



Geotechnical Earthquake Engineering and Soil Dynamics IV



YOU CAN EARN UP TO
32.5 PDHs!

GEESD IV



MAY 18-22, 2008 | SACRAMENTO, CA

Sacramento Convention Center
Sacramento, California, USA



FINAL PROGRAM

WELCOME TO SACRAMENTO AND THE GEESD IV

It is my pleasure to welcome you to GEESD IV in Sacramento, California, May 18-22, 2008. GEESD IV is the fourth decennial Geotechnical Earthquake Engineering and Soil Dynamics Conference organized by the Earthquake Engineering and Soil Dynamics Committee of the Geo-Institute. GEESD IV carries on the highly successful tradition of GEESD conferences in Seattle, Washington (1998), Park City, Utah (1988), and Pasadena, California (1978).

We hope you will enjoy interacting with colleagues and other conference attendees during this comprehensive examination of our earthquake engineering and soil dynamics disciplines. The coverage will be diverse, including case histories and practice-oriented papers, recent research findings, innovative technologies, and the emerging arts across many of our disciplines. Professional engineers, researchers, specialty contractors, regulators, educators and students will be interacting with each other over the next five days across a broad range of keynote and theme lectures, technical sessions, short courses, workshops, discussions, and equipment demonstrations.

This exciting GEESD IV has been made possible by the hard work and dedication of many individuals, including all the conference Organizing Committee members, EESD committee members, authors, paper reviewers, and G-I/ASCE staff. It's been a great community effort, and I know that everyone involved is glad that you have chosen to attend this exciting event.

Sincerely,



Ross W. Boulanger, Ph.D., P.E.
University of California, Davis
Chair, GEESD IV



CONFERENCE ORGANIZING COMMITTEE

Chair

Ross W. Boulanger, Ph.D., P.E., University of California, Davis

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Dennis Hiltunen, Ph.D., M.ASCE, University of Florida, Chair
Leslie F. Harder, Jr., Ph.D., P.E., M.ASCE, HDR Inc.
Steven L. Kramer, Ph.D., P.E., M.ASCE, University of Washington
Lelio H. Mejia, Ph.D., P.E., M.ASCE, URS Corporation
Mishac K. Yegian, Ph.D., P.E., M.ASCE, Northeastern University

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Equipment Demonstrations Committee

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David Frost, M.ASCE, Georgia Tech, Savannah
Bruce L. Kutter, Ph. D., M.ASCE, University of California, Davis
John Harvey, P.E., M.ASCE, University of California, Davis
Soheil Nazarian, Ph.D., P.E., M.ASCE, University of Texas, El Paso
Kenneth Stokoe, Ph.D., P.E., M.ASCE, University of Texas, Austin

Exhibitors and Sponsors

Steve Verigin, Ph.D., P.E., M.ASCE, GEI Consultants, Inc.
Lelio H. Mejia, Ph.D., P.E., M.ASCE, URS Corporation

Short Courses

Zia Zafir, P.E., M.ASCE, Kleinfelder, Inc.
John R. Hess, P.E., M.ASCE, U.S. Army Corps of Engineers

Field Trips

David Gutierrez, California Division of Safety of Dams
Mike I. Zumot, California Division of Safety of Dams

Student Activities

Tarek Abdoun, A.M.ASCE, Rensselaer Polytechnic Institute
Ellen Rathje, Ph.D., M.ASCE, University of Texas, Austin
Joseph Wartman, Ph.D., P.E., M.ASCE, Drexel University

Software Demonstrations

Pedro Arduino, M.ASCE, University of Washington
Joseph Sun, M.ASCE, Pacific Gas and Electric Company

Geo-Institute Staff

Carol W. Bowers, P.G., CAE, Director
Linda Bayer, Manager
Lauren Tighe, Board and Meetings Specialist

Conference Staff

Lucy King, CMP, Conference Manager
Megan McQuair, Conference Coordinator
Jeff Sandersen, Exhibit Sales
Ann Kashnikow, Sponsorship

Program-at-a-Glance

FRIDAY, May 16 - SATURDAY, May 17

8:00 a.m. - 5:00 p.m. US-Japan Workshop

SUNDAY, May 18

11:00 a.m. - 5:00 p.m. Registration
 8:00 a.m. - 5:00 p.m. Committee Meetings
 8:30 a.m. - 5:00 p.m. USUGGER Workshop
 5:00 p.m. No Host Welcome Reception

MONDAY, May 19

7:00 a.m. - 6:30 p.m. Registration
 8:30 - 8:45 a.m. Opening Ceremony **Sponsored by Geomatrix Consultants, Inc.**
 8:30 - 10:00 a.m. Guest Breakfast
 8:45 - 10:30 a.m. Plenary Session **Sponsored by Geomatrix Consultants, Inc.**
 10:00 a.m. - 7:00 p.m. Exhibit Hall Open
 10:30 - 11:00 a.m. Break in Exhibit Hall **Sponsored by Furgo**
 11:00 a.m. - 12:30 p.m. Concurrent Technical Sessions
 12:30 - 2:00 p.m. Lunch in Exhibit Hall E **Sponsored by URS Corporation**
 2:00 - 3:30 p.m. Concurrent Technical Sessions
 3:30 - 4:00 p.m. Break in Exhibit Hall E
 4:00 - 5:30 p.m. Concurrent Technical Sessions
 5:30 - 7:00 p.m. California Wine Tasting and Poster Session in Exhibit Hall E
Sponsored by Hayward Baker
 7:30 - 9:30 p.m. Banquet and Awards Ceremony

TUESDAY, May 20

7:00 a.m. - 6:30 p.m. Registration
 8:30 - 10:00 a.m. Plenary Session **Sponsored by GEI Consultants**
 9:30 a.m. - 1:30 p.m. Exhibit Hall Open
 10:00 - 10:30 a.m. Break in Exhibit Hall E **Sponsored by East Bay Municipal Utility District**
 10:30 a.m. - 1:30 p.m. Concurrent Technical Sessions
 12:00 noon - 1:30 p.m. Lunch in Exhibit Hall E **Sponsored by Farrell Design-Build Inc.**
 1:30 - 2:30 p.m. Concurrent Theme Sessions
Sponsored by Alan Kropp & Associates and Blackburn Consulting
 2:30 - 6:30 p.m. NEES Equipment Demonstrations at CGM (UC Davis)
Sponsored by NEES Consortium, Inc.
 6:30 p.m. Discover Sacramento - Evening on Your Own!
 7:00 - 9:00 p.m. Graduate Student Career Workshop: Toward Successful Career Paths in Geotechnical Earthquake Engineering

WEDNESDAY, May 21

7:00 a.m. - 3:00 p.m. Registration
 8:30 - 10:00 a.m. Plenary Session **Sponsored by GEI Consultants**
 9:30 a.m. - 3:30 p.m. Exhibit Hall Open
 10:00 - 10:30 a.m. Break in Exhibit Hall E
 10:30 a.m. - 12:00 noon Concurrent Technical Sessions
 12:00 noon - 1:30 p.m. Lunch in Exhibit Hall E
 1:30 - 3:00 p.m. Concurrent Technical Sessions
 3:00 - 3:30 p.m. Break in Exhibit Hall E
 3:30 - 5:00 p.m. Concurrent Theme Sessions **Sponsored by Earth Systems**
 5:00 - 5:30 p.m. Closing Ceremony and Toast

THURSDAY, May 22

8:30 a.m. - 5:00 p.m. Short Course 1 - Soil Liquefaction During Earthquakes
 8:30 a.m. - 5:00 p.m. Short Course 2 - Site Response of F-type Soils
 8:30 a.m. - 5:00 p.m. Short Course 3 - Seismic Analysis of Embankment Dams
 8:30 a.m. - 5:00 p.m. International Workshop on New Trends of Seismic Design Based on Seismic Performance and Lifecycle Cost
 8:30 a.m. - 5:00 p.m. Tour 1 - Bay Bridge East Span Replacement Project
 8:30 a.m. - 5:00 p.m. Tour 2 - Bay Area Landslides and Hayward Fault

Table of Contents

Welcome.....	2
Conference Organizing Committee.....	2
Program-at-a-Glance.....	3
Special Events.....	4
NEES Demonstration Bus Schedule.....	8
Short Courses.....	11
Technical Tours.....	11
Tours Itinerary.....	12
Poster Sessions.....	13
Concurrent Technical Sessions.....	17
General Information.....	23
Convention Center Floor Plans.....	24
Exhibitor.....	26
Exhibit Hall Hours.....	27
Sponsors Information.....	28

A Special Thank You to Our Cooperating Organizations:



Caltrans: California Department of Transportation



ASDSO: Association of State Dam Safety Officials



EERI: Earthquake Engineering Research Institute



CDWR: California Department of Water Resources



ADSC: International Association of Foundation Drilling



PDCA: Pile Driving Contractors Association



DFI: Deep Foundations Institute



ASFE: The Best People on Earth



GMA: Geosynthetic Materials Association



NAGS: North American Geosynthetics Society



AEG: Association of Engineering Geologists



ARMA: American Rock Mechanics Association

SPECIAL EVENTS

FRIDAY, MAY 16 - SATURDAY, MAY 17

US-Japan Workshop on Ground Improvement for Liquefaction Hazard Mitigation

8:00 a.m. – 5:00 p.m.

Location: Tofanelli Room - Sheraton Grand Sacramento Hotel

The US-Japan Workshops on Geotechnical Engineering, sponsored by the Japanese Geotechnical Society (JGS) and the Geo-Institute (G-I) of the American Society of Civil Engineers, enhance communication and collaboration between the geo-professional communities in Japan and the United States. The first joint workshop on geomechanics was held in Boston in 2003. Two workshops were held in 2005 and two will be held in 2008. Invited Japanese and U.S. participants will present over a two-day period on the topics of ground improvement related to liquefaction hazard mitigation. The second day will be dedicated to site visits with U.S. geotechnical contractors.

SUNDAY, MAY 18

USUCGER Workshop

8:30 a.m. – 5:00 p.m.

Location: Tofanelli Room - Sheraton Grand Sacramento Hotel

This one-day, United States Universities Council on Geotechnical Education and Research (USUCGER) workshop will be held in the Tofanelli Room, at the Sheraton Grand Sacramento Hotel on Sunday, May 18, before the kickoff of GEESD IV. The workshop has three sessions: "Future Directions in Geotechnical Engineering Research," "Education and Outreach," and "Mentoring for Young Faculty." Several outstanding speakers, including Mr. Richard Anderson, Dr. Richard Fragaszy, Dr. Lewis Samprani, Dr. Carlos Santamarina, Dr. Thomas Zimmie, and Dr. Barbara Luke, are scheduled to make presentations in the various sessions. You will also have an opportunity to participate in open panel discussions and breakout group discussions on various research and educational issues. In the mentoring sessions for young faculty members, presentations will be made on various topics, including tenure, funding, education, and service issues. The workshop is free and open to the first 80 registrants; USUCGER membership is required to attend the workshop. For the latest updates, please visit www.usucger.org. For further information, contact Anand Puppala, president of USUCGER, at anand@uta.edu.

No Host Welcome Reception

5:00 p.m.

Location: Lounge - Sheraton Grand Sacramento Hotel

Here's your chance to reconnect! Meet new and old friends at a no host welcome reception in the lobby/lounge area of the Sheraton Grand Hotel. It's a great chance to network in the informal and relaxed environment of this beautiful hotel.

MONDAY, MAY 19

Opening Ceremony Sponsored by Geomatrix Consultants, Inc. Geomatrix

8:30 – 8:45 a.m.

Room: 202-203 - Sacramento Convention Center

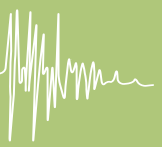
The opening ceremony will set the stage for the conference and will include an overview of activities at the convention center and the NEES equipment demonstrations on Tuesday afternoon.

Plenary Session Sponsored by Geomatrix Consultants, Inc. Geomatrix

8:45 – 10:30 a.m.

Room: 202-203 - Sacramento Convention Center

If you are involved in geotechnical earthquake engineering, you need to attend this session. Three exceptional researchers, Dr. Thomas D. O'Rourke, Dr. Steven L. Kramer and W. D. Liam Finn, will share their findings on topics that have wide-ranging implications for performance-based earthquake engineering and will challenge you to consider your own work in a new light.



SPECIAL EVENTS (CONT.) MONDAY, MAY 19

Opening Plenary Speakers



**Bruce L. Kutter, Ph.D., M.ASCE, Professor,
University of California, Davis**

“Centrifuge Testing of the Seismic Performance of Submerged Cut-and-Cover Tunnel in Liquefiable Soil”



**Steven L. Kramer, Ph.D., P.E., Professor,
University of Washington**

“Performance-Based Earthquake Engineering: Opportunities and Implications for Geotechnical Engineering Practice”



**W. D. Liam Finn, P.E., Professor Emeritus,
University of British Columbia**

“The Role of Numerical Modeling in Geotechnical Earthquake Engineering”

Middlebrooks Award

The Thomas A. Middlebrooks Award is given to the author or authors of a published paper judged worthy of special commendation for its merit as a contribution to geotechnical engineering.

2007 Middlebrooks Award winners



Deepa S. Liyanapathirana, M.ASCE
Senior Lecturer,
University of Wollongong



**Harry G. Poulos, Ph.D.,
S.C.D., F.ASCE**
Emeritus Lecturer
The University of Sydney

Casagrande Award

The Arthur Casagrande Professional Development Award is given in recognition of the outstanding accomplishments of young (under 35 years of age) practitioners, researchers, and teachers of geotechnical engineering. The award is named in memory of Arthur Casagrande, Hon.M.ASCE.

2008 Casagrande Award winners



Jason T. DeJong, Ph.D., M.ASCE
Associate Professor,
University of California, Davis



Laurie G. Baise, Ph.D., M.ASCE
Associate Professor,
Tufts University

Shamsher Prakash Award



Tarek Abdoun, Ph.D.,
Associate Professor and Associate
Director, Geotechnical Centrifuge
Research Center, Rensselaer
Polytechnic Institute



Ellen M. Rathje, Ph.D., P.E.,
Associate Professor,
Department of Civil,
Architectural and
Environmental Engineering,
University of Texas, Austin

MONDAY, MAY 19

California Wine Tasting and Combined Poster Session

Sponsored by Hayward Baker, Inc.



