Use of Reinforcement-Drainage Geosynthetics in Embankment/Wall Construction with Marginal Backfill, PI, funded by National Science Foundation, Award No. 0442159, 2006-2007
- Development of Recommended Skin Friction Design Values Design Values for Drilled Shafts in Intermediate Geomaterials based on O-cell Tests, PI, funded by Kansas Department of Transportation, 2006 – 2008
- Development of a Rapid Test to Determine Moisture Sensitivity of HMA (SuperPave) Mixtures, PI, funded by Kansas Department of Transportation, 2006 – 2008.
- Development of Design Guidelines for Laterally Loaded Drilled Shafts in MSE Walls, Co-PI, funded by Kansas Department of Transportation, 2006 – 2008.
- U.S.-Japan Cooperative Science: Use of Reinforcement-Drainage Geosynthetics in Embankment/Wall Construction with Marginal Backfill, PI, funded by National Science Foundation, Award No.: 0355430, 2004 – 2007.
- Numerical Analysis of Column-Supported Embankments, PI, funded by the Collin Group, 2005-2007.
- Investigation of Geosynthetic-Soil Confinement using Asphalt Pavement Analyzer, PI, funded by Tensar Earth Technologies, Inc., 2006-2008
- Mechanistic Analysis of Geocell-Reinforced Pavement Foundations, PI, funded by KU Transportation Research Institute, 2006-2008
- Numerical Study of Geosynthetic-Aggregate Interaction under Wheel Loading, PI, funded by KU Transportation Research Institute, 2006-2008
- Development of A Predictive Geomechanical Model for Recovery of Coalbed Methane, PI, funded by KU Energy Research Center, 2005-2006.
- Experimental and Numerical Studies of Reinforcement-Drainage Geosynthetics in Embankment/Wall Construction with Marginal Backfill, PI, funded by KU General Research Fund, 2005-2006.
- Geosynthetic-Reinforced Pile Supported Embankments, Co-PI, funded by FHWA, 2003-2004.
- Laboratory Study on Consolidation Characteristics of Deep Soil Mixing Foundations, PI, the Provost's Grant, Widener University, 2004-2005.
- Widener Faculty Development Option Award, PI, Fall, 2003.
- Acquisition of A Load Actuator System for Enhancing Civil Engineering Research and Research Training in An Undergraduate Institute (MRI), PI, funded by National Science Foundation, Award No. CMS-0216149, 2002-2004.
- Development of Design Charts for Geosynthetically Reinforced Embankments on Deep Mixed Columns, Principal Investigator, funded by the FHWA National Deep Mixing Program, 2002-2004.
- Analyses and Design of Multi-Tier Mechanically Stabilized Wall Systems, Co-PI, funded by Delaware Transportation Institute, 2002-2003.
- Testing of Additives for Waterproofing Concrete, Co-PI, funded by Concure Products, 2002.
- Widener University Provost Grant, PI, 2002 – 2003.
- Widener University Faculty Development Option Grant, PI, 2002.

SUPERVISED STUDENTS AND VISITING SCHOLARS

Ph.D. Students

Jie Huang, August 2004 to December 2007, dissertation “Coupled Mechanical and Hydraulic Modeling of Geosynthetic-reinforced Column-supported Embankments”

Anil Bhandari, August 2007 to May 2010, dissertation “Micromechanical Analysis of Geosynthetic-soil Interaction under Cyclic Loading”

Xiaoming Yang, August 2006 to August 2010, dissertation “Numerical Analyses of Geocell-reinforced Granular Soils under Static and Repeated Loads”

Sanat Pokharel, August 2006 to October 2010, dissertation “Experimental Study on Geocell-reinforced Bases under Static and Dynamic Loading”

Cheng Lin, May 2008 to May 2012, dissertation “Evaluation of Lateral Behavior of Pile-supported Bridges under Scoured Conditions”

Jitendra K. Thakur, January 2011 to May 2013, dissertation topic “Geocell-reinforced Unpaved and Paved Roads with Recycled Asphalt Pavement (RAP) Bases: Experimental Study and Damage Model Development”

Deep Khatri, January 2012 to May 2014, thesis “Laboratory and Field Performance of Buried Steel-Reinforced High Density Polyethylene (SRHDPE) Pipes in a Ditch Condition under a Shallow Cover”

Ryan Corey, January 2009 to May 2015 (expected), dissertation topic “Protection of Underground Pipelines using Geosynthetics”

Luke Schuler, expected to graduate in December 2015, dissertation topic “Behavior of Drilled Shafts and Augered Cast Piles”

Xiaohui Sun, August 2011 to May 2015 (expected). Dissertation topic “Resilient Behavior and Permanent Deformations of Multi-Axial Geogrid Stabilized Bases over Weak Subgrade”

Yan Jiang, August 2013 to 2016 (expected)

Shaymaa Kadhim, co-advised with Prof. Robert L. Parsons, August 2012 to 2015 (expected)

Fei Wang, January 2014 to 2017 (expected)

Jamal Ismail Kakrasul, August 2013 to 2017 (expected)

Jun Guo, January 2015 to 2018 (expected)

Saif Mohammed Jawad, January 2014 to 2018 (expected)

George A. Tannoury, January 2014 to 2018 (expected)

M.S. Students

Yuze Zhang, August 2005 to August 2007, thesis “Investigation of Geosynthetic-soil Confinement Using Asphalt Pavement Analyzer”

Harihar Shiwakoti, August 2006 to December 2007, thesis “Development of A Rapid Test to Determine Moisture Sensitivity of HMA (SuperPave) Mixtures”

Ryan Corey, August 2006 to December 2008

Ashwani Gautam, August 2007 to May 2009, thesis “Tolerable Strains for HMA Overlays over Concrete Pavements”

Yu Qian, August 2008 to December 2009, thesis “Experimental Study on Triangular Aperture Geogrid- reinforced Bases over Weak Subgrade under Cyclic Loading”

Subhash Thakur, August 2008 May 2010, thesis “Laboratory Evaluation of Physical Characteristics of Recycled Asphalt Pavement (RAP) in Kansas”

Jitendra Thakur, August 2009 to January 2011, thesis “Experimental Study of Geocell-reinforced Recycled Asphalt Pavement (RAP) Bases under Static and Cyclic Loads”

Bhagaban Acharya, August 2010 to December 2011, thesis “Experimental Study of Geocell-reinforced Flexible Pavements with Recycled Asphalt Pavement (RAP) Bases under Cyclic Loads”

Deep Khatri, August 2010 to May 2012, thesis “Experimental Evaluation of the Behavior of Steel-Reinforced High Density Polyethylene (SRHDPE) Pipes”

Raju Acharya, August 2011 to December 2012, thesis “Improved Load Distribution for Load Rating of Low-fill Box Structures”

Omar Ismael, August 2012 to May 2014, thesis “Evaluating the Behavior of Laterally Loaded Piles under a Scoured Condition by Model Tests”

Patrick Schaub, August 2010 to May 2014, project “Cranberry Bend River Mitigation Project”

Jun Guo, August 2012 to December 2014, thesis “Experimental Studies on Geocells and Mat Systems for Stabilization of Unpaved Shoulders and Temporary Roads.”

Wessam Mohammed, January 2014 to May 2015 (expected)

Mehari Weldu, August 2014 to December 2015 (expected)

Ghaith Abdulrasool, August 2014 to December 2015 (expected)

Mahdi Al-Naddaf, January 2014 to December 2016 (expected)

Visiting Scholars

Dr. Sadik Oztoprak, Istanbul University, Turkey, July 2006 to March 2007

Dr. Jungjo Yuu, KGI, South Korea, August 2006 to July 2007

Dr. Jianfeng Chen, Tongji University, China, August 2007 to February 2008

Dr. Fayun Liang, Tongji University, China, October 2007 to October 2008

Prof. Xianzhi Huang, Engineering College of Shanxi University, China, February 2009 to February 2010

Lei Chen, Ph.D. student, Southeast University, China, September 2007 to August 2008

Fei Wang, Ph.D. student, Southeast University, China, September 2007 to August 2008

Yong Li, Ph.D. student, Shandong University, China, October 2007 to October 2008

Yanli Dong, Ph.D. student, Taiyuan University of Technology, China, August 2008 to March 2010

Dr. Fen Li, Wuhan University of Technology, China, August 2009 to August 2010

Yan Jiang, Ph.D. student, Tianjin University, China, October 2009 to October 2010

Dr. Shanhong Liu, Chongqing Jiaotong University, China, February 2010 to February 2011

Dr. Gang Jiang, Nanjing University of Technology, China, March 2010 to March 2011

Dr. Chengzhi Xiao, Hebei University of Technology, China, August 2010 to August 2011

Prof. Wei Shi, Qingdao Technological University, China, September 2010 to March 2011

Prof. Songyu Liu, Southeast University, China, December 2010 to January 2011

Dr. Walid El Kamash, Jazan University, Kingdom of Saudi Arabia, June to July 2011

Zhen Zhang, Ph.D. student, Tongji University, China, August 2011 to September 2013

Dr. Jingshan Jiang, Jiangsu Transportation Research Institute, China, October 2011 to February 2013

Dr. Xiaoming Liu, Hunan University, China, August 2012 to August 2013

Dr. Zhigang Cao, Zhejiang University, China, September 2012 to September 2013

Weihua Li, Deputy General Manager, Hebei Research Institute of Construction & Geotechnical Investigation Co., LTD, China, November 2012 to November 2013

Hongguang Jiang, Ph.D. student, Zhejiang University, China, December 2012 to December 2013

Dr. Huayang Lei, Tianjin University, China, February 2013 to February 2014

Prof. Wuyu Zhang, Qinghai University, China, August 2013 to February 2014

Dr. Chunyong Luo, Shanghai Jiaotong University, August 2013 to August 2014

Mustapha Rahmaninezhad, Iran University of Science and Technology, September 2013 to February 2015

Dr. Hongguang Zhang, Chang'An University, February 2014 to March 2015

Meixiang Gu, Hunan University, August 2014 to August 2016

Dr. Junli Gao, Shanghai University, August 2014 to August 2015

Dan Chang, Beijing Jiaotong University, September 2014 to September 2015

Dr. Hongbo Zhang, Shandong University, November 2014 to November 2015

Dr. Fulin Li, China University of Mining and Technology, February 2015 to February 2016

PUBLICATIONS

Peer-Reviewed Journal Papers

1. Han, J. and Thakur, J.K. (2015). "Sustainable roadway construction using recycled aggregates with geosynthetics." *Sustainable Cities and Society*, 14(February), 342-350, DOI: 10.1016/j.scs.2013.11.011.
2. Han, J. (2015). "Recent research and development of ground column technologies." *Ground Improvement*, DOI: 10.1680/grim.13.00016.
3. Sukmak, K., Sukmak, P., Horpibulsuk, S., Han, J., Shen, S.-L., and Arulrajah, A. (2015). "Effect of fine content on the pullout resistance mechanism of bearing reinforcement embedded in cohesive-frictional soils." *Geotextiles and Geomembranes*, 43, 107-117.
4. Corey, R., Han, J., Khatri, D.K., and Parsons, R.L. (2015). "Closure to Laboratory Study on Geosynthetic Protection of Buried Steel-Reinforced HDPE Pipes from Static Loading'." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 07015011.
5. Cao, Z., Cai, Y., and Han, J. (2015). "Closure to Mitigation of Ground Vibration Generated by High-Speed Trains on Saturated Poroelastic Ground with Under-Sleeper Pads'." *Journal of Transportation Engineering*, ASCE, 141(1), 07014004.
6. Bhandari, A., Han, J., and Parsons, R.L. (2015). "Two-dimensional DEM analysis of geogrid-reinforced bases under a cyclic vertical load." *Acta Geotechnica*, DOI: 10.1007/s11440-013-0299-3.
7. Thakur, J.K. and Han, J. (2015). "Recent development of recycled asphalt pavement (RAP) bases treated for highway construction." *Transportation Infrastructure Geotechnology*, 2(1).
8. Sun, X.H., Han, J., Wayne, M.H., Parsons, R.L., and Kwon, J. (2015). "Determination of load equivalency for unpaved roads." *Proceedings of the 11th International Conference on Low-Volume Roads (Transportation Research Record, Journal of the Transportation Research Board, accepted.*
9. Zhang, J., Yang, J., Han, J., and Zhang, W. (2015). "Evaluation of dilatancy behavior of asphalt mixtures using partial triaxial compression tests." *ASCE Journal of Materials in Civil Engineering*, accepted.
10. Guo, J., Han, J., Schrock, S.D., and Parsons, R.L. (2015). "Field evaluation of vegetation growth in geocell-reinforced unpaved shoulders." Submitted for possible publication in *Geotextiles and Geomembranes*.
11. Sun, X.H., Han, J., Wayne, M.H., Parsons, R.L., and Kwon, J. (2015). "Radial Stresses and Resilient Deformations of Geogrid-Stabilized Unpaved Roads under Cyclic Plate Loading Tests." Submitted for possible publication in *Geotextiles and Geomembranes*.
12. Pokharel, S., Han, J., Leshchinsky, D., and Parsons, R.L. (2015). "Experimental evaluation of

