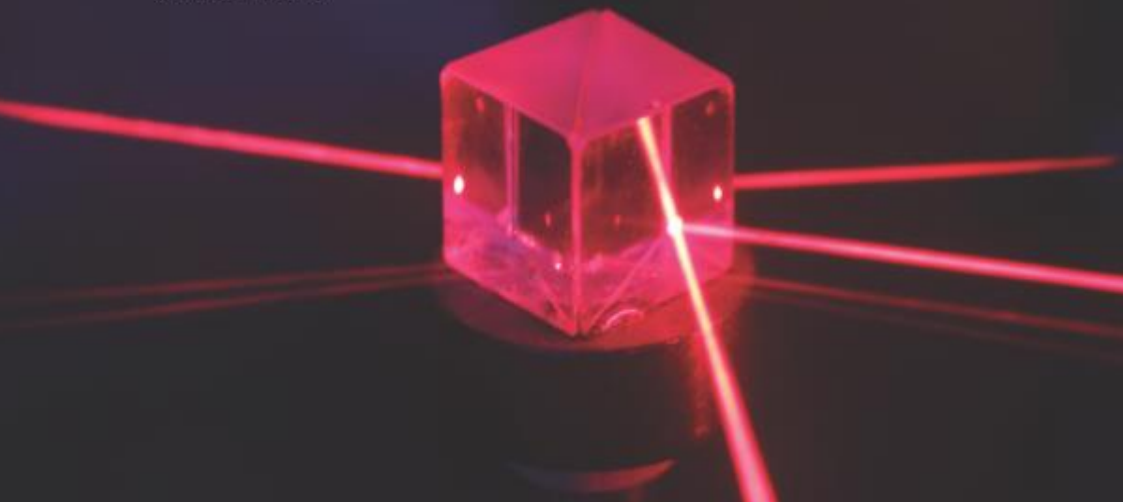
PROGRAM

The 3rd International School-Seminar

«PHOTONICS OF NANO- AND MICROSTRUCTURES»

(PNMS-2015)



7 – 11
september

PhNMS
Tomsk 2015

Tomsk State University of Control Systems and Radioelectronics
(TUSUR)

Institute of Automation and Control Processes Far Eastern Branch of RAS
(IACP FEB RAS)

PROGRAM

The 3rd International School-Seminar

«PHOTONICS OF NANO- AND MICROSTRUCTURES»
(PNMS-2015)

Tomsk, 7 - 11 September 2015

Tomsk - 2015

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PhD. N.I. Burimov (Tomsk, Russia)

September 7, Monday

09:00 – 11:00 Registration for the School-Seminar in the lobby of the main building TUSUR, Lenina ave., 40

11:00 Departure of the bus from the main TUSUR (from the backyard) to the sanatorium «Blue Cliff»

11:00 – 19:00 Registration for the School - Seminar at the conference hall of the sanatorium «Blue Cliff»

13:00 – 14:00 Lunch

19:00 – 20:00 Dinner

8 SEPTEMBER, TUESDAY

09:00 – 10:00 Breakfast

Opening of School

10:00 – 10:30 Keynote speech. Chairman of the School, Prof, Doctor of Technical Sciences, Rector TUSUR, ***A.A. Shelupanov***

Keynote speech. Co-Chair of the School, Academician, Director of the IACP, *Y.N. Kulchin*

Section 1. Semiconductor nano- and microstructures

Chairman: Academician Y.N. Kul'chin

10:30 Optically induced space-charge and conductivity gratings in wide-gap semiconductors and nanostructured materials"
M.A. Bryushinin, P.M. Karavaev, I.A. Sokolov *Ioffe Institute, 194021, Polytekhnicheskaya 26, St.-Petersburg, Russia*
Invited lecture (30 min.)

11:00 Nanostructures with quantum wells and quantum dots - element base photonics and photovoltaics
A.V. Wojciechowski, Prof. Dr, D.I. Horn, K.A. Lozovoi. *National Research Tomsk State University (TSU), Tomsk.*
Lecture (45 min .)

11:45 Conductive DPN-fabricated indium nanowires on silicon surface
A.S. Kozhukhov, D.V. Shcheglov. *Institute of Semiconductor Physics. AV Rzhanova Siberian Branch of the Russian Academy of Sciences (ISP SB RAS), Novosibirsk.*
Post (15 min.)

