FIFTH INTERNATIONAL SCIENTIFIC - PRACTICAL CONFERENCE "Research, Development and Application of High Technologies in Industry" March-April 2008, St. Petersburg, Russia

DEAR COLLEAGUES!

We inform you that

THE FIFTH INTERNATIONAL SCIENTIFIC – PRACTICAL CONFERENCE "RESEARCH, DEVELOPMENT AND APPLICATION OF HIGH TECHNOLOGIES IN INDUSTRY"

will be held in March-April, 2008 in St. Petersburg, Russia by the Institute of Atmospheric Optics of the Siberian Branch of the Russian Academy of Sciences (RAS), the Administrative Department of President of Russia "Enterprise for Deliveries of Products", the Institute of Tests and Certification of Arms and Military Engineering of the Ministry of Defense of the Russian Federation, the St.-Petersburg State Polytechnical University, S.M. Budennyi Military Academy of Communication of the Ministry of Defense, I.P. Pavlov Institute of Physiology of the RAS, the Tomsk Polytechnical University, D.F. Ustinov Baltic State Technical University "Voenmekh", the Academy of Strategic Researches, Information and High Technologies, the Institute of Telecommunications, the National Congress of Young People, the St.-Petersburg Commercial and Industrial House and other institut

- 1. The role of federal and regional authorities, state and private industrial sectors, mass media in the development of the education, basic and applied researches (hereinafter, BAR) and high technologies (hereinafter, HT) in Russia, USA, CIS and EU countries and other developed countries. The comparative analysis, search of optimal mechanisms of interaction and management.
- 2. The state of the art and prospects of application of HT results of basic and applied researches in various fields of science, education and industry (in particular, in military fields). Russia, the countries of CIS and EU, USA, China, India and other countries of the world:
- 1. Information and computer technologies (ICT), computer modelling, robotics, radio electronics, scientific instrument making, telecommunication systems, applied mathematics, direct and return problems, programming, cryptography and information protection databases;
- 2. Theoretical and applied physics, radiophysics, chemistry, physical chemistry, gas dynamics and hydrodynamics;
- 3. Physics and technology of electric discharges, optical, laser, plasma, film and nanotechnologies, electronics, including the high capacities, nondestructive control;
- 4. Atomic and nuclear technologies, aircraft, rocket design and astronautics;
- 5. Powder metallurgy, materials technology, composition materials and strengthening technologies;
- 6. Biotechnology, medicine, genetics, cytology, agriculture;
- 7. Global and regional climatology and ecology. Research of processes, diagnostics, the analysis of development processes, development of methods of climate and ecology control;
- 8. Extraction, processing and transportation of raw material, energetics, welding, construction,

metallurgy, chemical and heavy industry, mechanical engineering, shipbuilding, transport, consumer production;

- 9. Standardization and automation of control systems of business, science, industry, regions and the state. The theory of steady development, computer simulation;
- 10. The international standardization of education, BAR, HT, and HT production. Problems, the analysis, forecasts;
- 3. Problems and ways of solution of economic efficiency and competitiveness in the world education market, BAR and HT in Russia and the CIS countries. Experience of the Eurounion, USA, China, India and other countries. A policy and economy of education, BAR, HT and HT in industries. Analytics, the comparative analysis.
- 4. The education, basic and applied researches, high technologies and highly technological industry, as factors of state security, independence of the state, quality of life of citizens and protection of human rights.
- 5. BAR and HT, creation of HT business incubators, technoparks, ICT parks and "silicone" regions as a basis of development of industry, including an export component, the performance of the state and defence orders. Practice, legislative base, the analysis and forecast.
- 6. Financal-politological, legislative legal, social and international aspects of the development of higher secondary technical education, BAR, HT and HT industry. Computer simulation.
- 7. Intensification of works in the field of BAR, HT, development HT industry and preparation of highly skilled experts, as a basis for the solution of the problem of doubling of gross national product. Problems of youth in science and HT industry.
- 8. Basic and applied researches, high technologies and the highly technological industry of double purpose of 21st century. Computer simulation.
- 9. Historiography, dialectics and political science of the development of education, basic and applied researches, high technologies and the highly developed industry. Such an expanded approach to the subjects of the Conference and the complex scientific analysis, as the experience of the first Conference has shown, make it possible to evaluate the state of the art, to develop and realize the optimal solutions and way of the development of education, BAR, HT and the highly developed industry. It is also confirmed by the long-term work of the best Russian and foreign Universities, Institutes, Academies of Sciences and the largest corporations of the world. At the Conference the Trade Exhibition of Achievements in Education, Basic and Applied Researches and High Technologies in the Industry will be organized with participation of potential customers and investors, in particular, from foreign countries with an opportunity of concluding the contracts. We invite you and your colleagues to participate in the Trade Exhibition and to present materials about your achievements on the subjects of the Conference. The advertising information can be published in the Conference Proceedings and on the conference site: www.htfi.ru

We propose you and scientific workers of your University, Institute to take an active part in the Conference and in the work of Organizing Committee. The deadline for sending applications to participate in the Conference is 20. 12. 2008. Your application should contain the following information:

- 1. First name and last name of authors;
- 2. Title and length of paper abstracts;

- 3. Affiliation (if materials are presented by the institution);
- 4. First name and last name of a speaker;
- 5. Mailing address, fax and e-mail.

The number of papers is not limited.

More detailed information on conditions of participation in the International Conference will be sent after reception of the application. Please send your Application and proposals on the Conference subjects to the following addresses:

In Tomsk: 634055, Tomsk, Russia, Institute of Atmospheric Optics SB RAS, 1 Akademichesky Ave.

Phone in Tomsk: +7(3822)492-738.

In St. Petersburg: North-West Representative Office of IAO SB RAS Phone in St. Petersburg: +7(906)-22-99-647 - for English and German

fax: +7(812)574-30-17.

Post address: P/O box 01, St. Petersburg, 195298 Russia.

E-mail: spbtpd@mail.ru

Co-Chair and Chief Executive of the Conference Organizing Committee

vice-director of IAO SB RAS Kudinov A.P.