



XIX International Conference

# **“Nanotechnologies and Nanomaterials”**

(NANO-2021)

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August 25<sup>th</sup> - 27<sup>th</sup>, 2021

the House of Scientists in Lviv, Lystopadovoho Chynu St., 6

# Program


Wednesday, August 25<sup>th</sup>, 2021

9:00-18:00 | **Registration (6 Listopadovoho Chyna Street, Lviv, House of Scientists)**


10:00-10:10 | **Welcome speech**


10:10-10:35  **Prof. Olena Aksimentyeva** – Ivan Franko National University of Lviv (Ukraine)  
*"Nanofabrication of conducting polymer composites with tailored functions"*


10:35-11:00  **Prof. Tymish Y. Ohulchanskyy** – Shenzhen University, College of Physics and Optoelectronic Engineering (People's Republic of China)  
*"Nanoparticles for multimodal imaging guided photodynamic therapy of cancer"*

11:00-11:25  **Academ. Prof. Anatolii Belous** – Institute of general and inorganic chemistry of NASU, Department Solid state chemistry (Ukraine)  
*"Magnetic nanoparticles based on oxide systems: synthesis, properties, applications"*


11:25-11:50  **Prof. Mehmet Kahraman** – Gaziantep University (Turkey)  
*"Label-free biosensing on Plasmonic Nanostructures using SERS"*


11:50-12:15  **Dr. Dmitry Karpinsky** – SSPA "Scientific-Practical Materials Research Centre of NAS of Belarus" (Republic of Belarus)  
*"Crystal structure and orbital ordering of  $\text{BiMnO}_3+\delta$  ( $0<\delta<0.14$ ) compounds across the phase boundary"*


12:15-12:40  **Dr. Ling Peng** – CNRS, Aix-Marseille University (France)  
*"Charm of dendrimer nanotechnology in biomedical applications"*


12:40-13:05  **Prof. Anatoli Popov** – Institute of Solid State Physics, University of Latvia (Latvia)  
*"Distinctive features of diffusion-controlled point defect recombination in irradiated functional ceramics for nuclear applications"*


13:05-14:00 | **Coffee break and Conference photo**

14:05-14:30  **Prof. Sviatoslav Kirillov** – Joint Department of Electrochemical Energy Systems (Ukraine)  
*"Enhancing high-rate electrochemical properties of  $\text{LiMn}_2\text{O}_4$  by means of surface modification"*


14:30-14:55  **Dr. Alex Laikhtman** – Holon Institute of Technology, Sciences Department (Israel)  
*"Tungsten Disulfide Nanoparticles as Media for Hydrogen Storage: Experiment and Simulations"*

14:55-15:20  **Prof. Sergey Kolotilov** – L.V.Pisarzhevskii Institute of Physical Chemistry of NASU (Ukraine)  
*"Composites of metal-containing nanoparticles for catalytic hydrogenation of heterocyclic organic compounds"*

15:20-15:45  **Prof. Dominik Legut** – VSB - Technical University of Ostrava (Czech Republic)  
*"Lattice dynamics and trimeron order of the Verwey transition in magnetite - theory vs. experiment"*

15:45-16:10  **Dr. Oleksiy Shvets** – L. V. Pisarzhevskii Institute of physical chemistry of the National academy of sciences of Ukraine (Ukraine)  
*"Zeolite nanocomposites with variable acid and basic properties – effective catalysts for fine chemical synthesis and industrial reaction"*

16:10-16:35  **Dr. Krzysztof Szczepanowicz** – Jerzy Haber Institute of Catalysis and Surface Chemistry PAS (Poland)  
*"Polymeric core-shell nanoparticles – preparation, characterization and biomedical application"*

16:35-17:00  **Dr. Oleg Lavrentovich** – Kent State University, Advanced Materials and Liquid Crystal Institute, Department of Physics and Materials Science (USA)  
*"Liquid crystal elastomer coatings with dynamic nanoscale topography and their applications"*

# Program

Thursday, August 26<sup>th</sup>, 2021

09:00-18:00 | **Registration**

09:00-  
09:15



**PhD student Anastasiia Tomchuk** – Taras Shevchenko National University of Kyiv, Physics Department (Ukraine)  
*"Laser-induced periodic Ag surface structure with Au nanorods plasmonic nanocavity metasurface for strong enhancement of adenosine nucleotide label-free photoluminescence imaging"*

09:15-  
09:30



**Prof. Istvan Csarnovics** – University of Debrecen, Faculty of Science and Technology, Institute of Physics (Hungary)  
*"Investigation of surface-enhanced Raman scattering on gold nanoislands substrates with different geometrical parameters and analytes"*

09:30-  
09:45



**PhD student Martyna Tupikowska** – University of Warsaw, Faculty of Chemistry (Poland)  
*"Reconfigurable plasmonic systems based on liquid crystalline nanoparticles"*

