

Schedule of SFM-19/ADFLIM
7th International Symposium “Optics and Biophotonics”
23^d International School for Junior Scientists and Students on Optics, Laser Physics & Biophotonics
4th School on Advanced Fluorescence Imaging Methods

September 23, Monday		
12.00-14.00	Registration	<i>Building 3, Foyer</i>
14.00-15.00	OSA SHORT COURSE Functional Optical Imaging of Developmental Dynamics in vivo Irina V. Larina , Molecular Physiology and Biophysics, Baylor College of Medicine, Houston, USA	<i>Building 10 Hall 503</i>
15.00-15.30	Coffee break	<i>Building 10</i>
15.30-16.30	OSA SHORT COURSE Functional Optical Imaging of Developmental Dynamics in vivo Irina V. Larina , Molecular Physiology and Biophysics, Baylor College of Medicine, Houston, USA	<i>Building 10 Hall 503</i>

September 24, Tuesday

9.00-14.00	Registration	<i>Building 10, Foyer</i>
10.00-11.00	SPIE SHORT COURSE Optical Guidance in Surgery & Radiation Therapy Brian Pogue , Engineering Science & Medical Physics, Dartmouth College, Hanover, New Hampshire, USA	<i>Building 10, Hall 503</i>
11.00-11.30	Coffee break	<i>Building 10</i>
11.30-12.30	SPIE SHORT COURSE Optical Guidance in Surgery & Radiation Therapy Brian Pogue , Engineering Science & Medical Physics, Dartmouth College, Hanover, New Hampshire, USA	<i>Building 10, Hall 503</i>
12.30-14.00	Lunch	
14.00-14.05	Introduction to SFM/ADFLIM Program Valery V. Tuchin , Saratov State University, Russia; Alexander Savitsky , Research Center of Biotechnology of the RAS	
14.05-16.00	SFM/ADFLIM PLENARY SESSION I Chairs: Valery V. Tuchin , Saratov State University, Russia Rinat O. Esenaliev , University of Texas Medical Branch, Galveston, Texas, USA LAB-Medical Devices for Porphyria-Screening, Fe-Deficiency and Beyond Ronald Sroka , LIFE-Center at Department of Urology at Hospital of University of Munich, Munich, Germany Molecular Sensors for Imaging Inflammation-Specific Biomarkers Alexei A. Bogdanov Jr. , University of Massachusetts Medical School, Worcester MA, USA; Research Center of Biotechnology of the RAS and Moscow State University, Moscow, Russia Photophysics and Photochemistry of Biphotochromic Fluorescent Proteins Alexander P. Savitsky , Research Center of Biotechnology of the RAS, Moscow, Russia	<i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i>
16.00-16.30	Coffee break, Exhibition	<i>Building 3</i>

16.30-17.50	<p>SFM/ADFLIM PLENARY SESSION II Chair: Alexander P. Savitsky, Research Center of Biotechnology of the RAS</p> <p>Biomedical Optoacoustics: A New Theranostic Modality Rinat O. Esenaliev, University of Texas Medical Branch, Galveston, Texas, USA</p> <p>Optical Coherence Tomography and Optogenetics for Investigation of Early Mammalian Embryonic Development Irina V. Larina, Baylor College of Medicine, Houston, USA</p>	<p><i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i></p>
17.50-18.50	<p>SFM SPECIAL EVENT: SPONSOR SESSION Chair: Valery V. Tuchin, Saratov State University</p> <p>Modern Semiconductor Lasers Manufactured by INJECT RME LLC And Prospects For Their Application Sergey Sokolov, INJECT, Saratov, Russia</p> <p>Fiber optic solutions for broad spectral range 0.3-16 um Olga Bibikova & Viacheslav Artyushenko, art photonics GmbH, Germany</p> <p>Application of femtosecond lasers in biophysics and physical medicine: a review Dmitry Chernykh, Avesta Ltd., Russia</p>	
19.00-22.00	<p>Welcome Party</p>	<p><i>Cafe "Poliglot"</i></p>

