

## ADVANCES IN COMPUTATIONAL STRUCTURAL DYNAMICS

EVANGELOS J. SAPOUNTZAKIS\* AND ANDREAS E. KAMPITSIS†

\*† School of Civil Engineering, National Technical University of Athens  
Zografou Campus, Athens, GR-157 80, Greece

\* [cvsapoun@central.ntua.gr](mailto:cvsapoun@central.ntua.gr)    <http://users.ntua.gr/cvsapoun>

† [cvakamb@gmail.com](mailto:cvakamb@gmail.com)

**Key words:** Structural Dynamics, Advanced Computational Methods, Computational Mechanics, Soil-Structure Interaction.

### ABSTRACT

The aim of this mini-symposium is to constitute a forum for the exchange of latest research developments and ideas in the fields of **computational methods for structural dynamics** and **dynamic soil-structure interaction**. The topics of this mini-symposium will include, but not limited to: Computational analysis of structures by FEM, BEM, Mesh free, analytical or semi-analytical methods; Free or forced vibrations; Time or frequency domain analysis; Geometrical or material nonlinearities; Viscoelastic beams; Structures made from classic or composite materials; Contact problems; Dynamic response of piles and piers; Inelastic analysis of beam-foundation systems; Seismic soil-structure interaction; Earthquake response; Foundation deformations; Inertia and kinematic interaction; Tensionless foundation modeling; Finite or infinite beams under moving loading; Sandwich and multilayered beams or plates; Caisson foundations; etc.