09:45-  
10:00



**Prof. Dmytro Snizhko** – Kharkiv National University of Radioelectronics (Ukraine)  
*"Atomic-Force Microscopy of Laser-Induced Periodic Surface Structures"*

10:00-  
10:15



**PhD student Alina Oliinyk** – F.D. Ovcharenko Institute of Biocolloid Chemistry of NASU (Ukraine)  
*"Bioconjugates of nanogold with Chlorella v. polysaccharides selectively inactivate leukemia cells"*

10:15-  
10:30



**Dr. Anton Tkachenko** – Kharkiv National Medical University (Ukraine)  
*"GdYVO<sub>4</sub>:Eu<sup>3+</sup> nanoparticles-triggered effects on cultured dermal fibroblasts"*

10:30-  
10:45



**Prof. Andrii Netreba** – Taras Shevchenko National University of Kyiv, Faculty of radio physics, electronics and computer systems (Ukraine)  
*"Proton magnetic resonance response modification dependence estimation on aggregate biological object spatial regions state"*

10:45-  
11:00



**PhD student Svitlana Ukrayinska** – O.O. Bogomoletz Institute of Physiology of NASU (Ukraine)  
*"Effect of gold nanocomposites treatment on male reproductive function under conditions of experimental chronic kidney disease"*

11:00-11:15

**Coffee break**

11:15-  
11:30



**PhD Student Oksana** – Cherniuk Chuiko Institute of Surface Chemistry, NASU (Ukraine)  
*"Synthesis and catalytic properties of nitrogen-containing carbon nanotubes"*

11:30-  
11:45



**Dr. Anna Potapenko** – Joint Department of Electrochemical Energy Systems (Ukraine)  
*"Electrochemical characteristics of silicon oxide with water-soluble binder for new generation of LIBs"*

11:45-  
12:00



**Prof. Pawel Sikora** – Technical University of Berlin (Germany)  
*"Nano-engineered cementitious composites: Perspectives of advanced functional materials"*

12:00-  
12:15



**Prof. Ihor Stolyarchuk** – Drohobych Ivan Franko State Pedagogical University (Ukraine)  
*"Magneto-optical characterizations of CdMnTe micro- and nanoparticles"*

# Program

Thursday, August 26<sup>th</sup>, 2021

12:15-  
12:30



**Dr. Anna Pajor-Świerzy** – Jerzy Haber Institute of Catalysis and Surface Chemistry (Poland)  
*"Application of nanocomposite metallic ink for fabrication of conductive coatings at low-temperature sintering"*

12:30-  
12:45



**Prof. Yuliia Bondar** – State Institution "The Institute of Environmental Geochemistry of NASU" (Ukraine)  
*"Fabrication of nanocomposite polymer granules for enhanced removal of cesium radionuclides"*

12:45-  
13:00



**Student Zuzanna Lawera** – University of Warsaw (Poland)  
*"From halide perovskites to anisotropic semiconductors - new method of CdS nanorods synthesis"*

13:00-13:45 | **Lunch**

13:45-  
14:00



**Dr. Andrey Kadashchuk** – Institute of Physics of NASU (Ukraine)  
*"Determination of the Density-of-States in ultra-thin amorphous organic semiconductor films using thermoluminescence and molecular dynamics simulations"*

14:00-  
14:15



**Student Mateusz Pawlak** – University of Warsaw (Poland)  
*"Unusual odd-even effect in helical assemblies of metallic nanoparticles"*

14:15-  
14:30



**Prof. Dr. Amir Fahmi** – Faculty Technology and Bionics, Rhein-Waal University of Applied Sciences (Germany)  
*"Unidirectional Nanostructured Hybrid Materials"*

14:30-  
14:45



**Dr. Liudmyla Gryshchuk** – Leibniz-Institut für Verbundwerkstoffe GmbH (Germany)  
*"Bio-based soft polyurethane foams filled with coffee waste"*

14:45-  
15:00



**PhD student Dorota Grzelak** – University of Warsaw (Poland)  
*"Chirality transfer in liquid crystal and gold nanoparticle nanocomposites"*

15:00-  
15:15



**Dr. Matej Baláž** – Institute of Geotechnics, Slovak Academy of Sciences (Slovakia)  
*"Bio-mechanochemical synthesis of antibacterially active nanocomposite based on Ag nanoparticles, eggshell waste and Thymus serpyllum, L. plant"*

15:15-  
15:30



**Prof. Oleksandr Bochechka** – V. Bakul Institute for Superhard Materials of NASU (Ukraine)  
*"Effect of surface modification of diamond nanopowder particles on the properties of nanocomposite"*

