



Dr. Geoffrey Martin

Dr. Geoffrey Martin has more than 40 years of experience in civil and geotechnical engineering. He is nationally and internationally recognized for his expertise in the field of geotechnical and earthquake engineering, particularly as related to the stability of earth structures, liquefaction, ground improvement, and the seismic design of foundations. He has authored or co-authored over 100 papers on these topics.

Dr. Martin received his M.S. in Civil Engineering from the University of Auckland, New Zealand in 1962 and his Ph.D. in Geotechnical Engineering from the University of California, Berkeley, in 1965. Following a 12-year career as a Professor of Civil Engineering at the University of Auckland, New Zealand, he joined the Earth Technology Corporation, Long Beach in 1977, as manager of Earthquake Engineering. Subsequently, as Vice President for Engineering, he was responsible for technical direction of major geotechnical projects particularly those related to earth dams, port facilities, offshore structures and bridges. He also directed the company's research activities in earthquake engineering.

In 1990 he returned to academia as a Professor in the Department of Civil Engineering at USC where he is focusing his research interests on liquefaction related ground stability studies and the seismic design of foundations and retaining structures. He is a contributing author to the "Recommended LRFD Guidelines for the Seismic Design of Highway Bridges" (2001), the "FEMA 273/274 Guidelines for the Seismic Rehabilitation of Buildings," and the Port of Los Angeles Seismic Code for Container Wharves.

He is active as an independent consultant and is currently a Technical Advisory Panel Member for the Los Angeles Metropolitan Transportation Agency Tunnel Projects, the Port of Los Angeles, the Los Angeles County Sanitation Districts Ocean Outfall Tunnel Project, and the Port of Long Beach Gerald Desmond Bridge.

Joseph P. Nicoletti graduated from the University of California with a B.S. in Civil Engineering in 1943 with postgraduate studies in soil mechanics, coastal engineering, design of timber structures, and structural dynamics. In 1943-1946, Joe's duties in the U.S. Navy included shipbuilding officer and deck division officer on submarine tender in Central and South Pacific.

As Field Engineer for construction of the supersonic wind tunnel at Moffett Field, from 1946-1947, Joe joined the staff of structural engineering office of John A. Blume in 1947. He became a principal in the firm upon incorporation in 1957. The firm was known as URS/Blume - after acquisition by URS Corporation. In addition to the above administrative duties with URS/Blume, as Chief Engineer, Joe was responsible and in charge of all firm design and consultation projects that included major commercial and public buildings, military facilities, and waterfront and coastal structures. Joe retired as president of URS/Blume in 1987, but returned as senior consultant after the Loma Prieta earthquake in 1989 and retired completely in 2003.

For the Metropolitan Transportation Commission, Joe chaired the Engineering and Design Advisory Panel for East Crossing of the Bay Bridge. For Caltrans, he co-chaired peer review panels for retrofit of the San Francisco double deck viaducts and was a member of the peer review panels for replacement of the Cypress viaduct and retrofit of 24/580/980 interchange.

Joe's Professional Affiliations include: The American Society of Civil Engineers, Fellow; Structural Engineers Association of Northern California, Past President and Honorary Member; Earthquake Engineering Research Institute, Honorary Member; Applied Technology Council, Past President; San Francisco Bay Conservation and Development Commission, Member and Past Chair of Engineering Criteria Review Board; California Department of Transportation, member of the Seismic Advisory Board and Chair of Peer Review Panel for East Crossing of Bay Bridge

CALTRANS SEISMIC ADVISORY BOARD

Purpose:

The Seismic Advisory Board (SAB) is an independent body whose role is to advise Caltrans on seismic policy and technical practices to enhance the seismic safety and functionality of California's transportation structures.

Mission:

The mission of the SAB is to assist Caltrans in its role and obligation to provide seismic safety of California's transportation structures through:

1. Continued review of earthquake engineering and seismic design as practiced by Caltrans.
2. Formulation of recommendations for improvements in Caltrans earthquake engineering and seismic design practices.
3. Policy review of seismic hazard definition and mitigation directives.
4. Technical review of seismic design guidelines and standards for transportation structures.
5. Review and comment on Caltrans seismic research agenda and priorities.
6. Being available to provide the general public with explanations regarding Caltrans' seismic safety policies and procedures for maintaining safety and functionality of California's transportation structures.

Publications:

Caltrans Seismic Advisory Board publications are include:

*Race to Seismic Safety December 2003,
The Continuing Challenge October 1994,
and Competing Against Time May 1990.*

CALTRANS



Seismic Advisory Board

December 2007



Seismic Advisory Board Members



Chair
Dr. Frieder Seible

Frieder Seible is the Dean of the Jacobs School of Engineering at the University of California, San Diego. His responsibilities include strategic planning and operations, School-wide research and education initiatives, academic affairs, and UCSD-wide cooperative programs. He is a member of the National Academy of Engineering and is the Walter J. Zable Professor of Engineering and the Eric and Johanna Reissner Professor of Applied Mechanics and Structural Engineering.

