



Department of Electrical Engineering
Department of Physics
INDIAN INSTITUTE OF TECHNOLOGY KANPUR

WORKSHOP ON
DESIGN AND APPLICATIONS OF META-MATERIALS

October 27, 2005

Local Organization

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A. Biswas
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Patron

Prof. S.G. Dhande, Director
Indian Institute of Technology
Kanpur

Speakers

Christophe Caloz, *École
Polytechnique Montréal, Canada*

Nader Engheta, *University of
Pennsylvania, U.S.A. (Fellow,
IEEE)*

Stephen O'Brien, *Tyndall
National Institute, Cork,
Ireland*

S.A. Ramakrishna, *Indian
Institute of Technology,
Kanpur*

R. Ziolkowski, *University of
Arizona, U.S.A. (President,
IEEE Antennas Propagation
Society)*

Scope of the workshop

The past few years has seen the emergence of a new class of structured photonic materials termed meta-materials with novel electromagnetic properties spanning the spectrum from microwaves to optical wavelengths. This new area of research takes its inputs from fundamental Physics and has given rise to many novel phenomena such as negative refractive index. This expanding research frontier will greatly impact future technologies, particularly giving rise to new types of wave-guides, couplers, antennas, and stealth technologies.

The aim of the one-day workshop is to introduce the fundamental Physics of meta-materials and their design, and applications in Microwave Technologies. The workshop will be organized around plenary lectures by eminent scientists and interactive sessions with them.

Topics to be covered

- Physics of meta-materials and negative index materials
- Artificial plasmas and negative permeability media
- Meta-materials for microwave circuit applications
- Meta-materials for antenna applications

Target audience

Postgraduate Students, Scientists in Research Labs, and Engineers in RF Industry

Please email your application to sar@iitk.ac.in giving your Name, Affiliation, Sex, Contact Details, a short summary of educational background and research/work experience by **05 September 2005**.

Selected candidates will be informed by **15 September 2005**.

Registration Fee: Rs. 2000/-

This covers course material and accommodation & food for one day.

Selected candidates will have to pay the registration fee by **01 October 2005**.

Contact Details

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