- geocell- reinforced bases under repeated loading.” Submitted for possible publication in Geotextiles and Geomembranes.
13. Khatri, D.K., Han, J., Corey, R., Parsons, R.L., and Brennan, J.J. (2015). “Laboratory evaluation of installation of a steel-reinforced high-density polyethylene pipe in soil.” Submitted for possible publication in Tunnelling and Underground Space Technology.
 14. Lei, H., Wang, X., Chen, L., Huang, M., and Han, J. (2015). “Compression Characteristics of Ultra-soft Clays Subjected to Simulated Staged Preloading.” Submitted for possible publication in Korea Society of Civil Engineering Journal.
 15. Wang, F., Han, J., Khatri, D.K., Parsons, R.L., Brennan, J.J., and Guo, J. (2015). “Field Installation Effect on Steel-Reinforced High-Density Polyethylene Pipes”. Submitted for possible publication in Journal of Pipeline Systems - Engineering and Practice.
 16. Lin, C., Han, J., Bennett, C.R., and Parsons, R.L. (2015). “Analysis of laterally loaded piles in soft clay considering scour-hole dimensions.” Submitted for possible publication in Ocean Engineering.
 17. Acharya, R., Han, J., Parsons, R.L., and Brennan, J.J. (2015). “Field testing and numerical modeling of a low-fill box culvert under a flexible pavement subjected to traffic loading.” Submitted for ASCE Journal of Transportation Engineering, February 5.
 18. Xiao, C., Han, J., and Zhang, Z. (2015). “Experimental study on performance of geosynthetic-reinforced soil model walls subjected to static footing loading.” Submitted for possible publication in Geotextiles and Geomembranes.
 19. Gu, M., Zhao, M., Zhang, L., and Han, J. (2015). “Effects of geogrid encasement on lateral and vertical deformations of stone columns in model tests.” Submitted for possible publication in Geosynthetics International.
 20. Parsons, R.L., Rahman, A.J, Han, J., and Glavinich, T.E. (2014). “Fouling and permeability characterization using resistivity.” Journal of the Transportation Research Board, 2448, 133-141.
 21. Jiang, Y., Han, J., and Zheng, G. (2014). “Numerical analysis of pile-slab supported railway embankments.” Acta Geotechnica, 9(3), 499–511.
 22. Corey, R., Han, J., Khatri, D.K., and Parsons, R.L. (2014). “Geosynthetic protection of buried steel-reinforced HDPE pipes from static loading.” ASCE Journal of Geotechnical and Geoenvironmental Engineering, 04014019-1 to 10.
 23. Bian, X., Jiang, H., Chen, Y., Jiang, J. and Han, J. (2014). “A full-scale physical model test apparatus for investigating the dynamic performance of the slab track system of a high-speed railway.” Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 0954409714552113.
 24. Lin, C., Han, J., Bennett, C.R., and Parsons, R.L. (2014). “Analysis of laterally-loaded piles in sand considering scour hole dimensions.” ASCE Journal of Geotechnical and Geoenvironmental Engineering, 04014024-1 to 13.
 25. Lin, C., Han, J., Bennett, C.R., and Parsons, R.L. (2014). “Behavior of laterally-loaded piles under scour conditions considering stress history of undrained soft clay.” Technical note, ASCE Journal of Geotechnical and Geoenvironmental Engineering, 06014005-1 to 6.
 26. Leshchinsky, D., Kang, B., Han, J., and Ling H. (2014). “Framework for limit state design of geosynthetic-reinforced walls and slopes.” Transportation Infrastructure Geotechnology, 1(1), 129-164.
 27. Zhang, Z., Han, J., and Ye, G. (2014). “Numerical Investigation on factors for deep-seated slope stability of stone column-supported embankments over soft clay.” *Engineering Geology*, 168C, 104-113.
 28. Huang, J., Bin-Shafique, S., Han, J., and Rahman, M.S. (2014). “Modeling of laterally loaded drilled shaft group in MSE wall.” *ICE Geotechnical Engineering Journal*, 167(GE4). 402-414.
 29. Lin, C., Zhu, W., and Han, J. (2014). “Permeability and leachability of solidified sewage sludge.” *Environmental Geotechnics*, 1(EG1), 33–39.
 30. Cao, Z., Cai, Y., and Han, J. (2014). “Mitigation of ground vibration generated by high-speed trains on saturated poroelastic ground with under-sleeper-pads.” *ASCE Journal of Transportation*

- Engineering*, 140(1), 12-22.
31. Jiang, Y., Han, J., and Zheng, G. (2014). "Influence of column yielding on degree of consolidation of soft foundations improved by deep mixed columns." *Geomechanics and Engineering*, 6(2), 179-194.
 32. Miao, L., Wang, F., Han, J., and Lv, W. (2014). "Benefits of geosynthetic reinforcement in embankment widening subjected to foundation differential settlement." *Geosynthetics International*, 21(5), 321–332.
 33. Nian, T.-K., Liu, B., Han, J., and Huang, R.-Q. (2014). "Effect of seismic acceleration directions on dynamic earth pressures in retaining structures." *Geomechanics and Engineering*, 7(3), 263-277.
 34. Lin, C., Bennett, C.R., Han, J., and Parsons, R.L. (2014). "Effect of Soil Stress History on scour evaluation of pile-supported bridges." *ASCE Journal of Performance of Constructed Facilities*, 04014178-1 to 11.
 35. Acharya, R., Han, J., Brennan, J.J., Parsons, R.L., and Khatri, D.K. (2014). "Structural response of a low-fill box culvert under static and traffic loading." *ASCE Journal of Performance of Constructed Facilities*, 04014184-1 to 7.
 36. El Kamash, W. and Han, J. (2014). "Displacements of column-supported embankments over soft clay after widening considering soil consolidation and column layout: Numerical analysis." *Soils and Foundations*, December, 54(6), 1054–1069, DOI:10.1016/j.sandf.2014.11.002.
 37. Jiang, Y., Han, J., and Zheng, G. (2013). "Numerical analysis of consolidation of soft soils fully- penetrated by deep-mixed columns." *KSCE Journal of Civil Engineering*, 17(1), 96-105.
 38. Liang, F., Yu, F. and Han, J. (2013). "A simplified analytical method for response of an axially loaded pile group subjected to lateral soil movement." *KSCE Journal of Civil Engineering*, 17(3), 368-376.
 39. Yang, X., Han, J., Leshchinsky, D., and Parsons, R.L. (2013). "A three-dimensional mechanistic- empirical model for geocell-reinforced unpaved roads." *Acta Geotechnica*, 8(2), 201-213.
 40. Huang, J., Han, J., Parsons, R.L., and Pierson, M. (2013). "Refined numerical modeling of a laterally-loaded drilled shaft in an MSE wall." *Geotextiles and Geomembranes*, 37, 61-73.
 41. Li, F., Han, J., and Lin, C. (2013). "Effect of scour on the behavior of laterally loaded single piles in marine clay." *Journal of Marine Georesources and Geotechnology*, 31, 271-289.
 42. Miao, L.C., Wang, F., Han, J., Lv, W.H., and Li, J. (2013). "Properties and applications of cement-treated sand-expanded polystyrene bead lightweight fill." *ASCE Journal of Materials in Civil Engineering*, 25(1), 86-93.
 43. Qian, Y., Han, J., Pokharel, S.K., and Parsons, R.L. (2013). "Performance of triangular aperture geogrid-reinforced base courses over weak subgrade under cyclic loading." *ASCE Journal of Materials in Civil Engineering*, 25(8), 1013-1021.
 44. Xu, Y. S.; Huang, R. Q.; Han, J. and Shen, S.L. (2013). "Evaluation of allowable withdrawn volume of groundwater based on observed data." *Natural Hazards*, 67(2), 513-522.
 45. Nian, T.K. and Han, J. (2013). "Analytical solution for seismic earth pressures in $c-\phi$ soil with an infinite slope." Technical note, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 139(9), 1611-1616.
 46. Yang, X. and Han, J. (2013). "An analytical model for resilient modulus and permanent deformation of geosynthetic-reinforced unbound granular materials." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 139(9), 1443-1453.
 47. Thakur, J.K., Han, J., and Parsons, R.L. (2013). "Creep behavior of geocell-reinforced recycled asphalt pavement (RAP) bases." *ASCE Journal of Materials in Civil Engineering*, 25(10), 1533-1543.
 48. Yang, X. and Han, J. (2013). "Geocell-reinforced granular fill under static and cyclic loading: A synthesis of analysis." *Journal of Geotechnical Engineering*, Southeast Asian Geotechnical Society, 44(4), December, 18-24.
 49. Han, J. and Jiang, Y. (2013). "Use of geosynthetics for performance enhancement of earth

- structures in cold regions.” *Sciences in Cold and Arid Regions*, 5(5), 517-529.
50. Ye, G.-B., Zhang, Z., Han, J., Xing, H.-F., Huang, M.-S., and Xiang, P.-L. (2013). “Performance Evaluation of an Embankment on Soft Soil Improved by Deep Mixed Columns and Prefabricated Vertical Drains.” *ASCE Journal of Performance of Constructed Facilities*, 27(5), 614–623.
 51. Lin, C., Zhu, W., and Han, J. (2013). “Strength and leaching of solidified sewage sludge treated with different additives.” *ASCE Journal of Materials in Civil Engineering*, 25(11), 1594-1601.
 52. Khatri, D.K., Han, J., Parsons, R.L., Young, B., Brennan, J.J., and Corey, R. (2013). “Laboratory evaluation of deformations of steel-reinforced high-density polyethylene pipes under static loads.” *ASCE Journal of Materials in Civil Engineering*, 25(12), 1964-1969.
 53. Lin, C., Bennett, C.R., Han, J., and Parsons, R.L. (2012). “Integrated analysis of the performance of pile-supported bridges under scoured conditions.” *Engineering Structures*, 36, 27-38.
 54. Ai, Z.Y., Cang, N.R., and Han, J. (2012). “Analytical layer-element solutions for a multi-layered transversely isotropic elastic medium subjected to axisymmetric loading.” *Journal of Zhejiang University – Science A (Applied Physics and Engineering)*, 13(1), 9-17.
 55. Yang, X., Han, J., Pokharel, S.K., Manandhar, C., Parsons, R.L., Leshchinsky, D., and Halahmi, I. (2012). “Accelerated pavement testing of unpaved roads with geocell-reinforced sand bases.” *Geotextiles and Geomembranes*, 32, 95-103.
 56. Han, J., Bhandari, A., and Wang, F. (2012). “DEM analysis of stresses and deformations of geogrid- reinforced embankments over piles.” *ASCE International Journal of Geomechanics*, 12(4), 340-350.
 57. Thakur, J.K., Han, J., Pokharel, S.K., and Parsons, R.L. (2012). “Performance of geocell-reinforced recycled asphalt pavement (RAP) bases over weak subgrade under cyclic plate loading.” *Geotextiles and Geomembranes*, 35, 14-24.
 58. Zeng, L.-L., Hong, Z.-S., Cai, Y.-Q., and Han, J. (2011). “Change of hydraulic conductivity during compression of undisturbed and remolded clays.” *Applied Clay Science*, 51(1-2), 86-93.
 59. Huang, J., Parsons, R.L., Han, J., and Pierson, M.C. (2011). “Numerical analysis of a laterally-loaded shaft constructed within an MSE wall.” *Geotextiles and Geomembranes*, 29, 233-241.
 60. Dong, Y.-L., Han, J., and Bai, X.-H. (2011). “Numerical analysis of tensile behavior of geogrids with rectangular and triangular apertures.” *Geotextiles and Geomembranes*, 29(2), 83-91.
 61. Han, J., Zhang, Y.Z., and Parsons, R.L. (2011). “Experimentally quantifying the influence of geosynthetics on performance of reinforced granular bases.” *Journal of Geotechnical Engineering*, Southeast Asian Geotechnical Society, 42(1), 74-83.
 62. Zheng, G., Jiang, Y., and Han, J. (2011). “Performance of cement-fly ash-gravel pile-supported high-speed railway embankments over soft marine clay.” *Journal of Marine Georesources & Geotechnology*, 29(2), 145-161.
 63. Abusharar, S. and Han, J. (2011). “Two-dimensional deep-seated slope stability analysis of embankments over stone columns.” *Engineering Geology*, 120, 103-110.
 64. Qian, Y., Han, J., Pokharel, S.K., and Parsons, R.L. (2011). “Stress analysis on triangular aperture geogrid-reinforced bases over weak subgrade under cyclic loading - an experimental study.” *Journal of the Transportation Research Board*, No. 2204, *Low-Volume Roads*, Vol. 2, Proceedings of the 10th International Conference on Low-Volume Roads, July 24–27, Lake Buena Vista, Florida, USA, 83-91.
 65. Pokharel, S.K., Han, J., Manandhar, C., Yang, X.M., Leshchinsky, D., Halahmi, I., and Parsons, R.L. (2011). “Accelerated pavement testing of geocell-reinforced unpaved roads over weak subgrade.” *Journal of the Transportation Research Board*, No. 2204, *Low-Volume Roads*, Vol. 2, Proceedings of the 10th International Conference on Low-Volume Roads, July 24–27, Lake Buena Vista, Florida, USA, 67-75.
 66. Parsons, R.L., Pierson, M.C., Willems, I., Han, J., and Brennan, J.J. (2011). “Lateral capacity of short rock sockets in weak rock.” *Journal of the Transportation Research Board*, No. 2212, *Soil Mechanics*, 34-41.

67. Pierson, M.C., Parsons, R.L., Han, J., and Brennan, J.J. (2011). "Laterally loaded shaft group capacities and deflections behind an MSE wall." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Reston, Virginia, 137(10), 882-889.
68. Han, J., Pokharel, S.K., Yang, X., Manandhar, C., Leshchinsky, D., Halahmi, I., and Parsons, R.L. (2011). "Performance of geocell-reinforced RAP bases over weak subgrade under full-scale moving wheel loads." *Journal of Materials in Civil Engineering*, ASCE, 23(11), 1525-1534.
69. Bhandari, A. and Han, J. (2010). "Investigation of geotextile-soil interaction under a cyclic wheel load using the discrete element method." *Geotextiles and Geomembranes*, 28(1), 33-43.
70. Han, J., Chen, J.F., Hong, Z.S., and Shen, S.L. (2010). "Mitigation of levee failure using deep mixed columns and geosynthetics." *GeoMechanics and GeoEngineering: International Journal*, 5(1), 49-55.
71. Yang, X.M., Han, J., Parsons, R.L., and Leshchinsky, D. (2010). "Three-dimensional numerical modeling of single geocell-reinforced sand." *Frontiers of Architecture and Civil Engineering in China*, 4(2), 233-240.
72. Ai, Z.Y., Wang, Q.S., and Han, J. (2010). "Transfer matrix solutions to axisymmetric and non-axisymmetric consolidation of multilayered soils." *Acta Mechanica*, 211(1-2), 155-172.
73. Chen, J.F., Han, J., and Yu, S.B. (2010). "Centrifugal modeling of an embankment backfilled with lime-stabilized soil on marine clay." *Marine Georesources and Geotechnology*, 28, 25-36.
74. Ai, Z.Y., Wang, Q.S., and Han, J. (2010). "Analytical solutions to consolidation of a multi-layered soil under circular loading." *Journal of Engineering Mathematics*, 66(4), 381-393.
75. Han, J. and Leshchinsky, D. (2010). "Analysis of back-to-back mechanically stabilized earth walls." *Geotextiles and Geomembranes*, 28(3), 262-267.
76. Chen, B.-G., Zheng, J.-J., and Han, J. (2010). "Experimental study and numerical simulation on concrete box culverts in trenches." *ASCE Journal of Performance of Constructed Facilities*, 24(3), 223-234.
77. Huang, J. and Han, J. (2010). "Two-dimensional coupled hydraulic and mechanical modeling of geosynthetic-reinforced column-supported embankments." *Computers and Geotechnics*, 37, 638-648.
78. Pokharel, S., Han, J., Leshchinsky, D., Parsons, R.L., and Halahmi, I. (2010). "Investigation of factors influencing behavior of single geocell-reinforced bases under static loading." *Geotextiles and Geomembranes*, 28(6), 570-578.
79. Lin, C., Bennett, C.R., Han, J., and Parsons, R.L. (2010). "Scour effects on the response of laterally loaded piles considering stress history of sand." *Computers and Geotechnics*, 37, 1008-1014.
80. Huang, J. and Han, J. (2009). "3D coupled mechanical and hydraulic modeling of a geosynthetic-reinforced deep mixed column-supported embankment." *Geotextiles and Geomembranes*, 27, 272-280.
81. Zheng, G., Liu, L., and Han, J. (2010). "Stability of embankment on soft subgrade reinforced by rigid inclusions (II) – group pile analysis." *Chinese Journal of Geotechnical Engineering*, 32(12), 1811-1820, in Chinese.
82. Zheng, G., Liu, L., and Han, J. (2010). "Stability of embankment on soft subgrade reinforced by rigid piles (I) – background and single pile analysis." *Chinese Journal of Geotechnical Engineering*, 32(11), 1648-1657, in Chinese.
83. Huang, J., Han, J., and Oztoprak, S. (2009). "Coupled mechanical and hydraulic modeling of geosynthetic-reinforced column-supported embankments." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 135(8), 1011-1021.
84. Liang, F.Y., Chen, L.Z., and Han, J. (2009). "Integral equation method for analysis of piled rafts with dissimilar piles under vertical loading." *Computers and Geotechnics*, 36, 419-426.
85. Ai, Z.Y. and Han, J. (2009). "Boundary element analysis of axially loaded piles embedded in a multi-layered soil." *Computers and Geotechnics*, 36, 427-434.
86. Chen, J.F., Han, J., Oztoprak, S., and Yang, X.M. (2009). "Behavior of single rammed aggregate pier." *Computers and Geotechnics*, 36, 1191-1197.

