



Programm of the 81<sup>st</sup> International scientific conference of the  
University of Latvia Institute of Chemical Physics  
“Nanotechnologies and Radiation Processes”

Date: 5 April 2023

Venue: University of Latvia House of Nature, 1 Jelgava street, Room No. 702.

Chairwoman: *Gunta Kunakova*

**09:30 – 10:00**    **Registration**

**10:00 – 10:05**    **Opening**

**10:05 – 10:20**    **Annija Elizabete  
Goldmane**            Tritium Accumulation in JET ITER-Like-Wall Composite  
Materials From Divertor Tiles

**10:20 – 10:35**    **Oskars Putāns**            Automated Spectrogram Acquisition with Auxiliary  
Measurements for Characterization of Optical Sensor Substrates

**10:35 – 10:50**    **Rūdolfs Jānis  
Zabolockis**            Electrochemical Tritium Separation Using Proton Exchange  
Membrane Electrolysis

**10:50 – 11:05**    **Jeļena Sušinska**            Synthesis of Tungsten Ditelluride Nanostructures

**11:05 – 11:20**    **Patrīcija Kalniņa**            Chemical Separation and Purification of Stable <sup>45</sup>Sc from CERN-  
MEDICIS Mass-Separator Collection Foils

**11:20 – 11:35**    **Andrejs Terehovs**            CVD Growth of WTe<sub>2</sub> Monolayers on Insulating Substrates

**11:35 – 11:50**    **Anna Ansone**            Influence of Air Humidity on Chemisorption Processes of Carbon  
Dioxide in Lithium Orthosilicate Containing Ceramics

**11:50 – 12:10**    **Coffee Break**

**12:10 – 12:25**    **Līga Avotiņa**            Analysis of Latvian Darkhead Sheep Wool Fibers for Application  
in Air Filtrating Systems

**12:25 – 12:40**    **Elmārs Spalva**            Modular and Flexible P-Type Thermoelectric Films Based on  
Antimony(III) Telluride and CNT Hybrid Structures

**12:40 – 12:55**    **Matīss Sondars**            Polymer Electrolyte Membrane Effect on Water Electrolysis  
Hydrogen Generation Faradaic Efficiency

**12:55 – 13:10**    **Dāvis Gavars**            Thermoelectric Properties of Encapsulated Copper Oxide  
Nanowire Networks

**13:10 – 13:25**    **Edgars Mamis**            Mass-Separation of <sup>44,47</sup>Sc Radionuclides at the CERN-MEDICIS  
Facility

**13:25 – 13:40**    **Andrei Felsharuk**            Introduction of Magnetic Impurities Into the Bi<sub>2</sub>Se<sub>3</sub> Thin Films

**13:40 – 13:55**    **Mareks Senko**            Influence of Fabrication Related Effects on the Luminescence  
Properties of Lithium Orthosilicate and Lithium Metatitanate  
Two-Component Material

**13:55 – 14:10**    **Raitis Sondors**            Fabrication and Encapsulation of Polycrystalline ZnO Nanowire  
Networks for Use in Thermoelectric Generators

**14:10 – 14:15**    **Closing remarks**