15:30-  
15:45



**Prof. Alexander Kukhta** – Institute for Nuclear Problems, Belarusian State University (Republic of Belarus)  
*"Luminescent and electrophysical properties of MoS<sub>2</sub> nanosheets and its composites with polymer and graphene"*

15:45-  
16:00



**PhD student Natalia Kowalska** – University of Warsaw, Chemistry Department (Poland)  
*"Helical systems built from anisotropic gold nanoparticles and liquid crystal matrix – preparation and physicochemical characteristic"*

16:00-16:15 | **Coffee break**

16:15-  
16:30



**Student Filip Bandalewicz** – University of Warsaw, Faculty of Chemistry (Poland)  
*"Chiral induction and synthesis of gold nanoparticles with chiral morphology after phase transfer using hydrophobic promesogenic ligands"*

16:30-  
16:45



**Dr. Myroslav Ya Sushko** – Odesa Mechnikov National University (Ukraine)  
*"Effective electrical parameters of systems of fine anisotropic particles"*

# Program

Thursday, August 26<sup>th</sup>, 2021

16:45-  
17:00



**PhD student Agnieszka Jedrych** – University of Warsaw (Poland)  
*"A novel method of ordering nanoparticles in photosensitive organic nanotubes"*

17:00-  
17:15



**Dr. Karina Valihura** – L.V. Pisarzhevsky Institute of Physical Chemistry of NASU (Ukraine)  
*"Catalytic properties of Mg-Al-Ce oxide systems in gas phase conversion of ethanol to 1-butanol in a flow reactor"*

17:15-  
17:30



**Dr. Fatih Doğan Koca** – Erciyes University (Turkey)  
*"Synthesis of Cu hybrid nanoflower with their antimicrobial activity"*

17:30-  
17:45



**Dr. Vitalii Chornii** – National University of Life and Environmental Sciences of Ukraine (Ukraine)  
*"Synthesis and luminescence properties of phosphate-molybdate glasses and glass-ceramics doped with Pr<sup>3+</sup> and Eu<sup>3+</sup> ions"*

17:45-  
18:00



**PhD student Piotr Szustakiewicz** – University of Warsaw (Poland)  
*"Assemblies of binary gold nanoparticles with reconfigurable structure and optical properties"*



# Program

Friday, August 27<sup>th</sup>, 2021

09:00-18:00 | **Registration**

09:00-  
09:15



**Dr. Pavlo Kolkovskiy Vasyl** – Stefanyk Precarpathian National University (Ukraine)  
“Synthesis, structure and electrochemical properties of perovskite  $\text{LaMnO}_3$ ”

09:15-  
09:30



**PhD student Sylwia Parzyszek** – University of Warsaw (Poland)  
“Induced optical properties of semiconductor nanocrystals soft assemblies”

09:30-  
09:45



**Prof. Ersin Guler** – University of Selcuk, Department of Chemistry (Turkey)  
“Synthesis and characterization of deca-quinoline bearing pillar[5]arene macrocycle”

09:45-  
10:00



**PhD student Aliaksandra Radchanka** – Institute for Physical Chemical Research, Belarusian State University (Republic of Belarus)  
“Poly(maleic anhydride alt-1-tetradecene) derivatives control zeta potential and hydrodynamic size of encapsulated quantum dots”

10:00-  
10:15



**Dr. Mykhailo Kurmach** – L. V. Pisarzhevskii Institute of physical chemistry of NASU (Ukraine)  
“Composites of hierarchical zeolites with basic metal oxides as catalysts for 2-aminotiphenes production by Gewald reaction”

10:15-  
10:30



**PhD student Dominik Straszak** – Medical University in Lublin, Department of Synthesis and Chemical Technology of Pharmaceutical Substances (Poland)  
“Microsponges in tretinoin topical drugs”

10:30-  
10:45



**PhD student Olha Skurikhina** – Slovak Academy of Sciences (Slovakia)  
“Pyroxenes as ion conductors”

10:45-  
11:00



**Student Alexander Pospelov** – Kharkiv scientific boarding lyceum “Obdarovaniist” (Ukraine)  
“The point-contact cyclic switchover effect investigation”

11:00-11:15 | **Coffee break**

11:15-  
11:30



**PhD student Elena Vinogradova** – University of Tartu (Estonia)  
“Fluorescence of  $\text{Nd}^{3+}$  optical centers close to cubic symmetry in a calcium fluoride crystal co-doped with  $\text{Na}^{+}$ ”

11:30-  
11:45



**Prof. Yaroslav Shopa** – Cardinal Stefan Wyszyński University in Warsaw (Poland)  
“Characterization of single micrometre-sized droplets with luminescent nanoparticles levitated in linear electrodynamic trap”

11:45-  
12:00



**Dr. Svitlana Bugaychuk** – Institute of Physics of NASU (Ukraine)  
“Surface-confined optically controlled liquid crystal elements”

