

# **F i r s t      A n n o u n c e m e n t**

## **International Conference on Oxide and Non-oxide Materials for Optoelectronics and Energy Applications ( ICONMO 3 )**

01 – 04 December 2015, Borovetz, BULGARIA

### **Justification**

Nanoscience and Nanotechnology have a strong potential to bring about substantial changes in many fields of our life including the optoelectronics.

The optoelectronics as a field of technology that combines the physics of light with electricity that meets the ever increasing demands of the human society in the field of information technology, biotechnology, energy management by using the latest achievements of Nanoscience and Nanotechnology.

The nanostructured materials possess unique properties – mechanical, electrical, optical, magnetic, biological, entirely different from those of the conventional micro- or millimeter sized materials due to their distinctive size and shape, and predominant surface and quantum effects. The preparation and investigation of smart nanosized materials for different applications, like quantum dots, nanotubes, nanowires, nanoparticles and nanocomposites is an important matter in combination with their performance in micro- and nanooptics, MEMS, NEMS and other higher level of integration and effective processing. Only the common efforts of scientists from different fields of research – chemistry, physics, biology, materials science and engineering – and from different countries can bring the complimentary expertise in the development of new advanced materials and practices in Nanoscience and Nanotechnology.

The first objective of the conference is to present to the participants the up-to-date achievements in the Nanoscience and Nanotechnology. The second objective is the teaching and training of the participants in the scientific and technological background of nanostructures and nanostructured materials used in fields like optoelectronics, bionanotechnology, energy conversion and storage, new generation of advanced sensors, etc. The third objective addresses the initiation of transborder and interdisciplinary collaborations between young scientists towards the implementation of the recent nanotechnological achievements in security.

The ICONMO will cover various topics connected with the recent achievements in the field of nanotechnology and nanomaterials. The lectures will be given by outstanding scientists from universities and research institutes who are experts in nanoscience-related fields. Several thematic seminars on specific topics, not covered by the lectures, will be also included in the programme. The poster session will be held in the afternoon, during which the participants can present their results, establish closer contacts and discuss in less formal atmosphere.

**Location :** Hotel “Radina’s way” Borovetz, BULGARIA

**Topics**

- Advanced thin films
- Bulk oxide and Non-oxide materials
- Carbon like materials
- Optical recording
- Energy storage and conversion
- Advanced sensors for bio- and chemical processes

**Working language :** English

**Honorary chairman :** Prof. Dr. Mitko Georgiev, UCTM, Bulgaria

**Chairman :** Prof. Dr. Plamen Petkov, UCTM, Bulgaria

**International Scientific Committee**

- Luis Costa – Portugal
- Mitko Georgiev – Bulgaria
- Walter Hoyer – Germany
- Taras Kavetsky - Ukraine
- Vera Marinova - Bulgaria
- Ion Mihailescu - Romania
- Verginie Nazabal - France
- Plamen Petkov – Bulgaria
- Tamara Petkova – Bulgaria
- Perica Paunovic - Macedonia
- Cyril Popov – Germany
- Spyros Yannopolus – Greece
- Maria Zdanowska-Fraczek - Poland
- Tomas Wagner – Czech Republic

**Local Organizing Committee**

- |                     |                     |
|---------------------|---------------------|
| 1. Ruzha Harizanova | 2. Dany Trifonova   |
| 3. Any Stoilova     | 4. Stanislav Slavov |

**Publishing** : All contributions will be published in “**Advanced in Natural Science : Theory and Applications**”

**Call for abstracts** : **November 15<sup>th</sup>**

**Details** – A4 page with out restriction, send to [plamen.petkov@abv.bg](mailto:plamen.petkov@abv.bg).

**Participants fee** : **220 BGN-** ( The fee cover conference materials, accomodation, meal and Gala diner)

**Invited speakers** : - **30 + 15 min presentation** ,**Speakers** –**15 + 5 min presentation**

### Lecturers

1. Prof. Dr. Luis Costa, Department of Physics, Aveiro University, Portugal
2. Prof. Dr. Ruzha Harizanova, Department of Physics, University of Chemical Technolgy and Metallurgy, Bulgaria
3. Assoc.Prof. Dr. Taras Kavetsky, Department of Physics, DSPU, Drohobych, Ukraine
4. Prof. DSc Doriana Malinovska, SENES, Bulgarian Academy of Sciences
5. Assoc. Prof. Dr. Vera Marinova, IOMT, Bulgarian Academy of Sciences
6. Assoc.Prof.Dr. Lian Nedelchev, UTP, Sofia, Bulgaria
7. Prof. Dr. Perica Paunovic, Department of Materials Science, University Sts Cyril and Methodius, Skopje, FYR Macedonia
8. Prof. Dr. Tamara Petkova, Institute of Electrochrmistry and Energy Systems, Bulgarian Academy of Sciences
9. Prof. Dr. Ion Mihailescu, National Institute for Lasers, Plasma and Radiation Physics, Bucharest, Romania

### **Seminar Speakers**

1. Assist. Prof. Dr. Ofelia Koleva, Institute of Electrochrmistry and Energy Systems, Bulgarian Academy of Sciences
2. Assist. Prof. Dr. Christian Girginov, Department of Physical Chemistry, University of Chemical Technolgy and Metallurgy, Bulgaria
3. Assoc. Prof. Dr. Anita Grozdanov, Department of Materials Science, University Sts Cyril and Methodius, Skopje, FYR Macedonia
4. Assist.Prof.Dr. Emil Lilov, Department of Physics, University of Chemical Technolgy and Metallurgy, Bulgaria
5. Assist.Prof. Natalia Berberova, IOMT, Bulgarian Academy of Sciences
6. Assist.Prof. Denica Nicheva, Institute of Electrochrmistry and Energy Systems, Bulgarian Academy of Sciences

## Programme Schedule

### **1<sup>st</sup> day Tuesday (01.12.2015)**

#### **Arrival and registration**

12:00 Registration

13:30 Buffet

16:00 Welcome and introduction to the ICONMO – *P. Petkov, M.Georgiev*

16:15 *L1*

17:00 *L2*

17:45 *S1*

19:00 Dinner

### **2<sup>nd</sup> day Wednesday (02.12.2015)**

09:00 *L3*

09:45 *L4*

10:30 *S2*

10:50 Coffee break

11:20 *S3*

11:40 *S4*

12:30 Lunch

15:30 Coffee refreshment

16:00 *L5*

16:45 Flash Poster section – Chair *E. Lilov*

19:00 Dinner

### **3<sup>rd</sup> day Thursday (03.12.2015)**

09:00 *L6*

09:45 *L7*

10:30 *S5*

10:50 *S6*

11:10 Coffee break

11:40 *L8*

13:00 Lunch

18:00 Round table “Potential Adverse Effects of Nanotechnology”

– Chair *R. Harizaanova*

19:00 Closing ceremony – *P. Petkov,*

19:30 Farewell Party

### **4<sup>th</sup> day Friday (04.12.2015)**

#### **Departure**