

Curriculum Vitae

Professor Krishna R. Reddy

Dr. Krishna R. Reddy is Professor of Civil and Environmental Engineering, the Director of Sustainable Engineering Research Laboratory (SERL), and also the Director of the Geotechnical and Geoenvironmental Engineering Laboratory (GAGEL) in the Department of Civil and Materials Engineering at the University of Illinois at Chicago (UIC). Dr. Reddy received his Ph.D. in Civil Engineering from the Illinois Institute of Technology, Chicago, USA. He received gold medals for being first in his class of B.S. (Civil Engineering) at Osmania University, India, and M.S. (Civil Engineering) at the Indian Institute of Technology, Roorkee.

Dr. Reddy has over 25 years of research, teaching and consulting experience within the broad fields of civil, geotechnical, materials and environmental engineering, addressing the *nexus among sustainability, resiliency, infrastructure, water, energy, and the environment in urban setting*. His research expertise includes: (1) environmental remediation of soils, sediments, groundwater, and stormwater; (2) solid and hazardous waste management and landfill engineering; (3) engineering applications of waste/recycled materials; (4) life cycle assessment and sustainable engineering; and (5) geotechnical engineering. His research is funded by the U.S. National Science Foundation, the United States Environmental Protection Agency, several prominent state and local government agencies, and industries. His research includes laboratory studies, field experiments, and computer modeling, ultimately leading to fundamental advances and practical solutions to the real-world problems.

Dr. Reddy is the author of three major books: (1) *Geoenvironmental Engineering: Site Remediation, Waste Containment, and Emerging Waste Management Technologies*, (2) *Electrochemical Remediation Technologies for Polluted Soils, Sediments and Groundwater*, and (3) *Sustainable Remediation of Contaminated Sites*. He is also author of 204 journal papers (with h-index of 52), 15 edited books and conference proceedings, 20 book chapters, and 183 full conference papers. Dr. Reddy has given 183 invited presentations in the U.S.A. and 18 other countries (Brazil, Canada, China, Colombia, France, Germany, Greece, Hong Kong, India, Italy, Japan, Macedonia, Spain, Sri Lanka, South Korea, Turkey, Thailand, and U.K.).

Dr. Reddy has served or currently serves as an Associate Editor or Editorial Board Member of over 10 different journals, including the ASCE Journal of Geotechnical and Geoenvironmental Engineering, the ASTM Geotechnical Testing Journal, the ASCE Journal of Hazardous, Toxic and Radioactive Waste, the Journal of Hazardous Materials, among others. He has also served on various professional committees, including the Geoenvironmental Engineering Committee and Technical Coordinating Council of Geo-Institute (GI) of the American Society of Civil Engineers (ASCE) and the Environmental Geotechnics Committee of International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE).

Dr. Reddy has received several awards for excellence in research and teaching, including ASCE Wesley W. Horner Award, ASTM Hogentogler Award, UIC Distinguished Researcher Award, University of Illinois Scholar Award, and University of Illinois Award for Excellence in Teaching. He is a Fellow of the American Society of Civil Engineers (FASCE), a Diplomate of Geotechnical Engineering (DGE), and a Board Certified Environmental Engineer (BCEE). He is also a registered Professional Civil Engineer (PE) and an Envision™ Sustainability Professional (ENV SP).

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EXPERTISE

- Environmental remediation of soils, sediments, stormwater, and groundwater
- Solid and hazardous waste management and landfill engineering
- Engineering applications of waste/recycled materials
- Life cycle assessment and sustainable engineering, with special focus on green and sustainable civil infrastructure systems and environmental technologies
- Geotechnical engineering: Foundations, earth-retaining and earth structures, ground improvement, geomechanics, geotechnical earthquake engineering, and sustainable and resilient geo-systems

EDUCATION

Ph.D., Civil Engineering, Illinois Institute of Technology, Chicago, Illinois, 1990, GPA:4.0/4.0

M.S., Civil Engineering, Indian Institute of Technology, Roorkee, India, 1985, Gold Medalist

B.S., Civil Engineering, Osmania University, Hyderabad, India, 1983, Gold medalist

PROFESSIONAL APPOINTMENTS

- **Professor**, Department of Civil and Materials Engineering, University of Illinois at Chicago, August 2006-Present.
- **Director**, Sustainable Engineering Research Laboratory (SERL), University of Illinois at Chicago, August 2010-Present.
- **Director**, Geotechnical and Geoenvironmental Engineering Laboratory (GAGEL), University of Illinois at Chicago, August 1993-Present.
- **Associate Professor**, Department of Civil and Materials Engineering, University of Illinois at Chicago, August 1999-July 2006.
- **Assistant Professor**, Department of Civil and Materials Engineering, University of Illinois at Chicago, August 1993-July 1999.
- **Project Manager/Project Engineer**, Patrick Engineering Inc., Glen Ellyn, IL, May 1990-August 1993.
- **Civil Engineer (Summer Intern)**, Harza Environmental Services, Inc., Chicago, IL, May 1989-August 1989.
- **Research Assistant and Teaching Assistant**, Civil Engineering Department, Illinois Institute of Technology, Chicago, IL, August 1985-May 1990.
- **Research Associate**, Department of Civil Engineering, Indian Institute of Technology, Roorkee,

India, February 1985-August 1985.

PROFESSIONAL REGISTRATION

- Registered Professional Engineer (PE), State of Illinois #062-049625
- Envision™ Sustainability Professional (ENV SP)

AWARDS AND HONORS

- Best Reviewer Award, *Journal of Hazardous, Toxic and Radioactive Waste*, ASCE, 2018.
- Wesley W. Horner Award, Environmental & Water Resources Institute (EWRI), American Society of Civil Engineers, 2018.
- Excellence in Review Award, Elsevier Waste Management Journal, 2017.
- Editorial Board Member of the Year Award, Indian Geotechnical Journal, 2017.
- Board Certified Environmental Engineer (BCEE), American Academy of Environmental Engineers & Scientists, 2016.
- Distinguished Researcher Award, University of Illinois at Chicago, 2015.
- Visiting Professor, Southeast University, China, 2015.
- Fellow, Indian Geotechnical Society (FIGS), 2015 (LF-0523).
- Best Theoretical-Oriented Paper, ASCE-EWRI's *Journal of Hazardous, Toxic and Radioactive Waste*, 2015.
- Special Visiting Researcher, Brazilian Scientific Mobility Program "Ciências sem Fronteiras" Fellowship, CNPq, 2014-2017.
- Invited Expert Panelist, National Ash Management Advisory Board (NAMAB), University of North Carolina at Charlotte/Duke Energy, 2014-2017.
- Fellow, American Society of Civil Engineers (FASCE), 2012.
- Diplomate, Geotechnical Engineering (DGE), Academy of Geo-Professionals, American Society of Civil Engineers, 2011.
- Best Theoretical-Oriented Paper Award, Published in *Practice Periodical of Hazardous, Toxic, & Radioactive Waste Management*, EWRI-ASCE, 2011.
- Hogentogler Award for the Best Paper published in the *Geotechnical Testing Journal*, Committee D18, American Society of Testing and Materials, 2011.
- University of Illinois Scholar Award, 2007 (Prestigious University level award for excellence in research).
- Award for Excellence in Teaching, University of Illinois at Chicago, 2007 (Prestigious university-level award for excellence in teaching).
- Best Practice-Oriented Paper Award, Published in *Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management*, EWRI-ASCE, 2006.
- Outstanding Geotechnical Educator Award, Great Lakes Geotechnical & Geoenvironmental Conference, 2005-2006.
- Faculty Scholar Award, Institute for Environmental Science & Policy, University of Illinois at Chicago, 2004-2005.
- Best Paper Award for a paper published in the *Indian Geotechnical Journal*, Indian Geotechnical Society, 2004.
- Edmund Burke Teaching Award, University of Illinois at Chicago, 2004.
- Harold A. Simon Award for Excellence in Teaching, University of Illinois at Chicago College of Engineering, 1995, 2003.
- UIC Flame Award for Teaching Excellence Nominee, 2002, 2007.
- Faculty Research Award, University of Illinois at Chicago College of Engineering, 2001.

- Citation of Excellence for the Highest Quality Paper published in the *Journal of Environmental Management and Health*, 1999.
- Best Advisor Award, Professional Engineering Societies Council, University of Illinois at Chicago, 1998.
- Teaching Recognition Award, Council for Excellence in Teaching and Learning, University of Illinois at Chicago, 1997.
- Best Paper Award, Technology Development Conference, U.S. Department of Energy, 1995.
- Clinton E. Stryker Distinguished Service Award, Illinois Institute of Technology, 1989.
- Best Paper Award for 1985-1988, Indian Society of Earthquake Technology.
- Gold Medal for First Position in M.S., Indian Institute of Technology, Roorkee, India, 1985.
- Gold Medal for First Position in B.S., Osmania University, Hyderabad, India, 1983.
- Silver Medal for First Position in College, Board of Intermediate Education, Hyderabad, India, 1978.

RESEARCH GRANTS AND CONTRACTS

1. "GOALI: Innovative Biochar-Slag-Soil Cover System for Zero Emissions at Landfills." National Science Foundation, September 2017-August 2020, \$343,395.
2. "Modeling Coupled Dynamic Processes in Landfills: Holistic Long-Term Performance Management to Improve Sustainability." National Science Foundation, September 2015 –August 2019, \$356,431.
3. "Slag Water to Promote Alkaline Hydrolysis of Halogenated Organic Compounds in Contaminated Waters." Phoenix Services, December 2015 – January 2017, \$5,000.
4. "Green Stormwater Infrastructure at Rainbow Beach." Chicago Park District and United States Environmental Protection Agency, January 2013-January 2016, \$750,000.
5. "Sustainable Biocover System for Methane Oxidation in Landfills." National Science Foundation, March 2012-February 2016, \$372,000.
6. "Phytoremediation of Big Marsh Wetland." Chicago Park District and United States Forest Service, January 2013-January 2016, \$250,000.
7. "Reactive Stormwater Filter to Prevent Beach Contamination." United States Environmental Protection Agency, September 2010-August 2013, \$240,000.
8. "Geoenvironmental Characterization of Contaminated Soils." Hi-Tek Environmental Inc., Chicago, IL, January 2010-January 2013, \$30,301.
9. "First US-India Workshop on Global Geoenvironmental Engineering Challenges." National Science Foundation, August 2010-July 2011, \$35,240.
10. "Development of New Practical Modules of Green and Sustainable Environmental Remediation." University of Illinois at Chicago Council for Excellence in Teaching and Learning, May 2010-April 2011. \$7,000.
11. "Remediation of Contaminated Subsurface Using Nanoscale Iron Particles." National Science Foundation, August 2007-July 2009, \$169,830.
12. "Interdisciplinary Perspectives on Global Environmental Changes." University of Illinois at Chicago Graduate College, June 2008-August 2008, \$20,000.
13. "Multi-disciplinary Research in Environmental Nanotechnology." Faculty Research Cluster Award, Institute of Environmental Science & Policy, University of Illinois at Chicago, May 2007-April 2008. \$10,000.
14. "IGERT: Ecology, Management and Restoration of Integrated Human/Natural Landscapes." National Science Foundation, June 2006-June 2011, \$2,800,000 (PI: M. Ashley).
15. "Geophysical Monitoring of Leachate Recirculation and Its Effects on Waste at Orchard Hills Landfill." Environmental Research and Education Foundation, October 2006-October 2007,

