SPO 2026 — Programme at a glance · Monday–Wednesday

27th Symposium on Photonics and Optics · Kyiv · 2–6 November 2026 · online (Zoom)
Times in **CET** (UTC+1); Kyiv is one hour later

MONDAY

2 November
Workshop on Ultrafast Phenomena
Chair: Danylo Babich

08:20 OPENING OF SPO 2026 — PROF. SERHIY KONDRATENKO

Mo1 08:30–10:10
Ultrafast X-ray Probes, Strain and Acoustics

08:30 Nelson N. Hua
09:00 **Thomas Pezeril**
09:40 Ritwika Mandal

COFFEE 10:10–10:25

Mo2 10:25–12:20
Photoinduced Phase Transitions

10:25 **Hervé Cailleau**
11:05 Damien Léa
11:35 Denisa Colțuneac
11:50 Elizabeth M. Skoropata

LUNCH 12:20–13:10

Mo3 13:10–14:50
THz Spintronics and Terahertz Sources

13:10 **Lukáš Nádvorník**
13:50 Artem Levchuk
14:20 Peter Kubaščík

COFFEE 14:50–15:10

Mo4 15:10–16:50
Spin–Lattice Coupling: Experiment and Theory

15:10 **Urs Staub**
15:50 Leonie C. Spitz
16:20 Maryna Pankratova

TUESDAY

3 November
Workshop on Advanced Laser Science and Applications
Chair: Rostyslav Danylo

08:00 OPENING · ROSTYSLAV DANYLO

Tu1 08:10–09:50
Ultrafast Laser Sources and Amplification

08:10 **Federico J. Furch**
09:00 **Ondřej Hort**

COFFEE 09:50–10:10

Tu2 10:10–11:50
High-Intensity Pulses and Attosecond Science

10:10 **Tamás Nagy**
11:00 **Cord Arnold**

11:50 CLOSING · DISCUSSION

AFTERNOON FREE

How to read

Bold — plenary talk; other names are invited and contributed talks.

Mo2 — session code: day + session. Talk **Mo2.1** carries the same code in the day pages and in the Book of Abstracts.

Times in CET (UTC+1). Kyiv (EET, UTC+2) is one hour later; the day pages give both.

Rapid posters: 4-minute talks, listed in programme order.

WEDNESDAY

4 November
3rd USyNC Workshop · synchrotron and neutron
Chairs: Artem Yakovliev · Danylo Babich

08:00 OPENING · A. A. KORDYUK

We1 08:10–09:30
SOLARIS: Facilities and Beamlines

08:10 Marcin Sikora
08:30 Natalia Olszowska
09:00 Danylo Babich
09:15 Tomasz Wróbel

COFFEE 09:40–10:00

We2 10:00–12:10
Synchrotron and XFEL Photon Science

10:00 **Luc Patthey**
10:40 Eugenio Paris
11:10 Myron S. Huzan
11:40 Cormac McGuinness
11:55 Igor Beinik

LUNCH 12:10–13:00

We3 13:00–14:00
ARPES and Topological Quantum Materials

13:00 Volodymyr Bezguba
13:30 Tetiana Zakusylo
13:45 Larysa Khomenkova

We4 14:00–16:35
Neutron Methods for Materials Research

14:00 Astrid Schneidewind
14:10 Anatoliy Senyshyn
14:35 Oleksandr Prokhnenko
14:50 Oleksandr Tomchuk
15:05 Yehor Kosiachkin
15:20 Oleg Petrenko
15:35 Vasyl Ryukhtin
15:50 Anastasiia Sakhatska
16:05 Ivan Guk
16:20 Andrii Zelinsky

16:35 CONCLUDING REMARKS

AFTERNOON FREE

SPO 2026 — Programme at a glance

Thursday–Friday

27th Symposium on Photonics and Optics · Kyiv · 2–6 November 2026 · online (Zoom)

Times in **CET** (UTC+1); Kyiv is one hour later

THURSDAY

5 November

Laser Processing (am) · Sustainable Materials (pm)

Chair: Volodymyr Dzhagan

08:00 **OPENING · VOLODYMYR DZHAGAN**

LASER PROCESSING

Th1 — 08:05–09:55

Ultrafast Ablation and Laser Modification of Materials

- 08:05 Mindaugas Gedvilas
- 08:35 Amit Verma
- 09:05 Vladyslav Dzhahan
- 09:25 Danylo Havryliuk
- 09:40 Stanislav Serhiichuk

COFFEE 09:55–10:15

Th2 — 10:15–11:30

Laser Synthesis and Direct Laser Writing

- 10:15 Enrico D. Russo
- 10:45 Volodymyr Yukhymchuk
- 11:00 Ievgen Beliak
- 11:15 Oleksii Manko

