

15/06 MON

11:00 - 13:00	Registration & Welcome coffee		
13:00 - 13:20	Opening		110 (Alfa)
13:20 - 14:00	Chair: A. Sternbergs	Janis Timoshenko (DE) Tracking Heterogeneous Structures of Electrocatalysts with Synchrotron- and Lab-based Operando XAS and Machine Learning	110 (Alfa)
14:00 - 14:20	Chair: A. Sternbergs	Christoph Deusen (DE) 3D Optical Profilometer LEXT OLS5500	110 (Alfa)
14:20 - 15:20 Lunch			
	1-1 Ferroelectrics and Functional Materials 110 (Alfa)	1-2 Large-Scale Research Infrastructures, Science Policy and Collaboration 103/104	1-3 Materials for Energy, ARMS Project Workshop 301
15:20 - 15:50	Chair: J. Timoshenko Andrei Kholkin (LV) Magnetolectric and ferroionic structures for microelectronic and biomedical applications	Chair: A. Anspoks Ivars Ijabs (LV) EU Research and Innovation Policy: the Main Challenges the Next Framework Programme (FP10)	Hamed Pourkheirollah (FI) A technical overview of the ARMS project 🕒 10min
15:50 - 16:20	Ernesto Alfaro-Moreno (PT) Integrating Functional Material Design with Advanced Safety Assessment	Alevtina Smekhova (DE) X-ray absorption spectroscopy as an advanced characterization tool for compositionally complex systems	Aleksandrs Volperts (LV) Synthesis of biomass-based activated carbons for electrochemical applications 🕒 15min
16:20 - 16:40	Svitlana Kopyl (PT) Self-Assembled 2D Peptide Crystals and Thin Films	Yaroslav Zhdachevskyy (PL) Trap states engineering to improve the persistent luminescence performance of LiGa ₅ O ₈ spinel-based phosphors	Davis Kalnins (LV) Supercapacitors: Principles and Electrochemical Measurement Techniques 🕒 20min
16:40 - 17:00	Simonas Ramanavicius (LT) Ferrite Based Functional Nanomaterials for Practical Applications	Sergii Ubizskii (UA) The nanopowder synthesis and ceramics sintering of Mg _{1-x} A _x Al ₂ O ₄ (A = Zn, Ca, Sr, Ba) spinels and their structure peculiarities study	Remuel Vitto (FI) ALD on supercapacitor electrodes and their electrochemical behavior 🕒 20min
17:00	Transfer to the Welcome Party at the ISSP UL		
18:00 - 20:00	Welcome Party at ISSP UL, 8 Kengaraga Street, Riga		

