



11th International Congress on Engineered Material Platforms for Novel Wave Phenomena

Metamaterials 2017

Marseille, France, 28 August – 2 September 2017

The *Eleventh International Congress on Engineered Material Platforms for Novel Wave Phenomena – Metamaterials 2017*, will comprise a **4-day Conference (28–31 August)**, and a **2-day Doctoral School (1–2 September)**. Organized by the *METAMORPHOSE VI AISBL* (www.metamorphose-vi.org) and hosted by the *Institut Fresnel of Marseille*, this Congress follows the success of *Metamaterials 2007-2016* 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 Telecommunications*. The Congress will provide a unique topical forum to share the latest results of the metamaterials research in Europe and worldwide and bring together the engineering, physics, applied mathematics and material science communities working on artificial materials and their applications from microwaves to optical frequencies, as well as in acoustics, mechanics, hydrodynamics and thermodynamics.

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The Conference

The Conference includes *plenary presentations* given by leading scientists in the metamaterials research field and will address the main tendencies and discoveries in this field. Keynote talks will address hot topics in the respective research and leading experts will present invited talks, which will review the state-of-the-art and address the latest advancements in their respective areas.

The technical oral talks and interactive poster sessions will encompass a broad range of themes, from fundamental theory of metamaterials to innovative platforms for electromagnetics, acoustics, mechanics, hydrodynamics and thermodynamics.

Submission Deadline:

5 March 2017

Paper Submission

Papers should be 2-3 pages long and contain an abstract, a brief conclusion, and a main body where technical content and novelty of the work are clearly presented. Papers should be submitted as camera-ready PDF files to the website:

<http://congress2017.metamorphose-vi.org>

Authors are requested to use the template provided on the Congress website when preparing their submission. Authors of accepted and presented papers will be given the option of publishing their work in IEEE Xplore subject to the manuscript compliance with the format and copyright requirements.

Committees

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Reduced fees are available for personal or institutional members of the METAMORPHOSE VI and for students and senior participants over 65 years.

Grants will be provided for students and delegates from low-income countries. The grant rules and application forms will be available at the Congress website. Applications should be submitted online before **1 June 2017**.

Topics

- Physics of complex electromagnetic materials
- Analytical and numerical modelling of metamaterials
- Homogenization of metamaterials and effective medium models
- Metasurfaces
- 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 and topological metamaterials
- Plasmonics
- Extraordinary transmission
- Photonic crystals and EBG structures
- 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, mechanical and seismic metamaterials
- Metamaterials for nanoelectronics and nanophotonics
- Metamaterials for control of heat flow and radiation
- Nanocircuits and nanoantennas
- Metamaterials for quantum electronics
- Metamaterials for sensing
- Metamaterials in civil and maritime engineering
- Biological and biomedical applications of metamaterials
- Integrated nanophotonics and optoelectronics
- Super-resolution and near-field imaging: effects and devices
- Transformational electromagnetics, elastodynamics, hydrodynamics and thermodynamics
- Advances in cloaking and invisibility
- Experimental techniques and characterization of metamaterials
- Micro- and nanofabrication of metamaterials
- Metamaterials in education

Congress Prizes and Student Paper Competition

The Congress Prizes will be awarded in the following categories based on the merits of submitted papers and their conference presentations:

- best oral paper
- best poster paper
- best student paper (oral or poster)

The winners in the first two categories will be selected from all the presenters except the invited speakers.

The best student paper will be decided in the **Student Paper Competition**. Students who wish to participate in the competition should apply online at the Conference website before the **5 March 2017** (the paper submission deadline). Students should be registered at the website to submit a paper and fill in an application form online. During the submission process, students will be requested to upload:

- a CV outlining their research activities,
- the paper title,
- an endorsement letter signed by the student's advisor stating that the paper is primarily the result of the student's work.

The student must be the first author, and the co-authors may be the student's supervisors/advisors. No more than two authors are allowed, unless the student has additional advisors from different institutions or departments, and this fact must be explicitly stated in the endorsement letter. The student competition papers will undergo a regular review process and the shortlisted finalists will be requested to present their papers at a special interactive poster session during the Congress. All the finalists will have the registration fee waived. Only one paper per student will be considered. In case of multiple entries with different papers, the student will be excluded from the competition.

Previous Editions of the Congress

- 2016 Crete, Greece
- 2015 Oxford, UK
- 2014 Copenhagen, Denmark
- 2013 Bordeaux, France
- 2012 St. Petersburg, Russia
- 2011 Barcelona, Spain
- 2010 Karlsruhe, Germany
- 2009 London, UK
- 2008 Pamplona, Spain
- 2007 Rome, Italy

Contact: contact@metamorphose-vi.org

Doctoral School on Metamaterials

A course of the *European School on Metamaterials* operated by the METAMORPHOSE VI will be held in conjunction with the Congress (1-2 September 2017). The theme of the course, which will be co-organized with *the Institut Fresnel of Marseille*, is still under definition and will be announced shortly on the website. The event 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 field. For more information visit the website: <http://school.metamorphose-vi.org/>