



4<sup>th</sup> International Symposium on  
**E**nergy **C**hallenges & **M**echanics  
- working on small scales

11-13 August 2015  
Aberdeen, Scotland, UK

#### Speaker of Session 14

#### POROUS MATERIALS FOR ENERGY APPLICATIONS



Dr. Marinela M. Dîrtu, holds a Master degree in Solid State Chemistry at University “Al I. Cuza”-Iasi (Romania) and a DEA in Chemistry at Catholic University of Louvain (UCL), (Belgium). Dr. Marinela M. Dîrtu was awarded her PhD degree from Université Catholique de Louvain, Belgium, in 2012, under the supervision of Prof. Dr. Yann Garcia. During her PhD studies she worked as a teaching assistant at UCL. After finishing her doctorate, she joined for two years, the European School of Brussels I, as lecturer. In 2014, she became F.R.S.-FNRS researcher at the Institute of Condensed Matter and Nanosciences from the Université Catholique de Louvain. Her research work mainly focuses on the confinement and functionality of materials in cavernous solids: engineering multi-functional covalent-organic and metal-organic/peptide

frameworks, (MOF/COF) from new MOF/COF for gas storage to new spin crossover (SCO) materials for applications in soft orthopedic ‘cold & hot’ therapy products as temperature indicators. Thus obtained assemblies are tested for gas adsorption, optical and magnetic sensors. She also investigates a recent module of ‘multi-functionality’ concept wherein a single molecule with subtle modifications can be exploited in diverse applications.

