

Wednesday, October 11

Head of session:

Dr., Prof. Pavlo KOLKOVSKIY, *Ivano-Frankivsk, Ukraine*

09-00

Invite report

Transient photoconductivity study of multilayered random networks of 2D material flakes casted from solution

Prof. Egon PAVLICA,

Laboratory of Organic Matter Physics, University of Nova Gorica,
Nova Gorica, Slovenija

Session 2.

Nanotechnologies and nanomaterials, quantum-size structures

09-45

Doping-induced phase separation in (Cd,Cr)Te magnetic materials

Speaker: **Volodymyr POPOVYCH**

Ivan Franko Drohobych State Pedagogical University, Drohobych, Ukraine

Popovych, V.D., Dluzewski, P., Morawiec, K., Zajkowska, W., Popovych A.V., Stolyarchuk, I.D.,
Hadzaman, I.V., Żywczak, A., Kuzma M., Shiojiri M.

Ivan Franko Drohobych State Pedagogical University, Drohobych, Ukraine;

The John Paul II Catholic University of Lublin, Lublin, Poland;

Institute of Physics, Polish Academy of Science, Warsaw, Poland;

AGH University of Science and Technology, Krakow, Poland;

University of Rzeszow, Rzeszow, Poland;

Kyoto Institute of Technology, Kyoto, Japan

10-00

Effect of electric field of the electron and hole energy spectra of non-concentric spherical core-shell quantum dot

Speaker: **Dr. Roman LESHKO**

Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine

Leshko R., Leshko O.V.

Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine

10-15

Electrophysical properties of manganese dioxide various modifications and composites based on α - MnO₂/C and β - MnO₂/C

Speaker: **Dr. Pavlo KOLKOVSKIY**

V. I. Vernadsky Institute of General and Inorganic Chemistry, Kyiv, Ukraine

Kolkovskiy P.I., Rachiy B.I., Kolkovska H.M., Ivanichok O.M., Bushkova V.S.

V. I. Vernadsky Institute of General and Inorganic Chemistry, Kyiv, Ukraine;

Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine

10-30

Manipulating the band-gap value of phosphorene for straintronics application

Speaker: **Dr. Anastasiia SOLOMENKO**

G.V.Kurdyumov Institute for Metal Physics, N.A.S. of Ukraine, Kyiv, Ukraine

Solomenko A.G., Sahalianov I.Y., Radchenko T.M., Tatarenko V.A.

G.V.Kurdyumov Institute for Metal Physics, N.A.S. of Ukraine, Kyiv, Ukraine;

Linköping University, Norrköping, Sweden

10-45

Nanomaterials for application in Nuclear Forensics

Speaker: **Dr. Hanna VASYLYEVA**

Uzhhorod National University, Uzhhorod, Ukraine

Solomenko A.G., Sahalianov I.Y., Radchenko T.M., Tatarenko V.A.

G.V.Kurdyumov Institute for Metal Physics, N.A.S. of Ukraine, Kyiv, Ukraine; Linköping University,

Norrköping, Sweden

11-00

Theory of superlattices with two atoms in the basis

Speaker: **Dr. Halyna BANDURA**

Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine

Bandura H., Bilynskiy I.V., Leshko R.Ya.

Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine;

Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine

11¹⁵ – 12⁰⁰

Coffee break

SPECIAL INVITE REPORT

(in Ukrainian)

Section 8. Innovative methods for teaching

12-00

Discoverer of cold emission in island metal films: *Ukrainian physicist Petro Borziak. 120th anniversary*

Speaker: **Prof. Vasyl SCHENDEROVSKYI**

Institute of Physics, Ukrainian National Academy of Sciences, Kyiv, Ukraine

Schenderovskiy V., Kozyrski W., Polevetska O.,

Institute of Physics, Ukrainian National Academy of Sciences, Kyiv, Ukraine;

N. Bogolubov Inst. for Theoretical Physics, Ukrainian National Academy of Sciences, Kyiv, Ukraine