



82<sup>nd</sup> International Scientific  
Conference of the  
University of Latvia 2024

## Workshop “Nanomaterials for biomedical applications”

Friday, 16 February 2024, 09.00 AM

On line -Zoom



UNIVERSITY OF LATVIA  
**INSTITUTE OF  
ATOMIC PHYSICS  
AND SPECTROSCOPY**

### Programme

<b>Chair: Dr. Maksym Pogorielov</b>		
<b>9.00 – 9.20</b>	<b>Anastasia Konieva</b> <i>Sumy State University, Sumy, Ukraine; Department of Anatomy, University Clinic Essen, Essen, Germany</i>	<b>MXene-PDA-anti-CEACAM1 complex as a new agent for targeted melanoma treatment</b>
<b>9.20–9.40</b>	<b>Volodymyr Deineka</b> <i>University of Latvia, Latvia</i>	<b>2D nanosheets of niobium carbide (Nb<sub>4</sub>C<sub>3</sub>) as a universal photosynthesizer</b>
<b>9.40–10.00</b>	<b>Linda Giro</b> <i>Department of Biomedical Sciences, University of Padua, Italy</i>	<b>An alternative immune cell labeling system based on the new two-dimensional nanomaterials MXenes</b>
<b>10.00–10.20</b>	<b>Valeriia Korniienko</b> <i>Biomedical Research Center, Sumy State University, Ukraine</i>	<b>MXene-based photothermal therapies for antibacterial applications</b>
<b>10.20–11.00</b>	<b>Coffee break, discussions</b>	
<b>Chair: Dr. Viktoriia Korniienko</b>		
<b>11.00–11.20</b>	<b>Kateryna Diedkova</b> <i>University of Latvia, Latvia</i>	<b>New MXene-containing electroconductive polymer scaffolds for tissue engineering</b>
<b>11.20–11.40</b>	<b>Anna Butsyk</b> <i>Sumy State University, Ukraine</i>	<b>Copper nanoparticles (CuNPs) and their application in biomedicine</b>
<b>11.40–12.00</b>	<b>Yevheniia Husak</b> <i>Silesian University of Technology, Poland; Sumy State University, Ukraine</i>	<b>Silicates and phosphates anions cooperation during PEO of magnesium implants</b>

12.00–12.20	<b>Anna Yanovska</b> <i>Sumy State University,</i> Ukraine	<b>Gold modified ZnO nanoparticles for biomedical application</b>
12.20–13.00	<b>Conclusions, discussions</b>	

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