- \$26,875.
16. "Compressibility and Strength Characteristics of Foam Materials under Landfill Loading Conditions." Argonne National Laboratory, June 2006-August 2006, \$7,000.
 17. "Transport Behavior of Surface-modified Reactive Nanoscale Iron Particles." Toda America, Inc., April-December 2006, \$7,200.
 18. "GOALI: Field Monitoring and Performance Evaluation of Four Bioreactor Landfills." National Science Foundation, May 2006-April 2008, \$129,932.
 19. "Integrated Electrochemical Oxidation: Feasibility Studies for Different MGP Sites." Hi-Tech Environmental Inc., Chicago, IL, November 2005-October 2008, \$30,225.
 20. "Dynamic Water Balance and Geotechnical Stability of Bioreactor Landfills: Field Monitoring and Mathematical Modeling." Centre de Recherche pour l'Environnement, l'Energie, et le Dechet (CREED), Limay, France and ONYX Waste Services Inc., July 2005-June 2008, \$308,712.
 21. "Puncture Resistance of PVC Geomembranes." PVC Geomembrane Institute, June 2005-June 2006, \$20,000, (PI: T. Stark, UIUC).
 22. "U.S.-Korea Cooperative Research: Electrokinetic-Enhanced Bioremediation of Metal-Contaminated Soils." National Science Foundation, September 2004-August 2006, \$11,000.
 23. "Dynamic Water Balance and Geotechnical Stability of Bioreactor Landfills: Preliminary Laboratory Study." Centre de Recherche pour l'Environnement, l'Energie, et le Dechet (CREED), Limay, France, September 2004-August 2005. \$20,286.
 24. "Geochemical Characterization and Remediation of Contaminant Mixtures in Subsurface." Faculty Research Cluster Award, Institute of Environmental Science & Policy, University of Illinois at Chicago, May 2004-April 2005, \$15,000.
 25. "Creation of Physical Visualization Experiments to Understand Hazardous Waste Site Remediation Processes." University of Illinois at Chicago Council for Excellence in Teaching and Learning, March 2004-April 2005, \$9,500.
 26. "Workshop on Emerging Geoenvironmental Engineering Technologies for Pollution Control and Remediation." National Science Foundation, July 2003-June 2005, \$28,018.
 27. "Monitoring Database of Waste Containment Systems." Great Lakes Soil and Environmental Consultants, Inc., December 2002-November 2003, \$10,382.
 28. "Compatibility of Barrier Wall Materials with Dense Non-aqueous Phase Liquids (DNAPLs)." Hi-Tek Environmental, Inc., August 2002-September 2005, \$20,000.
 29. "Electrokinetic Remediation of Low Permeability and Heterogeneous Soils Contaminated by Hydrophobic Organic Compounds." National Science Foundation, September 2001-September 2005, \$233,800.
 30. "Development of Integrated Electrokinetic Remediation Technology for Cleanup of Contaminated Sites." STAT Analysis Corporation, August 2000-August 2002, \$84,250.
 31. "Small Scale Testing of Hydraulic Fracture Confinement in Stratified Porous Media-Continuation." Shell Oil Company, April 2000-March 2001, \$160,020, (PI: A. Chudnovsky).
 32. "Beneficial Use of Scrap Tires in Waste Containment Systems." Illinois Department of Commerce and Community Affairs Used Tire Recovery Program, January 2000-January 2003, \$169,173.
 33. "Searle Environmental Safety and Health Scholarship for Graduate Research in Geoenvironmental Engineering." Searle Foundation, September 1999-August 2000, \$10,000.
 34. "Research Experience for Undergraduates." National Science Foundation, May 1999-August 2000, \$8,000.
 35. "Small Scale Testing of Hydraulic Fracture Confinement in Stratified Porous Media." Shell Oil Company, April 1999-March 2000, \$156,876 (PI: A. Chudnovsky).
 36. "PVC Geomembrane Institute-Technical Program." January 1998-December 2005, \$50,000 per year, Continuing Grant - \$350,000 (PI: T. Stark and D. Daniel, UIUC).
 37. "Searle Environmental Safety and Health Scholarship for Graduate Research in Geoenvironmental

- Engineering.” Searle Foundation, September 1998-August 1999, \$10,000.
38. “System Effects on Remediation of VOC-Contaminated Saturated Soils and Groundwater Using In-Situ Air Sparging.” National Science Foundation, September 1998-August 2000, \$120,050.
 39. “Durability of High Performance Concrete under Various Environmental Conditions.” Applied Concrete Technology, Inc., April 1998-March 1999, \$40,000 (PI: M. Issa).
 40. “In-Situ Electrokinetic Remediation of Contaminated Soils: Bench and Pilot Scale Testing.” Gas Research Institute/ Institute of Gas Technology, April 1998-March 2000, \$118,000.
 41. “Comparative Assessment of Potential Technologies for the Remediation of Brownfields.” University of Illinois at Chicago Great Cities Institute, December 1996-June 1997, \$7,500.
 42. “Development of Sequential Conditioning System for In-Situ Electrokinetic Remediation of Chromium-Contaminated Soils.” University of Illinois at Chicago Campus Research Board, June 1996-August 1997, \$12,000.
 43. “Protection of the Infrastructure and Environment during Natural Disasters: The Unique Role of Civil Engineers.” University of Illinois at Chicago Council for Excellence in Teaching & Learning, April 1996-February 1997, \$7,400.
 44. “Foam Enhanced Electrokinetic Remediation of Contaminated Soils.” Institute of Gas Technology, March 1996-August 1996, \$3,062.
 45. “Field and Laboratory Evaluation of Protective Cover Soils for Minimizing Mechanical Damage to Landfill Liners.” Waste Management Inc., September 1995-August 1997, \$82,114.
 46. “Development of a New Test Apparatus to Determine Permeability of Glacial Soils and Rocks.” K&S Testing and Engineering Inc., February 1995-January 1997, \$5,015.
 47. “Evaluation of Protective Cover for Landfill Liners.” RUST Environment & Infrastructure, July 1994-May 1995, \$12,499.
 48. “Pollution Prevention Internship Program.” Illinois Environmental Protection Agency, May 1994-August 1994, \$4,972.

RESEARCH SUPERVISION

Ph.D. Dissertations

1. Adams, Jeffrey, “*System Effects on the Remediation of Contaminated Saturated Soils and Groundwater Using Air Sparging.*” May 1999 (Currently with ENGEO Consultants, San Ramon, CA).
2. Chinthamreddy, Supraja, “*Geochemical Characterization and Enhanced Mobilization of Heavy Metals During Electrokinetic Remediation of Soils.*” December 1999 (Currently with Interra, Inc., Boling Brook, IL).
3. Saichek, Richard, “*Electrokinetically Enhanced In-Situ Flushing for HOC-Contaminated Soils.*” December 2001 (Currently with U.S. Army Corps of Engineers, Chicago, IL).
4. Tekola, Luelseged, “*Remediation of Subsurface NAPL Contamination by In-Situ Air Sparging.*” December 2002 (Currently with U.S. Army Corps of Engineers, Chicago, IL).
5. Al-Hamdan, Ashraf, “*Speciation, Distribution and Mobility of Heavy Metals in Soils During Electrokinetic Remediation.*” December 2002 (Currently with the University of Alabama, Huntsville, AL).
6. Richards, Kevin, “*Piping Potential of Unfiltered Soils in Levees and Dams.*” December 2008 (Currently with the U.S. Army Corps of Engineers, Chicago, IL).
7. Gangathulasi, Janardhanan, “*Effects of Leachate Recirculation on Geotechnical Properties of Municipal Solid Waste in Landfills.*” December 2008 (Currently with Anna University, Chennai, India).
8. Darko-Kagya, Kenneth, “*Lactate-Modified Nanoscale Iron Particles for In-Situ Remediation of Organic Pollutants.*” July 2010 (Currently with U.S. Army Corps of Engineers, VA).

9. Yaghoubi, Poupak, "*Biochar-Amended Soil Cover System to Mitigate Landfill Gas Emissions.*" September 2011 (Currently with Morton College, Cicero, IL).
10. Kulkarni, Hanumanth, "*Optimization of Leachate Recirculation Systems in Bioreactor Landfills.*" May 2012 (Currently with Sam Consultants, Inc., Lombard, IL).
11. Chirikarra, Reshma, "*Phytoremediation of Soils with Contaminant Mixtures.*" December 2014 (Currently with Interra Consultants, Boling Brook, IL).
12. Giri, Rajiv Kumar, "*Attaining Landfill Sustainability through Coupled Hydro-Bio-Mechanical Modeling of Municipal Solid Waste.*" May 2015 (Currently with Geosyntec Consultants, Boston, MA).
13. Yargicoglu, Erin, "*Biotic and Abiotic Characterization of Biochar-Amended Landfill Covers Based on Column and Field Studies.*" December 2016 (Currently with Environmental Information Logistics, LLC, Glen Ellyn, IL).
14. Sadasivam, Balayamini, "*Biochar-based Biocover for Landfill Methane Mitigation: Adsorption, Oxidation and Transport Properties.*" (Defended, but final thesis yet to be submitted).
15. Kumar, Girish, "*Numerical Modeling of Coupled Hydro-Bio-Thermo-Mechanical Processes in Municipal Solid Waste for Holistic Assessment of Landfills.*" In Progress.
16. Chetri, Jyoti, "*Innovative Biochar-Slag-Soil Cover System for Zero Emissions at Landfills.*" In Progress.

M.S. Theses

1. Chad, Oliver, "*Seismic Performance Evaluation of Solid Waste Landfills in Illinois.*" March 1995 (Currently with Federal Aviation Authority)
2. Kosgi, Sinduja, "*Deformation Characteristics of Landfill Composite Liners Under Incremental Refuse Loading Conditions.*" March 1995 (Currently with Motorola)
3. Shirani, Akhgar, "*Electrokinetic Remediation of Metal-Contaminated Glacial Till.*" March 1995 (Currently with Illinois Department of Transportation)
4. Parupudi, Usha, "*Geochemical Processes Affecting Removal of Chromium from Fine-Grained Soils by Electrokinetics.*" March 1996.
5. Semer, Robin, "*Air Sparging: Contaminant Removal Mechanisms, Parameterization Comparisons and Enhancement.*" June 1996 (Currently with MWH Engineering, Inc.).
6. Saichek, Richard, "*Performance of Protective Cover Systems for Landfill Geomembrane Liners.*" December 1997 (Currently with U.S. Army Corps of Engineers, Chicago, IL).
7. Chueng, Kent, "*Cosolvent Enhanced Electrokinetic Remediation of Soils.*" May 1998 (Co-Advised with An Li).
8. Chaparro, Carlos, "*Electrokinetic Remediation of Mercury Contaminated Soils.*" May 1999 (Currently with URS Corporation).
9. Danda, Swapna, "*Enhanced Electrokinetic Remediation of Multiple Heavy Metals in Spiked and Field Soils.*" August 2001 (Currently with Brooms Engineering, Inc.).
10. Marella, Aravind, "*Use of Shredded Scrap Tires as Drainage Material in Landfill Covers.*" May 2002 (Currently with ARCADIS).
11. Roach, Nicole, "*Mineral Structure and Particle Morphology of Kaolin Subjected to Electrokinetic Remediation.*" May 2002 (Currently with U.S. Army Corps of Engineers, Chicago, IL).
12. Chanduri, Kalyan, "*Innovative Electrochemical Oxidation Technology for the Remediation of Organic Contaminants in Soils.*" May 2003 (Currently with GSG Consultants, Inc.)
13. Ala, Prasanth, "*Electrokinetic Remediation of Field Contaminated Soils and Sediments.*" May 2004.
14. Maturi, Kranti, "*Enhanced Electrokinetic Remediation of Soils Contaminated with Co-existing PAHs and Heavy Metals.*" May 2004 (Currently with URS Corporation).
15. Karri, Madhusudhana, "*Integrated Electrochemical Remediation of Mixed Contaminants in Soils.*" May 2005 (Currently with Terracon Consultants, Inc.).

16. Parakalla, Naveen, “*Effect of Degradation on Geotechnical Properties of Municipal Solid Waste.*” May 2008 (Currently with GSG Consultants, Inc.).
17. Dastgheibi, Sara, “*Stormwater Treatment using In-ground Permeable Reactive Filter Systems: Batch Test Evaluation of Media.*” December, 2012 (Currently with Christopher Burke Engineering Ltd.).
18. Goldenberg, Marat, “*Hydraulic Performance of Prototype Geosynthetic Clay Liners in Cap Applications.*” May 2015 (Currently with Burns and McDonnell, IL)
19. Amaya-Santos, Gema, “*Field-Scale Phytoremediation of Mixed Contaminated Site in Chicago, USA.*” July 2016.
20. Gopikumar, Archana, “*Sequestration of Landfill Gas Emissions using Basic Oxygen Furnace Slag.*” June 2018.
21. Rai, Raksha, “*Microbial Abundance and Activity in Innovative Landfill Covers,*” In Progress.