87. Chen, J.F. and Han, J. (2009). "Numerical modeling of loading tests on a rammed aggregate pier." *Chinese Journal of Geotechnical Engineering*, 31(9), 1366-1370.
88. Wang, F., Han, J., Miao, L.C., and Bhandari, A. (2009). "Numerical analysis of geosynthetic-bridged and drilled shaft-supported embankments over large sinkhole." *Geosynthetics International Journal*, 16(6), 408-419.
89. Bhandari, A. and Han, J. (2009). "Evaluation of high-capacity composite spun piles." *Journal of Transportation Research Board*, 2116, 53-61.
90. Pierson, M.C., Parsons, R.L, Han, J, and Brennan, J.J. (2009). "Capacities and deflections of laterally loaded shafts behind an MSE wall." *Transportation Research Record, Journal of Transportation Research Board*, 2116, Soil Mechanics 2009, 62-69.
91. Ai, Z.Y., Wu, C., and Han, J. (2008). "Transfer matrix solutions for three dimensional consolidation of a multi-layered soil with compressible constituents." *International Journal of Engineering Science*, 46(11), 1111-1119.
92. Shen, S.L., Han, J., and Du, Y.J. (2008). "Deep mixing induced property changes in sensitive marine clays." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 134(6), 845-854.
93. Liu, S.Y., Han, J., Zhang, D.W., and Hong, Z.S. (2008). "A new DJM-PVD combined method for soft ground improvement." *Geosynthetics International Journal*, 15(1), 43-54.
94. Chen, R.P., Chen, Y.M., Han, J., and Xu, Z.Z. (2008). "A theoretical solution for pile-supported embankments on soft soil." *Canadian Geotechnical Journal*, 45(5), 611-623.
95. Ai, Z.Y., Cheng, Z.Y., and Han, J. (2008). "State space solution to three-dimensional consolidation of multi-layered soils." *International Journal of Engineering Science*, 46, 486-498.
96. Han, J., Yang, X.M., Leshchinsky, D., and Parsons, R.L. (2008). "Behavior of geocell-reinforced sand under a vertical load." *Journal of the Transportation Research Board*, 2045, 95-101.
97. Yang, X.M., Han, J., Parsons, R.L., and Henthorne, R. (2008). "Resistance factors for drilled shafts in weak rocks based on O-cell test data." *Journal of the Transportation Research Board*, 2045, 62-67.
98. Hong, Z.S. and Han, J. (2007). "Evaluation of sample quality of sensitive clay using intrinsic compression concept." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 133(1), 83-90.
99. Han, J., Oztoprak, S., Parsons, R.L., and Huang, J. (2007). "Numerical analysis of foundation columns to support widening of embankments." *Computers and Geotechnics*, 34(6), 435-448.
100. Han, J., Huang, J., and Parsons, R.L. (2007). "Influence of bedrock inclination on settlements of flexible shallow foundations." *Computers and Geotechnics*, 34(1), 53-56.
101. Han, J. and Leshchinsky, D. (2006). "General analytical framework for design of flexible reinforced earth structures." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 132(11), 1427-1435.
102. Han, J. and Ye, S.L. (2006). "A field study on behavior of micropiles under compression or tension." *Canadian Geotechnical Journal*, 43(1), 19-29.
103. Han, J. and Ye, S.L. (2006). "A field study on behavior of an underpinned foundation by micropiles." *Canadian Geotechnical Journal*, 43(1), 30-42.
104. Hong, Z.S., Tateishi, Y., and Han, J. (2006). "Experimental study of macro and micro-behavior of natural diatomite." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 132(5), 603-610.
105. Giroud, J.P. and Han, J. (2006). "Closure to Design method for geogrid-reinforced unpaved roads. I. Development of design method." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 132(4), 549-551.
106. Huang, J., Han, J., and Collin, J. G. (2005). "Geogrid-reinforced pile-supported railway embankments - three dimensional numerical analysis." *Journal of Transportation Research Board*, 1936, 221-229.
107. Shen, S.L., Han, J., Zhu, H.-H., and Hong, Z.S. (2005). "Evaluation of a dike failure caused by pile driving in soft clay deposit." *Journal of Performance of Constructed Facilities*, ASCE, 19(4),

300-307.

108. Shen, S.L., Han, J., and Miura, N. (2004). "Laboratory evaluation of mixing energy consumption and its influence on soil-cement strength." *Journal of Transportation Research Board*, No. 1868, 23-30.
109. Giroud, J.P. and Han, J. (2004). "Design method for geogrid-reinforced unpaved roads – Part I: theoretical development." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 130(8), 776-786.
110. Giroud, J.P. and Han, J. (2004). "Design method for geogrid-reinforced unpaved roads – Part II: calibration and verification." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 130(8), 787-797.
111. Leshchinsky, D. and Han, J. (2004). "Geosynthetic reinforced multitiered walls." *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 130(12), 1225-1235.
112. Leshchinsky, D., Hu, Y.H., and Han, J. (2004). "Limited reinforced space in segmental retaining walls." *Geotextiles and Geomembranes*, 22(6), 543-553.
113. Han, J., Frost, J.D., and Brown, V. L. (2003). "Design of fiber-reinforced polymeric composite piles." *Journal of the Transportation Research Board*, 1849, 71-80.
114. Shen, S.L., Han, J., Huang, X.C., Du, S.J. (2003). "Laboratory studies on property changes in surrounding clays due to installation of deep mixing columns." *Marine Georesources and Geotechnology*, 21(1), 15-35.
115. Han, J., Zhou, H. T., and Ye, F. (2002). "State of practice review of deep soil mixing techniques in China." *Journal of the Transportation Research Board*, No. 1808, Soil Mechanics 2002, Transportation Research Board of the National Academies, 49-57.
116. Han, J. and Ye, S. L. (2002). "A theoretical solution for the rate of consolidation of a stone column reinforced foundation accounting for smear and well resistance." *International Journal of Geomechanics*, 2(2), 135-151.
117. Han, J. and Gabr, M.A. (2002). "Numerical analysis of geosynthetic-reinforced and pile-supported earth platforms over soft soil." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 128(1), 44-53.
118. Han, J. and Ye, S. L. (2001). "A simplified method for computing consolidation rate of stone column reinforced foundations." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 127(7), 597-603.
119. Han, J. and Frost, J. D. (2000). "Load-deflection response of transversely isotropic piles under lateral loads." *International Journal for Numerical and Analytical Methods in Geomechanics*, 24, 509-529.
120. Han, J. and Frost, J. D. (1999). "Buckling of vertically loaded fiber-reinforced polymer piles." *Journal of Reinforced Plastics and Composites*, 18(4), 290-318.
121. Frost, J. D. and Han, J. (1999). "Comparison of sand-FRP and sand-steel interface characteristics." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 125(8), 633-640.
122. Han, J. (1999). "Deformation and strength of geogrid-reinforced granular soil at plane strain conditions - Discussion." *Soils and Foundations*, 39(4), August, 152-153.
123. Han, J. and Frost, J. D. (1996). "Surficial stability of compacted clay: case study - Discussion." *Journal of Geotechnical Engineering*, ASCE, 122(3), March, 247-248.
124. Han, J. and Ye, S. L. (1995). "Site remediation technologies." *Journal of Soil Improvement*, 21, in Chinese.
125. Han, J. and Ye, S. L. (1994). "Applications of soil improvement techniques in geo-environment." *Journal of Construction Technologies*, 10, in Chinese.
126. Sun, L.C. and Han, J. (1994). "Influence factors and prediction of unconfined compressive strength of cement soil." *Journal of Soil Improvement*, 4, 31-37, in Chinese.
127. Han, J. and Ye, S. L. (1993). "Stress analysis of composite grounds." *Journal of Geotechnical Investigation*, 6, in Chinese.
128. Han, J., Ye, S. L., Zhang, D. S. (1993). "Measured stresses and pore water pressures in the stone column reinforced foundation under a building loading." *Journal of Geotechnical Engineering*,

- 15(5), in Chinese, 40-47.
129. Ye, S.L., Han, J., Ming, Q.X., and Gao, H.S. (1992). "Field tests of an oil tank founded on the stone column reinforced foundation." *Journal of Geotechnical Engineering*, 14(6), in Chinese, 50-59.
 130. Han, J. and Ye, S.L. (1992). "Analysis of the ground treated with stone columns using FEM." *Journal of Geotechnical Engineering*, 14(Supplement), in Chinese, 13-19.
 131. Han, J. and Ye, S.L. (1992). "Introduction to composite grounds." *Journal of Geotechnical Investigation and Surveying*, 6, in Chinese, 1-5.
 132. Han, J. and Yang, W.D. (1992). "Settlement analysis of vertically-extended buildings" *Journal of Soils and Foundations*, 1, in Chinese.
 133. Ye, S.L. and Han, J. (1992). "Recent development of underpinning techniques." *Journal of Site Investigation*, 4, in Chinese.
 134. Zhou, H.T. and Han, J. (1991). "Soil-pile interaction of micropiles." *Journal of Soil Improvement*, 1(3), in Chinese.
 135. Han, J. and Ye, S. L., and Zeng, Z. X. (1990). "Performance of stone column-reinforced foundations - a case study." *Journal of Geotechnical Investigation and Surveying*, 5, in Chinese, 1-6.
 136. Han, J. and Ye, S.L. (1989). "Analysis of stone column reinforcing mechanisms." *Journal of Harbor Engineering*, 6, in Chinese, 6-14.

Peer-Reviewed or Invited Conference Papers

1. Han, J. and Jiang, Y. (2015). "Evaluation of a simplified method to estimate consolidation rates of soft foundations improved by deep mixed columns." Paper submitted for International Conference on Deep Mixing, San Francisco, CA, June 2 to 5.
2. Kadhim, S., Parsons, R.L., and Han, J. (2015). "Stability analysis of embankments supported by geosynthetic encased stone columns." The International Foundations Congress and Equipment Expo 2015, San Antonio, Texas, March 17-21, in press.
3. Ismael, O.K. and Han, J. (2015). "Model tests of laterally loaded piles under a horizontally scoured condition." The International Foundations Congress and Equipment Expo 2015, San Antonio, Texas, March 17-21, in press.
4. Khatri, D.K., Han, J., Corey, R., and Parsons, R.L. (2014). "Geogrid protection of a steel reinforced high density polyethylene pipe subjected to a penetration load." Proceedings of the 10th International Conference on Geosynthetics, Berlin, Germany, 21 to 24 September.
5. Sun, X., Han, J., Wayne, M.H., Parsons, R.L., & Kwon, J. "Repetitive static plate load tests on triaxial geogrid-stabilized base courses over weak subgrade." Proceedings of the 10th International Conference on Geosynthetics, Berlin, Germany, 21 to 24 September.
6. Han, J. and Zhang, X. (2014). "Recent advances in the use of geosynthetics to enhance sustainability of roadways." Invited keynote lecture, Conference on Advances in Civil Engineering for Sustainable Development, Nakhon Ratchasima, Thailand, 27-29 August.
7. Zhang, Z., Han, J., and Ye, G.B. (2014). "Numerical analysis of failure modes of deep mixed column-supported embankments on soft soils." ASCE Geotechnical Special Publication - Ground Improvement and Geosynthetics, J. Han, A.J. Puppala, S.L. Shen, S. Oztoprak, and J. Huang (eds.), Proceedings of GeoShanghai International Conference 2014, Shanghai, China, May 26 to 28.
8. Zheng, G., Jiang, Y., and Han, J. (2014). "Consolidation of Soft Foundations Treated with Composite Columns." ASCE Geotechnical Special Publication - Ground Improvement and Geosynthetics, J. Han, A.J. Puppala, S.L. Shen, S. Oztoprak, and J. Huang (eds.), Proceedings of GeoShanghai International Conference 2014, Shanghai, China, May 26 to 28.
9. Guo, J., Han, J., Schrock, S.D., and Parsons, R.L. (2014). "Vegetation tests of geocell-reinforced unpaved shoulders." ASCE Geotechnical Special Publication - Ground Improvement and Geosynthetics, J. Han, A.J. Puppala, S.L. Shen, S. Oztoprak, and J. Huang (eds.), Proceedings of GeoShanghai International Conference 2014, Shanghai, China, May 26 to 28.

