



**ROSOV pinn 2017**

*Belgrade, June 1-2*

## **General conference program**

### Thursday, June 1<sup>st</sup> 2017

- 08<sup>00</sup>-09<sup>00</sup> Registration  
09<sup>00</sup>-09<sup>30</sup> Opening ceremony  
09<sup>30</sup>-11<sup>45</sup> Plenary lectures  
11<sup>45</sup>-12<sup>15</sup> Coffee break  
12<sup>15</sup>-13<sup>55</sup> Invited lectures  
13<sup>55</sup>-15<sup>30</sup> Lunch break  
15<sup>30</sup>-17<sup>35</sup> Invited lectures  
18<sup>00</sup>-19<sup>30</sup> Poster session  
20<sup>00</sup> Gala dinner

### Friday, June 2<sup>nd</sup> 2017

- 09<sup>00</sup>-10<sup>30</sup> Plenary lectures  
10<sup>30</sup>-11<sup>00</sup> Coffee break  
11<sup>00</sup>-12<sup>40</sup> Invited lectures  
12<sup>40</sup>-13<sup>00</sup> Break  
13<sup>00</sup>-14<sup>00</sup> Closing ceremony and awards



## **Program of lectures**

Thursday, June 1<sup>st</sup> 2017

### **Plenary lectures: 09<sup>30</sup>-11<sup>15</sup> (Hall 1)**

Chairmen: Vukoman Jokanović, Milenko Plavšić

09<sup>30</sup>-10<sup>15</sup> **Graphene quantum dots – confining Dirac electrons**

Florian Libisch

*Institute for Theoretical Physics, Vienna University of Technology, Vienna, Austria*

10<sup>15</sup>-11<sup>00</sup> **NMR studies of intrinsic fields in ferromagnetic carbon**

Miroslav Požek

*Department of Physics, Faculty of Science, University of Zagreb, Zagreb, Croatia*

11<sup>00</sup>-11<sup>45</sup> **Importance of polymer-silicone interactions**

Milenko Plavšić

*Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia*

Break until 12<sup>15</sup>

### **Invited lectures: 12<sup>15</sup>-13<sup>55</sup>**

#### **Section: Refractory and Process industry (Hall 1)**

Chairmen: Tatjana Volkov-Husović, Milorad Tomić

12<sup>15</sup>-12<sup>40</sup> **Why did that roll break?**

Vyacheslav Goryany, Olga Myronova

*Karl Buch Walzengiesserei GmbH & Co. KG., Siegen, Germany; Institute of Metal Technologies, University of Duisburg, Duisburg, Germany*

12<sup>40</sup>-13<sup>05</sup> **Implementation of image analysis on monitoring degradation of refractory samples: cavitation erosion behavior of mullite, zircon silicate and cordierite samples**

Tatjana Volkov Husović

*Faculty of Technology and Metallurgy, Belgrade University, Belgrade, Serbia*



- 13<sup>05</sup>-13<sup>30</sup> **Development of production technology of welding fillers in Serbia**  
Nikola Bajić  
*Research and Development Center, IHIS Techno-experts d.o.o., Belgrade, Serbia*
- 13<sup>30</sup>-13<sup>55</sup> **Sage extract as an inhibitor of steel and copper corrosion**  
Milorad Tomić  
*University of Eastern Sarajevo, Faculty of Technology Zvornik, Republic of Srpska*

**Section: Nanotechnologies (Hall 2)**

Chairmen: Ivana Validžić, Ilija Nasov

- 12<sup>15</sup>-12<sup>40</sup> **Preparation and characterization of TiO<sub>2</sub> and ZnO nanostructures**  
Andreja Gajović  
*The Ruđer Bošković Institute, Zagreb, Croatia*
- 12<sup>40</sup>-13<sup>05</sup> **Electronic and optical properties of the synthesized Sb<sub>2</sub>S<sub>3</sub> semiconductor and photovoltaic applications**  
Ivana Validžić  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 13<sup>05</sup>-13<sup>30</sup> **PVD nano coatings for optical applications**  
Ilija Nasov  
*Institute of Physics, St. Cyril and Methodius University, Skopje, Macedonia*
- 13<sup>30</sup>-13<sup>55</sup> **Influence of oxygen-containing surface functional groups on charge storage properties of graphene oxide**  
Zoran Jovanović  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*

**Section: Nanomedicine (Hall 3)**

Chairmen: Stevo Najman, Suzana Šegota

- 12<sup>15</sup>-12<sup>40</sup> **Neuroprotection and neuronal recovery under the oxidative stress achieved by enhanced lipid membrane interaction with flavonoids**  
Suzana Šegota  
*The Ruđer Bošković Institute, Zagreb, Croatia*



- 12<sup>40</sup>-13<sup>05</sup> **Reprogramming of N-glycan biosynthesis and lipid metabolism in cancer**  
Romana Masnikosa  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 13<sup>05</sup>-13<sup>30</sup> **New approach to principles of energetic cell treatment**  
Vukoman Jokanović  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 13<sup>30</sup>-13<sup>55</sup> **Bone tissue engineering with triad-bioceramics, adipose mesenchymal cells, PRP**  
Stevo Najman  
*Faculty of Medicine, University of Nis, Niš, Serbia*

