

A course of the European School on Metamaterials operated by the [Metamorphose Virtual Institute](#) will be held on September 21-22, 2012 in conjunction with the [Metamaterials'2012 Congress](#) .

Place: **St. Petersburg, Russia**

Organizer: **Prof. Irina Vendik**

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. The lectures will be delivered by key speakers of the Congress.

The topic of the school is: ***"Tunable and reconfigurable metamaterials"***

The school course will be mainly focused on the key aspects of metamaterials and related concepts that make them important for the device engineering in the different areas, ranging from acoustics to optics. Comprehensive lectures will take into account the widespread backgrounds of the audience

Program of the school:

Friday, September 21th 2012

8:00-9:00 Registration

9:00 – 9:15 Welcome and outline of the school (Irina Vendik)

9:15 – 10:45 Graphene and extreme metamaterials (Nader Engheta, Professor, University of Pennsylvania, USA)

10:45 – 11:15 Coffee break

11:15 – 12:45 Reconfigurable Semiconducting Hybrid Metamaterials (David Smith, Professor, Duke University, USA)

13:00 – 14:30 Lunch

14:30 – 16:00 Metamaterial tunability via liquid crystals with respect to ferroelectric and semiconductor technologies (Didier Lippens, Professor, University of Lille, France)

16:00 – 16:30 Coffee break + Poster Session

16:30 – 18:00 Planar or conformal multifunctional metamaterial antenna arrays for embedded aeronautic systems (Alain Priou, Professor, University Paris 10, France)

18:00-20:00 Self study

Saturday, September 22th 2012

9:00 – 10:00 Superconducting metamaterial and plasmonics (Vassili Fedotov, Dr., University of Southampton, UK)

10:00 – 11:00 Tunable magnonic crystals and artificial multiferroics: linear and nonlinear microwave properties (Boris Kalinikos, Professor, St. Petersburg Electrotechnical University, Russia)

11:00 – 11:30 Coffee break + Poster Session

11:30 – 12:30 Tunable and reconfigurable THz metamaterials (Irina Vendik, Professor, St. Petersburg Electrotechnical University, Russia)

12:30 – 13:30 Round table and closing ceremony

13:30 – 15:00 Lunch

15:30 – 20:00 Social Event and Dinner

To register to this school please follow [this link](#) at METAMATERIALS'2012 Congress website.