Session Program

2–6 Nov 2026

27th Symposium on Photonics and Optics (SPO 2026)

Rapid Poster Sessions

Online (Zoom)

Friday 6 November

14:45

Rapid Poster Sessions: Session 4: Poster Rapid I — Ceramics, Glasses and Composites

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

14:45–14:49

Hydrostatic Piezopotential in Unpoled Polycrystalline Particles: Finite Element Analysis of Grain Disorder, Cavitation Loading and Electrolyte Screening in Lead-Free Piezocatalysts

Speaker
Saicharen Lakshmanan

14:49–14:53

Alkali Volatilization as a Hidden Compositional Variable in Ta-Modified KNN: Electrical Characterisation and Preliminary Pencil-Lead-Break Response

Speaker
Ayush Kumar Samal

14:53–14:57

Sintering temperature influence on phase stability of scandium-stabilized ZrO_2 ceramics

Speaker
Vita Prosolenko

14:57–15:01

Dispersion analysis of IR spectra of $Mg_xZn_{1-x}O$ ceramics: phonon behaviour and phase composition

Speaker
Viktor Bardakov

15:01–15:05

Effect of ZnO electrical conductivity on the composition of hexagonal and cubic phases in MgxZn1-xO ceramics

Speaker
Oleksandr Melnichuk

15:05–15:09

Frustrated total internal reflection (Otto geometry) in a ZnO/6H-SiC structure: coupling through an air gap, a simulation study

Speaker
Mr Oleksii Sakhniuk

15:09–15:13

Effect of Fluoride Modification on the Structure and Luminescence of Europium-Doped Phosphomolybdate Glasses

Speaker
Dr Kateryna Terebilenko

15:13–15:17

Optical and electrophysical properties of some porous phosphate-molybdate glasses

Speaker
Vasyl Cherevyshnuy

15:17–15:21

Optical and dielectric properties of gelatin incorporated with K2Eu(PO4)(WO4) microcrystals

Speaker
Dr Vitalii Chornii

15:21–15:25

Mechanical properties of a Ti–Cu nanocomposite prepared by mechanical alloying

Speaker
Mykola Melnichenko

15:25–15:29 **Order in nanoparticles-doped liquid crystals**

Speaker
R Karapinar

15:29–15:33

Optical Absorption as a Probe of Fluorination and Crystalline Phase in P(VDF-TrFE): A Density Functional Theory Study

Speaker
Mr Zakhar Baranchykov

15:33

15:33

Rapid Poster Sessions: Session 5: Poster Rapid II — Sustainable Materials and Technologies

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

15:33–15:37

Comparison of Theoretical and Experimental Raman and Infrared Spectra of P(VDF-TrFE): Phase and Composition Sensitivity

Speaker
Dmytro Zaporoshchenko

15:37–15:41 **Aziridinium Cation based Cadmium Halide Hybrids**

Speaker
Danylo Kreiman

15:41–15:45

Band-structure evolution in Cs2AgxNa1-xInCl6 double perovskites and its manifestation in VUV-excited photoluminescence

Speaker
Denys Orlov

15:45–15:49

Singlet Oxygen Generation by Different Types of MXenes ($Ti_3C_2T_x$) and Ti_3AlC_2 and Ti_3SiC_2 MAX Phases under Near-IR Excitation

Speaker
Nazarii Tkach

15:49–15:53

Optical Properties and Singlet Oxygen Generation in Tryptanthrin/MoS_2 Nanosystems

Speaker
Nazarii Tkach

15:53–15:57

Silicon incorporation and dislocation-related traps in GeSn and GeSiSn layers on Si: an impedance and photocurrent study

Speaker
Andrii Pocherpailo

15:57–16:01

Investigation of the influence of natural scenes conditions on thermal contrast and detection range of phase-change materials

Speaker
Yevhen Melezhyk

16:01–16:05

Low-Cost Real-Time Frame-to-Event Converter for Prototyping Event-Based Obstacle Detection

Speaker
Vitalii Bortnik

16:05–16:09 **Water in Structures and Vibrations of Cellulose and Methylcellulose**

Speaker
Danylo Morozov

16:10

16:30

Rapid Poster Sessions: Session 6: Poster Rapid III — Semiconductors, Optics, THz Techniques and Bio-Optics

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

16:30–16:34

Formation and properties of barrier structures based on p-CdTe:Cl fabricated by laser-induced indium doping

Speaker
Serhii Levytskyi

16:34–16:38

Deep Level Admittance Spectroscopy of PEDOT:PSS/Si Heterostructure

Speaker
Oleh Bozhko

16:38–16:42

Heterogeneity and oxidation of layered porous silicon studied by spectroscopic ellipsometry

Speaker
Taras Veremeichyk

16:42–16:46

Electrical Tuning of the Graphene Mode in a One-Dimensional Terahertz Photonic Microcavity with a Multilayer Graphene Stack: Effects of Gate Voltage and Number of Layers

Speaker
Solmaz Salary

16:46–16:50
Sub-Terahertz Penetration Loss Measurements at 131.6 GHz for Indoor Environments

Speaker
Andrii Shekera

16:50–16:54
Concepts for propagation-invariant spatiotemporal optical vortex formation

Speaker
Dmytro Ivanskyi

16:54–16:58
High-resolution fabrication of diffractive optical elements by direct laser writing

Speaker
Dmytro Manko

16:58–17:02
Tracking the thermostimulated diffusion in the structures 'Ag–$As_{40}S_{60}$ superthin film' with surface plasmon-polaritons

Speaker
Sergii Mamykin

17:02–17:06 **Automatic Control System for a Precision Diffuse Optical Emitter**

Speaker
Viktor Shyshkin

17:06–17:10
The influence of spectral composition and intensity of LED phytolighting on the growth of higher and lower plants

Speaker
Praskoviya Boltovets

17:10–17:14
Optical–Digital Analysis of Leaf Venation: Integrating Light and Scanning Electron Microscopy with Digital Morphometry

Speaker
Oksana Futorna

17:14–17:18 **Structural properties of chitosan and chitosan-based composites**

Speaker
Diana Hurova

17:18–17:22
Quantitative Assessment of Tryptophan Content in the Blood Plasma of Oropharyngeal Cancer Patients

Speaker
Tymur Isokov

17:22–17:26
Effect of Si doping and annealing on optical properties of MOCVD-grown β-Ga_2O_3 thin films

17:45

Speaker
Andrii Kozak