LUNCH 11:30–12:30

12:30 **OPENING · VOLODYMYR DZHAGAN**

SUSTAINABLE MATERIALS

Th3 — 12:35–14:35

Hybrid Perovskites and Photoactive Materials

- 12:35 Illia Guralskyi
- 13:05 Valerii Sirenko
- 13:20 Hanna Petrosova
- 13:35 Dmytro Haleliuk
- 13:50 Olesia Kucheriv
- 14:05 Oleg Dimitriev

COFFEE 14:35–14:55

Th4 — 14:55–16:55

Earth-Abundant Semiconductors, Thin Films and Sensors

- 14:55 Galina Gurieva
- 15:25 Oleksandr Stroyuk
- 15:55 Oleksandra Ivakhno-Tsehelnyk
- 16:10 Tomash Sabov
- 16:25 Dovile Cibiraite-Lukenskiene

FRIDAY

6 November

Conference on Optics and High Technology Material Science

Chair: Kateryna Yablochkova

08:00 **OPENING · KATERYNA YABLOCHKOVA**

Fr1 — 08:10–09:40

Laser Radiation, Optics and Spectroscopy

- 08:10 Liudmyla Derzhypolska
- 08:40 Artem Podshebiakin
- 08:55 Andrii Lopatynskyi
- 09:10 Mariia Pashchenko

COFFEE 09:40–10:00

Fr2 — 10:00–11:45

Functional Ceramics, Glasses and Composites

- 10:00 Kateryna Terebilenko
- 10:30 Younes Elalaoui
- 10:45 Binayak Mukherjee
- 11:00 Saicharen Lakshmanan
- 11:15 Rostyslav Vazhnenko
- 11:30 Oleksandr Zaichenko

LUNCH 12:00–13:00

Fr3 — 13:00–13:45

Thin Films, Nanostructures and Materials Physics

- 13:00 Polina Shamrovska
- 13:15 Eugene Bortchagovsky
- 13:30 Vladyslav Tsehelnyi

Fr4 — 13:45–14:33

Poster Rapid I — Ceramics, Glasses and Composites

12 rapid posters, 4 min each: Saicharen Lakshmanan · Ayush K. Samal · Vita Prosolenko · Viktor Bardakov · Oleksandr Melnichuk · Oleksii Sakhniuk · Kateryna Terebilenko · Vasyl Cherevyshnyi · Vitalii Chornii · Mykola Melnichenko · R. Karapinar · Zakhar Baranchykov

Fr5 — 14:33–15:09

Poster Rapid II — Sustainable Materials and Technologies

9 rapid posters, 4 min each: Dmytro Zaporoshchenko · Danylo Kreiman · Denys Orlov · Nazarii Tkach · Nazarii Tkach · Andrii Pocherpailo · Yevhen Melezhyk · Vitalii Bortnik · Danylo Morozov

COFFEE 15:10–15:30

Fr6 — 15:30–16:26

Poster Rapid III — Semiconductors, Optics, THz Techniques and Bio-Optics

14 rapid posters, 4 min each: Serhii Levytskyi · Oleh Bozhko · Taras Veremeichyk · Solmaz Salary · Andrii Shekera · Dmytro Ivanskyi · Dmytro Manko · Sergii Mamykin · Viktor Shyshkin · Praskoviya Boltovets · Oksana Futorna · Diana Hurova · Tymur Isokov · Andrii Kozak

16:45 **CLOSING OF SPO 2026 — PROF. SERHIY KONDRATENKO**

Monday 2 November

Workshop on Ultrafast Phenomena
08:20–17:00 CET (09:20–18:00 Kyiv)

