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RAYMOND BOLTON SEED

Dr. Raymond B. Seed received his Bachelor of Science Degree in Civil Engineering from the University of California at Berkeley in 1980, and his Master of Science and Doctor of Philosophy Degrees, both in Geotechnical Engineering and both from the University of California at Berkeley, in 1981 and 1983, respectively. After working between 1980 and 1983 as an engineer for several geotechnical consulting firms, (Dames and Moore, Woodward-Clyde Consultants, and Converse Consultants), he joined the faculty of Stanford University where he served for four years as an Assistant Professor of Civil Engineering. He returned to U.C. Berkeley in 1987, where he is now a Professor of Civil and Environmental Engineering.

Since 1982, Professor Seed has served as a geotechnical consultant to numerous domestic and foreign engineering firms and government and civil agencies on problems spanning a number of areas including: geotechnical earthquake engineering, static and seismic stability evaluation and design of dams and embankments, analysis of soil-structure interaction, design and performance of buried structures and conduits, stability and performance of waste fills and repositories, advanced geotechnical laboratory testing for a variety of applications, seismic risk analyses of lifeline systems, seismic response analyses, slope stability studies, liquefaction hazard assessment and mitigation, foundation design, and geotechnical finite element analyses of a variety of problems.

The author of more than 200 professional research publications, Professor Seed's research activities also span a wide range of subject areas. His research has had a significant impact on geotechnical practice in a number of areas including: analysis of compaction-induced stresses and deformations, seismic stability and performance evaluation for dams and embankments, analysis of soil liquefaction potential and post-liquefaction behavior, analysis of reinforced soil systems and deep braced excavations, effects of site conditions on seismic site response, finite element analysis of soil-structure interaction, stability and performance evaluation for hazardous waste fills, risk assessment for levees and flood control systems, and others. He has led and/or participated in forensic studies of nine major earthquakes (domestic and foreign), multiple slope and dam failures, one tsunami, and the Kettleman Hills waste repository failure, and he led the NSF-sponsored independent investigation of the performance of the New Orleans regional flood protection systems following hurricane Katrina. He has also served as an advisor to local, state and national governmental agencies and professional organizations on the development of policies, design codes and practice in the fields of geotechnical and earthquake engineering.

Among the professional honors accorded him, he has received the ASCE Thomas A. Middlebrooks Award (1987 and 2006), the ASCE Edmund Friedman Young Engineer Award for Professional Achievement (1989), the ASCE Arthur Casagrande Award (1989), and the ASCE Huber Research Prize (1996) from the American Society of Civil Engineers, the Prakash Award for International Contributions to Seismic Geotechnics (1997), the Presidential Young Investigator Award (1985) from the U.S. National Science Foundation, a Special Resolution from the California Geology Board recognizing contributions to State seismic safety (2001), and a formal citation from the Egyptian Government's High and Aswan Dam Authority. He was twice selected as the Queen Mary Lecturer (ASCE; 2003 and 2006), and also as the 2006 George W. Sowers State of Practice Lecturer (ASCE). Professor Seed has also received a number of awards and honors recognizing his contributions as an educator, including the 1989 University of California Distinguished Teaching Award (the University's highest teaching award), the New Engineering Educator Excellence Award (1988) from the American Society for Engineering Education, and several other teaching awards from the Department of Civil Engineering at U.C. Berkeley.