

The University of Kansas

Lawrence, KS 66045

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Professor

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

Advising

- 10 Ph.D. students (2004 – present), 5 graduated
- 11 MS students (2005 – present), 9 graduated
- 14 visiting professors/scholars and 6 visiting Ph.D. students (2004 – present)
- More than 200 undergraduate students (2004 – present)

Graduate advisory committee

- 6 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

- 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

Manager and Senior Engineer - 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
- 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

- 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 Shamsher 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 -
- 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 -
- 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 -
- 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 of Steering Committee, Organizing Committee, and Technical Committee, GeoShanghai International Conference 2014, Shanghai, May 26 to 28, 2014
- Co-organizer, Organizing Committee, International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures (Bologna 2013), 14-16 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 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 Architecture and Civil Engineering in China, 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 -
- Member, TRB A2K07 Committee on Geosynthetics, 2003 – 2012
- Member, ASCE Geo-Institute Geosynthetic Committee, 2004 –
- Member, ASCE Geo-Institute Ground 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

- Calibrating Mechanistic-empirical Pavement Design Guide for Kansas, PI, funded by Kansas Department of Transportation, 2012-2013
- 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, Co-PI, funded by Maccaferri, 2012 to 2013
- 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, graduated in December 2007, dissertation “Coupled Mechanical and Hydraulic Modeling of Geosynthetic-reinforced Column-supported Embankments”

Anil Bhandari, graduated in May 2010, dissertation “Micromechanical Analysis of Geosynthetic-soil Interaction under Cyclic Loading”

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

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

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

Ryan Corey, expected to graduate in May 2013, dissertation topic “Protection of Underground Pipelines using Geosynthetics”

Jitendra K. Thakur, expected to graduate in May 2013, dissertation topic “Design of Geocell-reinforced Flexible Pavements with Recycled Asphalt Pavement (RAP) Bases”

Luke Schuler, expected to graduate in December 2013, dissertation topic “Behavior of Drilled Shafts and Augered Cast Piles”

Deep Khatri, expected to graduate in 2014, thesis “Design Procedure for Steel-reinforced High-density Polyethylene Plastic Pipes in Ground”

Xiaohui Sun, expected to graduate in 2016

M.S. Students

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

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

Ashwani Gautam, graduated in May 2009, thesis “Tolerable Strains for HMA Overlays over Concrete Pavements”

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

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

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

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

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

Raju Acharya, graduated in December 2012, thesis “Improved Load Distribution for Load Rating of Low-fill Box Structures”

Jun Guo, expected to graduate in December 2013

Omar Ismael, expected to graduate in May 2014

Visiting Scholars

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

Dr. Jungjo Yoo, 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 present

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

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

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

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

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

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

PUBLICATIONS

Peer-Reviewed Journal Papers

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.

6. 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).
7. 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*, accepted.
8. 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*, accepted.
9. 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*, accepted.
10. 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*, accepted.
11. 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*, accepted.
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121. 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.
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124. Ye, S. L. and Han, J. (1992). "Underpinning - general report." Invited Speakers, *Proc. of 3rd Chinese Soil Improvement Conference*, Qengwangdao, China, in Chinese.
125. 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.
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129. 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.
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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. 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.
2. Puppala, A., Huang, J., Han, J., and Hoyos, L.R. (editors) (2010). *Ground Improvement and Geosynthetics*, ASCE Geotechnical Special Publication No. 207, 380p.
3. 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.
4. 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.
5. Ye, S.L. and Han, J. et al. (1996). *Shanghai Soil Improvement Design and Construction Code*. The Shanghai Engineering Construction Standard Office, in Chinese.
6. Ye, S.L., Han, J., and Ye, G.B. (1995). *Soil Improvement and Underpinning*. The Chinese Building Industry Press, 2nd Edition, in Chinese.
7. 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. 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
2. 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.
3. 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.
4. 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.
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6. 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.
7. 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.