SPO 2026

NOW

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
08:20 09:20		**Opening of SPO 2026 — Prof. Serhiy Kondratenko** General opening of the symposium: welcome address	
Mo1	**Ultrafast X-ray Probes, Strain and Acoustics** 08:30–10:10 CET		Chair: Danylo Babich
08:30 09:30	Mo1.1	**Ultrafast Time-Resolved X-ray Scattering at XFELs to Study Nonequilibrium Phenomena in Quantum Materials** Nelson Nientsu Hua · Paul Scherrer Institute, Villigen	INVITED 30 min #203
09:00 10:00	Mo1.2	**Laser excitation of giant acoustic waves** Thomas Pezeril · IPR, CNRS, Université de Rennes	PLENARY 40 min #223
09:40 10:40	Mo1.3	**Steering ultrafast phase transitions through photoexcited strain waves in quantum materials** Ritwika Mandal · IMN Jean Rouxel, Nantes Université, CNRS	INVITED 30 min #257
10:10 11:10		COFFEE BREAK · 15 min	
Mo2	**Photoinduced Phase Transitions** 10:25–12:20 CET		Chair: Danylo Babich
10:25 11:25	Mo2.1	**Is Landau Potential Picture Useful for Photoinduced Phase Transitions?** Hervé Cailleau · IPR, Université de Rennes, CNRS	PLENARY 40 min #264
11:05 12:05	Mo2.2	**Ultrafast electron diffraction study of Ti_3O_5 insulator-to-metal photoinduced phase transition** Damien Léa · IPR, Université de Rennes, CNRS	INVITED 30 min #212
11:35 12:35	Mo2.3	**Heat-diffusion simulations of photoinduced phase transitions in Ti_3O_5 probed by ultrafast electron microscopy** Denisa Colțuneac · IPR Rennes / UAIC Iasi	ORAL 15 min #211
11:50 12:50	Mo2.4	**THz-induced phonon mode mixing and collective dynamics in a polar nanolattice** Elizabeth Marie Skoropata · Paul Scherrer Institute, Villigen	INVITED 30 min #273
12:20 13:20		LUNCH · 50 min	
Mo3	**THz Spintronics and Terahertz Sources** 13:10–14:50 CET		Chair: Danylo Babich
13:10 14:10	Mo3.1	**Coherent Sub-Picosecond Magnon Pulses for Ultrafast Spin Transport** Lukáš Nádvorník · Charles University, MFF, Prague	PLENARY 40 min #275
13:50 14:50	Mo3.2	**Tabletop terahertz: generating, shaping and detecting THz pulses with 1 kHz and 80 MHz Ti:Sapphire lasers** Artem Levchuk · LSI, École Polytechnique, CNRS	INVITED 30 min #259

Monday 2 November CONTINUED

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
Mo3	**THz Spintronics and Terahertz Sources (continued)** 13:10–14:50 CET		Chair: Danylo Babich
14:20 15:20	Mo3.3	**Role of electronic and magnonic spin-dissipation channels in terahertz spin-Hall magnetoresistance** Peter Kubaščík · Charles University, MFF, Prague	INVITED 30 min #284
14:50 15:50	COFFEE BREAK · 20 min		
Mo4	**Spin–Lattice Coupling: Experiment and Theory** 15:10–16:50 CET		Chair: Danylo Babich
15:10 16:10	Mo4.1	**Driving atoms to study the spin-lattice interaction** Urs Staub · Paul Scherrer Institute, Villigen	PLENARY 40 min #263
15:50 16:50	Mo4.2	**Before the Pulse: Equilibrium Benchmarks for Ultrafast Magnetophononics** Leonie Christine Spitz · Paul Scherrer Institute, Villigen	INVITED 30 min #242
16:20 17:20	Mo4.3	**Coupled atomistic spin-lattice dynamics simulations of ultrafast magnetisation dynamics** Maryna Pankratova · Uppsala University & University of Skövde	INVITED 30 min #243

Tuesday 3 November

Workshop on Advanced Laser Science and Applications
08:00–12:00 CET (09:00–13:00 Kyiv)

SPO 2026

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
08:00 09:00		**Opening of the workshop — Rostyslav Danylo** Welcome address	
Tu1	**Ultrafast Laser Sources and Amplification** 08:10–09:50 CET		Chair: Rostyslav Danylo
08:10 09:10	Tu1.1	**Overview of Optical Parametric Chirped-Pulse Amplification** Federico J. Furch · Ruhr University Bochum	PLENARY 50 min #290
09:00 10:00	Tu1.2	**Title to be announced** Ondřej Hort · ELI Beamlines, Czech Republic	PLENARY 50 min #291
09:50 10:50		COFFEE BREAK · 20 min	
Tu2	**High-Intensity Pulses and Attosecond Science** 10:10–11:50 CET		Chair: Rostyslav Danylo
10:10 11:10	Tu2.1	**The art of post-compression of intense light pulses** Tamás Nagy · Max Born Institute, Berlin	PLENARY 50 min #292
11:00 12:00	Tu2.2	**Title to be announced** Cord Arnold · Lund University	PLENARY 50 min #293
11:50 12:50		**Closing of the workshop / general discussion**	

Wednesday 4 November

3rd Workshop of the Ukrainian Synchrotron and Neutron Community (USyNC)
08:00–16:50 CET (09:00–17:50 Kyiv)

