



Metamaterials'2007



First International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Rome, Italy, October 22-26, 2007

Second Call for Papers

The Congress initiated by the European Network of Excellence "Metamorphose" will culminate the latest efforts in metamaterial research in Europe and worldwide and bring together the microwave, material science, and optical communities working in the field of artificial electromagnetic materials. Being the first event of its kind while continuing 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 sessions will include:

- ❖ Invited Plenary and Focused Session Talks
- ❖ Oral Presentations and Interactive Poster Forums
- ❖ Tutorials and Short Courses
- ❖ European Doctoral School on Metamaterials

Keynote Speakers

Prof. George Eleftheriades *"Microwave metamaterials and applications: current status of the experimental and theoretical developments"*

Prof. Vladimir Shalaev *"Optical metamaterials and applications: current status of the experimental and theoretical developments"*

The technical sessions will encompass a broad range of topics from the fundamental electromagnetic theory of metamaterials and complex electromagnetic media to novel types of microwave and optical devices and components. Special sessions will focus on applications of innovative materials, micro- and nano-technologies, and new physical phenomena in wireless and optical communication circuits and systems, optical sensing, nanoscale imaging and photolithography.

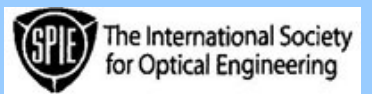
Information for Authors

Summaries should be submitted by uploading a pdf-file (portable document format) to the Congress website: www.metamorphose-eu.org/Congress/. The summary should be in English, typed single space, and be no longer than 2 pages, including figures and references. The summary should contain an abstract, a brief conclusion, and clearly state the novelty of the presented work. The paper title, author's name, affiliation and full address (including phone number and e-mail) must be provided in the beginning. Contact details of the authors will be required at the Congress website when uploading the summary. Only electronic submissions via the web portal will be accepted. Further details of the submission process and summary template are available at the Congress website. The deadline for the summary submission is **19 February 2007**. Late submissions cannot be considered

Summaries of the submitted papers will be reviewed by the Technical Programme Committee, and the authors will be notified of the status of their submission by 2 April 2007. A full paper will be required by 30 April 2007 for publication in the Congress Proceedings. Instructions for the publication and presentation will be available at the Congress website. The authors are responsible for obtaining publication permission from their employers and sponsors. A written statement signed by the submitting author must accompany the final manuscript of each accepted paper.

<http://www.metamorphose-eu.org/Congress/>

The Congress is organized by the **Metamorphose** Virtual Institute for Metamaterials supported by:



Reduced Fees and Special Grants

Fees are reduced for students and persons aged over 65. The NoE Metamorphose provide 10 grants for delegates from low-income countries and up to 10 grants for students attending the European Doctoral School on Metamaterials. The grant info and application forms are available at the Congress website. Applications should be received by the Congress Coordinator, Dr. Said Zouhdi, before 12 April 2007.

Topics

The Congress aims to address a wide area of research related to metamaterials, artificial electromagnetic materials and surfaces in the microwave and optical ranges, encompassing general theory, design, applications, fabrication and measurements. The conference topics include but are not limited to:

- Artificial electromagnetic materials and surfaces
- Plasmonic metamaterials
- Spatially dispersive materials
- Negative index materials
- Chiral and bianisotropic media
- Artificial and composite magnetic materials
- Electromagnetic bandgap structures and photonic crystals
- Nonlinear metamaterials and artificial surfaces, ultrafast phenomena and devices
- Tunable and active metamaterials and surfaces
- Nano-scaled metamaterials
- Periodic structures, frequency selective surfaces, nano-structured surfaces, enhanced transmission
- New physical phenomena in complex media
- Effective medium modelling and material phenomenology
- Modelling of complex materials and surfaces
- Fabrication and processing of metamaterials and artificial electromagnetic surfaces
- Experimental characterisation of metamaterials and measurement techniques
- Electromagnetic waves in complex media: propagation, reflection, diffraction and scattering
- Guiding structures with complex media, including nano-scaled transmission lines
- Complex materials in microwave and optical devices
- Miniaturisation of microwave and optical devices
- Metamaterial based antennas
- Subwavelength imaging, enhancement of evanescent fields, including nano-imaging and detection
- Plasmon-polariton devices and circuits
- Emerging metamaterial technologies and applications
- Educational aspects of artificial materials

Paper selection Criteria

Papers will be selected based on the following criteria:

Originality: The paper must present novel and significant results

Content: The summary should give a clear description of the work with the necessary supporting data and literature references

Quality: Clarity of writing and figures. Submission place in the context of previous works

Relevance to the Congress scope.

European Doctoral School



A session of the European PhD School on Metamaterials operated by the Metamorphose Network of Excellence will be held in conjunction with the Congress. This event will present a unique opportunity for young researchers to get exposed to the latest advancements in the field of metamaterials and to meet the leading experts in this explosively growing field. The lectures will be delivered by the Congress key speakers who will address the fundamental problems in the area of artificial electromagnetic materials along with the practical aspects of microwave and optical applications. The course will combine lectures, problem-solving, self-study sessions, and short presentations by the participating students. Details of the PhD School will be published at the dedicated page of the Congress website: www.metamorphose-eu.org/Congress/.

Important dates

- Summary Submission Deadline: 19 February 2007
- Acceptance notification: 2 April 2007
- Final paper: 30 April 2007
- Congress: 22-26 October 2007

Venue

Rome, Italy, hosted by the University ROMA TRE



<http://www.metamorphose-eu.org/Congress/>

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