



September 9	Panorama	8.00-18.00	Registration (Lobby)		
		9.00-9.45	Plenary lecture (Central Hall)		
		9.45-10.30	Plenary lecture (Central Hall)		
		10.30-10.45	Coffee break		
		10.45-11.30	Plenary lecture (Central Hall)		
		11.30-12.15	Plenary lecture (Central Hall)		
		12.15-13.30	Lunch		
		13.30-15.40	Oral Session OS-1-2, Section 1 (Hall A)	Oral Session OS-2-2, Section 2 (Hall B)	
		15.40-16.00	Coffee break		
		16.00-17.45	Oral Session OS-4-2, Section 4 (Hall A)	Oral Session OS-3-2, Section 3 (Hall B)	

Central Hall Plenary Session



September 9 (Tuesday)

Chairman: *Nikolay M. Zubarev*

9.00-9.45	<p>Plenary lecture (Central Hall)</p> <p>Plasma Methods for Controlling Aerodynamic Flows</p> <p><u>Vladimir A. Yamshchikov</u></p> <p>Institute for Electrophysics and Electric Power RAS, Saint Petersburg, Russia</p>
9.45-10.30	<p>Plenary lecture (Central Hall)</p> <p>Gas Discharge Plasma for Surface Modification of Insulating Materials</p> <p><u>Cheng Zhang</u></p> <p>Institute of Electrical Engineering CAS, Beijing, China University of Chinese Academy of Sciences, Beijing, China</p>
10.30-10.45	<p>Coffee break</p>
10.45-11.30	<p>Plenary lecture (Central Hall)</p> <p>Active Brownian Motion of Charged Grains in Plasma, Viscous Fluid, and Superfluid Helium</p> <p><u>Oleg F. Petrov</u></p> <p>Joint Institute for High Temperatures RAS, Moscow, Russia</p>
11.30-12.15	<p>Plenary lecture (Central Hall)</p> <p>Physical Models of Compact Sources of Neutrons and Charged Particles under the Action of Lasers and Pulsed Jets</p> <p><u>Sergey V. Ryzhkov</u></p> <p>Bauman Moscow State Technical University, Moscow, Russia</p>



Hall A

Section 1.

Fundamental processes in low-temperature plasma: low and high pressure discharges, near-electrode phenomena, radiation, ultrafast processes, diagnostics.

13.30-15.40

Oral Session (OS-1-2).

Chairman: *Dmitry L. Shmelev*

1	Invited report	<p>Comparison of plasma parameters of plasma diffuse jets and red columnar sprites <i>Viktor F. Tarasenko, Dmitry A. Sorokin, E.Kh. Baksht, V.P. Vinogradov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia</p>
2	Invited report	<p>Surface ionization waves in a coaxial barrier discharge in argon flow at atmospheric pressure <i>Yuri S. Akishev, S.A. Ermolaeva, M.A. Medvedev, A.V. Petryakov</i> SRC RF TRINITI, Moscow, Russia</p>
3	Oral	<p>On "memory" of plasma structures formed in a coaxial barrier discharge in argon flow <i>Alexander V. Petryakov, Yu.S. Akishev, S.A. Ermolaeva, M.A. Medvedev</i> SRC RF TRINITI, Moscow, Russia</p>
4	Oral	<p>Influence of plasma bubble process on hydrogen production characteristics in methanol-water mixtures <i>Yanbin Xin, Sh. Lei, J. Liu, Q. Wang, B. Sun</i> Dalian Maritime University, Dalian, China</p>
5	Oral	<p>Computation of high electron density during nanosecond pulsed plasma synthetic jet discharge initiation: coupled numerical models <i>Jintao Zhang, Cheng Zhang, Xinyu Xu, Bangdou Huang, Tao Shao</i> Institute of Electrical Engineering, Chinese Academy of Sciences, Beijing, China</p>
6	Oral	<p>Electrophysical parameters of the "physically pure" abnormal discharge in inert gases <i>Gleb V. Shevchenko, P.A. Bokhan, P.P. Gugin, M.A. Lavrukhin, D.E. Zakrevsky</i> Rzhanov Institute of Semiconductor Physics, Novosibirsk, Russia</p>



Hall A

Section 4.

Power supply for researches and applications: generators of continuous, pulse-periodic and pulsed action, gas switches, pulsed power machines and accelerators.

16.00-17.45

Oral Session (OS-4-2).