12:00 Synthesis ordered array of islands on the basis of ion irradiation and nanoimprint lithography
JV Smagina, PA Kuchinsky, VA Seleznev, SA Rudin, A. Nenashev, AV Dvurechensky. *Institute of Semiconductor Physics. AV Rzhanova SB RAS (ISP SB RAS), Novosibirsk.*
Post (15 min.)

12:15 electrokinetic flow rate sensor based on a silicon membrane microchannel
NS Filippov, MA Parashchenko, VV Kiriyenko, SI Romanov. *Institute of Semiconductor Physics. AV Rzhanova SB RAS (ISP SB RAS), Novosibirsk.*
Post (15 min.)

*Lunch **12:30** to **13:30***

Section 3. Nanoheterostructures and nanocomposites
Chairman: Dr., Professor T.R. Wolf

13:30 Hybrid oligomers for recording diffractive elements. Synthesis, Properties, Applications
VV Shelkovnikov, D.Sc. *Novosibirsk Institute of Organic Chemistry. NN Vorozhtsov, SB RAS (IOC SB RAS), Novosibirsk.*
Lecture (45 min.)

14:15 Regular ferroelectric domain structures for nonlinear conversion of laser radiation
TR Wolf, Prof. Dr. *Institute of Crystallography. AV Shubnikov Russian Academy of Sciences, Moscow.*
Invited lecture (30 min.)

14:45 Polaritons in medium with the zero-mean inhomogeneous coupling parameter.
V.A. Ignatchenko, D.S. Polukhin. L.V. Kirensky. *Institute of Physics SB RAS, Krasnoyarsk.*
Post (15 min.)

15:00 Coffee-break

Section 4. Photonic crystals and structure

Chairman: Ph.D., Professor S.N. Sharangovich

15:15 Optical induction of waveguide elements in photorefractive surface area of lithium niobate

A.D. Bezpaly, V.M. Shandarov. *Tomsk State University of Control Systems and Radioelectronics (TUSUR), Tomsk.*

Post (15 min.)

15:30 local density of states in one-dimensional photonic crystals and superlattices sinusoidal

VA Ignatchenko, DS Tsikalov, Ph.D. *Institute of Physics. LV Kirensky Siberian Branch of the Russian Academy of Sciences (Institute of Russian Academy of Sciences), Krasnoyarsk .*

Post (15 min.)

15:45 Formation of periodic structure with photonic band gap by scanning electron lithography

D.E. Utkin, A.A. Shklyev, A.V. Tsarev. *Institute of Semiconductor Physics. AV Rzhanova Siberian Branch of the Russian Academy of Sciences (ISP SB RAS) , Novosibirsk .*

Post (15 min.)

16:00 Photoinduced Fredericks transition in a liquid crystal cell with a polymer fotoorientantom

AO Semkin, SN Sharangovich, EA Melnikov, AL Toustsik. *Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*

Post (15 min.)

16:15 Interaction of optical radiation with heterogeneous holographic photonic structures in polymer-encapsulated liquid crystals under the influence of a spatially inhomogeneous external electric field

AO Semkin, SN Sharangovich. *Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*

Post (15 min.)

16:30 Parallel formation of superimposed holographic polarization photonic structures in composite materials PHOTOPOLYMER LCD

AO Semkin, SN Sharangovich. *Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*

Post (15 min.)

16:45 Coffee-break

17.00 – 19.00 Poster presentations

19:00 – 20:00 Dinner

9 SEPTEMBER, WEDNESDAY

Section 2. Nonlinear optical materials
Chairman: Dr., Prof. I.A. Sokolov

09:00 – 10:00 Breakfast

10:00 Laser light control device based on single crystals of high-ohm-RKTP
VA Krakow, Professor, Ph.D. *Director of "Crystal T", Tomsk.*
Invited lecture (30 min.)

10:30 Nonlinear Raman-Nath diffraction in two-dimensional nonlinear photonic crystals
AM Vyunyshev, Ph.D., VG Arkhipkin, AS Chirkin. *Institute of Physics. LV Kirensky Siberian Branch of the Russian Academy of Sciences (Institute of Russian Academy of Sciences), Krasnoyarsk.*
Report (30 min.)

11:00 Fast and slow light in photonic crystal with Raman nonlinearity
VG Arkhipkin, Prof. Dr. *Institute of Physics. LV Kirensky Siberian Branch of the Russian Academy of Sciences (Institute of Russian Academy of Sciences), Krasnoyarsk.*
Report (30 min.)

