

Registration

1. Express your interest by sending an e-mail message to katsiki@auth.gr
2. Pay the fee at the HSSTCM account at **PIRAEUS BANK (IBAN: GR30 xxxx xxxx xxxx xxxx 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 **Fees: 50 € (HSSTCM & FEMS 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)

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Faculty of Sciences School of Physics



School of Physics
Faculty of Sciences
Aristotle University
of Thessaloniki

Hellenic Society for the
Science and Technology
of Condensed Matter



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
Thessaloniki, Greece

Program

A31 seminar room, 1st floor
Faculty of Sciences building
School of Physics

Workshops' language: English

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 their 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 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.

All lecturers are experts in the field

Saturday 3/11/2018

08:30 – 09:15 **Registration**

09:15 **Welcome and Introduction**

09:30 • **M. Agelakeris**, Assoc. Prof., School of Physics, Aristotle Univ. of Thessaloniki, **Nanomagnetism and biomedical applicability**

10:45 • **A. Assimopoulou**, Assoc. Prof., School of Chemical Engineering, Aristotle Univ. of Thessaloniki, **Nanotechnology in drug delivery**

12:00 **Coffee break**

12:30 • **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**

13:45 **Lunch break**

14:45 • **E. Makarona**, Researcher, NCSR Demokritos, **Multifunctional nanomaterials as an enabling tool for innovation: the special case of ZnO and metal oxides**

16:00 **Coffee break**

16:30 • **M. Kandyla**, Assoc. Researcher, National Hellenic Research Foundation, **Development and applications of laser-processed hybrid nanomaterials**

17:45 • **K. Simeonidis**, Post Doc. Fellow, School of Physics, Aristotle University of Thessaloniki, **Implementing nanoparticles in competitive drinking water purification processes**

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

Sunday 4/11/2018

09:00 • **D. Christofilos**, Assoc. Prof., School of Chemical Engineering, Aristotle Univ. of Thessaloniki, **Raman spectroscopy and its application in the study of nanomaterials**

10:15 • **E. C. Paloura**, Prof., School of Physics, Aristotle Univ. of Thessaloniki, **Nanostructural characterization using Synchrotron Radiation techniques**

11:30 **Coffee break**

12:00 • **Ch. B. Lioutas**, Assoc. Prof., School of Physics, Aristotle Univ. of Thessaloniki, **Transmission Electron Microscopy techniques for the study of nanomaterials**

13:15 **Lunch break**

14:15 • **E. Lidorikis**, Assoc. Prof., Department of Materials Science and Engineering, Univ. of Ioannina, **Computational nanophotonics: designing applications based on metal and graphene plasmonics**

15:30 **Coffee break**

16:00 • **S. Gardelis**, Assoc. Prof., School of Physics, National & Kapodistrian Univ. of Athens, **Light manipulation strategies for efficient optoelectronic devices**

17:15 • **S. Naris**, Researcher, Hellenic Institute for Occupational Health and Safety, **Management of risks associated with nanomaterials**

18:00 **End of workshop**

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