

PREFACE

The California Strong Motion Instrumentation Program (CSMIP) in the California Geological Survey (previously known as the Division of Mines and Geology) of the California Department of Conservation established a Data Interpretation Project in 1989. Each year the 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, in the improvement of seismic design codes and practices. The SMIP05 Seminar is the sixteenth in this series of annual seminars.

The SMIP05 Seminar is divided into four sessions. Session I includes strong-motion data from the 2004 Parkfield earthquake and animation of earthquake ground motions. Session II will include ShakeMap uncertainty and visualization of the seismic response of an interchange bridge. Session III will include two presentations on various methodologies for post-earthquake damage assessment of instrumented buildings using recorded building response data. In Session IV, there are four invited presentations on the ground motions of the recent Sumatra earthquakes, engineering aspects of the Sumatra mainshock, and tsunami preparedness and response in California. The Seminar will end with a field trip to the Los Angeles City Hall. Before the field trip, Nabih Youssef will discuss the design and new structural system for strengthening the Los Angeles City Hall. CSMIP extends its appreciation to staff of the City of Los Angeles, especially Jim Treadaway and Y.C. Wang, who have cooperated in the installation of strong-motion equipment in the City Hall.

The seminar includes presentations by investigators of four CMIP-funded projects. These four projects are scheduled to be completed by the summer 2005 and the final results will be published in their final reports.

Moh J. Huang
Data Interpretation Project Manager