

**Session S1 - Fundamentals of Crystal Growth and Modeling**

- S1.01** Numerical modelling of turbulent heat transfer in laboratory Czochralski system model with InGaSn eutectic  
Andrejs Sabanskis (University of Latvia, Latvia)
- S1.02** DFT modeling of the incorporation and diffusion of Ge and Si dopants in (In)GaN  
Karol Kawka (Unipress, Poland)
- S1.03** Experimental and numerical investigation of LiBr crystal growth using the CZ method  
Krišjanis Kalme (University of Latvia, Latvia)
- S1.04** Computational Fluid Dynamics for determining the interplay between stirring technique and crystal size distribution  
Michał Kołodziej (Rzeszów University of Technology, Poland)
- S1.05** Study of analytical solutions of the Cabrera and Levine equation without considering elastic effects  
Oksana Podshyvalova (Kharkiv Aviation Institute, Ukraine)
- S1.06** Decomposition and reaction of ammonia in nitride MOVPE condition analyzed by time-of-flight mass spectrometry  
Shugo Nitta (Nagoya University, Japan)

**Session S3 - Crystals for Energy Production, Saving and Storage**

- S3.01** Control over sodium sulfate hydrates formation upon temperature cycling for sustainable thermal energy storage  
Anne Claude (University of Amsterdam, Netherlands)
- S3.02** Multi-metallic nanolayers boost  $\text{Cu}_2\text{ZnSnS}_4$  solar cell performance  
Fang-i Lai (Yuan-Ze University, Taiwan)
- S3.03** A detailed interfacial analysis of interaction of Li and Na-ions with eutectic composites: for battery application  
Sanjit Saha (ENSEMBLE<sup>3</sup>, Poland)
- S3.04** Growth and Investigation of Hexagallate Substrate Crystals for Strain-Engineered Functional Oxide Layers  
Matthias Bickermann (Leibniz-Institut für Kristallzüchtung, Germany)

**Session S4 - Crystals for Optics**

- S4.01** Co-Doping Effects on Anti-Stokes Fluorescence Cooling in Yb:YLF  
Matthias Bickermann (Leibniz-Institut für Kristallzüchtung, Germany)
- S4.02** Growth of  $(\text{Lu}_{1-x}\text{Tb}_x)_2\text{O}_3$  Single Crystals by Optical Floating Zone for Magneto-Optic Applications  
Aravinthkumar Padmanaban (ENSEMBLE<sup>3</sup>, Poland)
- S4.03** Chemical analysis, crystal structure and optical properties of thulium-doped fluoride single crystals  
Gabriel Buse (West University of Timisoara, Romania)
- S4.04** Applications of Eutectic materials for wireless communication technology  
Hamid Reza Darabian (ENSEMBLE<sup>3</sup>, Poland)
- S4.05** Eutectic microspheres, their solidification and properties  
Katarzyna Sadecka (ENSEMBLE<sup>3</sup>, Poland)

- S4.06** Epitaxial growth and characterization of (100) oriented Potassium Titanyl Arsenate ( $\text{KTiOAsO}_4$ ) thin film by Pulsed Laser Deposition  
Adrien Clavel (Institut Néel, CNRS, France)
- S4.07** Eutectics based on optically active crystals grown by micro-pulling-down method  
Oleksandra Kryzhanovska (ENSEMBLE<sup>3</sup>, Poland)
- S4.08** Study of nonlinear optical crystals: L-nitroarginine perchlorate and L-nitroarginine tetrafluoroborate  
Ruzan Sukiasyan (Institute of Applied Problems of Physics, NAS of Armenia, Armenia)
- S4.09** Growth and Improved Properties of Single Crystals  $\alpha\text{-LiIO}_3$  Doped with L-Alanine and Glycine  
Ruzan Sukiasyan (Institute of Applied Problems of Physics, NAS of Armenia, Armenia)
- S4.10** Growth of gradient-doped YAG:Nd crystals by HDC method with double crucible  
Sergii Nizhankovskyi (Institute for Single Crystals NAS of Ukraine, Ukraine)
- S4.11** Europium doped  $\text{ZnO-ZnWO}_4$  eutectic composite for lighting and security applications  
Monika Tomczyk (ENSEMBLE<sup>3</sup>, Poland)
- S4.12** Spectroscopic study of  $\text{TmF}_3$ -doped  $\text{CaF}_2$  single crystals  
Maria Poienar (West University of Timisoara, Romania)

**Session S5 - Crystals and Films for Sensors and Detectors**

- S5.01** Growth of porous GaN for a gate of HEMT-Based Sensor  
Kamila Nowak (Łukasiewicz Research Network-PORT, Poland)

**Session S6 - Crystallization for Food and Pharmaceutical Production**

- S6.01** Temperature-mediated switch of the phase behavior to separate enantiomers of methyl p-tolyl sulfoxide  
Markiian Korbetskyi (Rzeszów University of Technology, Poland)

**Session S7 - Growth of Nanocrystals**

- S7.01** On the effect of simulated annealing on structural and energetic properties of some silicon nanoparticles: a molecular dynamics survey  
Lynda Amirouche (USTHB, Algeria)
- S7.02** Calibration of surface temperature of thin ZrN buffer layers for GaN nanowire growth by plasma-assisted MBE  
Marta Sobańska (Institute of Physics PAS, Poland)
- S7.03** Chemical bath deposition of semiconductor nanorods in continuous flow reactors: control over the morphology  
Ondrej Cernohorský (Czech Academy of Science, Czech Republic)

**Session S9 - Bio-crystallization**

- S9.01** Predicting the properties of polytryptophan crystals  
Łukasz Mioduszewski (Cardinal Stefan Wyszyński University, Poland)