

**Event Program of Photonics. World of Lasers and Optics, 14-17 March 2016, Pavilion No.3 of Expocentre Fairgrounds**

14 March 2016 (Monday)							
Hall 1		Hall 2		Hall 3		Hall 4	
10:30 - 12:30 <b>Visiting Meeting of the Interagency Working Group on Photonics under the Russian Ministry of Industry and Trade (jointly with Secretariat of Technology Platform "Photonics" and the Council of Laser Association) (Hall 1)</b>							
12:30 - 13:00 <b>Exhibition Official Opening</b>							
13:00 - 14:00 <b>Tour around the exhibition to VIP visitors</b>							
14:00 - 18:00 <b>Element Base of Photonics</b> <i>Moderated by S.E. Shevtsov, General Director of Vavilov State Optical Institute</i>		14:00 - 18:00 <b>Laser Technologies and Procedures in Manufacturing Industries</b> <i>Moderated by V.M. Levshakov, Director of Shipbuilding and Shiprepair Technology Center OAO</i>		14:00 - 18:00 <b>Semiconductor Photonics and Nanophotonics</b> <i>Moderated by A.G. Zbrodskiy, Corresponding Member of the Russian Academy of Sciences, Director of Ioffe Institute of Research in Physics and Technology</i>		14:00 - 15:00 <b>Photon Counting IC Specpostavka</b>	
1. Modern Semiconductor Lasers and Prospects of their Application Speaker: G.T. Mikalayana, Inject Research and Production Enterprise, Saratov		1. Report on Results of Working Group No.3 in 2015 Speaker: V.M. Levshakov, Coordinator of Working Group No.3, St. Petersburg		1. Eye-Safe Wavelength Emission and Increase in Spectral Density of High-Power Semiconductor Lasers Speaker: Dr. Sci. (Phys.–Math.) I.S. Tarasov, Ioffe Institute of Research in Physics and Technology of the Russian Academy of Sciences, St. Petersburg		Speakers: Francois Richou, Engineer, ID Quantique N. Burov, Head of Optics and Photonics Department, IC Specpostavka	
2. Doide-Pumped Solid-State Y3 Al5 O12:Er, Y3 Al5 O12:Tm, Y2 O3:Tm Ceramic Lasers Speaker: P.A. Ryabochkina, Ogarev Mordovia State University, Saransk		2. Development of Russian Technology and Equipment for Laser Growth of Items Made of Powderly Materials Speaker: G.A. Turichin, Institute of Laser and Welding Technology, St. Petersburg		2. Dynamically Controlled Semiconductor Light Sources: from Technology to Equipment Speaker: Cand. Sci. (Phys.–Math.) A.F. Tsatsulnikov, Ioffe Institute of Research in Physics and Technology of the Russian Academy of Sciences, St. Petersburg			
3. Micro-and Nanodomain Engineering. Frequency Converters of Laser Emission by Crystals with Regular Domain Structures Speaker: V.Ya. Shur, Labfer OOO and Ural Centre of Shared Use "Advanced Nanotechnologies" of the Ural Federal University, Yekaterinburg		3. Production of Wear-Resistant Coatings for Gas Turbine Shafts Using Laser Cladding Speaker: I.N. Shiganov, Bauman Moscow State Technical University, Moscow		3. Russia-made Special-Purpose Equipment Used for Long-Run Objectives of Semiconductor Laser Technology Speaker: Cand. Sci. (Phys.–Math.) A.N. Alexeyev, NTO ZAO, St. Petersburg			
4. Holographic Diffraction Gratings with Varied Rulings from 10 to 30 nm Speaker: E.R. Muslimov, State Institute of Applied Optics, Kazan		4. Production of Products Made of Metallic Composite Materials Using Additive Technology (DMD) Speaker: R.S. Tretyakov, Bauman Moscow State Technical University, Moscow		4. Nanotechnology for Light Emitting Semiconductors Speaker: Cand. Sc. (Engineering) M.A. Ladugin, Stelmakh Polyus Research Institute, Moscow			