8. 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.
9. 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.
10. 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.
11. 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.
12. Collin, J.G., Han, J., and Huang, J. (2005). Numerical Analysis of Column-Supported Embankments. Final Report, submitted to FHWA, July.
13. 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.
14. 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.
15. Han, J. (2003). Influence of Curing Conditions on Strengths of Soft Clay-Cement Mixtures. Research Report, Submitted to Provost of Widener University, June, 23p.
16. 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.
17. A New Design Methods for Geosynthetic-Reinforced Unpaved Roads, Tensar Earth Technologies, Inc., Internal Report, March 2001.
18. Design Guidelines for Mesa Retaining Wall Systems, Tensar Earth Technologies, Inc., 1999.
19. 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.
20. 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.
21. 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.
22. 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 - DIMENSION™.
2. Design Software for Subgrade Improvement and Base Reinforcement – SPECTRAPAVE™.
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 Column Technologies to Improve Soft Foundations, International Conference on Ground Improvement and Ground Control, Wollongong, Australia, 30 October to 2 November 2012
2. Geosynthetic Reinforcement for Railway and Highway Construction. International Symposium on Geotechnical Engineering for High-speed Transportation Infrastructure, Hangzhou, China, 26 to 28 October, 2012
3. Performance of Laterally-loaded Piles in an MSE Wall, Sun Jun Lecture, Shanghai, China, October 25, 2012
4. Giroud-Han Design Method – Development and Calibration, Tensar International Meeting, Cancun, Mexico, August 20 to 25, 2012
5. Recent Research on Triaxial Geogrid Reinforced-Unpaved Roads and Construction Platforms, Tensar International Meeting, Cancun, Mexico, August 20 to 25, 2012
6. 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
7. Geocell-reinforced RAP Pavements - A New and Sustainable Solution, 55th Kansas Asphalt Paving Conference, Lawrence, Kansas, December 1, 2011
8. Geosynthetic Reinforcement for Roadway Systems, PAVCO Geosynthetics Congress and Lecture Series, October 26 (at Medellin, Colombia), 27 (at Bogota), and 28 (at Cali), 2011
9. Exploring Geocell Technology for Roadway Base Reinforcement, International Symposium on Pavement and Geotechnical Engineering for Transportation, Nanchang, China, June 5, 2011
10. 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
11. Reinforcement Innovations for Structural Pavement Design, the 1st PRS International Conference on Geocell Reinforcement, Herzliya, Israel, March 15, 2010
12. Geosynthetic Reinforcement Technologies and Recent Developments, the Tenth Chinese Symposium on Ground Improvement, Nanjing, China, November 3, 2008
13. US Education in Geotechnical Engineering, invited, the Second Chinese Education Symposium on Soil Mechanics, Nanjing, China, November 2, 2008
14. Geosynthetic-Reinforced Column-Supported Embankments, International Geotechnical Engineering Seminar, Tianjing University, China, June 5, 2008
15. Issues Related to Design of Geosynthetics-reinforced Unpaved Roads, the Tensar International Meeting, Lima, Peru, October 19, 2006
16. Latest Research on Geogrid Confinement for Pavement Applications, the Tensar International Meeting, Lima, Peru, October 19, 2006
17. Design Issues in Geosynthetic-Reinforced Column-Supported Embankments, Spring Seminar of the Seattle ASCE Geotechnical Group, May 20, 2006
18. Recent Development of Geosynthetic-Reinforced Column-Supported Embankments, the 23rd Annual Geotechnical Seminar – Geo-Omaha 2006, February 17, 2006
19. Design of Geosynthetic-reinforced Roads, Tensar International Conference, Cancun, Mexico, October 14, 2003
20. Design of Geosynthetic-reinforced Pile-supported Embankments, Tensar International Conference, Cancun, Mexico, October 14, 2003
21. Geosynthetics-reinforced Pile-supported Embankments, the 1st World Forum of Chinese Scholars in Geotechnical Engineering, Tongji University, August 22, 2003

22. Design and Construction of Embankments on Geosynthetic Reinforced Platforms Supported by Piles, ASCE/Pa DOT Geotechnical Seminar, Hershey, PA, April 14-16, 1999
23. Stone Column Technologies, the 3rd Chinese Soil Improvement Conference, Qengwangdao, P.R. China, 1992
24. Underpinning, co-author, the 3rd Chinese Soil Improvement Conference, Qengwangdao, P.R. China, 1992

Invited Lectures/Presentations

1. Recent Advances of Column Technologies to Improve Soft Foundations, ASCE Kansas City Geotechnical Committee, January 11, 2013
2. Flexible pavements on geocell-reinforced RAP aggregate bases - a new and sustainable solution, Oklahoma Transportation Third Annual Summer Symposium, August 6, 2012
3. Laterally loaded piles in an MSE wall, Oklahoma Transportation Third Annual Summer Symposium, August 6, 2012
4. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Oklahoma Transportation Third Annual Summer Symposium, August 6, 2012
5. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Zhejiang University, China, July 26, 2012
6. Behavior of laterally loaded piles in an MSE wall, Central South University, China, July 17, 2012
7. Recent developments of geosynthetic-reinforced column-supported embankments, Hunan University, China, July 16, 2012
8. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Wuhan University of Technology, July 13, 2012
9. Design of MSE walls under special conditions, Wuhan University, China, July 13, 2012
10. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Huazhong University of Technology, China, July 12, 2012
11. Exploring geocell technology for roadway base reinforcement, Huazhong University of Technology, China, July 12, 2012
12. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, China University of GeoScience, China, July 11, 2012
13. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Southeast University, China, July 9, 2012
14. Evaluation of lateral behavior of pile-supported bridges under scoured conditions, Shanghai Jiaotong University, China, July 6, 2012
15. Stability Analyses of Reinforced Earth Structures, ASCE Kansas City Geotechnical Committee, October 6, 2011
16. Exploring Geocell Technology for Roadway Base Reinforcement, Wenzhou University, June 24, 2011
17. Geosynthetic-reinforced MSE Walls to Support Laterally Loaded Piles, Tongji University, June 21, 2011
18. Stability Analyses of Reinforced Earth Structures, Southeast University, China, June 18, 2011
19. Exploring Geocell Technology for Roadway Base Reinforcement, Nanjing University of Technology, China, June 17, 2011
20. Laterally Loaded Piles in a Mechanically Stabilized Earth Wall, Dalian University of Science and Technology, June 15, 2011
21. Recent Development of Column-supported Embankments, Dalian University of Science and Technology, June 15, 2011
22. Geosynthetic Reinforced – Research and Applications, Qingdao Technological University, China, June 13, 2011

