

#### UNIVERSITY OF CALIFORNIA, BERKELEY

# Civil and Environmental Engineering Academy of Distinguished Alumni

Induction and Banquet for Class of 2018 The University Club California Memorial Stadium October 4, 2018

#### UNIVERSITY OF CALIFORNIA, BERKELEY

#### Inductees for Class of 2018 October 4, 2018

Mohammad A. Alshaikh, Ph.D. Retired; former Saudi Arabia Minister of Municipal and Rural Affairs

Harlan L. Kelly, Jr., P.E. General Manager, San Francisco Public Utilities Commission (SFPUC)

**M. Susan Leal** Principal, Urban Water Works and former General Manager, SFPUC and San Francisco City Treasurer, Honorary Member

> Lelio Mejia, Ph.D., P.E., G.E. Senior Principal, Geosyntec Consultants, Inc.

Balakrishnan Narayanan, Ph.D., P.E. President and CEO, Carollo Engineers

**Michael Ortiz, Ph.D., NAE** Frank and Ora Lee Marble Professor of Aeronautics and Mechanical Engineering, California Institute of Technology

Ellen M. Rathje, Ph.D., P.E. Warren S. Bellows Centennial Professor, Dept. of Civil, Architectural and Environmental Engineering, University of Texas at Austin

> Mason T. Walters, P.E., S.E. Senior Principal, Forell/Elsesser Engineers, Inc.

Class of 2017 Edward Kavazanjian, Jr., Ph.D., P.E., G.E., NAE Regents Professor and Ira. A. Fulton Chair, School of Sustainable Engineering and the Built Environment, Arizona State University

In Memoriam (Posthumous) Stephen A. Mahin (1946-2018), Ph.D. Byron and Elvira Nishkian Professor, Civil and Environmental Engineering, University of California, Berkeley

H. Bolton (Harry) Seed (1922-1989), Ph.D., NAE, NAS Edward G. and John R. Cahill Professor, Civil and Environmental Engineering, University of California, Berkeley, Honorary Member

#### University of California, Berkeley

College of Engineering

Tsu-Jae King Liu, Dean Philip Kaminsky, Executive Associate Dean

Department of Civil and Environmental Engineering (CEE)

Mark Stacey, Department Chair Michael Cassidy, Vice Chair for Undergraduate Studies Arpad Harvath, Vice Chair for Graduate Studies Claudia Ostertag, Vice Chair for Research and Technical Services

CEE Academy of Distinguished Alumni

BOARD OF DIRECTORS Rudolph Bonaparte, Chair David A. Friedman, Vice Chair Adib K. Kanafani Richard G. Luthy Paulo J. M . Monteiro Nicholas Sitar Mark Stacey

#### P R O G R A M

- 5:30-6:30 PM RECEPTION The University Club
- 6:30 PM DINNER The University Club
- 6:30-6:40 PM CALL TO ORDER, INTRODUCTION, AND STATE OF DEPARTMENT

MARK STACEY, Henry and Joyce Miedema Professor and Chair, Department of Civil and Environmental Engineering

6:40-6:45 PM WELCOME FROM THE COLLEGE

TSU-JAE KING LIU, Dean

- 7:15 PM DESSERT
- 7:15-7:20 PM OVERVIEW OF THE ACADEMY OF DISTINGUISHED ALUMNI AND RECOGNITION/ACKNOWLEDGEMENT OF SPONSORS

NICHOLAS SITAR, Edward G. Cahill and John R. Cahill Professor, Department of Civil and Environmental Engineering

7:20-7:25 PM CEE UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM

TAMIKA BASSMAN (UROP STUDENT)

# 7:25-8:05 PM INDUCTION AND PRESENTATION OF CERTIFICATES TO ACTIVE AND IN MEMORIAM MEMBERS

Readers: RUDOLPH BONAPARTE, Chair, Board of Directors, CEE Academy of Distinguished Alumni, and DAVID A. FRIEDMAN, Vice Chair, Board of Directors, CEE Academy of Distinguished Alumni

Presenter: MARK STACEY

#### 8:05-8:20 PM CONCLUSION, ADJOURNMENT, and PHOTOGRAPHS

DAVID A. FRIEDMAN

INDUCTEE CLASS PHOTO (all inductees gather for class photo)

CEE ACADEMY PHOTO (all current and new members gather for photo) Sponsor contributions in excess of banquet costs and individual member contributions generously support the Berkeley CEE

# Undergraduate Research Opportunity Program (UROP)

UNIVERSITY OF CALIFORNIA, BERKELEY

Civil and Environmental Engineering Academy of Distinguished Alumni

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### CLASS OF 2018 INDUCTEES

Civil and Environmental Engineering Academy of Distinguished Alumni

#### Mohammad A. Alshaikh Ph.D., Civil (Transportation) Engineering (1975)



For outstanding contributions to the planning, engineering, and implementation of city infrastructure systems; for leadership in public administration reflecting the highest standards of professional excellence and integrity; and for five decades of unwavering support for Berkeley CEE.

