

V Staver's Readings

Event date: 15-16 october 2009, 10:00-18:00

Siberian Federal University and Krasnoyarsk Scientific Center SB RAS held the All-Russian Scientific-Technical Conference «*Ultra-Fine Powders, Nano-Structures and Materials*» with international participation on **October 15-16, 2009**.

The Conference was held in the memory of Anatoly Staver, Professor, Doctor of Physical and Mathematical Sciences, Laureate of the National State Prize and former Rector of Krasnoyarsk State Technical University integrated into Siberian Federal University.

Topics of the Conference:

- Physical chemistry of ultra-fine (nano-) systems;
- Production and properties of ultra-fine (nano-) powders;
- Applications of ultra-fine (nano-) powders in multipurpose materials and technologies;
- Nano-structures in materials and micro-engineering;
- Ultra-fine (nano-) powders in biology and medicine;
- Investigation and certification of ultra-fine (nano-) powders, materials and nano-structures;
- Training in the field of advanced materials and technologies.

Scientists from Moscow, St. Petersburg, Yekaterinburg, Chelyabinsk, Omsk, Novosibirsk, Tomsk, Irkutsk, Chita, Biysk and Kazakhstan took part in the Conference. The organizing committee received for about 180 scientific reports from 400 Russian and foreign scientists.

Scientists of the SibFU Polytechnic Institute have been successfully applying nanotechnologies since 1983. They were also granted with more than 50 patents in Russia and abroad. Siberian Federal University collaborates with the Kirensky Institute of Physics SB RAS, the Institute of Chemistry and Chemical Technology SB RAS, the Biophysics Institute SB RAS and Krasnoyarsk State Medical Academy, etc.

SibFU scientists and their co-workers achieved the most remarkable results in elaboration of motor oil additives enabling to save 10% of fuel, corrosion-resistant alloys of high-quality characteristics, ultra-strong paint coating and lens of high quality for optical systems.

Scientists also developed demonstration installation referred to the production scheme of the new wood-based panels and plastic wood. Such technology stands out from the others by ecological cleanness, high strength of received materials and utilization of industrial wood residue and low-value species of wood (aspen). The new plastic wood can be applied as a construction material in agriculture, machine and shipping industry. Furthermore, research of other scientists showed that applications of ultra-fine (nano-) powders in modified technical carbon dust cause 50% increase in plain bearing operation in comparison with the basic oil. R&D activities concerning magnetic nanoelements which function as drug carriers and possess stable bactericidal properties are expected to be the most far reaching and perspective at the present time.

Eugene A. Vaganov, Professor, Rector of Siberian Federal University pointed out at the opening ceremony of the Conference: «*Staver's Readings is a role model of the progressing scientific idea. Siberian Federal University always supports such scientific events which have become the remarkable feature of the Russian science*». Eugene A. Vaganov also expressed his confidence that the participants of the Conference succeeded in forming new groups of scientists working in the same R&D direction. «*Experienced scientists should give a helping hand to inexperienced ones*», he said.

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