



## IN MEMORIAM

Joseph Penzien  
Professor of Civil Engineering, Emeritus  
UC Berkeley  
1924 – 2011

Joseph Penzien died on September 19, 2011 as a consequence of a fall at his home in Lafayette, California. Joe was born on November 21, 1924, on a farm near Philip, South Dakota. The family lived in a tar paper shack with no running water and he attended a one room school with sixteen classmates. The Great Depression of 1932, together with the drought that produced the Dust Bowl, prompted the family to move to a farm in Nampa, Idaho, where Joe helped his father and completed high school. Aided by a series of fortuitous circumstances, he attended the University of Washington and received a B.S. in Civil Engineering in 1945. During the next two years he worked first for the Army Corps of Engineers and then as a Lecturer at the University of Washington. He was then awarded a full scholarship at M.I.T., where he earned his Sc.D. in Civil Engineering in 1950. While at M.I.T. he married Jeanne Ellen Hunson. Their children are Robert Joseph, Karen Estelle, Donna Marie and Charlene May.

He then joined Sandia Laboratory in Albuquerque, NM, working on blast effects on structures, followed by similar work at Convair in Ft. Worth, TX. In 1953 he joined the faculty of the Division of Civil Engineering and Irrigation in the Department of Engineering at Berkeley as an Assistant Professor. Moving through the ranks he was promoted to Professor in 1962 and retired in 1988. Thereafter, he moved to Taipei, Taiwan, in the consulting firm Eastern International Engineers, which he had started with local partners in the early 1980's. After a year at this firm, he returned to his home and with Dr. Wen S. Tseng launched International Civil Engineering Consultants, a Berkeley firm in which he served as Chairman until 2007.

Together with colleagues Ray Clough and Vitelmo Bertero, Joe developed the teaching and research programs in structural dynamics and earthquake engineering that many considered to be the best in the world. His scholarly contributions and engineering analysis and design expertise received international acclaim. Among the many accomplishments we note the following: Development of perhaps the earliest course in random vibrations, and its relevance to earthquake engineering, offered in Civil Engineering departments in the United States; As the Founding Director of the Earthquake Engineering Research Center (EERC), his leadership was responsible for the rapid recognition of EERC as one of the foremost research centers in the world in earthquake engineering. With Dixon Rea he was responsible for designing and operating the first modern servo- controlled shaking table of significant size. The Center attracted a stream of visitors from all over the world, especially from Japan. Joe's special rapport with Japanese earthquake engineers led to significant collaboration in research over three decades. In addition to his impact on research his book, Dynamics of Structures, co- authored with Ray Clough, was a landmark in terms of its broad scope, comprehensive coverage and philosophy. It was translated into six languages and influenced several generations of students and engineers as well as subsequent textbook writers.

That his career as an engineering scholar and consulting engineer had a major impact is validated by the number of honors and awards that he was given. Among them are the following: Member, National Academy of Engineering; Fellow, American Academy of Mechanics; Honorary Member of the Peruvian Association of Earthquake Engineering; Honorary Member, Earthquake Engineering Research Institute, USA; Honorary Member, Architectural Institute of Japan; Honorary Member, American Society of Civil Engineers (ASCE); Honorary Member, International Association of Earthquake Engineering; Nathan M. Newmark Medal, Alfred M. Freudenthal Medal, Ernest F. Howard Award, all of the ASCE; Alfred E. Alquist Medal, California Earthquake Safety Foundation; Silver Medal of Paris; The Berkeley Citation.

From a tarpaper shack near the badlands of South Dakota to an elegant home in Lafayette, CA; from a one-room school to a high school student in Idaho who did not have the funds for college to a doctoral degree at M.I.T. in two and one-half years; from a farming family of eight children in which his father did not trust educated people to an eminent professor at the University of California, Berkeley; Joseph Penzien traveled a long, hard road with incredible success. As his colleagues we stand in grateful appreciation of his friendship, yet this record leaves unspoken the gracious, kind, humble and generous person that was Joseph Penzien.

Anil K. Chopra  
Karl S. Pister