

**Thematic Symposium
ESIS TC 06
“Ceramics”**

Thematic Symposium “**Ceramics**” will be organised by Technical Committee 06 of the European Structural Integrity Society within the framework of the 23rd European Conference on Fracture – ECF23 to be held in Funchal, Madeira, Portugal, 27 June – 3 July 2020 (see <https://www.ecf23.eu/>).

The Symposium aims to bring together specialists in research and development of advanced structural and functional ceramics and ceramic matrix composites. It will be focused on discussion of the recent trends in design, processing, fabrication, characterization and application of novel ceramic-based materials, on new time and energy saving sintering techniques, on new structures, on advanced characterisation methods.

The topics of the Symposium include, but are not limited to, the following:

- Novel ceramics and ceramic matrix composites: preparation, microstructure, properties;
- Mechanical performance of ceramic materials in demanding applications;
- Mechanical characterisation of ceramics and CMCs at macro-, micro- and nano-levels;
- Fracture mechanics of brittle materials;
- Ultrahigh temperature ceramics (UHTC) and their structural integrity;
- High entropy ceramics: preparation, challenges and perspectives;
- Fatigue, creep, corrosion and degradation of ceramic materials;
- Structural integrity of brittle materials;
- Tribology and wear of hard materials;
- Fatigue and dynamic loading response of brittle materials;
- 3D-printing of ceramic parts and specific problems of their structural integrity;
- Numerical simulations of properties and performance of dissimilar structures.

Organiser: Dr. Pavol Hvizdoš,
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