12:00-  
12:15



**Prof. Eugene Glushko** – VE Lashkaruov Institute of Semiconductor Physics of NASU (Ukraine)  
“Local modes and local resonances in photonic structures containing doubled defect: applications”

# Program

Friday, August 27<sup>th</sup>, 2021

12:15-  
12:30



**Dr. Oleh Yermakov** – V. N. Karazin Kharkiv National University Ukraine (Ukraine)  
*"Hyperbolic plasmons at resonant anisotropic metasurfaces"*

12:30-  
12:45



**Dr. Andrey ILJIN** – Institute of Physics, NAS of Ukraine (Ukraine)  
*"Dynamics of optical activity of polymer-stabilized blue phase"*

12:45-  
13:00



**Dr. Alexander Sorokin** – Institute for Scintillation Materials of NASU (Ukraine)  
*"Spectroscopic study of amphi-PIC J-aggregates interaction with bovine serum albumin"*

13:00-  
13:15



**Dr. Krzysztof Pomorski** – Cracow University of Technology, Faculty of Computer Science and Telecommunications, Quantum Hardware Systems (Poland)  
*"Quantum information processing in nanostructures in photonic tight-binding model"*

13:15-14:15 | **Lunch**

14:15-  
14:30



**Dr. Iuliia Mukha** – Chuiko Institute of Surface Chemistry of NASU (Ukraine)  
*"Formation of gold colloids with tunable size of nanoparticles"*

14:30-  
14:45



**Dr. Adrian Augustyniak** – West Pomeranian University of Technology in Szczecin (Poland)  
*"Pseudomonas aeruginosa and its reaction to sublethal concentrations of carbon nanomaterials"*

14:45-  
15:00



**Dr. Ruslan Mariychuk** – University of Presov (Slovakia)  
*"Phytosynthesis of irregularly shaped gold nanoparticles: peculiarities, challenges, and future perspectives"*

15:00-  
15:15



**Dr. Oksana Koplak** – Institute of Problems of Chemical Physics of RAS (Russia)  
*"Laser modulation of amorphous PrDyFeCoB microwires"*

15:15-  
15:30



**Prof. Kateryna Muzyka** – Kharkiv National University of Radio Electronics (Ukraine)  
*"Laser-based Nanostructured Materials for Electroanalysis"*

15:30-  
15:45



**Prof. ZAFER YAZICIGIL** – Selcuk University, Faculty of science (Turkey)  
*"8-4-(azidomethyl)phenyl-4,4-difluoro-1,3,5,7-tetramethyl-4-bora-3a,4a-diaza-s-indacene (BODIPY-I) Compound on the Gold Electrode Surface Investigation of Electrochemical Behaviors"*

15:45-  
16:00



**Dr. Sergii Sologub** – Institute of Physics of NASU (Ukraine)  
*"Electronic (magneto)transport in pristine and adsorption-modified epitaxial Bi nanofilms"*

16:00-16:15 | **Coffee break**

16:15-  
16:30



**Dr. Victor Kislyuk** – G.V.Kurdyumov Institute of Metal Physics (Ukraine)  
*"PV encapsulant material mechanical properties (peculiarities and their microscopic mechanisms)"*

# Program

Friday, August 27<sup>th</sup>, 2021

16:30-  
16:45



**Prof. Andrii Goriachko** – Taras Shevchenko National University of Kyiv (Ukraine)  
*"(Ce+O)/Mo(112) Nanostructured Surface"*

16:45-  
17:00



**Prof. Yuriy Zholudov** – Kharkiv National University of Radio Electronics (Ukraine)  
*"Electrogenerated chemiluminescence in thin polymer films on smooth and nanostructured electrode surface"*

17:00-  
17:15



**Prof. Dariia Matulka** – Lviv Polytechnic National University, Department of Applied Physics and Nanomaterial Science (Ukraine)  
*"Features of optical characteristics of nanoobjects"*

17:15-  
17:30



**Dr. Natalia Rusinchuk** – Taras Shevchenko National University of Kyiv, Institute of High Technologies (Ukraine)  
*"Physical description of near-field interaction of nanoparticles with microorganisms"*

17:30-  
17:45



**PhD student Svitlana Balika** – Odesa Mechnikov National University (Ukraine)  
*"Role of interface effects in the formation of the electrical conductivity of electrolyte-based suspensions"*

17:45-  
18:00



**Prof. Nataliya Kizilova** – V.N.Karazin Kharkov National University (Ukraine)  
*"Generalized constitutive equations and coupled phenomena at the nanoscale: applications to nanofluidics"*

18:00

| **Closing ceremony**



**9th International Conference**  
**"Nanotechnologies and Nanomaterials" NANO-2021**  
will be held on the **25 – 27 of August 2021** in **6 Listopadovoho Chyna Street, Lviv,**  
**House of Scientists**  
**CONFERENCE AGENDA**