Post-Doctoral Fellows and Visiting Scholars

1. Saichek, Richard: Assisted on electrokinetic remediation project, March 2002-July 2002.
2. Sharma, Saurabh: Assisted on different soil and groundwater remediation projects, February 2003-January 2004.
3. Grellier, Solenne: Assisted on bioreactor landfill project, August 2005-January 2007.
4. Cameselle, Claudio: Assisted on environmental nanotechnology and electrokinetic remediation projects, September 2007-August 2008.
5. Yükselen-Aksoy, Yeliz: Assisted on integrated electrochemical remediation project, March 2008-April 2009.
6. Yue, Donbei: Assisted in various waste management and environmental remediation projects. July 2010-July 2011.
7. Karaca, Ozgur: Collaborated on management of mine tailing project, March 2012-June 2012.
8. Xie, Tao: Assisted with biomass utilization for nutrient removal and soil fertilization, July 2012-August 2013.
9. Xu, Wei: Assisted with foundations for the tall structures/Soil-structure interaction, November 2013-December 2014.
10. Thome, Antonio: Collaborated on nanotechnology for environmental remediation. November 2013-June 2014.
11. Kasthurba, A.K: Collaborated on sustainable construction using waste and recycled materials, February 2014-June 2014.
12. Venkat Reddy, D: Collaborated on environmental impacts of hydraulic fracturing, June-July 2014.
13. Basha, Munwar: Assisted on slope stability of waste dumps and landfills, compressibility of MSW and reliability assessment of transport of nanoiron, June-July 2014.
14. Karaca, Ozgur: Collaborative research on sustainable remediation of mine tailing disposal sites, October 2015-September 2016.
15. Yang, Yuling: Collaborative research on phosphate-amended Ca-bentonite soil backfill for vertical barriers, January 2015-January 2016.
16. Fan, Ri-dong: Collaborative research on chemical compatibility of CMC-amended Ca-bentonite backfill with heavy metals and organic contaminants, January 2016-February 2017.
17. Cecchin, Iziquiel: Collaborative research on use of nanoiron to remediate contaminated residual soils in Brazil, March 2016-February 2017.
18. Cameselle, Claudio: Fulbright scholar, collaborative research on sustainability and environmental remediation, March 2017-June 2017.
19. Patel, Vruthika: collaborative research on microbial analysis in geoenvironmental remediation systems, May 2017 – Decemebr 2017.
20. Mohan, S: Collaborative research on bioreactor landfills, May 2017-July 2017, July 2018.

21. da Silva Trentin, Adan William: Collaborative research on sustainable remediation, December 2017-August 2018.
22. de Souza Tímbole, Rafael: Collaborative research on liners for acid mine drainage containment, December 2017-August 2018.

Undergraduate Research Assistants

- More than 50 undergraduate students have worked on various research projects. These students were funded through research grants, including the National Science Foundation Research Experience for Undergraduate (REU) grants.

PUBLICATIONS

Books (5)

1. Reddy, K.R., Cameselle, C., and Adams, J.A., Sustainable Engineering: Drivers, Metrics, Tools & Applications, John Wiley, In Print.
2. Sharma, H.D., and Reddy, K.R., Geoenvironmental Engineering: Site Remediation, Waste Containment, and Emerging Waste Management Technologies, John Wiley & Sons, Inc., Hoboken, New Jersey, 2004, 992p. (ISBN: 0-471-21599-6).
3. Reddy, K.R., and Cameselle, C. Editors, Electrochemical Remediation Technologies for Polluted Soils, Sediments and Groundwater, John Wiley & Sons, Inc., Hoboken, New Jersey, 2009, 760p. (ISBN: 0-470-38343-7).
4. Reddy, K.R., and Adams, J.A., Sustainable Remediation of Contaminated Sites, Momentum Press, New York, February 2015 (ISBN: 9781606505205).
5. Reddy, K.R., Laboratory Testing of Soils for Engineering Purposes, Laboratory Manual, University of Illinois at Chicago, August 2002.

Edited Books/Conference Proceedings (15)

1. Agnihotri, A.K., Reddy, K.R., and Bansal, A., Editors, Environmental Geotechnology, Recycled Waste Materials, and Sustainable Engineering, Springer, 2018. In Print.
2. Sivakumar Babu, G.L., Reddy, K.R., De, A., and Datta, M., Editors, Geoenvironmental Practices and Sustainability: Linkages and Directions, Springer, 2017 (ISBN 978-981-10-4077-1).
3. Reddy, K.R., Yesiller, N., Zekkos, D., Farid, A., and De, A., Editors, Sustainable Materials and Resource Conservation, Proceedings of GeoChicago2016, Geotechnical Special Publication No.272, ASCE Press, Reston, VA, 2016.
4. Zekkos, D, Farid, A, De, Anirban, Reddy, K.R., and Yesiller, N., Editors, Sustainability and Resiliency in Geotechnical Engineering, Proceedings of GeoChicago2016, Geotechnical Special Publication No.269, ASCE Press, Reston, VA, 2016.
5. Farid, A, De, A, Reddy, K.R., Yesiller, N., and Zekkos, D., Editors, Geotechnics for Sustainable Energy, Proceedings of GeoChicago2016, Geotechnical Special Publication No.270, ASCE Press, Reston, VA, 2016.
6. De, A, Reddy, K.R., Yesiller, N., Zekkos, D., Farid, A., Editors, Sustainable Geoenvironmental

- Systems, Proceedings of GeoChicago2016, Geotechnical Special Publication No.271, ASCE Press, Reston, VA, 2016.
7. Yesiller, N., Zekkos, D., Farid, A., and De, A., Reddy, K.R., Editors, Sustainable Waste Management and Remediation, Proceedings of GeoChicago2016, Geotechnical Special Publication No.273, ASCE Press, Reston, VA, 2016.
 8. Reddy, K.R., and Feng, S., Editors, Geoenvironmental Engineering, Proceedings of GeoShanghai2014, Geotechnical Special Publication No.241, ASCE Press, Reston, VA, 2014.
 9. Khire, M.V., Alshawabkeh, A.N., and Reddy, K.R., Editors, GeoCongress2008: Geotechnics of Waste Management and Remediation, Geotechnical Special Publication No.177, ASCE Press, Reston, VA, 2008, 856p (ISBN: 978-0-7844-0970-1).
 10. Reddy, K.R., Khire, M.V., and Alshawabkeh, A.N., Editors, GeoCongress2008: Geosustainability and Geohazard Mitigation, Geotechnical Special Publication No.178, ASCE Press, Reston, Virginia, 2008, 1203p (ISBN: 978-0-7844-0971-8).
 11. Alshawabkeh, A.N., Reddy, K.R., and Khire, M.V., Editors, GeoCongress2008: Characterization, Monitoring, and Modeling of Geosystems, Geotechnical Special Publication No.179, ASCE Press, Reston, VA, 2008, 1101p (ISBN: 978-0-7844-0972-5).
 12. Reddy, K.R., Guest Editor, Site Remediation Technologies, Special Issue, *Journal of Hazardous Materials*, Vol.143, No. 3, 2007 (ISBN: 0304-3894).
 13. Burns, S.E., Culligan, P.J., Evans, J.C., Fox, P.J., Reddy, K.R., and Yesiller, N., Editors, Geoenvironmental Engineering, ASCE Special Publication No.163, ASCE Press, Reston, VA, 2007 (ISBN: 978-0-7844-0897-1).
 14. Alshawabkeh, A., Benson, C.H., Culligan, P.J., Evans, J.C., Gross, B.A., Narejo, D., Reddy, K.R., Shackelford, C.D., and Zornberg, J.G., Editors, Waste Containment and Remediation, ASCE Geotechnical Special Publication No. 142, ASCE Press, Reston, VA, 2005, 664p. (ISBN: 0-7844-0769-X).
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Refereed Conference Publications

1. Kumar, G., and Reddy, K.R. (2019). "Comparison of shear response of four different liner interfaces under accelerated degradation of MSW in bioreactor landfill." GeoCongress2019, ASCE.
2. Reddy, K.R., and Kumar, G. (2019). "Application of triple bottom line sustainability framework to select remediation method at industrial contaminated site." GeoCongress2019, ASCE.
3. Chetri, J.K., Reddy, K.R., and Grubb, D.G. (2019). "Effect of moisture content on CO₂ sequestration by BOF slag in landfill cover." GeoCongress2019, ASCE.
4. Reddy, K.R., and Kumar, G., and Du, Y-J. (2018). "Risk, sustainability and resiliency considerations in polluted site remediation." Invited paper, 8th International Congress on Environmental Geotechnics, China.
5. Reddy, K.R., and Chirakkara, R.A. (2018). "Phytoremediation of field soil with mixed contamination." 8th International Congress on Environmental Geotechnics, China.
6. Rai, R.K., Chetri, J.K., Green, S.J., and Reddy, K.R. (2018). "Identifying active methanotrophs and mitigation of CH₄ emissions in landfill cover soil." 8th International Congress on Environmental Geotechnics, China.
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193. Saxena, S.K., and Reddy, K.R. (1987). "Dynamic properties of sands at low strain amplitudes." *Proc. Pacific Conference on Earthquake Engineering*, Wairakei, New Zealand, 3, 61-72.
194. Saran, S., and Reddy, K.R. (1984). "Behavior of soils, foundations and slopes during earthquakes." *Proc. International Symposium on Creation of Awareness about Earthquake Hazards and Mitigation of Seismic Risks*, Roorkee, India, 19-24.

PRESENTATIONS

Invited Plenary and Keynote Presentations

1. "Framework for Integrating Sustainability into Electrokinetic Remediation Projects." EREM2018 XVI. International Symposium on Electrokinetic Remediation, Canakkale, Turkey, August 6, 2018.
2. "Green and Sustainable Remediation of Polluted Sites: New Concept, Assessment Tools, and Challenges." XVI Danube - European Conference on Geotechnical Engineering, Skopje, R. Macedonia, June 7, 2018.
3. "Sustainability and Resiliency in Civil and Environmental Engineering." 3rd International Conference on Civil and Environmental Engineering (ICOCEE), Cesme, Turkey, April 24, 2018.
4. "Role of Geochemistry in Sustainable Geotechnics." International Conference on Environmental Geotechnology, Recycled Waste Materials, and Sustainable Engineering (EGRWSE-2018), NIT Jalandhar, March 29, 2018.
5. "Sustainability Applied Remediation of Soil and Groundwater." VI Encontro de Engenheiros e Arquitetos do Norte do RS (EENAR), III Simpósio de Infraestrutura e Meio Ambiente (SINMA), and I Seminário de Geotecnia Ambiental, University of Passo Fundo, Brazil, March 15, 2018.
6. "Overview of Geotechnical Engineering Practice in Chicago." International Seminar on Latest Trends in Structural Engineering and Geo-Environmental Engineering (LTSEGEE-2018), Visakhapatnam, India, March 2, 2018.
7. "Waste Management and Landfill Engineering." International Seminar on Latest Trends in Structural Engineering and Geo-Environmental Engineering (LTSEGEE-2018), Visakhapatnam, India, March 2, 2018.
8. "Polluted Soil and Groundwater Remediation." International Seminar on Latest Trends in Structural Engineering and Geo-Environmental Engineering (LTSEGEE-2018), Visakhapatnam, India, March 3, 2018.
9. "Addressing Sustainability in Civil Engineering." International Seminar on Latest Trends in

Structural Engineering and Geo-Environmental Engineering (LTSEGEE-2018), Visakhapatnam, India, March 3, 2018.

