

## 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 Program 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/Pages/proceedings.aspx> in PDF format. Due to the State budget restraints, CSMIP did not fund as many projects as in other years and did not hold an annual seminar in 2010 or 2011. The SMIP15 Seminar is the twenty-fourth in this series of annual seminars.

The SMIP15 Seminar is divided into two sessions in the morning and two sessions in the afternoon. The sessions in the morning include three presentations. Dr. David Boore of USGS is invited to present the 2014 William Joyner Lecture on the past, present, and future for ground motion prediction equations in the first session. The second session will focus on ground motions and will include presentations of the results from two CSMIP-funded projects on effectiveness of 1D site response analysis by Professor Stewart of UCLA and on topographic effects on strong ground motion by Professor Rodriguez-Marek of Virginia Tech.

The afternoon session will start with presentations of the final results from two CSMIP-funded projects on ASCE/SEI 7 direction of loading provisions by Mr. Lizundia of Rutherford + Chekene and on building response to bi-directional excitation by Professor Bernal of Northeastern University. The third presentation by Dr. Imbsen of SC Solutions will include preliminary results from a CSMIP-funded project on rapid post-earthquake safety evaluation of a suspension bridge. The last session will include presentations of some preliminary results from two CSMIP-funded projects on identifications of building periods and modal damping ratios for buildings by Professor Zareian of UC Irvine and on identification of soil-foundation impedance functions from building response records by Professor Taciroglu of UCLA. Individual papers and the proceedings are available to the SMIP15 participants in an USB flash drive, and will be available at the CSMIP website.

Moh Huang  
CSMIP Data Interpretation Project Manager

**Appreciation to Members of the  
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