September 25, Wednesday

9.00-10.00	SHORT COURSE Near-infrared Spectroscopy in Cardiac Arrest and Cardiac Surgery Vladislav Toronov, Department of Physics, Ryerson University, Toronto, Canada					<i>Building 10, Hall 503</i>
10.00-10.30	Coffee break, Exhibition					<i>Building 10</i>
10.30-11.30	SHORT COURSE Near-infrared Spectroscopy in Cardiac Arrest and Cardiac Surgery Vladislav Toronov, Department of Physics, Ryerson University, Toronto, Canada					<i>Building 10, Hall 503</i>
11.40-13.00	SFM/ADFLIM PLENARY SESSION III Chairs: Kirill Larin, University of Houston, USA Peter S. Timashev, Institute for Regenerative Medicine, Sechenov University Quantum Optical Technologies for Communications and Information Processing Alexei K. Fedorov, Russian Quantum Center, Skolkovo, Russia Porous Oxide 3D Nanostructures and Nanocomposites as New Functional Materials: Prospects of The Applications for Information Transfer Devices, in Optics and Photovoltaics Anatoly N. Khodan, Frumkin Institute of Physical Chemistry and Electrochemistry of the RAS, Moscow, Russia Neoplasm Raman spectroscopy Valery P. Zakharov, Samara National Research University, Russia					<i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i>
13.00-14.00	Lunch					
14.00-16.30	JOINT INVITED LECTURE/ORAL SESSION BIOPHYSICS I/MICROSCOPY AND LOW-COHERENCE METHODS Chair: Vladislav Toronov, Department of Physics, Ryerson University, Toronto, Canada	<i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i>	ORAL SESSION BIOCOMPUTING I Chairs: Dmitry E. Postnov, Saratov State University, Russia	<i>Building 3, Conference Hall 64</i>	ADVANCED MATERIALS FOR OPTICS AND BIOPHOTONICS Chair: Rustam A. Khabibullin, IUHFSE RAS	<i>Building 10, Hall 503</i>
			ORAL SESSION BIOMEDICAL SPECTROSCOPY I Chair: Alexander B. Pravdin, Saratov	<i>Building 10, Hall 108</i>	LECTURE/ORAL SESSION EDUCATION I Chairs: Boris A. Medvedev, Saratov State University, Russia	<i>Scientific Library Conference Hall</i>

16.30-17.00	Coffee break, Exhibition							<i>Building 10</i>
17.00-19.15	INVITED LECTURE/ORAL SESSION BIOPHYSICS II Chair: Valery P. Zakharov , Samara University, Russia	<i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i>	ORAL SESSION LASER PHYSICS & PHOTONICS I Chair: Vladimir L. Derbov , Saratov State University, Russia	<i>Building 3, Conference Hall 64</i>	ORAL SESSION BIOMEDICAL SPECTROSCOPY II Chair: Alexander Pravdin , State University, Russia	<i>Building 10, Hall 108</i>	ADVANCED MATERIALS FOR OPTICS AND BIOPHOTONICS II Chair: Rustam A. Khabibullin , IUHFSE RAS, Moscow, Russia	<i>Building 10, Hall 503</i>
			ORAL SESSION EDUCATION II Chairs: B. Medvedev and V. Ryabukho , Saratov State University, Russia	<i>Scientific Library Conference Hall</i>	ORAL SESSION SPECTROSCOPY I Chair: Lev M. Babkov , Saratov State University, Russia	<i>Building 3, Room 34</i>		
20.00-22.00	Social program (Volga boat tour)							

September 26, Thursday

9.00-11.00	<p>SFM/ADFLIM SESSION IV</p> <p>Chairs: Alexei A. Bogdanov Jr., University of Massachusetts Medical School, Worcester MA, USA; Research Center of Biotechnology of the RAS and Moscow State University, Moscow, Russia Alexei K. Fedorov, Russian Quantum Center, Skolkovo, Russia</p> <p>Speckle Dynamics – from Diffuse Correlation Spectroscopy through Laser Speckle Contrast Imaging to Ultrasound Velocimeter David Boas, Boston University, Boston, USA</p> <p>Biological Atomic-Force Microscopy: Is It Worth It? Peter S. Timashev, Institute for Regenerative Medicine, Sechenov University</p> <p>Neuro Monitoring with Diffuse Correlation Spectroscopy Maria Angela Franceschini, Optics at Martinos Center, Massachusetts General Hospital and Harvard Medical School, Charlestown, Massachusetts, USA</p> <p>Colloids in Rotating Electric Fields: Tunable Interactions, Self-Assembly, and Phase Transitions Stanislav O. Yurchenko, Bauman Moscow State Technical University, Moscow, Russia</p>				<p><i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i></p>	
11.00-11.30	<p>Coffee break, Exhibition</p>				<p><i>Building 10</i></p>	
11.30-13.00	<p>INVITED LECTURE/ORAL SESSION BIOPHYSICS III</p> <p>Chair: Ronald Sroka, LIFE-Center at Department of Urology at Hospital of University of Munich, Munich, Germany</p>	<p><i>Building 10, Main Conference Hall (or Building 3, Big Physical Hall)</i></p>	<p>ORAL SESSION LASER PHYSICS & PHOTONICS II</p> <p>Chair: Vladimir L. Derbov, Saratov State University, Russia</p>	<p><i>Building 3, Conference Hall 64</i></p>	<p>TERAHERTZ OPTICS AND BIOPHOTONICS</p> <p>Chair: Dr. Vladimir A. Lazarev, BMSTU, Moscow, Russia</p>	<p><i>Building 10, Hall 503</i></p>
13.00-14.00	<p>Lunch</p>					
14.00-15.30	<p>PUBLIC LECTURE SESSION MODERN OPTICS</p> <p>Chairs: Georgy V. Simonenko, Alexander B. Pravdin, Saratov State University, Russia</p> <p>Shining Light on the Miracle of Life Irina V. Larina, Molecular Physiology and Biophysics, Baylor College of Medicine Houston, USA</p> <p>Quantum Technology: Bite Size Particles for Global Tasks Alexey K. Fedorov, Russian Quantum Center, Skolkovo, Russia</p> <p>Show "Exciting Light" presented by OSA and SPIE student Chapters of SSU</p>				<p><i>Building 3, Big Physical Hall</i></p>	

