

Session Program

2-6 Nov 2026

**27th Symposium on Photonics and Optics
(SPO 2026)**

***Conference on Optics and High Technology
Material Science***

Online (Zoom)

Friday 6 November

09:10

Conference on Optics and High Technology Material Science: Session 1: Laser Radiation, Optics and Spectroscopy

Session | **Location:** Online (Zoom) | **Convener:** Kateryna Yablochkova

09:10–09:40

Generation, propagation and remote action of laser radiation

Speaker

Liudmyla Derzhypolska

09:40–09:55

Lasing of dye-doped mesostructured hybrid films in the critical (near-cutoff) regime: guided and Lummer-Gehrcke modes

Speaker

Artem Podshebiakin

09:55–10:10

Mie-Theory-Based Modeling of Light Extinction Spectra for Size and Shell-Thickness Estimation of Photochemically Synthesized pNIPAM-Coated Silver Nanoparticles

Speaker

Andrii Lopatynskyi

10:10–10:40

Renaissance of Magneto-Optics, or New Challenges - Old Methods

Speaker

Mariia Pashchenko

10:40

11:00

Conference on Optics and High Technology Material Science: Session 2: Functional Ceramics, Glasses and Composites

Session | **Location:** Online (Zoom) | **Convener:** Kateryna Yablochkova

11:00–11:30

Molten Salts: A Versatile Platform for Engineering Functional Glasses and Crystalline Materials

Speaker

Dr Kateryna Terebilenko

11:30–11:45

Effect of Cesium Doping on the Structural, Electronic, and Optical Properties of BaSnO₃: A First-Principles Study for Photovoltaic Applications

Speaker

Younes Elalaoui

11:45–12:00

Electronic properties of inhomogeneous polar textures in BaTiO₃: A second-principles study

Speaker

Dr Binayak Mukherjee

12:00-12:15

MgO-Mediated Densification and Electromechanical Hardening in BNT-BT-KNN Lead-Free Piezoceramics: Decoupling Porosity from Acceptor Effects**Speaker**

Saicharen Lakshmanan

12:15-12:30

Effect of Graphite Inclusions on the Mechanical Properties of Silicon Carbide Ceramics**Speaker**

Rostyslav Vazhnenko

12:30-12:45

Functionally Graded Polymer-Inorganic Composites as Advanced Wideband Microwave Absorbers**Speaker**

Prof. Oleksandr Zaichenko

13:00

14:00

Conference on Optics and High Technology Material Science: Session 3: Thin Films, Nanostructures and Materials Physics**Session** | **Location:** Online (Zoom) | **Convener:** Kateryna Yablochkova

14:00-14:15

Structural and optical properties of undoped and Sn-doped β -Ga₂O₃ thin films deposited by ultrasonic spray pyrolysis**Speaker**

Polina Shamrovska

14:15-14:30

Exhibition of spatial dispersion in optical properties of lattices of plasmonic nanoparticles**Speaker**

Eugene Bortchagovsky

14:30-14:45

Effect of Nanoconfinement on Thermal Transport in Porous Silicon / Phase Change Material Composites**Speaker**

Vladyslav Tsehelnyi

14:45