Speaker of Session 07

NANOTECHNOLOGY FOR GENERATORS

and

Speaker of Session 11

NANOMECHANICS

Claudio Maruccio, PhD, Department of Innovation Engineering, University of Salento, Lecce, via Monteroni, Italy.

Dr. Claudio Maruccio received Master Science degree in Materials Engineering at the University of Salento in 2006 and a joint PhD degree in Civil Engineering at the University of Minho, Portugal, and in Structural Engineering at the Sapienza University of Rome in 2011. His research is focused now on computational mechanics and nonlinear finite element procedures with a particular attention on constitutive modeling of smart materials, multi-physics and multiscale modelling of piezoelectric devices and energy harvesting technologies. He is currently working to combine experimental and numerical procedures to develop nanodevices based on array of piezoelectric nanowires that may allow self-powered wireless devices for applications such as nanoactuators, nanomotors, nanomachines etc. These applications are very important in nanopiezotronics: a new research field that focus on the development of nanogenerators able to convert nanoscale mechanical energy into electric energy.