SPO 2026

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
08:00 09:00		**Opening of the workshop — A. A. Kordyuk** Welcome address	
We1	**SOLARIS: Facilities and Beamlines** 08:10–09:30 CET		Chair: Artem Yakovliev
08:10 09:10	We1.1	**SOLARIS and CERIC-ERIC - research offer and access modes** Marcin Sikora · NSRC SOLARIS, Jagiellonian University, Kraków	INVITED 20 min #215
08:30 09:30	We1.2	**The URANOS Beamline: An Advanced Tool for Electronic Band Structure Research** Natalia Olszowska · URANOS, NSRC SOLARIS, Kraków	INVITED 30 min #294
09:00 10:00	We1.3	**MAVKA at SOLARIS: progress of the "Light for Ukraine" beamline towards first light** Danylo Babich · Paul Scherrer Institute, Villigen	ORAL 15 min #288
09:15 10:15	We1.4	**IR imaging capabilities at the CIRI Beamline in Solaris** Tomasz Wróbel · NSRC SOLARIS, Kraków (CIRI)	ORAL 15 min #295
09:40 10:40		COFFEE BREAK · 20 min	
We2	**Synchrotron and XFEL Photon Science** 10:00–12:10 CET		Chair: Artem Yakovliev
10:00 11:00	We2.1	**SwissFELplus: Enabling the Next Generation of Ultrafast X-ray Science** Luc Patthey · Paul Scherrer Institute, Villigen	PLENARY 40 min #296
10:40 11:40	We2.2	**Spin-orbit excitons and magnetic excitations in iridates across the Mott boundary** Eugenio Paris · Paul Scherrer Institute, Villigen	INVITED 30 min #283
11:10 12:10	We2.3	**Bringing Light to Chemical Processes at the Balder Beamline, MAX IV** Myron S. Huzan · MAX IV, Lund	INVITED 30 min #235
11:40 12:40	We2.4	**NEPHEWS and beyond: Sustainable user access to external Photon and Neutron Infrastructures** Cormac McGuinness · ESUO / Trinity College Dublin	ORAL 15 min #277
11:55 12:55	We2.5	**High-Resolution Soft X-ray Microscopy at MAX IV: New Capabilities and Opportunities** Igor Beinik · MAX IV, Lund University	ORAL 15 min #268
12:10 13:10		LUNCH · 50 min	

Wednesday 4 November CONTINUED

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
We3 ARPES and Topological Quantum Materials 13:00–14:00 CET		Chair: Artem Yakovliev	
13:00 14:00	We3.1	**ARPES-Based Search for Topological Quantum Materials** Volodymyr Bezguba · Kyiv Academic University	INVITED 30 min #267
13:30 14:30	We3.2	**Exploring ferroelectricity and topology in IV–VI semiconductors: an ARPES perspective** Tetiana Zakusylo · Johannes Kepler University Linz	ORAL 15 min #280
13:45 14:45	We3.3	**Synchrotron VUV and structural characterization of zirconia-based nanopowders and ceramics** Larysa Khomenkova · V. Lashkaryov ISP NASU	ORAL 15 min #300
We4 Neutron Methods for Materials Research 14:00–16:50 CET		Chair: Danylo Babich	
14:00 15:00	We4.1	**ENSA – European Neutron Science Association** Astrid Schneidewind · JCNS, Forschungszentrum Jülich	WELCOME 10 min #285
14:10 15:10	We4.2	**Generation and properties of free neutrons** Anatoliy Senyshyn · TU Munich, MLZ	INVITED 25 min #221
14:35 15:35	We4.3	**Neutron Diffraction** Oleksandr Prokhnenko · HZB Berlin	INVITED 15 min #250
14:50 15:50	We4.4	**Small-Angle Neutron Scattering: Principles and Applications** Oleksandr Tomchuk · ISIS Neutron and Muon Source, STFC RAL	INVITED 15 min #286
15:05 16:05	We4.5	**Neutron Reflectometry: the interfaces study technique overview and use-cases** Yehor Kosiachkin · DMSC, ESS	INVITED 15 min #216
15:20 16:20	We4.6	**Introduction to Neutron Spectroscopy** Oleg Petrenko · ILL Grenoble	INVITED 15 min #225
15:35 16:35	We4.7	**Imaging and tomography using monochromatic beams of thermal neutrons** Vasyl Ryukhtin · NPI CAS, Řež	INVITED 15 min #226
15:50 16:50	We4.8	**Advancing Fast-Neutron Imaging with Metal-Halide Detectors** Anastasiia Sakhatska · ETH Zurich	INVITED 15 min #258
16:05 17:05	We4.9	**Neutron source at the MAC NSC "KIPT"** Ivan Guk · NSC KIPT, Kharkiv	INVITED 15 min #241

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
We4		**Neutron Methods for Materials Research (continued)** 14:00–16:50 CET	Chair: Danylo Babich
16:20 17:20	We4.10	**Subcritical Assembly “Neutron Source” at NSC KIPT: Start-Up Results and Current Status** Andrii Zelinsky · NSC KIPT, Kharkiv	INVITED 15 min #287
16:35 17:35		**Concluding remarks** Oleksandr Tomchuk · ISIS, STFC RAL	SUMMARY 15 min

