

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 SMIP21 Seminar is the thirtieth in this series of annual seminars.

The SMIP21 Seminar is divided into two sessions in the morning and two sessions in the afternoon. There are three presentations on the results from CSMIP-funded projects and five invited presentations. The sessions in the morning include four presentations. The first session will focus on ground motion issues. Professor Ziotopoulou of UC Davis will present on developing input motions for site response and nonlinear deformation analyses. She will be followed by a presentation from Professor Abrahamson of UC Berkeley on site response based on Vs profile information. The second session will focus on structural response topics. Professor Kunnath of UC Davis will present on ASCE-41 acceptance criteria for steel moment frame buildings. Dr. Celebi of USGS and I will then present on recent response studies of four tall buildings in California.

The two sessions in the afternoon include four presentations on a variety of topics. In the third session, Professor Olsen of San Diego State University will present on seismic hazard analysis of embankment dams. He will be followed by a presentation from Professor Mosalam of UC Berkeley on structural health monitoring. The last session will include a presentation on earthquake early warning by Dr. Given of USGS, and a presentation on the Community Seismic Network by Professor Kohler of Caltech. Individual papers and the proceedings are available for download by the SMIP21 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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