**Wednesday, 25.08.2021**

<b>9:00-17:30</b>	<b>Registration (6 Listopadovoho Chyna Street, Lviv, House of Scientists)</b>
10:00-10:10	<b>Welcome speech</b>
	<b>Plenary Section (Prof. Bohdan Lukiyanets, Dr. Olena Fesenko)</b>
10:10-10:35	<b>Prof. Olena Aksimentyeva</b> <i>Ivan Franko National University of Lviv (Ukraine)</i> "Nanofabrication of conducting polymer composites with tailored functions"
10:35-11:00	<b>Prof. Tymish Y. Ohulchanskyy,</b> <i>Shenzhen University, College of Physics and Optoelectronic Engineering (People's Republic of China)</i> "Nanoparticles for multimodal imaging guided photodynamic therapy of cancer"
11:00-11:25	<b>Academ. Prof. Anatolii Belous</b> <i>Institute of general and inorganic chemistry of NASU, Department Solid state chemistry (Ukraine)</i> "Magnetic nanoparticles based on oxide systems: synthesis, properties, applications"
11:25-11:50	<b>Prof. Mehmet Kahraman</b> <i>Gaziantep University (Turkey)</i> "Label-free biosensing on Plasmonic Nanostructures using SERS"
11:50-12:15	<b>Dr. Dmitry Karpinsky</b> <i>SSPA "Scientific-Practical Materials Research Centre of NAS of Belarus" (Republic of Belarus)</i> "Crystal structure and orbital ordering of $\text{BiMnO}_3+\delta$ ( $0 < \delta < 0.14$ ) compounds across the phase boundary"
12:15-12:40	<b>Dr. Ling Peng,</b> <i>CNRS, Aix-Marseille University, (France)</i> "Charm of dendrimer nanotechnology in biomedical applications"
12:40-13:05	<b>Prof. Anatoli Popov</b> <i>Institute of Solid State Physics, University of Latvia (Latvia)</i> "Distinctive features of diffusion-controlled point defect recombination in irradiated functional ceramics for nuclear applications"
<b>13:05-14:05</b>	<b>Coffee break and Conference photo</b>
14:05-14:30	<b>Prof. Sviatoslav Kirillov</b> <i>Joint Department of Electrochemical Energy Systems (Ukraine)</i> "Enhancing high-rate electrochemical properties of $\text{LiMn}_2\text{O}_4$ by means of surface modification"
14:30-14:55	<b>Dr. Alex Laikhtman</b> <i>Holon Institute of Technology, Sciences Department (Israel)</i> "Tungsten Disulfide Nanoparticles as Media for Hydrogen Storage: Experiment and Simulations"
14:55-15:20	<b>Prof. Sergey Kolotilov</b> <i>L.V.Pisarzhevskii Institute of Physical Chemistry of NASU (Ukraine)</i> "Composites of metal-containing nanoparticles for catalytic hydrogenation of heterocyclic organic compounds"
15:20-15:45	<b>Prof. Dominik Legut</b> <i>VSB - Technical University of Ostrava (Czech Republic)</i> "Lattice dynamics and trimeron order of the Verwey transition in magnetite - theory vs. experiment"
15:45-16:10	<b>Dr. Oleksiy Shvets</b> <i>L. V. Pisarzhevskii Institute of physical chemistry of the National academy of sciences of Ukraine (Ukraine)</i> "Zeolite nanocomposites with variable acid and basic properties – effective catalysts for fine chemical synthesis and industrial reaction"
16:10-16:35	<b>Dr. Krzysztof Szczepanowicz</b> <i>Jerzy Haber Institute of Catalysis and Surface Chemistry PAS (Poland)</i> "Polymeric core-shell nanoparticles – preparation, characterization and biomedical application"
16:35-17:00	<b>Dr. Oleg Lavrentovich</b> <i>Kent State University, Advanced Materials and Liquid Crystal Institute, Department of Physics and Materials Science (USA)</i> "Liquid crystal elastomer coatings with dynamic nanoscale topography and their applications"
17:00- 17:30	<b>Single Market and Horizont Europe Programmes, EEN Programmes and its Instruments for support innovations</b>
17:30-18:30	<b>Welcome networking cocktail party ( Free entrance)</b>
<b>10:00-17:30</b>	<b>Poster Session</b> PLEASE NOTE THAT THE PRESENTATION OF EACH POSTER IS ONLY POSSIBLE FOR ONE DAY!