5:30 – 7:00 p.m.

Location: Exhibit Hall E

Sample northern California wines under the expert guidance of the graduate student society (DEVD) from the renowned Department of Viticulture and Enology at the University of California, Davis. Learn about wines and wine-tasting terminology while chatting with DEVD members who will be circulating throughout the poster session and Exhibit Hall.

Banquet and Awards Ceremony

7:30 – 9:30 p.m.

Location: Grand Nave Ballroom

Join your peers for fine food, networking, and a celebration of the winners of the most prestigious awards in the field of earthquake engineering and soil dynamics. Network with colleagues from around the world while enjoying the banquet meal. Dr. Chik Brennan, Winemaker for the Department of Viticulture and Enology at UC Davis, will share his insights on “Living (and Drinking) with ‘Terroir.’”

SPECIAL EVENTS

TUESDAY, MAY 20

Plenary Session Sponsored by GEI Consultants

8:30 – 10:00 a.m.

Location: Room 202-203 - Sacramento Convention Center

Tuesday begins with an exceptional lineup of distinguished lecturers covering the most recent research and findings related to liquefaction and soil-structure interaction during earthquakes. From physical modeling of a major Bay Area lifeline tunnel to the most current field observations and findings from the 2007 Niigata-ken Chuetsu-oki earthquake to recent developments in ground improvement for existing dams, this session provides something for everyone.

Plenary Speakers



**Thomas D. O'Rourke, Ph.D., Professor,
Cornell University**

"Geotechnics of Pipeline System Response to Earthquakes"



**James K. Mitchell, Ph.D., P.E., Dist. M.ASCE,
Professor Emeritus, Virginia Tech**

"Recent Developments in Ground Improvement for Mitigation of Seismic Risk to Existing Embankment Dams"



**Kohji Tokimatsu, D. Eng., M.ASCE, Professor,
Tokyo Institute of Technology**

"Geotechnical Problems in the 2007 Niigata-ken Chuetsu-oki Earthquake"

Concurrent Theme Sessions

1:30 – 2:30 p.m.

Plan to attend these important theme sessions to learn about the newest developments in evaluating the seismic performance of bridges, tunnels, ports, and levees. These esteemed speakers will describe real-world cases in ways that will make advanced theoretical concepts comprehensible and concrete.

Theme Session T1a

Sponsored by Alan Kropp & Associates

Location: Room 202-203 - Sacramento Convention Center



Susumu Iai, Professor, Kyoto University

"Seismic Performance and Design of Port Structures"



**Raymond B. Seed, Ph.D., M.ASCE, Professor,
University of California, Berkeley**

"Seismic Evaluation of Levees"

Theme Session T1b

Sponsored by Blackburn Consulting

Location: Room 204 - Sacramento Convention Center



**Mishac K. Yegian, P.E., Professor,
Northeastern University**

"Seismic Soil-Structure Interaction Analyses of the Brooklyn Bridge"



**Ignacio Arango, Ph.D., P.E., M.ASCE,
Bechtel Corporation**

"Earthquake Engineering for Tunnels and Underground Structures: A Case Study"

SPECIAL EVENTS

TUESDAY, MAY 20 (cont.)

NEES and Equipment Demonstrations at the Center for Geotechnical Modeling (University of California, Davis) Sponsored by NEES Consortium, Inc

2:30 – 6:30 p.m.

Location: UC Davis Campus

NEES Equipment Demonstrations

Experience demonstrations of new earthquake engineering research equipment and learn more about the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES). With funding from the National Science Foundation, NEES includes 15 shared experimental facilities that are available for earthquake engineering research. Each site enables researchers to explore different aspects of the complex ways that soils and structures behave as a result of earthquakes and tsunamis. Tour NEES@UCDavis and see the largest centrifuge and largest centrifuge-based shake table in the United States. Learn how centrifuge models are constructed and enjoy presentations about featured centrifuge research topics such as the Seismic Retrofit of the Bart Offshore Transbay Tube and the NEESR-Grand challenge: Seismic Risk Mitigation for Port Systems. Watch a demonstration of the mobile field laboratory of NEES@UCLA, which is used to perform seismic performance characterization of full-scale structural and foundation systems. See the shakers in operation and view data collected from multiple data acquisition systems. Feel the ground tremble as researchers from NEES@UTexas demonstrate T-Rex, a large mobile shaker used in deep dynamic geotechnical field investigations. Learn how to access NEES data with NEESit and watch a demonstration of a NEES experiment from data collection to visualization.

Post-earthquake Reconnaissance Technology Demonstrations

Witness the range of tools available to researchers in post-earthquake reconnaissance studies in a series of demonstrations organized by Geo-Engineering Earthquake Reconnaissance (<http://gees.usc.edu/GEER/>).

Join vendors and users of various handheld and mobile devices as they showcase tools that allow high-resolution geo-referenced information to be rapidly collected before perishable evidence is inadvertently destroyed:

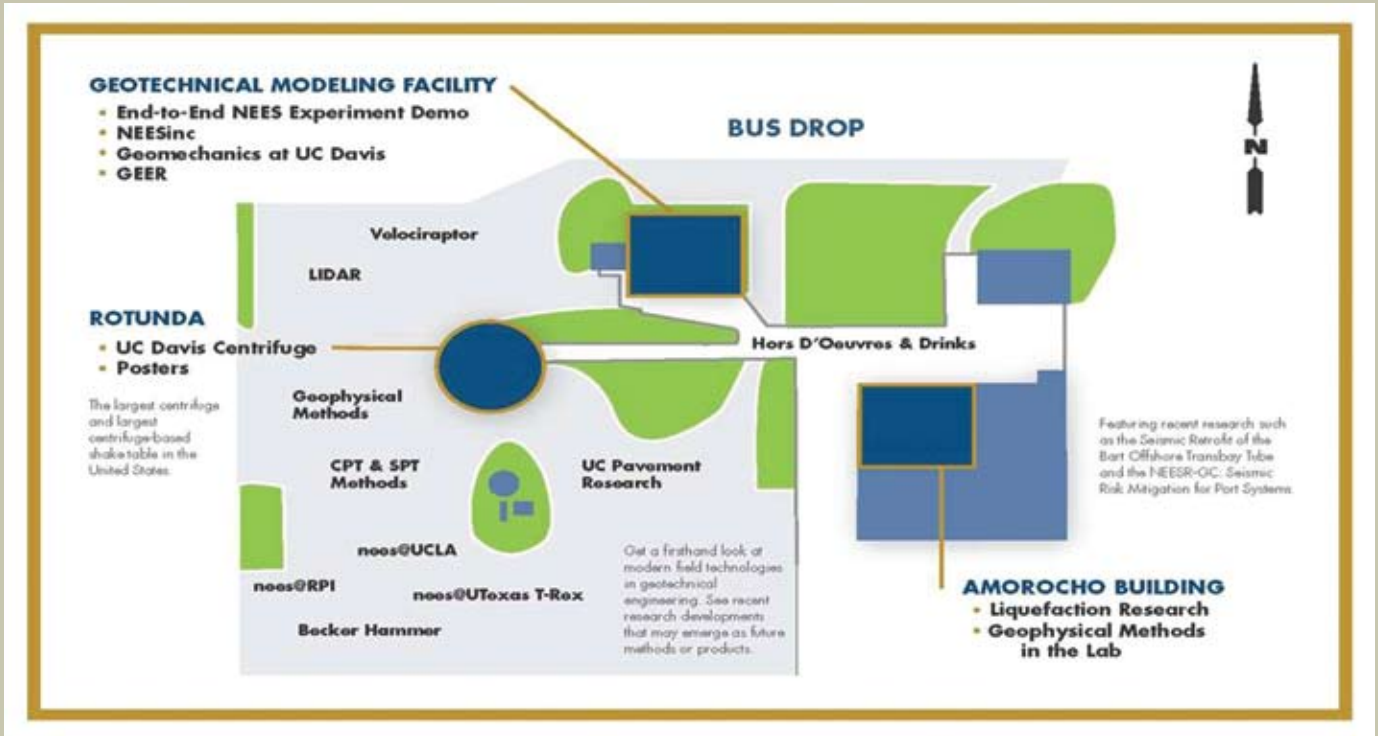
- Multispectral image collection technologies
- Ground and airborne light detection and ranging devices (LIDAR)
- Laser range finder technologies
- Global positioning system technologies
- Geographic information system technologies
- Personal digital assistant and digital tablet software applications
- Caltrans-ShakeCast post-event analysis software

Geophysics and Equipment Demonstrations and Site Investigation Demonstrations

Get a firsthand look at modern laboratory and field technologies in geotechnical engineering. See recent research developments that may emerge as future methods or products. There will be exhibits and demonstrations of commercial geophysical and geotechnical equipment and methods including:

- Field investigations including SPT and CPT (Taber Consultants, GRL, Gregg Drilling)
- Borehole seismic methods and equipment (Geovision)
- Borehole sensor technology for vibration and tilt (Geoengineers)
- Shape accelerometer arrays for monitoring slope stability (NEES@RPI)
- Surface seismic (refraction and reflection) methods and equipment (USGS)
- Ground-penetrating radar and other electromagnetic methods (Geometrics and Geovision)
- Wireless Sensing Solutions for structural health monitoring (Clarkson University)
- High-speed wireless data acquisition systems (NEES@UCDavis)
- Instrumented tire/pavement noise car and heavy weight deflectometer (UC Pavement Research Center)
- High-speed wireless data acquisition systems (NEES@UCDavis)
- Full flow penetrometers and bio-soils (Soil Interactions Laboratory, UC Davis)

NEES DEMONSTRATION BUS SCHEDULE

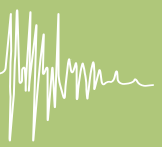


LEAVING SAC CONVENTION CENTER

- 1:50 p.m. BUS #1 (VOLUNTEERS ONLY)
- 2:40 p.m. BUS #2
- 2:45 p.m. BUS #3
- 2:50 p.m. BUS #4
- 3:00 p.m. BUS #5
- 3:15 p.m. BUS #1
- 4:00 p.m. BUS #2
- 4:30 p.m. BUS #3
- 5:40 p.m. BUS #4
- 6:10 p.m. BUS #5

RETURNING FROM DEMOS

- 2:30 p.m. BUS #1
- 3:20 p.m. BUS #2
- 3:40 p.m. BUS #3
- 5:00 p.m. BUS #4
- 5:30 p.m. BUS #5
- 6:00 p.m. BUS #1
- 6:15 p.m. BUS #2
- 6:30 p.m. BUS #3
- 6:30 p.m. BUS #4
- 7:00 p.m. BUS #5 (VOLUNTEERS ONLY)



SPECIAL EVENTS

TUESDAY, MAY 20 (cont.)

Graduate Student Career Workshop: Toward Successful Career Paths in Geotechnical Earthquake Engineering

7:00 – 9:00 p.m

Location: Room 204 - Sacramento Convention Center

Find out everything you want to know about career opportunities for geotechnical earthquake engineers in consulting, government, national laboratories, and academia. Learn from representatives from each sector about their typical projects, the joys and challenges unique to their work, and how graduate students can prepare for careers in each sector. Be sure to ask questions during the question-and-answer session and then join the participants for lively discussions during the informal reception afterward. Registration not required for students. All other participants must pre-register.

Moderator



Tarek Abdoun, Ph.D., A.M.ASCE, Associate Professor of Civil and Environmental Engineering, Rensselaer Polytechnic Institute



Ali Porbaha, Ph.D., P.E., M.ASCE, Assistant Professor of Civil Engineering, California State University, Sacramento

“Academic Careers at Primarily Undergraduate Institutions”

Speakers



Tom Cooling, P.E., Vice President, URS Corporation

“Career Paths in Consulting Practice”



Robert Kayen, Ph.D., M.ASCE, Research Scientist, U.S. Geological Survey

“Dynamic Geotechnical Earthquake Engineering Careers in U.S. National Laboratories and Research Agencies”



Ellen Rathje, Ph.D., M.ASCE, Associate Professor of Civil, Architectural and Environmental Engineering, University of Texas, Austin

“Academic Careers at a Research University”

WEDNESDAY, MAY 21

Plenary Session Sponsored by GEI Consultants

8:30 – 10:00 a.m.

Location: Room 202-203 - Sacramento Convention Center

Speakers will enlighten you about vital technical topics during this session. You'll learn about the latest research in earthquake ground movements, the seismic remediation of existing dams, and soil liquefaction. Whether you are a specialist in these areas, or simply curious about them, you'll come away from this session with new knowledge that you can apply to your work in many other aspects of geotechnical earthquake engineering.

Plenary Speakers



Jonathan P. Stewart, Ph.D., P.E., M.ASCE, Professor, University of California, Los Angeles

“Nonlinear Seismic Ground Response Analysis: Code Usage Protocols and Verification against Vertical Array Data”



“Skip” Hendron, Ph.D., M.ASCE, Professor Emeritus, University of Illinois at Urbana-Champaign

“Seismic Remediation of Existing Dams”



I. M. Idriss, Ph.D., P.E., F.ASCE, Professor Emeritus, University of California, Davis

“Liquefaction and Its Consequences”

SPECIAL EVENTS

WEDNESDAY, MAY 21

Concurrent Theme Sessions

3:30 – 5:00 p.m.

Location: Room 202-204 - Sacramento Convention Center

Hear from national and international experts as they cover a broad range of technical topics in these concurrent theme sessions. One session covers ground motion, liquefaction hazard mapping, fault rupture and geologic hazards, while the other session covers seismic soil properties, site response and soil-structure interaction.

Theme Session WTa Sponsored by Earth Systems, Inc.

Location: Room 202-203 - Sacramento Convention Center



Norman Abrahamson, M.ASCE,
Pacific Gas and Electric Company

"Ground Motion Estimation"



Thomas L. Holzer,
U.S. Geological Survey

"Probabilistic Liquefaction Hazard Mapping"



William R. Lettis,
William Lettis & Associates, Inc.

