#### **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 <a href="http://www.consrv.ca.gov/CGS/smip/proceedings.htm">http://www.consrv.ca.gov/CGS/smip/proceedings.htm</a> 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 SMIP13 Seminar is the twenty-second in this series of annual seminars.

The SMIP13 Seminar is divided into two sessions in the morning and two sessions in the afternoon. The sessions in the morning include four invited presentations. They are lessons learned on ground motions from large subduction earthquakes by Professor Stewart of UCLA, significant building records from the 2011 Tohoku earthquake by Professor Kasai of Tokyo Institute of Technology, observations from recent earthquake in China by Dr. Lew of AMEC, and earthquake early warning system by Dr. Given of USGS. The first afternoon session starts with a presentation of some preliminary results from the CSMIP-funded project on port structures by Dr. Dickenson of New Albion Geotechnical, followed by an invited presentation on analyses of records from instrumented bridges by Dr. Shamsabadi of Caltrans. The last session includes an invited presentation by Dr. Naeim of John A. Martin and Associates on instrumentation requirements for tall buildings in Los Angeles, followed by presentations by Dr. Shakal on recent developments at CSMIP, and by Dr. Haddadi on the updates of the Center for Engineering Strong Motion Data. Individual papers and the proceedings are available to the SMIP13 participants in an USB flash drive.

Moh Huang CSMIP Data Interpretation Project Manager

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

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Norman Abrahamson, Pacific Gas & Electric Company

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Bruce Clark, Leighton & Associates

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