10. Sun, X.H., Han, J., Wayne, M.H., Parsons, R.L., and Kwon, J. (2014). "Experimental study on resilient behavior of triaxial geogrid-stabilized unpaved roads." ASCE Geotechnical Special Publication - Ground Improvement and Geosynthetics, J. Han, A.J. Puppala, S.L. Shen, S. Oztoprak, and J. Huang (eds.), Proceedings of GeoShanghai International Conference 2014, Shanghai, China, May 26 to 28.
11. Lin, C., Han, J., Bennett, C., and Parsons, R.L. (2014). "Case history analysis of bridge failures due to scour." International Symposium of Climatic Effects on Pavement and Geotechnical Infrastructure, ASCE, 204-216.
12. Thakur, J.K., Han, J., Parsons, R.L., and Guo, J. (2014). "Sustainable stabilization of recycled asphalt pavement (RAP) bases." GeoCongress 2014, Geotechnical Special Publication No. 234 and 235 GeoCharacterization and Modeling for Sustainability, A.J. Puppala, P. Bandini, T.C. Sheahan, M. Abu-Farsakh, X. Yu, and L.R. Hoyos (eds.), 2255-2262.
13. Sun, X., Han, J., Wayne, M.H., Parsons, R.L., and Kwon, J. (2014). "Quantifying the benefit of triaxial geogrid in stabilizing granular bases over soft subgrade under cyclic loading at different intensities." GeoCongress, 2014, Geotechnical Special Publication No. 234 and 235 GeoCharacterization and Modeling for Sustainability, A.J. Puppala, P. Bandini, T.C. Sheahan, M. Abu-Farsakh, X. Yu, and L.R. Hoyos (eds.), 2568-2577.
14. Rahman, AJ, Parsons, R.L., and Han, J. (2014). "Resistivity and hydraulic conductivity of fouled railroad ballast." GeoCongress, 2014, Geotechnical Special Publication No. 234 and 235 GeoCharacterization and Modeling for Sustainability, A.J. Puppala, P. Bandini, T.C. Sheahan, M. Abu-Farsakh, X. Yu, and L.R. Hoyos (eds.), 1406-1414.
15. Han, J., Thakur, J.K., Parsons, R.L., Pokharel, S.K., Leshchinsky, D., and Yang, X. (2013). "A summary of research on geocell-reinforced base courses." Ling, H.I., Gottardi, G., Cazzuffi, D., Han, J., and Tatsuoka, F. (editors) (2013). *Design and Practice of Geosynthetic-Reinforced Soil Structures*. Honoring Research Achievement of Professor Dov Leshchinsky, 14-16 October, 2013, Bologna, Italy.
16. Han, J. (2013). "Design of planar geosynthetic-improved unpaved and paved roads." *Pavement and Geotechnical Engineering for Transportation*, Geotechnical Practice Publication No. 8, Huang, B., Bowers, B.F., Mei, G.X., Luo, S.H., and Zhang, Z. (editors), 31-41.
17. Jiang, Y., Han, J., and Zheng, G. (2013). "Consolidation of column-reinforced soft foundations under embankments." *Stability and Performance of Slopes and Embankments III*, GSP231, Meehan, C.L., Pradel D., Pando, M.A., and Labuz, J.F. (editors), Proceedings of GeoCongress 2013, San Diego, CA, March 3 to 7, 1825-1828.
18. Zheng, G., Diao, Y., Li, S., and Han, J. (2013). "Stability failure modes of rigid pile-supported embankments and simplified analysis method." *Stability and Performance of Slopes and Embankments III*, GSP231, Meehan, C.L., Pradel D., Pando, M.A., and Labuz, J.F. (editors), Proceedings of GeoCongress 2013, San Diego, CA, March 3 to 7, 1821-1824.
19. Acharya, R., Han, J., Brennan, J.J., Parsons, R.L., and Khatri, D.K. (2013). "Structural response of a low-fill box culvert under static and traffic loading." Presentation at the TRB 92nd Annual Meeting, January 13 to 17, Washington, DC.
20. Han, J. (2012). "Recent advances in column technologies to improve soft soils." Invited keynote lecture, *Proceedings of International Conference on Ground Improvement and Ground Control*, B. Indraratna, C. Rujikiatkamjorn, and J. Vinod (eds.), Wollongong, Australia, 30 October to 2 November, Vol. 1, Research Publishing, 99-113.
21. Han, J., Jiang, J., and Parsons, R.L. (2012). "Geosynthetic reinforcement for railway and highway construction." *Theories and Technologies for High-speed Transportation Infrastructure*, R. Chen, X. Yu, and X. Bian (eds.), Zhejiang University Press, 19-32.
22. Han, J. and Thakur, J.K. (2012). "Use of geosynthetics to stabilize recycled aggregates in roadway construction." *Developing the Frontier of Sustainable Design, Engineering, and Construction*, W.K.O. Chong, J. Gong, J. Chang, and M.K. Siddiqui (eds.), International Conference on Sustainable Design, Engineering, and Construction 2012 (ICSDEC 2012), Fort Worth, Texas,

November 7-9, 473-480.

23. Han, J., Thakur, J.K., Corey, R., Christopher, B.R., Khatri, D., Acharya, B. (2012). "Assessment of QC/QA technologies for evaluating properties and performance of geosynthetics in roadway systems." GeoCongress 2012, Oakland, California, USA, March 25-29, *State of the Art and Practice in Geotechnical Engineering*, Geotechnical Special Publication No. 225, R.D. Hryciw, A. Athanasopoulos-Zekkos, and N. Yesiller (eds.), 1350-1359.
24. Thakur, J.K., Han, J., Pokharel, S.K., and Parsons, R.L. (2012). "A large test box study on geocell- reinforced recycled asphalt pavement (RAP) bases over weak subgrade under cyclic loading." GeoCongress 2012, Oakland, California, USA, March 25-29, *State of the Art and Practice in Geotechnical Engineering*, Geotechnical Special Publication No. 225, R.D. Hryciw, A. Athanasopoulos-Zekkos, and N. Yesiller (eds.), 1562-1571.
25. Lin, C., Han, J., Shen, S.L, and Hong, Z.S. (2012). "Numerical modeling of laterally loaded pile groups in soft clay improved by jet grouting." Proceedings of the 4th International Conference on Grouting and Deep Mixing, New Orleans, LA, February 15 to 18.
26. Shen, S.L., Xu, Y.S., Han, J., and Zhang, J.M. (2012). "A ten-year review on the development of soil mixing technologies in China." Proceedings of the 4th International Conference on Grouting and Deep Mixing, New Orleans, LA, February 15 to 18.
27. Khatri, D.K., Han, J., Parsons, R.L., Young, B., Brennan, J.J., and Corey, R. (2012). "Laboratory evaluation of deformations of steel-reinforced high-density polyethylene pipes under static loads." Presentation at the TRB 91st Annual Meeting, January 22 to 28, Washington, DC.
28. Thakur, J.K., Han, J., Pokharel, S.K., and Parsons, R.L. (2012). "Experimental evaluation of Recycled Asphalt Pavement (RAP) bases reinforced by geocells under cyclic plate loading." Presentation at the TRB 91st Annual Meeting, January 22 to 28, Washington, DC.
29. Han, J. (2011). "Design of planar geosynthetic-improved unpaved and paved roads." *Pavement and Geotechnical Engineering for Transportation*, Geotechnical Practice Publication No. 8, B. Huang, B.F. Bowers, G.X. Mei, S.H. Luo, and Z. Zhang (eds.), 31-41.
30. Shi, W. and Han, J. (2011). "Sustainable utilization and experimental study on wet fly ash by sea water." *Integrating Sustainability Practices in the Construction Industry*, Proceedings of the International Conference on Sustainable Design and Construction (ICSDC) 2011, 533-559.
31. Han, J. and Jiang, G. (2011). "Influence of inclined bedrock on undrained bearing capacity of shallow strip foundations." *Advances in Geotechnical Engineering*, Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Han, J. and Alzamora, D.E. (editors), Dallas, TX, March 13 to 16, 322-331.
32. Thakur, J.K., Han, J., Leshchinsky, D., Halahmi, I., and Parsons, R.L. (2011). "Creep deformation of unreinforced and geocell-reinforced recycled asphalt pavements." *Advances in Geotechnical Engineering*, Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Han, J. and Alzamora, D.E. (editors), Dallas, TX, March 13 to 16, 4723-4732.
33. Pierson, M.C., Parsons, R.L. Han, J., Brennan, J.J. (2011). "Influence of geogrid stiffness values on shaft group lateral capacities and deflections behind an MSE wall." *Advances in Geotechnical Engineering*, Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Han, J. and Alzamora, D.E. (editors), Dallas, TX, March 13 to 16, 3756-3765.
34. Corey, R. and Han, J. (2011). "Numerical analysis of soil stress distribution under restrained and eccentrically loaded footings considering soil strength." *Advances in Geotechnical Engineering*, Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Han, J. and Alzamora, D.E. (editors), Dallas, TX, March 13 to 16, 303-311.
35. Thakur, S.C., Han, J., Chong, W.K., and Parsons, R.L. (2011). "Comparison of physical and consensus properties of RAP aggregate extracted by ignition and centrifuge methods." *Advances in Geotechnical Engineering*, Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Han, J. and Alzamora, D.E. (editors), Dallas, TX, March 13 to 16, 4525-4534.
36. Qian, Y., Han, J., Pokharel, S.K., and Parsons, R.L. (2011). "Determination of resilient modulus of subgrade using a cyclic plate loading test." *Advances in Geotechnical Engineering*,

- Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Han, J. and Alzamora, D.E. (editors), Dallas, TX, March 13 to 16, 4743-4751.
37. Yang, X., Han, J., Pokharel, S.K., Manandhar, C., Parsons, R.L., Leshchinsky, D., and Halahmi, I. (2010). "Accelerated pavement testing of unpaved roads with geocell-reinforced sand bases." Presentation at Annual Transportation Research Board Meeting.
 38. Han, J. and Bhandari, A. (2010). "The influence of geogrid aperture size on the behavior of reinforced granular bases." Proceedings, International Symposium on Geomechanics and Geotechnics: From Micro to Macro, Oct. 10-12, Shanghai, China, Jiang, M., Liu, F., and Bolton, M. (eds.), 683-687.
 39. Lin, C., Bennett, C., Han, J., and Parsons, R.L. (2010). "p-y based approach for buckling analysis of axially loaded piles under scoured conditions." *Proceedings of SEI 2010 Structures Congress*, Orlando, FL.
 40. Han, J., Pokharel, S.K., and Parsons, R.L., Leshchinsky, D., and Halahmi, I. (2010). "Effect of infill material on the performance of geocell-reinforced bases." *Geosynthetics for A Challenging World*, E.M. Palmeira, D.M., Vidal, A.S.J.F. Sayao, and M. Ehrlich (eds.), *Proceedings of the 9th International Conference on Geosynthetics*, Brazil, May 23-27, 2010, 1503-1506.
 41. Dong, Y.L., Han, J., Qian, Y., and Bai, X.H. (2010). "Behavior of triaxial geogrid-reinforced bases under static loading." *Geosynthetics for A Challenging World*, E.M. Palmeira, D.M., Vidal, A.S.J.F. Sayao, and M. Ehrlich (eds.), *Proceedings of the 9th International Conference on Geosynthetics*, Brazil, May 23-27, 2010, 1547-1550.
 42. Jeon, H.Y., Yuu, J.J., and Han, J. (2010). "Objectification suggestion for installation damage evaluation of geosynthetics." *Geosynthetics for A Challenging World*, E.M. Palmeira, D.M., Vidal, A.S.J.F. Sayao, and M. Ehrlich (eds.), *Proceedings of the 9th International Conference on Geosynthetics*, Brazil, May 23-27, 2010, 833-837.
 43. Han, J. (2010). "Consolidation settlement of stone column-reinforced foundations in soft soils." Invited, *New Technologies on Soft Soils, Proceedings of Symposium on New Techniques for Design and Construction on Soft Clays*, M. Almeida (ed.), Brazil, May 22-23, 167-179.
 44. Huang, J., Han, J., and Zheng, J.J. (2010). "3D parametric study of geosynthetic-reinforced column-supported embankments based on coupled hydraulic and mechanical modeling." *Ground Improvement and Geosynthetics*, Geotechnical Special Publication No. 207, A.J. Puppala, J. Huang, J. Han, and L.R. Hoyos (eds.), Proceedings of the GeoShanghai International Conference 2010, June 3 to 5, Shanghai, China, 318-327.
 45. Dong, Y.-L., Han, J., and Bai, X.-H. (2010). "Bearing capacities of geogrid-reinforced sand bases under static loading." *Ground Improvement and Geosynthetics*, Geotechnical Special Publication No. 207, A.J. Puppala, J. Huang, J. Han, and L.R. Hoyos (eds.), Proceedings of the GeoShanghai International Conference 2010, June 3 to 5, Shanghai, China, 275-281.
 46. Lin, C., Bennett, C.R., Parsons, R.L., and Han, J. (2010). "Analysis of bridge response considering water-soil-pile-structure interaction under a scoured condition." *Proceedings of the GeoShanghai International Conference 2010*, June 3 to 5, Shanghai, China.
 47. Huang, X.-Z., Han, J., Yan, F.X., and Fan, J.Z. (2010). "Stability analysis of geosynthetic-reinforced cushion foundations." *Ground Improvement and Geosynthetics*, Proceedings of the GeoShanghai International Conference 2010, June 3 to 5, Shanghai, China, 287-294.
 48. Thakur, S.C., Han, J., Chong, W.K., and Parsons, R.L. (2010). "Laboratory evaluation of physical and mechanical properties of recycled asphalt pavement as a base course material." *Proceedings of the GeoShanghai International Conference 2010*, June 3 to 5, Shanghai, China.
 49. Lin, C., Han, J., Bennett, C., and Parsons, R.L. (2010). "Effects of scour on sand resistance to laterally loaded piles considering stress history." Poster presentation at the TRB 89th Annual Meeting, January 10 to 14, Washington, DC.
 50. Han, J. and Lin, C. (2010). "A feasibility study on reducing flowability of vacuum tower bottoms using aggregate." *Proceedings of ASCE Geo-Institute GeoFlorida 2010*, West Palm Beach,

