

EESMS 2014 - IEEE Workshop on Environmental, Energy and Structural Monitoring Systems

PROPOSAL

Special session on Structural Control and Health Monitoring Systems

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This special session aims at networking novel researches concerning complex and edge-technology systems and methodologies addressed to the vibration control and health monitoring of existing structures subjected to natural actions like earthquakes, wind, rain etc. and/or to deterioration. The session intends to attract and collect contributions coming from different area of research, so trying to draw a multidisciplinary state-of-the-art about the involved topics.

Topics of interest include, but are not limited to:

- passive, active and semi-active control schemes and implementations
- system identification
- health monitoring
- health diagnostics
- multi-functional materials
- signal processing
- sensor technology
- piezoelectrics and mechatronics
- wireless communications and measurements
- smart or innovative sensors for local damage detection
- optical fibre sensors for health monitoring
- remote control of monitoring systems

with particular attention, among the others, to applications involving environmental and/or energetic aspects, according to the general address of the workshop.