**Thursday, 26.08.2021(6 Listopadovoho Chyna Street, Lviv, House of Scientists)**

09:00-18:00	<b>Registration</b>
<b>Section "Nanoplasmonics and surface-enhanced spectroscopy" (Dr. Olena Fesenko)</b>	
<b>Section "Nanoobjects microscopy"</b>	
09:00-09:15	<b>PhD student Anastasiia Tomchuk</b> <i>Taras Shevchenko National University of Kyiv, Physics Department (Ukraine)</i> "Laser-induced periodic Ag surface structure with Au nanorods plasmonic nanocavity metasurface for strong enhancement of adenosine nucleotide label-free photoluminescence imaging"
09:15-09:30	<b>Prof. Istvan Csarnovics</b> <i>University of Debrecen, Faculty of Science and Technology, Institute of Physics (Hungary)</i> "Investigation of surface-enhanced Raman scattering on gold nanoislands substrates with different geometrical parameters and analytes"
09:30-09:45	<b>PhD student Martyna Tupikowska</b> <i>University of Warsaw, Faculty of Chemistry (Poland)</i> "Reconfigurable plasmonic systems based on liquid crystalline nanoparticles"
09:45-10:00	<b>Prof. Dmytro Snizhko</b> <i>Kharkiv National University of Radioelectronics (Ukraine)</i> "Atomic-Force Microscopy of Laser-Induced Periodic Surface Structures"
<b>Section "Nanobiotechnology for health-care" (Dr. Olena Fesenko)</b>	
10:00-10:15	<b>PhD student Alina Oliinyk</b> <i>F.D. Ovcharenko Institute of Biocolloid Chemistry of NASU (Ukraine)</i> "Bioconjugates of nanogold with Chlorella v. polysaccharides selectively inactivate leukemia cells"
10:15-10:30	<b>Dr. Anton Tkachenko</b> <i>Kharkiv National Medical University (Ukraine)</i> "GdYVO <sub>4</sub> :Eu <sup>3+</sup> nanoparticles-triggered effects on cultured dermal fibroblasts"
10:30-10:45	<b>Prof. Andrii Netreba</b> <i>Taras Shevchenko National University of Kyiv, Faculty of radio physics, electronics and computer systems (Ukraine)</i> "Proton magnetic resonance response modification dependence estimation on aggregate biological object spatial regions state"
10:45-11:00	<b>PhD student Svitlana Ukrainka</b> <i>O.O. Bogomoletz Institute of Physiology of NASU (Ukraine)</i> "Effect of gold nanocomposites treatment on male reproductive function under conditions of experimental chronic kidney disease"
<b>11:00-11:15</b>	<b>Coffee break</b>
<b>Section "Nanocomposites and nanomaterials" (Prof. Dmytro Snizhko, Dr. Anna Potapenko)</b>	
11:15-11:30	<b>PhD Student Oksana Cherniuk</b> <i>Chuiko Institute of Surface Chemistry, NASU (Ukraine)</i> "Synthesis and catalytic properties of nitrogen-containing carbon nanotubes"
11:30-11:45	<b>Dr. Anna Potapenko</b> <i>Joint Department of Electrochemical Energy Systems (Ukraine)</i> "Electrochemical characteristics of silicon oxide with water-soluble binder for new generation of LIBs"
11:45-12:00	<b>Prof. Pawel Sikora</b> <i>Technical University of Berlin (Germany)</i> "Nano-engineered cementitious composites: Perspectives of advanced functional materials"
12:00-12:15	<b>Prof. Ihor Stolyarchuk</b> <i>Drohobych Ivan Franko State Pedagogical University (Ukraine)</i> "Magneto-optical characterizations of CdMnTe micro- and nanoparticles"
12:15-12:30	<b>Dr. Anna Pajor-Świerzy</b> <i>Jerzy Haber Institute of Catalysis and Surface Chemistry (Poland)</i> "Application of nanocomposite metallic ink for fabrication of conductive coatings at low-temperature sintering"
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14:15-14:30	<b>Prof. Dr. Amir Fahmi</b> <i>Faculty Technology and Bionics, Rhein-Waal University of Applied Sciences (Germany)</i> "Unidirectional Nanostructured Hybrid Materials"
14:30-14:45	<b>Dr. Liudmyla Gryshchuk</b> <i>Leibniz-Institut für Verbundwerkstoffe GmbH (Germany)</i> "Bio-based soft polyurethane foams filled with coffee waste"
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<b>16:00-16:15</b>	<b>Coffee break</b>