"Fault Rupture and Other Geologic Hazards"

Theme Session WTb

Location: Room 202-203 - Sacramento Convention Center



Juan M. Pestana, P.E., Associate Professor,
University of California, Berkeley

"Multidirectional Cyclic Behavior of Soil and its
Application to Nonlinear Site Response Analyses"



Kenneth H. Stokoe, Ph.D., P.E., M.ASCE,
Professor, University of Texas, Austin

"Application of Seismic Measurements in
Geotechnical Engineering"



George Gazetas, Ph.D., P.E., M.ASCE, Professor
National Technical University of Athens

"Effects of Near-Fault Ground Shaking on
Sliding Systems"

Closing Ceremony and Toast

5:00 – 5:30 p.m.

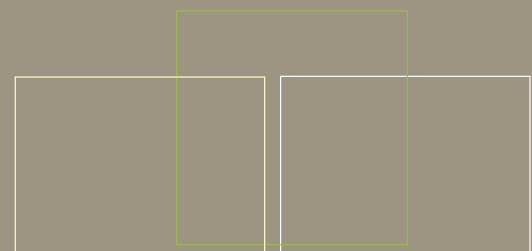
Location: Room 202-203 - Sacramento Convention Center

Complete your rewarding conference experience by joining your peers at this short ceremony and toast to close GEESD IV. Professor James K. Mitchell, P.E., will share his closing remarks about the conference and state of geotechnical earthquake engineering. This is the perfect time to meet friends and colleagues for a thoughtful overview of the week, before saying farewell to Sacramento.



James K. Mitchell, Ph.D., P.E.,
Dist. M.ASCE, Professor Emeritus,
Virginia Tech

"Closing Remarks"



SHORT COURSES

THURSDAY, MAY 22

8:30 a.m. – 5:00 p.m.

Soil Liquefaction During Earthquakes **Location: Grand Sacramento Hotel - Room: Beavis**

Find out about recent progress in the evaluation of liquefaction hazards during earthquakes and learn how to estimate the potential for triggering liquefaction, its consequences and its mitigation. Receive a copy of the EERI monograph "Soil Liquefaction During Earthquakes," by Idriss and Boulanger.

Instructors: Ross W. Boulanger, Ph.D., P.E., M.ASCE, University of California, Davis
I. M. Idriss, Ph.D., P.E., M.ASCE, University of California, Davis

Site Response of F-type Soils **Location: Grand Sacramento Hotel - Room: Bondi**

Learn how to evaluate the response of F-type soils and hear overviews of regulatory requirements, seismic hazard evaluation in accordance with current codes, evaluation of design ground motions, modeling of F-type soil profiles (including evaluation of material parameters), and interpretation of the results.

Instructors: Neven Matasovic M.ASCE, Geosyntec Consultants
Ted S. Vinson, Ph.D., P.E., M.ASCE, Professor Emeritus, Oregon State University
Gustavo Ordóñez, Washington Department of Ecology
Jonathan Bray, P.E., F.ASCE, University of California-Berkeley

Seismic Analysis of Embankment Dams **Location: Grand Sacramento Hotel - Room: Compango**

Improve your knowledge of the basics of evaluating the response of embankment dams under seismic loading while exploring such topics as regulatory requirements, field investigations, laboratory testing, liquefaction and fault displacement hazards, embankment stability and deformation, and more.

Instructors: Keith Ferguson, P.E., M.ASCE, Kleinfelder
Faiz Makdisi, Ph.D., P.E., M.ASCE, Geomatrix
Lelio Mejia, Ph.D., P.E., M.ASCE, URS Corporation
Zia Zafir, P.E., M.ASCE, Kleinfelder

International Workshop on New Trends of Seismic Design Based on Seismic Performance and Lifecycle Cost

The seismic design of geotechnical structures is shifting internationally toward performance-based design. This shift in practice must address the reliability of field investigations, the accuracy of performance predictions, the specification of performance criteria, and other problems. This international workshop, in cooperation with the JSCE, ASCE, JGS, and PEER, includes presentations by Professors I. Towhata (workshop chair), P. Arduino, A. Elgamal, W. D. L. Finn, S. Lai, S. L. Kramer, G. Madabhushi, R. Mayfield, M. Sakikabara, and S. Salah Mars, plus panel discussions regarding emerging trends around the world. Attendance is free, so plan to join in the discussions.

TECHNICAL TOURS

THURSDAY, May 22

8:30 a.m. – 5:00 p.m.

Be sure to inquire at the registration desk for sign-up. Limited space is available.

Tour 1 - Bay Bridge East Span Replacement Project



See a modern engineering marvel up close as you examine the Bay Bridge's foundation piling, the concrete column construction, the installation of the prefabricated bridge deck sections, the construction of the suspension system support towers, and the Oakland-side touchdown project. If you want to be a part of history, you will want to join this field trip.

Tour 2 - Bay Area Landslides and Hayward Fault



Take a closer look at the landsliding and active faulting that help create the scenic beauty of the Coast Range of California even as they affect engineering structures from landslides in the Fairfield/Vallejo area and the Berkeley Hills, as well as ongoing creep deformation and fault-related landforms along the active Hayward fault through the East Bay communities of Richmond, Berkeley, and Oakland.

TOUR ITINERARY

Tour 1: Bay Bridge Tour:

8:30 a.m.	Leave Sacramento
10:00 a.m.	Arrive at CALTRANS field office
10:00 – 11:00 a.m.	Safety meeting & project overview
11:00 a.m. – 12:00 p.m.	Tour
12:00 p.m. – 12:30 p.m.	Brown-bag lunch
12:30 p.m. – 2:30 p.m.	Continue tour
2:30 p.m. – 3:00 p.m.	Travel back to CALTRANS field offices and return safety equipment
3:00 p.m.	Travel back to Sacramento
ETA Sacramento 5:00 p.m.	



Tour 2: Bay Area Landslide and Hayward Fault Tour:

8:30 a.m.	Leave Sacramento
9:30 a.m.	Fairfield Area Green Valley Fault (45 minutes, Baldwin) Red Top Landslide (45 minutes, Whitman)
11:00 a.m.	Leave for East Bay
11:45 a.m.	Arrive in East Bay Area Cragmont School Slide (45 minutes, Kropp)
12:30 p.m.	Lunch
1:00 p.m.	Blakemont Slide (45 minutes, Kropp) Hayward Fault UC Stadium and/or Mira Vista (45 minutes, Baldwin)
2:30 p.m.	Begin Return to Sacramento

MONDAY, MAY 19

12:30 – 2:00 p.m. and 5:30 – 7:00 p.m.

Poster Session A Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E
<p>Deformation Buildup in Tertiary Rocks in the October 23, 2004, Mid-Niigata Earthquake</p> <p>Kazuo Konagai Tokyo, Tokyo, JPN</p> <p>Some Characteristics of Ground Vibration as Induced by High-Speed Trains</p> <p>Yit-Jin Chen, Ph.D., P.E. Department of Civil Engineering, Chung Yuan Christian University Chung-Li, TWN</p> <p>Yi-Jiun Shen, MS China Engineering Consultants, Inc. Taipei, TWN</p> <p>Kuo-Yen Chen Chung-Li, TWN</p> <p>Geoscience and Geotechnical Aspects of Recent Earthquakes</p> <p>Robert C. Lo, Ph.D., P.E., F.ASCE Vancouver, B.C., CAN</p> <p>Recent Improvements in MOC for Earthquake Response</p> <p>Richard P. Ray, Ph.D., P.E., M.ASCE Columbia, SC, USA</p> <p>Dynamic Properties of Naturally-Cemented Dils in the Southwestern United States</p> <p>Mr. Ravi Murthy, P.E. Phoenix, AZ, USA</p> <p>Soheil Nazarian, P.E., M.ASCE El Paso, TX, USA</p> <p>Full-Scale Laboratory Tests Using a Shape-Acceleration Array System</p> <p>Victoria Gene Bennett, S.M.ASCE Rensselaer Polytechnic Institute Troy, NY, USA</p> <p>Sabanayagam Thevanayagam, M.ASCE Buffalo, NY, USA</p> <p>Tarek Abdoun, Ph.D., A.M.ASCE Rensselaer Polytechnic Institute Troy, NY, USA</p> <p>Lee Danisch, Ph.D. Measurand, Inc. Fredericton, New Brunswick, CAN</p> <p>Ricardo Dobry, Ph.D., M.ASCE Troy, NY, USA</p>	<p>Closed-Form Force-Displacement Backbone Curves for Bridge Abutment-Backfill Systems</p> <p>Liping Yan V, Ph.D., P.E., M.ASCE Earth Mechanics, Inc. Fountain Valley, CA, USA</p> <p>Anoosh Shamsabadi I, Ph.D., P.E. Irvine, CA, USA</p> <p>Soil-Structure Interaction Analysis of Bridge Columns Supported on CISS Piles</p> <p>Pedro Franco Silva, Ph.D., P.E. Washington, D.C., USA</p> <p>Majid T. Manzari, Ph.D. Washington, D.C., USA</p> <p>Observations on Sand Boils from Simple Model Tests</p> <p>Andrew John Brennan, Ph.D. Dundee, Angus, SCT</p> <p>Effects of Stress Reduction Factors in Simplified on Liquefaction Analysis Susceptibility</p> <p>Atilla Ansal, Ph.D., M.ASCE Bogazici University Istanbul, TUR</p> <p>Liquefaction Resistance Recovered from "On-the-Fly" CPTU-Measured Pore Pressures</p> <p>Mr. Michael Fitzgerald, EIT Penn State University University Park, PA, USA</p> <p>The Rigidity Recovery of Post Liquefied Soils</p> <p>Seiji Kano, Ph.D. Hiroshima University Higashi-hiroshima, Hiroshima, JPN</p> <p>Effect of Backfill Soil Type on Stiffness and Ultimate Capacity of Bridge Abutments</p> <p>Azadeh Bozorgzadeh, Ph.D., S.M.ASCE La Jolla, CA, USA</p> <p>Scott Ashford, Ph.D., P.E., M.ASCE UCSD San Diego, CA, USA</p> <p>Jose I Restrepo, A.M.ASCE Department of Structural Engineering, University of California, San Diego San Diego, CA, USA</p>	<p>Using Decision-Tree Learning to Assess Liquefaction Potential</p> <p>Mr. Gary Livingston, Ph.D. Lowell, MA, USA</p> <p>Michael Piantedosi Lowell, MA, USA</p> <p>T.G. Sitharam, Ph.D. Indian Institute of Science Bangalore, Karnataka, IND</p> <p>Pradeep U. Kurup, Ph.D., P.E., M.ASCE Lowell, MA, USA</p> <p>Influence of Geological Aging on Liquefaction Potential: Preliminary Results</p> <p>Robb Eric S. Moss, Ph.D., P.E., M.ASCE Cal Poly San Luis Obispo San Luis Obispo, CA, USA</p> <p>Sensitivity Study of Standard Penetration Test Results Used to Evaluate Liquefaction Potential</p> <p>Mr. Troy M. Hull, P.E., M.ASCE Gamas, WA, USA</p> <p>Investigating the Critical State Using Laboratory Ring Shear Tests</p> <p>Mr. Abouzar Sadrekarimi, S.M.ASCE Urbana, IL, USA</p> <p>Scott M. Olson, Ph.D., P.E., M.ASCE University of Illinois at Urbana-Champaign Urbana, IL, USA</p> <p>Effects of Mica Content on Cyclic Resistance of Poorly-Graded Sand</p> <p>Miss Kimberly Schmidt, B.S., A.M.ASCE Sacramento, CA, USA</p> <p>Numerical and Physical Modelling of Liquefaction Mechanisms in Layered Sands</p> <p>Pelin Tohumcu Özener, S.M.ASCE Istanbul, TUR</p> <p>Pore Structure Variation of Porous Media under Vibrations</p> <p>Ming Xiao, Ph.D., P.E., M.ASCE Fresno, CA, USA</p>	<p>Shear Resistance versus Shear Strain of Sand after Liquefaction</p> <p>Tzou-Shin Ueng, P.E., M.ASCE Taipei, TWN</p> <p>I-Yen Liao Taipei, TWN</p> <p>Dynamic Effects of Impact Machine Foundations</p> <p>Mark Svinkin R. Svinkin, Ph.D., M.ASCE Cleveland, OH, USA</p> <p>Wavelet Signal Processing Technique in Analyzing Earthquake Records of Masjed Soleyman Embankment Dam</p> <p>Masoud Amel Sakhi IV Tehran, IRN</p> <p>Walnut Canyon Dam Seismic Performance Evaluation</p> <p>Mr. John Barneich, P.E., M.ASCE Santa Ana, CA, USA</p> <p>Mr. Yoshi Moriwaki, Ph.D., P.E., M.ASCE Santa Ana, CA, USA</p> <p>Mr. Phalkun Tan, Ph.D., P.E., M.ASCE Santa Ana, CA, USA</p> <p>Yoojoong Choi, Ph.D., P.E., M.ASCE Santa Ana, CA, USA</p> <p>David Shen, P.E. Anaheim, CA, USA</p> <p>Seismic Safety Evaluation of an Embankment Dam Subjected to Strong Seismic Excitation, in Mid-North Turkey</p> <p>Hasan Tosun, Ph.D. Dam Safety Association Eskisehir, TUR</p> <p>Keziban Tosun, P.E. Eskisehir, TUR</p> <p>Eng. Evren Seyrek, M.S. Eskisehir Osmangazi University Eskisehir, TUR</p> <p>Effects of Cyclic Rotation of Principal Stress Axes and Intermediate Principal Stress Parameter on the Deformation Behavior of Sands</p> <p>Zhaoxia Tong, Beijing, P.R. China</p>	<p>Determination of Soil-Structure Interaction Effects for A Model Test Structure Using Parametric System Identification Procedures</p> <p>Salih Tileyioglu Los Angeles, CA, USA</p> <p>Robert Nigbor, Ph.D., P.E., M.ASCE Los Angeles, CA, USA</p> <p>Jonathan P Stewart, Ph.D., P.E., M.ASCE Los Angeles, CA, USA</p> <p>Pore Fluid induced Damping of Saturated Soil in Resonant Column Tests</p> <p>Tong Qiu, A.M.ASCE Clarkson University Potsdam, NY, USA</p> <p>Evaluation of Dynamic Properties of a Calcite Cemented Gravelly Sand</p> <p>S. Mohsen Haeri, Ph.D. Tehran, IRN</p> <p>Mohammad Reza Shakeri Tehran, Tehran, IRN</p> <p>S. Ali Shahcheraghy, M.S. Tehran, IRN</p> <p>Dynamic Performance of Toyoura Sand Reinforced with Randomly Distributed Carpet Waste Strips</p> <p>Reza Jamshidi Chenari, S.M.ASCE Tehran, IRN</p> <p>Alireza Tabarsa Sr., Ph.D. Gorgan, Golestan, IRN</p> <p>Development of a P-wave Measurement System for Laboratory Specimens</p> <p>Sajjad Maqbool, Ph.D. Lahore, Punjab, Pakistan</p> <p>Dynamic Properties of Saturated Compacted Soils</p> <p>Chia-Pin Wu Jhongli City, Taoyuan County, TWN</p> <p>Jin-Hung Hwang, Ph.D. Jhongli, Taoyuan, TWN</p>

