

### The Main Concept of the Project

Conventional seismic design for soil–foundation–structure interaction is still based on the “prudent” conservative approach inherited from static geotechnical and structural engineering: Exceedance of a number of thresholds that lead to the creation of failure mechanisms in the supporting soil or at the footing–soil interface must be avoided.

This is accomplished by the use of “overstrength” factors plus (explicit and implicit) factors of safety.

However, a growing body of evidence suggests that soil–foundation inelastic and nonlinear response under seismic excitation is unavoidable, and at times even desirable. Our research helps break away with the very philosophy of the conventional approach for seismic loading and contributes in a decisive way towards a soil–foundation–structure design that can survive seismically while operating at the verge of failure.

George Gazetas

### FINAL WORKSHOP : Athens, 25-26 October 2013

**Friday, 25 October [1:30– 7:00 pm]:** Introduction ■ **Research Tools: Experimental, Numerical** ■ Seismic Loading Beyond Design Levels: Uplifting and Sliding of Rigid Bodies ■ **The Concept: “Inviting” Uplifting and Failure** ■ The UC Davis Experimental and Theoretical Related Research ■ **“Rocking-Isolation” of Frames**

**Saturday, 26 October [9:30– 2:00 pm]:** Rocking Isolation for Piled Foundations ■ **Macroelements** ■ Foundations to undergo Tectonic Fault Dislocation ■ **Practical Conclusions of “DARE”**

**Invited Speakers:** B. Kutter (USA) , A. Pecker (FRANCE) , R. Paolucci (ITALY)

**“DARE” Team :** G. Gazetas, I. Anastasopoulos, N. Gerolymos, R. Kourkoulis, F. Gelagoti, E. Garini, V. Drosos, M. Loli, G. Tasiopoulou, S. Giannakos, Th. Zafeirakos, A. Tsatsis, E. Vintzilaiou, N. Makris, E. Sapountzakis, I. Psycharis

**Venue:** “Excelixi Training and Conference Center Amphitheater”, El. Venizelou 154, Kastrì [\[map\]](#)

### Project Highlights