5. Special Features of Formation of Aspherical Optical Surface Based on High-Precision Replication Speaker: A.V. Lukin, State Institute of Applied Optics, Kazan		5. Promising Laser Technology in Instrument Making, Micro-and Radio Electronics Speaker: D.L. Saprykin, NII ESTO ZAO, Zelenograd		5. Nonlinear Interaction between Light and Photonic Crystals: Theoretical and Experimental Studies Speaker: Cand. Sci. (Phys.–Math.) S.O. Yurchenko, Bauman Moscow State Technical University, Moscow			
6. Geometrical-Optic Method of Computing Indicatrix of Light Transmission and Diffuse Reflection by Rough-Surfaced Objects and their Experimental Verification Speaker: A.I. Kolesnikov, Tver State University, Tver		6. Laser-Optical Methods of Measurement, Diagnostics and Control of Production Processes Speaker: Yu.V. Chugui, Technological Design Institute of Scientific Instrument Engineering, Siberian Branch of the Russian Academy of Sciences, Novosibirsk		6. Standards for Cleanrooms Speaker: A.E. Fedotov, ASENMC0, Moscow			
7. Erbium Doped Amplifiers for Special Applications Speaker: M.E. Likhachev, Fiber Optics Research Center in cooperation with FORC Photonics OOO and LICOptics OOO		7. Use of Laser Beam Machines Made by Laser Center OOO in Manufacturing Speaker: S.G. Gornyi, Laser Center OOO, St. Petersburg		7. On Aims and Plans of Working Group No.10 (Semiconductor Photonics and Nanophotonics) of Russian Technology Platform "Photonics" for 2016 Speaker: Dr. Sci. (Phys.–Math.) G.S. Sokolovsky, Executive Secretary of Working Group No.10			
8. Optoelectronic Sensors for the Oil and Gas Industry Speaker: M. Simonov (FORC Photonics), N. Stoyanov (Microsensor Technology), G. Kiselev (Omega ZAO, Transneft Group)		8. Laser On-Board Speed Detectors for Marine, Railway and Automotive Transport Speaker: Yu.D. Kaminsky, NII Teplopribor AO, Moscow					
9. On Aims and Plans of Working Group No.1 (Element Base of Photonics) of the Russian Technology Platform "Photonics" for 2016 Speaker: L.N. Arkhipova, Executive Secretary of Working Group No.1		9. Application of Direct Laser Growing Technologies for Making Bulk Samples Made of Stainless Iron and Study of their Mechanical Characteristics Speaker: D.P. Bykovskiy					
		10. Introduction and admission into Working Group No.3					
15 March 2016 (Tuesday)							
Hall 1		Hall 2		Hall 3		Hall 4	
10:00 - 13:00 <b>Russian-Chinese seminar on Laser Technology for the Oil and Gas Sector</b> <i>Moderated by prof. Xiao Zhu, Director of National Engineering Research Center for Laser Processing, Wuhan (working languages: Russian and Chinese, consecutive interpretation)</i>		10:00 - 13:00 <b>Photonics in Medicine and Life Sciences</b> <i>Moderated by A.V. Baranov, Director of State Scientific Center of Laser Medicine</i>		10:00 - 13:00 <b>Photonics in Scientific Research</b> <i>Moderated by V.I. Pustovoyt, Academician, Director of Scientific and Technological Center of Unique Instrumentation of the Russian Academy of Sciences</i>		11:00 - 12:00 <b>SensL. Silicone Photomultipliers Azimuth Photonics</b> Speaker: V.S. Timoshin	
1. Plans for Development and Adoption of Photonic Technologies in the Oil and Gas Industry of the People's Republic of China. Opportunities of China-Russia Cooperation in this Area. Speaker: prof. Xiao Zhu, Director of National Engineering Research Center for Laser Processing, Wuhan		1. Problems of Implementation of Laser Noninvasive Diagnostic Units and Technologies in Practical Healthcare Speaker: D.A. Rogatkin, MONIKI, Moscow		1. Laser-Electronic X-Ray Generator: Current State and Applications Speaker: A.V. Gorbunov, Lebedev Physical Institute of the Russian Academy of Sciences, Moscow			
