

## 2d Workshop

### **NANOTECHNOLOGIES FOR 21st CENTURY**

#### **COOPERATION EVENT BETWEEN ALBANIA, JAPAN AND SPAIN**

Tirana, Albania October 7, 2021

The main objective of this 2d Nano-Workshop, after the first one organized in Tokyo (www.1and2dm.com/2020/nanoworkshop.php) will be to keep and further enhance the cooperation between three countries, Albania, Japan and Spain in the field of Nanoscience and Nanotechnologies and their applications in important areas such as life sciences, information technologies and energy. Scientists and representatives from institutions of the three countries will share ideas about collaboration opportunities and research support programs in the research and development including cooperation with industry in the field of nanotechnology.

LOCATION: Tirana International Hotel, Tirana, Albania

DATE: October 7, 2021

#### **ORGANISERS**:

Event organized by Phantoms Foundation (Spain) with the support from Spain of ICN2, CERCA, BIST, from Albania of NanoAlb, Academy of Sciences and from Japan of Univ. Keio, Univ. Tokyo and the embassies of Spain and Japan in Albania.

#### **ORGANISING COMMITTEE**

Antonio Correia (Phantoms Foundation, Spain) - Coordinator

Arben Merkoçi (ICN2, Spain) – Co-Coordinator

Pablo Ordejon (ICN2, Spain)

Jose Garrido (ICN2, Spain)

Yasuaki Einaga (Keio University, Japan)

Majlinda Vasjari (NanoAlb, University of Tirana, Albania)

Kledi Xhaxhiu (NanoAlb, University of Tirana, Albania)

#### **TENTATIVE PROGRAM**

# 9.00-9:15 Welcome, Organizers & Representatives from the Embassies of Japan and Spain in Tirana



Spain

**9.15-9:35** Prof. Pablo Ordejon (ICN2, Barcelona) "Research and Innovation at the Catalan Institute of Nanoscience and Nanotechnology"

**9.35-9:55** Prof. Stephan Roche (ICN2, ICREA, Barcelona) "The Universe of Disordered and Amorphous Two-dimensional Materials: Scientific Challenges & Technology Opportunities"

9.55-10:15 Prof. Jose Garrido (ICN2, ICREA, Barcelona), Title to be defined

**10.15-10:35** Prof. Jordi Sort (ICREA, UAB, Barcelona) "Magneto-ionic ON-OFF switching of ferromagnetism: challenges and prospects"

**10.35-10:55** Prof. Aitor Mugarza (ICN2, Barcelona) "Tailoring electronic and magnetic properties with molecular strategies: from ligand chemistry to covalent nanoarchitectures"

**10.55-11:05** Prof. Miguel Vilaplana (GraphenicaLab, Barcelona) "Why should Business Angels & Venture Capital invest in Nanotechnology?"

**11.05-11:25** Prof. Arben Merkoçi (ICN2, Barcelona) "Collaboration opportunities ICN2, NanoAlb, Japan."

#### 11.25-11:45 Coffee break



Japan

**11:45-12:05** Prof. Yasuaki Einaga (Keio University) "Recent development on electrochemical application of boron-doped diamond electrodes"

**12.05-12:25** Prof. Yuta Nishina (Okayama University), "Chemical and electrochemical exfoliation of graphite in a large scale"

**12.25-12:45** Prof. Yuya Oaki (Keio University) "Layered conjugated polymers with stimuli-responsive color-change properties"

**12.45-13:05** Prof. Kazuya Nakata (Tokyo University of Agriculture and Technology) "Photocatalytic Generation of Solar Chemicals"

**13.05-13:25** Dr. Andrea Fiorani (Keio University) "Electrochemiluminescence application of boron-doped diamond electrodes"

13.25-13:45 Yunita Triana (Keio University) "Electrochemical gas sensing by BDD electrodes"

#### 13.45-14:30 Lunch

#### **Albania**



**14.30-14:50** Prof. Fetah Podvorica (NanoAlb, Prishtina University) "Modification of the surfaces of materials with functional organic layers"

**14.50-15:10** Prof. Kreshnik Hoti (NanoAlb, Prishtina University) "Emerging applications of technologies that solve health related challenges: focus on medication adherence and pain assessment"

**15.10-15:30** Prof. Albana Ndreu (NanoAlb, Epoka University) "Polymer-based Nano/microfibers for Hard Tissue Engineering Applications"

**15.30-15:50** Prof. Valbona Aliko (NanoAlb, University of Tirana) "Comprehensive Understanding of Bio-nano Interactions-A challenge for future applications of nanoparticles in medicine"

**15.50-16:10** Prof. Kledi Xhaxhiu (NanoAlb, University of Tirana) "Influence of the pH on the stability of CdTe QDs investigated by fluorescence and particle size analyses"

**16.10-16:30** Prof. Majlinda Vasjari (NanoAlb, Univ. of Tirana) "Development of electrochemical imunosensors based on CPE modification"

**16.30-16:50** Prof. Arjan Korpa (NanoAlb, Univ. of Tirana) "Functionalised, nanostructured multiscale cementitious materials"

**16:50-17:10** Mr. Robert Dumi (Director, National Agency of Scientific Research and Innovation, Tirana) "Albania vs. European Frame Work Programs (FP7, H2020, HEU)".

Round table/discussions/Closure of the workshop