14.00-16.30	ROUND-TABLE DISCUSSION EDUCATION Chairs: Boris A. Medvedev , Saratov State University, Russia			<i>Scientific Library Conference Hall</i>
	ORAL SESSION LASER PHYSICS&PHOTONICS III Chair: Vladimir L. Derbov , Saratov State University, Russia	<i>Building 3, Conference Hall 64</i>	ORAL SESSION NANOBIPHOTONICS I Chair: Nikolai G. Khlebtsov , IBPPM RAS, Saratov State University, Russia	<i>Building 9, Conference Hall</i>
	LOW-DIMENSIONAL STRUCTURES Chair: Olga Glukhova , Saratov State University, Russia	<i>Building 8, Room 82</i>	ORAL SESSION NONLINEAR DYNAMICS Chair: Vadim S. Anishchenko , Saratov State University, Russia	<i>Building 3, Room 38</i>
16.30-17.00	Coffee break			<i>Building 3</i>
17.00-18.00	SFM/ADFLIM INTERNET PLENARY SESSION Chair: Valery V. Tuchin , Saratov State University Through Tissue Non-Invasive Sensing and Imaging Zeev Zalevsky , Bar Ilan University, Tel Aviv, Israel Upconverting Nanoparticles Applied in Tissue Imaging Stefan Andersson-Engels , Irish Photonic Integration Centre (IPIC), Tyndall National Institute and Department of Physics, University College Cork, Ireland			<i>Building 3, Big Physical Hall</i>
18.00-19.30	JOINT POSTER/INTERNET SESSION. COMPETITION FOR THE BEST STUDENT POSTER AWARD Chairs: Ivan V. Fedosov , Oleg Grishin , and Arkady Abdurashitov , Saratov State University, Russia			<i>Building 3</i>

September 27, Friday

9.00-10.00	<p>SFM/ADFLIM PLENARY SESSION V Chair: Kirill I. Zaytsev, Prokhorov Institute of General Physics of the RAS, Bauman Moscow State Technical University, Russia Plasmonic Layers Mediated Cell Optoporation System for Effective Intracellular Delivery of Biomolecules: Challenges and Perspectives Timofey E. Pylaev, Institute of Biochemistry and Physiology of Plants and Microorganisms of the RAS Exogenous Fluorescence Diagnostics of Gastrointestinal Tumours Ekaterina Borisova, Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria, Saratov State University, Saratov, Russia</p>							
10.00-10.45	<p>SFM SPECIAL EVENT: Journal session - Club of Editors-in-Chief Chair: Valery V. Tuchin, Saratov State University Journal of Biomedical Optics Brian Pogue, Engineering Science & Medical Physics, Dartmouth College, Hanover, New Hampshire, USA Neurophotonics David Boas, Boston University, Boston, USA Translational Biophotonics Ronald Sroka, LIFE-Center at Department of Urology at Hospital of University of Munich, Munich, Germany Journal of Biomedical Photonics & Engineering Valery P. Zakharov, Samara University, Valery V. Tuchin, Saratov State University</p>				Building 10, Main Conference Hall (or Building 3, Big Physical Hall)			
10.45-11.00	<p>BEST STUDENT POSTER WINNERS AWARD SESSION Chair: Valery V. Tuchin, Saratov State University</p>							
11.00-11.30	<p>Coffee break, Exhibition</p>					Building 10		
11.30-13.00	<p>ORAL SESSION BIOPHYSICS IV Chair: Ekaterina Borisova, Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria, Saratov State University, Saratov, Russia</p>		Building 10, Hall 503	<p>ORAL SESSION NANOBIPHOTONICS II Chair: Nikolai G. Khlebtsov, IBPPM RAS, SSU, Russia</p>		Building 9, Conference Hall		
	<p>ORAL SESSION BIOCOMPUTING I Chairs: Dmitry E. Postnov, Saratov State University, Russia</p>	Building 3, Conference Hall 64	<p>ORAL SESSION ELECTROMAGNETICS Chair: Michael V. Davidovich, Saratov State University, Russia</p>		Building 8, Room 82	<p>ORAL SESSION ENGLISH Chair: Alexander Pravdin, Saratov State University, Russia</p>		Building 18, Room 105
	<p>ORAL SESSION POLARIZATION Chair: Dmitry A. Zimnyakov, Yuri Gagarin State Technical University of Saratov, Russia</p>		Building 1, Room 459, SSTU	<p>ORAL SESSION SPECTROSCOPY II Chair: Kirill V. Berezin, Saratov State University, Russia</p>		Building 3, Room 34		
14.00-18.00	<p>Round-table discussions and closing of the School</p>				Open Air Meeting			