Poster Session A Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E	Poster Session A (cont.) Location: Exhibit Hall E	Poster Session B Location: Exhibit Hall E
<p>Effect of Critical Contact Area Ratio on Moment Capacity of Rocking Shallow Footing Sivapalan Gajan, Ph.D. Fargo, ND, USA</p> <p>Bruce Kutler, Ph.D., M.ASCE Davis, CA, USA</p> <p>Numerical Simulation of Impedance Functions of Strip Footings Abir Jendoubi IV, S.M.ASCE Sherbrooke, Quebec, CAN</p> <p>Effect of Heterogeneity of Ground Strength to the Seismic Residual Displacement of Embankments Yoshiya Hata I Tsukuba, Ibaraki, JPN</p> <p>Koji Ichii, Ph.D. Higashi-Hiroshima, Hiroshima, JPN</p> <p>Seiji Kano Hiroshima University Higashi-Hiroshima, Hiroshima, JPN</p> <p>Earthquake-Induced Deformations of Partially Saturated Embankments Rolando P Orense, Ph.D., P.E., M.ASCE University of Auckland Auckland, NZ</p> <p>Liquefaction Resistance of Sands Containing Varying Amounts of Fines George Andreas Athanasopoulos, M.ASCE Patras, GRE</p> <p>Probabilistic Assessment of Cyclic Soil Straining in Fine-Grained Soils Tolga Habib Bilge, S.M.ASCE Ankara, TUR</p> <p>Under Kemal Cetin, Ph.D. Ankara, TUR</p> <p>Analytical Solutions of Dynamic Soil Structure Interaction for Structures on Footings and Piles George Mylonakis, A.M.ASCE Rio, Patras, GRE</p> <p>Effects of Fines on Undrained Behavior of Sands Misko Cubrinovski, Ph.D. Christchurch, NZ</p>	<p>Cyclic Failure of Cohesive Soils During 1999 Kocaeli Earthquake Valkan Okur, Ph.D., M.ASCE Eskisehir, TUR</p> <p>Post-liquefaction Shear Behavior of Bonneville Silty Sand Aurelian C. Trandafir, Aff.M.ASCE Salt Lake City, UT, USA</p> <p>Shaking Table Test on a Large Specimen of Mailiao Silty Sand Tzou-Shin Ueng, P.E., M.ASCE Taipei, TWN</p> <p>Mr. Chia-Han Chen NCGEE Taipei, TWN</p> <p>Mr. Cheng-Fu Zou Taipei, TWN</p> <p>Mr. Yi-Cheng Chen Taipei, TWN</p> <p>Cyclic P-Y Curves for a Pile in Cohesive Soil Travis M. Gerber, Ph.D., P.E., M.ASCE Provo, UT, USA</p> <p>Kyle M. Rollins, Ph.D., M.ASCE Brigham Young University Provo, UT, USA</p> <p>E-defense Facility: A Frontier in Geotechnical Physical Modeling Ramin Motamed, Ph.D., S.M.ASCE Tokyo Institute of Technology Tokyo, JPN</p> <p>Ikuo Towhata, Ph.D. Bunkyo-Ku, Tokyo, JPN</p> <p>Nonlinear Behavior of Single Piles Vibrating Vertically Jin-xing Zha, Ph.D., P.E., M.ASCE Roseville, CA, USA</p> <p>Undrained Tip Response of Drilled Shaft in Cohesionless Soils Sherif Ahmed Elfass, Ph.D., P.E., A.M.ASCE University of Nevada, Reno Reno, NV, USA</p> <p>Gary Martin Norris, Ph.D., M.ASCE Reno, NV, USA</p>	<p>Piles Under Earthquake Loading Shamsher Prakash, Ph.D., F.ASCE University of Missouri Rolla, MO, USA</p> <p>Compaction Grouting to Mitigate Liquefaction Potential for a New Medical Retail Building Jeffrey Geraci, C.E.G., P.G., M.ASCE Moore & Taber Anaheim, CA, USA</p> <p>Mr. Mark Lewis Russell, P.E., M.ASCE Earth Systems Pasadena, CA, USA</p> <p>Mr. David Murray Van Nuys, CA, USA</p> <p>Seismic Response Evaluation of an Onshore Building Site Improved by Deep Mixed Foundation System Ali Purbaha, Ph.D., P.E., M.ASCE Sacramento, CA, USA</p> <p>Raj Siddharthan, Ph.D., M.ASCE University of Nevada, Reno Reno, NV, USA</p> <p>Seismic Response Analyses for the Silicon Valley Rapid Transit Project Daniel Pradel, Ph.D., P.E., F.ASCE Los Angeles, CA, USA</p> <p>Peter Chiu, A.M.ASCE Los Angeles, CA, USA</p> <p>Increase in Cone Penetration Resistance following Variation with Time after Blast Liquefaction Testing Kyle M. Rollins, Ph.D., M.ASCE Brigham Young University Provo, UT, USA</p> <p>Mr. Joshua K.S. Anderson Las Vegas, NV, USA</p> <p>Tunnel Response under Spatially Varying Ground Motion Duhee Park Seoul, Korea</p>	<p>Effects of KO – Condition on Penetration Resistance and Cyclic Strength of Ground Improved by Compaction Methods Kenji Harada, Ph.D. Tokyo, JPN</p> <p>Jun Mukai San Mateo, CA, USA</p> <p>Kenji Ishihara Tokyo, JPN</p> <p>Rolando P Orense, Ph.D., P.E., M.ASCE University of Auckland Auckland, NZ</p> <p>Plastic Hinge Formation in Pile Foundations due to Liquefaction-Induced Loads Tara Hutchinson, Ph.D., A.M.ASCE La Jolla, CA, USA</p> <p>Effect of Soil Liquefaction on Flexural Behavior of Axially and Laterally Loaded Piles Prabir Kumar Basudhar, A.M.ASCE Kanpur, U.P., IND</p> <p>Meera R. S. Sr. Trivandrum, Kerala, IND</p> <p>Assessment of Structure-Induced Liquefaction Triggering Berna Unutmaz, M.S. Ankara, TUR</p> <p>Under Kemal Cetin Ankara, TUR</p> <p>Centrifuge Simulation of Effect of Seepage Force on Liquefaction of Soil in Embankment Dams David Zeng, Ph.D. Cleveland, OH, USA</p> <p>Parametric Analysis of the Seismic Response of Irregular Topographic Features Arash Razmkhah, Ph.D. Tehran, IRN</p> <p>Influence of Rate Dependent Soil Behavior on Propagated Ground Motion Duhee Park Seoul, KOR</p>	

MONDAY, MAY 19 (cont.)
5:30 – 7:00 p.m.

TUESDAY, MAY 20 (cont.)
12:00 – 1:30 p.m.

Poster Session B (cont.) Location: Exhibit Hall E	Poster Session B (cont.) Location: Exhibit Hall E	Poster Session B (cont.) Location: Exhibit Hall E	Poster Session B (cont.) Location: Exhibit Hall E	Poster Session B (cont.) Location: Exhibit Hall E
<p>Developing Site-Specific Design Response Spectra for a Type F Site due to Liquefaction</p> <p>Endi Zhai, Ph.D., P.E., Aff.M.ASCE Irvine, CA, USA</p> <p>The Turkey Flat Blind Prediction Experiment for the September 28, 2004, Parkfield Earthquake: General Overview and Models Tested</p> <p>Mr. Charles R. Real, Sacramento, CA, USA</p> <p>Anthony Shakal, Ph.D. Sacramento, CA, USA</p> <p>Brian E. Tucker, Ph.D. Palo Alto, CA, USA</p> <p>Two-Dimensional Evaluation of Site Effect in Rectangular Valleys</p> <p>Nima Tafazzoli, M.S., S.M.ASCE Tehran, IRN</p> <p>Mohammad Hassan Baziar Sr., A.M.ASCE Tehran, IRN</p> <p>Habib Shahnazari, Ph.D., A.M.ASCE Tehran, IRN</p> <p>Consequences of Solution Non-uniqueness in Surface Wave Tests for Seismic Response Studies</p> <p>Sebastiano Foti, Ph.D. Torino, TO, ITA</p> <p>Daniele Boiero Torino, TO, ITA</p> <p>Cesare Comina Torino, TO, ITA</p> <p>Valentina Socco Torino, TO, ITA</p> <p>Site Response Analysis for Tito Scalo Area (PZ) in the Basilicata Region, Italy</p> <p>Salvatore Grasso, Ph.D., Ing. Gentania, CT, ITA</p> <p>Site Response to Vertical Earthquake Motion</p> <p>Jun Yang, Ph.D., M.ASCE Hong Kong, China</p>	<p>Evaluation of Site Response for Deepwater Field</p> <p>Mr. Eric J. Parker, P.E., M.ASCE Genova, GE, ITA</p> <p>Mr. Fabrizio Ardoino Genova, GE, ITA</p> <p>Ms. Chiara M. Traverso Genova, GE, ITA</p> <p>Hysteretic Damping Correction and Its Effect on Nonlinear Site Response Analyses</p> <p>Zhi-Liang Wang Sr., Ph.D., P.E. Oakland, CA, USA</p> <p>C.Y. Chang, Ph.D. Oakland, CA, USA</p> <p>Chih-Cheng Chin, Ph.D., P.E., M.ASCE San Jose, CA, USA</p> <p>Nonlinear Shear Wave Propagation in Strain Stiffening and Strain Softening Soil</p> <p>Jui-Ching Chou, Davis, CA, USA</p> <p>Bruce Kutler, Ph.D., M.ASCE Davis, CA, USA</p> <p>Seismic Behavior of 2D Topographic Features Subjected to Vertically Propagating Incident SV at High Frequencies</p> <p>Mr. Hamid Ali Elahi III Tehran, IRN</p> <p>Seismic Lateral Earth Pressure Reduction on Earth-Retaining Structures Using Geofom</p> <p>John S Horvath, Ph.D., P.E., M.ASCE Bronx, NY, USA</p> <p>Extended Veletsos-Younan Model for Geofom Compressible Inclusions Behind Rigid, Non-yielding Earth-Retaining Structures</p> <p>John S Horvath, Ph.D., P.E., M.ASCE Bronx, NY, USA</p> <p>The Effect of Amplification on the Seismic Stability of Reinforced Soil Slopes Using Horizontal Slice Method</p> <p>Mr. Hamid Reza Nouri Tehran, IRN</p>	<p>Excitation and Flexibility Effects on Dynamic Response of Cantilever Retaining Walls</p> <p>Ozgur Lutfi Ertugrul, Ph.D., S.M.ASCE Ankara, TUR</p> <p>Mehmet Yener Ozkan Sr., M.ASCE Ankara, TUR</p> <p>Selman Saglam Ankara, TUR</p> <p>Seismic Earth Pressures behind Retaining Walls: Effects of Rigid-Body Motions</p> <p>Mr. Chulmin Jung, S.M.ASCE West Lafayette, IN, USA</p> <p>Antonio Bobet, P.E., M.ASCE West Lafayette, IN, USA</p> <p>Distribution of Seismic Earth Pressures on Gravity Walls by Wave-Based Stress Limit Analysis</p> <p>George Mylonakis, A.M.ASCE Rio, Patras, GRE</p> <p>Monitoring for Successful Site Improvement</p> <p>Lisheng Shao, Ph.D., P.E., M.ASCE Hayward Baker, Inc. Santa Paula, CA, USA</p> <p>Mr. Francis B Gularte, M.ASCE Hayward Baker Inc. Santa Paula, CA, USA</p> <p>Mr. Brian Dennis Bauldry, P.E., M.ASCE Santa Cruz, CA, USA</p> <p>Shear Stress Redistribution as a Mechanism to Mitigate the Risk of Liquefaction</p> <p>Russell A. Green, P.E., M.ASCE Ann Arbor, MI, USA</p> <p>Guney Olgun, Ph.D. Blacksburg, VA, USA</p> <p>Kord Wissmann, Ph.D., P.E., M.ASCE Geopier Foundation Company, Inc. Blacksburg, VA, USA</p> <p>Increase in Cyclic Liquefaction Resistance of Sandy Soil Due to Installation of Drilled Displacement Piles</p> <p>Mr. Timothy Carl Siegel, P.E., M.ASCE Berkel & Company Contractors Knoxville, TN, USA</p>	<p>Application of Deep Dynamic Compaction to U.S. Route 44 Relocation Project</p> <p>Yong Tan, Ph.D. WPC, Inc. Savannah, GA, USA</p> <p>Study on Uplift Behavior of Plate Anchor in Geogrid Reinforced Sand Bed</p> <p>Mr. Mohammed Toufeeq Sr. Chennai, Tamilnadu, IND</p> <p>P. T. Ravichandran Chennai, Tamil Nadu, IND</p> <p>K. Ilamparuthi Chennai, Tamil Nadu, IND</p> <p>A New Site Classification System Based on Strong Motion Analysis in Iran</p> <p>Mohammad Reza Ghayamghamian Kyoto, Kyoto, JPN</p> <p>Mr. Alireza Nojavan Tehran, IRN</p> <p>Seismic Microzonation of Shiraz City in Southwest Iran</p> <p>Mohammad Sadegh Sahraeian Tehran, IRN</p> <p>Abbas Ghalandarzadeh Tehran, IRN</p> <p>Ali Kavand, S.M.ASCE Tehran, IRN</p> <p>Babak Kamrani Moghaddam, S.M.ASCE Tehran, IRN</p> <p>An Evaluation of Site Classification for National Strong Motion Recording Stations in Turkey</p> <p>Mustafa Abdullah Sandikkaya, S.M.ASCE Ankara, TUR</p> <p>Mustafa Tolga Yilmaz, Ph.D. Ankara, TUR</p> <p>B Sadik Bakir, Ph.D. Ankara, TUR</p> <p>Sinan Dede Akkar, Ph.D. Ankara, TUR</p> <p>Centrifuge Modeling of Earthquake-Induced Failure Process of Soil Slopes</p> <p>Ga Zhang IV, Ph.D. Beijing, China</p>	<p>Constructing Hillside Ozone Facilities in a High Seismic Zone</p> <p>Meang-Kour Hassel Metropolitan Water District of Southern California Los Angeles, CA, USA</p> <p>Mahsen Beikae, Ph.D., P.E., M.ASCE Los Angeles, CA, USA</p> <p>Arthur Woo Los Angeles, CA, USA</p> <p>Displacement-Based Seismic Stability Analyses of Slopes under Seismic Conditions</p> <p>Deepankar Choudhury, M.ASCE Indian Institute of Technology Bombay Mumbai, Maharashtra, IND</p> <p>Ms. Deepa Modi Mumbai, Maharashtra, IND</p> <p>Pore Structure Variation of Porous Media under Vibration</p> <p>A Comparison of Shear Wave Velocity Profiles from SASW, MASW, and ReMi Techniques</p> <p>Two-Dimensional Evaluation of Site Effect in Rectangular Valleys</p>

