

**PREFACE**

The California Strong Motion Instrumentation Program (CSMIP) in the Division of Mines and Geology of the California Department of Conservation promotes and facilitates the improvement of seismic codes through the Data Interpretation Project. The objective of this project is to increase the understanding of earthquake strong ground shaking and its effects on structures through interpretation and analysis studies of CSMIP and other applicable strong-motion data. The ultimate goal is to accelerate the process by which lessons learned from earthquake data are incorporated into seismic code provisions and seismic design practices.

Since the establishment of CSMIP in the early 1970s, over 600 stations, including 400 ground-response stations, 145 buildings, 20 dams and 45 bridges, have been installed. Significant strong-motion records have been obtained from many of these stations. One of the most important sets of strong-motion records is from the 1994 Northridge earthquake. During this earthquake strong-motion records were obtained from 116 ground-response stations and 77 extensively-instrumented structures. In addition to these records, CSMIP in cooperation with the City of Los Angeles and other agencies, collected and archived accelerograms recorded at over 300 high-rise buildings during the Northridge earthquake. These buildings were instrumented by the building owners as required by the City's Building Code. The strong-motion records from the Northridge earthquake have been and will be the subject of CSMIP data interpretation projects.

The SMIP97 Seminar is the ninth in a series of annual events designed to transfer recent interpretation findings on strong-motion data to practicing seismic design professionals and earth scientists. The purpose of the Seminar is to increase the utilization of strong-motion data in improving seismic design and practices. In the presentations, six invited experts who have utilized strong-motion data in specific studies will present the applications of strong-motion data to a variety of areas including earthquake resistant design, near fault ground motion, UBC ground shaking criteria, seismic rehabilitation guidelines, computer modeling of buildings, and utilization for bridges and dams. In addition, CSMIP staff will present two papers; one on the recent development on near-real-time strong motion and data dissemination through Internet, and the other on the EERI/FEMA Profession Fellowship project on site response. Director Richard Andrews of the Governor's Office of Emergency Services will present a luncheon address on the funding of TriNet project to improve earthquake planning, response and early warning.

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