10. "Climate Change, Resiliency and Sustainability: Engineering Challenges for Smart Cities." International Conference on Development of Sustainable Smart Cities, Manipal Institute of Technology & Engineering (MITE), Mangalore, India, January 3, 2018.
11. "Geoenvironmental Engineering for Pollution Control." Indian Geotechnical Society Kolkata Chapter, Jadavpur University, Kolkata, India, December 30, 2017.
12. "Addressing Sustainable Technologies in Geotechnical and Geoenvironmental Engineering." Indian Geotechnical Conference, Indian Institute of Technology Guwahati, December 15, 2017.
13. "Bioreactor Landfills and Leachate Recirculation." GEOSUL 2017, XI Simpósio de Prática de Engenharia Geotécnica da Região Sul, Bento Gonçalves, Rio Grande do sul, July 28, 2017.
14. "Sustainability and Life Cycle Thinking in Geotechnical and Geoenvironmental Engineering." GEORS 2017- IX Seminario De Engenharia Geotecnica Do Rio Grande Do Sul, Universidade De Caxias Do Sul, Brazil, April 27, 2017.
15. "Practical Technologies for Polluted Site Remediation: USA Perspective." The 3rd China National Symposium on Geoenvironmental Engineering, Nanjing, China, November 12, 2016.
16. "Sustainable Bioengineered Cover Systems for Waste Dumps and Landfills." COBRAMSEG/SBMR 2016: XVIII Brazilian Conference on Soil Mechanics and Geotechnical Engineering, Belo Horizonte, Brazil, October 19-22, 2016.
17. "Field-Scale Phytoremediation of Mixed Contaminants in Upland Area at Big Marsh Site, Chicago, USA." International Conference on Soil and Environment, Indian Institute of Science, Bangalore, July 22-23, 2016.
18. "Climate Change, Resiliency and Sustainability: Perspectives on Engineering Challenges." Keynote Lecture, Sustainability in Engineering IV Encontro de Engenheiros e Arquitetos do Norte do RS (EENAR2016), University of Passo Fundo-RS, Brazil, May 11, 2016.
19. "Urban Infrastructure: Innovation and Sustainability." II Encontro Nacional de Tecnologia Urbana, V Simpósio de Pós-Graduação em Engenharia Urbana e o II Simpósio de Infraestrutrua e Meio Ambiente, Universidade de Passo Fundo (UPF), Passo Fundo (RS), Brazil, November 12, 2015.
20. "Assessing Sustainability of Ground Improvement Methods: Quantitative Triple Bottom Line Framework and Case Study." International Conference on INfrastructure Development for Environmental Conservation and Sustenance (INDECS-15), Hosur, Tamilnadu, India, October 28-30, 2015.
21. "Green and Sustainable Remediation: New Paradigm Shift to Cleanup Polluted Sites." VIII Congresso Brasileiro de Geotecnia Ambiental (REGEO' 2015) e do VII Congresso Brasileiro de Geossintéticos (Geossintéticos' 2015), Brasília-DF, Brazil, July 19-21, 2015.
22. "Integrating Sustainability into Waste Containment System Design: Framework and Examples." Global Waste Research Institute (GWRI) Geoenvironmental Engineering Symposium, Cal Poly-San Luis Obispo, CA, February 13, 2015.
23. "Can Solidification/Stabilization be Sustainable Technology for Remediation of Metal Contaminated Soils?" International Workshop on Solidification/Stabilization of Industrially

Heavy Metal Contaminated Soils, Beijing, China, May 1, 2015.

24. "New Binders and Construction Methods for Solidification/Stabilization of Metal Contaminated Soils: US Perspectives." International Workshop on Solidification/Stabilization of Industrially Heavy Metal Contaminated Soils, Beijing, China, May 1, 2015.
25. "Slope Stability of Waste Dumps and Landfills: State-of-the-Art and Future Challenges." Indian Geotechnical Conference (IGC2014), Kakinada, India, December 18-20, 2014.
26. "Integrating Sustainability into Civil Infrastructure Design." International Conference on Sustainable and Innovative Construction Technologies (ICSICT 2014), Karunya University, Coimbatore, India, December 15-16, 2014.
27. "Sustainable (Triple Bottom Line) Design of Civil Infrastructure: Case Studies." 5th International Conference on Sustainable Built Environment (ICSBE), Kandy, Sri Lanka, December 12-15, 2014.
28. "Bioreactor Landfills for MSW Rapid Degradation: Modeling, Optimization and Performance." XIV Congreso Internacional en Disposición Final de Residuos Sólidos y Perspectivas Ambientales, Pereira-Colombia, September 24-26, 2014.
29. "Future Directions for Electrokinetic Remediation Research." 13th symposium on electrokinetic remediation (EREM2014), University of Málaga (UMA), Spain, September 7-10, 2014.
30. "Application of Life Cycle Assessment (LCA) for Sustainable Infrastructure Design." International Conference on Advances in Civil Engineering for Sustainable Development, Suranaree University of Technology, Nakhon Ratchasima, Thailand, August 27-29, 2014.
31. "Sustainable Landfill Biocover." 24th Annual Solid Waste Technical Conference, The Engineering Society of Detroit & Michigan Waste Industries Association, East Lansing, MI, March 18, 2014.
32. "LCA and Sustainability Assessment for Selecting Deep Foundation System for High-rise Buildings." Arab American Association of Architects and Engineers (AAAEA) Fall Conference, Hillside, IL. November 23, 2013.
33. "Quantifying Social Aspects of Sustainable Remediation: Classroom Examples." Sustainable Remediation Forum (SURF) Meeting, Chicago, IL. July 25, 2013.
34. "Electrokinetic Remediation of Soils at Complex Contaminated Sites: Technology Status, Challenges, and Opportunities." Symposium on Coupled Phenomena in Environmental Geotechnics (CEPG), Politecnico Di Torino, Torino, Italy. July 3, 2013.
35. "General Report on Case Studies on Ground Improvement and Geoenvironmental Engineering." Seventh Case Histories in Geotechnical Engineering, Wheeling, IL. May 2, 2013.
36. "Use of Biochar in Landfill Cover Systems to Enhance Methane Oxidation." Keynote Lecture, Purdue Geotechnical Society Workshop, Purdue University, West Lafayette, IN. April 19, 2013.
37. "New Approach to Assess Piping Potential in Earth Dams and Levees." Indo-US Workshop on Strides in Infra-Development on Expansive and Soft Soils, Indian Institute of Technology, Hyderabad, India. June 27, 2012.
38. "Geotechnics for Sustainable Environment." Feature Lecturer, GEOMO2012, Missouri University of Science & Technology, Rolla, MO; Presented 6 lectures on landfill liners/covers,

- bioreactor landfills, green/sustainable remediation, electrochemical remediation, and environmental nanotechnology. April 27, 2012.
39. "State-of-the-Practice of Characterization and Remediation of Contaminated Sites." Keynote Lecture, GeoCongress2012-ASCE, Oakland, CA. March 26, 2012.
 40. "Green and Sustainable Remediation of Polluted Sites." Institute for Geo-Resources and Environment (Geological Survey of Japan), National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Ibaraki, Japan. October 4, 2011.
 41. "Emerging Trends in Remediation of Contaminated Sites in the United States." US-Japan Workshop on Geoenvironmental Engineering, Kyoto, Japan, October 6, 2011.
 42. "Characterization and Remediation of Contaminated Sites." Association of Engineering Geologists, North Central Section, Chicago, IL. October 18, 2011.
 43. "Lactate-Modified Nanoscale Iron Particles for In-Situ Remediation of Organic Pollutants." RemTEC Summit, Wheeling, Illinois. May 19, 2011.
 44. "Geothermal Heating and Cooling Systems at UIC and Elsewhere." ASCE Illinois Section Geotechnique/Geotech Group Meeting. April 13, 2011.
 45. "Nanotechnology for Site Remediation: Dehalogenation of Organic Pollutants by Nanoscale Iron Particles." Plenary Lecture, 6th International Congress on Environmental Geotechnics, New Delhi, India. November 10, 2010.
 46. "Foundations and Earth Retention Systems in Chicago." Invited Presentation, Symposium on Selected Topics in Geotechnical Engineering (STINGE – 2010), J.N. Technological University, Hyderabad, India. November 4, 2010.
 47. "Nanotechnology for Site Remediation." Invited Presentation, National Geophysical Research Institute, Hyderabad, India. November 3, 2010.
 48. "Electrokinetic/Electrochemical Remediation of Polluted Soils and Groundwater." American Institute of Professional Geologists (AIPG)-Illinois/Indiana Section, Spring Meeting, Lisle, IL. April 22, 2010.
 49. "Pile Foundations." ASCE Illinois Section Young Member Group Meeting, Chicago, IL. January 20, 2010.
 50. "Geotechnical Engineering for Pollution Control and Remediation." Keynote Presentation, International Conference on Advances in Concrete, Structural and Geotechnical Engineering, Birla Institute of Technology & Science, Pilani, India. October 25, 2009.
 51. "Modeling Leachate Recirculation and Geotechnical Stability of Bioreactor Landfills: Approach and Data Needs." Veolia Center for Research, Limay, France. October 2, 2009.
 52. "Nanotechnology for Decontamination of Polluted Ground: Fundamentals and Applications." Keynote Presentation, International Conference on Developments on Expansive Soils (INDEX-09), Hosur, India. August 28, 2009.
 53. "Bioreactor Landfill Engineering: A Sustainable Approach to Manage Municipal Solid Waste." IIT Solid Waste Conference, Chicago, IL. May 1, 2009.
 54. "Remediation of Contaminated Subsurface Using Nanoscale Iron Particles." Keynote Presentation, Indian Geotechnical Conference, Bangalore, India. December 15, 2008.

55. "Containment Wall Construction at DNAPL-Contaminated Site." Hong Kong Institute of Engineers-Environmental Division, HKIE Headquarter, Hong Kong, May 29, 2008.
56. "Chemical Oxidation and Reduction of Environmental Pollutants: An Integral Component of Green Remediation." Keynote Presentation, Adventus/Carcus/FMC Workshop on Integration of Technologies, Schaumburg, IL. March 27, 2008.
57. "Advances in Electrokinetic Remediation of Contaminated Sites." Environmental Science Research Institute, School of Environmental Science and Engineering, Huazhong University of Science and Technology (HUST), China. October 27, 2007.
58. "Integrated Electrokinetic Remediation Technologies." Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China. October 25, 2007.
59. "Nanotechnology for Contaminated Site Remediation." International Symposium on Geo-Environmental Engineering for Sustainable Development, Xuzhou, China. October 23, 2007.
60. "Monitoring and Performance Assessment of Bioreactor Landfills." Department of Environmental Science and Engineering, Tsinghua University, Beijing, China. October 22, 2007.
61. "Technical Challenges to In-Situ Remediation of Polluted Sites." First Sri Lanka Geotechnical Society International Conference on Soil and Rock Engineering, Colombo, Sri Lanka. August 9, 2007.
62. "Electrokinetic Delivery of Nanoscale Iron Particles for Remediation of Pentachlorophenol in Clay Soil." 6th Symposium on Electrokinetic Remediation, Vigo, Spain. June 14, 2007.
63. "Performance Assessment of Bioreactor Landfills." Association of Environmental & Engineering Geologists-North Central Section Meeting, Chicago, IL. March 20, 2007.
64. "Geotechnical Aspects of Bioreactor Landfills." Keynote Presentation, Indian Geotechnical Conference, Indian Institute of Technology, Madras, India. December 15, 2006.
65. "Physical and Chemical Groundwater Remediation Technologies." NATO Advanced Study Institute on Overexploitation and Contamination of Shared Groundwater Resources: Management, (Bio)technological, and Political Approaches to Avoid Conflicts, Varna, Bulgaria. October 9, 2006.
66. "Enhanced Aquifer Recharge." NATO Advanced Study Institute on Overexploitation and Contamination of Shared Groundwater Resources: Management, (Bio)technological, and Political Approaches to Avoid Conflicts, Varna, Bulgaria. October 7, 2006.
67. "Remediation of Contaminated Sediments." Workshop on Remediation at 5th International Congress on Environmental Geotechnics, Cardiff, Wales, UK. June 29, 2006.
68. "Technologies for Contaminated Sediment Remediation." 3rd International Symposium on Contaminated Sediments, Shizuoka, Japan. May 24, 2006.
69. "Integrated Electrochemical Remediation of Contaminated Sites: Challenges and Opportunities." Colloquium Honoring Dr. Tamas Meggyes, Federal Institute for Materials Research and Testing (BAM), Berlin, Germany. February 24, 2006.
70. "Dynamic Water Balance and Geotechnical Stability of Bioreactor Landfills." Workshop on Waste Containment, Federal Institute for Materials Research and Testing (BAM), Berlin, Germany. February 21, 2006.

71. "Soil and Geosynthetic Liner Systems for Municipal Solid Waste Landfills." Keynote Presentation, INDEX 2006-International Conference on Infrastructure Development on Expansive Soils, Erode, India. February 2, 2006.
72. "Interface Shear Behavior of Landfill Composite Liners." Keynote Presentation, Japan-Korea Workshop on Geoenvironmental Engineering, Seoul National University, Seoul, Korea. June 4, 2005.
73. "Subsurface Contaminant Remediation: Regulations and Case Studies." Keynote Presentation, Indian Geotechnical Conference, Warangal, India. December 19, 2004.
74. "Geoenvironmental Engineering for Pollution Control and Remediation." Keynote Presentation, Symposium on Awareness of Geoenvironmental Engineering, J.N. Technological University, Kukatpally, Hyderabad, India. December 14, 2004.
75. "Geoenvironmental Engineering: Challenges and Opportunities." Keynote Presentation, National Symposium on Advances in Geotechnical Engineering (NSAGE-2004), Indian Institute of Sciences, Bangalore, India. July 23, 2004.
76. "In-Situ Air Sparging for Contaminated Groundwater Remediation: Effects of System Variables." Keynote Lecture, Fall Meeting of Korean Society of Soil and Groundwater Environment, Jeju, Korea. September 26, 2003.
77. "Assessment and Remediation of Contaminated Sites." Keynote Presentation, Indian Geotechnical Conference, Allahabad, India. December 21, 2002.
78. "Geotechnics of Contaminated Site Remediation and Waste Containment: An Overview." Keynote Presentation, Indian Geotechnical Conference, Indian Institute of Technology-Bombay, India. December 12, 2000.

