THE 20TH BALTIC CONFERENCE
ON INTELLECTUAL COOPERATION
NANOMATERIALS AND NANOTECHNOLOGY THROUGH TIME: PAST INSIGHTS, PRESENT ADVANCES, FUTURE DIRECTIONS

Conference programme

Thursday 6th May 2027

Venue: Lithuanian Academy of Sciences.
Gedimino Avenue 3, 01102 Vilnius

Time	Speaker	Title of the presentation
8:00–9:00	**Registration.**	
9:00–9:30	**OPENING CEREMONY.** ***Chair of the session Prof. Aivaras Kareiva.*** Welcome by President of Lithuanian Academy of Sciences Vytautas Nekrošius. Welcome by Representative of the Ministry of Economy and Innovation of the Republic of Lithuania. Welcome by President of Estonian Academy of Sciences Mart Saarma. Welcome by President of Latvian Academy of Sciences Ivars Kalvins. Welcome by Chairman of Finnish Society of Sciences and Letters Jan Sundberg.	
9:30–9:55	**Keynote lecture.** **Prof. Dariusz Hreniak,** Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Poland.	Cooperative phenomena in rare-earth-doped persistent luminescent nanomaterials and their potential applications in the design of new phosphors
9:55–10:20	**Keynote lecture.** **Prof. Arunas Ramanavičius,** Vilnius University and Lithuanian Academy of Sciences, Lithuania	**To be announced**
10:20–10:45	**Invited speaker.** **Prof. Anatolijs Šarakovskis,** Institute of Solid State Physics, University of Latvia, Latvia	Upconversion luminescence in oxyfluoride glass and nanoceramics
10:45–11:10	**Invited speaker.** **Prof. Maria Luisa Saladino,** University of Palermo, Italy	Luminescent markers for cultural heritage objects
11:10–11:30	**Coffee break.**	

Time	Speaker	Title of the presentation
	Chair of the session Prof. Markku Leskela.	
11:30–11:55	**Keynote lecture.** **Prof. Olli Ikkala,** Aalto University, Finland	To be announced
11:55–12:20	**Keynote lecture.** **Dr. Monika Mortimer,** National Institute of Chemical Physics and Biophysics, Estonia	Navigating the Nanoworld Responsibly: From Early Toxicological Insights to Safe-and-Sustainable-by-Design Nanomaterials
12:20–12:45	**Keynote lecture.** **Prof. Maksym Pogorelov,** University of Latvia, Latvia	2D nanomaterials MXenes for biomedical applicatiopns: hype and promiss
12:45–13:10	**Keynote lecture.** **Prof. Natalia Sobczak,** Institute of Metallurgy and Materials Science, Polish Academy of Sciences, Poland	High-Temperature Interactions and Bonding of Liquid Metals with Graphene- and Oxide-Based Aerogels
13:10–13:25	**Invited speaker.** **Dr. Maira Elksne,** Institute of Solid State Physics, University of Latvia	Organ-on-a-chip; devices for the separation and detection of extracellular vesicles and other cancer biomarkers
13:25–14:30	**Lunch.**	
	Chair of the session Dr. Monika Mortimer.	
14:30–14:55	**Keynote lecture.** **Prof. Tambet Teesalu,** University of Tartu	Homing peptides for precision nanomedicine: from discovery to clinical translation
14:55–15:20	**Keynote lecture.** **Prof. Donats Erts,** University of Latvia, Latvia	Nanomaterials for application in energy conversion and storage
15:20–15:45	**Keynote lecture.** **Prof. Tomas Tamulevicius,** Kaunas University of Technology, Lithuania	Self-Assembled Plasmonic Metasurfaces: From Nanoparticles to Functional Photonic Devices
15:45–16:10	**Keynote lecture.** **Prof. Joanna Wojewoda-Budka,** Institute of Metallurgy and Materials Science, Poland	From Antibacterial Coatings to CeO2 Nanozymes: Nanomaterials that Heal and Protect
16:10–16:40	**Coffee break.**	
	Chair of the session Prof. Aivaras Kareiva.	
16:40–18:00	**SCIENTIFIC DISCUSIONS ABOUT FUTURE OF NANOMATERIALS AND NANOTECHNOLOGY.**	
19:00–22:00	**Conference dinner.** (*Place will be announced*)	

Friday 7th May 2027

Time	Speaker	Title of the presentation
8:00–9:00	**Registration.**	
	Chair of the session Prof. Justina Gaidukevic.	
9:00–10:40	**POSTER PRESENTATIONS AND SCIENTIFIC DISCUSSIONS.**	
10:40–11:00	**Coffee break.**	
	Chair of the session Prof. Anatolijs Šarakovskis.	
11:00–11:25	**Keynote lecture.** **Prof. Markku Leskela,** University of Helsinki, Finland	Atomic layer processes enabling nanotechnology
11:25–11:50	**Invited speaker.** **Prof. Angela Ivask,** University of Tartu, Estonia	From contact to consequence: nanomaterial interactions with cells
11:50–12:15	**Invited speaker.** **Prof. Justina Gaidukevic,** Vilnius University and Lithuanian Academy of Sciences, Lithuania	Development of Conducting Polymer–Exfoliated Graphite Composites for Electrochemical Neurotransmitter Analysis
12:15–12:40	**Invited speaker.** **Prof. Andris Šutka,** Riga Technical University, Latvia	Nanomaterials in triboelectric generators for mechanical energy harvesting and sensing
12:40–13:30	**Lunch.**	
	Chair of the session Prof. Dariusz Hreniak.	
13:30–13:55	**Invited speaker.** **Prof. Andres Krumme,** Tallinn University of Technology, Estonia	Electroactive biobased nanofibers for triboelectric energy harvesting
13:55–14:20	**Invited speaker.** **Prof. Pierre Rabu,** University of Strasbourg, France	**To be announced**
14:20–14:45	**Invited speaker.** **Prof. Aivaras Kareiva,** Vilnius University, Lithuania	Composites of Biomaterials
14:45–15:15	**AWARD OF THE BEST POSTERS.** **CLOSING OF THE CONFERENCE.**	
15:45–16:45	**Tour of the Vilnius University (Optional)**	

Vilnius University