



Special Session on

INNOVATIVE GROUND INTERVENTIONS & METAMATERIAL CONCEPTS FOR STRUCTURE PROTECTION



Prof. Ioannis Antoniadis
National Technical University
of Athens
antogian@central.ntua.gr



Prof. Eleni Chatzi
ETH Zürich
chatzi@ibk.baug.ethz.ch



Prof. Alessandro Marzani
University of Bologna
alessandro.marzani@unibo.it

For more details:



Send us an email at:
secretary@iconhic.com

The aim of this session is to discuss recent scientific and technological advances, mainly developed within the broad research area of mechanical metamaterials, towards the design and implementation of novel metastructures for isolation against seismic, machinery and traffic induced ground borne vibrations and noise.

Researchers, innovators, and industry representatives are invited to present their findings and discuss the potentials of novel solutions, such as:

- below-ground interventions intended to divert or attenuate seismic waves;
- broad-band isolation concepts incorporating negative stiffness devices, inerters, and engineered microstructures with high-damping behavior;
- foundations and barriers with periodic configurations and/or distributed resonant system to achieve seismic protection or ground vibration attenuation;
- implementation of engineered materials for noise isolation and isolation from machine-induced vibrations.

Theoretical, numerical and experimental studies investigating the underlying physics of metamaterials for vibration and noise mitigation, including both linear and nonlinear resonant materials and periodic materials are also welcomed.

Submit your abstracts via [ICONHIC2022](https://iconhic.com) before **15 January 2022**.