Chairman: **Sergei A. Shunailov**

1	Invited report	<p>Degradation in e-beam irradiated solutions of medicine <i>Olga N. Tchaikovskaya, E.N. Bocharnikova, N.P. Bezlepkina, I.E. Filatov, V.I. Solomonov, A.V. Spirina, A.I. Lipchak, A.S. Makarova</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia</p>
2	Oral	<p>Radiolytic transformation of toxicants in the presence of humic acids <i>Alfiya V. Spirina, O.N. Tchaikovskaya, V.I. Solomonov, N.V. Udina</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia</p>
3	Invited report	<p>A new concept: multi-switch shared driving <i>Junfeng Rao</i> Chinese Academy of Sciences, Suzhou Institute of Biomedical Engineering Technology, Suzhou, China</p>
4	Oral	<p>Features of measuring the diameter of a focused electron beam in a forevacuum <i>Aleksey A. Zenin, I.Yu. Bakeev, A.V. Dolgova, A.S. Klimov</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia, Tomsk, Russia</p>



Hall B

Section 2.

Gas-discharge methods for surface modification and coating deposition: surface modification, ion implantation, combined methods of surface treatment, neutron and synchrotron methods of diagnostics.

13.30-15.40

Oral Session (OS-2-2).

Chairman: *Efim M.Oks*

1	Invited report	<p>Extension the operating range of continuous magnetron discharge with a cold cathode in self-sputtering mode <u>Maxim V. Shandrikov, A.A. Cherkasov, E.M. Oks</u> Institute of High Current Electronics SB RAS, Tomsk, Russia</p>
2	Invited report	<p>Application of HiPIMS technology for deposition of functional nanocomposite coatings using ceramic SHS-targets <u>Philipp V. Kiryukhantsev-Korneev, A.D. Chertova, E.A. Levashov</u> The National University of Science and Technology MISIS, Moscow, Russia</p>
3	Oral	<p>Magnetron discharge with asymmetric rotating magnetic field <u>Alexander V. Tumarkin, A.V. Kaziev, M.M. Kharkov, D.V. Kolodko, Y.D. Kiryukhin</u> National Research Nuclear University, Moscow, Russia</p>
4	Oral	<p>Analysis of the ion flux extracted from a DC magnetron discharge with aluminum target <u>Nikita V. Mamedov, D.V. Kolodko, G.S. Lomonosov, A.V. Tumarkin, M.M. Kharkov, M.S. Novikov, A.V. Kaziev</u> Research Institute for Precision Machine Manufacturing (NIITM JSC), Moscow, Russia</p>
5	Oral	<p>Formation of gas and metal ion beams in a source based on a high-current pulsed magnetron discharge <u>Alexander A. Cherkasov, E.M. Oks, K.P. Savkin, M.V. Shandrikov</u> Institute of High Current Electronics SB RAS, Tomsk, Russia</p>
6	Oral	<p>Molecular mobility in the near-surface nanolayers of nascent and sintered UHMWPE reactor powders as revealed by plasma-induced thermoluminescence <u>Timofey D. Shidlovskiy, L.P. Myasnikova, V.I. Siklitsky, V.L. Preobrazhenskii, M.M. Cygankov, A.S. Luzgin</u> The Ioffe Physical-Technical Institute of the Russian Academy of Sciences, St. Petersburg, Russia</p>

September 9 (Tuesday)



Hall B

Section 3.

Plasma-chemical, electrophysical and laser technologies: environmental applications, production of nanopowders and functional materials.

16.00-17.45

Oral Session (OS-3-2).

Chairman: *Igor E. Filatov*

1	Invited report	Characteristic evolution of pulsed spark discharge and its application in energy small molecules conversion <i>Shuai Zhang, L. Li, C. Zhang, T. Shao</i> The Institute of Electrical Engineering of Chinese Academy of Sciences, Beijing, China
2	Oral	Corona discharge ozone generator <i>Alexandr S. Chepusov, S.R. Korzhenevskiy, A.A. Komarskiy, A.V. Ponomarev, O.D. Krasniy</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
3	Oral	Filamentation and optical breakdown of air <i>Vladimir E. Prokopen, V.K. Oshlakov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Generators for electric pulse crushing with operating voltage of 50 kV <i>Vitaly M. Alexeenko, A.A. Zherlitsyn, S.S. Kondratiev, A.G. Sitnikov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
5	Oral	Combined fieldshaper of steel base with CuNb wire insert <i>Vasili I. Krutikov, A.V. Spirin, E.V. Zaytsev, S.N. Pararin</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia