

COSMOS 2004 ANNUAL MEETING

Technical Session on Scaling of Ground Motions for Engineering Design Applications

**The Westin
San Francisco Airport
1 Old Bayshore Highway
Millbrae, California 94030**

**12 November 2004
Friday
10:00 am – 5:00 pm**

The COSMOS membership made a decision at its 2003 COSMOS Annual Meeting that the principal part of the 2004 meeting will be a technical session dealing with important strong-motion issues of broad interdisciplinary interest to the strong-motion community.

An informal committee headed by Norm Abrahamson has been planning arrangements for the technical session since November 2003. Plans are nearing the final stages. The technical session will begin at 10:00 am after a short, one-hour business meeting. The technical session is planned to extend for the rest of the meeting.

Purpose: The COSMOS Virtual Data Center has provided engineering access to time histories that can be used in engineering analyses, but to use the time histories in engineering analyses, most feel that they must be scaled to the design level ground motion. This scaling issue recurrently comes up in practice and it is one that can benefit from discussion and input from the COSMOS interdisciplinary community that includes seismologists, geologists, engineering seismologists, geotechnical engineers and practicing structural engineers. There are many disparate points of view on the issues involved and their implications are very important to the seismic safety of current and future structures. Developing greater consensus on guidelines for scaling is important.

Content: The technical session will begin with a review of the issues and approaches. This will be followed by an overview presentation of new insights coming from the CSMIP/PEER project. Next scaling effects on a variety of applications will be considered including linear oscillators, Newmark displacements, high rise construction, earth dams and others. A panel of investigators will exchange their views and answer questions from participants. This will be followed by a general discussion by all present.