Friday, May 16

8:00 a.m. - 5:00 p.m. US-Japan Workshop (Tofanelli Room - Sheraton Grand Sacramento Hotel)

Saturday, May 17

8:00 a.m. - 5:00 p.m. US-Japan Workshop (Tofanelli Room - Sheraton Grand Sacramento Hotel)

Sunday, May 18

11:00 a.m. - 5:00 p.m. Registration (1st Floor, West Lobby - Sacramento Convention Center)
8:00 a.m. - 5:00 p.m. Committee Meetings (Sheraton Grand Sacramento Hotel)
8:30 a.m. - 5:00 p.m. USUGGER Workshop (Tofanelli Room - Sheraton Grand Sacramento Hotel)
5:00 p.m. No-Host Icebreaker Reception (Lounge - Sheraton Grand Sacramento Hotel)

Monday, May 19

7:00 a.m. - 6:30 p.m. Registration (1st Floor, West Lobby - Sacramento Convention Center)
8:30 - 8:45 a.m. Opening Ceremony (Room: 202-203 - Sacramento Convention Center Moderator: Ross Boulanger, Ph.D., P.E., M.ASCE)
8:30 - 10:00 a.m. Guest Breakfast
8:45 - 10:30 a.m. Plenary Session MP (Room: 202-203 - Sacramento Convention Center) Moderator: Dennis Hiltunen, M.ASCE
10:00 a.m. - 7:00 p.m. Exhibit Hall Open (Exhibit Hall E - Sacramento Convention Center)
10:30 - 11:00 a.m. Break (Exhibit Hall E - Sacramento Convention Center)
12:30 - 2:00 p.m. Lunch and Poster Session "A" (Exhibit Hall E - Sacramento Convention Center)
3:30 - 4:00 p.m. Break (Exhibit Hall E - Sacramento Convention Center)
5:30 - 7:00 p.m. California Wine Tasting and Poster Session "A" & "B" (Exhibit Hall E - Sacramento Convention Center)
7:30 - 9:30 p.m. Banquet & Awards Ceremony (Grand Nave Ballroom - Sheraton Grand Sacramento Hotel)

Tuesday, May 20

7:00 a.m. - 6:30 p.m. Registration (1st Floor, West Lobby - Sacramento Convention Center)
8:30 - 10:00 a.m. Plenary Session TP (Room: 202-203 - Sacramento Convention Center) Moderator: David Zeng
10:00 a.m - 7:00 p.m. Exhibit Hall Open (Exhibit Hall E - Sacramento Convention Center)
10:00 - 10:30 a.m. Break (Exhibit Hall E - Sacramento Convention Center)
12:00 noon - 1:30 p.m. Lunch and Poster Session "B" (Exhibit Hall E - Sacramento Convention Center)
1:30 - 2:30 p.m. Theme Session TTa (Room 202-203 - Sacramento Convention Center) Moderator: David Zeng
1:30 - 2:30 p.m. Theme Session TTb (Room: 204 - Sacramento Convention Center) Moderator: Steven Kramer, Ph.D., P.E., M.ASCE
2:30 - 6:30 p.m. NEES Equipment Demonstration (UC Davis Campus)
6:30 p.m. Evening On Your Own
7:00 - 9:00 p.m. Graduate Student Career Workshop: *Towards Successful Career Paths in Geotechnical Earthquake Engineering* (Room 204 - Sacramento Convention Center)

Wednesday, May 21

7:00 a.m. - 3:00 p.m. Registration (1st Floor, West Lobby - Sacramento Convention Center)
8:30 - 10:00 a.m. Plenary Session WP (Room: 202-203 - Sacramento Convention Center) Moderator: Majid Manzarri, M.ASCE
9:30 a.m. - 3:30 p.m. Exhibit Hall Open (Exhibit Hall E - Sacramento Convention Center)
12:00 noon - 1:30 p.m. Lunch (Exhibit Hall E - Sacramento Convention Center)
3:00 - 3:30 p.m. Break (Exhibit Hall E - Sacramento Convention Center)
3:30 - 5:00 p.m. Theme Session WTa (Room: 202-203 - Sacramento Convention Center) Moderator: Majid Manzari, M.ASCE
3:30 - 5:00 p.m. Theme Session WTb (Room: 204 - Sacramento Convention Center) Moderator: Dennis Hiltunen, M.ASCE
5:00 - 5:30 p.m. Cloisgn Plenary WP2 (Room: 202-203 - Sacramento Convention Center)

MONDAY, MAY 19
11:00 a.m. – 12:30 p.m.

Session M1a Location: Room 204 - SCC	Session M1b Location: Room 205 - SCC	Session M1c Location: Room 103 - SCC	Session M1d Location: Room 104 - SCC	Session M1e Location: Room 105 - SCC
<p>Bridges <i>Moderators: Ed Kavazanjian, Ph.D., P.E., M.ASCE, Scott Brandenburg</i></p> <p>Factors that Affect the Performance of Bridge Foundations Undergoing Liquefaction-Induced Lateral Spreading Mr. Christian Ledezma, B.S., M.S., S.M.ASCE Albany, CA, USA</p> <p>Prof. Jonathan D Bray, Ph.D., F.ASCE, P.E. Berkeley, CA, USA</p> <p>Sensitivity Study of an Older-Vintage Bridge Subjected to Lateral Spreading Prof. Jian Zhang, A.M.ASCE Los Angeles, CA, USA</p> <p>Scott J Brandenburg, Ph.D., A.M.ASCE Los Angeles, CA, USA</p> <p>Development of Innovative Foundation Systems to Optimize Seismic Behavior of Bridge Structures Mr. Lijun Deng Davis, CA, USA</p> <p>Prof. Bruce Kutter, Ph.D., M.ASCE Davis, CA, USA</p> <p>Proposed Changes to AASHTO LRFD Bridge Design Specifications for the Seismic Design Freestanding of Retaining Water Dr. Donald G. Anderson, P.E., M.ASCE Bellevue, WA, USA</p> <p>Seismic Response of a Typical Highway Bridge in Liquefiable Soil Dr. Pedro Arduino, Ph.D., M.ASCE Seattle, WA, USA</p> <p>Prof. Steve Kramer, M.ASCE Seattle, WA, USA</p> <p>Dr. Hyungsuk Shin A.M.ASCE Lynnwood, WA, USA</p>	<p>Dynamic Properties I <i>Moderators: Yu-Hsing Wang, Laureno Hoyos, M.ASCE</i></p> <p>Sand Aging Field Study Prof. Russell A. Green, M.ASCE, P.E. Ann Arbor, MI, USA</p> <p>Prof. Roman D Hryciw, M.ASCE Ann Arbor, MI, USA</p> <p>Mr. David A Saftner, S.M.ASCE Ann Arbor, MI, USA</p> <p>Mr. Thaweesak Jirathanathaworn, M.S. Ann Arbor, MI, USA</p> <p>Prof. Chris D. P. Baxter, A.S., Ph.D., P.E. A.M.ASCE Narragansett, RI, USA</p> <p>Mr. Yongsu Jung Ann Arbor, MI, USA</p> <p>Dynamic Response of Unsaturated Soils Using Resonant Column and Bender Element Testing Techniques Dr. Laureano R. Hoyos, Ph.D., P.E., A.M.ASCE Arlington, TX, USA</p> <p>Prof. Anand Puppala, M.ASCE, P.E. The University of Texas at Arlington Arlington, TX, USA</p> <p>MD Sahadat Hossain, Ph.D. The University of Texas at Arlington Arlington, TX, USA</p> <p>Water, Inertial Damping, and the Complex Shear Modulus Dr. Paul Michaels, M.ASCE, P.E. Boise, ID, USA</p> <p>Density Effects on the Aging Behavior of Sands and the Anisotropy of Aging-Induced Stiffness Increases Prof. Yu-Hsing Wang, Ph.D., M.ASCE Kowloon, I, HKG</p> <p>Effective Density for Propagation of Small Strain Shear Waves in Saturated Soil Prof. Tong Qiu, A.M.ASCE Clarkson University Potsdam, NY, USA</p> <p>Prof. Patrick Fox, Ph.D., A.M.ASCE Columbus, OH, USA</p>	<p>Liquefaction <i>Moderators: Gopal Madabhushi, Endi Zhai, P.E., M.ASCE</i></p> <p>Cyclic Response of a Sand with Thixotropic Pore Fluid Chadi S. El Mohtar, M.S. W. Lafayette, IN, USA</p> <p>Prof. Antonio Bobet, M.ASCE West Lafayette, IN, USA</p> <p>Dr. Marika Santagata, Ph.D., M.ASCE West Lafayette, IN, USA</p> <p>Prof. Vincent P. Ornevech Jr., P.E. West Lafayette, IN, USA</p> <p>Prof. Cliff T Johnston, Ph.D. West Lafayette, IN, USA</p> <p>Effect of High Confining Stresses on Static and Cyclic Strengths of Mine Tailing Materials Dr. Michael Riemer, A.M.ASCE Berkeley, CA, USA</p> <p>Mr. Yoshi Moriwaki, Ph.D., M.ASCE Santa Ana, CA, USA</p> <p>Mr. James Ray Obermeyer, P.E., M.ASCE Denver, CO, USA</p> <p>Characterizing the Liquefaction Resistance of Aged Soils Prof. Ron Andrus, M.ASCE Clemson University Clemson, SC, USA</p> <p>Effects of Methods on Liquefaction Analysis Results at Two Fluvial Stand Sites Tianfei Liao, Ph.D., A.M.ASCE Frederick, MD, USA</p> <p>The Seismic Dilatometer Marchetti Test (SDMT) for Evaluating Liquefaction Potential under Cyclic Loading Salvatore Grasso, Ph.D., Ings Catania, CT, ITA</p>	<p>Soil-Structure Interaction (SSI) and Near-Fault Effects <i>Moderators: Adrian Rodriguez, George Mylonakis, A.M.ASCE</i></p> <p>Response Sensitivity Analysis of Soil-Structure Interaction (SSI) Systems Prof. Joel P. Conte, M.ASCE La Jolla, CA, USA</p> <p>Mr. Quan Gu, M.ASCE University of California at San Diego La Jolla, CA, USA</p> <p>Dimensional Response Analysis of Yielding Structures Subjected to Near-Fault Ground Motions Prof. Nicos Makris, M.ASCE Rio, Patras, GRC</p> <p>Response to Geo-Structures to Near Fault Pulses Prof. George Mylonakis, A.M.ASCE Rio, Patras, GRC</p> <p>Numerical Modeling of Dynamic Soil-Structure Interaction Using Centrifuge Experiments Mohammad HT Rayhani Sr., S.M.ASCE Kingston, ON, CAN</p> <p>M. Hesham El Naggar, Ph.D., University of Western Ontario London, ON, CAN</p> <p>Dimensional Analysis of Soil-Foundation-Structure System Subjected to Near Fault Ground Motions Mr. Yuchuan Tang, S.M.ASCE Los Angeles, CA, USA</p> <p>Prof. Jian Zhang, A.M.ASCE Los Angeles, CA, USA</p>	<p>Numerical Modeling <i>Moderators: Majid Manzari, M.ASCE, Pedro Arduino, M.ASCE</i></p> <p>Transient Boundary Integral Equation of Dynamic Unsaturated Poroelastic Media Mr. Iman Ashayeri, B.S., M.S. International Institute of Earthquake Engineering and Seismology (IIEES) Tehran, Tehran, IRN</p> <p>Mr. Mohsen Kamalian, Ph.D. Tehran, Tehran, IRN</p> <p>Mr. Mohammad Khazem Jafari, Ph.D., S.M.ASCE Tehran, Tehran, IRN</p> <p>Efficient Numerical Modeling of Liquefaction-Induced Deformations of Soil Structures Dr. Achilleas Papadimitriou, M.ASCE University of Thessaly Greece Volos, Magnisia, GRC</p> <p>Three-Dimensional Numerical Simulation of zy Coupled Nonlinear Response in Saturated Sands Mahdi Taiebat, S.M.ASCE Davis, CA, USA</p> <p>Prof. Boris Jeremic, A.M.ASCE Davis, CA, USA</p> <p>Dr. Zhao Cheng, Ph.D., A.M.ASCE Davis, CA, USA</p> <p>Prof. Yannis F. Dafalias, A.M.ASCE Davis, CA, USA</p> <p>DEM Simulation of the Seismic Response of Shallow Foundation on Liquefiable Soils Usama Samir El Shamy, A.M.ASCE Southern Methodist University Dallas, TX, USA</p> <p>Numerical Simulation of a Soil Model-Model Container-Centrifuge Shaking Table System Mr. Mahadevan Ilankatharan, S.M.ASCE</p> <p>Modeling of Large-Scale Ground-Foundation-Structure Seismic Response Prof. Ahmed Elgamal University of California at San Diego, La Jolla, CA, USA</p>

MONDAY, MAY 19

4:00 – 5:30 p.m.