23. Design of Geosynthetics-Reinforced Earth Walls under Special Conditions, Shanghai Jiaotong University, China, June 4, 2011
24. Geocell for Base Reinforcement, the University of Nebraska, Dec. 17, 2010
25. Geocell-reinforced Recycled Asphalt Pavements – A Sustainable Solution, the University of Delaware and the Technion Institute Symposium, Haifa, Israel, Nov. 10, 2010
26. Recent Advances in Column Technologies to Improve Soft Soils, the Institution of Engineers, Malaysia, July 22, 2010
27. Recent Developments of Geosynthetic-reinforced Column-supported Embankments, Wollongong University, Australia, July 19, 2010
28. Geosynthetics and Ground Improvement, Griffith University, Australia, July 13 to 15, 2010
29. Geosynthetic-reinforced Earth Walls to Support Laterally Loaded Piles, Wenzhou University, China, June 17, 2010
30. Micromechanical Analysis of Geosynthetic-soil Interaction under Cyclic Loading, Hohai University, China, June 13, 2010
31. Exploring Geocell Technology for Roadway Base Reinforcement, Southeast University, China, June 11, 2010
32. Geosynthetic-reinforced Earth Walls to Support Laterally Loaded Piles, Taiyuan University of Technology, China, June 8, 2010
33. 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
34. Exploring Geocell Technology for Roadway Base Reinforcement, the University of Illinois at Urbana-Champaign, March 18, 2010
35. Geosynthetic Reinforcement Technologies and Recent Developments, the Institution of Engineers, Malaysia, July 21, 2009
36. Ground Improvement Technologies, Southeast University, China, July 16-18, 2009
37. Geosynthetic Reinforcement Technologies and Recent Developments, Wenzhou University, China, May 26, 2009
38. Campus Life Enrichment Committee (CLEC) Lecture “Geosynthetic Reinforcement and Recent Developments”, Georgia Southern University, Statesboro, GA, Nov. 21, 2008
39. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Wuhan University, China, June 30, 2008
40. 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
41. Behavior Experimental and Numerical Evaluation of Geocell-Reinforced Bases, Department of Geotechnical Engineering at Tongji University, China, June 24, 2008
42. Behavior Experimental and Numerical Evaluation of Geocell-Reinforced Bases, Department of Civil Engineering at Shanghai University, China, June 12, 2008
43. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Department of Geotechnical Engineering at Zhejiang University, China, June 10, 2008.
44. Technical Paper Writing in English – Reviewer’s Point of View, Tianjing University, China, June 6, 2008
45. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Department of Geotechnical Engineering at Tongji University, China, June 3, 2008
46. 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
47. Behavior of Laterally Load Shafts Constructed Within an MSE Block Wall, Institute of Geotechnical Engineering at Southeast University, China, May 29, 2008
48. Insitu testing technologies – state of the art, presented to undergraduate class in geotechnical engineering at Tongji University, China, May 27, 2008

