

Workshop on Advanced Material Characterisation, Modelling, and Numerical Simulations

Albena, June 28 - July 01, 2015

The Technology Transfer Workshop on Advanced Material Characterisation, Modelling, and Numerical Simulations was held as an associated event to **AMiTaNS'15, the 7th Conference of the Euro-American Consortium for Promoting the Application of Mathematics in Technical and Natural Sciences**. The workshop was devoted to advanced techniques for material characterization, nonlinear, multi-scale and multi-physics modeling, and emerging numerical techniques used in the computational and engineering practice.



Three invited keynote lectures were given by: Prof. Svetozar Margenov, IICT-BAS, Sofia (on the left photo above); Prof. Gabriella Bolzon, Politecnico di Milano (middle photo above); and Prof. Anatoly Filippov, Gubkin Russian State University of Oil and Gas, Moscow.

More than 10 contributed talks and posters were presented. The topics of interest include:

- Advanced material characterization techniques (e.g. micro CT scanning, nanoindentation, AFM)

- Model parameter identification, sensitivity and back analyses
- Advanced simulation tools for strongly heterogeneous and/or anisotropic media
- Scalable parallel implementations on heterogeneous computational systems
- Molecular dynamics



The AComIn project and the related SmartLab equipment were presented. Areas of possible cooperation and particular problems of interest were discussed. Six talks were given by participants from IICT, three by foreign scientists and four by participants from the Institute of Mechanics, BAS. More than half of the speakers were female and young scientists.