#### Harlan L. Kelly, Jr. B.S., Civil Engineering (1986)



For more than three decades of distinguished civil service at the San Francisco Department of Public Works and SFPUC; for leadership of more than \$10 billion in water, sewer, and power capital improvement programs; and for cofounding of Project Pull and lifelong dedication to internships for racially-diverse and at-risk high school students.

#### M. Susan Leal Honorary Member



For sustained leadership in both the public and private sectors, including as San Francisco City Supervisor and Treasurer, and as SFPUC General Manager; for deep knowledge of theoretical and practical solutions to addressing local and global water challenges; for her long tenure on the CEE Advisory Council, including as Chair; and for providing outstanding guidance and support to CEE.

#### Lelio Mejia

M.S., Civil (Geotechnical) Engineering (1978) Ph.D., Civil (Geotechnical) Engineering (1981)



For international leadership in the practice of geotechnical earthquake engineering and the seismic evaluation and design of embankment dams and levees, both in the U.S. and around the world; for service to the profession, including the Earthquake Engineering Research Institute, U.S. Society of Dams, International Commission on Large Dams, and National Research Council; and for longtime contributions to the Berkeley CEE program.

#### Balakrishnan Narayanan

Ph.D., Civil (Environmental) Engineering (2003)



For distinguished industry leadership over a nearly three-decade career at Carollo Engineers, culminating as Chief Technology Officer, President, and CEO; for nationally-recognized expertise in wastewater treatment, particularly in the area of biological nutrient removal; and for the "Carollo Cares" program dedicated to STEM outreach to, and education of, underprivileged children.

#### Michael Ortiz

M.S., Civil (Structural) Engineering (1978) Ph.D., Civil (Structural) Engineering (1981)



For seminal contributions to computational mechanics that have advanced the underpinnings of solid mechanics across multiple length and time scales and a wide range of physical and environmental conditions; for the application of his models to a broad range of nationally-important research topics; and for service to the profession through his contributions to professional societies, archival journals, and government panels.

#### Ellen M. Rathje

M.S., Civil (Geotechnical) Engineering (1994) Ph.D., Civil (Geotechnical) Engineering (1997)



For sustained leadership in research and education in the field of geotechnical earthquake engineering; for outstanding service to the profession as a founding member of the Geotechnical Extreme Events Reconnaissance Association and as a Board Member of the Earthquake Engineering Research Institute; and for longtime collaboration with Berkeley CEE faculty.

#### Mason T. Walters M.S., Civil (Structural) Engineering (1980)



For career achievements in structural and earthquake engineering design, including pioneering work in the application of base isolation technology for retrofitting historic buildings; for collaborations with Berkeley CEE faculty in the development of seismic protection systems and sustainable concrete technology; and for his contributions to the seismic retrofit of numerous campus buildings.

#### CLASS OF 2017

#### Edward Kavazanjian, Jr. Ph.D., Civil (Geotechnical) Engineering (1978)



For research and practice leadership in geotechnical earthquake engineering, geotechnical landfill engineering, and bio-mediated and bioinspired geotechnics; for dedicated service to, and leadership in, the CEE profession over more than three decades; and for longtime collaboration with, and support for, the Berkeley CEE Department.

#### 2018 (IN MEMORIAM)

#### Stephen A. Mahin

#### B.S., Civil Engineering (1968) M.S., Civil (Structural) Engineering (1970) Ph.D., Civil (Structural) Engineering (1975)



For world-renowned expertise in structural earthquake engineering, with wide-ranging teaching, research, and professional practice contributions related to buildings, bridges, power plants, offshore structures, and performance-based earthquake engineering design; for his leadership of the Pacific Earthquake Engineering Research Center and Berkeley Sim-Center; and, for nearly 50 years of dedication and loyalty to Berkeley CEE.

#### H. Bolton (Harry) Seed Honorary Member



For seminal and globally-recognized research in the field of geotechnical earthquake engineering; for pioneering development of methods of analysis for seismic site response, soil-structure interaction, seismic slope stability, and liquefaction potential; for consulting contributions to major projects around the globe; and for 40 years of contributions to Berkeley CEE, including as leader of the Department during its rise to national and world prominence.