Thursday 5 November

Laser Processing (morning) · Sustainable Materials (afternoon)
08:00–17:00 CET (09:00–18:00 Kyiv)

SPO 2026

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH

WORKSHOP ON LASER PROCESSING OF MATERIALS FOR ADVANCED OPTOELECTRONIC APPLICATIONS

08:00 / 09:00 — **Opening of the workshop — Volodymyr Dzhagan**
Welcome address

Th1 Ultrafast Ablation and Laser Modification of Materials 08:05–09:55 CET — Chair: Volodymyr Dzhagan

08:05 / 09:05 — Th1.1 — **Advances in Efficiency Optimization of Ultrashort Pulse Laser Ablation of Metals**
Mindaugas Gedvilas · FTMC, Vilnius
INVITED · 30 min · #207

08:35 / 09:35 — Th1.2 — **Direct Laser Writing of Reconfigurable Vanadium Dioxide Devices**
Amit Verma · Department of Electrical Engineering; Adjunct Faculty, MSP, IIT Kanpur
INVITED · 30 min · #297

09:05 / 10:05 — Th1.3 — **Raman spectroscopy analysis of laser-induced graphene on polymer**
Vladyslav Dzhahan · Faculty of Physics, KNU
ORAL · 20 min · #276

09:25 / 10:25 — Th1.4 — **Fabrication, Optical, and Electrical Properties of Laser-reduced Graphene Oxide Films**
Danylo Havryliuk · Zaporizhzhia Polytechnic National University
ORAL · 15 min · #282

09:40 / 10:40 — Th1.5 — **Calibration and Application of Industrial Laser Systems for Thin-Film Optoelectronics**
Stanislav Serhiichuk · V. Lashkaryov ISP NASU
ORAL · 15 min · #302

09:55 / 10:55 — COFFEE BREAK · 20 min

Th2 Laser Synthesis and Direct Laser Writing 10:15–11:30 CET — Chair: Volodymyr Dzhagan

10:15 / 11:15 — Th2.1 — **Nanosecond laser-driven local synthesis of semiconductors: from 2D materials to supersaturated Ge-based alloys**
Enrico Di Russo · University of Padova
INVITED · 30 min · #240

10:45 / 11:45 — Th2.2 — **Laser-Induced Crystallization of Ge/Sn Multilayer Amorphous Films**
Volodymyr Yukhymchuk · V. Lashkaryov ISP NASU
ORAL · 15 min · #245

11:00 / 12:00 — Th2.3 — **Real-time optical inspection and classification of defects in DLW-microstructures**
Ievgen Beliak · Institute for Information Recording NASU
ORAL · 15 min · #248

11:15 / 12:15 — Th2.4 — **Deep learning methods for inverse design of diffractive optical elements taking into account technological limitations of direct laser writing**
Oleksii Manko · Institute for Information Recording NASU
ORAL · 15 min · #227

11:30 / 12:30 — LUNCH · 60 min

CET KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH

WORKSHOP ON SUSTAINABLE MATERIALS AND TECHNOLOGIES FOR OPTOELECTRONICS AND SENSORS

12:30 13:30 — **Opening of the workshop — Volodymyr Dzhagan**
Welcome address

Th3 Hybrid Perovskites and Photoactive Materials 12:35–14:35 CET — Chair: Volodymyr Dzhagan

12:35 13:35 — Th3.1 — **Element Mixing in Aziridinium based Hybrid Perovskites towards Tunable Optoelectronic Properties**
Illia Guralskyi · KNU
INVITED · 30 min · #224

13:05 14:05 — Th3.2 — **Cysteine-based Hybrid Perovskite Exhibiting Thermally Tunable Dual-Band Photoluminescence**
Valerii Sirenko · KNU
ORAL · 15 min · #231

13:20 14:20 — Th3.3 — **Synthesis and Structural Phase Behaviour of B-Site-Mixed Methylammonium Lead–Tin Bromide Perovskites**
Hanna Petrosova · KNU
ORAL · 15 min · #237

13:35 14:35 — Th3.4 — **Effect of a cationic surfactant on the formation and optical properties of perovskite quantum dots**
Dmytro Haleliuk · KNU
ORAL · 15 min · #230

13:50 14:50 — Th3.5 — **Structural Diversity and Photocatalytic Properties of Hybrid Ruthenium Coordination Compounds Containing Metal Chloride Anions**
Olesia Kucheriv · KNU
ORAL · 15 min · #233

14:05 15:05 — Th3.6 — **Thermal energy upconversion using thermally-activated delayed fluorescence materials**
Oleg Dimitriev · V. Lashkaryov ISP NASU
INVITED · 30 min · #217