- Florida, February 20 to 24.
51. Corey, R. and Han, J. (2010). "Analysis of structurally restrained eccentrically loaded footings." *Proceedings of ASCE Geo-Institute GeoFlorida 2010*, West Palm Beach, Florida, February 20 to 24.
 52. Dong, Y.-L., Han, J., and Bai, X.-H. (2010). "A numerical study on stress-strain responses of biaxial geogrids under tension at different directions." *Proceedings of ASCE Geo-Institute GeoFlorida 2010*, West Palm Beach, Florida, February 20 to 24, *Advances in Analysis, Modeling & Design*, Geotechnical Special Publication No. 199, 2551-2560.
 53. Qian, Y., Han, J., Pokharel, S.K., and Parsons, R.L. (2010). "Experimental study on triaxial geogrid-reinforced bases over weak subgrade under cyclic loading." *Proceedings of ASCE Geo-Institute GeoFlorida 2010*, West Palm Beach, Florida, February 20 to 24.
 54. Han, J., Bhandari, A., and Parsons, R.L. (2009). "Influence of base course gradation on response of granular bases under cyclic loading: a micromechanical study." *Proceedings of the 17th International Conference on Soil Mechanics and Geotechnical Engineering*, Alexandria, Egypt 5-9 October 2009, 893-896.
 55. Bhandari, A., Han, J., and Wang, F. (2009). "Micromechanical analysis of soil arching in geosynthetic-reinforced pile-supported embankments." *ASCE Geotechnical Special Publication No. 189, Characterization, Modeling, and Performance of Geomaterials*, Zhang, Yu, Fu, and Zhang (eds.), GeoHunan International Conference on Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics, Hunan, China, Hunan, August 3-6, 47-52.
 56. Chen, J.F., Yu, S.B., and Han, J. (2009). "Numerical modeling of a reinforced embankment based on centrifuge test." *ASCE Geotechnical Special Publication No. 189, Characterization, Modeling, and Performance of Geomaterials*, Zhang, Yu, Fu, and Zhang (eds.), GeoHunan International Conference on Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics, Hunan, China, Hunan, August 3-6, 69-76.
 57. Bennett, C.R., Lin, C., Parsons, R.L., and Han, J. (2009). "Evaluation of behavior of a laterally loaded bridge pile group under scour conditions." *Proceedings of SEI 2009 Structures Congress*, Texas, April 29-May 2, 2009, 290-299.
 58. Pokharel, S.K., Han, J., Parsons, R.L., Qian, Y., Leshchinsky, D., and Halahmi, I. (2009). "Experimental study on bearing capacity of geocell-reinforced bases." *Proceedings of the 8th International Conference on the Bearing Capacity of Roads, Railways, and Airfields*, Champaign, Illinois, June 29 to July 2, *Bearing Capacity of Roads, Railways and Airfields*, Vol. 2, E. Tutumluer and I.L. Al-Qadi (eds.), 1159-1166.
 59. Han, J., Yang, X.M., Chen, J.F., and Porbaha, A. (2009). "Settlement calculation of deep mixed foundations." *Proceedings of International Symposium on Deep Mixing & Admixture Stabilization*, Okinawa, Japan, May 19-21.
 60. Lu, X., Filz, G., and Han, J. (2009). "Dynamic compaction of fill in a mountainous area." *Advances in Ground Improvement*, Geotechnical Special Publication No. 188, J. Han, G. Zheng, V.R. Schaefer, M.S. Huang (eds.), *Proceedings of the US-China Workshop on Ground Improvement Technologies*, March 14, Orlando, Florida, 281-289.
 61. Han, J. and Bhandari, A. (2009). "Evaluation of geogrid-reinforced pile-supported embankments under cyclic loading using discrete element method." *Advances in Ground Improvement*, Geotechnical Special Publication No. 188, J. Han, G. Zheng, V.R. Schaefer, M.S. Huang (eds.), *Proceedings of the US-China Workshop on Ground Improvement Technologies*, March 14, Orlando, Florida, 73-82.
 62. Huang, J. and Han, J. (2009). "Approaches for 2D coupled modeling of column-supported embankments." *Advances in Ground Improvement*, Geotechnical Special Publication No. 188, J. Han, G. Zheng, V.R. Schaefer, M.S. Huang (eds.), *Proceedings of the US-China Workshop on Ground Improvement Technologies*, March 14, Orlando, Florida, 36-45.
 63. Bhandari, A. and Han, J. (2009). "DEM study of a shallow foundation under vertical

- loading.” *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support*, Geotechnical Special Publication No. 187, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 465-472.
64. Lin, C., Zhu, W., and Han, J. (2009). “Geotechnical properties of solidified sludge by mixing cement and calcium-bentonite.” *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support*, Geotechnical Special Publication No. 187, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 281-288.
 65. Ye, F., Jia, X.-Y., Zhu, T.-T., and Han, J. (2009). “Laboratory study on recycled building waste materials for road construction.” *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support*, Geotechnical Special Publication No. 187, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 417-424.
 66. Liang, F.-Y., Bennett, C.R., Parsons, R.L., Han, J., and Lin, C. (2009). “A literature review on behavior of scoured piles under bridges.” *Contemporary Topics in In Situ Testing, Analysis, and Reliability of Foundations*, Geotechnical Special Publication No. 186, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), Geotechnical Special Publication No. 186, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 482-489.
 67. Parsons, R. L., Pierson, M., Han, J., and Brennan, J.J., and Brown, D.A. (2009). “Lateral load capacity of cast-in-place shafts behind an MSE wall.” *Contemporary Topics in In Situ Testing, Analysis, and Reliability of Foundations*, Geotechnical Special Publication No. 186, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 560-567.
 68. Pierson, M., Parsons, R. L., Han, J., Brennan, J.J., and Vulova, C. (2009). “Instrumentation of an MSE wall containing laterally loaded drilled shafts.” *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support*, Geotechnical Special Publication No. 187, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 353-360.
 69. Pokharel, S.K., Han, J., Leshchinsky, D., Parsons, R.L., and Halahmi, I. (2009). “Behavior of geocell- reinforced granular bases under static and repeated loads.” *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support*, Geotechnical Special Publication No. 187, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 409-416.
 70. Han, J., Yang, X.M., Parsons, R.L., and Henthorne, R. (2009). “Side resistance factor for serviceability-based design of drilled shafts in weak rock calibrated using O-cell test data.” *Contemporary Topics in In Situ Testing, Analysis, and Reliability of Foundations*, Geotechnical Special Publication No. 186, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 292-299.
 71. Chen, L., Liu, S.Y., Han, J., and Zhang, D.W. (2009). “Numerical analysis of consolidation of soft ground improved by the DJM-PVD combined method.” *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support*, Geotechnical Special Publication No. 187, M. Iskander, D.F. Laefer, and M.H. Hussein (eds.), International Foundation Congress & Equipment Expo 2009 - IFCEE '09, March 15-19, Orlando, Florida, 321-328.
 72. Parsons, R.L., Pierson, M.C., Han, J., Vulova, C., and Brennan, J.J. (2009). “Longer term monitoring of strains in MSE wall.” *Proceedings of Geosynthetics' 2009*, Salt Lake City, February 25-27, 300-307.
 73. Bhandari, A., Han, J., and Parsons, R.L. (2009). “Discrete element method investigation of geogrid- aggregate interaction under a cyclic wheel load.” Poster presentation and CD publication

- at the TRB 88th Annual Meeting, January 11 to 15, Washington, DC.
74. Bhandari, A. and Han, J. (2009). "Evaluation of high-capacity composite spun piles." Oral presentation and CD publication at the TRB 88th Annual Meeting, January 11 to 15, Washington, DC.
 75. Pokharel, S.K., Han, J., Leshchinsky, D., Parsons, R.L., and Halahmi, I. (2009). "Experimental evaluation of influence factors for single geocell-reinforced sand." Oral presentation and CD publication at the TRB 88th Annual Meeting, January 11 to 15, Washington, DC.
 76. Pierson, M.C., Parsons, R.L., Han, J., and Brennan, J.J. (2009). "Load-deflection responses of laterally loaded shafts in an MSE wall." Poster presentation and CD publication at the TRB 88th Annual Meeting, January 11 to 15, Washington, DC.
 77. Han, J., Wang, F., and Miao, L.C. (2008). "Numerical analysis of embankments supported by geosynthetics over drilled shafts in karst terrains." *11th Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst: Integrating Science and Engineering to Solve Karst Problems*, 22-26 September, Tallahassee, FL, 535-544.
 78. Bhandari, A., Han, J., and Parsons, R.L. (2008). "DEM analysis of geotextile-soil interaction under wheel loading." *Proceedings of Research Symposium on Characterization and Behavior of Interfaces*, J.D. Frost (ed.), Atlanta, GA, September 21, 2008.
 79. Zhang, Y.Z., Han, J., and Parsons, R.L. (2008). "Experimental study of deformation effect on geosynthetic-soil interaction." *Proceedings of the 4th International Symposium - Deformation Characteristics of Geomaterials*, Burns, Mayne, and Santamarina (eds.), 22-24 September, Atlanta, GA, 643-647.
 80. Han, J., Yang, X.M., Leshchinsky, D., Parsons, R.L., and Rosen, A. (2008). "Numerical analysis for mechanisms of a geocell-reinforced base under a vertical load." *Proceedings of the 4th Asian Regional Conference on Geosynthetics*, June 17-20, Shanghai, China, 741-746.
 81. Han, J., Chen, J.F., and Hong, Z.S. (2008). "Geosynthetic reinforcement for riverside slope stability of levees due to rapid drawdown." *Geotechnical Engineering for Disaster Mitigation and Rehabilitation, Proceedings of the 2nd International Conference on Geotechnical Engineering for Disaster Mitigation & Rehabilitation (GEDMAR08)*, Liu, Deng & Chu (eds), May 30 to June 2, Nanjing, China, 153-158.
 82. Han, J., Zhang, Y.Z., and Parsons, R.L. (2008). "Development of a performance-based laboratory test method for evaluating geosynthetic-soil confinement." *Poster presentation and CD publication at the TRB 87th Annual Meeting*, January 13 to 17, Washington, DC.
 83. Han, J., Yang, X.M., Leshchinsky, D., and Parsons, R.L. (2008). "Behavior of geocell-reinforced sand under a vertical load." *Presentation and CD publication at the TRB 87th Annual Meeting*, January 13 to 17, Washington, DC.
 84. Yang, X.M., Han, J., and Parsons, R.L. (2008). "Resistance factors for drilled shafts in weak rocks based on O-cell test data." *Presentation and CD publication at the TRB 87th Annual Meeting*, January 13 to 17, Washington, DC.
 85. Yang, X.M., Han, J., Parsons, R.L., and Henthorne, R. (2008). "Statistical analysis of O-Cell test data for nominal load capacities of drilled shafts." *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, 90-97.
 86. Huang, J. and Han, J. (2008). "Critical height of deep mixed column-supported embankment under an undrained condition." *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, 638-645.
 87. Han, J., Hong, Z.S., and Shen, S.L. (2008). "Stability of levees over soft soil improved by deep mixing technology." *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, 716-723.
 88. Zhou, J., Han, J., and Jia, M.C. (2008). "Laboratory model study on densification of

- hydraulically- filled fine sands by vibro-compaction.” *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, 700-707.
89. Shen, S.L., Han, J., and Hong, Z.S. (2008). “An approach to estimate the optimum depth of floating type column for embankment stability.” *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, 678-685.
 90. Ye, F., Jia, X.Y., and Han, J. (2008). “Evaluation of surface infiltration rate of permeable sidewalks under rainfall.” *GeoCongress 2008: Geosustainability and Geohazard Mitigation*, ASCE, 546-553.
 91. Huang, J., Han, J., and Parsons, R.L. (2008). “Two-dimensional parametric study on geosynthetic- reinforced column-supported embankments over soft soil.” *Proceedings of the First Pan American Geosynthetics Conference & Exhibition*, 2-5 March, Cancun, Mexico, 1275-1284.
 92. Yuu, J., Han, J., Rosen, Arik R., Parsons, R.L., and Leshchinsky, D. (2008). “Technical review of geocell-reinforced base courses over weak subgrade.” *Proceedings of the First Pan American Geosynthetics Conference & Exhibition*, 2-5 March, Cancun, Mexico, 1022-1030.
 93. Li, Y., Zhu, W.S., Zhang, Q.Y., Wang, H.P., Wang, W.T., and Han, J. (2008). “Development of a new type of steel structure rack apparatus for 3D geomechanical model tests and structural integrity assessment.” *Proceedings of the International Young Scholars' Symposium on Rock Mechanics - Boundaries of Rock Mechanics Recent Advances and Challenges for the 21st Century*, 907-911.
 94. Han, J. and Leshchinsky, D. (2007). “Stability analysis of back-to-back MSE walls.” *Proceedings of the 5th International Symposium on Earth Reinforcement (IS Kyushu'07)*, November 14-16, Fukuoka, Japan, 487-490.
 95. Leshchinsky, D. and Han, J. (2007). “Analytical framework for geosynthetic reinforced earth structures: Part I – Ideal approach.” *Proceedings of GeoDenver 2007*.
 96. Leshchinsky, D. and Han, J. (2007). “Analytical framework for geosynthetic reinforced earth structures: Part II – Practical approach.” *Proceedings of GeoDenver 2007*.
 97. Han, J. and Huang, J. (2007). “Validation of constitutive models for geosynthetic-reinforced column- supported embankments.” *Proceedings of the International Workshop on Constitutive Modelling – Development, Implementation, Evaluation, and Application*, Hong Kong, China, January 12 to 13.
 98. Han, J., Huang, J., Liu, S.Y., and Hong, Z.S. (2006). “Stresses and deformations induced by widening of existing embankments.” *Proceedings of the International Symposium of Lowland Technology*, Saga University, Japan, September 14-16, 201-205.
 99. Huang, J., Han, J., and J.G. Collin (2006). “Serviceability analysis of geomembrane in geosynthetic- reinforced column-supported platforms.” *Advances in Earth Structures: Research to Practice, ASCE Geotechnical Special Publication No. 151, Proceedings of the GeoShanghai International Conference 2006*, edited by Han, Yin, White, and Lin, Shanghai, China, June 6 to 8, 211-216.
 100. Ai, Z.Y. and Han, J. (2006). “A solution to plane strain consolidation of multi-layered soils.” *Soil and Rock Behavior and Modeling, ASCE Geotechnical Special Publication, Proceedings of the GeoShanghai International Conference 2006*, edited by Luna, Hong, Ma, and Huang, Shanghai, China, June 6 to 8, 176-183.
 101. Yan, L., Yang, J.S., and Han, J. (2006). “Parametric study of geosynthetic-reinforced pile-supported embankments.” *Advances in Earth Structures: Research to Practice, ASCE Geotechnical Special Publication No. 151, Proceedings of the GeoShanghai International Conference 2006*, edited by Han, Yin, White, and Lin, Shanghai, China, June 6 to 8, 255-261.
 102. Huang, J., Han, J., and Porbaha, A. (2006). “Two and three-dimensional modeling of deep mixed columns under embankments.” *Proceedings, the ASCE GeoCongress 2006*, Atlanta, GA, Feb. 27 to March 1.
 103. Madhyannapu, R.S., Puppala, A.J., Hossain, S., Han, J., and Porbaha, A. (2006). “Analysis of