11:30 Coffee-break

11:45 Features of the transition process in the parametric interaction of counterpropagating waves
VA Tkachenko EV Rasskazova, AK Moskalev, VV Slabko. *Siberian Federal University (SFU), Krasnoyarsk.*
Report (30 min.)

12:00 frequency conversion in doped fibers polingovannyh
VA Litvinov, MN Litvinov, YM Karpets. *Far Eastern State University of Communications (FESTU), Khabarovsk.*
Post (15 min.)

Lunch **13:00** to **14:00**

14:00 – 19:00 Sightseeing tours

19:00 – 20:00 Dinner

10 SEPTEMBER, THURSDAY

Section 4. Photonic crystals and structure

Chairman: Dr., V.V. Shelkovnikov

09:00 – 10:00 Breakfast

10:00 The contribution of the elastic-optical and flexoelectric effects in linear diffraction of light on periodic domain structure in lithium niobate crystal
***AE Mandel**, Prof. Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*
Invited lecture (30 min.)

10:30 Multi-element photorefractive waveguide structure based on the crystal of lithium niobate
***VM Shandarov**, Prof. Dr. Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*
Invited lecture (30 min.)

11:00 Photonic jet from a radially symmetric dielectric microparticles
***EK Panin**, Prof. Institute of Atmospheric Optics SB RAS, Tomsk.*
Invited lecture (15 min.)

11:15 Regular Metahexahedron-Aided Photonic Jet
***I.V.Minin**, professor, Dr.Sc., O.V.Minin. Siberian State University Geosystems and Technology (SGUGiT), Novosibirsk.*
Post (15 min.)

11:30 Effect of EM strong localization in photonic crystal
***I.V.Minin**, professor, Dr.Sc., O.V.Minin. Siberian State University Geosystems and Technology (SGUGiT), Novosibirsk.*
Post (15 min.)

11:45 Coffee-break

SECTION 5. Nanometrology and measurement systems

Chairman: Prof. Dr. R.V. Romashko

12:00 Detection and reconstruction of the spatial distribution of weak acoustic fields using an adaptive multi-channel fiber-optic interferometer

***RV Romashko**, Prof. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP). Vladivostok. Far Eastern Federal University (FENU), Vladivostok*
Invited lecture (30 min.)

12:30 Spectral methods for measuring the temperature of the semiconductor light sources
***SV Smirnov**, Professor, Ph.D. Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*
Invited lecture (30 min.)

Lunch **13:00** to **14:00**

SECTION 7. Nano- and Biophotonics
Chairman: Prof. Dr. A.A. Kamshilin

14:00 Nanocomposite polymer structures for optical sensors, hydrogen sulfide
***AA Sergeev AY Mironenko, AA Leonov, SS Ascension**, Prof. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok.*
Post (15 min.)

14:15 Formation of nanoscale structures in the form of cones on the surface of the metal films by femtosecond laser pulses
***DV Pavlov, AA Kuchmizhak, OB Vitrik, YN Kul'chin.** Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok.*
Post (15 min.)

14:30 Coffee-break

SECTION 6. photonic and quantum systems and devices
Chairman: Dr., Prof. S.M. Shandarov

14:45 Multi-channel measurement system based on the mass of the adaptive interferometer
***RV Romashko**, Prof. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok.*
Invited lecture (30 min.)

15:15 The amplitude characteristic of the adaptive interferometer based on the interaction of light waves counter to reflection holograms in photorefractive crystals

***NI Drillability**, Ph.D. Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*
Invited lecture (30 min.)

15:45 Holographic Photonic structures PHOTOPOLYMER liquid crystal nanocomposite materials
***SN Sharangovich,** Ph.D. Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*
Invited lecture (30 min.)

16:15 Effect of electrostatic field on the characteristics of the luminescence of quantum dots of cadmium sulfide in the silicate matrix
***SS Ascension, Dr., AA Sergeev, NS Eugene IV Postnova**. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*
Report (30 min.)

16:45 Coffee-break

17:00 Investigation of sensing elements based on polymer particles with a microfilm of the amorphous alloy to create a magnetic field sensors
***MA Kozubova VB Balashov, VI Yurchenko**. Research Institute of Semiconductor Devices (RISD), Tomsk.*
Post (15 min.)

