

S14 Smart materials and structures

Organizers:

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The session covers experimental research, modelling and applications of *Smart materials and structures* and includes, but is not limited to:

- smart materials and their applications,
- smart structures,
- shape memory alloys,
- shape memory polymers,
- advanced polymer materials,
- shape memory composites,
- magnetic shape memory materials,
- elastocaloric effects,
- functionally-graded shape memory materials,
- materials related to phase transformation,
- multifunctional active materials.

Special emphasis will be placed on the phenomena related to phase transformations, in particular macro- and nano-scale phase transitions and mechanics of multi-scale processes with multi-field coupling. Presentations of both deterministic and stochastic models and solution techniques for the coupled thermo-mechanical processes as well as deterioration processes are welcome.