

Metamaterials 2011 Congress Barcelona

10th-15th October
Hotel Barceló Sants

Metamaterials 2011

Fifth International Congress on Advanced Electromagnetic Materials in Microwaves and Optics

Barcelona, Spain, 10-15 October, 2011

The Fifth International Congress on Advanced Electromagnetic Materials in Microwaves and Optics – **Metamaterials 2011**, will be held on 10th - 15th October 2011 in Barcelona, Spain. The Congress will comprise a 4-day Conference, 10th - 13th October, and a 2-day Doctoral School, 14th - 15th October. Organized by the *Metamorphose Virtual Institute* (www.metamorphose-vi.org) and hosted by the *Centre CIMITEC of the Universitat Autònoma de Barcelona*, this Congress follows the success of *Metamaterials 2007* (Rome), *2008* (Pamplona), *2009* (London), *2010* (Karlsruhe) 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 microwave, millimeter wave, terahertz, and optical frequencies.

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The Conference

The Conference will include plenary presentations given by eminent researchers in the field. Keynote talks will address hot topics in metamaterials research and leading experts will present invited talks, which will review the state-of-the-art and address the latest advancements in the respective areas. The technical oral and interactive poster sessions will encompass a broad range of themes from fundamental electromagnetic theory of metamaterials and complex electromagnetic media to innovative microwave and optical devices.

Submission Deadline 15th March 2011

Paper Submission

Papers should be in English and 3-pages long (including figures and references). Each paper should contain an abstract, a brief conclusion, and a main body where the technical content and the novelty of the work are clearly presented. Authors are requested to use the template when preparing the submission. Papers noncompliant with the template format may not be accepted for the publication in the Conference Proceedings. Papers should be submitted by uploading a PDF-file to the Congress Website: <http://congress2011.metamorphose-vi.org>. Paper title, author name, affiliation, full address (including phone number and e-mail), and brief abstract (50 words) will be required at the Congress website when submitting the paper. Only electronic submission via the web portal will be accepted. The authors are responsible for obtaining publication permission from their employers and sponsors. A written statement signed by the corresponding author must accompany each paper.

The deadline for the paper submission is **15th March 2011**, late submissions will not be considered. All papers will be reviewed by the Technical Program Committee and the authors will be notified of the status of their submission by **1st June 2011**.

Please, visit the Congress website for details of the submission process and paper template.



Topics

- Physics of complex electromagnetic materials
- Micro- and nano-fabrication of metamaterials
- Experimental techniques for characterization of metamaterials
- Analytical and numerical modelling of metamaterials
- Homogenization of metamaterials and effective medium models
- Three-dimensional metamaterials
- Planar metamaterial structures, meta-surfaces & meta-sheets
- Metamaterials for nanoelectronics and nanoantennas
- Carbon nanotubes and graphene in metamaterials
- Tunable, reconfigurable and nonlinear metamaterials
- Absorption free metamaterials
- Chiral and bianisotropic composites
- Metamaterials with extreme parameters
- Quantum metamaterials
- Plasmonic metamaterials
- Extraordinary transmission
- EBG structures, photonic crystals, and their applications
- RF and microwave metamaterials: design, properties, and applications
- Millimeter wave/THz metamaterials and applications
- Optical metamaterials and applications
- Acoustic metamaterials and applications
- Antenna and absorber applications of metamaterials
- Metamaterials as sensors
- Medical applications of metamaterials
- Superlenses, hyperlenses, other near-field imaging devices
- Transformational electromagnetics and optics
- Advances in cloaking
- Educational aspects of metamaterials

Scientific Advisory Board

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Reduced fees. Registration fees are reduced for members of the Metamorphose Virtual Institute, students and senior participants over 65 years.

Grants. A few travel grants will be provided for students and delegates from low-income countries. The grant rules and application forms are available at the Congress website. Applications should be submitted online before **30th June 2011**.

Student Paper Competition

The Conference Organizers run a competition for the **Best Student Paper**. All student participants are invited to enter the competition by submitting the online application form at the Conference website before **15th March 2011** (the paper submission deadline). The students need to be registered at the website to submit a paper and fill in the form. During the submission process, the students will be asked to upload: (a) a CV of their scientific activity, (b) the title of the submitted paper, (c) an endorsement letter signed by the student's supervisor/advisor stating that the paper is the result of 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 that must be explicitly stated in the endorsement letter. The student papers will be subject to a regular review process. The TPC will evaluate the students' applications and invite the finalists to present their papers at a dedicated poster session during the Congress. 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.

Doctoral School on Metamaterials

A course of the European School on Metamaterials operated by the Metamorphose Virtual Institute will be held in conjunction with the Metamaterials 2011 Congress (14th-15th October 2011). This event will be co-organized with the **Centre CIMITEC** of the **Universitat Autònoma de Barcelona**. The course will present 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 explosively developing field. For further information visit the school website <http://school.metamorphose-eu.org/>

Previous Editions of the Congress
2010 Karlsruhe, Germany
2009 London, UK
2008 Pamplona, Spain
2007 Roma, Italy

Contact

Jordi Bonache
contact@congress2011.metamorphose-vi.org

<http://congress2011.metamorphose-vi.org>