- geotextile reinforced embankment over deep mixed soil columns using numerical and analytical tools.” Proceedings, the ASCE GeoCongress 2006, Atlanta, GA, Feb. 27 to March 1.
104. Han, J. and Leshchinsky, D. (2006). “Stability analyses of geosynthetic-reinforced earth structures using limit equilibrium and numerical methods.” Proceedings of the 8th International Geosynthetics Conference, 18-22 September, Yokohama, Japan, 1347-1350.
 105. Huang, J., Han, J., and Collin, J.G. (2006). “Deformations of geosynthetic-reinforced column-supported embankments.” *Proceedings of the 8th International Geosynthetics Conference*, 18-22 September, Yokohama, Japan.
 106. Collin, J.G., Han, J., and Huang, J. (2005). “Geosynthetic-reinforced column-support embankment design guidelines.” Proceedings, the North America Geosynthetics Society Conference.
 107. Han, J. and Collin, J.G. (2005). “Geosynthetic support systems over pile foundations.” *Proceedings of the 18th Geosynthetic Research Institute (GRI) Conference*, Austin, TX, Jan. 24-26.
 108. Huang, J., Collin, J.G., Han, J. (2005). “3D numerical modeling for a geosynthetic-reinforced pile-supported embankment –displacement analysis.” *Proceedings of the 16th International Conference on Soil Mechanics and Geotechnical Engineering*, Osaka, Japan, Sept. 12-16, 913-916.
 109. Collin, J.G., Watson, C.H., and Han, J. (2005). “Column-supported embankment solves time constraint for new road construction.” *ASCE Geotechnical Special Publication (GSP) No. 131: Contemporary Issues in Foundation Engineering*, ASCE GeoFrontiers, Austin, TX, Jan. 24-26.
 110. Han, J., Huang, J., and Porbaha, A. (2005). “2D numerical modeling of a constructed geosynthetic-reinforced embankment over deep mixed columns.” *ASCE Geotechnical Special Publication (GSP) No. 131: Contemporary Issues in Foundation Engineering*, ASCE GeoFrontiers, Austin, TX, Jan. 24-26.
 111. Ai, Z.Y., Han, J., and Yan, Y. (2005). “Elastic analysis of single pile-rigid circular raft systems in layered soils.” *ASCE Geotechnical Special Publication (GSP) No. 132: Advances in Deep Foundations*, ASCE GeoFrontiers, Austin, TX, Jan. 24-26.
 112. Gabr, M. and Han, J. (2005). “Geosynthetic reinforcement for soft foundations: US perspectives.” Invited paper, *ASCE Geotechnical Special Publication (GSP) No. 141: International Perspectives on soil reinforcement applications*, ASCE GeoFrontiers, Austin, TX, Jan. 24-26.
 113. Shen, S.L., Han, J., and Hong, Z.S. (2005).” Installation effects on properties of surrounding soils by different deep mixing methods.” *ASCE Geotechnical Special Publication (GSP) No. 136: Innovations in Grouting and Soil Improvement*, ASCE GeoFrontiers, Austin, TX, Jan. 24-26.
 114. Han, J., Parsons, R.J., Sheth, A.R., and Huang, J. (2005). “Factors of safety against deep-seated failure of embankments over deep mixed columns.” Deep Mixing 2005 Conference, Sweden, Vol. 1.2, May 23-25, 2005, 231-236.
 115. Han, J., Collin, J.G., and Huang, J. (2004). “Recent development of geosynthetic-reinforced column-supported embankments.” The 55th Highway Geology Symposium, Kansas City, Missouri, September 7-10, 299-321.
 116. Han, J. and Leshchinsky, D. (2004). “Limit equilibrium and continuum mechanics-based numerical methods for analyzing stability of MSE walls.” Proceedings of the 17th Engineering Mechanics Conference, ASCE, University of Delaware, Newark, Delaware, USA, June 13-16.
 117. Han, J., Sheth, A.R., Porbaha, A., and Shen, S.L. (2004). “Numerical analysis of embankment stability over deep mixed foundations.” *ASCE Geotechnical Special Publication No. 126: Geotechnical Engineering for Transportation Projects*, GeoTrans 2004, ASCE, Los Angeles, California, USA, July 26-31, 1385-1394.
 118. Han, J., Chai, J.C., Leshchinsky, D., and Shen, S.L. (2004). “Evaluation of deep-seated slope stability of embankments over deep mixed foundations.” *Geotechnical Special Publication No. 124*, J.P. Turner and P.W. Mayne (eds), GeoSupport 2004, ASCE Geo-Institute and ADSC, Jan. 29-31, Orlando, 945-954.
 119. Shen, S.L., Han, J., and Miura, N. (2004). “Laboratory evaluation of mixing energy consumption and its influence on soil-cement strength.” Presentation at 83rd Transportation Research Board Annual

Meeting.

120. Leshchinsky, D. and Hu, Y.H., and Han, J. (2003). "Design implications of limited reinforced zone space in SRW's." GRI-17 Conference, Las Vegas, Nevada, USA, Dec. 15-16, 292-303.
121. Han, J., Shen, S.L., Yang, J.S, and Yan, L. (2003). "Geosynthetic-reinforced and pile-supported embankments." *Proceedings of the 1st World Forum of Chinese Scholars in Geotechnical Engineering*, Tongji University, August, 309-318.
122. Shen, S.L., Miura, N., Han, J., and Koga, H. (2003). "Evaluation of Property Changes in Surrounding Clays due to Installation of Deep Mixing Columns." *Proceedings of the Third International Conference on Grouting and Ground Treatment*, New Orleans, ASCE Geotechnical Special Publication No. 120, edited by L.F. Johnsen, D.A., Bruce, and M.J. Byle, 634-645.
123. Han, J. and Akins, K. (2002). "Case studies of geogrid-reinforced and pile-supported earth structures on weak foundation soils." *Proc. of International Deep Foundation Congress*, Geotechnical Special Publication No. 116 – *Deep Foundations 2002*, edited by O'Neill and Townsend, ASCE, Orlando, 668-679.
124. Han, J., Leshchinsky, D., and Shao, Y. (2002). "Influence of tensile stiffness of geosynthetic reinforcements on performance of reinforced slopes." *Proceedings of Sixth International Conference on Geosynthetics*, Nice, France, A.A. Balkema Publishers, Vol. 1, 197-200.
125. Han, J. and Wayne, M.H. (2000). "Pile-soil-geosynthetic interactions in geosynthetic reinforced/piled embankments over soft soil." Presentation and CD-Rom Paper at 79th Annual TRB meeting.
126. Alzamora, D. E., Wayne, M. H., and Han, J. (2000). "Performance of SRW supported by geogrids and jet grout columns." *Performance Confirmation of Constructed Geotechnical Facilities*, ASCE Geotechnical Special Publication No. 94, edited by A.J. Lutenegeger and D.J. DeGroot, 456-466.
127. Han, J. (1999). "Design and construction of embankments on geosynthetic reinforced platforms supported by piles." Invited Speaker, ASCE/PaDOT Geotechnical Seminar, Hershey, PA, Apr. 14-16.
128. Wayne, M. H., Han, J., and Akins, K. (1998). "The design of geosynthetic reinforced foundations." *Design and Construction of Retaining Systems, ASCE Geo-Institute Geotechnical Special Publication*, No. 76, edited by John J. Bowders et al., 1-18.
129. Han, J. (1998). "Ground modification by a combination of dynamic compaction, dynamic consolidation, and dynamic replacement." *Proceedings of Fourth International Conference on Case Histories in Geotechnical Engineering*, March 8-15.
130. Han, J. (1998). "Stress and strain fields of a geosynthetic reinforced foundation vertically loaded by a concentrated force." *Proc. of Sixth International Conference on Geosynthetics*, 25-29 March, Atlanta.
131. Han, J. (1997). "A strain-softening constitutive law for smooth geomembrane/sand interfaces." *Proceeding of Geosynthetics' 97*, Finalist for the student paper competition, Long Beach, California.
132. Dove, J. E., Frost, J. D., Han, J. and Bachus, R. C. (1997). "The influence of geomembrane surface roughness on interface strength." *Proceedings of Geosynthetics' 97*, Long Beach, California.
133. Han, J. and Frost, J. D. (1997). "Stress-dependent friction coefficients for sliding particle interfaces", *Proceedings of Ninth International Conference of the International Association for Computer Methods and Advances in Geomechanics*, China, Nov. 2-7, 1997.
134. Ye, S. L., Han, J., Zhang, J, and Yang, W.D. (1994). "Loading tests of underpinned foundation by micropiles." *Proc. of 7th Chinese Conference on Soil Mechanics and Foundation Engineering*, Xian, China, in Chinese.
135. Zhang, J., Han, J., and Ye, S. L. (1994). "Consolidation characteristics of soil-cement mixing piles in clays." *Proc. of 7th Chinese Conf. on Soil Mechanics and Foundation Engineering*, Xian, China, in Chinese.
136. Han, J. and Ye, S.L. (1993). "Field study of an oil tank on the ground stabilized by stone columns." *Proc. of 3rd International Conf. on Case Histories in Geotechnical Engineering*, St. Louis, Missouri.
137. Zhang, J., Han, J., and Ye, S.L. (1993). "Theoretical analysis of pore water pressure distribution in

- the composite ground by soil-cement mixing piles.” *Proc. of Symposium on Design and Construction of Deep Mixing Method*, Hangzhou, China, in Chinese.
138. Ye, S.L., Cai, W.M., and Han, J. (1992). “Soil improvement by deep mixing piles and stone columns.” Proceedings, U.S.-China Workshop on Cooperative Research in Geotechnical Engineering, sponsored by National Science Foundation/USA and National Natural Science Foundation/PRC, Shanghai, 57-73.
 139. Han, J. (1992). “Stone column techniques - general report.” Invited speaker, *Proc. of 3rd Chinese Soil Improvement Conference*, Qengwangdao, China, in Chinese.
 140. Ye, S. L. and Han, J. (1992). “Underpinning - general report.” Invited Speakers, *Proc. of 3rd Chinese Soil Improvement Conference*, Qengwangdao, China, in Chinese.
 141. Han, J. and Ye, S. L. (1992). “Consolidation degree of a composite ground by stone columns with well resistance and smear effects.” *Proc. of 3rd Chinese Soil Improvement Conference*, Qengwangdao, China, in Chinese.
 142. Han, J. and Ye, S. L. (1992). “Theory and practice of composite grounds.” Published in the book *Theory and Practice of Soft Soils*, the Chinese Building Industry Press, in Chinese.
 143. Han, J. and Ye, S. L. (1992). “Settlement analysis of buildings on the soft clays stabilized by stone columns.” *Proc. of International Conf. on Soil Improvement and Pile Foundations*, Nanjing, China.
 144. Han, J. and Ye, S. L. (1991). “Analysis of characteristics to composite grounds.” *Proc. of First Young Asian Geotechnical Engineers Conference*, Thailand, 197-206.
 145. Han, J. and Ye, S. L. (1991). “Field tests on clays stabilized by stone columns at coastal areas in China.” *Proc. of 4th International Conference on Piling and Deep Foundations*, Stresa, Italy.
 146. Han, J. and Ye, S. L. (1990). “Consolidation degree of the composite ground by ideal stone columns.” *Proc. of Symposium on Composite Grounds*, Chengde, China, in Chinese.

Magazine Articles

1. Han, J. and J.P. Giroud (2012). “The Giroud-Han design method for geosynthetic-reinforced unpaved roads. Part II Recommendations for the proper use of the method.” *Geosynthetics*, 30(2), 12-19.
2. Giroud, J.P. and Han, J. (2011). “The Giroud-Han design method for geosynthetic-reinforced unpaved roads. Part I. The method development and its calibration.” *Geosynthetics*, 30(1), 40-49.
3. Han, J., Pokharel, S.K., Yang, X., and Thakur, J.K. (2011). “Tough cell: geosynthetic reinforcement shows strong promise.” *Roads & Bridges*, July Issue, 40-43.
4. Han, J., Parsons, R.L., Pierson, M.C., and Brennan, J.J. (2010). “MSE walls supported laterally loaded drilled shafts.” *Geosynthetics*, June-July Issue, 43-49.
5. Wayne, M. and Han, J. (1998). “On-site soil usage with geogrid-reinforced SRWs.” *Geotechnical Fabrics Report*, 16(3), 20-22.

Books and Chapters

1. Han, J. (2015). *Principles and Practice of Ground Improvement*, Wiley, in press.
2. Han, J., Puppala, A.J., Shen, S.L., Oztoprak, S., and Huang, J. (editors) (2014). *Ground Improvement and Geosynthetics*, ASCE Geotechnical Special Publication.
3. Ling, H.I., Gottardi, G., Cazzuffi, D., Han, J., and Tatsuoka, F. (editors) (2013). *Design and Practice of Geosynthetic-Reinforced Soil Structures*. Honoring Research Achievement of Professor Dov Leshchinsky, 14-16 October, 2013, Bologna, Italy.
4. Han, J. and Alzamora, D.E. (editors) (2011). *Advances in Geotechnical Engineering*, Geotechnical Special Publication No. 211, Proceedings of GeoFrontiers 2011, Dallas, TX, March 13 to 16, 4,862p.
5. Puppala, A., Huang, J., Han, J., and Hoyos, L.R. (editors) (2010). *Ground Improvement and Geosynthetics*, ASCE Geotechnical Special Publication No. 207, 380p.

6. Han, J., Zheng, G., Schaefer, R.V., and Huang, M.S. (editors) (2009). *Advances in Ground Improvement: Research to Practice in the United States and China*, ASCE Geotechnical Special Publication No. 188, 322p.
7. Han, J., Yin, J.H., White, D.J., and G. Lin (editors) (2006). *Advances in Earth Structures: Research to Practice*. ASCE Geotechnical Special Publication No. 151, 376p.
8. Ye, S.L. and Han, J. et al. (1996). *Shanghai Soil Improvement Design and Construction Code*. The Shanghai Engineering Construction Standard Office, in Chinese.
9. Ye, S.L., Han, J., and Ye, G.B. (1995). *Soil Improvement and Underpinning*. The Chinese Building Industry Press, 2nd Edition, in Chinese.
10. Han, J. and Xu, B.S. (1994). *Soil Modification Handbook* - Chapter 12 Underpinning. The Liaoning Technology Press, P.R. China, in Chinese.

