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 SMIP12 Seminar is the twenty-first in this series of annual seminars.

The SMIP12 Seminar is divided into two sessions in the morning and two sessions in the afternoon. The sessions in the morning include four presentations on CSMIP-funded projects. These include analysis of building response data for improvement of seismic design for non-structural components, soil-structure interactions, dampings in buildings, and computer models for seismic response of buildings. The first afternoon session includes a presentation of the project on wave propagation and site effects in the Humboldt Bay area, and two presentations on the extensive instrumentation of a 62-story building in San Francisco and analysis of the ambient vibration data from the building. The last session includes invited presentations by Chris Tokas of OSHPD on seismic safety and instrumentation of hospital buildings and by Brian Maroney of Caltrans on the construction of the new San Francisco-Oakland Bay Bridge East Span. Individual papers and the proceedings are available to the SMIP12 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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