16/06 TUE

8:30	Registration		
9:00 - 9:40	Chair: A. Kholkin	Aymeric Robert (SE) MAX 4U: the first fourth-generation lightsource upgrade	110 (Alfa)
9:40 - 10:20	Chair: A. Kholkin	Lars Österlund (SE) Functional Chromogenic Nanostructures for Energy, Optics, and Display Technologies	110 (Alfa)
10:20 - 10:40 Coffee break			
	2-1 Materials for Energy 110 (Alfa)	2-2 Theoretical Modeling of Functional Materials and Devices 103/104	2-3 Large-Scale Research Infrastructures, Science Policy and Collaboration 202
10:40 - 11:10	Chair: R. Merkle Marit Kauk-Kuusik (EE) Advancing Earth-Abundant Photovoltaic Materials through Smart Processing Design	Chair: R. Eglitis Eugene Kotomin (LV) First principles computer modelling of advanced materials for fusion applications	Chair: J. Purans Alexei Kuzmin (LV) X-ray absorption spectroscopy study of polycrystalline V _{1-x} Re _x O ₂ solid solution
11:10 - 11:40	Johannes Lischner (UK) Hot electrons in plasmonic nanoparticles: from creation to catalysis	Denis Gryaznov (LV) First-principles computational design of air electrode materials	Aleksandr Kalinko (DE) XAFS Spectroscopy at PETRA III: Capabilities and Applications of the PG4 and PG5 beamlines
11:40 - 12:00	Ali Zavabeti (AU) Liquid Metal Nano-Interface Engineering for Waste-to-Energy Storage Applications	Ivan Novoseltsev (EE) Investigation of crystal structures, stability, electronic structure and optical properties of XH _{2-2x} O ₃ (X=V, La, Nd, Nb, Zr) oxyhydrides by first-principles calculations	Oksana Chukova (DE) Optimization of Sol-Gel Synthesis Parameters for LaAlO ₃ Nanoparticles and Their Impact on Luminescence Properties
12:00 - 12:20	Evelina Dudutienė (LT) Emission from bismuth quantum dots formed in annealed GaAsBi quantum wells	Ondrej Krejci (FI) Accelerating Atomic Configuration Identification on Reconstructed Surfaces with Machine Learning	Armi Tiihonen (SE) Bayesian optimization machine learning method tuned for high-throughput sample fabrication
12:20 - 13:20 Lunch			
13:20 - 14:00	Chair: A. Kuzmin	Prof. Mikhail Brik (EE) Crystal field theory, DFT and machine learning studies of phosphor materials	110 (Alfa)
14:00 - 14:40	Chair: A. Kuzmin	Ms. Tina Benda (SI) EIT RawMaterials	EIT RawMaterials Informative seminar 🕒 15:00 - 16:30 Innovation Funding and commercialisation opportunities 203
14:40 - 15:00 Coffee break			
	3-1 Materials for Energy 110 (Alfa)	3-2 Technologies and Devices 204	3-3 Ferroelectrics and Functional Materials 201
15:00 - 15:30	Chair: E. Kotomin Rotraut Merkle (DE) Protons in mixed-conducting perovskites: Why, how many, and how fast?	Chair: H. Klym Ruitao Wen (CN) Electrochromic materials for visible and near infrared light modulation	Chair: D. Gryaznov Volker Sittinger (DE) Hybrid SALD-PVD approaches for electron contact layers in perovskite/silicon tandem solar cells
15:30 - 16:00	Vytautas Klimavicius (LT) NMR Investigation of NASICON-based materials for Aqueous Batteries Applications	Smagul Karazhanov (LV) Photochromic coatings: fundamentals and applications	Mantas Šimėnas (LT) Emergence of a relaxor phase and dimensional tuning in mixed 2D hybrid perovskites
16:00 - 16:20	Anna Piduzhna (LV) Technical Parameters and Principles of Charging and Discharging in Lithium-Ion Batteries	Arturs Bundulis (LV) Polymer Photonics for Highly Nonlinear Host-Guest System Integration in Photonic Integrated Circuits	Yevhen Brych (IE) Exploring ferroelectric and electrical properties in Cobalt Doped BiFeO ₃ prepared via modified chemical solution method
16:20 - 16:40	Alexey Rulev (CH) Lattice Dynamic - Based Design of Light Ion Conductors	Jana Andzane (LV) Hybrid Metal Oxide Nanowires for Bias-Free Photo-Driven Simultaneous Energy Generation and Carbon Dioxide Reduction	Reinis Ignatans (LV) Induced piezoelectric effect in cubic materials and improvement of the temporal response
16:40 - 17:00	Bejan Hamawandi (LV) Versatile Solution-Based Synthesis of Nanostructured Thermoelectric Materials with Their Transport Property Evaluation	Artūrs Mozers (LV) Quantum Magnetometry in the University of Latvia: Towards Functional Prototypes	Roberts Eglitis (LV) Ab initio calculations of ABO ₃ Perovskite (001) Surfaces, Interfaces, and Oxygen Vacancies Therein
17:00 - 17:20	Pascal Henkel (FI) How stable are mixed-metal chalcogenides?	Margarita Anna Zommere (LV) Single Photon source and its development in Latvia	Līga Jasulaneca (LV) Atomic Drums Without Order
17:20 - 17:40	Official Conference Photo		2nd floor atrium
17:40 - 20:00	Poster Session		103/104, 2nd floor atrium