2. Application of Laser Technology to Increase Equipment Life and Reliability in Trade Oil Production Speaker: A.M. Chirkov, Vyatka Laser Innovation and Technology Center, Kirov		2. Laser Stimulated Formation of 3D Polymeric Structures for Regenerative Medicine Speaker: P.S. Timashev, Institute on Laser and Information Technologies of the Russian Academy of Sciences, Troitsk		2. PEARL Laser Machine for Studying Critical State of Matter under the Influence of PW Emission Pulses Speaker: E.A. Khazanov, Corresponding Member of the Russian Academy of Sciences, Institute of Applied Physics of the Russian Academy of Sciences, Nizhny Novgorod			
3. Optoelectronic Sensor Systems for the Oil and Gas Industry (3 reports) Speakers: M.A. Simonov, FORC-Photonics N. Stoyanov, Microsensor Technology G. Kiselev, Omega ZAO of Transneft Group		3. Photonics in the programmes carried out by the Department of Innovative Development and Scientific Design of the Russian Ministry of Health Care Speaker: S.A. Romyantsev, Head of Department					

	<p>4. Lidar Monitoring of Leakages in Gas and Oil Pipelines Speaker: G.G. Matvienko, Zuev Institute of Atmospheric Optics, Siberian Branch of the Russian Academy of Sciences, Tomsk</p> <p>5. Detection of Methane Yields from Gas Hydrate Bottom Sediments through Water Surface Using Diode Laser Analyzers Speaker: Yu.N. Ponomaryov, Zuev Institute of Atmospheric Optics, Siberian Branch of the Russian Academy of Sciences, Tomsk</p> <p>6. Remote Laser Cutting in Emergency Operations at Oil and Gas Wells and Cleaning of Spills Speaker: A.G. Krasnyukov, TRINITI, Troitsk</p> <p>7. Representatives of Chinese oil and gas sector</p>	<p>4. On Plans of the State Scientific Centre of Laser Medicine Concerning Scientific and Methodological Support of Studies Aimed at Creation and Adoption of Medical and Photonic Technologies Speaker: A.V. Baranov, State Scientific Centre of Laser Medicine</p> <p>5. On Aims and Plans of Working Group No.4 (Photonics in Medicine and Life Sciences) of Russian Technology Platform "Photonics" for 2016 Speaker: D.G. Kochiyev, Executive Secretary of Working Group No.4</p>					
13:00-15:00	<b>Plenary Meeting of the 5th Congress of Technology Platform "Photonics"</b>	<b>Modern Laser Technologies and Their Application IRE-Polus</b>	13:00 - 15:00	<b>Modern Technologies for Development of Optical Equipment and Systems Bee Pitron SP</b>	12:00 - 16:00	<b>Modern Methods and Solutions for Testing Fiber-Optic Transmission Systems and Components Keysight Technologies</b>	
	<p>1. Academician A.M. Prokhorov and his Role in Laser Physics Speaker: acad. I.A. Shcherbakov, Director of Prokhorov General Physics Institute of Russian Academy of Sciences</p> <p>2. New Compact Laser Sources for Biomedical Applications Speaker: prof. E.U. Rafailov, Aston University, UK</p> <p>3. Quantum Photonics Speaker: prof. R.R. Yunusov, Director of Russian Quantum Centre</p>	Speaker: Dr. Sci. (Phys.–Math.), Prof. N.N. Evtkhiyev, R&D Deputy Director General of IRE-Polus		<p>13:00 Concurrent Engineering of Optical Systems: Integration of Zemax OpticStudio Software with Mechanical CAD and Multidisciplinary Physics and Technology Programmes</p> <p>13:30 Analysis Techniques for Design of Optical Equipment Using OOFELIE: Multiphysics and Zemax</p> <p>14:00 System Engineering: Multidisciplinary Engineering of Devices and Systems Based on 3DEXPERIENCE Platform</p> <p>14:30 Design Automation of Equipment Parts Made of Composite Materials</p>			