Invited Seminars/Webinars

79. "Walk the Talk: Incorporating Sustainability in Engineering Design." Departments of Civil Engineering & Environmental Engineering, Dokuz Eylül University, Izmir, Turkey, April 25, 2018.
80. "Waste Management and Landfill Engineering." Indian Institute of Technology Hyderabad, India, March 5, 2018.
81. "Current Research in Geoenvironmental Engineering." National Institute of Technology Suratkal, Department of Civil Engineering, India, January 2, 2018.
82. "Sustainability in Civil and Environmental Engineering." Indian Institute of Technology Kharagpur, India, December 29, 2017.
83. "Biocovers for Mitigation of Landfill Gas Emissions." Ecology & Evolution Group, Department of Biological Sciences, UIC, October 26, 2017.
84. "Life Cycle Sustainability Assessment in Geotechnical and Geoenvironmental Engineering." Department of Civil Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil, May 3, 2017.
85. "Climate Change, Resiliency and Sustainability: Perspectives on Engineering Challenges." UNC Charlotte: Department of Civil & Environmental Engineering, Seminar, September 29, 2016.

86. "Geoenvironmental Engineering Challenges and Opportunities." Indian Geotechnical Society-Bhubaneswar Chapter, Bhubaneswar, India, August 4, 2016.
87. "Sustainable Urban Infrastructure and Environment: Chicago Example." College of Engineering, Bhubaneswar, India, July 31, 2016.
88. "Resilient and Sustainable Site Remediation: New Pathway Forward." State University of Rio de Janeiro, Brazil May 5, 2016.
89. "Protecting Beaches from Urban Stormwater Contamination." UIC Freshwater Lab and EOHS Seminar Class on Water and Health, April 5, 2016.
90. "Permeable Reactive Filter System for Treatment of Urban Stormwater Runoff." EWRI Sustainability Committee Meeting Webinar, March 16, 2016.
91. "Sustainable Design of Civil Infrastructure Systems." Department of Civil Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil, July 24, 2015.
92. "Use of Biochar as Soil Cover Amendment for Landfill Gas Mitigation." China University of Mining and Technology, Beijing, China, December 29, 2014.
93. "Biochar as a Landfill Cover Amendment for Methane Mitigation: Coupled Field and Laboratory Investigations." School of Environment, Tsinghua University, December 25, 2014.
94. "Green and Sustainable Remediation of Polluted Sites." School of Environment, Tsinghua University, Beijing, China, December 24, 2014.
95. "Green and Sustainable Remediation of Polluted Sites." Department of Civil and Environmental Engineering, Syracuse, NY, October 31, 2014.
96. "Social Metrics for Sustainable Remediation." AECOM Webinar, Green/Sustainable Remediation (GSR) Technical Practice Group (TPG), May 27, 2014.
97. "Solid Waste Disposal Challenges." Department of Civil Engineering, Osmania University, Hyderabad, India. August 12, 2013.
98. "Waste Dumps: Problems and Solutions." J.N. Technological University, Hyderabad, India. August 7, 2013.
99. "Electrokinetic Remediation of Contaminated Sites." Dipartimento di Ingegneria Civile, Edile e Ambientale, Università degli Studi di Roma "La Sapienza," Rome, Italy. July 5, 2013.
100. "Leachate Recirculation in Bioreactor Landfills." Department of Geotechnical Engineering, School of Civil Engineering, Tongji University. China, May 23, 2013.
101. "Green and Sustainable Remediation of Polluted Sites." Department of Civil Engineering, Zhejiang University, Hangzhou, China. May 22, 2013.
102. "Green and Sustainable Remediation of Polluted Sites." Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China. May 21, 2013.
103. "Electrochemical Remediation of Polluted Soils and Groundwater." Department of Geo-Engineering and Geo-informatics, Nanjing University, Nanjing, China. May 20, 2013.
104. "Lactate-modified Nanoscale Iron Particles for the Remediation of Recalcitrant Organic Contaminants in Soils and Groundwater." Institute of Geotechnical Engineering, School of Transportation, Southeast University, Nanjing, China. May 19, 2013.

105. "Use of Biochar in Landfill Cover Systems to Enhance Methane Oxidation, Institute of Geotechnical Engineering, School of Transportation, Southeast University, Nanjing, China. May 19, 2013.
106. "Green and Sustainable Remediation of Polluted Sites." Department of Civil Engineering, University of Calgary, Canada. December 17, 2012.
107. "Electrochemical Remediation of Soils and Groundwater." Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI. October 24, 2012.
108. "Electrochemical Remediation of Polluted Soils and Groundwater." Department of Civil Engineering, Indian Institute of Science, Bangalore, India. July 9, 2012.
109. "Landfill Liner and Cover Systems." Indian Geotechnical Society/Indian Institute of Technology, Chennai, India. June 22, 2012.
110. "Overview of Structural Foundations in Chicago." Department of Civil Engineering, SV University, Tirupati, India. June 19, 2012.
111. "Study on Leachate Recirculation at Orchard Hills Landfill." USEPA Region 5 RDD Bioreactor Webinar. February 27, 2012.
112. "Biochar-amended Soil Cover for Mitigation of Methane Emissions." Geosyntec Consultants, Chicago, IL. February 7, 2012.
113. "Monitoring of Leachate Recirculation and its Effects on Municipal Solid Waste at Bioreactor Landfills." Department of Civil Engineering, Hong Kong University, Hong Kong. May 6, 2011.
114. "Green and Sustainable Remediation of Polluted Sites." Sustainability Lunch and Learn Seminar Series, Office of Vice Chancellor for Sustainability, University of Illinois at Chicago, Chicago, IL. December 9, 2010.
115. "Lactate-modified Nanoscale Iron Particles for In-situ Dehalogenation of Organic Pollutants." Department of Building, Civil and Environmental Engineering, Concordia University, Montreal, Quebec, Canada. August 26, 2010
116. "Green and Sustainable Site Remediation: Is it Hands-off Approach to do Nothing?." UIC/CME Environmental Research Seminar Series, University of Illinois at Chicago, Chicago, IL. March 10, 2010.
117. "Leachate Recirculation and Geotechnical Stability of Bioreactor Landfills." Department of Civil Engineering, Indian Institute of Science, Bangalore, India. August 26, 2009.
118. "Nanotechnology for Decontamination of Polluted Soils and Groundwater." Environmental Occupational Health Sciences, School of Public Health, University of Illinois at Chicago, Chicago, IL. May 21, 2009.
119. "Containment of Groundwater Pollution: A Case Study." College of Engineering, J.N. Technological University, Kukatpally, Hyderabad, India. December 16, 2008.
120. "Climate Change and Water Crisis." Two-days seminar for UIC Chicago Teachers-as-Scholars program, organized by the University of Illinois at Chicago Graduate College, Chicago Newberry Library, Woodrow Wilson Foundation, Polk Foundation, and Fry Foundation. November 18-19, 2008.
121. "Bioreactor Landfills: New Paradigm in Design and Operation of Municipal Solid Waste

- Landfills.” Department of Civil, Architectural & Environmental Engineering, Illinois Institute of Technology, Chicago, IL. February 20, 2008.
122. “Field Monitoring and Performance Evaluation of Bioreactor Landfills.” UIC/CME Environmental and Water Resources Seminar Series, University of Illinois at Chicago, Chicago, IL. March 16, 2007.
 123. “Geotechnics of Bioreactor Landfills.” SV University and Indian Geotechnical Society Tirupathi Chapter, Tirupathi, India. December 19, 2006.
 124. “Overview of Geotechnical and Geoenvironmental Engineering at UIC.” Burns & McDonnell Company, Downers Grove, IL. November 9, 2006.
 125. “Environmental Remediation Research: Focus on Contaminated Sediments.” USEPA Great Lakes National Program Office (GLNPO), Chicago, IL. August 24, 2006.
 126. “Environmental Pollution Control and Remediation: An Overview.” UIC/CME Environmental Research Seminar Series, University of Illinois at Chicago, Chicago, IL. January 13, 2006.
 127. “Settlement of Municipal Solid Waste in Conventional and Bioreactor Landfills.” Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, Urbana, IL. April 21, 2005.
 128. “Interface Shear Behavior of Composite Liner Systems.” Department of Civil and Environmental Engineering, Wayne State University, Detroit, MI, March 28, 2005.
 129. “Geoenvironmental Engineering Education and Research at UIC.” Institute of Environmental Science and Policy Steering Committee Meeting, November 2003, and ASCE Student Chapter Meeting, Chicago, IL. February 9, 2004.
 130. “Electrokinetically Enhanced In-Situ Remediation of Contaminated Sites.” Korea Advance Institute for Science and Technology (KAIST), Department of Chemical and Biomolecular Engineering, Dajeon, Korea. September 24, 2003.
 131. “Electrokinetically Enhanced In-Situ Remediation of Contaminated Soils.” Department of Civil & Environmental Engineering, University of Massachusetts, Amherst, MA. October 23, 2002.
 132. “Characterization and Remediation of Brownfield Sites.” Guest Lecture, Course on Brownfields, University of Illinois at Chicago Urban Transportation Center, Chicago, IL. October 8, 2001.
 133. “Electrokinetic Remediation of Contaminated Soils.” Department of Engineering Science, Oxford University, Oxford, UK. August 15, 2001.
 134. “Electrokinetic Remediation of Contaminated Sites.” Environmental Protection Training and Research Institute (EPTRI), Hyderabad, India. December 20, 2000.
 135. “Environmental Geotechnology: An Overview.” College of Engineering, Jawaharlal Nehru Technological University (JNTU), Hyderabad, India. December 19, 2000.
 136. “Remediation of Contaminated Soils and Groundwater at Brownfield Sites.” Guest Lecture, Course on Brownfields, University of Illinois at Chicago Urban Transportation Center. October 17, 2000.
 137. “Use of Shredded Scrap Tires as Drainage Material in Landfill Covers.” Department of Civil, Urban, and Geosystem Engineering, Seoul National University, South Korea. July 4, 2002.

138. "Remediation of Soils Contaminated with Heavy Metals." Midwest Metals Meeting, University of Illinois at Chicago, Chicago, IL. May 12, 2002.
139. "Adaptive Electrokinetic Remediation of Contaminated Soils and Groundwater." School of Civil Engineering, Purdue University, West Lafayette, IN. September 20, 2000.
140. "Remediation of Hazardous Waste Sites." Department of Civil Engineering and Construction Technology, Bradley University, Peoria, IL. April 13, 2000.
141. "New Strategies for the In-Situ Remediation of Contaminated Soils and Groundwater." American Society of Civil Engineers- Geotechnical Group Meeting, Chicago, IL. December 2, 1997.
142. "New Strategies for the In-Situ Containment and Remediation of Contaminants in Soils and Groundwater." Department of Earth and Environmental Sciences, University of Illinois at Chicago, Chicago, IL. November 20, 1997.
143. "Soil Compositional Influence on Electrokinetic Remediation of Chromium-Contaminated Sites." Institute of Gas Technology, Des Plaines, IL, August 31, 1995.
144. "Air Sparging for Groundwater Remediation." Illinois Groundwater Association, Utica, IL. March 22, 1995.
145. "Design of Waste Containment Systems- Two Case Studies." University of Illinois at Chicago, Chicago, IL. May 27, 1993.

Invited Symposia and Workshop Presentations

146. "Perspectives on Solid Waste Management and Waste Dumps." Workshop on Urban Waste Management, Indian Institute of Technology Delhi, December 12, 2017.
147. "Sustainable Biochar-amended Soil Cover Systems for Landfill Gas Mitigation." Geological, Mining, and Geotechnical Engineering 2nd Technical Conference and Alumni Reunion, University of Wisconsin-Madison, Madison, WI, September 14, 2017
148. "Application of Life Cycle Assessment to Geotechnical and Geoenvironmental Projects." Purdue Geotechnical Society Workshop Program, Purdue University, West Lafayette, IN, April 21, 2017
149. "Coupled Hydro-Bio-Mechanical Modeling of Bioreactor Landfills: New Modeling Framework and Research Challenges." US-India Workshop on Establishing Linkages between Geoenvironmental Practices and Sustainability, Chicago, August 18, 2016.
150. "Geophysical Imaging of Landfill Interiors: Examples from Northern Illinois, USA." US-India Workshop on Establishing Linkages between Geoenvironmental Practices and Sustainability, Chicago, August 18, 2016. (With Phil Carpenter, NIU)
151. "Bioengineered Systems and Role of Geochemistry: New Research Developments." US-Japan Workshop on Geoenvironmental Engineering, August 14, 2016.
152. "Fundamental Research on Geochemical Processes for the Development of Resilient and Sustainable Geosystems." NSF Workshop on Geotechnical Fundamentals in the Face of New World Challenges, Washington, D.C., July 16, 2016.
153. "Sustainable Biocover System for Methane Oxidation in Landfills." Department of Civil Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil, November 14, 2015.

