

# International Workshop on Advances in Nanomaterials

September 10-12, 2018

## Program

### Monday 17.09:

**1. Official opening (9.15-9.30):** Nicola Seiani, Stefan Antohe, Lucian Pintilie

#### **2.1 Size effects, quantum dots and nanomagnetism (9.30-11.00)**

*Mira Ristić, Rudjer Boskovic Institute, Zagreb, Croatia:* Metal Oxide Nanostructures: Chemical Synthesis and Properties (9.30 - 10.00)

*Stjepko Krehula, Rudjer Boskovic Institute, Zagreb, Croatia:* Influence of Metal Doping on the Properties of Iron Oxide Nanoparticles (10.00 - 10.30)

*Marko Boskovic, Vinca Institute of Nuclear Sciences, Belgrade, Serbia:* AC magnetometry for hyperthermia applications (10.30 - 11)

11-11.30 Coffe Break

#### **2.2 Size effects, quantum dots and nanomagnetism (11.30-13.00)**

*R. Piticescu, National Institute of Non-ferrous and Rare Metals, Bucharest:* to be announced (11.30 - 12.00)

*S. Greculeasa, National Institute for Materials Physics, Magurele - Bucharest:* Multifunctional and tunable iron oxides prepared by laser Pyrolysis (12.00 - 12.30)

*V. Barsan, National Institute for Physics and Nuclear Engineering and the Horia Hulubei Foundation, Magurele - Bucharest:* Applications of generalized Lambert functions in nanomagnetism (12.30 - 13.00)

13.00-14.15 Lunch

#### **3.1. Photovoltaics, Photocatalysis and Photonics (14.15-15.45)**

*Suzana Topuzovski, Sts. Kiril and Methodius University, Skopje:* Shaping Laguerre-Gaussian laser modes (with or without phase singularities) by using fork-shaped gratings (14.15 - 14.45)

*Sorina Iftimie, Physics Department, Bucharest University: Organic and biologic thin films based photovoltaic devices: preparation, characterization and optimization (14.45 - 15.15)*

*Lucia Leonat, National Institute for Materials Physics, Magurele - Bucharest: Defects in organic/hybrid thin films solar cell (15.15 - 15.45)*

15.45-17.30 Coffe Break + Visits in laboratories + Discussions

## **Tuesday 18.09**

### **3.2. Photovoltaics, Photocatalysis and Photonics (9.30-11.00)**

*N. Seriani, ICTP - Trieste: Photoelectrochemistry of water splitting form first principles (9.30 - 10.00)*

*Erick Vesselli, University of Trieste: Vibronic and chemical properties of supported single metal atom catalysts (10.00 - 10.30)*

*Vlad Antohe, Physics Department, Bucharest University: Fabrication and characterization of Cu nanowire arrays for photovoltaic applications (10.30 - 11.00)*

11-11.30 Coffe Break

### **3.3. Photovoltaics, Photocatalysis and Photonics (11.30-13.00)**

*G.A. Nemnes, Physics Department, Bucharest University: How measurement protocols influence the dynamic J-V characteristics of perovskite solar cells: Theory and experiment (11.30 - 12.00)*

*M.Grigoroscuta, National Institute for Materials Physics, Magurele - Bucharest: Spectral up-conversion of Yb/Er doped CeO<sub>2</sub> thin films on Si solar cells (12.00 - 12.30)*

*Mihaela Baibarac, National Institute for Materials Physics, Magurele - Bucharest: to be announced (12.30 - 13.00)*

13-14.15 Lunch

14-15-15.30: Discussions with the Humboldt Foundation Representatives

### **4.1 Low dimensional systems and heterojunctions (15.30-17.00)**

*Nenad Novkovski, Sts. Kiril and Metodius University, Skopje: Interface state densities in different heterojunctions (15.30 - 16.00)*

*Radu Dragomir, National Institute for Materials Physics, Magurele - Bucharest: Spin correlations in 2D electron systems (16.00 - 16.30)*

*Andra Georgia Boni, National Institute for Materials Physics, Magurele - Bucharest: Multiferroic heterojunctions: the role of interfaces (16.30 - 17.00)*

Wednesday 19.09

#### **4.1 Low dimensional systems and heterojunctions (9.30-10.30)**

*Ruxandra Vidu, National Institute for Materials Physics, Magurele - Bucharest: to be announced*

*Cristian Teodorescu, National Institute for Materials Physics, Magurele - Bucharest: to be announced*

10.30-10.45 Coffe Break

#### **4.2 Low dimensional systems and heterojunctions (10.45-11.45)**

*Felicia Tolea, National Institute for Materials Physics, Magurele - Bucharest: Multifunctional magnetic materials: Superposed shape memory and magneto-caloric effects*

*Ionut Enculescu, National Institute for Materials Physics, Magurele - Bucharest: Metallic and Semiconducting nanowires and applications*

11.45-11.55 Final Remarks

12.00-13.00 Lunch