

The Hellenic Society for the Science and Technology of Condensed Matter (HSSTCM) organizes an online workshop on “Computational Materials Science”. The workshop will take place during the weekend 19 & 20 December 2020.

About the workshop

The two-day online training workshop is dedicated to most recent advances in the theory and simulation of Materials. The speakers are well-known experts in the field. The workshop is aimed to young researchers in theoretical and computational Materials Science, including senior undergraduate students, graduate students, PhD candidates, Post-docs and early-career investigators. The event is co-organized by the [Hellenic Society for the Science and Technology of Condensed Matter](#) and the [Department of Materials Science and Technology, University of Crete](#). HSSTCM is a Greek non-profit scientific society founded in 1981 which is member of FEMS. The objectives of HSSTCM are to promote the exchange of new developments and achievements in the field of Condensed Matter and Materials Science and to support their applications.

Registration

To attend the workshop, please send email with your name and affiliation **by Dec. 11th, 2020** to cms20@materials.uoc.gr. Participation is free for the members of the FEMS associated Societies. Registration fee for non-members is 20 euros. Certificate of attendance will be provided to all participants.

Organizing Committee

Ioannis Remediakis, *Department of Materials Science and Technology, University of Crete and Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology Hellas (FORTH)*

Dimitris Kechrakos, *Department of Education, School of Pedagogical & Technological Education (ASPETE)*

George Kopidakis, *Department of Materials Science and Technology, University of Crete and Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology Hellas (FORTH)*

Confirmed Speakers

Electronic structure and Density-Functional Theory

- **Iosif Galanakis**, *Department of Materials Science, University of Patras, All-electron ab-initio electronic band structure methods and their applications to magnetic materials.*
- **Christos Garoufalis**, *Department of Materials Science, University of Patras, Structural and electronic properties of small perovskite nanoparticles of different size, shape and composition.*

- **Phivos Mavropoulos**, *Department of Physics, National and Kapodistrian University of Athens*, **Electrical control of magnetization by spin orbit torque in doped topological insulator surfaces.**
- **Leonidas Tsetseris**, *Department of Physics, National Technical University of Athens*, **Density Functional Theory Studies of Materials Used in State-of-the-art Technological Applications.**

Atomistic Simulations, machine learning and big data

- **George Frudakis**, *Department of Chemistry, University of Crete*, **Designing novel Nanoporous Materials for applications in Energy and Environment. From Multi-Scale Modeling to Materials Informatics.**
- **Stelios Karozis**, *Environmental Research Laboratory (EREL), National Center for Scientific Research “Demokritos”* **Introduction to Molecular Simulations & the use of Machine Learning in material design.**
- **Joseph Kioseoglou**, *Physics Department, Aristotle University of Thessaloniki*, **Atomic scale modelling into the fascinating world of Nanoparticles.**

Photonics, Phononics, Plasmonics and Metamaterials

- **Maria Kafesaki**, *Department of Materials Science and Technology, University of Crete and Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology Hellas (FORTH)* **Metamaterials for advanced electromagnetic wave control.**
- **Eleftherios Lidorikis**, *Department Materials Science and Engineering, University of Ioannina*, **Optoelectronic applications based on graphene.**
- **Michael Sigalas**, *Department of Materials Science, University of Patras*, **Phononic Crystals: Controlling Elastic waves from nanometers to meters**

Continuum models and multi-scale simulations

- **Vangelis Harmandaris**, *Department of Mathematics and Applied Mathematics, University of Crete and Institute of Applied and Computational Mathematics, FORTH*, **Hierarchical Multi-scale Simulations of Polymer-based Materials.**
- **Theodoros Karakasidis**, *Department of Physics, University of Thessaly*, **Simulating fluid systems across scales: why size matters.**
- **Charalambos Makridakis**, *Institute of Applied and Computational Mathematics, FORTH and Department of Mathematics and Applied Mathematics, University of Crete*, **TBA.**

Stay updated: <https://www.materials.uoc.gr/~cms20/>



Department of
Materials Science
and Technology
University of Crete

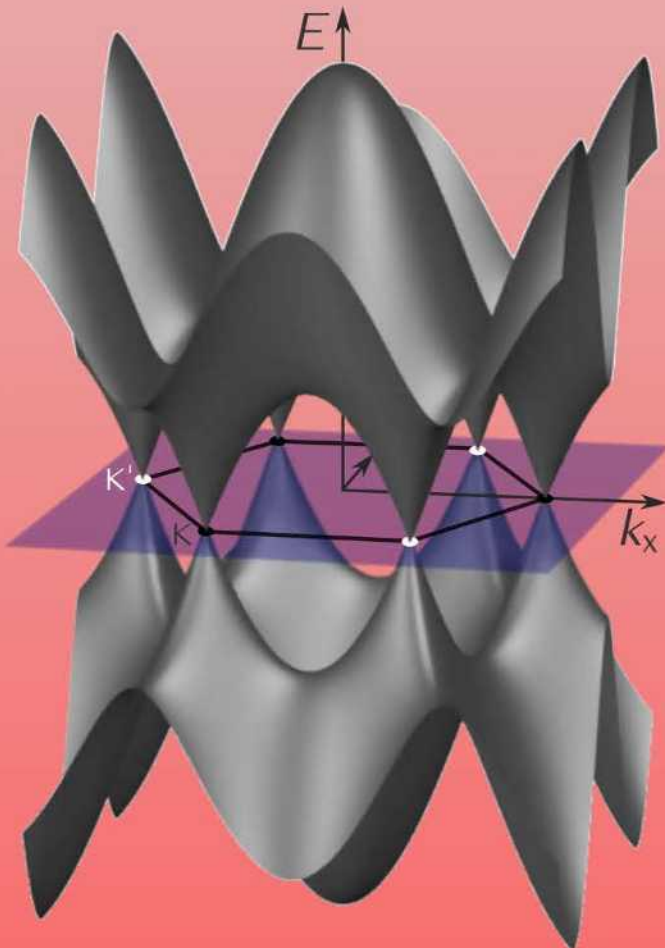
Hellenic Society for the
Science and Technology of
Condensed Matter
www.hsstcm.eu



ONLINE WORKSHOP

COMPUTATIONAL MATERIALS SCIENCE

<https://www.materials.uoc.gr/~cms20/>



Workshop Committee:

Prof. **Ioannis Remediakis**
(Univ. of Crete)

Prof. **Dimitris Kechrakos**
(ASPETE)

Prof. **George Kopidakis**
(Univ. of Crete)

**Saturday 19
& Sunday 20
December 2020**

Registration: until **11/12/20** at **cms20@materials.uoc.gr**

Registration fee: 20€ (includes certificate of attendance)

Participation is free for HSSTCM members