15:00-18:00	<b>Conferences of the 5th Congress of Russian Technology Platform "Photonics"</b>	<b>Optical Communications and Telecommunications Moderated by V.N. Treshchikov, Director of T8 OOO</b>	15:00-18:00	<b>Photonics in Agriculture and Environmental Management Moderated by D.S. Strebkov, Academician, Russian Academy of Agriculture of the Russian Academy of Sciences</b>	16:00 - 18:00	<b>Market Demand for Photonics Development. International Practices and Russian Reality Skolkovo Foundation</b>	
	<p>1. Photoelectronics Moderated by A.M. Filachyov. Corresponding Member of the Russian Academy of Sciences, General Director of NPO Orion</p> <p>2. Space Photosensory Speaker: V.P. Ponomarenko, NPO Orion, Moscow</p> <p>3. Development of Matrix Photodetectors Speaker: K.A. Khamidulin, NPO Orion, Moscow</p> <p>4. Large-Format Matrix Multiple Photodetectors Used in Space Speaker: K.V. Kozlov, NPO Orion, Moscow</p> <p>5. Multielement Avalanche Photodetectors Based on InGaAs Speaker: N.I. Yakovleva, NPO Orion, Moscow</p> <p>6. On Aims and Plans of Working Group No.12 (Photoelectronics) of Russian Technology Platform "Photonics" for 2016 Speaker: V.P. Ponomarenko, Executive Secretary of Working Group No.12</p>	<p>1. Modern Challenges and Prospects of the Russian Digital Transport Systems DWDM Speaker: V.N. Treshchikov, Director of T8 OOO</p> <p>2. Russia-made DWDM Telecommunications Equipment for Volga Long-Distance Fiber-Optic Communication Lines Speaker: M.A. Sleptsov</p> <p>3. Development Trends in Specific Optical Communications Systems Speaker: O.E. Naniy, Moscow State University – T8 OOO, Moscow</p> <p>4. On Aims and Plans of Working Group No.7 (Optical Communications and Telecommunications) of Russian Technology Platform "Photonics" for 2016 Speaker: R.R. Ubaidullayev, Executive Secretary of Working Group No.7</p>		<p>1. Use of Photonics and Robotics as a Priority Prospect for Agriculture Development Speaker: A.M. Bashilov, Russian Research Institute of Rural Electrification, Moscow</p> <p>2. Improvement of Quality of Farm Products by Processing them with Low-Intensity Infrared Light Speaker: A.S. Gordeev, Michurinsk State Agrarian University, Michurinsk</p> <p>3. Three Range Laser Diode Scanner for Greenhouses Speaker: S.A. Kuryanov, Michurinsk State Agrarian University, Michurinsk</p> <p>4. Machine Vision in Robotic Plant Growing Technologies Speaker: V.A. Korolev, Russian Research Institute of Rural Electrification, Moscow</p> <p>5. Prospects of Using Drones for Implementation of the Latest Agrotechnologies Speaker: S.A. Vorotnikov, Bauman Moscow State Technical University,</p> <p>6. Vision Systems for Conveyor Sorting of Farm Products in Accordance with Quality Regulations Speaker: Yu.I. Kirienko, Russian Research Institute of Rural Electrification, Moscow</p> <p>7. On Aims and Plans of Working Group No.5 (Photonics in Agriculture and Environmental Management) of Russian Technology Platform "Photonics" for 2016 Speaker: A.M. Bashilov, Executive Secretary</p>			
18:00-20:00	<b>Reporting and Relection Meeting of Laser Association (Press Hall at Congress Centre)</b>						
<b>16 March 2016 (Wednesday)</b>							
<b>Hall 1</b>		<b>Hall 2</b>		<b>Hall 3</b>		<b>Hall 4</b>	