Lunch break until 15<sup>30</sup>

**Invited lectures: 15<sup>30</sup>-17<sup>35</sup>**

**Sections: Refractory and Process industry (Hall 1)**

Chairmen: Milenko Rimac, Goran Lazić

- 15<sup>30</sup>-15<sup>55</sup> **Investigation of structure of NiCrAlY metal powder and coating deposited by diamond jet method**  
Milenko Rimac, Ilhan Bušatlić  
*American University in Bosnia and Herzegovina, Tuzla, Bosnia and Herzegovina*  
*Faculty for Metallurgy and Materials, University of Zenica, Bosnia and Herzegovina*
- 15<sup>55</sup>-16<sup>20</sup> **Characterization of composite bioinert coating APS-Al<sub>2</sub>O<sub>3</sub> 25% w/w (ZrO<sub>2</sub>-8% Y<sub>2</sub>O<sub>3</sub>) obtained by plasma spray method**  
Mihailo Mrdak  
*Institute for Microwave Technique and Electronics, Belgrade, Serbia*
- 16<sup>20</sup>-16<sup>45</sup> **Drying and heating of the refractory lining of rotary kiln with heat exchanger**  
Goran Lazić  
*Lafarge BFC, Beočin, Serbia*
- 16<sup>45</sup>-17<sup>10</sup> **Technological development of steel production in Bosnia and Herzegovina from 1891 to 2016**  
Sulejman Mehmedagić  
*Faculty of Metallurgy and Materials, University of Zenica, Bosnia and Herzegovina*



**Section: Nanotechnologies (Hall 2)**

Chairmen: Duško Borka, Nataša Jović Orsini

- 15<sup>30</sup>-15<sup>55</sup> **Charged particles interactions with carbon nanostructured materials**  
Duško Borka  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 15<sup>55</sup>-16<sup>20</sup> **Deposition of thin films using spray pyrolysis**  
Nenad Radić  
*Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia*
- 16<sup>20</sup>-16<sup>45</sup> **Tuning of magnetic heating by changing magnetic anisotropy in monodisperse and crystalline iron oxide-based nanoparticles**  
Nataša Jović Orsini  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 16<sup>45</sup>-17<sup>10</sup> **Oxide layers on alumina and their application in nanotechnology**  
Bečko Kasalica  
*Faculty of Physics, University of Belgrade, Belgrade, Serbia*

**Section: Nanomedicine (Hall 3)**

Chairmen: Vesna Babić Ivančić, Božana Čolović

- 15<sup>30</sup>-15<sup>55</sup> **Biom mineralization – how to investigate it?**  
Vesna Babić Ivančić  
*The Ruđer Bošković Institute, Zagreb, Croatia*
- 15<sup>55</sup>-16<sup>20</sup> **Bioactive coatings on the surface of titanium implants**  
Božana Čolović  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 16<sup>20</sup>-16<sup>45</sup> **Dental anthropology of prehistoric period on the territory of Serbia**  
Đurica Grga  
*Faculty of Dentistry, University of Belgrade, Belgrade, Serbia*
- 16<sup>45</sup>-17<sup>10</sup> **Physico chemical properties of nanostructured cements based on calcium silicates**  
Violeta Petrović  
*Faculty of Dentistry, University of Belgrade, Belgrade, Serbia*



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17<sup>10</sup>-17<sup>35</sup> **Nanostructural biomaterials: a pathway to clinical usage**  
Vanja Opačić Galić  
*Faculty of Dentistry, University of Belgrade, Belgrade, Serbia*

18<sup>00</sup>-19<sup>30</sup> **Poster session**

*Friday, June 2<sup>nd</sup> 2017*

**Plenary lectures: 09<sup>00</sup>-10<sup>30</sup> (Hall 1)**

Chairmen: Maja Dutour Sikirić, Miroslav Požek

09<sup>00</sup>-09<sup>45</sup> **Calcium phosphates revisited: How well their formation can be controlled?**  
Maja Dutour Sikirić  
*The Ruđer Bošković Institute, Zagreb, Croatia*

09<sup>45</sup>-10<sup>30</sup> **X-ray photoelectron spectroscopy and its application in the analysis of industrial materials**  
Nenad Bundaleski  
*New University of Lisbon, Faculty of Science and Technology, Caparica, Portugal*

Break until 11<sup>00</sup>

**Invited lectures: 11<sup>00</sup>-12<sup>40</sup>**

**Section: Nanomedicine (Hall 1)**

Chairmen: Dejan Marković, Đorđe Antonijević

11<sup>00</sup>-11<sup>25</sup> **Investigation of electrochemical inhibition of different active drug substances in immobilized enzyme**  
Safija Herenda  
*Faculty of Natural Sciences, University of Sarajevo, Sarajevo, Bosnia and Herzegovina*



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- 11<sup>25</sup>-11<sup>50</sup> **Application of nanomaterials in preventive and restorative dentistry**  
Dejan Marković  
*Faculty of Dentistry, University of Belgrade, Belgrade, Serbia*
- 11<sup>50</sup>-12<sup>15</sup> **Clinical aspects of ISO standards in dental fillings engineering**  
Đorđe Antonijević  
*The Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia*
- 12<sup>15</sup>-12<sup>40</sup> **Challenges and dilemmas related to the application of scaffolds in nanomedicine**  
Vladimir Biočanin  
*Faculty of Pharmacy and Health, University of Travnik, Travnik, Bosnia and Herzegovina*

Break until 13<sup>00</sup>

**Closing ceremony: 13<sup>00</sup>-14<sup>00</sup>**

13<sup>00</sup>-13<sup>45</sup> Vedran Vučić and Dušan Spasić: **From mythology to metaphysics**

13<sup>45</sup>-14<sup>00</sup> Vukoman Jokanović: **Closing speech and awards**