Session M3a Location: Room 204 - SCC	Session M3b Location: Room 205 - SCC	Session M3b Location: Room 205 - SCC	Session M3d Location: Room 104 - SCC	Session M3e Location: Room 105 - SCC
<p>Dams and Levees <i>Moderators: Ikuo Towhata, David Zeng, Ph.D., M.ASCE</i></p> <p>Characterizing the Earthquake Ground Shaking Hazard in the Sacramento-San Joaquin Delta, California Mr. Ivan G. Wong, B.S. Oakland, CA, USA</p> <p>Seismic Vulnerability of the Sacramento-San Joaquin Delta Levees Said Salah-Mars, P.E., A.M.ASCE URS Corporation Oakland, CA, USA</p> <p>Rajendram Arulnathan, P.E., A.M.ASCE URS Corporation Oakland, CA, USA</p> <p>Seismic Characterization and Evaluation of San Pablo Dam Mr. Andrew J Dinsick, El, A.M.ASCE Santa Ana, CA, USA</p> <p>Mr. Yoshi Moriawaki, Ph.D., P.M., M.ASCE Santa Ana, CA, USA</p> <p>Mr. John Barneich, P.E., M.ASCE Santa Ana, CA, USA</p> <p>Mr. Phalkun Tan, Ph.D., P.E., M.ASCE Santa Ana, CA, USA</p> <p>Ms. Guilaine Roussel, P.E., M.ASCE San Francisco, CA, USA</p> <p>Mr. Atta Yiadom, Ph.D., P.E., M.ASCE Oakland, CA, USA</p> <p>Mr. Fred Starr, P.E., M.ASCE Oakland, CA, USA</p> <p>Seismic Deformation Analysis of the New Coquitlam Dam Li Yan, Ph.D., M.ASCE, P.Eng, PMP BC Hydro Burnaby, BC, CAN</p> <p>Using ShakeMaps and ShakeCast to Prioritize Post-Earthquake Dam Inspections William A Fraser, C.E.G, P.G. California Division of Safety of Dams Sacramento, CA, USA</p> <p>Dr. David Jay Wald, Ph.D. Denver, CO, USA</p> <p>Kuo-Wan Lin Denver, CO, USA</p>	<p>Geophysics and Dynamic Properties <i>Moderators: Brant Rosenblad, Soheil Nazarian, Ph.D., P.E., M.ASCE</i></p> <p>A Comparison of Shear Wave Velocity Profiles from SASW, MASW, and ReMi Techniques Dennis R. Hiltunen, Ph.D., M.ASCE, P.E. Gainesville, FL, USA</p> <p>Development of a P-wave Measurement System for Laboratory Specimens Sajjad Maqbool, S.M.ASCE</p> <p>Inversion Algorithm to Evaluate Velocity Profiles from Downhole Seismic Test J. Alfredo Fernandez Atlanta, GA, USA</p> <p>Savannah Gowdy, S.M.ASCE Atlanta, GA, USA</p> <p>Prof. Glenn J. Rix, A.M.ASCE Atlanta, GA, USA</p> <p>Development and Applications of In-Hole Seismic Method to Measure Shear Wave Velocity of Subsurface Materials Prof. Young Jin Mok, Ph.D., P.E. Yongin-si, Gyeonggi-do, KOR</p> <p>Mr. Jae Woo Jung, MEng Yongin-si, Gyeonggi-do, KOR</p> <p>Mr. Chul Soo Park, MEng Yongin-si, Gyeonggi-do, KOR</p> <p>Use of Shear Wave Velocity to Estimate Settlement Potential in Mine Spoils Dr. Michael Edward Kalinski, P.E. Lexington, KY, USA</p>	<p>Deep Shear Wave Velocity Profiling of Poorly Characterized Soils Using the NEES Low-Frequency Vibrator Prof. Brent L Rosenblad I, A.M.ASCE, Ph.D. Columbia, MD, USA</p> <p>Dr. Kenneth H Stokoe II, Ph.D, P.E., M.ASCE Austin, TX, USA</p> <p>Dr. Farn-Yuh Meng, Ph.D. Austin, TX, USA</p> <p>Mr. Jianhua Li, M.S., S.M.ASCE Columbia, MD, USA</p> <p style="text-align: center;">Session M3c Location: Room 103 - SCC</p> <p>Liquefaction of Silty Soils <i>Moderators: Ali Eladorani, Liping Yan, P.E., M.ASCE</i></p> <p>Effect of Fines on Sand Residual Strength after Liquefaction Prof. Pedro de Alba, M.ASCE Durham, NH, USA</p> <p>Prof. Thomas P Ballester, Ph.D., P.E., M.ASCE Durham, NH, USA</p> <p>Cyclic Shear Response of Undisturbed and Reconstituted Fine-Grained Soils Dharma Wijewickreme, P.E., M.ASCE Vancouver, BC, CAN</p> <p>Maria Victoria Sanin Vancouver, BC, CAN</p> <p>Effect of Sand Gradation and Fines Type on Liquefaction Resistance of Sand-Fines Mixture Mr. Md. Mizanur Rahman, S.M.ASCE University of New South Wales at Australian Defence Force Academy Canberra, ACT, AUS</p> <p>Effects of Permeability on Liquefaction Resistance and Cone Resistance Prof. Sabanayagam Thevanayagam Buffalo, NY, USA</p> <p>Miss Nurhan Ecemis, Ph.D., S.M.ASCE Buffalo, NY, USA</p> <p>Liquefaction Behavior of Mississippi River Silts Ronaldo Luna Ph.D., P.E., F.ASCE Rolla, MO, USA</p>	<p>Pile Foundations and SSI <i>Moderators: George Mylonakis, A.M.ASCE, Ikuo Towhata</i></p> <p>Response of Clay-Pile System under Earthquake Loading Mr. Subhadeep Banerjee, M.Eng. Singapore, SGP</p> <p>Dr. Fook-Hou Lee, Ph.D. Singapore, SGP</p> <p>Dr. Siang-Huat Goh, Ph.D. Singapore, SGP</p> <p>Non-linear Dynamic Response of Deepwater Suction Pile Foundation Mr. Eric J. Parker, M.ASCE, P.E. Genova, GE, ITA</p> <p>Mr. Fabrizio Ardoino Genova, GE, ITA</p> <p>Mr. Marco Pedemonte Genova, GE, ITA</p> <p>Ms. Chiara M. Traverso Genova, GE, ITA</p> <p>Static and Dynamic Lateral Load Tests on a Pile Cap with Partial Gravel Backfill Prof. Kyle M. Rollins, Ph.D., M.ASCE Provo, UT, USA</p> <p>Prof. Travis M. Gerber, Ph.D., M.ASCE, P.E. Provo, UT, USA</p> <p>Mr. Ku Hyun Kwon Provo, UT, USA</p> <p>Analysis of Statnamic Behavior of Full-Scale Pile Group in Soft Clays and Silts Dr. Tetsuo Tobita, Ph.D., A.M.ASCE Uji, Kyoto, JPN</p> <p>Mr. Gi-Cheon Kang Uji, Kyoto, JPN</p> <p>Prof. Susumu Iai, Ph.D. Uji, Kyoto, JPN</p> <p>Prof. Kyle M. Rollins, Ph.D., M.ASCE Provo, UT, USA</p> <p>Three Dimensional Nonlinear Analysis of Seismic Behavior of Soil-Pile-Structure System Dr. Rabin Tuladhar, Ph.D. Saitama, Saitama Shi, JPN</p>	<p>Software-Users <i>Moderators: Pedro Arduino, Joseph Sun</i></p> <p>FLAC in Geotechnical Earthquake Engineering Practice - One Perspective Yoshi Moriawaki</p> <p>FLAC Applications: Nonlinear Approach versus Equivalent Linear Approach in Seismic Stability and Deformation Analyses of Embankment Dams Fiaz Makdisi</p> <p>Re-analysis of Upper San Fernando Dam John Krahn</p> <p>Importance of Selecting Initial Time Histories to Generate Spectral Compatible Motions Norm Abrahamson</p> <p>Advantages and Limitations of Existing Aoftware for Geotechnical Earthquake Software Bob Pyke</p>

TUESDAY, MAY 20

10:30 a.m. – 12:00 noon

Session T1a Location: Room 204 - SCC	Session T1b Location: Room 205 - SCC	Session T1c Location: Room 103 - SCC	Session T1d Location: Room 104 - SCC	Breakout Session T1e Location: Room 105 - SCC
<p>Ground Improvement I <i>Moderators: Russell Green, M.ASCE, P.E., Ikuo Towhata</i></p> <p>Imaging a Grouted Column in a Centrifuge Model Using Shear Wave Velocity Tomography Scott J Brandenberg, Ph.D. Los Angeles, CA, USA</p> <p>Use of Rammed Aggregate Piers to Resist Seismic Uplift Forces Tom Farrell, M.ASCE, P.E. Placerville, CA, USA</p> <p>Mr. Brendan FitzPatrick, M.ASCE, P.E. Mooresville, NC, USA</p> <p>Evaluation of a Geogrid-Reinforced Soil Mat to Mitigate Post-liquefaction Settlements - A Case Study Mr. James R. Gingery, B.S., M.S., M.ASCE, P.E. San Diego, CA, USA</p> <p>Scott M. Merry, Ph.D., M.ASCE, P.E. Tuscon, AZ, USA</p> <p>Numerical Modeling of the Seismic Response of Columnar Reinforced Ground Guney Olgun, Ph.D. Blacksburg, VA, USA</p> <p>Prof. James R Martin Blacksburg, VA, USA</p> <p>First Applications of the SAVE Composer Method (Nonvibratory Stone Columns) for Soil Densification in the United States Mr. Masaru Sakakibara, B.S. San Mateo, CA, USA</p> <p>Jun Mukai San Mateo, CA, USA</p> <p>Dr. Juan I. Baez, Ph.D., A.M.ASCE Los Angeles, CA, USA</p> <p>Mr. Sean G. Callan, P.E., M.ASCE Los Angeles, CA, USA</p> <p>Dr. Hideo Tsuboi, Ph.D. Tokyo, JPN</p>	<p>Recent Earthquakes and GEER <i>Moderators: J. David Frost, P.E., M.ASCE, Jonathan D. Bray, P.E., F.ASCE</i></p> <p>Complimentary Coordinated Post-Earthquake Reconnaissance Efforts T. Leslie Youd</p> <p>GEER - Turning Disaster into Knowledge J. D. Bray</p> <p>GEER Response - August 15, 2007 Pisco, Peru Earthquake A. Rodriguez-Marek</p> <p>GEER Response - July 16, 2007 Niigata Chuetsu-Oki, Japan Earthquake R. Kayen</p> <p>Panel discussion on Leveraging Technology in Future GEER Activities.</p>	<p>Liquefaction Effects on Structures and Foundations <i>Moderators: Jerry Wu, T.S. Ueng, P.E., M.ASCE</i></p> <p>Centrifuge Experimentation of Building Performance on Liquefied Ground Mrs. Shideh Dashti, M.S. Berkeley, CA, USA</p> <p>Prof. Jonathan D Bray, Ph.D., F.ASCE, P.E. Berkeley, CA, USA</p> <p>Dr. Dan Wilson, Ph.D., M.ASCE Davis, CA, USA</p> <p>Dr. Michael Riemer, A.M.ASCE Berkeley, CA, USA</p> <p>Performance-Based Seismic Response of Pile Foundations Dr. Misko Cubrinovski, Ph.D. Christchurch, NZL</p> <p>Mechanism of Pile Group Settlement in Liquefiable Soils Mr. Jonathan Knappett Dundee, Angus, SCO</p> <p>Dr. Gopal Madabhushi, Ph.D. Cambridge, Cambridgeshire, GBR</p> <p>Centrifuge Modeling of Pile Pinning Effects Mr. Richard James Armstrong, M.S. Davis, CA, USA</p> <p>Prof. Ross W Boulanger Ph.D., P.E., M.ASCE Davis, CA, USA</p> <p>Engr. Umit Gulerce, S.M.ASCE Davis, CA, USA</p> <p>Dr. Dan Wilson, Ph.D., M.ASCE Davis, CA, USA</p> <p>Prof. Bruce Kutler, Ph.D., M.ASCE Davis, CA, USA</p> <p>The Role of Soil Compressibility in Centrifuge Model Tests of Piles Foundation Undergoing Lateral Spreading of Liquefied Soil Mr. Marcelo Alejandro Gonzalez, M.S., S.M.ASCE Troy, NY, USA</p> <p>Tarek Abdoun, Ph.D., S.M.ASCE Troy, NY, USA</p> <p>Ricardo Dobry, Ph.D., M.ASCE Troy, NY, USA</p>	<p>Underground Structures <i>Moderators: Yousef Hashash, S. Dstadan, Ph.D., P.E., M.ASCE</i></p> <p>Damage of New Sanyi Railway Tunnel during the 1999 Chi-Chi Earthquake Mr. Chih-Chieh Lu, B.S. Jhongli, Taoyuan, TWN</p> <p>Prof. Jin-Hung Hwang, Ph.D. Jhongli, Taoyuan, TWN</p> <p>Seismic Analyses for the Fourth Bore of Caldecott Tunnel Chientai Yang, Ph.D., P.E., M.ASCE Fountain Valley, CA, USA</p> <p>Dr. Anoosh Shamsabadi I, Ph.D., P.E. Irvine, CA, USA</p> <p>Mr. Hubert Law, Ph.D., M.ASCE, P.E. Fountain Valley, CA, USA</p> <p>Seismic Analyses of the Bay Tunnel Dr. Yiming Sun, Ph.D., P.E., M.ASCE San Francisco, CA, USA</p> <p>Cut-and-Cover Structures: Seismic Response and Design Ching Liu Wu, Ph.D., P.E., S.E., M.ASCE Moraga, CA, USA</p> <p>Development and Verification of A Pseudostatic Solution for Evaluation of Seismic-Induced Deformations of Rectangular Tunnels Hongbin huo, Ph.D., P.E., M.ASCE Earth Systems Bermuda Dunes, CA, USA</p>	<p>Software Public Domain <i>Moderator: Pedro Arduino</i></p> <p>Soil and Soil-Structure Interaction Analyses Using OpenSees Zhaohui Yang</p> <p>Next Generation Site Response Analysis Incorporating Uncertainties in Soil Properties and Input Ground Motions Ellen M. Rathje</p> <p>Recent Modifications to QUAD4MU I.M. Idriss Phakun Tan</p> <p>Analyzing Strong Ground Motion Records Jeff Howard</p> <p>Site Response Using DEEPSOIL Youseff Hashash</p>