17:15 The research of temperature dependence of contrast ratio of electrooptics Q-switches based on the RKTP crystal for different types of assembly technologies
***O.T. Vazhinsky, K.S. Vazhinskaya, I.A. Pargachev**. Tomsk State University of Control Systems and Radioelectronics (TUSUR), Tomsk.*
Post (15 min.)

17:30 Assembly technology and research of the parameters of pulsed high voltage driver for Q-switches
***O.T. Vazhinsky, I.A. Pargachev**. Tomsk State University of Control Systems and Radioelectronics (TUSUR), Tomsk.*
Post (15 min.)

17:45 Coffee-break

19:00 - 20:00 Friendly dinner

11 SEPTEMBER, FRIDAY

SECTION 7. Nano- and Biophotonics
Chairman: Prof. Dr. A.A. Kamshilin

9:00 - **10:00** Breakfast

10:00 Visualization pulsation of blood by photoplethysmography
***AA Kamshilin**, Prof. St. Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO), St. Petersburg.*
Lecture (45 min.)

10:45 Short-Wave Infrared Thermography-based Biophotonics
***BG. Vainer**, Prof. Rzhanov Institute of Semiconductor Physics SB RAS, Novosibirsk State University, Novosibirsk, Russia.*
Lecture (45 min.)

11:30 Coffee-break

11:45 fluorescence imaging arbitrarily oriented single molecules in the free film
***SV Boychenko**. Irkutsk branch of the Institute of Laser Physics, Siberian Branch of the Russian Academy of Sciences (IF ILP), Irkutsk.*
Post (15 min.)

12:00 The solar cells based on silicon-germanium nanoheterostructures with germanium quantum dots
***AP Kokhanenko**, Prof. Dr. National Research Tomsk State University (TSU NO), Tomsk*
Invited lecture (30 min.)

12:30 multispectral optical system for rapid analysis in the pharmaceutical industry
***E. Nippolaynen**, PhD. University of Eastern Finland, Cope, Finland.*
Invited lecture (30 min.)

Lunch **13:00** to **14:00**

14:00 atmospheric sounding by femtosecond laser pulses
***SS Golik**, Ph.D. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*
Invited lecture (30 min.)

14:30 Nonlinear optical properties of new composite materials Nanoq-based and on-biosilicates Limra
***OA Bukin**, Prof. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*
Invited lecture (30 min.)

15:00 photoprotective nanoparticle titanium dioxide (TiO2) and zinc oxide (ZnO), and thermal field of human skin
***IV Krasnikov, PhD, A. Yu Seteykin, AP Popov.** Amur State University (ASU), Blagoveshchensk.*
Post (15 min.)

15:15 Coffee-break

16:00 School closing

19:00 – 20:00 Dinner

SEPTEMBER 12, SATURDAY

09:00 – 10:00 Breakfast

Departure of the participants of the 3rd International School-Seminar "Photonics nano- and microstructures" (FNMS 2015)

Good-bye, until we meet again!

POSTERS

Tuesday
September 8
17:00 – 19:00

SECTION A.1 Semiconductor nano- and microstructures

1. Characterization of epitaxial films on a substrate Fe3Si the Si (111): magnetic and transport properties
IA Bondarev, Tarasov, N. Dorofeev, SG Ovchinnikov, SN Varnakov, MN Volochaev AV Lukyanenko and N. Volkov. *Institute of Physics Kirenskii Siberian Branch of the Russian Academy of Sciences (Institute of Russian Academy of Sciences), Krasnoyarsk.*

2. Magnetotransport properties planar manufacturing apparatus based on the hybrid structure of FeNi / SiO2 / p-Si
AS Tarasov, AV Lukyanenko. *Institute of Physics. LV Kirensky Siberian Branch of the Russian Academy of Sciences (Institute of Russian Academy of Sciences), Krasnoyarsk.*

SECTION A.2 nonlinear optical materials

1. The processes of light-induced charge transfer in photorefractive crystals class sillenitov
TA Kornienko, MG Kisteneva, SS Shandarov, *AL Toustsik. Belarusian State University (BSU), Minsk, Belarus.*

2. Optical sensing photorefractive crystals silicate and bismuth titanate
TA Kornienko, YI Miksyuk. *Belarusian State University (BSU), Minsk, Belarus.*

3. Model of polychromatic two-wave mixing in cubic photorefractive crystal
M.A. Asalkhanova, R.V. Romashko. *Institute of Automation and Control Processes, Far Eastern Branch RAS (IACP FEB RAS), Vladivostok.*

