**CONFERENCE PROGRAM**

**The 1st**

**Serbian Conference on Materials Application and Technology - SCOM**

**October 2022, Belgrade**

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| **Thursday, October 20th, 2022** |
| **Vlatacom Institute – Conference hall****09:00-13:00 Registration** |
| **Session 1** |
| **09:30-09:45** | **Opening ceremony -** *Dr. Dragana Perić, Prof. Dr. Miroslav Dramićanin* |
| **09:45-10:15** | *Dr. Miroslav Perić* **- *Vlatacom Insitute Current and Future Program – Challenges for Special Materials and Technologies***  |
| **10:15-11:00** | Tutorial lecture 1 **–** *Dr. Philippe Goldner -* ***Rare Earth Doped Crystals for Quantum Technologies*** |
| **11:00-11:30** | **Coffee Break** |
| **Session 2 -** *Chairperson Dr. Jovan Nedeljković* |
| **11:30-11:45** | *MC Labor d.o.o. -* ***Laboratory and process equipment overview*** |
| **11:45-12:00** | *Dr. Dušan Božanić -* ***Silver-Bismuth Iodide Rudorffites as Light Absorbers in Photovoltaic Devices*** |
| **12:00-12:15** | *Danijela Danilović -* ***Silver-Bismuth Iodide Nanoplatelets: Synthesis, Characterization and Electronic structure*** |
| **12:15-12:30** | *Dr. Zoran Ristić –* ***All near-infrared luminescent lifetime-based thermometry with Mn5+ activated Sr3(PO4)2 and Ba3(PO4)2 phosphors***  |
| **12:30-12:45** | *Vukašin Ugrinović* - ***The development of composite hydrogels based on poly(methacrylic acid), natural polymers and nano-structured particles of calcium phosphate ceramics for biomedical applications*** |
| **12:45-13:00** | *Dr. Vesna Lazić -* ***"Smart" textile against pathogens’ attack*** |
| **13:00-13:15** | *Natalija Čutović* - ***Optimization of the extraction process from satureja montana l.: physicochemical characterization of the extracts*** |
| **13:15-15:00** | **Lunch Break – Hotel Inn** |
| **Session 3 -** *Chairperson Dr. Željka Antić* |
| **15:00-15:45** | Tutorial lecture 2*Prof. Thomas Thundat -* ***Molecular Recognition Using Nanomechanical Photothermal Spectroscopy*** |
| **15:45-16:00** | *Dr. Branka Hadžić -* ***Changes in samples characteristics due to laser power*** |
| **16:00-16:15** | *Dr. Aleksandra Patarić -* ***Prediction of thermal and mechanical properties of the acrylate-based composites using artificial neural network model*** |
| **16:15-16:30** | *Dr. Bojana Milićević –* ***Mn4+ - dopedK2TiF6: red-emitting component for modern white LEDs*** |
| **16:30-18:00** | **Vlatacom Institute exhibition and Cocktail*****Vlatacom solutions in areas of applied cryptography, radar systems, electro-optical systems, advanced weapons and ICT technologies*** |

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| **Friday, October 21st, 2022** |
| **Vlatacom Institute – Conference hall** |
| **Session 4 -** *Chairperson Prof. Dr. Mikhail Brik* |
| **09:30-10:15** | Tutorial lecture 3 *Dr. Maksym Buryi -* ***Electron Paramagnetic Resonance as a unique and powerful tool for point defects study. Application in various branches of science and industry*** |
| **10:15-10:30** | *Maja Szymczak**-* ***Temperature invariant luminescence manometer based on Cr3+ emission in Li2Mg3TiO6*** |
| **10:30-10:45** | *Dr. Aleksandar Ćirić* **-** ***Scientific Software for Luminescence by OMAS group*** |
| **10:45-11:00** | *Tamara Mijatović -* ***Numerical simulation of titanium alloy hip implants behavior under static and dynamics loads*** |
| **11:00-11:30** | **Coffee Break** |
| **Session 5 -** *Chairpersons Dr. Željka Antić, Prof. Dr. Miroslav Dramićanin* |
| **11:30-11:45** | *Dr. Jelena Mitrić -* ***Phonon investigation in YVO4:Eu3+ nanopowders*** |
| **11:45-12:00** | *Dr. Vitaliy Shkoldin –* ***Optical nanosources based on tunnel transition created by the STM nanolithography*** |
| **12:00-12:15** | *Katarina Milenković* – ***Microwave-assisted hydrothermal synthesis of Eu3+-doped CsY2F7 nanophosphor*** |
| **12:15-12:30** | *Dr. Jasmina Grbović Novaković–* ***Materials for hydrogen storage*** |
| **12:30-12:45** | *Dr. Slavica Petrović* - ***Wood as an energy material: meeting energy needs in the EU-27 by importing certain wood fuels*** |
| **12:45-13:00** | *Dr. Vesna Đorđević –* ***Tailoring of Cr3+ emission by tunning crystal field in LiAl5-x-yMgxSiyO8*** |
| **13:00** | **Closing ceremony***Dr. Dragana Perić, Prof. Dr. Miroslav Dramićanin* |