Dedicated to the 110th Anniversary of Saratov State University

Organized by

Saratov State University (National Research University of Russia) (SSU)

Research-Educational Institute of Optics and Biophotonics, SSU

International Research-Educational Center of Optical Technologies for Industry and Medicine "Photonics", SSU

Institute of Biochemistry and Physiology of Plants and Microorganisms, RAS

Institute of Precision Mechanics and Control, RAS (IPMC RAS)

Saratov State Medical University named after V.I. Razumovsky

Volga Region Center of New Information Technologies, SSU

Tomsk State University (National Research University of Russia) (TSU)

Biomedical Photonics Committee of Chinese Optical Society, China

ITMO University

Bauman Moscow State Technical University (BMSTU)

Institute of Solid State Physics of RAS (ISSP RAS)

Prokhorov Institute of General Physics of RAS

Sechenov First Moscow State Medical University

Institute of Ultra High Frequency Semiconductor Electronics of RAS

Bach Institute of Biochemistry, Research Center of Biotechnology, RAS, Moscow

SPIE Student Chapters of SSU, BMSTU, ISSP RAS, and Samara University

OSA Student Chapters of SSU and BMSTU

In cooperation with

Academy of Natural Sciences, Saratov Regional Division

Russian Society for Photobiology

Saratov Science Center, RAS

Biophotonics.World - the worldwide consortium Biophotonics4Life

EPIC – European Photonics Industry Consortium

Co-sponsored by

Government of the Russian Federation

RAS – Russian Academy of Sciences

SPIE – The International Society of Photo-Optical Instrumentation Engineers

OSA –Optical Society of America

IEEE - Institute of Electrical and Electronics Engineers

Russian Technology Platform “The Medicine of the Future”

Russian Technology Platform “Photonics”

European Technology Platform “Photonics21”

Samara University

INJECT RME LLC, Saratov, Russia

LLC SPE Nanostructed Glass Technology, Saratov, Russia

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The main goal of the Symposium is to present and discuss recent developments and applications of optical and laser technologies in medicine and biology, precise mechanics and control of tissues and cells, coherent optics of random and ordered media, material and environmental sciences, nonlinear dynamics of laser systems, laser physics, spectroscopy and molecular modeling, nanophotonics and nanobiophotonics. Fundamental problems of photonics, quantum optics and ultrafast optical techniques will be discussed. The main attention will be paid to discussion of basic research of interactions of coherent, low-coherent, polarized, spatially- and temporally-modulated electromagnetic radiation within the broad wavelength range from x-rays to terahertz with inhomogeneous scattering media and biological tissues and cells. Elastic, inelastic (Raman, SERS and CARS) and dynamic light scattering, Doppler shift, photoacoustic, photothermal and nonlinear interactions, mechanical stresses, and photobiological effects will be considered. On this basis, the variety of laser and optical technologies for medical diagnostics, therapy, surgery, and light dosimetry, as well as for diagnostics and imaging of random and ordered media will be presented. Studies on lasers, fibers, and microstructured waveguides will be discussed. Plasmonics and biosensing will be one of the key features of the meeting.

Official languages of the School and the Workshops are English and Russian, translation will be provided.

The Conference fee

For foreign participants, the conference fee is $200 (lunches, barbecue, Volga-river voyage, and light refreshments are included), may be paid during the Meeting or transferred to the account number for request.

For Russian participants the Conference fee will depend on financial support from sponsoring organizations.

Lodging

Western style mini-hotel Bohemia in the downtown

http://www.bohemiahotel.ru

Hotel “Slovakia” ashore the Volga river

http://slovakia.all-hotels.ru/

Hotel “Volga” in the downtown

http://astoria-saratov.ru/en/hotels/volga/

Hotel “Saratov” in the downtown

http://astoria-saratov.ru/en/hotels/saratov/

Hotel “Volna” ashore the Volga river

http://volna64.ru/

Culture program

Visits to Conservatoire, Theaters, and Museums, 2-hour Volga-tour.

Proceedings

Conference papers will be published as Conference Proceedings (in Russian and English) under the title "Optical Physics and Biophotonics", SPIE Proceedings, and in Russian and International peer-reviewed journals: *Journal of Biomedical Photonics & Engineering, Quantum Electronics (Russian/English), Optics and Spectroscopy (Russian/English), Nonlinear Applied Physics (Russian/English).*

All papers will be subjected to the normal refereeing process for the journals. Manuscripts of papers should be submitted not later than **November 1, 2019**. For special issue of Quantum Electronics not later than **August 15, 2019**.

Visa application support

To apply for visa to Russian Consulate you need an official invitation letter. The following information about you and accompany persons is needed:

1. Passport (valid up to six months after September 28, 2019)
number:_____
dates of issue:___ and of expiry:_____ (copy of passport page with photo)

2. Date of birth:___, place of birth:_____

3. Living address:_____

4. Working position:_____

5. Working address:_____

6. Name of town, where you are going to apply for visa (Russian consulate)

Please, send this information to general secretary of the SFM-19

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