4. Impact of a two-pulse femtosecond laser excitation method in the detection limits of elements in liquids
OA Bukin. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

5. Photonics liquid nanocomposite materials
VP Dziuba. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

SECTION A.3 nanoheterostructures and nanocomposites

1. Formation and study of microstructures based on acrylate monomer to liga-technology
DI Derevyanko, VV Shelkovnikov, NA Orlova, BG Goldenberg, AG Lemzyakov, NG Mironnikov. *Novosibirsk Institute of Organic Chemistry. NN Vorozhtsov, SB RAS (IOC SB RAS), Novosibirsk.*

SECTION A.4 Photonic crystals and structure

1.Creation of a Bragg waveguide by ion-beam sputtering
YN Kul'chin, RV Romashko, AB Cherepakhin, TA Efimov. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok. Far Eastern Federal University (FENU), Vladivostok.*

2. The globular optically transparent photonic crystals based on 3d-opal matrices and REE
SN Ivicheva, YF Kargin, VS Gorelik. *Institute of Metallurgy and Materials Science. AA Baikov Russian Academy of Sciences (IMET RAS), Moscow.*

3.Ppyroelectric induction waveguide photonic structures in a photorefractive crystal of lithium niobate
AS Perin, VY Ryabchënok, VA Kradko, EA Berezina. *Tomsk State University of Control Systems and Radio Electronics (TUSUR), Tomsk.*

4. Low-frequency Raman scattering in nanoscale environments
VS Gorelik, AD Kudryavtseva, MV Tareeva, NV Chernega. *Physical Institute. PN Lebedev of the Russian Academy of Sciences (FIAN), Moscow.*

5. Mode analysis and mode conversion of chiral waveguide based on 3D Double-grid FDTD algorithm
Junqing Li, Bian Ying. *Physics Department, Harbin Institute of Technology, China.*

6. Features of the optical properties of the dielectric, semiconductor and magnetic nanoparticles in a weak laser fields
VP Dziuba. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

7. Interference converging rays in single crystals of LiNbO3: Gd
NV Sidorov, MN Palatnikov, OJ Pikul. *Far Eastern State Transport University, Khabarovsk.*

8. The double-band microwave filter based on photonic crystal

D.V. Borisenkov, S. A. Khodenkov. *Institute of Physics, Krasnoyarsk, Siberian State Aerospace University, Krasnoyarsk.*

9. The microstrip band-pass filter based on a two-dimensional photonic crystal with dimension 3 × 2
S. A. Khodenkov, D.V. Borisenkov. *Siberian State Aerospace University, Krasnoyarsk, Institute of Physics, Krasnoyarsk.*

10. The microstrip diplexer based on photonic crystal
S. A. Khodenkov, D.V. Borisenkov. *Siberian State Aerospace University, Krasnoyarsk, Institute of Physics, Krasnoyarsk*

SECTION A.5 Nanometrology and measurement systems

1. Precision measures on the basis of single-crystal chalcogenides for calibrating a scanning probe microscope
AI Caumont, KA Koch, VA Seleznev, VY Prince. *Institute of Semiconductor Physics. AV Rzhanova Siberian Branch of the Russian Academy of Sciences (ISP SB RAS), Novosibirsk.*

2. A fiber optic sensor for detecting the ultrasonic waves in solids based adaptive interferometer
RV Romashko, MN Bezrukov, SA Ermolaev. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok. Far Eastern Federal University (FENU), Vladivostok.*

3. Measurement of the refractive index using a laser profilometer.
VA Kolchinsky, RV Chamomile. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok. Far Eastern Federal University (FENU), Vladivostok*.

4. Adaptive fiber optic hydrophone
RV Romashko, MN Bezrukov, SA Ermolaev. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok. Far Eastern Federal University (FENU), Vladivostok.*

5. Identification of the stages of structural changes in the deformation of aluminum alloy D16AT the parameters of acoustic emission
OV Baska, SV Panin, RV Romashko, VA Kim, AA Popkov. *Komsomolsk-on-Amur State Technical University, Russia, Komsomolsk-on-Amur. Institute of Strength Physics and Materials Science, Tomsk, Russia. Institute of Automation and Control Processes FEB RAS, Russia, Vladivostok. Far Eastern Federal University, Russia, Vladivostok.*