154. "Sustainable Stormwater Infrastructure," Water After Borders Summit, University of Illinois at Chicago, April 24, 2015.
155. "PCBs in Soils and Their Remediation." Workshop on a Persistent Pollutant: PCBs and Their Impact on Illinois, Illinois Sustainability Technology Center, Chicago, Illinois, September 17, 2014.
156. "Evaluation of Biochar as a Potential Filter Media for the Removal of Mixed Contaminants from Urban Stormwater Runoff." Midwest Biochar Conference, Champaign, Illinois, August 8, 2014.
157. "Bioreactor Landfills: State-of-the-Practice & Research Challenges." Symposium on Landfill Engineering: Perspectives and Practices, Indian Institute of Technology Hyderabad, India. August 5, 2013.
158. "Development of Biochar-amended Soil Cover for Landfill Gas Mitigation." Illinois Biochar Group Meeting, Urbana, IL. November 7, 2011.
159. "Green and Sustainable Remediation: Incorporating in Curricula." Interstate Technology & Regulatory Council, Fall Meeting, Denver, CO. October 28, 2011.
160. "Contaminated Site Remediation Using Nanotechnology." Nanoscience Working Group, University of Illinois at Chicago, Chicago, IL, April 24, 2007.
161. "Remedial Options for Contaminated Sediments." Symposium on Contaminated Sediments: Challenges and Opportunities, ACS National Meeting, Chicago, IL, March 29, 2006.
162. "Transport of Modified Reactive Nanoscale Iron Particles in Subsurface Soils." U.S. EPA Workshop on Nanotechnology for Site Remediation, Chicago, IL, September 6, 2006.
163. "Electrochemical Remediation of Mixed Contaminants in Soils." 27th Annual Midwest Environmental Chemistry Workshop, University of Wisconsin, Madison, WI, October 17, 2004.
164. "Subsurface Contaminant Remediation: Regulations and Case Studies." Workshop on Remediation of Contaminated Soils and Groundwater in Korea, Jeju, Korea, September 25, 2003.
165. "Mathematical Modeling of Air Sparging." Symposium on Emerging Technologies in Hazardous Waste Management, 224th ACS National Meeting, Boston, MA, August 19, 2002.
166. "Chelated Iron in Fenton-Like Oxidation of Organic Contaminants in Soils." Symposium on Emerging Technologies in Hazardous Waste Management, 224th ACS National Meeting, Boston, MA, August 19, 2002.
167. "Electrokinetic Remediation Modeling Incorporating Geochemical Reactions." Symposium on Emerging Technologies in Hazardous Waste Management, 224th ACS National Meeting, Boston, MA, August 18, 2002.
168. "Remediation of DNAPLs in Groundwater using In-Situ Air Sparging." The 6th International Symposium on Environmental Geotechnology and Global Sustainable Development, Seoul, Korea, July 5, 2002.
169. "Technologies for the Remediation of Mercury-Contaminated Soils." The 6th International Symposium on Environmental Geotechnology and Global Sustainable Development, Seoul, Korea. July 3, 2002.
170. "Transmissivity Behavior of Shredded Scrap Tire Drainage Layer in Landfill Cover System." 6th International Symposium on Environmental Geotechnology and Global Sustainable Development, Seoul, Korea, July 3, 2002.
171. "Protection of Geomembranes from Mechanical Damage." Short Course on Constructing with PVC Geomembranes, PVC Geomembrane Institute, Naperville, IL, July 21, 2000.

172. "Removal of HOCs from Heterogeneous Soils Using Electrokinetically Enhanced Surfactant/Cosolvent Flushing." Symposium on Emerging Technologies: Waste Management in the 21st Century, American Chemical Society, San Francisco, CA, March 29, 2000.
173. "Integrated Electrokinetic Technology for the Remediation of Contaminated Soils and Groundwater." Symposium on Environmental Science & Technology, University of Illinois at Chicago, Chicago, IL, February 16, 2001.
174. "Field Assessment of Air Sparging for Remediation of LUST Sites." Environmental Professionals of Iowa Fall Symposium, Ames, IA, November 17, 2000.
175. "Electrokinetic Remediation of Low Permeability Soils Contaminated by Polycyclic Aromatic Hydrocarbons." *ASTM Symposium*, Reno, NV, January 25, 2001.
176. "Geochemistry of Chromium during Electrokinetic Remediation." 4th International Symposium on Environmental Geotechnology and Global Sustainable Development, Boston (Danvers), MA, August 11, 1998.
177. "Speciation of Heavy Metals in Clays during Electrokinetic Remediation." ACS I&EC Special Symposium, Pittsburgh, PA, September 16, 1997.
178. "The Effect of Grain Size Distribution on Air Sparging Efficiency." Fourth International Symposium on In Situ and On-Site Bioremediation, New Orleans, LA, April 29, 1997.
179. "Geochemical Characterization of Heavy Metals in Clays during Electrokinetics." Committee on Physicochemical Phenomenon in Soils, Transportation Research Board Meeting, Washington, D.C, January 14, 1997.
180. "Electrokinetic Removal of Chromium from Glacial Clays." Eighth International IGT Symposium on Gas, Oil, and Environmental Biotechnology, Colorado Springs, CO, December 1995.
181. "New Applications of Shredded Scrap Tires and Glass Cullet in Civil Engineering." OSWR Solid Waste Research Symposium, Rosemont, IL. March 29, 1995.
182. "Seismic Performance Evaluation of Solid Waste Landfills in Illinois." OSWR Solid Waste Research Symposium, Rosemont, IL. March 28, 1995.
183. "Development of Rational Design Method for Landfill Liner Protective Soil Cover." OSWR Solid Waste Research Symposium, Rosemont, IL. March 28, 1995.
184. "Contaminant Transport through Landfill Composite Liners." OSWR Solid Waste Research Symposium, Rosemont, IL. March 28, 1995.
185. "Deformation Characteristics of Landfill Composite Liners under Incremental Refuse Loading Conditions." OSWR Solid Waste Research Symposium, Rosemont, IL March 28, 1995.

Conference Presentations

- In addition to the above invited presentations, over 100 presentations were made at various conferences on a wide range of topics (excluding the presentations made by my students and other co-authors). See the refereed and non-refereed conference publications sections for details on the presentation titles and conference themes and locations.

TEACHING EXPERIENCE

University Courses Developed and Taught

- Sustainable Engineering (CME514)
- Computer Methods in Geoenvironmental Engineering (CME594)
- Introduction to Geoenvironmental Engineering (CME415)

- Hazardous Waste and Site Remediation Engineering (CME425)
- Subsurface Flow and Contaminant Transport Modeling (CME549)
- Solid Waste Management and Landfill Engineering (CME516)
- Soil Mechanics and Laboratory (CME315)
- Foundation Analysis and Design (CME405)
- Advanced Soil Mechanics (CME505)
- Environmental Pollution Control (CME216)
- Honors Seminar (HON201)

Undergraduate Senior Design/Honors Projects

- Advised numerous undergraduate senior design and Honors projects; many of them have received the best project awards at the annual Engineering Expo held at UIC.

Teaching Evaluations

- Student evaluations have been consistently excellent. Several awards received for excellence in teaching, including the UIC CETL Teaching Recognition Award, the UIC Award for Excellence in Teaching, and the Harold Simon Award.

Professional Short Courses Developed and Taught

- GIAN (Global Initiative of Academic Networks) Short Course on Polluted Sites: Characterization and Remediation, Indian Institute of Technology Bhubaneswar, India, July 25- August 5, 2016.
- GIAN (Global Initiative of Academic Networks) Short Course on Landfills and Geoenvironmental Engineering, National Institute of Technology, Jalandhar, India, May 30 – June 3, 2016.
- Short course on “Sustainable Remediation of Contaminated Sites” Faculdade de Engenharia e Arquitetura (FEAR), University of Passo Fundo (UPF), RS, Brazil, May 8-13, 2016.
- Short course on “Soil and Groundwater Remediation” Faculdade de Engenharia e Arquitetura (FEAR), University of Passo Fundo (UPF), RS, Brazil, July 27-29, 2015.
- One-week short course on “Advances in Geoenvironmental Engineering”, Southeast University, Nanjing, China, December 5-11, 2015.
- One-day short course on “Life Cycle Assessment and Sustainable Geoengineering”, ASCE Illinois Section Geo-Institute Chapter, Chicago, September 9, 2013.
- One-week short Course on “Geoenvironmental Engineering”, Southeast University, Nanjing, China, May 12-21, 2013.
- One-day short course on “Advances in Geoenvironmental Engineering: Remediation of Contaminated Soils, Sediments, and Groundwater”, GeoCongress-2012, ASCE, Oakland, California, March 25, 2012.
- One-day short course on “Design, Construction and Monitoring of Landfills”, First Sri Lanka Geotechnical Society International Conference on Soil and Rock Engineering, Colombo, Sri Lanka, August 7, 2007.

SERVICE- UNIVERSITY OF ILLINOIS AT CHICAGO

University Level

- Faculty Fellow (January 1994-Present), Council Member (August 1997-Present) & Member of various ad-hoc committees (1994-Present). UIC Honors College.
- Chair, UIC Award for Excellence in Teaching Review Panel, 2014, Appointed by the Vice Chancellor for Faculty Affairs.

- Member, Diversity Committee, 2013-2015, UIC Honors College.
- Member, Campus Review Board, 2010-Present, Appointed by the Vice Chancellor for Research.
- Review Committee, Chancellor's Supplemental Graduate Fellowship Program, Graduate College, 2009, 2012, 2014, Appointed by the Graduate College Dean.
- Member, All-Campus Promotion and Tenure Committee, 2008-2012, Appointed by the Provost.
- Faculty Mentor to Assistant Professors on academic career development, 2008-2010, Appointed by the Vice Chancellor for Faculty Affairs.
- Committee Chair, University of Illinois Scholar Award Review Panel, 2009, 2010, Appointed by the Vice Chancellor for Faculty Affairs.
- Member, Council for Excellence in Teaching and Learning, 2008-2012, Appointed by the Vice Chancellor for Faculty Affairs.
- Member, Various ad-hoc committees dealing with research, facilities, awards, etc., 2000-Present. Appointed by Vice Chancellor for Research and Vice Chancellor for Faculty Affairs.
- Member, University Senate, 2005-2008. Elected.
- Presenter/Panel Member, Brown Bag Lunch Interdisciplinary Discussion on "Water: Recreation and Health," Office of Vice Chancellor for Research, October 30, 2007.
- Reviewer, Campus Research Board, 2000-Present.
- Reviewer, CETL Teaching Recognition Program, 2000-Present.
- Steering Committee Member and Fellow, Institute for Environmental Science and Policy. 2002-Present.
- Co-Director, PVC Geomembrane Institute-Technology Program (PGI-TP). University of Illinois at Urbana-Champaign. 1998-2010.
- Faculty Advisor, Sustainable Remediation Forum- UIC Student Chapter. 2012-Present.

College Level

- Member, Diversity Strategic Thinking and Planning Committee.2009-2015. Appointed by the Dean of College of Engineering.
- Member, Laboratory Space Committee, 2006-2007. Appointed by the Dean of College of Engineering
- Faculty Judge, Engineering Senior Design Expo.1994, 1996, 1997, 2002, 2004.
- Member, Research Award Committee, 2001-2002.
- Member, Power Electronics Research Center, 2001-2003.
- Member, College ABET Accreditation Committee, 1998-1999.
- National Engineers Week Open-Lab Host. 1996.

Department Level

- Member, Department Advisory Committee, 1995-96, 2004-06, 2006-2008, 2011-2013.
- Member, Department Graduate Committee, 1994-2015.
- Member, Civil Engineering Graduate Committee, 1996-2010, 2012-2015.
- Member, Civil Engineering Undergraduate Committee, 1995-2013, 2015-Present.
- Organizer, Environmental Research Seminar Series, spring 2006, Fall 2013.
- Member, Structural Mechanics Faculty Search Committee, Spring 2006.
- Faculty Advisor, ASCE Student Chapter, 1998-2006.
 - Participant. ASCE Zone III Workshop for Student Chapter Leaders (WSCL), Dallas, TX. February, 2003.
 - Participant. ASCE Practitioner & Faculty Advisor Training Workshop (PFATW), Reston, VA. September, 2002.