Dr. Seible's research achievements include the development of large-scale structural testing techniques, seismic assessment and retrofit of bridges, and the application of Polymer Matrix Composites (PMC) in civil engineering structures. He was the founding director of the Charles Lee Powell Structural Research Laboratories, which serve as a worldwide resource for full-scale testing and analysis of structures. Dr. Seible is the chair of the California Department of Transportation (Caltrans) Seismic Advisory Board and has contributed to the Caltrans Bridge Seismic Safety Program through his large scale testing and retrofit research. He has served on or led many national and international committees on bridge reconstruction and retrofit. Dr. Seible has received numerous awards for his research, including the 2006 Humboldt Research Award, and has published more than 600 papers and technical reports mainly related to seismic design of bridges and buildings, as well as blast resistant design of critical structures.

Dr. Seible joined the UCSD faculty in 1983, and served as the founding Chair of the Department of Structural Engineering from 1995 to 2001. As chair, he oversaw the development of the first nationally accredited program in structural engineering. Dr. Seible received a Dpl. Ing. from the University of Stuttgart, a M.Sc. from the University of Calgary, and a Ph.D. from the University of California, Berkeley, all in civil engineering.



Vice - Chair
Dr. Ian Buckle

Ian Buckle is the Director of the Center for Civil Engineering Earthquake Research and Professor of Civil Engineering at the University of Nevada, Reno. Previously, he served as Deputy Vice-Chancellor (Research), University of Auckland, New Zealand and as Deputy Director of the National Center for Earthquake Engineering Research, University at Buffalo, New York (now the Multidisciplinary Center). He earned his BE (Hons) and Ph.D. degrees from the University of Auckland, New Zealand.

Dr. Buckle's research interests include seismic performance of bridges, lifelines and buildings; design and retrofit criteria for bridges; earthquake protective systems for structures including the theory, hardware, and engineering applications of seismic isolation; non-seismic bridge performance for extreme loads such as thermal effects and overloads; and linear and nonlinear analytical techniques for structures subject to dynamic loads. He has conducted short courses in bridge engineering, seismic retrofitting, and the seismic isolation of highway bridges; conducted full-scale field testing and large-scale laboratory testing of structures using static and dynamic loads; and has been a member of reconnaissance teams to earthquakes in California, Japan and Taiwan.

He is the lead author of the seismic provisions in the AASHTO LRFD Comprehensive Bridge Specifications (1994), the AASHTO Standard Specifications (16th Edition) Division I-A (Seismic Design), and the FHWA Seismic Retrofitting Manual for Highway Bridges (1995 and 2006 eds).

Dr. Buckle is currently the chair of TRB Committee AFF50 on Seismic Design of Bridges, vice-chair of the Caltrans Seismic Advisory Board, immediate past president Board of Directors NEES Consortium, and past chair ASCE Technical Council on Lifeline Earthquake Engineering. Current appointments also include being a member of the board of directors of the Consortium of Universities for Research in Earthquake Engineering, and the Nevada Earthquake Safety Council.

He is a member of the American Society of Civil Engineers, Earthquake Engineering Research Institute, and the New Zealand Society of Earthquake Engineering.



Dr. Norman Abrahamson

Dr. Norman Abrahamson is an internationally recognized expert in engineering seismology. Dr. Abrahamson has extensive experience in the practical application of seismology to the development of deterministic and probabilistic seismic criteria for engineering design and analyses. He has been involved in developing or reviewing design ground motions for hundreds of projects including dams, bridges, nuclear power plants, nuclear waste repositories, water and gas pipelines, rail lines, ports, landfills, hospitals, electric substations, and office buildings.

At PG&E, Dr. Abrahamson is responsible for developing ground for seismic evaluations of PG&E facilities including nuclear power plants, nuclear waste storage, dams, penstocks, electric substations, office buildings, and gas pipelines. He is also responsible for the technical management of the PG&E seismic research program funded through the Pacific Engineering Research Center. He is also directing the seismic studies in a cooperative agreement between PG&E and the Department of Energy.

As an adjunct professor at UC Berkeley and UC Davis, Dr. Abrahamson teaches a graduate class on seismic hazard analysis and directs students in their PhD research.