Technical Reports

1. Sun, X., Han, J., Parsons, R.L., Misra, and Thakur, J.K. (2014). Calibrating Mechanistic-Empirical Pavement Design Guide for Kansas. Final Report, submitted to KDOT.
2. Khatri, D.K., Han, J., Corey, R., and Parsons, R.L. (2013). Establishing a Design Procedure for Buried Steel-Reinforced High Density Polyethylene (SRHDPE) Pipes, Final Report, KDOT, K-TRAN: KU-11-6.
3. Han, J., Acharya, R., Parsons, R.L., and Khatri, D. (2013). Improved Load Distribution for Load Rating of Low-fill Box Structures. Final Report No. K-Tran KU-12-3, 208p.
4. Han, J., Gautam, A., Pokharel, S.K., and Parsons, R.L. (2012). Tolerable Strains for HMA Overlays over Concrete Pavements. Final Report No. K-Tran KU-08-3, 113p.
5. Bhagaban Acharya, Jie Han, Jitendra K. Thakur, and Robert L. Parsons (2012). Onsite Use of Recycled Asphalt Pavement Materials and Geocells to Reconstruct Damaged Pavements by Heavy Trucks. Final Report MATC-KU: 462, the Mid-America Transportation Research Center.
6. Parsons, R.L., Jowkar, M., and Han, J. (2012). Performance of Geogrid Reinforced Ballast under Dynamic Loading. Final Report MATC-KU: 363, the Mid-America Transportation Research Center.
7. Pokharel, S., Parsons, R.L., Pierson, M., Han, J., and Willems, I. (2011). Use of Flexible Facing for Soil Nail Walls. Final Report No. KU-10-06.
8. Han, J., Thakur, S.C., Chong, O., and Parsons, R.L. (2011). Laboratory Evaluation of Characteristics of Recycled Asphalt Pavement (RAP) in Kansas. Final Report, Report No. K-TRAN: KU-09-2, 153p.
9. Yang, X.M., Han, J., and Parsons, R.L. (2010). Development of Recommended Resistance Factors for Drilled Shafts in Weak Rocks Based on O-cell Tests. Final Report, Report No. K-TRAN: KU-07-4.
10. Yang, X.M., Han, J., and Chen, J.F. (2010). Numerical Analysis of Load Transfer Mechanisms of Rammed Aggregate Pier Systems. Final Report, submitted to Geopiers Foundation.
11. Han, J. and Shiwakoti, H. (2009). Development of a Rapid Test to Determine Moisture Sensitivity of HMA (Superpave) Mixtures. Final Report, Report No. K-TRAN: KU/KSU-07-5.
12. Pierson, M., Parsons, R.L., and Han, J. (2009). Capacity of Laterally Loaded Shafts Constructed Behind the Face of a Mechanically Stabilized Earth Block Wall. Final Report, Report No. K-TRAN: KU-07-6, 237p.
13. Han, J. and Huang, J. (2005). Development of Design Charts for Geosynthetically Reinforced Embankments on Deep Mixed Columns. Final Report, submitted to FHWA and the National Deep Mixing Program, May, 197p.
14. Collin, J.G., Han, J., and Huang, J. (2005). Numerical Analysis of Column-Supported Embankments. Final Report, submitted to FHWA, July.
15. Han, J. and Sheth, A. (2003). Development of design Charts for Geosynthetically Reinforced Embankments on Deep Mixed Columns – Interim Report II: Two-Dimensional Analyses and

- Results, submitted to the National Deep Mixing Program, November, 100p.
16. Leshchinsky, D. and Han, J. (2003). Analysis and Design of Multi-Tier Mechanically Stabilized Earth Wall Systems. Research Report, submitted to Delaware Department of Transportation and National Concrete Masonry Association, June, 27p.
 17. Han, J. (2003). Influence of Curing Conditions on Strengths of Soft Clay-Cement Mixtures. Research Report, Submitted to Provost of Widener University, June, 23p.
 18. Han, J. (2003). Development of design Charts for Geosynthetically Reinforced Embankments on Deep Mixed Columns – Interim Report I: Literature Review, submitted to the National Deep Mixing Program, January, 234p.
 19. Han, J. (2001). A New Design Method for Geosynthetic-Reinforced Unpaved Roads, Tensar Earth Technologies, Inc., Internal Report, March.
 20. Han, J. (1999). Design Guidelines for Mesa Retaining Wall Systems, Tensar Earth Technologies, Inc.
 21. Barksdale, R. D., Han, J., Miller, S. L. and Thompson, S. (1995). “Optimum design of stone matrix asphalt mixes.” GDOT Research Project No. 9217 (Georgia Tech E20 - X42), Final Report.
 22. Han, J., Ye, G. B. (1995). “Design of foundations on double soil layer systems.” Funded by the Shanghai Building and Construction Research Foundation, Final Report, in Chinese.
 23. Ye, S. L., Han, J., Yang, W. D. (1993). “Experimental and theoretical studies of micropiles and their applications.” Funded by the Shanghai Science and Technology Research Foundation, Final Report, in Chinese.
 24. Ye, S. L. and Han, J. (1989). “Experimental and theoretical studies of stone columns in soft soils.” Funded by the Shanghai Building and Construction Research Foundation, Final Report, in Chinese.

Developed Software

1. Design Software for Geosynthetic Reinforced Foundations - DIMENSIONTM.
2. Design Software for Subgrade Improvement and Base Reinforcement – SPECTRAPAVETM.
3. Design Software for Surficial Slope Stability – SSS.

Theses

1. An Experimental and Analytical Study of Fiber Reinforced Polymer Piles in Sand and Pile-Sand Interactions, Ph.D. Dissertation, the Georgia Institute of Technology, USA, 1997.
2. Experimental and Theoretical Studies of Stone Columns in Soft Clays, MS Thesis, Tongji University, China, 1989.

KEYNOTE AND INVITED LECTURES

Keynote Lectures

1. Recent advances in the use of geosynthetics to enhance sustainability of roadways, International Conference on Advances in Civil Engineering for Sustainable Development, Nakhon Ratchasima, Thailand, 27-29 August, 2014
2. Use of Geosynthetics for Performance Enhancement of Earth Structures in Cold Regions, the 1st International Symposium on Transportation Soil Engineering in Cold Regions, Xining, China, 10-11 October, 2013
3. Recent Advances in Column Technologies to Improve Soft Foundations, International Conference on Ground Improvement and Ground Control, Wollongong, Australia, 30 October to 2 November 2012
4. Geosynthetic Reinforcement for Railway and Highway Construction. International Symposium on

- Geotechnical Engineering for High-speed Transportation Infrastructure, Hangzhou, China, 26 to 28 October, 2012
5. Performance of Laterally-loaded Piles in an MSE Wall, Sun Jun Lecture, Shanghai, China, October 25, 2012
 6. Giroud-Han Design Method – Development and Calibration, Tensar International Meeting, Cancun, Mexico, August 20 to 25, 2012
 7. Recent Research on Triaxial Geogrid Reinforced-Unpaved Roads and Construction Platforms, Tensar International Meeting, Cancun, Mexico, August 20 to 25, 2012
 8. Geocell-reinforced RAP Pavements - A New and Sustainable Solution, International Symposium on Safe, Energy-efficient, and Environmentally Friendly Transportation Infrastructure, Inner Mongolian, China, July 20-22, 2012
 9. Geocell-reinforced RAP Pavements - A New and Sustainable Solution, 55th Kansas Asphalt Paving Conference, Lawrence, Kansas, December 1, 2011
 10. Geosynthetic Reinforcement for Roadway Systems, PAVCO Geosynthetics Congress and Lecture Series, October 26 (at Medellin, Colombia), 27 (at Bogota), and 28 (at Cali), 2011
 11. Exploring Geocell Technology for Roadway Base Reinforcement, International Symposium on Pavement and Geotechnical Engineering for Transportation, Nanchang, China, June 5, 2011
 12. Design of Geosynthetic-reinforced Earth Retaining Structures and Roadways, International Workshop on Practical Solutions to Geotechnical Problems in Pavement Engineering, Shanghai, China, June 2 to 4, 2011
 13. Reinforcement Innovations for Structural Pavement Design, the 1st PRS International Conference on Geocell Reinforcement, Herzliya, Israel, March 15, 2010
 14. Geosynthetic Reinforcement Technologies and Recent Developments, the Tenth Chinese Symposium on Ground Improvement, Nanjing, China, November 3, 2008
 15. US Education in Geotechnical Engineering, invited, the Second Chinese Education Symposium on Soil Mechanics, Nanjing, China, November 2, 2008
 16. Geosynthetic-Reinforced Column-Supported Embankments, International Geotechnical Engineering Seminar, Tianjing University, China, June 5, 2008
 17. Issues Related to Design of Geosynthetics-reinforced Unpaved Roads, the Tensar International Meeting, Lima, Peru, October 19, 2006
 18. Latest Research on Geogrid Confinement for Pavement Applications, the Tensar International Meeting, Lima, Peru, October 19, 2006
 19. Design Issues in Geosynthetic-Reinforced Column-Supported Embankments, Spring Seminar of the Seattle ASCE Geotechnical Group, May 20, 2006
 20. Recent Development of Geosynthetic-Reinforced Column-Supported Embankments, the 23rd Annual Geotechnical Seminar – Geo-Omaha 2006, February 17, 2006
 21. Design of Geosynthetic-reinforced Roads, Tensar International Conference, Cancun, Mexico, October 14, 2003
 22. Design of Geosynthetic-reinforced Pile-supported Embankments, Tensar International Conference, Cancun, Mexico, October 14, 2003
 23. Geosynthetics-reinforced Pile-supported Embankments, the 1st World Forum of Chinese Scholars in Geotechnical Engineering, Tongji University, August 22, 2003
 24. Design and Construction of Embankments on Geosynthetic Reinforced Platforms Supported by Piles, ASCE/Pa DOT Geotechnical Seminar, Hershey, PA, April 14-16, 1999
 25. Stone Column Technologies, the 3rd Chinese Soil Improvement Conference, Qengwangdao, P.R. China, 1992
 26. Underpinning, co-author, the 3rd Chinese Soil Improvement Conference, Qengwangdao, P.R. China, 1992

Invited Lectures/Presentations

1. Use of Geosynthetics for Accelerated Construction, KU CEAE Professional Development Series, February 9, 2015
2. Exploratory Study on Wicking Fabrics for Soil Moisture Reduction, Tongji University, Department of Geotechnical Engineering, China, December 30, 2014
3. Experimental Evaluation of Behavior of Steel-reinforced HDPE Pipes, Shanghai Jiaotong University, Shanghai, China, December 29, 2014
4. Behavior of Laterally Loaded Piles in an MSE Wall, Tongji University, Department of Railway Engineering, Shanghai, China, December 25, 2014
5. Exploratory Study on Wicking Fabrics for Soil Moisture Reduction, Southeast University, China, December 22, 2014
6. Behavior of Laterally Loaded Piles in Mechanically-Stabilized Earth (MSE) Walls, the ASCE Geo-Institute Los Angeles Section Geotechnical Group seminar, November 19, 2014
7. Geogrid Protection of A Steel Reinforced HDPE Pipe Subjected to A Penetration Load, the 10th International Conference on Geosynthetics, Berlin, Germany, September 22, 2014
8. Repetitive Static Plate Load Tests on Triaxial Geogrid-Stabilized Base Course over Weak Subgrade, the 10th International Conference on Geosynthetics, Berlin, Germany, September 22, 2014
9. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Hohai University, China, June 26, 2014
10. Geosynthetic reinforcement - Research and Applications, North University of China, China, June 19, 2014
11. Evaluation of Lateral Behavior of Pile-supported Bridges under Scoured Conditions, Tianjin University, China, June 16, 2014
12. Recent Developments of Geosynthetic-reinforced Column-supported Embankments, Hebei University of Technology, China, June 16, 2014
13. Behavior of Laterally Loaded Piles in An MSE Wall, Southwest University, China, June 10, 2014
14. Recent Developments of Geosynthetic-reinforced Column-supported Embankments, Hebei Institute of Construction and Geotechnical Investigation, China, June 4, 2014
15. Geosynthetic Reinforcement - Research and Applications, Yunnan University, China, May 30, 2014
16. A Few Thoughts on Education, Research, and Collaboration, GeoShanghai International Conference, Shanghai, May 28, 2014
17. Ground Improvement Research for Railway Applications, Track Substructure Workshop, U.S. Department of Transportation Federal Railroad Administration Transportation Technology Center, Pueblo, Colorado, March 31, 2014
18. FCE Public Lecture "Recent Developments of Geosynthetic-Reinforced Column-Supported Embankments over Soft Soils", the Hong Kong Polytechnic University, March 21, 2014
19. Evaluation of Lateral Behavior of Pile-supported Bridges under Scoured Conditions, Hong Kong University of Science and Technology, March 20, 2014
20. Mechanistic-Empirical Pavement Design Guide (MEPDG) Calibration in Kansas – Preliminary Results, 57th Annual Asphalt Paving Conference, Lawrence, Kansas, December 5, 2013
21. A Summary of Research on Geocell-Reinforced Base Courses, International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures, October 14-16, 2013, Bologna, Italy
22. Geosynthetic Reinforcement – Research and Applications, Qinghai University, China, October 9, 2013
23. Recent developments of geosynthetic-reinforced column-supported embankments, the University of Illinois at Chicago, June 19, 2013
24. Recent developments of geosynthetic-reinforced column-supported embankments, Hebei Institute of Geotechnical Engineering, Shijiazhuang, China, May 31, 2013
25. Behavior of laterally loaded piles in an MSE wall, Beijing Jiaotong University, Beijing, China, May 29, 2013
26. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Huanan

