

SESSION 41- Seismic Structural Health Monitoring-Relevance for Seismic Safety

Conveners

Mehmet Celebi, USGS (Emeritus), USA and
Maria Pina Limongelli, University of Milan, Italy

Session Description

[Upon acceptance of the session, we intend to invite up to 8 speakers from various countries. The aim to have a session with approximately 8-10 speakers including We did not contact the prospective speakers yet – in case the session is not approved).conveners). Some of the prospective invitees are: Ruben Boroschek (Chile), Reiko Hatada (Japan), Yoshiaki Hisada (Japan), Serdar Soyoz (Türkiye), Erdal Safak (Türkiye), Yavuz Kaya (Canada), Philippe Gueguen (France), David McCallen (USA), Ertugrul Taciroglu (USA)].

Scope: The session will bring together well-known experts on the subject from different countries, concentrate on methodology used with applications and recent developments.

Objectives: To review the significant methods used in different countries and results to date as applicable to the theme of the conference.

Relevance: Seismic Structural Health Monitoring is related to seismic safety of lives and property during and following a seismic event. With advent of computational capacity and speed, near real-time seismic strong shaking data is generally used to compute actual or average drift ratios to compare with several levels of acceptance as related to no damage, light damage, heavy damage and collapse. Thus decision makers can make rapid informed decisions to evacuate or continue to occupy the structure. The session will further dwell on other approaches and criteria used.