10:00 - 14:00	<b>Research and technology seminar on Application of Titanium Alloys in Industrial and Special-Purpose Products Using Laser Processing Technologies Moderated by A.G. Sukhov, General Director of RCLT ZAO</b>	10:00 - 13:00	<b>Laser Information Systems Moderated by E.V. Kuznetsov, General Director of Stelmakh Polyus Research Institute</b>	10:00-14:30	<b>New Laser Processing Technology Laser Center</b>	10:00 - 13:00	<b>Metrological Support of Photonics Moderated by V.N. Krutik, General Director of All-Russian Research Institute for Optical and Physical Measurements</b>
		<p>1. Mini-Laser Rangefinders Speaker: V.A. Pashkov, Stelmakh Polyus Research Institute, Moscow</p> <p>2. Laser Emitters for GLONASS Optic Frequency Standards Speaker: A.V. Ivanov, Stelmakh Polyus Research Institute, Moscow</p> <p>3. Photodetectors for Modern Laser Rangefinders Speaker: A.E. Safutin, Stelmakh Polyus Research Institute, Moscow</p>				<p>1. Metrological Support of Photonics as a Sector Speaker: V.N. Krutikov, All-Russian Research Institute for Optical and Physical Measurements</p> <p>2. Metrology of Fiber Optic Systems: Current State and Development Prospects Speaker: S.V. Tikhomirov, All-Russian Research Institute for Optical and Physical Measurements</p> <p>3. Requirements for LED Measuring Equipment Speaker: T.B. Gorshkova, All-Russian Research Institute for Optical and Physical Measurements</p> <p>4. Technical Committee on Photonics under the Federal Agency on Technical Regulating and Metrology: Aims, Structure, Plans Speaker: E.A. Pechersky, Shvabe</p>	

					5. On Aims and Plans of Working Group No.2 (Metrological Support of Photonics) of Russian Technology Platform "Photonics" for 2016 Speaker: S.A. Moskaliuk, Executive Secretary of Working Group No.2
		13:00-15:00	<b>Round table on Photonics as Driving Force of Innovations. Experience of A.M. Prokhorov's School</b> Moderated by V.G. Artyushenko, General Director of Art Photonics, Berlin	14:30-17:00	<b>Modern Technologies for Development of Optical Equipment and Systems</b> Bee Pitron SP
15:00-18:00	<b>Application of Electro-Optical Technologies</b> Moderated by V.P. Savinykh, Corresponding Member of the Russian Academy of Sciences, President of Moscow State University of Geodesy and Cartography	15:00-18:00	<b>Photonics in Navigation and Geodesy</b> Moderated by V.D. Shargorodsky, Chief Designer of NPK SPP		13:00-14:00 <b>Azimuth Photonics</b> Cobolt Semiconductor Lasers Speaker: A.O. Taganov
	1. Quality of Optical Systems of Diverse Complexity: Detection of Maximum Possible Level Using Existing Data Base Speaker: S.N. Bezdiko, Zverev Krasnogorskiy Zavod, Krasnogorsk 2. Lidar Control Technologies of Optical and Microphysical Characteristics of Aerosol and Cloudy Fields and Atmospheric Meteorological Parameters Speaker: Yu.S. Balin, Zuev Institute of Atmospheric Optics, Siberian Branch of the Russian Academy of Sciences, Tomsk 3. Monitoring of Object Parameters of Critical Infrastructure Speaker: V.V. Gorbulev, T8 OOO, Moscow 4. Problems of Maintaining Consistency in Operation of High-Precision Range Keepers Speaker: M.V. Khoroshev, Moscow State University of Geodesy and Cartography, Moscow 5. Aims and Plans of Working Group No.8 (Application of Electro-Optical Technologies) of Russian Technology Platform "Photonics" for 2016 Speaker: M.V. Khoroshev, Executive Secretary of Working Group No.8		1. Results of Space Experiment on Processing Laser Communication System between ISS and Ground Stations Speaker: V.N. Grigoryev, NPK SPP, Moscow 2. Results of Space Experiment on Precise Synchronization of GLONASS On-Board and Earth-Based Timescales Speaker: A.S. Zhabin, NPK SPP, Moscow 3. Efficiency Upgrading of Laser Ranging of Space Vehicles Using Lasers