- University of Technology, Guangzhou, China, May 27, 2013
27. Geocell-reinforced RAP pavements – a new and sustainable solution, Huanan University of Technology, Guangzhou, China, May 27, 2013
 28. Column-supported Embankments on Soft Soils: Load Transfer, Consolidation, and Stability, Hohai University, China, May 18, 2013
 29. Structural Response of a Low-Fill Box Culvert under Static and Traffic Loading, 2013, Transportation Research Board Annual Meeting, DC, January 14, 2013
 30. Geosynthetic Reinforced Roadway Testing Under Cyclic Loading, Workshop “Deploying Soil and Rock Instrumentation to Solve Real Problems”, 2013 Transportation Research Board Annual Meeting, DC, January 13, 2013
 31. Recent Advances of Column Technologies to Improve Soft Foundations, ASCE Kansas City Geotechnical Committee, January 11, 2013
 32. Flexible pavements on geocell-reinforced RAP aggregate bases - a new and sustainable solution, Oklahoma Transportation Third Annual Summer Symposium, August 6, 2012
 33. Laterally loaded piles in an MSE wall, Oklahoma Transportation Third Annual Summer Symposium, August 6, 2012
 34. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Oklahoma Transportation Third Annual Summer Symposium, August 6, 2012
 35. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Zhejiang University, China, July 26, 2012
 36. Behavior of laterally loaded piles in an MSE wall, Central South University, China, July 17, 2012
 37. Recent developments of geosynthetic-reinforced column-supported embankments Hunan University, China, July 16, 2012
 38. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Wuhan University of Technology, July 13, 2012
 39. Design of MSE walls under special conditions, Wuhan University, China, July 13, 2012
 40. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Huazhong University of Technology, China, July 12, 2012
 41. Exploring geocell technology for roadway base reinforcement, Huazhong University of Technology, China, July 12, 2012
 42. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, China University of GeoScience, China, July 11, 2012
 43. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Southeast University, China, July 9, 2012
 44. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Shanghai Jiaotong University, China, July 6, 2012
 45. Stability Analyses of Reinforced Earth Structures, ASCE Kansas City Geotechnical Committee, October 6, 2011
 46. Exploring Geocell Technology for Roadway Base Reinforcement, Wenzhou University, June 24, 2011
 47. Geosynthetic-reinforced MSE Walls to Support Laterally Loaded Piles, Tongji University, June 21, 2011
 48. Stability Analyses of Reinforced Earth Structures, Southeast University, China, June 18, 2011
 49. Exploring Geocell Technology for Roadway Base Reinforcement, Nanjing University of Technology, China, June 17, 2011
 50. Laterally Loaded Piles in a Mechanically Stabilized Earth Wall, Dalian University of Science and Technology, June 15, 2011
 51. Recent Development of Column-supported Embankments, Dalian University of Science and Technology, June 15, 2011
 52. Geosynthetic Reinforced – Research and Applications, Qingdao Technological University, China, June 13, 2011

53. Design of Geosynthetics-Reinforced Earth Walls under Special Conditions, Shanghai Jiaotong University, China, June 4, 2011
54. Geocell for Base Reinforcement, the University of Nebraska, Dec. 17, 2010
55. Geocell-reinforced Recycled Asphalt Pavements – A Sustainable Solution, the University of Delaware and the Technion Institute Symposium, Haifa, Israel, Nov. 10, 2010
56. Recent Advances in Column Technologies to Improve Soft Soils, the Institution of Engineers, Malaysia, July 22, 2010
57. Recent Developments of Geosynthetic-reinforced Column-supported Embankments, Wollongong University, Australia, July 19, 2010
58. Geosynthetics and Ground Improvement, Griffith University, Australia, July 13 to 15, 2010
59. Geosynthetic-reinforced Earth Walls to Support Laterally Loaded Piles, Wenzhou University, China, June 17, 2010
60. Micromechanical Analysis of Geosynthetic-soil Interaction under Cyclic Loading, Hohai University, China, June 13, 2010
61. Exploring Geocell Technology for Roadway Base Reinforcement, Southeast University, China, June 11, 2010
62. Geosynthetic-reinforced Earth Walls to Support Laterally Loaded Piles, Taiyuan University of Technology, China, June 8, 2010
63. Consolidation settlement of stone column-reinforced foundations in soft soils, Symposium on New Techniques for Design and Construction on Soft Clays, Brazil, May 22, 2010
64. Exploring Geocell Technology for Roadway Base Reinforcement, the University of Illinois at Urbana-Champaign, March 18, 2010
65. Geosynthetic Reinforcement Technologies and Recent Developments, the Institution of Engineers, Malaysia, July 21, 2009
66. Ground Improvement Technologies, Southeast University, China, July 16-18, 2009
67. Geosynthetic Reinforcement Technologies and Recent Developments, Wenzhou University, China, May 26, 2009
68. Campus Life Enrichment Committee (CLEC) Lecture “Geosynthetic Reinforcement and Recent Developments”, Georgia Southern University, Statesboro, GA, Nov. 21, 2008
69. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Wuhan University, China, June 30, 2008
70. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Department of Road and Bridges at Huazhong University of Science & Technology, China, June 26, 2008
71. Behavior Experimental and Numerical Evaluation of Geocell-Reinforced Bases, Department of Geotechnical Engineering at Tongji University, China, June 24, 2008
72. Behavior Experimental and Numerical Evaluation of Geocell-Reinforced Bases, Department of Civil Engineering at Shanghai University, China, June 12, 2008
73. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Department of Geotechnical Engineering at Zhejiang University, China, June 10, 2008.
74. Technical Paper Writing in English – Reviewer’s Point of View, Tianjing University, China, June 6, 2008
75. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Department of Geotechnical Engineering at Tongji University, China, June 3, 2008
76. Geosynthetic Reinforcement for Riverside Slope Stability of Levees due to Rapid Drawdown, the 2nd International Conference on Geotechnical Engineering for Disaster Mitigation & Rehabilitation (GEDMAR08), Nanjing, China, May 30 to June 2, 2008
77. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Institute of Geotechnical Engineering at Southeast University, China, May 29, 2008
78. Insitu testing technologies – state of the art, presented to undergraduate class in geotechnical engineering at Tongji University, China, May 27, 2008
79. Design and Evaluation of Geosynthetic-Reinforced Roads, Geotechnical Distinguished Seminar

- Series, Department of Civil, Construction, and Environmental Engineering, Iowa State University, October 12, 2007
80. U.S. LRFD Design in Geotechnical Engineering, Tongji University, Shanghai, China, June 5, 2007
 81. Research on Geocell-Reinforced Foundations, Southeast University, Nanjing, China, May 29, 2007
 82. Coupled Mechanical and Hydraulic Modeling of Geosynthetic-Reinforced Column Supported embankments, Shanghai Jiaotong University, Shanghai, China, May 23, 2007
 83. Development of China into a Modern Country – Another Great Leap Forward?, KU Center for East Asian Studies, May 2, 2007
 84. LRFD Design for Deep Foundations, KU Professional Series, March 12, 2007
 85. China: the World's Largest Construction Site, KU Center for East Asian Studies, March 6, 2007
 86. Geotechnical Options for Lowering Petroleum Costs, the 50th Annual Kansas Asphalt Paving Conference, Lawrence, KS, December, 7, 2006
 87. Stresses and deformations induced by widening of existing embankments, the International Symposium of Lowland Technology, Saga University, Japan, September 14-16, 2006
 88. Stability Analysis of Reinforced Earth Structures, the University of Missouri – Rolla, November 8, 2005
 89. Stability Analysis of Reinforced Earth Structures using Numerical Methods, Saga University, Japan, September 8, 2005
 90. Geosynthetic Reinforcement and Applications, Tongji University, China, July 28, 2005
 91. Design of Geosynthetic-reinforced Roadways and Embankments, School of Transportation Engineering, Tongji University, China, July 26, 2005
 92. Design of Pile-supported Embankments, Zhejiang University, China, July 21, 2005
 93. Technical Paper Writing for Geotechnical Publications – Reviewer's Point of View, Southeast University, China, July 14, 2005
 94. Geotechnical education in U.S, Southeast University, China, July 14, 2005
 95. Design of Geosynthetic-reinforced Roadways, Southeast University, China, July 13, 2005
 96. Stability Analysis of Reinforced Earth Structures, Southeast University, China, July 13, 2005
 97. Designing Geosynthetics for Highway Applications, Southeast University, China, July 12, 2005
 98. Stability Analyses of Reinforced Earth Structures using Numerical Methods, Geotechnical & Geoenvironmental Engineering Seminar, the University of Missouri – Columbia, October 15, 2004
 99. Geosynthetic-Reinforced Pile-Supported Embankments, Kansas City – ASCE/AEG/UMKC-Geotechnical Group, October 7, 2004
 100. Geosynthetic-soil particle interaction, Micro-Geomechanics Workshop at Cambridge University in Cambridge, England, March 20 to 23, 2005, sponsored by the U.S. National Science Foundation (NSF)/ U.K. Engineering and Physical Sciences Research Council (EPSRC)
 101. Geosynthetics-Reinforced Pile-Supported Embankments, Department of Civil and Environmental Engineering, University of Delaware, November 10, 2003
 102. Geosynthetic-reinforced Pile-supported Embankments, Department of Civil, Architectural, and Environmental Engineering, Drexel University, October 28, 2003
 103. Geotechnical Research at Widener University, the 4th USUCGER Workshop, Atlanta, GA, October 3, 2003, supported by NSF
 104. Design of Geosynthetic-reinforced Pile-supported Embankments, Panama Geotechnical Community, Fall, 2002
 105. Geosynthetic-Reinforced and Pile-Supported Foundation Systems”, Department of Civil Engineering, Saga University, Japan, September 3, 2002
 106. Geosynthetic-Reinforced Pile-Supported Foundation Systems, NSF Geotechnical Composite System Workshop, Virginia Tech, July 28 and 29, 2002, supported by NSF
 107. Design of Geosynthetic Reinforced Slopes and Walls, School of Civil and Environmental Engineering, the Georgia Institute of Technology, February & March 2001
 108. Geogrid-Reinforced and Pile-Supported Earth Structures on Weak Foundation Soils, the Bridge

- Department at NCDOT, November 2000
109. An Experimental and Analytical Study of The Behavior of Fiber Reinforced Polymer Piles, Department of Civil and Environmental Engineering, Louisiana State University, May 2000
 110. Numerical Study of Geosynthetic Reinforced and Pile Supported Fill Platforms over Soft Soil, Department of Civil and Environmental Engineering, Louisiana State University, February 2000
 111. Lecture “Analysis of Geosynthetic Reinforced and Pile Supported Fill Platforms over Soft Soil”, invited, presented to the faculty and students at Department of Civil and Environmental Engineering, University of Utah, January 2000
 112. Design of Mechanically Stabilized Retaining Walls, School of Civil and Environmental Engineering, the Georgia Institute of Technology, October 1999
 113. Geosynthetic Reinforced and Piled Embankments over Soft Soil, Department of Civil and Environmental Engineering, University of Texas at Arlington, May 1999
 114. The Use of Geosynthetics in Civil Engineering, School of Civil and Environmental Engineering, the Georgia Institute of Technology, November 1998
 115. Geogrid Reinforced Soil Foundations, Froehling & Roberston 21st Annual Technical Seminar, January 1998
 116. An Experimental and Analytical Study of Fiber Reinforced Polymer Piles in Sand and Pile-Sand Interactions, Department of Civil and Environmental Engineering, University of Delaware, March 1997

Short Courses

1. Design of Geosynthetic-reinforced Unpaved and Paved Roads, Portland, Oregon, February 14, 2015
2. Mechanisms and Design of Unpaved Roads, Berlin, Germany, September 22, 2014
3. Design of Geosynthetic-reinforced Unpaved and Paved Roads, Long Beach, California, April 5, 2013
4. Geosynthetics for Stream Crossings and Channel Stabilization, A pre-conference session to the 2012 joint APWA/KCHA Spring conference, Newton, May 9, 2012
5. Recent Trends in Ground Improvement, the GeoFrontiers 2011, Dallas, Texas, March 13, 2011
6. Principles and Practice of Ground Improvement, the Association of Geotechnical Societies in Southeast Asia, Malaysia, July 22-23, 2010
7. Design of Geosynthetic-Reinforced Earth Structures, the Association of Geotechnical Societies in Southeast Asia, Malaysia, July 20 to 21, 2009
8. Geosynthetics Reinforcement in Embankment Foundations and Roads, Monash University, Australia, October 10, 2008
9. Geotextile Applications, Griffith University, Australia, September 29 to October 3, 2008.

TECHNICAL/PROPOSAL/AWARD REVIEWER

- Research Proposal Review for National Science Foundation
- Research Proposal Review for Czech Science Foundation
- Changjiang Scholars Review for Ministry of Education of P.R. China
- Research Proposal Review for NCHRP
- Research Project Review for Federal Highway Administration
- Research Proposal Review for Research Grant Council (RGC) of Hong Kong
- Acta Geotechnica
- Journal of Engineering Mechanics, ASCE
- Journal of Geotechnical and Geoenvironmental Engineering, ASCE
- Geotechnique
- Canadian Geotechnical Journal

- Transportation Research Board, Annual Meeting
- ASTM Geotechnical Testing Journal
- Geosynthetic International Journal
- International Journal of Geomechanics
- Geomechanics and Geoengineering: An International Journal
- Soils and Foundations
- Geotextiles and Geomembranes
- Computers and Geotechnics
- Environmental Geology
- Journal of Materials in Civil Engineering, ASCE
- Journal of Bridge Engineering, ASCE
- International Journal of Pavement Engineering
- Construction and Building Materials Journal
- Ocean Engineering
- Lowland Technology International Journal
- Journal of Zhejiang University Science
- ASCE GeoCongress, San Diego, CA, 2012
- ASCE GeoFrontiers, Dallas, TX, 2011
- ASCE GeoCongress, Oakland, CA, 2010
- International Foundation Congress & Equipment Expo 2009 - IFCEE '09
- ASCE Geo-Institute Conference: GeoCongress 2008
- GeoAmericas International Conference, Cancun, Mexico, March 2008
- ISGSR2007 First International Symposium on Geotechnical Safety and Risk, Shanghai, China, October, 2007
- ASCE Geo-Institute Conference: Geo-Denver 2007
- The 5th International Symposium on Earth Reinforcement, Fukuoka, Japan, 14-16th November, 2007
- The 8th International Geosynthetic Conference, 2006
- GeoShanghai International Conference, Shanghai, China, 2006
- ASCE GeoFrontiers, Austin, Texas, 2005
- ASCE Geo-Trans Conference, Los Angeles, 2004
- ASCE GeoSupport Conference, Orlando, 2004
- ASCE Geo-Institute Conference: Geo-Denver, Denver 2000
- ASCE Geo-Institute Conf. on Performance Verification of Constructed Geotechnical Facilities, 2000
- ASCE Geo-Institute Specialty Conference on Underground Facilities, 1999
- The Sixth International Geosynthetic Conference, 1998

M.S. AND PH.D. THESIS EXAMINER

- National University of Singapore
- Nanyang Technological University, Singapore
- University of New South Wales, Australia
- Indian Institute of Technology - Madras, India
- Indian Institute of Science, Bangalore, India
- The Hong Kong Polytechnic University