16:15-16:30	<b>Student Filip Bandalewicz</b> <i>University of Warsaw, Faculty of Chemistry (Poland)</i> "Chiral induction and synthesis of gold nanoparticles with chiral morphology after phase transfer using hydrophobic promesogenic ligands"
16:30-16:45	<b>Dr. Myroslav Ya Sushko</b> <i>Odesa Mechnikov National University (Ukraine)</i> "Effective electrical parameters of systems of fine anisotropic particles"
16:45-17:00	<b>PhD student Agnieszka Jedrych</b> <i>University of Warsaw (Poland)</i> "A novel method of ordering nanoparticles in photosensitive organic nanotubes"
17:00-17:15	<b>Dr. Karina Valihura</b> <i>L.V. Pisarzhevsky Institute of Physical Chemistry of NASU (Ukraine)</i> "Catalytic properties of Mg-Al-Ce oxide systems in gas phase conversion of ethanol to 1-butanol in a flow reactor"
17:15-17:30	<b>Dr. Fatih Doğan Koca</b> <i>Erciyes University (Turkey)</i> Synthesis of Cu hybrid nanoflower with their antimicrobial activity
17:30-17:45	<b>Dr. Vitalii Chornii</b> <i>National University of Life and Environmental Sciences of Ukraine (Ukraine)</i> "Synthesis and luminescence properties of phosphate-molybdate glasses and glass-ceramics doped with Pr <sup>3+</sup> and Eu <sup>3+</sup> ions"
17:45-18:00	<b>PhD student Piotr Szustakiewicz</b> <i>University of Warsaw (Poland)</i> "Assemblies of binary gold nanoparticles with reconfigurable structure and optical properties"
<b>09:00-18:00</b>	<b>Poster Session</b> <b>PLEASE NOTE THAT THE PRESENTATION OF EACH POSTER IS ONLY POSSIBLE FOR ONE DAY!</b>
<b>18:15-20:15</b>	<b>Theatrical excursion "Lviv through the ages"</b>
<b>Friday, 27.08.2021 (6 Listopadovoho Chyna Street, Lviv, House of Scientists)</b>	
<b>Section "Physico-chemical nanomaterials science" (Prof. Andrii Netreba)</b>	
<b>09:00-18:00</b>	<b>Registration</b>
09:00-09:15	<b>Dr. Pavlo Kolkovskiy</b> <i>Vasyl Stefanyk Precarpathian National University (Ukraine)</i> "Synthesis, structure and electrochemical properties of perovskite LaMnO <sub>3</sub> "
09:15-09:30	<b>PhD student Sylwia Parzyszek</b> <i>University of Warsaw (Poland)</i> "Induced optical properties of semiconductor nanocrystals soft assemblies"
09:30-09:45	<b>Prof. Ersin Guler</b> <i>University of Selcuk, Department of Chemistry (Turkey)</i> "Synthesis and characterization of deca-quinoline bearing pillar[5]arene macrocycle"
09:45-10:00	<b>PhD student Aliaksandra Radchanka</b> <i>Institute for Physical Chemical Research, Belarusian State University (Republic of Belarus)</i> "Poly(maleic anhydride alt-1-tetradecene) derivatives control zeta potential and hydrodynamic size of encapsulated quantum dots"
10:00-10:15	<b>Dr. Mykhailo Kurmach</b> <i>L. V. Pisarzhevskii Institute of physical chemistry of NASU (Ukraine)</i> "Composites of hierarchical zeolites with basic metal oxides as catalysts for 2-aminotriphenyls production by Gewald reaction"
10:15-10:30	<b>PhD student Dominik Straszak</b> <i>Medical University in Lublin, Department of Synthesis and Chemical Technology of Pharmaceutical Substances (Poland)</i> "Microsponges in tretinoin topical drugs"
10:30-10:45	<b>PhD student Olha Skurikhina</b> <i>Slovak Academy of Sciences (Slovakia)</i> "Pyroxenes as ion conductors"
10:45-11:00	<b>Student Alexander Pospelov</b> <i>Kharkiv scientific boarding lyceum "Obdarovanist" (Ukraine)</i> "The point-contact cyclic switchover effect investigation"
<b>11:00-11:15</b>	<b>Coffee break</b>
<b>Section "Nanooptics and photonics" (Dr. Liudmyla Gryshchuk)</b>	
11:15-11:30	<b>PhD student Elena Vinogradova</b> <i>University of Tartu (Estonia)</i> "Fluorescence of Nd <sup>3+</sup> optical centers close to cubic symmetry in a calcium fluoride crystal co-doped with Na <sup>+</sup> "
11:30-11:45	<b>Prof. Yaroslav Shopa</b> <i>Cardinal Stefan Wyszyński University in Warsaw (Poland)</i> "Characterization of single micrometre-sized droplets with luminescent nanoparticles"

