

NON-CONVENTIONAL METHODS FOR SOLID MECHANICS (NMSM)

**Wojciech Sumelka¹, Tomasz Blaszczyk², HongGuang Sun³,
Jacek Leszczyński⁴ and Giuseppe Failla⁵**

¹ Poznan University of Technology, Poland

² Czestochowa University of Technology, Poland

³ Hohai University, China

⁴ AGH University of Science and Technology, Poland

⁵ University of Reggio Calabria, Italy

The Minisymposium focuses on non-conventional techniques for solid mechanics, including experimental, theoretical and computational aspects. The attention is focused on heterogeneous/multiscale/multiphase/multifunctional materials, and their behaviour especially in the framework of coupled field problems.

TOPICS

- Non-conventional theoretical techniques for description of heterogeneous/multiscale/multiphase/multifunctional materials:
 - fractional continuum mechanics,
 - tolerance and non-asymptotic modelling,
 - peridynamics,
 - fractal media,
 - nonlocal continuum,
 - relativistic continuum mechanics, etc.
- Non-conventional techniques for solving coupled field problems for heterogeneous/multiscale/multiphase/multifunctional materials (computational aspects including implementation and hardware/software point of views).
- New set-ups for experimental testing of heterogeneous/multiscale/multiphase/multifunctional materials (miniaturised equipment, digital imaging, etc.)