



**7th International Congress
on Advanced Electromagnetic Materials in Microwaves and Optics**

Metamaterials 2013

Bordeaux, France, 16-21 September 2013

The *Seventh International Congress on Advanced Electromagnetic Materials in Microwaves and Optics – Metamaterials 2013*, will comprise a **4-day Conference (16-19 September)**, and a **2-day Doctoral School (20–21 September)**. Organized by the *Metamorphose Virtual Institute* (www.metamorphose-vi.org) and hosted by the *Université de Bordeaux* (<http://www.univ-bordeaux.fr>), this Congress follows the success of *Metamaterials 2007-2012* 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 in the field of artificial electromagnetic materials and their applications at microwaves, millimeter waves, terahertz, and optical frequencies.

Scope

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

- Physics of complex electromagnetic materials
- Experimental techniques for characterization of metamaterials
- Analytical and numerical modelling of metamaterials
- Homogenization of metamaterials and effective medium models
- Three-dimensional metamaterials
- Planar metamaterials, meta-surfaces and meta-sheets
- 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
- Plasmonic metamaterials
- 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 applications
- Acoustic and mechanical metamaterials
- Metamaterials for nanoelectronics and nanoantennas
- Metamaterials for quantum electronics
- Metamaterials for sensors
- Biological applications of metamaterials
- Medical applications of metamaterials
- Integrated nanophotonics
- Super-resolution and near-field imaging: effects and devices
- Transformational electromagnetics and optics
- Advances in cloaking
- Micro- and nano-fabrication of metamaterials
- Top-down and bottom-up fabrication methods
- Novel metamaterial concepts
- Educational aspects of metamaterials

General Chairs

Sergei Tretyakov, Finland (chair)
Alexander Schuchinsky, UK (co-chair)

Steering Committee Chair

Filiberto Bilotti, Italy

Program Committee Chair

Andrea Alù, US

Local Organizing Committee Chair

Philippe Barois, France

Congress Secretary General

Corinne Amengual, France

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 further information visit the school website <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.

Contacts

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Submission Deadline: 24 March 2013

<http://congress2013.metamorphose-vi.org/>