

IWMP, 28-29 May 2019

28 of May

8:15-8:50 Registration

8:50-9:00 Opening

9:00-11:15 Session 1

9:00-9:30

Magdalena Titirici, Department of Chemical Engineering, Imperial College London, UK

Going green with black: On Biomass, Carbon and Clean Energy

9:30-10:00

Vladimir Matolin, Charles University, Czech Republic

PEM Based Ordered Superstructures as a Durable Support for Fuel Cell Catalyst.

10:00-10:30

Ifan Stephens, Imperial College London, UK

Power-to-X: the role of catalysis in advancing the electrochemical synthesis of our most coveted chemicals

10:30-11:15

M. Florea

Cost efficient oxygen generation through alkaline water electrolysis using Ni on SnO₂ mesoporous support-based electrocatalysts

A. Nicolaev

Carbon monoxide adsorption, dissociation and oxidation on ferroelectric surfaces decorated with nanoparticles of noble metals

S. Neatu

The use of three-component composites in the photocatalytic water splitting reaction

11:15-11:30 Coffee break

11:30-13:00 Session 2

11:30-12:00

Joe Briscoe, Queen Mary University London, UK

Sustainable energy devices using nanostructured polar materials

12:00-12:30

Andrew Holmes, Imperial College London, UK

Piezoelectric Devices for Energy Harvesting from Motion and Flow

12:30-13:00

Sam Cooper, Imperial College London, UK

Multilength scale characterisation of materials, microstructures and performance of batteries and fuel cells.

13:00-14:30 Lunch

14:30-16:30 Session 3

14:30-15:00

Marin Alexe, University of Warwick, UK

Bulk- and Flexo-Photovoltaic effects

15:00-15:30

G. A. Nemnes

Measurement protocols for a reliable electrical characterization of perovskite solar cells

15:30-16:00

Anca Duta, Transilvania University Brasov

VIS-active photocatalytic composites for advanced wastewater treatment

16:00-16:30

L. Leonat

Reticulated mesoporous TiO₂ scaffold for hybrid perovskite solar cells

M. Grigoroscuta

Improved performance of a Si-solar cell by up-conversion in Yb/Er doped CeO₂ thin films

16:30-18:00

Visit to NIMP facilities

18:00 departure for dinner

29 of May

9:00-11:15 Session 4

9:00-9.30

Andrei.V. Kovalevsky, CICECO – Aveiro Institute of Materials, Department of Materials and Ceramic Engineering, University of Aveiro, Portugal

Selected approaches for designing oxide thermoelectrics

9:30-10:00

Andres Sotelo, ICMA-CSIC-Universidad de Zaragoza, Spain

Very high thermoelectric performances in Sr-doped textured $\text{Ca}_3\text{Co}_4\text{O}_9$. Costs optimization of unileg thermoelectric generator fabrication.

10:00-10:30

Ernst Bauer, Technische Universität Wien, Austria

Bulk and thin film Heusler alloys as promising thermoelectric materials

10:30-11:15

B. Popescu

Thermoelectric nano-composite from double filled skutterudite and carbides

I. Mercioniu

On the adherence of ceramic layers for thermal barriers coatings

M. Galatanu

Development of thermal barriers materials with application in energy

11:15-11:30 Coffee break

11:30-13:15 Session 5

11:30-12:00

Mihai A. Gîrțu, Department of Physics and Electronics, Ovidius University of Constanța, Constanța, Romania

DFT Calculations of Structure and Electronic Properties of TiO_2 Nanoclusters, of Dye-Nanocluster and Dye-Electrolyte Systems for Modeling Hybrid Photovoltaic and Photocatalytic Applications

12:00-12:30

Chris Chikere, School of Pharmacy and Life Sciences, Robert Gordon University, Aberdeen, UK

New Electrode Materials for Energy Storage Devices-Battery Applications

12:30-13:15

O. Rasoga

Tryphenylamine and carbazol oligomers for photovoltaic applications

S. Polosan

Organometallic compounds for photovoltaic applications

M. Baibarac

Composites based on carbon nanotubes and polydiphenylamine: from the functionalization process to applications in the energy storage field

13:15-14:45 Lunch

14:45-17:00 Session 3

14:45-15:15

Ibrahim Burc Misirlioglu, Sabanci Univeristy Istanbul, Turkey

Functionality from ferroelectric superlattices: Designing a phase transition and its implications for applications

15:15-15:45

Andrei Manolescu, University of Reykjavik, Iceland

Excitons in core-shell nanowires with polygonal cross section

15:45-16:15

L. Abramiuc

Photoelectron spectromicroscopy: revealing the stability of ferroelectric surfaces with respect to irradiation and contamination

A. Crisan

Nanotechnology of Pinning Centres in Superconducting Films for Clean Energy-saving Power Applications

16:15-16:30 Closing

16:45 departure for some sightseeing and dinner