- Member, Laboratory Committee, 1997-2014, 2015-Present.
- Member, Scholarship Committee, 2015-Present
- Member, Computer Committee, 2003-2015.
- Member, CME Distinguished Seminars Committee, 2004-2005.
- Member, Langelier Scholarship Committee, 1997-2006.
- Director, Sustainable Engineering Research Laboratory, 2010-Present.
- Director, Geotechnical and Geoenvironmental Engineering Laboratory, 1993-Present.
- Chair, Environmental Engineering Faculty Search Committee, 1999-2000.
- Director of Undergraduate Studies, 1998-1999.
- Member, Faculty Search Committee, 1995-1996.
- Department Faculty Secretary, 1994-1996.
- Steering Committee Member, UIC Environmental Engineering and Health Center, 1994-1996.
- Department Web Master, 1996-1998.
- Chairperson, Department Seminars, 1996-1999.

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers/Geo-Institute (Member, 242310)
- American Society for Testing and Materials
- International Society of Soil Mechanics and Geotechnical Engineering
- Sustainable Remediation Forum (SURF)
- Association of Ground Water Scientists and Engineers/National Ground Water Association
- American Chemical Society
- Illinois Groundwater Association
- Association of Environmental Health and Science
- Illinois Association of Environmental Professionals
- Transportation Research Board, National Academies, Washington, D.C.
- Clays and Clay Mineralogy
- International Society of Environmental Geotechnology
- Indian Geotechnical Society
- Association of Environmental Engineering and Science Professors (AEESP)
- United States Universities Council on Geotechnical Education and Research (USUCGER)

PROFESSIONAL SERVICE

Offices Held

- Illinois Section, American Society of Civil Engineers
 - Director, Board of Directors, 2007-2012.
 - Chair, Student Chapter Committee. 2008-2012.
 - Member, Student Outreach Committee. 2008-2012.
 - Member, Membership Committee, 2008-2012.
 - Member, Awards Committee, 2008-2012.
 - Member, Infrastructure Report Committee, 2008-2012.
 - Participated in the 2008 Workshop for Section and Branch Leaders. January 25-26, 2008. Austin, TX.
- Great Lakes Geotechnical and Geoenvironmental Conference Steering Committee
 - Secretary/Treasurer (1997-Present)
 - President (1996)

- Vice President (1995)
- Geotechnical Group/Geo-Institute Chapter, Illinois Section, American Society of Civil Engineers
 - Chairman (1999-2000)
 - Vice Chairman (1998-1999)
 - Secretary/Treasurer (1997-1998)
- Honorary Advisor, International Society of Environmental Geotechnology. 2004-Present.

Committee Memberships

- Member, Technical Coordinating Council (TCC), Geo-Institute/ASCE (2015-Present)
- Member, ASCE Committee on Sustainability (2015-Present)
- Member, ASCE/GI Committee on Sustainability in Geotechnical Engineering (2013-Present)
- Member, ASCE/EWRI Committee on Sustainability (2015-Present)
- Chair, Committee on Geoenvironmental Engineering, American Society of Civil Engineers/Geo-Institute (Member: 1998-2008; Chair: 2008-2015). Received the Committee of the Year Award 2013 for major accomplishments.
- Member, Committee on Codes and Standards, American Society of Civil Engineers/Geo-Institute (2013-Present).
- Member, Environmental Geotechnics Committee, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), 2010-Present.
- Member, ASCE Illinois Section Sustainability Committee, 2010-Present.
- Member, ITRC Team on Stormwater BMP Pollution-Reduction Determinations and Performance Verification, 2015-Present.
- Member, ITRC Team on Green and Sustainable Remediation, 2009-2012.
- Member, ITRC Team on Contaminated Sediments-Remediation, 2009-Present
- Member, ITRC Team on Remediation Management of Complex Sites, 2009-Present.
- Member, AFP40-Committee on Physicochemical and Biological Processes in Soils, Transportation Research Board, 1994-2010.
- Member, ASTM Technical Committees: D18.06-Physical-Chemical Interactions of Soil and Rock; D18.14-Industrial Byproducts and Recycled Materials; D18.21.07-Ground Water and Vadose Zone Remediation Technologies, 1999-Present.
- Member, Research Committee, United States Universities Council on Geotechnical Education and Research (USUCGER), 2004-2010.
- Member, Committee on Ground Water, American Society of Civil Engineers/Geo-Institute, 1999-2001.

EDITORSHIPS AND EDITORIAL BOARDS

- Associate Editor, *Journal of Hazardous, Toxic and Radioactive Waste*, ASCE, 2009-Present.
- Editorial Board Member, *Innovative Infrastructure Solutions*, Springer, 2015-Present.
- Editorial Board Member, *Environmental Nanotechnology, Monitoring & Management*, 2013-Present.
- Editorial Board Member, *International Journal of Geotechnical Engineering*, 2011-Present.
- Editorial Board Member, *International Journal of Earth Sciences and Engineering*, 2009-Present.
- Editorial Board Member, *Environmental Geotechnics*, 2012-Present.
- Editorial Board Member, *Waste and Biomass Valorization Journal*, 2009-Present.
- Editorial Board Member, *Frontiers of Environmental Science & Engineering*, 2012-Present.
- Editorial Board Member, *Journal of Soil and Sediment Contamination*, 2002-Present.
- Editorial Board Member, *Indian Geotechnical Journal*, 2012-Present.

- Guest Editor, Special Issue on Bioreactor Landfills, *Journal of Hazardous, Toxic and Radioactive Waste*, ASCE, 2013.
- Guest Editor, Special Issue on Site Remediation Technologies, *Journal of Hazardous, Toxic and Radioactive Waste*, ASCE, 2011.
- Editor, *Land Contamination & Reclamation Journal*, 2005-2012.
- Editorial Board Member, *Journal of Hazardous Materials*, 2006-2010.
- Editorial Board Member, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 2004-2008.
- Guest Editor, Special Issue on Site Remediation Technologies, *Journal of Hazardous Materials*, 2007.
- Editorial Board Member, *Geotechnical Testing Journal*, ASTM International, 2002-2007.
- Board Member, Special Issue on Electrochemical Decontamination of Soil and Water, *Journal of Hazardous Materials*, 1997.

PROPOSAL, PAPER AND BOOK REVIEWS

Research Proposal Review (1993-Present)

- Strategic Environmental Research and Development Program, U.S. Department of Energy
- National Science Foundation, Washington, D.C.
- National Environment Research Council, UK
- National Research Council, Canada
- International Science and Technology Center/U.S. Civilian Research and Development Foundation, Washington, D.C.
- International Foundation for Science, Stockholm, Sweden
- University of Wisconsin Water Resources Institute Madison, Wisconsin
- Research Grants Council of Hong Kong, Hong Kong
- Water Resources Research Institute, University of North Carolina
- Mountain-Plains Consortium, North Dakota State University
- Natural Sciences and Engineering Research Council (NSERC) of Canada
- King Abdullah University of Science and Technology (KAUST), Office of Competitive Research Funds (OCRF), Saudi Arabia
- Environmental Research & Education Foundation (EREF), Raleigh, NC
- W.M. Keck Foundation
- National Fund for Scientific & Technological Development (FONDECYT), Santiago-Chile

Journal Paper Review (1993-Present): Approximately 2-4 papers reviewed per month.

- *Journal of Environmental Engineering*, ASCE
- *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE
- *Geotechnical Testing Journal*, ASTM
- *Journal of Hazardous Materials*
- *Journal of Soil and Sediment Contamination*
- *Advances in Environmental Research*
- *Geosynthetics International*
- *Journal of Air and Waste Management Association*
- *Environmental & Engineering Geoscience*
- *Environmental Engineering Science*

- *Waste Management*
- *Geotechnical and Geological Engineering*
- *Journal of Contaminant Hydrology*
- *Journal of Environmental Technology*
- *Progress in Energy and Combustion Science: An International Review Journal*
- *Environmental Monitoring & Assessment (EMA): An International Journal*
- *Water Research*
- *Land Contamination and Reclamation*
- *Environmental Science & Technology*
- *Indian Geotechnical Journal*
- *The Total Science of Environment*
- *Industrial and Engineering Chemistry Research*
- *Chemosphere*
- *The Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management, ASCE*
- *Separation Science and Technology*
- *Journal of Environmental Management*
- *Electrochemistry Communications*
- *Journal of Materials in Civil Engineering, ASCE*
- *Canadian Biosystems Engineering Journal*
- *Environmental Progress, AIChE*
- *Kuwait Journal of Science and Engineering*
- *International Journal of Environment and Waste Management*
- *Electrochimica Acta*
- *Water, Air, & Soil Pollution*
- *The Journal of Engineering Research, Oman*
- *Plant and Soil Journal*
- *International Journal of Soil, Sediment and Water: Documenting the Cutting Edge of Environmental Stewardship*
- *Journal of ASTM International*
- *Waste Management and Research*
- *Applied Clay Science*
- *International Journal of Geotechnical Engineering*
- *Journal of Applied Electrochemistry*
- *Environmental Nanotechnology, Monitoring & Management*
- *Engineering Geology*

Conference Proceedings Paper Review

- Reviewed numerous papers for the Transportation Research Board Technical Sessions, ASCE/Geo-Institute Conferences, ACS Symposium Series, Geosynthetics Conferences, and other national and international conferences.

Book Proposal Review

- Reviewed book proposals for McGraw-Hill Book Co., John Wiley, Inc. and Cengage Learning.

CONFERENCES, SYMPOSIA AND WORKSHOPS

Chair or Organizer

- Conference Chair, International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE-2019), University of Illinois at Chicago, June 17-18, 2019.
- Conference Chair, International Conference on *Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE-2018)*, National Institute of Technology, Jalandhar, India March 29-31, 2018.
- Conference Chair, *GEO-CHICAGO 2016: Sustainability, Energy and the Geoenvironment*, Specialty Conference of GI/ASCE, Chicago, August 14-18, 2016.
- Organizing Committee Member, 12th International Symposium on Electrokinetic Remediation, Boston. June 2013.
- Organizer, The First US-India Workshop on Global Geoenvironmental Engineering Challenges, funded by the U.S. National Science Foundation, New Delhi, India. November 7, 2010.
- Organizer and Steering Committee Member, ASCE's Geotechnical Lecture Series on Case Studies in Geotechnical Engineering, University of Illinois at Chicago, April 2010.
- Organizer/Steering Committee Member, ASCE's Geotechnical Lecture Series on Current Topics in Foundation Engineering, University of Illinois at Chicago, April 2010.
- Conference Co-Chair, GeoCongress2008: The Challenge of Sustainability in the Geoenvironment, ASCE/GI Annual Conference, New Orleans, LA. March 9-12, 2008.
- Organizer, Combined Chicago Geotechnical Lecture Series & 14th Great Lakes Geotechnical and Geoenvironmental Conference on Geotechnical Aspects of Earth Retention and Shoreline Protection, University of Illinois at Chicago, May 2006.
- Organizer, NSF Workshop on Emerging Geoenvironmental Technologies for Pollution Control and Remediation, University of Illinois at Chicago, September 2003.
- Organizer/Steering Committee Member/Panel Member, Geotechnical Lecture Series on Performance Monitoring of Geotechnical Structures, University of Illinois at Chicago, May 2003.
- Organizer, Symposium on Emerging Technologies in Hazardous Waste Management, 224th ACS National Meeting, Boston, MA, August 2002.
- Symposium Chair, Environmental Science and Technology University of Illinois at Chicago, February 2001.
- Organizer, Chicago Geotechnical Lecture Series, University of Illinois at Chicago, February-March 1998; March-April 2000.
- Conference Chair, Great Lakes Geotechnical/Geoenvironmental Conference on In-Situ Remediation of Contaminated Sites, May 1996.