6. Management of the spectral composition of the radiation in a system of multiple anisotropic elements
PS Goncharov, VV Krishtop, NM Kireyev, Y. Ponomarchuk, AI Livashvili, TN Kornienko, A. Xu. *Far Eastern State Transport University, Khabarovsk.*

SECTION A.6 Photon and quantum systems and devices

1. Field testing of fiber optic receivers seismic acoustic signals
OT Kamenev, S. Petrov. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

SECTION A7 Nano- and Biophotonics

1. Models of high-photorealistic rendering for computing tasks Biophotonics
VA Peresunko, AY Seteykin, IV Krasnikov. *Amur State University, Blagoveshchensk.*

2. Laser fabrication of plasmonic nanosensors
AA Kuchmizhak, YN Kul'chin, OB Vitrik. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

3. Features of the method of laser-induced fluorescence to determine the concentration of phytoplankton chlorophyll in a changing environmental factors
EL Gamayunov*, Ph.D. Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

4. Submersible fiber optic fluorimeters in the study of marine biota
EL Gamayunov. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok.*

5. Investigation of thermal relaxation of living tissue by optical imaging of blood pulsation
AV Belaventseva, RV Romashko, AA Kamshilin. *Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences (IACP), Vladivostok. Far Eastern Federal University (FENU), Vladivostok. St. Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO), St. Petersburg.*

<table>
<tr><th>Monday
07/09/15</th><th>Tuesday
08/09/15</th><th>Wednesday
09/09/15</th><th>Thursday
10/09/15</th><th>Friday
11/09/15</th><th>Saturday
12/09/15</th></tr>
<tr><td rowspan="2">09:00 – 11:00
Registration for the School-Seminar in the lobby of the main building TUSUR , Lenina ave. , 40</td><td colspan="4">9:00 – 10:00
Breakfast</td><td rowspan="10">Departure of the participants of the 3rd International School-Seminar l of Young Scientists Photonics Nano- and microstructures (PNMS 2015)</td></tr>
<tr><td>10:00 – 10:30
The opening of the school</td><td rowspan="5">10:00 – 13:00
Section 2. Nonlinear optical materials</td><td>10:00 – 12:00
Section 4. Photonic crystals and structure</td><td rowspan="4">10:00 – 13:00
Section 7. Nano- and biophotonics</td></tr>
<tr><td>11:00
Departure auto- bead from the main TUSUR the sanatorium " Blue Cliff"</td><td rowspan="2">10:30 – 12:30
Section 1. Semiconductor nano- and microstructures</td><td rowspan="2">12:00 – 13:00
Section 5. Nanometrology and measurement systems</td></tr>
<tr><td rowspan="2">12:30 – 13:30
Lunch</td></tr>
<tr><td>13:00 – 14:00
Lunch</td><td colspan="2">13:00 – 14:00
Lunch</td></tr>
<tr><td rowspan="3">11:00 – 19:00
Registration for the School-Seminar at the conference hall of the sanatorium " Blue Cliff"</td><td rowspan="2">13:30 – 15:00
Section 3.

Nanoheterostructures and nanocomposites</td><td rowspan="3">EXCURSIONS</td><td>14:00 – 14:30
Section 7 . Nano- and biophotonics</td><td rowspan="2">14:00 – 16:00
Section 7. Nano- and biophotonics</td></tr>
<tr><td>15:00 – 17:00
Section 4. Photonic crystals and structure</td><td rowspan="2">17:00 – 18:00
Section 6 . Photonic and Quantum Systems and Devices</td></tr>
<tr><td>17:00 – 19:00
Зoster presentations</td><td>16:00
School Closing</td></tr>
<tr><td colspan="3">19:00 – 20:00
Dinner</td><td>19:00
Friendly dinner</td><td>19:00 – 20:00
Dinner</td></tr>
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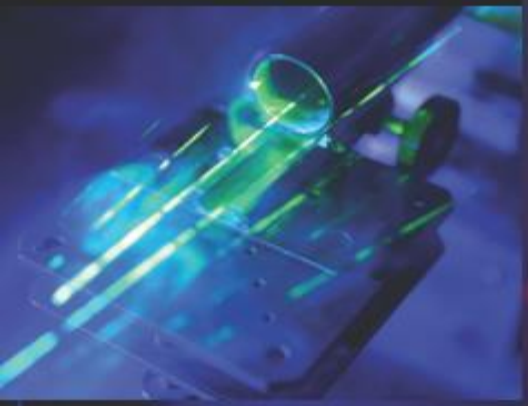

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