The Eighth International Congress on Advanced Electromagnetic Materials in Microwaves and Optics – Metamaterials 2014, will comprise a 4-day Conference (25–28 August), and a 2-day Doctoral School (29–30 August). Organized by the Metamorphose Virtual Institute (www.metamorphose-vi.org) and hosted by the Technical University of Denmark (http://www.dtu.dk/), this Congress follows the success of Metamaterials 2007-2013 and continues the traditions of the highly successful series of International Conferences on Complex Media and Metamaterials (Bianisotropics) and Rome International Workshops on Metamaterials and Special Materials for Electromagnetic Applications and TLC. The Congress will provide a unique forum to share the latest results of the metamaterials research in Europe and worldwide and bring together the engineering, physics, and material science communities working on artificial electromagnetic materials and their applications at microwaves, millimeter waves, terahertz, and optical frequencies.

The Doctoral School following the Conference will represent a unique opportunity for students and young researchers to get exposure to the latest advancements in the field of metamaterials and to meet the leading experts in this rapidly developing field. For more information, visit http://school.metamorphose-vi.org/.

Following the tradition of the Congress, the Metamorphose Virtual Institute will sponsor travel grants for students and researchers coming from low-income countries.

Scope
The conference scope includes but is not limited to the following topics:

- Physics of complex electromagnetic materials
- Analytical and numerical modelling of metamaterials
- Homogenization of metamaterials and effective medium models
- Three-dimensional metamaterials
- Planar metamaterials and meta-surfaces
- Carbon nanotubes and graphene in metamaterials
- Nonlinear, tunable and reconfigurable metamaterials
- Active and absorption-free metamaterials
- Chiral and bianisotropic composites
- Metamaterials with extreme parameters
- Quantum metamaterials
- Superconducting metamaterials
- Nonreciprocal metamaterials
- Plasmonics
- Extraordinary transmission
- EBG structures, photonic crystals, and their applications
- Antenna and absorber applications of metamaterials
- RF and microwave metamaterials: design, properties, applications
- Millimeter wave/THz metamaterials and applications
- Optical metamaterials and their applications
- Acoustic and mechanical metamaterials
- Metamaterials for nanoelectronics and nanophotonics
- Nanocircuits and nanoantennas
- Metamaterials for quantum electronics
- Metamaterials for sensing
- Biological and biomedical applications of metamaterials
- Integrated nanophotonics and optoelectronics
- Super-resolution and near-field imaging: effects and devices
- Transformational electromagnetics and optics
- Advances in cloaking and invisibility
- Novel metamaterial concepts
- Experimental techniques and characterization of metamaterials
- Micro- and nano-fabrication of metamaterials
- Top-down and bottom-up fabrication methods
- Metamaterials in education

Contacts
contact@congress2014.metamorphose-vi.org