# Civil and Environmental Engineering Academy of Distinguished Alumni

#### In Memoriam

Raymond W. Clough, Honorary Member, NAE (2017) Henry J. Degenkolb, NAE (2017) Charles Gilman Hyde, Honorary Member (2014) James H. Kleinfelder, P.E. (2012) Tung-Yen (T.Y.) Lin (2014) Ben C. Gerwick, Jr., NAE (2013) Eugene M. Herson, P.E., CPA (2016) Helmut Krawinkler, Ph.D., NAE (2016) Julia Morgan (2013) Egor Popov, Ph.D., NAE (2015) Awtar Singh, Ph.D., P.E., GE (2012) Bernard A. Vallerga, P.E., NAE (2015) Robert L. Wiegel, Honorary Member, NAE (2012)

#### Honorary Members David I. Jenkins, Ph.D., NAE (2012) James K. Mitchell, Sc.D., P.E., NAE, NAS (2012)

#### Active Members

Franklin J. Agardy, Ph.D., P.E. (2012)
Mihran S. Agbabian, Ph.D, NAE (2012)
Eleanor J. M. Allen, P.E. (2015)
Gregory B. Baecher, Ph.D., NAE (2014)
John A. Baker, P.E. (2014)
James M. Becker, Ph.D., P.E. (2014)
Glenn R. Bell, P.E., S.E. (2015)
Brenda Myers Bohlke, Ph.D. (2013)
Rudolph Bonaparte, Ph.D., P.E., NAE (2012)
Anil K. Chopra, Ph.D., NAE (2017)
G. Wayne Clough, Ph.D., P.E., NAE (2013)
Paul A. Cocotis, P.E. (2017)
Reginald DesRoches, Ph.D. (2015)

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J. Michael Duncan, Ph.D., P.E., NAE (2013) Uri Eliahu, P.E., G.E. (2015) Gregory L. Fenves, Ph.D., NAE (2013) Fred N. Finn, NAE (2014) David A. Friedman, P.E,. SE (2012) William R. Gianelli (2017) Paul H. Gilbert, P.E., NAE (2012) David T. Gockel, P.E. (2017) Richard E. Goodman, Ph.D., NAE (2012) Ashraf Habibullah, P.E., SE (2013) Jefferson M. Hilliard, P.E., Dist. M.ASCE (2013) Susan S. Hubbard, Ph.D. (2014) I.M. (Ed) Idriss, Ph.D., P.E., G.E., NAE (2017) Jorg Imberger, Ph.D., NAE (2016) Adib K. Kanafani, Ph.D., NAE (2012) Richard W. Karn, P.E. (2012) Michael C. Kavanaugh, Ph.D., P.E., NAE (2012) Edward Kavazanjian, Jr., Ph.D., P.E., G.E., NAE (2017) John H. Koon, Ph.D., P.E. (2013) Patrick C. Lucia, Ph.D., P.E., G.E. (2016) Richard G. Luthy, Ph.D., P.E., NAE (2012) Janiele Maffei, P.E., S.E. (2016) James O. Malley, P.E., S.E. (2016) Jon D. Magnusson, P.E., S.E., NAE (2017) Robin K. McGuire, Ph.D., P.E., NAE (2014) Carl L. Monismith, P.E., NAE (2012) Stephen G. Monismith, Ph.D. (2014) Marwan Nader, Ph.D., P.E. (2015) Denny S. Parker, Ph.D., P.E., NAE (2015) Maryann Phipps, P.E., S.E. (2016) Karl S. Pister, Ph.D., NAE (2012) Y.R. (Joe) Rashid, Ph.D., P.E. (2015) James H. Roberts (2016) Leslie E. Robertson, P.E., S.E., NAE (2012)

# Civil and Environmental Engineering Academy of Distinguished Alumni

Larry L. Russell, Ph.D., P.E. (2015) Howard A. Schirmer, Jr., P.E. (2016) Elizabeth Hausler Strand, Ph.D. (2014) Robert L. Taylor, Ph.D., NAE (2012) George Tchobanoglous, Ph.D., P.E., NAE (2013) R. Rhodes Trussell, Ph.D., P.E., NAE (2012) James D.A. van Hoften, Ph.D. (2012) Robert P. Wadell, P.E. (2012) Robert D. Whitley, P.E. (2017) Edward L. Wilson, D Eng., NAE (2012) Loring A. Wyllie, Jr., P.E., S.E., NAE (2012) Peter I. Yanev (2012) Victor A. Zayas, Ph.D., P.E. (2012)

Biographies for all members of the Academy of Distinguished Alumni can be found at www.ce.berkeley.edu/alumni/academy