

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. Due to State budget constraints, CSMIP did not hold an annual seminar in 2010 or 2011. The SMIP19 Seminar is the twenty-eighth in this series of annual seminars.

The SMIP19 Seminar is divided into two sessions in the morning and two sessions in the afternoon. There are eight presentations on the results from CSMIP-funded projects and one invited presentation. The sessions in the morning include five presentations. The first session will focus on lifeline structures. Professor Elgamal of UC San Diego will present on the seismic response of the Eureka Channel Bridge. He will be followed by a presentation from Professor Zareian of UC Irvine on Caltrans bridge modeling. The second session will focus on ground motion issues. Professor Stewart of UCLA will present on the topic of site response and its predictability. Professor Taciroglu, also of UCLA, will then present on earthquake input excitations for buildings. The final presentation of the second session will be an invited presentation from Professor Stewart of UCLA and Janis Hernandez of CGS on the recent Ridgecrest Earthquake sequence.

The two sessions in the afternoon include four presentations on building response topics. In the third session, Professor Hutchinson of UC San Diego will present on the seismic response of nonstructural components in buildings. She will be followed by a presentation from Professor Loh, also of UC San Diego, on building response analysis and damage detection. The last session will include presentations on column base flexibility in buildings by Professor Kanvinde of UC Davis, and FEMA P58 and the potential for automated loss estimation by Professor Moehle of UC Berkeley. Individual papers and the proceedings are available for download by the SMIP19 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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