

**J. ERIK LOEHR, P.E., Ph.D.**  
Dan Brown and Associates, PC

**EDUCATION**

- PhD 1998 Civil Engineering, The University of Texas
- MS 1993 Civil Engineering, The University of Texas
- BS 1990 Civil Engineering, The University of Texas

**EXPERIENCE AND EMPLOYMENT RECORD**

- 1998-present: Civil Engineering Faculty, University of Missouri
- 2004-present: Technical Affiliate and Senior Principal, Dan A. Brown and Associates
- 1992-1993: Field Engineer, Superconducting Supercollider Site
- 1989-1990: Assistant Estimator, Coffee Excavation, Inc.

**PROFESSIONAL**

- American Society of Civil Engineers and Geo-Institute (Embankments, Dams, and Slope Committee)
- Deep Foundations Institute (Chair Committee on Deep Foundations for Landslides/Slopes)
- International Society of Soil Mechanics and Foundation Engineering
- ADSC: The International Association of Foundation Drilling
- Transportation Research Board
- Registered Professional Engineer: MO#2005022128

**HONORS AND AWARDS**

- 2010 Outstanding Service Award, ADSC: The International Association of Foundation Drilling
- 2005 Chi Epsilon Excellence in Teaching Award
- 2004 University of Missouri College of Engineering Junior Faculty Research Award
- 2004 University of Missouri Excellence in Education Award
- University of Missouri College of Engineering Faculty Fellow, 2003 - present
- 2001 National Science Foundation CAREER Award

**PROFESSIONAL INTERESTS AND SUMMARY**

Dr. Erik Loehr has a distinguished career of research, instruction, and practice in the field of geotechnical engineering. He is known for his expertise in addressing complex slope stability and earth stabilization problems, particularly those involving deep foundations, and the effects of moving soil on structural foundations. His expertise also includes evaluation of risk and reliability as applied to practical projects. He was lead investigator for development of the new Missouri Department of Transportation geotechnical design guidelines and is an instructor and developer of the National Highway Institute course on slope stabilization and slide repair. In addition to his research and teaching activities, he has served as consultant on numerous projects involving complex slope stability and slope stabilization issues.

**RECENT REPRESENTATIVE PUBLICATIONS**

- Loehr, J.E., and D. Huaco (2009), "Probabilistic Calibration of Resistance Factors for Slope Stability," *Contemporary Topics in In Situ Testing, Analysis, and Reliability of Foundations*, Proceedings of the 2009 International Foundation Congress and Equipment Expo, ASCE, GSP 186, pp. 466-473.
- Boeckmann, A.Z., and J.E. Loehr (2007), "Load Transfer in Flexible and Stiff Piles for Landslide Stabilization from Large Scale Physical Models," *Proceedings of the 1<sup>st</sup> North American Landslide Conference*, Vail, Colorado, AEG Special Publication No. 23, pp. 1195-1204.

- Brown, D.A., and J.E. Loehr (2007), "A simple solution for slope stabilization using micropiles," *Proceedings of the 32<sup>nd</sup> Annual Conference on Deep Foundations*, Colorado Springs, Colorado, October 11-13, 2007, Deep Foundations Institute, pp. 93-104.
- Loehr, J.E., T.W. Fennessey, and J.J. Bowders (2007), "Stabilization of Surficial Slides Using Recycled Plastic Reinforcement," *Transportation Research Record: Journal of the Transportation Research Board*, No. 1989, Vol. 2, Transportation Research Board of the National Academies, Washington, D.C., pp. 79-87.
- Axtell, P.J., J.E. Loehr, and D.L. Jones (2006), "Case History: Multiple Axial Static Tests on a Drilled Shaft Embedded in Shale," *Proceedings of 31<sup>st</sup> Annual DFI Conference on Deep Foundations*, Washington, D.C., October 4-6, pp. 203-210.
- Neupane, D., J.J. Bowders, J.E. Loehr, A. Bouazza, and S.J. Trautwein (2005), "Sealed Double Ring Infiltrimeters for Estimating Very Low Hydraulic Conductivity," *Geotechnical Testing Journal*, ASTM, Vol. 28, No. 3, pp. 247-252.
- Loehr, J.E., B.F. McCoy, and S.G. Wright (2004), "Quasi 3-D Method for Slope Stability Analysis of General Sliding Bodies," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 130, No. 6, pp. 551-560.
- Ang, E.C., and J.E. Loehr (2003), "Specimen Size Effects for Fiber-Reinforced Silty Clay in Unconfined Compression," *Geotechnical Testing Journal*, ASTM, Vol. 26, No. 2, pp. 191-200.
- Sanford Bernhardt, K.L., J.E. Loehr, and D. Huaco (2003), "An Asset Management Framework for Geotechnical Infrastructure," *Journal of Infrastructure Systems*, ASCE, Vol. 9, No. 3, pp. 107-116.
- Bowders, J.J., J.E. Loehr, D. Neupane, and A. Bouazza (2003), "Construction Quality Control for Asphalt Concrete Hydraulic Barriers," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 129, No. 3, pp. 219-223.

#### SELECTED RECENT CONSULTING PROJECTS

- ***Micropile Stabilization for Union Pacific Railroad, Hermann, Missouri***; Designer of stabilization measures for unstable slope along Missouri River.
- ***US Highway 98 Slope Stabilization, Wilmer, Alabama***; Lead geotechnical designer for remedial measures for multiple, seepage induced slides along newly constructed segment of highway.
- ***Independent Review Panel for Wolf Creek Dam, Jamestown, Kentucky***; Consultant on independent review panel commissioned by Congressman Hal Rogers to assess condition of Wolf Creek Dam.
- ***Lowman Power Plant River Bank Stabilization, Leroy, Alabama***; Lead geotechnical consultant for design/construction of drilled shafts for stabilization of deep seated sliding.
- ***Shear Strength Evaluation for Landfill Expansion, Grand Forks, North Dakota***; consultant responsible for establishing strength of soft foundation soils for a proposed landfill expansion.

#### SELECTED SPONSORED RESEARCH PROJECTS

- "LRF Design Guidelines for Bridge Foundations" Missouri Dept. of Transportation
- "Ground-based Interferometric Radar for Infrastructure Applications, National Science Foundation
- "Evaluation and Optimization of Polymer-based Drilling Fluids" Missouri Dept. of Transportation
- "Stabilization of Earth Slopes Using In-site Reinforcement" National Science Foundation
- "SAR Methods for Detection and Characterization of Subsidence from Underground Facilities" National Geospatial Intelligence Agency.