

**INTERNATIONAL WORKSHOP FOR YOUNG SCIENTISTS  
"FUNCTIONAL MATERIALS FOR TECHNICAL  
AND BIOMEDICAL APPLICATIONS"**

**WORKSHOP PROGRAM**

**September 18-20, 2023, Kharkiv, Ukraine**

**Monday, September 18**

<b>11:00 – 11:10</b>	<b>Opening ceremony</b>	
<b>11:10 – 11:55</b>	<b>Dr. Oleksandr Tomchuk (Great Britain)</b>	<b>Small angles for grand actions</b>
<b>11:55 – 12:10</b>	<b>Coffee-break</b>	
12:10 – 12:25	Dr. Iryna Ropakova	Homogeneous versus inhomogeneous molecular aggregates: optical characteristics
12:25 – 12:40	Denys Kofanov	Growth and characterization of mixed LuYAG based crystals
12:40 – 12:55	Dr. Oleksandr Rebrov	The features of Eu <sub>2</sub> O <sub>3</sub> solubilization in various halide melts
12:55 – 13:10	Viktor Kireev	Structure and antioxidant properties of TiO <sub>2-x</sub> nanoparticles
<b>13:10 – 14:30</b>	<b>Lunch</b>	
14:30 – 14:45	Mikola Sibilyev	Development of 3D printing technology for elements of Shashlik-type radiation detectors with improved energy resolution
14:45 – 15:00	Ilarion Khromiuk	Pulse shape discrimination capability of organic composite scintillators with different grain sizes
15:00 – 15:15	Oleksandr Suddia	Thermal conductive properties of polyimide dielectrics for combined thermally conductive printed circuit boards
15:15 – 15:30	Sofiia Sadivnycha	Growth of Sesquioxide Crystals from Tungsten Crucibles by Vertical Gradient Freezing Method
<b>15:30 – 15:45</b>	<b>Coffee-break</b>	
<b>15:45 – 16:30</b>	<b>Prof. Andrea Alù (USA)</b>	<b>Extreme Light Control with Metamaterials</b>
<b>16:30 – 16:45</b>	<b>Dr. Nataliia Mysko-Krutik (Germany)</b>	<b>Optica is the leading society in optics and photonics</b>

## Tuesday, September 19

<b>10:00 – 10:45</b>	<b>Prof. Longin Lisetski (Ukraine)</b>	<b>Liquid crystals as sensor and biomimetic materials</b>
<b>10:45 – 10:55</b>	<b>Break</b>	
10:55 – 11:10	Dr. Maksym Barabashko	Thermal conductivity of hydroxyapatite composite with small amounts of MWCNTs additives
11:10 – 11:25	Dr. Shiva Lingappa Udachan	Impact of thickness on refractive index of chromium nano films
11:25 – 11:40	Nazar Pavlyshche	Optical properties of a Bruggeman composite with randomly arranged anisotropic metal inclusions
11:40 – 11:55	Oksana Mankovska	Brewster's angle shift with two-dimensional materials and structures
11:55 – 12:15	<b>Coffee-break</b>	
12:15 – 12:30	Polina Pisklova	The Stability of TDBC J-Aggregates in Layered Polymer Films
12:30 – 12:45	Svitlana Hrankina	Formation of TDBC J-aggregates in a nematic liquid crystal matrix
12:45 – 13:00	Tamara Skrypnyk	Perovskite Nanocrystals Composite Materials Based on Polymer Cross-Linked Systems
13:00 – 13:15	Volodymyr Vasylovskyi	Laser generation of multicomponent crystalline nanostructures
<b>13:15 – 14:30</b>	<b>Lunch</b>	
<b>14:30 – 15:15</b>	<b>Dr. Sci. Nataliya Babayevska (Poland)</b>	<b>ZnO surface and crystal structure modification for obtaining multifunctional biomaterials</b>
15:15 – 15:30	<b>Coffee-break</b>	
15:30 – 15:45	Danylo Martynov	Electrochemiluminescent properties of sensors based on Langmuir-Blodgett films
15:45 – 16:00	Artem Hrinchenko	Designing hyperbolic metasurfaces based on gold nanodisks
16:00 – 16:15	Andrey Varich	The development of technological routine for sodium iodide based wastes reprocessing
16:15 – 16:30	Garry Moroz	Influence of size effects on the field amplification factor near a spherical metal nanoparticle
<b>16:30 – 16:40</b>	<b>Break</b>	
<b>16:40 – 17:40</b>	<b>Kostyantyn Ponomaryov (Ukraine)</b>	<b>Liberated art. From Duchamp to Christo and Jeanne-Claude</b>
<b>18:00</b>	<b>Dinner</b>	

## Wednesday, September 20

**15:00 – 16:30**      **TWISMA meeting**

**16:30**              **Workshop closing**