49. Design and Evaluation of Geosynthetic-Reinforced Roads, Geotechnical Distinguished Seminar Series, Department of Civil, Construction, and Environmental Engineering, Iowa State University, October 12, 2007
50. U.S. LRFD Design in Geotechnical Engineering, Tongji University, Shanghai, China, June 5, 2007
51. Research on Geocell-Reinforced Foundations, Southeast University, Nanjing, China, May 29, 2007
52. Coupled Mechanical and Hydraulic Modeling of Geosynthetic-Reinforced Column Supported embankments, Shanghai Jiaotong University, Shanghai, China, May 23, 2007
53. Development of China into a Modern Country – Another Great Leap Forward?, KU Center for East Asian Studies, May 2, 2007
54. LRFD Design for Deep Foundations, KU Professional Series, March 12, 2007
55. China: the World's Largest Construction Site, KU Center for East Asian Studies, March 6, 2007
56. Geotechnical Options for Lowering Petroleum Costs, the 50th Annual Kansas Asphalt Paving Conference, Lawrence, KS, December, 7, 2006
57. Stresses and deformations induced by widening of existing embankments, the International Symposium of Lowland Technology, Saga University, Japan, September 14-16, 2006
58. Stability Analysis of Reinforced Earth Structures, the University of Missouri – Rolla, November 8, 2005
59. Stability Analysis of Reinforced Earth Structures using Numerical Methods, Saga University, Japan, September 8, 2005
60. Geosynthetic Reinforcement and Applications, Tongji University, China, July 28, 2005
61. Design of Geosynthetic-reinforced Roadways and Embankments, School of Transportation Engineering, Tongji University, China, July 26, 2005
62. Design of Pile-supported Embankments, Zhejiang University, China, July 21, 2005
63. Technical Paper Writing for Geotechnical Publications – Reviewer's Point of View, Southeast University, China, July 14, 2005
64. Geotechnical education in U.S, Southeast University, China, July 14, 2005
65. Design of Geosynthetic-reinforced Roadways, Southeast University, China, July 13, 2005
66. Stability Analysis of Reinforced Earth Structures, Southeast University, China, July 13, 2005
67. Designing Geosynthetics for Highway Applications, Southeast University, China, July 12, 2005
68. Stability Analyses of Reinforced Earth Structures using Numerical Methods, Geotechnical & Geoenvironmental Engineering Seminar, the University of Missouri – Columbia, October 15, 2004
69. Geosynthetic-Reinforced Pile-Supported Embankments, Kansas City – ASCE/AEG/UMKC-Geotechnical Group, October 7, 2004
70. 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)
71. Geosynthetics-Reinforced Pile-Supported Embankments, Department of Civil and Environmental Engineering, University of Delaware, November 10, 2003
72. Geosynthetic-reinforced Pile-supported Embankments, Department of Civil, Architectural, and Environmental Engineering, Drexel University, October 28, 2003
73. Geotechnical Research at Widener University, the 4th USUCGER Workshop, Atlanta, GA, October 3, 2003, supported by NSF
74. Design of Geosynthetic-reinforced Pile-supported Embankments, Panama Geotechnical Community, Fall, 2002
75. Geosynthetic-Reinforced and Pile-Supported Foundation Systems”, Department of Civil Engineering, Saga University, Japan, September 3, 2002
76. Geosynthetic-Reinforced Pile-Supported Foundation Systems, NSF Geotechnical Composite System Workshop, Virginia Tech, July 28 and 29, 2002, supported by NSF
77. Design of Geosynthetic Reinforced Slopes and Walls, School of Civil and Environmental Engineering, the Georgia Institute of Technology, February & March 2001

78. Geogrid-Reinforced and Pile-Supported Earth Structures on Weak Foundation Soils, the Bridge Department at NCDOT, November 2000
79. An Experimental and Analytical Study of The Behavior of Fiber Reinforced Polymer Piles, Department of Civil and Environmental Engineering, Louisiana State University, May 2000
80. Numerical Study of Geosynthetic Reinforced and Pile Supported Fill Platforms over Soft Soil, Department of Civil and Environmental Engineering, Louisiana State University, February 2000
81. 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
82. Design of Mechanically Stabilized Retaining Walls, School of Civil and Environmental Engineering, the Georgia Institute of Technology, October 1999
83. Geosynthetic Reinforced and Piled Embankments over Soft Soil, Department of Civil and Environmental Engineering, University of Texas at Arlington, May 1999
84. The Use of Geosynthetics in Civil Engineering, School of Civil and Environmental Engineering, the Georgia Institute of Technology, November 1998
85. Geogrid Reinforced Soil Foundations, Froehling & Roberston 21st Annual Technical Seminar, January 1998
86. 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, Long Beach, California, April 5, 2013
2. Geosynthetics for Stream Crossings and Channel Stabilization, A pre-conference session to the 2012 joint APWA/KCHA Spring conference, Newton, May 9, 2012
3. Recent Trends in Ground Improvement, the GeoFrontiers 2011, Dallas, Texas, March 13, 2011
4. Principles and Practice of Ground Improvement, the Association of Geotechnical Societies in Southeast Asia, Malaysia, July 22-23, 2010
5. Design of Geosynthetic-Reinforced Earth Structures, the Association of Geotechnical Societies in Southeast Asia, Malaysia, July 20 to 21, 2009
6. Geosynthetics Reinforcement in Embankment Foundations and Roads, Monash University, Australia, October 10, 2008
7. 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
- 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