WEDNESDAY, MAY 21

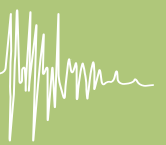
10:30 a.m. – 12:00 noon

Session W1a Location: Room 204 - SCC	Session W1b (cont.) Location: Room 205 - SCC	Session W1c (cont.) Location: Room 103 - SCC	Session W1d Location: Room 104 - SCC	Session W1e Location: Room 105 - SCC
<p>Ground Motion Time Series Selection <i>Moderators: Tom Shantz, Christine Gault</i></p> <p>Assessment of Ground Motion Selection and Modification (GMSM) Ms. Christine Anne Goulet, M.Engr. Los Angeles, CA, USA</p>	<p>Seismic Response of the San Francisco International Airport Dr. Jerry Wu, A.M.ASCE, Ph.D., P.E. Oakland, CA, USA</p> <p>Lelio Mejia Ph.D., P.E., M.ASCE Oakland, CA, USA</p>	<p>Ports <i>Moderator: G. Yogachandran</i></p> <p>Comparison of Panama Wharf Performance Using Numerical Analysis and Limit Equilibrium Methods King H Chin, P.E., A.M.ASCE GeoEngineers, Inc. Seattle, WA, USA</p> <p>Daniel W Mageau, P.E., AFF., M.ASCE GeoEngineers, Inc. Seattle, WA, USA</p> <p>Mr Scott T. Peterson, Ph.D., P.E., M.ASCE BERGER/ABAM Engineers Inc. Federal Way, WA, USA</p>	<p>Retaining Structures & SSI <i>Moderators: Raj Siddharthan, Tara Hutchinson</i></p> <p>Dynamic Centrifuge Study of Seismically Induced Lateral Earth Pressures on U-shaped Retaining Structures Linda Al Atik Berkeley, CA, USA</p> <p>Nicolas Sitar Ph.D., M.ASCE Berkeley, CA, USA</p>	<p>Pipelines <i>Moderators: Jorge Meneses, Endi Zhai, Ph.D., P.E., AFF.M.ASCE</i></p> <p>Assessing Geotechnical Hazards for Water Pipes with Uniform Confidence Level Dr. Craig A. Davis, Ph.D., M.ASCE, P.E. Los Angeles Department of Water and Power Los Angeles, CA, USA</p>
<p>Session W1b Location: Room 205 - SCC</p>	<p>Session W1c Location: Room 103 - SCC</p>	<p>Full-Scale Lateral Pile Load Test in Rock Fill Yohsuke Kawamata Corvallis, OR, USA</p> <p>Prof. Scott Ashford, Ph.D., M.ASCE, P.E. Corvallis, OR, USA</p> <p>Nontapat Nimityongskul, M.S. Corvallis, OR, USA</p>	<p>Dynamic Modeling of a 135-Foot-Tall MSE Wall Doug D Lindquist, M.ASCE, P.E. Hart Crowser, Inc. Seattle, WA, USA</p>	<p>Components of Dynamic Subgrade Reaction on Pile in Saturated Sand Dr. Hideki Funahara, Ph.D. Yokohama, Kanagawa, JPN</p>
<p>Site Response I <i>Moderators: Dominic Assimaki, Xiang-Song Li</i></p> <p>Basin Effects in the Upper Mississippi Embayment J. Alfredo Fernandez Atlanta, Georgia, USA</p> <p>Prof. Glenn J. Rix, A.M.ASCE Atlanta, GA, USA</p> <p>The Turkey Flat Blind Prediction Experiment and the Parkfield Earthquake of 24 September 2004: Results and Comparison with Other Turkey Flat Recordings Dr. Hamid Haddadi, Ph.D. Sacramento, CA, USA</p> <p>Dr. Anthony Shakal, Ph.D. Sacramento, CA, USA</p> <p>Mr. Charles R. Real, M.S. Sacramento, CA, USA</p>	<p>Ports <i>Moderators: G. Yogachandran, Arul Arulmoli</i></p> <p>Geotechnical Considerations and Soil-Structure Interaction: Proposed ASCE Standards for Seismic Design of Piers and Wharves (Arul) K Arulmoli, Ph.D., G.E., F.ASCE Earth Mechanics Fountain Valley, CA, USA</p> <p>Mr Peter P Yin, P.E., M.ASCE Port of Los Angeles San Pedro, CA, USA</p> <p>Mr. Gayle Johnson, M.ASCE, P.E. Oakland, California, USA</p> <p>Dr. Timothy W. Mays, Ph.D., M.ASCE, P.E. Charleston, SC, USA</p> <p>Omar Jaradat, Ph.D., P.E., M.ASCE Orange, CA, USA</p>	<p>Integrating Soil-Structure Interaction Analyses of Pile-Supported Wharves in Seismic Risk Management of Port Systems Prof. Dominic Assimaki, A.M.ASCE Atlanta, GA, USA</p> <p>Varun Varun, S.M.ASCE Atlanta, GA, USA</p> <p>Seismic Retrofit and Improvement of Alpha-Bravo Wharf in Guam Raj S Varatharaj, M.ASCE Earth Mechanics, Inc. Fountain Valley, CA, USA</p> <p>Arul K Arulmoli, Ph.D., G.E., F.ASCE Earth Mechanics Fountain Valley, CA, USA</p> <p>Dr. Dick Chan, Ph.D. Long Beach, CA, USA</p> <p>Kijun Ahn, P.E. Long Beach, CA, USA</p> <p>Ukrit Siriprusanan, P.E. Tamuning, GU, USA</p>	<p>Permanent Seismic Deformation of MSE Walls with Uneven Reinforcement Prof. Raj Siddharthan, M.ASCE University of Nevada, Reno Reno, Nevada, USA</p> <p>Gopalan Vishnan, A.M.ASCE Roseville, CA, USA</p> <p>Lateral Seismic Soil Pressures on Soldier Pile Walls Jin-xing Zha, Ph.D., P.E. M.ASCE Roseville, CA, USA</p> <p>Seismic Behaviour of Propped and Cantilevered Retaining Structures Dr. Luigi Callisto Roma, ITA</p> <p>Ing. Riccardo Conti Marino, Roma, ITA</p> <p>Dr. Fabio Saccodato, Ph.D. Cagliari, CA, ITA</p>	<p>Soil-Pipeline Interaction Behavior Under Strike-Slip Faulting Mr. Da Ha, Ph.D., S.M.ASCE Troy, NY, USA</p> <p>Tarek Abdoun, Ph.D., A.M.ASCE Rensselaer Polytechnic Institute Troy, NY, USA</p> <p>Prof. Michael O'Rourke, Ph.D., P.E., M.ASCE Troy, NY, USA</p> <p>Characteristics of Uplifting Velocity of a Buried Pipe in Liquefied Ground Dr. Koji Ichii Higashi-hiroshima, Hiroshima, JPN</p> <p>Shake-Table Testing and FLAC Modeling of Liquefaction-Induced Slope Failure and Damage to Buried Pipelines Dr. Endi Zhai, Ph.D., P.E., AFF.M.ASCE Irvine, CA, USA</p>
<p>Soil Uncertainty and Seismic Ground Motion Prof. Boris Jeremic, A.M.ASCE University of California Davis, CA, USA</p> <p>Mr. Kallol Sett, S.M.ASCE Davis, CA, USA</p> <p>A Simplified Constitutive Model to Simultaneously Match Modulus Reduction and Damping Soil Curves for Nonlinear Site Response Analysis Camilo Andres Phillips, M.S., Ing., S.M.ASCE Champaign, IL, USA</p> <p>Prof. Youssef M. A. Hashash, Ph.D., M.ASCE, P.E. Urbana, IL, USA</p>				

WEDNESDAY, MAY 21

1:30 – 3:00 p.m.

<p>Session W2a Location: Room 204 - SCC</p>	<p>Breakout Session W2b Location: Room 205 - SCC</p>	<p>Session W2c Location: Room 103 - SCC</p>	<p>Session W2d Location: Room 104 - SCC</p>	<p>Session W2e Location: Room 105 - SCC</p>
<p>Panel on Residual Strength of Liquefied Soils <i>Moderator: Steve Kramer, Ph.D., P.E., M.ASCE</i></p> <p>Important issues and recommended methods for prediction of the residual strength of liquefied soils will be discussed by a distinguished group of panelists, and then the floor will be opened for questions and discussions.</p> <p>Gonzalo Castro I. M. Idriss Scott Olson Leslie F. Harder, Jr.</p>	<p>Site Response 2 <i>Moderators: Xiang-Song Li, Adrian Rodriguez Makek</i></p> <p>Modeling Nonlinear Site Response Uncertainty in the Los Angeles Basin Prof. Dominic Assimaki, M.ASCE Atlanta, GA, USA</p> <p>Comparing Weak-Motion Spectral Ratio Predictions with Small-Motion Observation at the Turkey Flat Site Effects Test Area Prof. Chris H Cramer, R.G. Memphis, TN, USA</p> <p>Dynamic Response of Unsaturated Noncollapsible and Collapsible Deposits Claudia Medina, A.M.ASCE, Ph.D. Rensselaer Polytechnic Institute Vancouver, BC, CAN</p> <p>Mourad Zeghal, Ph.D., A.M.ASCE Rensselaer Polytechnic Institute Troy, NY, USA</p> <p>Spatial Analysis of Damage Distribution in the 2001 Southern Peru Earthquake Nicholas E Malasavage, EIT Philadelphia, PA, USA</p> <p>Joseph Wartman, Ph.D., P.E., M.ASCE Drexel University Philadelphia, PA, USA</p> <p>Strain-Dependent Soil Properties Estimated from Downhole Array Recordings at Kashiwazaki-Kariwa Nuclear Power Plant during the 2007 Niigata-ken Chuetsu-oki Earthquake Dr. Kohji Tokimatsu, D.Eng., M.ASCE Tokyo, JPN</p> <p>Mr. Ryosuke Sugimoto, B.Engr. Meguro-ku, Tokyo, JPN</p>	<p>Ground Improvement 2 <i>Moderators: Kyle Rollins, Ph.D., M.ASCE, Lisheng Shao, P.E., M.ASCE</i></p> <p>Centrifuge Testing of Prefabricated Vertical Drains for Liquefaction Remediation Prof. Ellen Rathje, Ph.D., M.ASCE Austin, TX, USA</p> <p>Liquefaction Potential Mitigation using Rapid Impact Compaction Ms. Lori A. Simpson, M.S. P.E., M.ASCE Oakland, CA, USA</p> <p>Ms. Serena T. Jang, M.S. San Francisco, CA, USA</p> <p>Ms. Cary E. Ronan, M.S. San Francisco, CA, USA</p> <p>Ms. Lisa M. Splitter, M.S. P.E., M.ASCE Oakland, CA, USA</p> <p>Colloidal Silica Gel and Sand Mixture Dynamic Properties Mrs. Laura Spencer, EIT, M.S. Atlanta, GA, USA</p> <p>Prof. Glenn J. Rix, A.M.ASCE Atlanta, GA, USA</p> <p>Dr. Patricia M Gallagher, A.M.ASCE, P.E. Philadelphia, PA, USA</p> <p>Dynamic Response of an Embankment during Stone-Column Piling Dr. Dario Rosidi, Ph.D. P.E., M.ASCE Oakland, CA, USA</p> <p>Mr. Areg Gharabegian Pasadena, CA, USA</p> <p>Deh-Jeng Jang P.E., M.ASCE Sacramento, CA, USA</p> <p>Cone Penetration Testing before, during, and after Blast-Induced Liquefaction William M Camp III, P.E., M.ASCE SGME, Inc. Mt. Pleasant, SC, USA</p> <p>Prof. Kyle M. Rollins, Ph.D., M.ASCE Brigham Young University Provo, UT, USA</p> <p>Prof. Paul W Mayne, Ph.D., P.E., M.ASCE Atlanta, GA, USA</p>	<p>Faults and Seismic Hazard Mapping <i>Moderators: Tom Holzer, ASCE, Russell Green, ASCE</i></p> <p>Earthquake Loss Estimation Tool for Urban Areas Prof. Atilla Ansal, M.ASCE., Ph.D. Bogazici University Istanbul, TUR</p> <p>The Effect of Shallow Foundation Positions on Their Interaction with Reverse Faults Dr. Fraser Bransby Dundee, Angus, SCO</p> <p>Waqas Ahmed Dundee, Angus, SCO</p> <p>Incorporating the Effects of Site Geology in CEUS Hazard Maps Prof. Chris H Cramer, RG, ASCE Memphis, TN, USA</p> <p>Geological and Microtremor Survey, Damage Distribution, and Reconstruction of Muzaffarabad and Surroundings after the 2005 Kashmir Earthquake Jorgen Johansson, Ph.D. Meguro, Tokyo, JPN</p> <p>Kazuo Kanagai Tokyo, JPN</p> <p>A Deformation-Based Approach for Mapping Earthquake-Induced Liquefaction Hazard Mr. Charles R. Real, M.S. Sacramento, CA, USA</p> <p>Mr. Keith L. Knudsen, M.S. Menlo Park, CA, USA</p> <p>Mr. Marvin Woods, M.S. Sacramento, CA, USA</p>	<p>Slopes and Embankments <i>Moderators: Mourad Xeghal, U. Elshamy, A.M.ASCE</i></p> <p>Energy-Based Evaluation of Earthquake-Induced Slope Failure and Its Application Takaji Kokusho, M.ASCE Tokyo, JPN</p> <p>Motion Characteristics of Compacted Earth Dams under Small Earthquake Excitations in Taiwan Prof. Jin-Hung Hwang, Ph.D. Jhongli, Taoyuan, TWN</p> <p>Mr. Chia-Pin Wu Jhongli, Taoyuan, TWN</p> <p>Failure Mechanisms of Landfills under Dynamic Loading Dr. Prodromos Psarropoulos, Ph.D. Chania, Crete, GRC</p> <p>Dr. Achilles Papadimitriou, M.ASCE, P.E. University of Thessaly Greece Volos, Magnisia, GRC</p> <p>Prof. Yiannis Tsompanakis, Ph.D. Chania, Crete, GRC</p> <p>Eng. Varvara Zania, M.Engr. Chania, Crete, GRC</p> <p>Geotechnical Investigations and Site Characterization of the Success Dam Seismic Remediation Project David C. Serafini, B.S., M.S., M.ASCE, P.E. Sacramento, CA, USA</p> <p>Matthew G. Allen, B.S., M.S., M.ASCE, P.E. Sacramento, CA, USA</p> <p>Validation of Generic MSW Properties for Seismic Design of Landfills Dr. Adda G. Athanasopoulos-Zekkos, M.S., S.M.ASCE Albanay, CA, USA</p> <p>Dr. Dimitrios Zekkos, Ph.D., P.E., M.ASCE Oakland, CA, USA</p> <p>Dr. Neven Matasovic, M.ASCE Huntington Beach, CA, USA</p>



