

**Program of 4-th International Summer School**  
**“Nanotechnology: from fundamental research to innovations”**  
*August 19-22, Migove, Chernivtsi region, Ukraine*

**Saturday, 19.08**

12.00 – 16.00	<b>Registration</b>
15.00 – 16.00	<b>Dinner</b>
16.00 – 16.30	<b>Open of Summer School</b> Prof. Leonid Yatsenko Dr. Olena Fesenko
16.30 – 19.00	<b>Excursion</b>
19.00 – 20.00	<b>Evening dinner</b>

**Sunday, 20.08**

09.00 -10.00	<b>Breakfast</b>
	<b>Lectures</b>
10.00 – 11.00	Prof. Leonid Yatsenko - Recent progress in optical trapping and manipulation of atomic, nano- and microobjects ( <i>Ukraine</i> )
11.00 – 12.00	Dr. Alessandro Damin - Gold substrates for SERS: a material scientist point of view ( <i>Italy</i> )
12.00 – 13.00	Dr. Yuriy Khalavka - Tuning the quantum dots optical properties ( <i>Ukraine</i> )
13.00 – 14.00	<b>Dinner</b>
14.00 – 14.15	Sonya Kosar - Highly efficient photocatalytic conversion of solar energy to hydrogen by core-shell heterojunction nanorods ( <i>Ukraine</i> )
14.15 – 14.30	Emilia Tomaszewska - Conjugates of silver nanoparticles and plant extracts for dermal applications ( <i>Poland</i> )
14.30 – 14.45	Volodymyr Multian - Third-order nonlinear susceptibility of ZnO nanoparticles using third-harmonic generation at interfaces ( <i>Ukraine</i> )
14.45 – 15.00	Egor Kaniukov - Single molecule detection using silver dendrites in pores of SiO <sub>2</sub> template ( <i>Belarus</i> )
15.00 – 15.15	Amadeusz Laszcz - Instrumented-Nanoindentation as a Method for Mapping of Properties of Multi-phase Gd-doped Ferromagnetic Shape Memory Alloy ( <i>Poland</i> )
15.15 – 15.30	Mariia Yakhnevych - Effect of electric field and position of impurity on energy spectrum of electron and its location in multilayered quantum ( <i>Ukraine</i> )
15.30 – 15.45	Yaroslav Shpotyuk - Effect of Ga on the nanostructure of As-Se-based glasses ( <i>Poland</i> )
15.45 – 16.00	<b>Break</b>
16.00 – 16.15	Svitlana Sovinska - Synthesis and characterization of ZnSe and ZnSe:Ag nanowires for photovoltaic application ( <i>Poland</i> )
16.15 – 16.30	Liubov Matkovska - Structural peculiarities of ion-conductive organic-inorganic polymer composites ( <i>France</i> )
16.30 – 16.45	Olga Porohnya - Resistive ethanol vapor sensors based on polyethylene glycol/carbon nanotubes composites ( <i>Ukraine</i> )
16.45 – 17.00	Liubov Revutska - Nanostructured GeAsSe chalcogenide glasses: Raman spectroscopy studies ( <i>Ukraine</i> )
17.00 – 17.15	Ewa Czechowska - Investigation of catalase activity adsorbed on the gold nanoparticles surface ( <i>Poland</i> )
17.15 – 17.30	Joanna Ginter - The influence of the synthesis conditions on the optical and photocatalytic properties of TiO <sub>2</sub> photonic crystals ( <i>Poland</i> )
17.30 – 17.45	Ewelina Mackiewicz - Nanosilver surface modification for biological properties formation ( <i>Poland</i> )
17.45 – 18.00	Tetyana Yemelyanova - Rheological properties of xanthan/nanoclay hydrogel ( <i>Ukraine</i> )
18.00 – 19.00	<b>Evening dinner</b>

**Monday, 21.08**

9.00 -10.00	Breakfast
	<b>Lectures</b>
10.00 – 11.00	Dr. Vladimir Korzh - Zebrafish as useful in vivo model for nanomaterials embryotoxicity and disease treatment (Poland)
11.00 – 12.00	Dr. Mohamed Bououdina - Micro-/Nano-Structured Materials for H2 Energy (Bahrain)
12.00 – 13.00	Dr. Andrey Kadashchuk - Modern trends in nanoelectronics and ultra-thin-film flexible electronics (Ukraine)
13.00 – 14.00	<b>Dinner</b>
14.00 – 14.15	Dmytro Yaremkevych - Spin-dependent scattering in Co/Ni-Cu multilayers under magnetic proximity effect (Ukraine)
14.15 – 14.30	Katarzyna Lenczewska - Energy transfer and near infrared emission in GdVO4:Bi <sup>3+</sup> , Ln <sup>3+</sup> (Ln=Nd <sup>3+</sup> and Yb <sup>3+</sup> ) nanophosphors (Poland)
14.30 – 14.45	Oleksandr Hreshchuk - Experiment and modeling of “star-like” plasmonic nanostructures for SERS application (Ukraine)
14.45 – 15.00	Oleksii Liubchenko - XRD investigation of structural transformations in InSb induced by ion implantation (Ukraine)
15.00 – 15.15	Vitaly Uvarov - Structure and morphology study of carbon nitride nanostructured films under nanosecond laser pulses (Ukraine)
15.15 – 15.30	Marcin Piotrowski (Natalia Sobus) - BEA zeolite design for lactic acid dehydration (Poland)
15.30 – 15.45	Iryna Naiko - Obtaining a homogeneous nanosize film with using an erosive plasma source (Ukraine)
15.45 – 16.00	<b>Break</b>
16.00 – 16.15	Anna Mazur - Corrosion resistance of ZrO2 ceramic layers deposited by the sol-gel method on 316L stainless steel in SBF (Poland)
16.15 – 16.30	Pavlo Golub - Light-induced LC director freezing on a chalcogenide surface (Ukraine)
16.30 – 16.45	Anastasiia Tomchuk - Influence of Dielectric Film Thickness on the Surface Plasmon Resonance in the System “Au NPs Monolayer –Dielectric Spacer – Al Film” (Ukraine)
16.45 – 17.00	Siim Heinsalu - Raman scattering from organic molecules deposited on the noble metal nanoparticles and graphene (Estonia)
17.00 – 17.15	Roman Rudenko - Electrical conductivity of PANI-PVDF-MWCNT nanocomposites (Ukraine)
17.15 – 17.30	Kaja Spilarewicz-Stanek - Characterization of graphene oxide reduction methods (Poland)
17.30 – 17.45	Kira Kalinichenko - On the nature of the liquid phase of the metal-containing nanocomposite (Ukraine)
17.45 – 18.00	<b>Conclusion and Discussion</b>
18.00 – 19.00	<b>Evening dinner</b>

**Tuesday, 22.08**

09.00 – 10.00	Breakfast
	<b>Lectures</b>
10.00 – 11.00	Dr. Stefano Bellucci - Tunable Microstrip Attenuators and Patch Antenna based on graphene (Italy)
11.00 – 12.00	Nataliya Storozhylova - New potential nanotechnology-based therapies for the treatment of rheumatoid arthritis (Spain/Ukraine)
12.00 – 13.00	Dr. Eugene Bortchagovsky - Ellipsometry of nanostructures on a surface (Ukraine)
13.00 – 14.00	<b>Dinner</b>
14.00 –	<b>Departure to Chernivtsi</b>