14:35 15:35 — COFFEE BREAK · 20 min

Th4 Earth-Abundant Semiconductors, Thin Films and Sensors 14:55–16:55 CET — Chair: Volodymyr Dzhagan

14:55 15:55 — Th4.1 — **Earth-abundant compound semiconductors for solar energy conversion**
Galina Gurieva · Helmholtz-Zentrum Berlin
INVITED · 30 min · #232

15:25 16:25 — Th4.2 — **High-Throughput Robot-Assisted Screening of Sustainable Lead-Free Perovskite Materials for Energy Harvesting Applications**
Oleksandr Stroyuk · FZ Jülich, HI ERN (IMD-3)
INVITED · 30 min · #298

15:55 16:55 — Th4.3 — **"Green" Aqueous Synthesis and Understanding the Properties of Cu_2MSnS_4 (M = Zn, Ni, Fe) Nanocrystals**
Oleksandra Ivakhno-Tsehelnyk · TU Chemnitz
ORAL · 15 min · #236

16:10 17:10 — Th4.4 — **Controlling phase composition in VOx thin films using getter technologies**
Tomash Sabov · V. Lashkaryov ISP NASU
ORAL · 15 min · #253

16:25 17:25 — Th4.5 — **CMOS field-effect transistor-based optoelectronic sensors and possible applications**
Dovile Cibiraite-Lukenskiene · FTMC, Vilnius
INVITED · 30 min · #209

THU

Friday 6 November

Conference on Optics and High Technology Material Science
08:00–17:00 CET (09:00–18:00 Kyiv)

SPO 2026

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
08:00 09:00		**Opening of the Conference — Kateryna Yablochkova** Welcome address	
Fr1 Laser Radiation, Optics and Spectroscopy 08:10–09:40 CET		Chair: Kateryna Yablochkova	
08:10 09:10	Fr1.1	**Generation, propagation and remote action of laser radiation** Liudmyla Derzhypolska · Institute of Physics, NAS of Ukraine	INVITED 30 min #299
08:40 09:40	Fr1.2	**Lasing of dye-doped mesostructured hybrid films in the critical (near-cutoff) regime: guided and Lummer–Gehrcke modes** Artem Podshebiakin · KNU	ORAL 15 min #260
08:55 09:55	Fr1.3	**Mie-Theory-Based Modeling of Light Extinction Spectra for Size and Shell-Thickness Estimation of Photochemically Synthesized pNIPAM-Coated Silver Nanoparticles** Andrii Lopatynskyi · V. Lashkaryov ISP NASU	ORAL 15 min #270
09:10 10:10	Fr1.4	**Renaissance of Magneto-Optics, or New Challenges – Old Methods** Mariia Pashchenko · FZU – Institute of Physics CAS, Prague	INVITED 30 min #289
09:40 10:40		COFFEE BREAK · 20 min	
Fr2 Functional Ceramics, Glasses and Composites 10:00–11:45 CET		Chair: Kateryna Yablochkova	
10:00 11:00	Fr2.1	**Molten Salts: A Versatile Platform for Engineering Functional Glasses and Crystalline Materials** Kateryna Terebilenko · KNU	INVITED 30 min #251
10:30 11:30	Fr2.2	**Effect of Cesium Doping on the Structural, Electronic, and Optical Properties of BaSnO3: A First-Principles Study for Photovoltaic Applications** Younes Elalaoui · Hassan II University of Casablanca	ORAL 15 min #210
10:45 11:45	Fr2.3	**Electronic properties of inhomogeneous polar textures in $BaTiO_3$: A second-principles study** Binayak Mukherjee · Université de Liège	ORAL 15 min #234
11:00 12:00	Fr2.4	**MgO-Mediated Densification and Electromechanical Hardening in BNT-BT-KNN Lead-Free Piezoceramics: Decoupling Porosity from Acceptor Effects** Saicharen Lakshmanan · Sri Sathya Sai Institute of Higher Learning, India	ORAL 15 min #199
11:15 12:15	Fr2.5	**Effect of Graphite Inclusions on the Mechanical Properties of Silicon Carbide Ceramics** Rostyslav Vazhnenko · KNU, Faculty of Physics	ORAL 15 min #262
11:30 12:30	Fr2.6	**Functionally Graded Polymer-Inorganic Composites as Advanced Wideband Microwave Absorbers** Oleksandr Zaichenko · Lviv Polytechnic National University	ORAL 15 min #247
12:00 13:00		LUNCH · 60 min	

