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 in PDF format at http://www.consrv.ca.gov/CGS/smip/proceedings.htm 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 SMIP14 Seminar is the twenty-third in this series of annual seminars.

The SMIP14 Seminar is divided into two sessions in the morning and two sessions in the afternoon. The sessions in the morning include four invited presentations. The first session will focus on ground motions and will include an invited presentation by Professor Baker of Stanford University on engineering application of ground motion simulation, and a presentation by Professor Rodriguez-Marek of Virginia Tech on accounting topographic effects in ground motion predication equations. The second session will include presentations of some preliminary results from two CSMIP-funded projects on building code seismic provisions on the direction of loading in building codes by Mr. Lizundia of Rutherford+Chekene and effects of multiple-component ground motion on building response by Professor Bernal of Northeastern University.

The first afternoon session will start with a presentation of the results from the CSMIP-funded project on seismic performance analysis of port structures by Dr. Dickenson of New Albion Geotechnical, followed by an invited presentation on seismic analysis of an instrumented concrete gravity dam by Mr. Schultz of Department of Water resources. The last session will include a presentation of CSMIP-funded project on building modeling sensitivity by Professor Kunnath of UC Davis, followed by an invited presentation by Professor Allen of UC Berkeley on California earthquake early warning system, and highlights of strong-motion data from the M6.0 South Napa earthquake of August 24, 2014 by Dr. Shakal of CSMIP. Individual papers and the proceedings are available to the SMIP14 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 Strong Motion Instrumentation Advisory Committee

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