

## 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 SMIP25 Seminar is the thirty-fourth in this series of annual seminars.

The SMIP25 Seminar is divided into two sessions in the morning and two sessions in the afternoon. There are eight presentations in total; seven are on the results of CSMIP-funded projects. The sessions in the morning include four presentations. The first session will focus on ground response topics. Professor Abrahamson of UC Berkeley will present on a period-dependent duration model for California. He will be followed by a presentation from Professor Stewart of UC Los Angeles on an ergodic site response model for California conditioned on mHVSr. The second session will also include presentations on ground response topics. Professor Miranda of Stanford University will present on ground motion directionality in strike-slip earthquakes. He will be followed by a presentation from Professor Pretell of UNR on ground motion model predictions for the Sierras region in eastern California.

The sessions in the afternoon include four presentations. The third session will include presentations on recent CSMIP activities and a topic in structural response. Hamid Haddadi, Dave Branum and Daniel Swensen will present on CSMIP's pilot projects on application of lower resolution strong motion instrumentation. They will be followed by a presentation from Professor Nagarajaiah of Rice University on the performance of instrumented base isolated buildings in Los Angeles in recent earthquakes. The last session will include presentations on lifeline response topics. Professor Becker of UC Berkeley will present on the seismic performance of bridges with pier walls. She will be followed by a presentation from Professor Athanapoulos-Zekkos of UC Berkeley on the seismic response of California earth dams. Individual papers and the proceedings are available for download by the SMIP25 participants at the provided link and will be available at the CSMIP website in the future.

Daniel Swensen  
CSMIP Data Interpretation Project Manager

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

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Norman Abrahamson, UC Berkeley  
Bruce Clark, Leighton & Associates  
Martin Eskijian, California State Lands Commission  
David Gutierrez, GEI Consultants  
Zia Zafir, Kleinfelder  
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**Data Utilization Subcommittee**

Representatives from each Subcommittee