17/06 WED

8:30	Registration		
9:00 - 9:40	Chair: A. Sarakovskis	Marko Huttula (FIN) Scaling research: From photoelectron-ion coincidences to photocatalytic solar hydrogen production	110 (Alfa)
9:40 - 10:20	Chair: A. Sarakovskis	Miroslav Dramicanin (SRB) Reimagining Luminescence Thermometry: Unleashing the Potential of Comprehensive Spectral Analytics for Unmatched Precision	110 (Alfa)
10:20 - 10:40 Coffee break			
	4-1 Materials for Photonics 110 (Alfa)	4-2 Ferroelectrics and Functional Materials 202	4-3 Technologies and Devices 725
10:40 - 11:10	Chair: A. Sarakovskis Marco Kirm (EE) Energy relaxation processes resulting in ultrafast cross-luminescence and intraband	Chair: O. Chukova Edvardas Kazakevičius (LT) In situ monitoring of crystallization in glassy mixed ionic-electronic conductors through impedance spectroscopy	Chair: S. Karazhanov Prof. Kwang Leong Choy (CN) Nanostructured Materials for a Sustainable Future: Eco-Friendly Design, Processing, and Performance
11:10 - 11:40	Dariusz Hreniak (PL) Defect related luminescence properties of CaF ₂ nanocrystals doped with rare-earth ions	Marina Tyunina (FI) Substrate-controlled point defects in thin films of perovskite oxides	Vittorio Morandi (IT) EuroNanoLab distribute nanofabrication facility for Europe
11:40 - 12:10	Halyna Klym (UA) Positron annihilation approaches to the study of free-volume defects in functional nanostructured materials	Juris Purans (LV) Deposition of ZnO-Ga ₂ O ₃ and Ir ₂ O ₃ -Ga ₂ O ₃ thin films by reactive co-sputtering of liquid gallium	Alexandr Dejneka (CZ) From Optics to Integrated Innovation Ecosystems: Interdisciplinarity as a Strategic Tool for European Competitiveness
12:10 - 12:30	Viktorija Paramonova (LV) Plasmonic Silver Nanoparticles: Synthesis and Optical Response	Anna Marta Zeberga (LV) Collagen-SPION Magnetic Nanocomposites for Small-Scale Oil Spill Remediation in Water Basins	Anna Wojsiat Soosaar (EE) Femtosecond Laser Treatment of Graphene for Gas Sensing Applications
12:30 - 13:10 Lunch			
	5-1 Materials for Photonics 110 (Alfa)	5-2 Ferroelectrics and Functional Materials 202	5-3 Technologies and Devices 725
13:10 - 13:30	Chair: R. Ignatans Sergei Krylov (SK) Study of thin Py films suitable for excitation of surface spin-wave	Chair: M. Tyunina Volker Eyert (FR) Machine-Learned Potentials for Transition-Metal Oxides	Chair: M. Brik Maksym Buryi (CZ) Synthesis of the advanced nanomaterials by implementing principles of plasma chemistry 🕒 13:10-13:40
13:30 - 13:50	Manivel Rajan (EE) Luminescence properties of Cs ₂ HfF ₆ : the observation of self-trapped and perturbed excitons using synchrotron radiation	Donats Erts (LV) Ionic thermoelectric energy harvesting and storage using nanoconfined aqueous electrolytes	CHIN SHAN LUE (TW) Single crystal growth of functional materials at NCKU 🕒 13:40 - 14:10
13:50 - 14:10	Boris Polyakov (LV) Comparative Study of Thermal, Current-Induced, and Laser-Induced Melting of Ag and Au Nanoplates	Uday Pratap Singh Kushwah (EE) First principles studies of ternary hexafluorides as scintillators for medical imaging technologies	Ljubica Đaćanin Far (RS) Full-spectrum Principal Component Analysis-polynomial calibration-for the high-accuracy luminescence thermometry with Eu ³⁺ /Dy ³⁺ co-Doped La ₂ O ₃ S 🕒 14:10 - 14:30
14:10 - 14:40 Coffee break			
14:40 - 18:00	Excursion to the Jurmala Open-Air Museum, Tiklu iela 1A, Jurmala		
18:30 - 22:00	Conference Dinner at Semarah Hotel Lielupe, Bulduru prospekts 64, Jurmala		

18/06 THU

8:30	Registration		
9:00 - 9:40	Juras Banys (LT) Microwave Spectroscopy of Ferroelectrics and Related Materials		110 (Alfa)
9:40 - 10:20	Viviana Andrea Claveria Pizarro (LV) Microworlds on chips: microfluidics, biosensing, and scalable Lab-to-Fab technologies		110 (Alfa)
10:20 - 10:40 Coffee break			
	6-1 Microfluidics and Biomedical technologies 110 (Alfa)	6-2 Theoretical Modeling of Functional Materials and Devices 103/104	6-3 Materials for Photonics 205
10:40 - 11:10	Chair: M. Elksne Damien Faivre (LV) Controlling Swarms of Magnetic Micro- and Nanoswimmers	Chair: A. Popov Maytal Caspary Toroker (IL) Charge transport through catalytic materials	Chair: TBD Paul Stradins (US) Nanostructured Materials for Silicon Photovoltaics
11:10 - 11:40	Una Riekstina (LV) Microfluidic PDAC-on-a-Chip for Patient-Specific Drug Testing	Vyacheslavs Kashcheyevs (LV) Single-electron quantum technologies	Viktorija Pankratova (FI) Influence of europium ion doping on photoinduced properties of 2D cobalt hydroxide 🕒 11:10 - 11:30
11:40 - 12:10	Arunas Stirke (LT) Advances in Microfluidic Electrochemical Biosensors for Microbial Biofilm Analysis	Ahmet Burak Baloglu (EE) Enhanced thermal stability in graphene-based gas sensors through thin antimony oxide films	Igors Mihailovs (LV) Compute-Me-(Not): The bulky groups attached to nonlinear optical chromophores 🕒 11:30 - 11:50
12:10 - 12:30	Amit Blumberg (IL) Turning Strategy into Practice: SWOT Analysis for Integrating Microfluidic Rapid DNA Technologies		Arturs Medvids (LV) Comparative Analysis of Nanostructures Formation in Semiconductors by Laser Irradiation and Stranski-Krastanov Methods 🕒 11:50-12:10
12:30 - 12:45 Closing Ceremony 110 (Alfa)			
12:45 - 13:15 Closing Refreshments & Networking			
SWEB Summer School on Functional Coatings and X-Chromic Materials			
ISSP UL, 8 Kengaraga Str, Riga			
🕒 14:00 - 18:30 Thursday			
🕒 9:30 - 17:40 Friday			
The Summer School program is focused on modern thin-film technologies, experimental methods, smart functional devices, and digital tools for materials design. The program combines short lectures, hands-on demonstrations, and practical training sessions using advanced research software.			