

Call for Papers

Proceedings of the European Microwave Association

Special Issue on

MICROWAVE METAMATERIALS: THEORY, FABRICATION AND APPLICATIONS

Metamaterials are artificially fabricated materials with novel and unique electromagnetic properties, not readily available in nature. They include the so-called left handed (LH) materials, also termed negative refractive index (NRI) materials, which simultaneously exhibit a negative value of the magnetic permeability and dielectric permittivity, and are characterized by the anti-parallelism between the phase and group velocities. From the beginning of this millennium, the exciting properties of such composite media have been theoretically, numerically and experimentally demonstrated, and there is no doubt at present on the future impact of metamaterials in different fields of Science and Engineering. In particular, several applications in Microwave Engineering have already emerged and many others are foreseen. This special issue tries to group the recent results of the research activities carried out in the field by different teams and experts in Europe and overseas.

Topics to be covered include, but are not limited to:

- Theory and physical understanding of metamaterials.
- Metamaterial based transmission lines, components and systems.
- Metamaterials for antenna applications.
- Tunable metamaterials.
- Metasurfaces and frequency selective surfaces.
- Metamaterials at millimeter wave frequencies and beyond.
- Fabrication techniques.
- Numerical techniques.
- Novel physical phenomena

Manuscripts should conform to the requirements of the journal (i.e. less than 6 printed pages long). Authors willing to contribute to this special issue should submit their manuscripts in **pdf format**, as an e-mail attachment, to ferran.martin@uab.es. An acknowledgement message will be returned to the author indicating that the manuscript has been received and is under review.

Deadline for paper submission: September 15th, 2005

Publication date: March 2006

Guest Editors

Dr. Ferran Martín, Departament d'Enginyeria Electrònica, Universitat Autònoma de Barcelona (Spain).

Dr. Irina Vendik, Saint Petersburg Electrotechnical University (Russia)