Conference Advisory or Scientific Committee Member

- Technical Advisory Committee Member, Second International Symposium on Coupled Phenomena in Environmental Geotechnics (CPEG2), University of Leeds, Leeds, UK, September 6-7, 2017.
- International Scientific Committee Member, Geo-Risk 2017: Geotechnical Risk from Theory to Practice, ASCE, Denver, CO, June 4-7, 2017.
- International Advisory Committee Member, International Conference on Advances in Civil Infrastructure and Development of Smart Cities (ICACIDS-2K16), Department of Civil Engineering, Rajarambapu Institute of Technology, Rajaramnagar, Islampur, Sangli, Maharashtra State, India, February 26-28, 2016
- Scientific Committee Member, 6th International Conference on Structural Engineering and Construction Management 2015, December 2015, Kandy, Sri Lanka

- International Advisory Committee Member, 2nd International Conference on Earth Sciences and Engineering (ICEE-2015), Coimbatore, India, March 2015
- International Advisory Committee Member, Sixth International Geotechnical Symposium on Disaster Mitigation in Special Geoenvironmental Conditions, IIT Madras, Chennai, India, January 2015.
- Advisory Committee Member, International Conference on Geotechnical Engineering (ICGE-2015), Sri Lankan Geotechnical Society (SLGS), Colombo, Sri Lanka, August 2015.
- International Advisory Committee Member, International Conference on Sustainable Civil Infrastructure, IIT Hyderabad, Hyderabad, India, October 2014.
- International Advisory Committee Member, International Conference on Environmental Geotechnics (ICEGEO'14), Bharathidasan Institute of Technology, Anna University, Tiruchirapalli, India, October 2014.
- Technical Committee Member, 7th International Congress on Environmental Geotechnics, Melbourne, Australia, November 2014.
- Technical Committee Member, GeoShanghai2014, May 2014.
- Scientific Committee Member, BOSICON International Conference on polluted Site Remediation, Rome, Italy. September 2012.
- Scientific Committee Member, International Conference on Solid Waste Technology and Management, Held annually in Philadelphia, PA. 2012-Present.
- Technical Committee Member, 6th International Congress on Environmental Geotechnics, International Society of Soil Mechanics & Geotechnical Engineering, New Delhi, India, November 8-12, 2010.
- Scientific Committee Member, 9th Symposium on Electrokinetic Remediation, Taiwan, June 2010.
- International Advisory Committee Member, 11th International Symposium on Environmental Geotechnology and Global Sustainable Development, Beijing, China, October 2010.
- International Scientific Committee Member, 11th International Environmental Specialty Conference which is organized by the Environmental Engineering Division of the Canadian Society for Civil Engineering, Winnipeg, Manitoba, Canada, June 9-12, 2010.
- International Advisory Committee Member, International Conference on Developments on Expansive Soils (INDEX-09), Hosur, India, August 27-29, 2009.
- Scientific Committee Member, 8th Symposium on Electrokinetic Remediation, Lisbon, Portugal, July 27-28, 2009.
- International Scientific Committee Member, 4th ASTM International Symposium on Contaminated Sediments- Sustainable Management and Remediation, Dublin, Ireland, June 30-July 3, 2009.
- International Advisory Committee Member, 12th International Association for Computer Methods and Advances in Geomechanics (IACMAG) Conference, Goa, India, October 2008.
- International Scientific Committee Member, The Third International Meeting on Environmental Biotechnology and Engineering (3IMEBE), Palma de Mallorca, Spain, September 21-25, 2008.
- Scientific Committee Member, 7th Symposium on Electrokinetic Remediation, Seoul, Korea, August 19-22, 2008.
- International Scientific Committee Member, 9th International Symposium on Environmental Geotechnology and Global Sustainable Development, Hong Kong, June 1-4, 2008.
- International Advisory Committee Member, International Conference on Waste Engineering and Management, Hong Kong, May 28-30, 2008.
- International Scientific Committee Member, International Symposium on Geoenvironmental Engineering for Sustainable Development, Xuzhou, China, October 22-24, 2007.

- International Advisory Committee Member, First Sri Lanka Geotechnical Society International Conference on Soil and Rock Engineering, Colombo, Sri Lanka, August 6-11, 2007.
- International Advisory Committee Member, International Conference on Cleaner Technologies and Environmental Management (ICCTEM2007), Pondicherry, India, January 2007.
- International Review Panel Member, International Conference on New Developments in Geoenvironmental and Geotechnical Engineering (IETeC2006), Incheon, Korea, November 2006.
- Advisory Committee Member, INDEX 2006-International Conference on Infrastructure Development on Expansive Soils, Erode, India, February 2006.
- International Scientific Committee Member, International Conference on Environmental Management (ICEM2005), Hyderabad, India, October 2005.
- Scientific Committee Member, International Conference on Energy, Environment and Disasters (INCEED 2005), Charlotte, NC, July 2005.
- Advisory Committee Member, International Conference on Geoenvironmental Engineering and Geosynthetics, Indian Institute of Technology, Bombay, India, December 2004.
- Advisory Committee Member, 7th International Symposium on Environmental Geotechnology and Global Sustainable Development, Helsinki, Finland, June 2004.

Technical Session Chair or Organizer

- Session Chair, Solid Waste Management, International Conference on Protection and Restoration of the Environment XIV, Thessaloniki, Greece, July 5, 2018
- Session Chair: LCA and Geoengineering session, Soil & Groundwater Remediation session, and Geosynthetics in Waste Containment session at Geotechnical Frontiers, Orlando, March 2017.
- Working Group Organizer, Sustainable Stormwater Infrastructure, Water After Borders Summit, University of Illinois at Chicago, April 23, 2015.
- Session Chair, Waste Recycling for Construction, International Conference on Solid Waste 2011: Moving Towards Sustainable Resource Management, Hong Kong, May 3, 2011.
- Session Chair, Landfills, 26th International Conference on Solid Waste Technology and Management, Philadelphia, PA, March 28, 2011.
- Session Chair/Co-Chair for sessions: (1) Advances in Site Remediation Technologies-I & II, (2) Elevated Temperatures in Landfills, (3) Unsaturated Characteristics and Behavior of Solid Waste Fills, (4) Use of Geosynthetics for Containment Systems, Geofrontiers2011, Dallas, Texas, March 14-16, 2011.
- Session Chair, Advances in Site Remediation Technologies-I & II, Geofrontiers2011, Dallas, Texas, March 2011.
- Session Chair, Contaminated Sites, Ground Water, Control and Remediation, 6th International Congress on Environmental Geotechnics, New Delhi, India, November 10, 2010.
- Session Chair, Plenary Session: Invited Lectures, 6th International Congress on Environmental Geotechnics, New Delhi, India, November 11, 2010.
- Session Chair, Landfills, 25th International Conference on Solid Waste Technology and Management, Philadelphia, PA, March 15, 2010.
- Session Chair, Physico-Chemical Response of Soil, GeoFlorida2010: Advances in Analysis, Modeling & Design, ASCE, West Palm Beach, FL, February 22, 2010.
- Session Chair, Advances in Concrete Engineering, International Conference on Advances in Concrete, Structural and Geotechnical Engineering, BITS-Pilani, India, October 25, 2009.
- Session Chair, Techniques of Contaminated Site Remediation, 9th International Symposium on Environmental Geotechnology and Global Sustainable Development, Hong Kong, June 2, 2008.
- Session Chair, Characterization and Management of Wastes, International Conference on Waste

Engineering and Management, Hong Kong, May 29, 2008.

- Session Chair, Panel Discussion on Current Topics in Foundation Engineering, ASCE's Chicago Geotechnical Lecture Series, Chicago, IL, April 10, 2008.
- Session Chair, Opening and Closing Plenary Sessions of GeoCongress2008: The Challenge of Sustainability in the Geoenvironment, New Orleans, LA, March 9-12, 2008.
- Session Chair, International Symposium on Geo-Environmental Engineering for Sustainable Development, Xuzhou, China, October 23, 2007.
- Session Chair, Geotechnical Construction, First Sri Lanka Geotechnical Society International Conference on Soil and Rock Engineering, Colombo, Sri Lanka, August 9, 2007.
- Opening Plenary Speaker and Chair for Technical Session on Electrokinetic Barriers, 6th Symposium on Electrokinetic Remediation (EREM 2007), Vigo, Spain, June 13, 2007.
- Session Organizer/Chair, Symposium on Contaminated Sediment Remediation: Challenges and Opportunities, ACS Annual Meeting, Chicago, IL, March 2007.
- Session Organizer/Chair, Symposium on Nanotechnology for Contaminated Site Remediation, ACS Annual Meeting, Chicago, IL, March 2007.
- Session Chair, Advances in Waste Utilization and Disposal, Geo-Denver Conference, Denver, CO. February 2007.
- Session Chair, Panel Discussion on Geotechnical Aspects of Earth Retention and Shoreline Protection, Combined Chicago Geotechnical Lecture Series and the 14th Annual Great Lakes Geotechnical and Geoenvironmental Conference, University of Illinois at Chicago, Chicago, IL, May 12, 2006.
- Session Chair, Geotechnical Issues with Infrastructure Development on Expansive Soils, INDEX 2006-International Conference on Infrastructure Development on Expansive Soils, Erode, India, February 2006.
- Session Chair/Organizer, Bioreactor Landfills Update, Geo-Frontiers2005 Conference, Austin, TX. January 2005.
- Session Chair, Brownfields Redevelopment-Case Studies, ASCE Annual Conference, Nashville, TN, October 2004.
- Session Co-Chair, Soil-Waste Interaction Behavior, Indian Geotechnical Conference, Allahabad, India, December 2002.
- Session Co-Chair, Site Remediation Techniques and Management, 6th International Symposium on Environmental Geotechnology and Global Development, Seoul, Korea, July 2002.
- Session Chair, Recent Experiences and Initiatives in Brownfield Redevelopment, Remaking Chicago Conference, Chicago, IL, November 2000.
- Session Chair, Emerging Technologies for the Remediation of Contaminated Soils and Groundwater, American Chemical Society Conference, San Francisco, CA, March 2000.
- Session Chair, Assessment, Characterization and Remediation of Contaminated Transportation Facilities, Transportation Research Board Meeting, Washington, D.C, January 1998.
- Session Chair, Groundwater Remediation at Petroleum Spill Sites, American Power Conference, Chicago, IL, April 1997.

EXTERNAL PH.D. EXAMINER

- Federal University of Rio Grande do Sul (UFRGS), Brazil
- University of Passo Fundo, Brazil
- University of Calgary, Canada.
- University of British Columbia, Canada
- University of Western Ontario, London, Canada

- Concordia University, Montreal, Quebec, Canada
- Politecnico di Torino-Italy, Scuola Interpolitecnica di Dottorato, Water and Territory Management Engineering, Turin, Italy
- University of Wollongong, Australia
- Indian Institute of Technology-Roorkee, India
- Indian Institute of Technology-Delhi, India
- Indian Institute of Technology-Kanpur, India
- Indian Institute of Technology-Guwahati, India
- Indian Institute of Technology-Bombay, India
- Indian Institute of Science, Bangalore, India
- National Institute of Technology, Hamirpur, India
- National Institute of Technology, Calicut, India
- National Institute of Technology, Suratkal, India
- Motilal Nehru National Institute of Technology, Allahabad, India
- Indian School of Mines, Dhanbad, India
- Anna University, Chennai, India
- Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, India
- Pondicherry Engineering College, Pondicherry, India
- University of Allahabad, Allahabad, India
- Visvesvaraya Technological University, Belgaum, India
- Manipal University, Manipal, Karnataka, India
- Bengal Engineering and Science University, Shibpur (Formerly Bengal Engineering College), Howrah, West Bengal, India
- University of Engineering and Technology, Lahore, Pakistan
- Edith Cowan University (MS Thesis), Australia

OTHER SIGNIFICANT SERVICE ACTIVITIES

- Technical Advisory Board Member, Global Waste Research Institute, California Polytechnic State University, San Luis Obispo, CA, 2010-Present.
- Invited External Reviewer, Geo-engineering Program at Queens University, Canada Foundation for Innovation, January 26-28, 2010.
- Invited External Reviewer, Civil & Environmental Engineering Graduate Program, Southern Illinois University, December 2-4, 2009.
- Foreign Principal Investigator, Global Research Lab (GRL) Program Pre-proposal with multi-Korean and foreign universities and industries led by the Korean Advanced Institute for Science and Technology on the Development of Novel Nano/Bio- Remediation Technologies for Ecosystem Restoration, March 2006 and September 2007.
- Invited Participant, European Research Project on Integrated Risk Assessment and Risk-Based Management for River Basin Systems, 2004, 2005.
- NSF-funded collaborative research on electrokinetic remediation with Korean Advanced Institute of Science & Technology (KAIST) and Korea Institute of Construction Technology (KICT), 2004-2006.
- Advisory Committee Member, Center for Geoenvironmental Engineering, J.N. Technological University, Hyderabad, India, 2000.