

# POSTER SESSION: 17 JULY 2025

16.00 – 18.30 h

**P1. Characterization of a hydrosensitive copolymer nanosized coatings for applications as active media in optical humidity sensing**

Katerina Lazarova, Ketrin Pavlova, Martina Docheva, Silvia Bozhilova, Darinka Christova and Tsvetanka Babeva

**P2. Design of a Novel Optical System Integrating a Holographic Quarter-Wave Plate for Laser Tracking Interferometer**

Yu-Ta Chen, Fan-Hsi Hsu, Ting-Han Chen, Hung-Yu Chen

**P3. High speed impact testing of composites with dynamic speckle analysis**

Mikhail Levchenko, Elena Stoykova, Andrei Anisimov

**P4. Biospeckle Analysis of pea seed germination using SS-OCT images following Hydro- and Carbon Nanotube Priming**

Maryam Viqar, Violeta Madjarova, Elena Stoykova, Keehoon Hong

**P5. Optimization of brilliant yellow thin films deposition for optical recording using poly(vinyl alcohol) and polyethylene glycol matrices**

B. Blagoeva, L. Nedelchev, D. Nazarova, D. Dimov, E. Stoykova

**P6. Speckle excitation by tensile loading for laser photometric defect detection**

Branimir Ivanov, Elena Stoykova, Violeta Madjarova, Ginka Ivanova, Keehoon Hong

**P7. Influence of Perchloroethylene treatment on the electrochemical behavior of household chimney soot for application as supercapacitor material**

M. Petrov, T. Stankulov, L. Slavov, B. Karamanova, A Stoyanova

**P8. Direct Detection of Faraday Phase Shift in Magneto-Optical Materials**

Petar Kolev, Tinko Eftimov, Evdokiya Hikova, Petar Veselinov, Hristo Kisov and Georgi Dyankov

**P9. Recording of polarization gratings through digital polarization holography on azopolymer thin films**

Nataliya Berberova-Buhova, Georgi Mateev, Branimir Ivanov, Lian Nedelchev, Elena Stoykova, Kristina Borisova, Aleksandra Antonova, Dimana Nazarova

**P10. Synthesis and Comprehensive Characterization of Submicron Tubular Inorganic Fibers for Gas Sensing Applications**

B. Georgieva, B. S. Blagoev, K. Starbova, N. Starbov, K. Buchkov, V. Mehandzhiev, A. Paskaleva, D. Spasov, L. Slavov, I. Avramova, P. Tzvetkov

**P11. Nanocomposite polymer electrolytes for dielectric applications: The effect of Graphene Oxide nanofiller**

Todor E. Vlahov, Georgi B. Hadjichristov, Angel D. Dimitrov, Yordan G. Marinov

**P12. Nano-thin phospholipid Langmuir-Blodgett monolayer as a component in an impedimetric microdetector for Cadmium ions**

Todor E. Vlahov, Georgi B. Hadjichristov, George R. Ivanov, Yordan G. Marinov

**P13. Epoxy composites with organoclay – structure and mechanical properties**

Verislav Angelov

**P14. Al-doped ZnO nanolayers for electro-optical applications**

Stefani Bogoeva, Dimitrina Petrova, Vladimira Videva, Vera Marinova and Dimitre Dimitrov

**P15. Antibacterial activity of ZnO and Al doped ZnO nanocoatings**

Maria Stefanova, Dimitrina Petrova, Vladimira Videva, Dimitre Dimitrov, Nadia Todorova and Vera Marinova

**P16. 2D van der Waals heterostructures: synthesis and characterization**

Mila Krumova, Maria Martinova, Nikolay Minev, Blagovest Napoleonov, Vladimira Videva, Dimitre Dimitrov and Vera Marinova

**P17. Synthesis of 2D WSe<sub>2</sub> Nanolayers via Ultraviolet/Ozone Pre-deposition Treatment**

Vladimira Videva, Veronika Todorova, Irnik Dionisiev, Dimitre Dimitrov, Peter Rafailov, Velichka Strijkova, Ivalina Avramova and Vera Marinova

**P18. Effect of UV-Ozone treatment on the optical and electrical properties of AZO thin films**

D. Petrova, M. Stefanova, S. Bogoeva, B. Napoleonov, B. Blagoev, V. Videva, V. Marinova and D. Dimitrov

**P19. Investigation of mechanical and optical behavior of graphene/PtSe<sub>2</sub> nanocomposites**

Nikolay Minev, Blagovest Napoleonov, Vera Marinova, Tatyana Petrova, Apostol Apostolov