As a consultant, Dr. Abrahamson has been involved in the development or review of the ground motions for all of the major toll bridges in California. He also served as the leader of the ground motion characterization study for two major seismic hazard studies: the proposed nuclear waste repository at Yucca Mtn and a major update of the seismic hazard for Swiss nuclear power plants (PEGASOS project). He is currently leading a study by EPRI to update the models of the variability of ground motions in the eastern US for application to new nuclear plants.



Jack Boda

Jack Boda is the Director of Capital Projects and Mobility Management for the San Diego Association of Governments (SANDAG). He is a registered Civil Engineer with more than 28 years of experience planning, designing, building, and maintaining transportation systems throughout the State of California. His current responsibilities include the implementation and management of the San Diego region's \$14 billion TransNet half-cent sales tax program for transportation. He also directs the SANDAG overall transportation program project office and the development and operation of the region's Intelligent Transportation System Network including Managed Lanes (HOT) and Traveler Information system (511). Before coming to SANDAG, Boda worked for the California Department of Transportation (Caltrans) and held several key management positions including State Traffic Engineer, Capital Project Program Manager, San Francisco Bay Area Chief Deputy Director, and served as the interim San Diego District 11 Director. Boda holds multiple degrees in Transportation and Civil Engineering from Cal Poly San Luis Obispo, is a registered Civil Engineer, and is a member of the State of California Seismic Advisory Board.



Dr. Gregory Fenves

Gregory L. Fenves is the T.Y. and Margaret Lin Professor of Engineering in the Department of Civil and Environmental Engineering at the University of California, Berkeley. He has conducted research over twenty years in the behavior and analysis of complex structural systems, such as bridges, subjected to earthquake ground motion and extreme loading. Research developments have included new methods of analysis and design of bridges based on nonlinear models and advanced computational simulation. Fenves has a substantial research record in soil-structure-foundation interaction with particular application to long-span bridges. Results of the research have been incorporated into design guidelines. He was a co-principal investigator of a research program on seismic protective systems for bridges, sponsored by Caltrans. Fenves has developed a widely used constitutive model for concrete, and employed such models for assessing the potential of collapse of critical structures in earthquakes. He is a key participant and member of the Research Committee for the Pacific Earthquake Engineering Research Center (PEER), and he established the PEER Lifelines Program while serving as Assistant Director. From 1997 to 2002, Fenves led a lifelines research program on seismic hazard and ground motion sponsored by Caltrans. Fenves was a team member for an NCHRP project to develop new national seismic design standards for bridges. He was responsible for the sections on seismic analysis of bridges.

Fenves is a member of ASCE and has received the Moisseiff Award, Reese Research Prize, and the Huber Award from the society. He has served on and chaired technical committees for ASCE. He is a member of EERI and has led the institute's Research Policy committee. Fenves received the National Science Foundation's Presidential Young Investigator Award in 1987. He is a past member of the board and secretary for the Consortium of Universities for Research in Earthquake Engineering (CUREE).

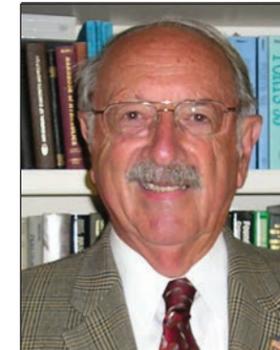
George Fotinos is an experienced structural engineer. He has extensive experience in the design and construction of bridges, waterfront structures, tunnels, deep foundations and offshore structures.

He attended Santa Clara University where he obtained his Bachelor of Science Degree in Civil Engineering. He started his career with the bridge department of Caltrans in Sacramento. He designed bridge structures for the new interstate highway system in Northern California. Following his assignment in Sacramento, he served two years in military service where he was assigned to administer the construction of radar bases in Iceland and Canada. Following discharge from the Army, he returned to school at the University of California in Berkeley, where he earned a masters degree in civil engineering.

Upon receiving his master's degree, he was employed at the Ben C. Gerwick Company in San Francisco. The Gerwick Company specialized in waterfront structures and bridge foundations. He worked on several major bridges including the foundations of the Richmond-San Rafael Bridge, San Mateo-Hayward Bridge, Benicia-Martinez Bridge and waterfront structures throughout the San Francisco Bay.

The company was purchased by Santa Fe International Corporation and Mr. Fotinos served as the Chief Engineer of the engineering division of the corporation. He worked on many offshore and marine structures and bridges throughout the world, including the Northumberland Crossing in eastern Canada, Jamuna Bridge in Bangladesh, Bahrain Crossing in the Persian Gulf, and the Seven mile bridge in Florida.

Mr. Fotinos is a registered structural engineer in California, and a registered civil engineer in Washington, Nevada and Colorado. He has written many papers on the subject of marine foundations and bridges. He currently serves as a consultant to engineering and construction companies where he helps to solve difficult engineering and construction problems.



George Fotinos