

PREFACE

The California Strong Motion Instrumentation Program (CSMIP) in the California Geological Survey of the California Department of Conservation established a Data Interpretation Project in 1989. Each year CSMIP funds several data interpretation contracts for the analysis and utilization of strong-motion data. The primary objectives of the Data Interpretation Project are to further the understanding of strong ground shaking and the response of structures, and to increase the utilization of strong-motion data in improving post-earthquake response, seismic code provisions and design practices.

As part of the Data Interpretation Project, CSMIP holds annual seminars to transfer recent research findings on strong-motion data to practicing seismic design professionals, earth scientists and post-earthquake response personnel. The purpose of the annual seminar is to provide information that will be useful immediately in seismic design practice and post-earthquake response, and in the longer term, useful in the improvement of seismic design codes and practices. Proceedings and individual papers for each of the previous annual seminars are available at <http://www.conservation.ca.gov/cgs/smip/seminar> in PDF format. Due to State budget constraints, CSMIP did not hold an annual seminar in 2010 or 2011. The SMIP23 Seminar is the thirty-second in this series of annual seminars.

The SMIP23 Seminar is divided into two sessions in the morning and two sessions in the afternoon. There are seven presentations in total; six are on the results of CSMIP-funded projects. The sessions in the morning include four presentations. The first session will focus on structural response topics. Professor Mosalam of UC Berkeley will present on the use of neural networks in structural response prediction. He will be followed by a presentation from Professor Bernal of Northeastern University on inherent damping of structures during nonlinear seismic response. The second session will include presentations on both structural and lifeline response topics. Professor Tsampras of UC San Diego will present on diaphragm seismic design provisions and higher-mode responses of buildings. He will be followed by a presentation from Professor Athanasopoulos-Zekkos of UC Berkeley on dynamic response parameters of earth dams.

The sessions in the afternoon include three presentations. The third session will focus on ground response topics. Professor Olsen of San Diego State University will present on the near-surface seismic structure of the SCEC Community Velocity Model. He will be followed by a presentation from Professor Stewart of UC Los Angeles on the useability of ground motions recorded by the Community Seismic Network. The last session will focus on the 2023 Turkey earthquake sequence. Professor Akciz of Cal State Fullerton, Professor Moss of Cal Poly San Luis Obispo, Dr. Hortacsu of the Applied Technology Council and Dr. Buckreis of UC Los Angeles will present on the seismological and faulting, geotechnical engineering, structural engineering, and strong motion data aspects of the earthquake sequence, respectively. Individual papers and the proceedings are available for download by the SMIP23 participants at the provided link and will be available at the CSMIP website in the future.

Daniel Swensen
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**Appreciation to Members of the
Strong Motion Instrumentation Advisory Committee**

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