

15th International Young Scientists Conference Optics and High Technology Material Science

SPO 2014

October 23-26, 2014

CONFERENCE PROGRAM

► ORGANIZERS:

Taras Shevchenko National University of Kyiv, Ukraine

Shizuoka University, Hamamatsu, Japan

"United Optical Community" joint student chapters

associated with SPIE, OSA



Shizuoka University
静岡大学

SPIE
Student Chapter
Taras Shevchenko National
University of Kyiv



Thursday 23/10/2014	Chairman – Tamara Rozouvan
09:00 - 10:00	Registration
10:00 - 10:20	Opening Leonid Poperenko Conference chair
10:20 - 11:00	Invited Lecture Maksym V. Strikha UKRAINIAN CONTRIBUTION TO SEMICONDUCTOR SCIENCE Taras Shevchenko National University of Kyiv, Faculty of Radiophysics, Kyiv (Ukraine)
11:00 - 11:40	Invited Lecture Olena Vertsanova OLYMPUS GX SERIES - THE NEW STANDARD IN RESEARCH MICROSCOPY "MELYTEC-UKRAINE", <i>Kyiv (Ukraine)</i>
11:40 - 12:20	Coffee Break
12:20 - 12:40	Kutsay O. M. FROM CARBON TO SILICON CARBON VAPOUR CONDENSATES: STRUCTURAL AND ELEMENTAL ANALYSIS V. Bakul Institute for Superhard Materials of the National Academy of Science of Ukraine, Kyiv (Ukraine)
12:40 - 13:00	Holubenko R. S. MECHANISMS OF PHOTOVOLTAGE GENERATION IN GaAs-BASED P-N JUNCTIONS WITH INGAAS QUANTUM WIRE Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)

<p>13:00 - 13:20</p>	<p>Oleksiienko G. A. INFLUENCE OF INJECTION ANGLE OF ELECTRON BEAM ON DYNAMICS OF WAVES IN PLASMA-BEAM SUPERGETERODYNE FREE ELECTRON LASER OF DOPPLERTRON TYPE National Aviation University, <i>Sumy</i> (Ukraine)</p>
<p>13:20 - 14:20</p>	<p>Lunch</p>
<p>14:20 - 15:00</p>	<p>Invited Lecture Olexandr V. Ogloblya EFFECT OF COULOMB REPULSION IN CNTQDS TRANSPORT WITH SPIN-ORBITAL COUPLING AND INTERACTING LEADS Taras Shevchenko National University of Kyiv, Institute of Biology, <i>Kyiv</i> (Ukraine)</p>
<p>~15:20</p>	<p>Poster Session. Section A. (Poster hall) / Coffee Brake</p>

<p>Friday 24/10/2014</p>	<p>Chairman – Anastasiia Mykytiuk</p>
<p>10:20 - 11:00</p>	<p>Invited Lecture Toru Aoki PHOTON COUNTING X-RAY CT FOR LOW EXPOSURE TO RADIATION Shizuoka University, Research Institute of Electronics, Hamamatsu (Japan)</p>
<p>11:00 - 11:20</p>	<p>Lopatynska O.G. BIOMOLECULE CONFORMATION CHANGES INDUCED BY UV IRRADIATION: OPTICAL SPECTROSCOPY DETECTION Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)</p>
<p>11:20 - 11:40</p>	<p>Gorbov I. V. THE IMPACT OF LOW TEMPERATURE THERMAL ANNEALING ON OPTICAL PROPERTIES OF THINCOMPOSITE FILMS Institute for information recording, NAS of Ukraine, Kyiv (Ukraine)</p>
<p>11:40 - 12:10</p>	<p>Coffee Break</p>
<p>12:10 - 12:50</p>	<p>Hisaya Nakagawa NEUTRON SEMICONDUCTOR DETECTOR BY USING BGAN Shizuoka University, Graduate school of informatics, Hamamatsu (Japan)</p>
<p>12:50 - 13:10</p>	<p>G. I. Dovbeshko SURFACE ENHANCED SPECTROSCOPY OF BIOLOGICAL MOLECULES Institute of Physics of NAS of Ukraine, Kyiv (Ukraine)</p>
<p>13:10 - 14:20</p>	<p>Lunch</p>
<p>Session Devoted to 180th anniversary of Taras Shevchenko National University of Kyiv</p>	

& 75th anniversary of its Chair of Optics (Room 200)

14:20 - 15:00

Invited Lecture **Vasyl G. Kravets**
OPTICS OF A GRAPHENE SHEET COUPLED TO A
PLASMONIC NANOARRAY
University of Manchester, Manchester (UK)

15:00 - 15:40

Invited Lecture **Serhyi V. Kondratenko**
PHOTOCONDUCTIVITY AND KELVIN FORCE
MICROSCOPY OF SI-GE HETEROSTRUCTURES
WITH QUANTUM DOTS
**Taras Shevchenko National University of Kyiv,
Kyiv (Ukraine)**

15:40 - 16:30

Poster Session. Section B/C.
(Poster hall) / Coffee Brake

16:30

Banquet

Saturday 25/10/2014	Chairman – Roman Holubenko
11:00 - 11:20	<p style="text-align: center;"> Rybak Ya. SPECTRAL AND LASING PROPERTIES OF YAG:Nd³⁺+ CERAMICS MADE BY REACTIVE SINTERING Taras Shevchenko National University of Kyiv, <i>Kyiv (Ukraine)</i> </p>
11:20 - 11:40	<p style="text-align: center;"> Tian F. NANOPARTICLE SHAPE DEPENDED PLASMON EFFECT: OBSERVING DRUG DELIVERY VIA RAMAN SPECTROSCOPY AND FTIR FOCAS Research Institute, Dublin Institute of Technology, Dublin (Ireland) </p>
11:40 - 12:00	<p style="text-align: center;"> Shynkarenko Y. V. ISSUES OF TRANSIENT ABSORPTION MEASUREMENTS IN PICO- AND FEMTOSECOND TIME DOMAIN OF GOLD NANOSPHERES AND NANORODS Institute of Physics National Academy of Science of Ukraine, Kyiv (Ukraine) </p>
12:00 - 12:30	Coffee Break
12:30 - 12:50	<p style="text-align: center;"> Borovytsky V. N. FOCUSING PARTLY POLARIZED BEAM National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv (Ukraine) </p>
12:50 - 13:10	<p style="text-align: center;"> Smaliuk A. P. PECULARITIES OF DYE VIBRATIONAL SPECTRA OBTAINED FROM STIMULATED RAMAN SCATTERING IN MULTIPLE SCATTERING MEDIA Taras Shevchenko National University of Kyiv, <i>Kyiv (Ukraine)</i> </p>

13:10 - 13:30	<p align="center">Borysiuk V. I. STUDIES OF BORON- AND NITROGEN-DOPED SINGLE-WALLED CARBON NANOTUBES AS POTENTIAL HYDROGEN HALIDE MOLECULES HX (X = F, CL, Br) SENSORS Taras Shevchenko National University of Kyiv, <i>Kyiv (Ukraine)</i></p>
~13:30	<p align="center">Poster Session. Section D (Poster hall) / Coffee Brake</p>
14:30 - 14:50	<p align="center">Conference closing</p>
evening	Social event
Sunday 26/10/2014	Social day (10-19)