	levitated in linear electrodynamic trap"
11:45-12:00	<b>Dr. Svitlana Bugaychuk</b> <i>Institute of Physics of NASU (Ukraine)</i> "Surface-confined optically controlled liquid crystal elements"
12:00-12:15	<b>Prof. Eugene Glushko</b> <i>VE Lashkaruov Institute of Semiconductor Physics of NASU (Ukraine)</i> "Local modes and local resonances in photonic structures containing doubled defect: applications"
12:15-12:30	<b>Dr. Oleh Yermakov</b> <i>V. N. Karazin Kharkiv National University Ukraine (Ukraine)</i> "Hyperbolic plasmons at resonant anisotropic metasurfaces"
12:30-12:45	<b>Dr. Andrey ILJIN</b> <i>Institute of Physics, NAS of Ukraine (Ukraine)</i> "Dynamics of optical activity of polymer-stabilized blue phase"
12:45-13:00	<b>Dr. Alexander Sorokin</b> <i>Institute for Scintillation Materials of NASU (Ukraine)</i> "Spectroscopic study of amphi-PIC J-aggregates interaction with bovine serum albumin"
13:00-13:15	<b>Dr. Krzysztof Pomorski</b> <i>Cracow University of Technology, Faculty of Computer Science and Telecommunications, Quantum Hardware Systems (Poland)</i> "Quantum information processing in nanostructures in photonic tight-binding model"
13:15-14:15	<b>Lunch</b>
<b>Section "Nanochemistry and biotechnology" (Dr. Liudmyla Gryshchuk)</b>	
14:15-14:30	<b>Dr. Iuliia Mukha</b> <i>Chuiko Institute of Surface Chemistry of NASU (Ukraine)</i> "Formation of gold colloids with tunable size of nanoparticles"
14:30-14:45	<b>Dr. Adrian Augustyniak</b> <i>West Pomeranian University of Technology in Szczecin (Poland)</i> "Pseudomonas aeruginosa and its reaction to sublethal concentrations of carbon nanomaterials"
14:45-15:00	<b>Dr. Ruslan Mariychuk</b> <i>University of Presov (Slovakia)</i> "Phytosynthesis of irregularly shaped gold nanoparticles: peculiarities, challenges, and future perspectives"
<b>Section "Nanostructured surfaces" (Dr. Ruslan Mariychuk)</b>	
15:00-15:15	<b>Dr. Oksana Koplak</b> <i>Institute of Problems of Chemical Physics of RAS (Russia)</i> "Laser modulation of amorphous PrDyFeCoB microwires"
15:15-15:30	<b>Prof. Kateryna Muzyka</b> <i>Kharkiv National University of Radio Electronics (Ukraine)</i> "Laser-based Nanostructured Materials for Electroanalysis"
15:30-15:45	<b>Prof. ZAFER YAZICIGIL</b> <i>Selcuk University, Faculty of science (Turkey)</i> "8-{4-(azidomethyl)phenyl}-4,4-difluoro-1,3,5,7-tetramethyl-4-bora-3a,4a-diaza-s indacene (BODIPY-I) Compound on the Gold Electrode Surface Investigation of Electrochemical Behaviors"
15:45-16:00	<b>Dr. Sergii Sologub</b> <i>Institute of Physics of NASU (Ukraine)</i> "Electronic (magneto)transport in pristine and adsorption-modified epitaxial Bi nanofilms"
<b>16:00-16:15</b>	<b>Coffee break</b>
16:15-16:30	<b>Dr. Victor Kislyuk</b> <i>G.V.Kurdyumov Institute of Metal Physics (Ukraine)</i> "PV encapsulant material mechanical properties (peculiarities and their microscopic mechanisms)"
16:30-16:45	<b>Prof. Andrii Goriachko</b> <i>Taras Shevchenko National Univesity of Kyiv (Ukraine)</i> "(Ce+O)/Mo(112) Nanostructured Surface"
16:45-17:00	<b>Prof. Yuriy Zholudov</b> <i>Kharkiv National University of Radio Electronics (Ukraine)</i> "Electrogenerated chemiluminescence in thin polymer films on smooth and nanostructured electrode surfaces"
<b>Section "Nanoscale physics" (Dr. Oksana Budnyk)</b>	
17:00-17:15	<b>Prof. Dariia Matulka</b> <i>Lviv Polytechnic National University, Department of Applied Physics and Nanomaterial Science (Ukraine)</i> "Features of optical characteristics of nanoobjects"
17:15-17:30	<b>Dr. Natalia Rusinchuk</b> <i>Taras Shevchenko National Univesity of Kyiv, Institute of High Technologies (Ukraine)</i> "Physical description of near-field interaction of nanoparticles with microorganisms"
17:30-17:45	<b>PhD student Svitlana Balika</b> <i>Odesa Mechnikov National University (Ukraine)</i> "Role of interface effects in the formation of the electrical conductivity of electrolyte-based suspensions"
17:45-18:00	<b>Prof. Nataliya Kizilova</b> <i>V.N.Karazin Kharkov National University (Ukraine)</i> "Generalized constitutive equations and coupled phenomena at the nanoscale: applications to nanofluidics"
<b>09:00-18:00</b>	<b>Poster Session</b>
	<b>PLEASE NOTE THAT THE PRESENTATION OF EACH POSTER IS ONLY POSSIBLE FOR ONE DAY!</b>
	<b>Closing ceremony</b>

