### October 20-23, 2016, Moscow, Russia

#### The 1st International Symposium on

### «Physics, Engineering and Technologies for Bio-Medicine»

The 1st International Symposium on "Physics, Engineering and Technologies for Bio-Medicine" will be held in Moscow at the occasion of the foundation of the new Institute PhysBio at MEPHI (Russia) on October 20-23, 2016.

Under the auspices of the Russian Ministry of Science and Education, the Ministry of Health and the State Company Rosatom, the Symposium is organized by the Institute of Engineering Physics for Biomedicine (PhysBio), which has recently been established at National Research Nuclear University MEPhI (Moscow Engineering Physics Institute).

The PhysBio's goal is to train highly-skilled personnel through the research and development in engineering physics for biomedicine, including nuclear medicine, material science, laser physics and biophotonic technologies.

The Symposium is aimed to meet the leading scientists and experts in nuclear medicine, biophysics, biophotonics, and emerging fields to present their works and to have invited lectures on the following topics:

- Diagnosis methods, today and in the future
- Isotopes for medical purpose
- Brachy-, Proton and Ion therapy methods
- Immuno-therapy
- Nanomaterials for biomedical applications
- Bioimaging technologies and materials
- Advanced materials and methods for MRI and PET
- Plasma and laser technologies for biomedicine
- Medical-biological aspects of radiation effects
- Bio-photonics for diagnosis and therapy

A Poster session is foreseen.

Please note the following important information:

Deadline for abstract submission and registration: 16 October 2016

Welcome reception: 7 p.m. on October 19, 2016.

Graduate School (special student lectures) will be organized from 9:00 to 17:00 on October 19 at MEPHI.

More detailed information on the Symposium organization is available on the following webpage: <a href="http://physbio.mephi.ru/symp16/">http://physbio.mephi.ru/symp16/</a>. If you have any questions, please, use the following e-mail: <a href="mailto:PhysBioSymp16@mephi.ru">PhysBioSymp16@mephi.ru</a>.

We invite you to visit the website of the Symposium and distribute this information widely to your colleagues.

### **Symposium Co-Chairs**

Mikhail N. Strikhanov, MEPhI, Moscow, Russia

Paras Prasad, University of Buffalo, New York, USA

### **Program-Committee Co-Chairs**

Andrei V.Kabashin, CNRS, Aix-Marseille University, France

Oleg B. Loran, S.P. Botkin City Clinical Hospital, Department of Urology and Surgical Andrology of the Russian Medical Academy of Post-Graduate Education, Moscow, Russia

### **Organizing-Committee Chair**

Irina N. Zavestovskaya, PhysBio MEPhI, LPI of RAS, Moscow, Russia

## **Symposium Secretary**

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Nidal Salim, Center of beam therapy of The European Medical Center, Moscow, Russia

Marc Sentis, CNRS, Aix-Marseille University, France

Sergey V. Shestakov, Academician of RAS, member of the Genetics Department of the M.V. Lomonosov Moscow State University, Moscow, Russia

Rudolf Steiner, Institut für Lasertechnologien in der Medizin (ILM), Universität Ulm, Germany

Gleb Sukhorukov, Queen Mary University of London, UK

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Valentin G.Nikitaev, MEPhI, Moscow, Russia

Vasyli M. Petriev., laboratory of experimental nuclear medicine, Medical Radiological Research Center, Ministry of Health, Moscow, Russia

Sergey V. Shiryaev, Department of Radiologic Diagnosis of the N.N. Blokhin Cancer Research Center, President of the Oncological Society of Molecular Imaging, Moscow, Russia

Victor Yu. Timoshenko, MSU, PhysBio of MEPhI, Lebedev Physical Institute of RAS, Moscow, Russia

Igor E. Tyurin, Department of Radiodiagnostics and Medical Physics of the Russian Academy of Post-qualifying Education, Moscow, Russia

### **Preliminary List of Invited Speakers**

Dimiter Loukanov Balabanski, Extreme Light Infrastructure - Nuclear Physics IHIN-HH Marurele – Bucharest, Romania

Jacques Barbet, ARRONAX, Center in Cancer Research of Nantes-Angers (CRCNA), France

Vladimir I. Chernov, Department of Radiologic Diagnosis of the Tomsk Research Institute of Oncology, Tomsk, Russia

Boris I. Dolgushin, Research Institute of Clinical Oncology of the N.N. Blokhin Cancer Research Center, Moscow, Russia

Dmitry K. Fomin, Nuclear Medicine Clinic of the Russian Scientific Center of Radiology and Nuclear Medicine, Moscow, Russia

François Guérard, CRCNA (The Cancer research center in Nantes-Angers), GIP Arronax, France

Thomas Haberer, Heidelberg Ion Therapy Centre HIT, Germany

Andrey D. Kaprin, Herzen Moscow Oncology Research Institute, Moscow, Russia

Anatoly V. Karalkin, Nuclear Medicine Clinic of N.I. Pirogov State Clinical Hospital No. 1, Moscow, Russia

Valery V. Krylov, Division of Radiosurgical Targeted Therapy of the A.F. Tsyb Medical Radiological Research Center, Obninsk, Russia

Victor B. Loschenov, Prokhorov General Physics Institute of RAS, IEPhB, MEPhI, Moscow, Russia

Vladimir Lysenko, CNRS, INL, INSA de Lyon, France

Igor Meglinski, University of Oulu, Finland

Hans P. Meinzer, Department of Medical and Biological Informatics E130, Heidelberg, Germany

Igor R. Nabiev, University of Reims Champagne-Ardenne, France; LNBI, MEPhI, Moscow, Russia

Valentin G.Nikitaev, MEPhI, Moscow, Russia

Igor N.Pronin, Research Institute of Neurosurgery, Moscow, Russia

Paras Nath Prasad, University at Buffalo, USA

Michael Scholz, GSI Helmholtz Centre for Heavy Ion Research, Darmstadt, Germany

Sergey V. Shestakov, M.V. Lomonosov Moscow State University, Moscow, Russia

Sergey V. Shiryaev, N.N. Blokhin Cancer Research Center, Moscow, Russia

Gleb Sukhorukov, Queen Mary University of London, UK

Victor Yu. Timoshenko, MSU, PhysBio of MEPhI, Lebedev Physical Institute of RAS, Moscow, Russia

Igor I. Vlasov, Prokhorov General Physics Institute of RAS

Raisa I. Yakubovskaya, Herzen Moscow Oncology Research Institute, Russia

Andrey Zvyagin, Macquarie University, Sydney, Australia