

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/docs/seminar/Pages/default.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 SMIP16 Seminar is the twenty-fifth in this series of annual seminars.

The SMIP16 Seminar is divided into two sessions in the morning and two sessions in the afternoon. There are a total of nine presentations including one invited presentation and eight presentations on the results from CSMIP-funded projects. The sessions in the morning include four presentations. Dr. C.B. Crouse of AECOM is invited to present the development of new ground-motion maps for Los Angeles. It will be followed by a presentation by Dr. Imbsen of SC Solutions on the fragility curves for rapid post-earthquake safety evaluation of a suspension bridge. The second session will focus on results from building response data: building periods and modal damping ratios by Professor Zareian of UC Irvine and dynamic foundation stiffnesses and input motions for buildings by Professor Taciroglu of UCLA.

The afternoon session will start with presentation of the results on the implications of vertical array data for modeling of site response by Professor Stewart of UCLA. Professor Taciroglu of UCLA will present theoretical basis for spatial variability of bridge foundation input motions. The last session will include presentations of ground motions recorded during the 2014 South Napa Earthquake by Drs. Kishida and Mazzoni of UC Berkeley, one-dimensional site response by Professor Motamed of University of Nevada Reno, and improved ground motion intensity measures for estimating the collapse of structures by Professor Miranda of Stanford University. Individual papers and the proceedings are available to the SMIP16 participants in an USB flash drive, and will be available at the CSMIP website.

Moh Huang
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**Appreciation to Members of the
Strong Motion Instrumentation Advisory Committee**

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