



# Workshop

# Materials at the nanoscale

Organized by the Hellenic Society  
for the Science and Technology  
of Condensed Matter  
under the auspices of the School of Physics

**Saturday 3 & Sunday 4 November 2018**

## Scope

The workshop on “Materials at the Nanoscale” aims to provide an insight in selected fields, applications and techniques related to nanomaterials. The term nanomaterials refers to materials with at least one of its dimensions at the nanoscale. They find numerous applications in photonics, tribology, biomedicine, catalysis and many other fields.

The lectures will include a short introduction with a review of fundamental principles and examples of recent work. Experimental techniques that provide information and allow the study of materials at the nanoscale, synthesis methods and properties of certain types of nanomaterials, biomedical, environmental, optical etc. applications of nanomaterials will be presented. Theoretical aspects related to materials at the nanoscale and issues related to the risks associated with nanomaterials will be also presented.

The workshop is aimed at M.Sc. and Ph.D. students who wish to expand their knowledge in the field of nanoscale materials. Scientists, engineers and technicians working in research and education, who are interested in extending their knowledge in nanomaterials, will also benefit.

## List of speakers

- **M. Agelakeris**, *Assoc. Prof.*, School of Physics, Aristotle Univ. of Thessaloniki, **Nanomagnetism and biomedical applicability**
- **A. Assimopoulou**, *Assoc. Prof.*, School of Chemical Engineering, Aristotle Univ. of Thessaloniki, **Nanotechnology in drug delivery**
- **V. Zaspalis**, *Prof.*, School of Chemical Engineering, Aristotle Univ. of Thessaloniki, **Oxidic Magnetic Nanoparticles: Synthesis characterization and applications in petroleum engineering and diagnostic medicine applications**
- **E. Makarona**, *Researcher*, NCSR Demokritos, **Multifunctional nanomaterials as an enabling tool for innovation: the special case of ZnO and metal oxides**
- **M. Kandyla**, *Assoc. Researcher*, National Hellenic Research Foundation, **Development and applications of laser-processed hybrid nanomaterials**
- **K. Simeonidis**, *Post Doc. Fellow*, School of Physics, Aristotle University of Thessaloniki, **Implementing nanoparticles in competitive drinking water purification processes**
- **Ch. B. Lioutas**, *Assoc. Prof.*, School of Physics, Aristotle Univ. of Thessaloniki, **Transmission Electron Microscopy techniques for the study of nanomaterials**

- **E. C. Paloura**, *Prof.*, School of Physics, Aristotle Univ. of Thessaloniki, **Nanostructural characterization using Synchrotron Radiation techniques**
- **D. Christofilos**, *Assoc. Prof.*, School of Chemical Engineering, Aristotle Univ. of Thessaloniki, **Raman spectroscopy and its application in the study of nanomaterials**
- **E. Lidorikis**, *Assoc. Prof.*, Department of Materials Science and Engineering, Univ. of Ioannina, **Computational nanophotonics: designing applications based on metal and graphene plasmonics**
- **S. Gardelis**, *Assoc. Prof.*, School of Physics, National & Kapodistrian Univ. of Athens, **Light manipulation strategies for efficient optoelectronic devices**
- **S. Naris**, *Researcher*, Hellenic Institute for Occupational Health and Safety, **Management of risks associated with nanomaterials**

*All lecturers are experts in the field*

### **Workshops' language**

English

### **Venue**

The workshop will take place at the School of Physics, Aristotle University of Thessaloniki Campus, A31 Seminar room, 1<sup>st</sup> floor, Faculty of Sciences Building

### **Program**

The final program will be announced soon. The lectures will start at about 9:00 and will end by 19:00.

### **Registration**

1. Express your interest by sending an e-mail message to [katsiki@auth.gr](mailto:katsiki@auth.gr)
2. Pay the fee at the HSSTCM account at **PIRAEUS BANK (IBAN: GR30 0172 0400 0050 4008 3709 502)**.

Do not forget to mention the participant's name and the word "workshop"

3. Send the bank transcription receipt as attachment to [katsiki@auth.gr](mailto:katsiki@auth.gr) **Fees: 50 € (HSSTCM members 30 €)**

### **Organizing Committee**

Maria Katsikini, *Assoc. Prof.* School of Physics

Konstantinos Papagelis, *Prof.* School of Physics

Dimitrios Christofilos, *Assoc. Prof.* School of Chem. Engineering  
(Aristotle University of Thessaloniki)

### **Contact details**

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