with Picosecond Pulse Duration and Corner Retroreflectors with Bidirectional Beam Speaker: V.A. Murashkin, NPK SPP, Moscow 4. Retroreflector for Laser Ranging with Birefringent Wedge to Balance Velocity Aberration Speaker: V.P. Vasilyev, NPK SPP, Moscow 5. Laser Radar of Retroreflectors on the Moon Surface Speaker: I.A. Grechukhin, NPK SPP, Moscow 6. Results of Two Observation Campaigns on Laser Ranging of Earth Satellite Aimed at Evaluation of Productivity of International Network of Laser Stations Speaker: V.V. Pasyukov, NPK SPP, Moscow 7. Analysis of Opportunities of Space Debris Removal Using High-Power Lasers Speaker: V.D. Shargorodskiy, NPK SPP, Moscow 8. Aims and Plans of Working Group No.9 (Photonics in Navigation and Geodesy) of Russian Technical Platform "Photonics" for 2016 Speaker: A.A. Chubykin, Executive Secretary of Working Group No.9		14:30 Concurrent Engineering of Optical Systems: Integration of Zemax OpticStudio Software with Mechanical CAD and Multidisciplinary Physics and Technology Programmes 15:00 Analysis Techniques for Design of Optical Equipment Using OOFELIE: Multiphysics and Zemax 15:30 System Engineering: Multidisciplinary Engineering of Devices and Systems Based on 3DEXPERIENCE Platform 16:00 Design Automation of Equipment Parts Made of Composite Materials
					14:00-15:00 <b>Laser Track</b> New Trends in Micromachining Speaker: Axel Wehling, Coherent, Germany

17 March 2016 (Thursday)

Hall 1		Hall 2		Hall 3		Hall 4	
11:00 - 13:00	<b>Seminar on Holographic Photonic Technology</b> Moderated by prof. S.B. Odinovok, Bauman Moscow State Technical University	11:00 - 13:00	<b>Results of the Competition held by Laser Association</b> Moderated by A.A. Marmalyuk, Deputy Chairman of Research and Technical Council of Laser Association				
	1. Interferometric Control of Flat, Spherical and Aspherical Optics Using Synthetic Holograms Speaker: A.G. Poleshchuk, Dr. Sci. (Engineering), Prof., Head of Laboratory, Institute of Automation and Electrometry, Siberian Branch of the Russian Academy of Sciences, Novosibirsk						
	2. Tomographic Phase Microscopy Speaker: G.N. Vishnyakov, Dr. Sci. (Engineering), Prof., Head of Laboratory, All-Russian Research Institute for Optical and Physical Measurements, Moscow	13:00 - 14:00	<b>Public Session of Editorial Staff of Photonics Journal</b>				
	3. Digital Holographic Nanointerferometry Speaker: V.Yu. Venediktov, Dr. Sci. (Phys.-Math.), Assoc. Prof., Saint Petersburg Electrotechnical University "LETI", St. Petersburg						
	4. Application Features of Amplitude Equalizers in Cross Section of Laser Beams Speaker: A.F. Smyk, Cand. Sci. (Engineering), Nanotechnost OOO, Moscow						
	5. Methods of Speckle Reduction in Images, Liquid Crystal Despeckler Speaker: I.N. Komapets, Dr. Sci. (Phys.-Math.), Prof., Lebedev Physical Institute of the Russian Academy of Sciences, Moscow						
	6. Measuring Methods of Phase Distortions of High-Power Laser Radiation Using Wavefront Sensors Based on Computer Holograms Speaker: P.I. Malina Co-authors: S.B. Odinovok, M.S. Kovalev, K.G. Krasin, R&D Institute of Radioelectronics and Laser Technology at Bauman Moscow State Technical University, Moscow						
	7. Electro-Optical Scanner for Automated Identification of Security Holograms in ID Documents Speaker: I.K. Tsyganov Co-authors: S.B. Odinovok, V.V. Kolyuchkin, E.Yu. Zlokazov, N.V. Piryutin, V.E. Talalayev, R&D Institute of Radioelectronics and Laser Technology at Bauman Moscow State Technical University, Moscow						