Competition of Young Scientists

Institute of Inorganic Chemistry SAS, Bratislava 23.10.2023, room no. 107

09:15 Opening

- **09:20 Alper Güneren** Improvement of the Performance of Silicon-Graphite Anodes by Ultrathin Atomic Layer Deposited ZnO Films
- **09:40 Mir Saeed Sajjadi** In₂S₃/Bi₂WO₆/Fe₃O₄ magnetic core-shell stucture as an efficient catalyst for sono-photo hybrid catalytic degradation of tetracycline
- **10:00 Viktória Planetová** Elucidation of the mechanism of singlet oxygen formation by selected photosensitizers
- 10:20 Debora Mišenková Quadratic spin-orbit mechanism of electronic g-tensor
- **10:40** Naser Hosseini Joining of CVD β-SiC and SiC_f/SiC ceramics to themselves using in-situ formed SiC-ZrC interlayer

Break (11:00 – 11:10)

- **11:10 Inga Zhukova** Theoretical predictions and synthesis of (Ti-Zr-Hf-Nb-Ta)B₂ structures with non-equimolar compositions
- **11:30 Sheeraz Khan** Corrosion of AZS refractory materials during production of Ba crystalline glass and design of methodology for their evaluation
- **11:50** Lucia Šedivá Study of thermal behavior glasses in system Al2O3-Yb2O3-Er2O3
- **12:10 Ertugrul Varlik** Boron and Cobalt co-doped silicate-based bioactive glass scaffolds fabrication via Digital Light Processing (DLP): Optimization of the printing parameters

Lunch (12:30 – 13:15)

- 13:15 Vinny George Sodium Alginate Microspheres for Controlled Drug Delivery
- 13:35 Sanam Bashir Elastic moduli of pristine clay minerals and clay polymer hybrids
- **13:55** Martina Vitázková Effect of Co and B co-doped mesoporous bioactive glass nanoparticles on various cell lines
- **14:15 Jakub Michalík** Preparation and spectral properties of Er, Yb and Li doped glass microspheres with YAG composition
- **14:35 Guido de La Torre** Heated and plasma treated silicon nitride with different sintering additives for biomedical application

15:10 Results

Committee:

Ing. Blanka Kubíková, PhD. doc. Ing. Zoltán Lenčéš, PhD. Mgr. Marián Matejdes. PhD.

Ing. Monika Michalková, PhD. Ing. Štefan Varga, CSc.