FRI

CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
Fr3 Thin Films, Nanostructures and Materials Physics 13:00–13:45 CET		Chair: Kateryna Yablochkova	
13:00 14:00	Fr3.1	**Structural and optical properties of undoped and Sn-doped β-Ga2O3 thin films deposited by ultrasonic spray pyrolysis** Polina Shamrovska · TU Chemnitz	ORAL 15 min #255
13:15 14:15	Fr3.2	**Exhibition of spatial dispersion in optical properties of lattices of plasmonic nanoparticles** Eugene Bortchagovsky · V. Lashkaryov ISP NASU & TU Chemnitz	ORAL 15 min #303
13:30 14:30	Fr3.3	**Effect of Nanoconfinement on Thermal Transport in Porous Silicon / Phase Change Material Composites** Vladyslav Tsehelnyi · Université de Lorraine, LEMTA	ORAL 15 min #239
Fr4 Poster Rapid I — Ceramics, Glasses and Composites 13:45–14:33 CET		Chair: Kateryna Yablochkova	
13:45 14:45	Fr4.1	**Hydrostatic Piezopotential in Unpoled Polycrystalline Particles: Finite Element Analysis of Grain Disorder, Cavitation Loading and Electrolyte Screening in Lead-Free Piezocatalysts** Saicharen Lakshmanan · Sri Sathya Sai Institute of Higher Learning	POSTER 4 min #200
13:49 14:49	Fr4.2	**Alkali Volatilization as a Hidden Compositional Variable in Ta-Modified KNN: Electrical Characterisation and Preliminary Pencil-Lead-Break Response** Ayush Kumar Samal · Sri Sathya Sai Institute of Higher Learning	POSTER 4 min #238
13:53 14:53	Fr4.3	**Sintering temperature influence on phase stability of scandium-stabilized ZrO_2 ceramics** Vita Prosolenko · Mykola Gogol Nizhyn State University	POSTER 4 min #208
13:57 14:57	Fr4.4	**Dispersion analysis of IR spectra of $Mg_xZn_{1-x}O$ ceramics: phonon behaviour and phase composition** Viktor Bardakov · Mykola Gogol Nizhyn State University	POSTER 4 min #219
14:01 15:01	Fr4.5	**Effect of ZnO electrical conductivity on the composition of hexagonal and cubic phases in MgxZn1-xO ceramics** Oleksandr Melnichuk · Mykola Gogol Nizhyn State University	POSTER 4 min #222
14:05 15:05	Fr4.6	**Frustrated total internal reflection (Otto geometry) in a ZnO/6H-SiC structure: coupling through an air gap, a simulation study** Oleksii Sakhniuk · Mykola Gogol Nizhyn State University	POSTER 4 min #228
14:09 15:09	Fr4.7	**Effect of Fluoride Modification on the Structure and Luminescence of Europium-Doped Phosphomolybdate Glasses** Kateryna Terebilenko · KNU	POSTER 4 min #249
14:13 15:13	Fr4.8	**Optical and electrophysical properties of some porous phosphate-molybdate glasses** Vasyl Cherevyshnyi · KNU	POSTER 4 min #271
14:17 15:17	Fr4.9	**Optical and dielectric properties of gelatin incorporated with K2Eu(PO4)(WO4) microcrystals** Vitalii Chornii · KNU; NULES of Ukraine	POSTER 4 min #261
14:21 15:21	Fr4.10	**Mechanical properties of a Ti–Cu nanocomposite prepared by mechanical alloying** Mykola Melnichenko · KNU	POSTER 4 min #204