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Business casual attire is appropriate for most events unless otherwise noted. It is advisable to wear a jacket or a sweater during the sessions, as rooms are typically cool. We also recommend wearing comfortable shoes.

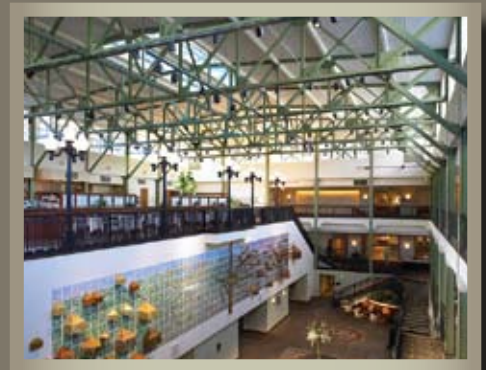
SPEAKERS' PREPARATION ROOM

LOCATION: ROOM 201

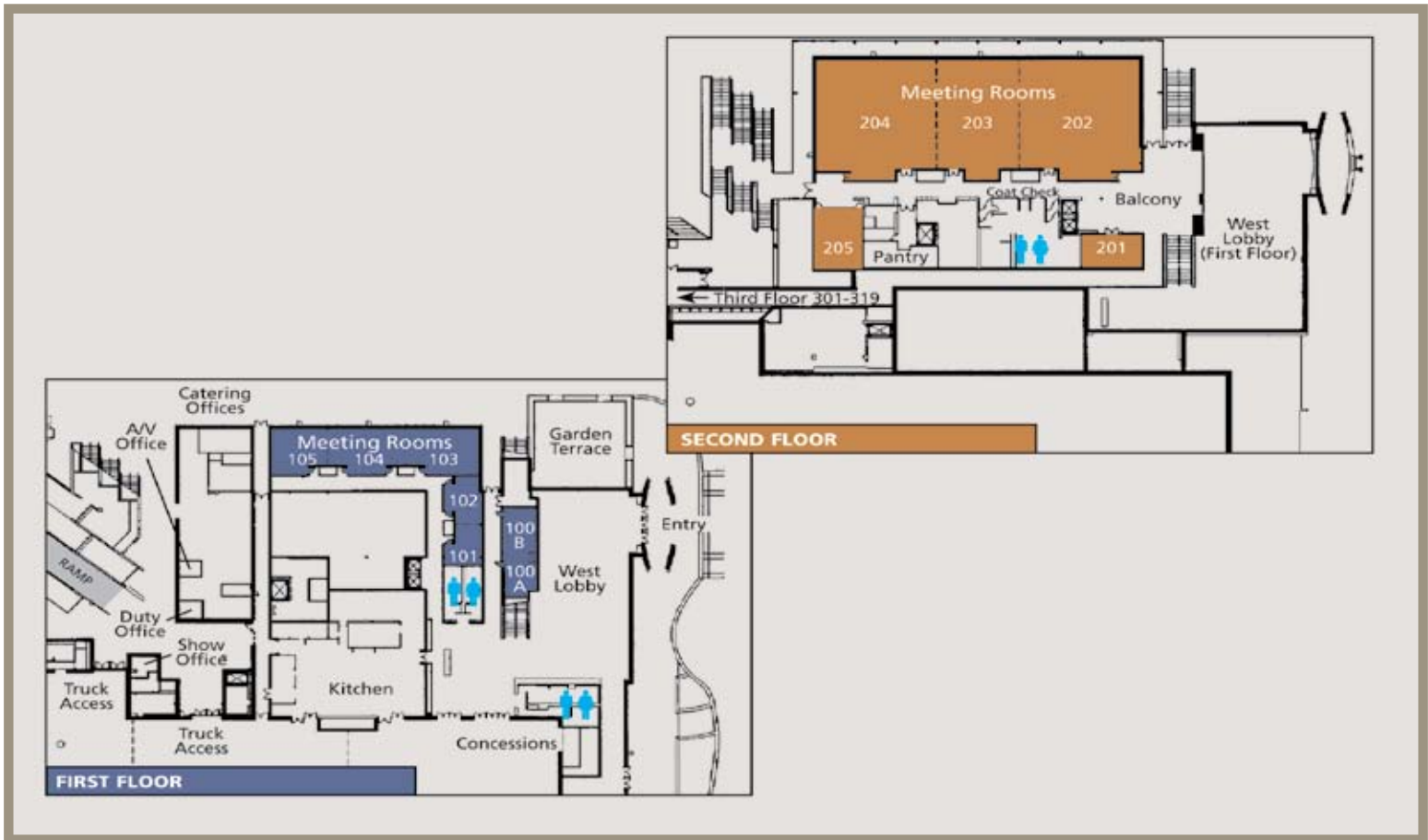
A speakers' prep room will be open Monday, May 19 - Wednesday, May 21.

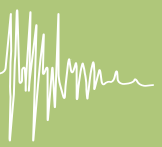
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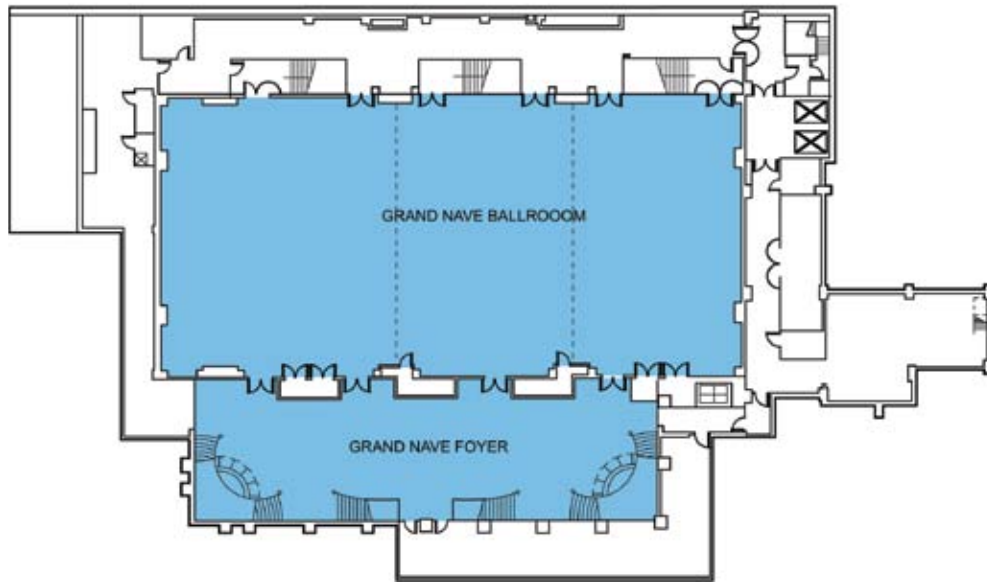


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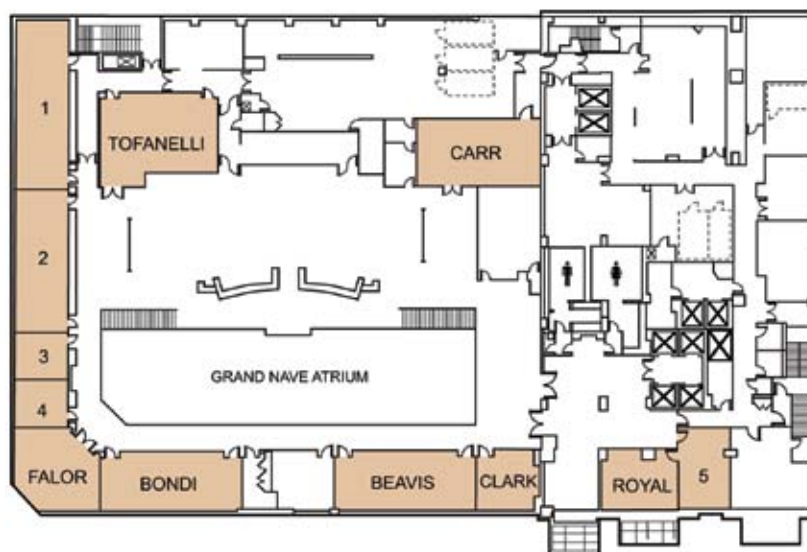




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EXHIBIT HALL HOURS

SUNDAY, MAY 18

Move in
12:00 noon - 4:00 p.m.

MONDAY, MAY 19

Exhibit Hall Open
10:00 a.m. - 7:00 p.m.

Break
10:30 - 11:00 a.m.

Lunch
12:30 - 2:00 p.m.

Break
3:30 - 4:00 p.m.

Wine Tasting/Poster Session
5:30 - 7:00 p.m.

TUESDAY, MAY 20

Exhibit Hall Open
9:30 a.m. - 3:30 p.m.

Break
10:00 - 10:30 a.m.

Lunch
12:00 noon - 1:30 p.m.

WEDNESDAY, MAY 21

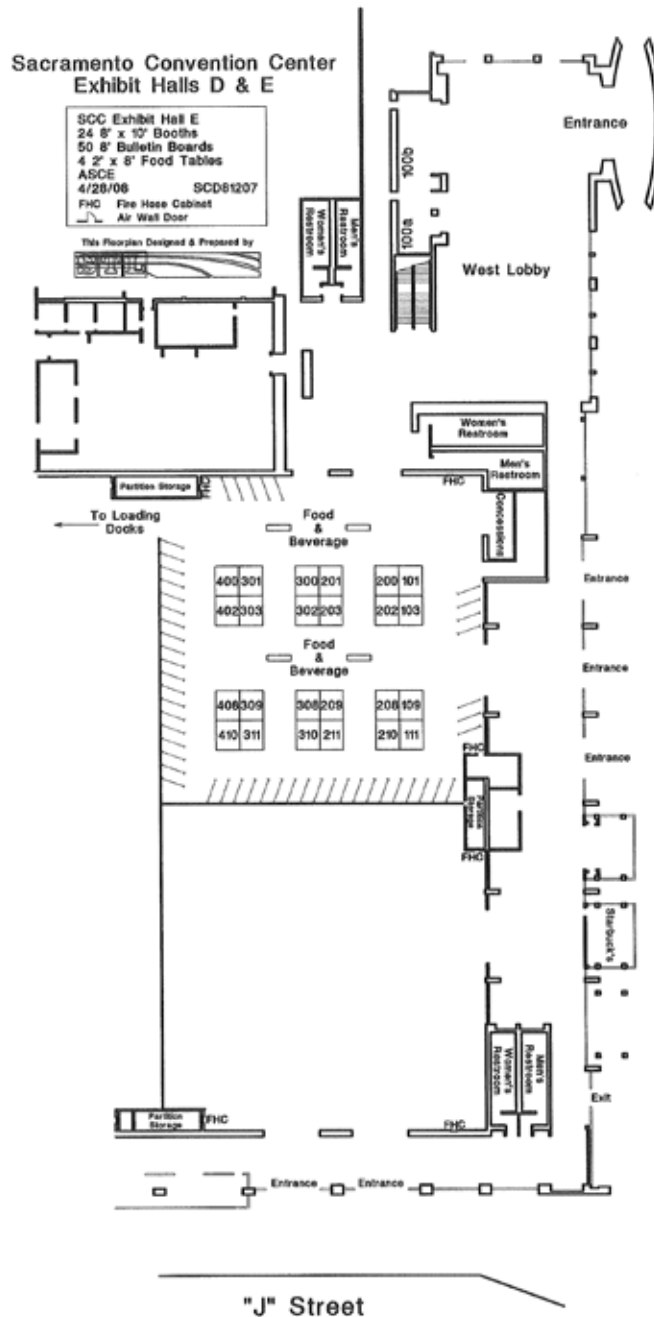
Exhibit Hall Open
9:30 a.m. - 1:30 p.m.

Break
10:00 - 10:30 a.m.

Lunch
12:00 noon - 1:30 p.m.

Break
3:00 - 3:30 p.m.

Move out
3:30 - 7:00 p.m.



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