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CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
Fr4	**Poster Rapid I — Ceramics, Glasses and Composites (continued)** 13:45–14:33 CET		Chair: Kateryna Yablochkova
14:25 15:25	Fr4.11	**Order in nanoparticles-doped liquid crystals** R. Karapinar · Mehmet Akif Ersoy University, Burdur	POSTER 4 min #202
14:29 15:29	Fr4.12	**Optical Absorption as a Probe of Fluorination and Crystalline Phase in P(VDF-TrFE): A Density Functional Theory Study** Zakhar Baranchykov · KNU	POSTER 4 min #218
Fr5	**Poster Rapid II — Sustainable Materials and Technologies** 14:33–15:09 CET		Chair: Kateryna Yablochkova
14:33 15:33	Fr5.1	**Comparison of Theoretical and Experimental Raman and Infrared Spectra of P(VDF-TrFE): Phase and Composition Sensitivity** Dmytro Zaporoshchenko · KNU	POSTER 4 min #279
14:37 15:37	Fr5.2	**Aziridinium Cation based Cadmium Halide Hybrids** Danylo Kreiman · KNU	POSTER 4 min #229
14:41 15:41	Fr5.3	**Band-structure evolution in Cs2AgxNa1-xInCl6 double perovskites and its manifestation in VUV-excited photoluminescence** Denys Orlov · KNU	POSTER 4 min #246
14:45 15:45	Fr5.4	**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** Nazarii Tkach · KNU, Faculty of Physics	POSTER 4 min #278
14:49 15:49	Fr5.5	**Optical Properties and Singlet Oxygen Generation in Tryptanthrin/MoS_2 Nanosystems** Nazarii Tkach · KNU, Faculty of Physics	POSTER 4 min #281
14:53 15:53	Fr5.6	**Silicon incorporation and dislocation-related traps in GeSn and GeSiSn layers on Si: an impedance and photocurrent study** Andrii Pocherpailo · KNU	POSTER 4 min #205
14:57 15:57	Fr5.7	**Investigation of the influence of natural scenes conditions on thermal contrast and detection range of phase-change materials** Yevhen Melezhyk · V. Lashkaryov ISP NASU	POSTER 4 min #244
15:01 16:01	Fr5.8	**Low-Cost Real-Time Frame-to-Event Converter for Prototyping Event-Based Obstacle Detection** Vitalii Bortnik · Igor Sikorsky KPI	POSTER 4 min #214
15:05 16:05	Fr5.9	**Water in Structures and Vibrations of Cellulose and Methylcellulose** Danylo Morozov · KNU	POSTER 4 min #254
15:10 16:10	COFFEE BREAK · 20 min		
Fr6	**Poster Rapid III — Semiconductors, Optics, THz Techniques and Bio-Optics** 15:30–16:26 CET		Chair: Kateryna Yablochkova
15:30 16:30	Fr6.1	**Formation and properties of barrier structures based on p-CdTe:Cl fabricated by laser-induced indium doping** Serhii Levytskyi · V. Lashkaryov ISP NASU	POSTER 4 min #272

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CET / KYIV	CODE	TALK · SPEAKER · AFFILIATION	TYPE · LENGTH
Fr6		**Poster Rapid III — Semiconductors, Optics, THz Techniques and Bio-Optics (continued)** 15:30–16:26 CET · Chair: Kateryna Yablochkova	
15:34 16:34	Fr6.2	**Deep Level Admittance Spectroscopy of PEDOT:PSS/Si Heterostructure** Oleh Bozhko · KNU	POSTER 4 min #220
15:38 16:38	Fr6.3	**Heterogeneity and oxidation of layered porous silicon studied by spectroscopic ellipsometry** Taras Veremeichyk · KNU	POSTER 4 min #274
15:42 16:42	Fr6.4	**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** Solmaz Salary · University of Tabriz, Iran	POSTER 4 min #206
15:46 16:46	Fr6.5	**Sub-Terahertz Penetration Loss Measurements at 131.6 GHz for Indoor Environments** Andrii Shekera · V. Lashkaryov ISP NASU	POSTER 4 min #265
15:50 16:50	Fr6.6	**Concepts for propagation-invariant spatiotemporal optical vortex formation** Dmytro Ivanskyi · Yuriy Fedkovych Chernivtsi National University	POSTER 4 min #213
15:54 16:54	Fr6.7	**High-resolution fabrication of diffractive optical elements by direct laser writing** Dmytro Manko · Institute for Information Recording NASU	POSTER 4 min #198
15:58 16:58	Fr6.8	**Tracking the thermostimulated diffusion in the structures 'Ag–$As_{40}S_{60}$ superthin film' with surface plasmon-polaritons** Sergii Mamykin · V. Lashkaryov ISP NASU	POSTER 4 min #301
16:02 17:02	Fr6.9	**Automatic Control System for a Precision Diffuse Optical Emitter** Viktor Shyshkin · Igor Sikorsky KPI	POSTER 4 min #252
16:06 17:06	Fr6.10	**The influence of spectral composition and intensity of LED phytolighting on the growth of higher and lower plants** Praskoviya Boltovets · V. Lashkaryov ISP NASU	POSTER 4 min #256
16:10 17:10	Fr6.11	**Optical–Digital Analysis of Leaf Venation: Integrating Light and Scanning Electron Microscopy with Digital Morphometry** Oksana Futorna · KNU; Kholodny Institute of Botany NASU	POSTER 4 min #269
16:14 17:14	Fr6.12	**Structural properties of chitosan and chitosan-based composites** Diana Hurova · B. Verkin ILTPE NASU	POSTER 4 min #266
16:18 17:18	Fr6.13	**Quantitative Assessment of Tryptophan Content in the Blood Plasma of Oropharyngeal Cancer Patients** Tymur Isokov · Institute of Physics, NAS of Ukraine	POSTER 4 min #304
16:22 17:22	Fr6.14	**Effect of Si doping and annealing on optical properties of MOCVD-grown β-Ga_2O_3 thin films** Andrii Kozak · Institute of Electrical Engineering SAS, Bratislava	POSTER 4 min #305
16:45 17:45		**Closing of SPO 2026 — Prof. Serhiy Kondratenko** Closing remarks	

SPO 2026

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