

PERSONALIA

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On the Seventy-Fifth Birthday of Sergei Nikolaevich Bagayev

Academician Sergei Nikolaevich Bagayev, an eminent physicist and science manager, director of science at the Institute of Laser Physics (ILP), Siberian Branch (SB), Russian Academy of Sciences (RAS), was born on 9 September 1941 in Novosibirsk.

Bagayev's scientific biography is closely connected with Siberia. Here, after graduating from the Department of Physics, Novosibirsk State University (NSU), he started his research career in 1963 at the Institute of Radiophysics and Electronics, SB, USSR Academy of Sciences (UAS). After its reorganisation in 1964, he began his work at the Institute of Semiconductor Physics, SB, UAS, where he went all the way from a research assistant to head of a laboratory. In 1975, Bagayev defended his candidate of science dissertation under the mentorship of V.P. Chebotaev, with whom he was linked by collaboration and friendship for many years. In 1978, the Laboratory of the Physics of Gas Lasers, Department of Laser Physics, headed by Bagayev, moved to the Institute of Thermophysics, SB, UAS. In 1983, he defended his doctoral dissertation. Bagayev was elected a corresponding member of UAS in 1990 and a member of RAS in 1994. Thanks largely to Chebotaev and Bagayev's joint efforts, 1991 was the year of the birth of ILP in Novosibirsk. In 1992, Bagayev became its head. In the 1990s, hard years for Russia and Russian science, Bagayev's immense capacity to work, activity and persistence played an important role in ensuring that ILP's creative team persisted and progressed. He was an initiator of establishing a state science and technology program concerned with fundamental metrology and became head of the program's panel. He forged efficient cooperation with a number of leading foreign laboratories and countries of the Commonwealth of Independent States. Together with researchers from Germany, the United Kingdom, France, Italy and the United States, Bagayev carried out international programs concerned with the precision spectroscopy of hydrogen and muonium atoms and the indium ion with the aim of more accurately determining fundamental physical constants and the laser detection of gravitational waves.

Today, under his scientific guidance, researchers at ILP conduct basic and applied studies concerned with a wide range of issues in laser physics and quantum electronics, create ultra-accurate optical frequency and time standards (optical clocks) using ultracold ($T \leqslant 10^{-6}$ K) Mg atoms and Yb^+ or In^+ ions with an unparalleled long-term frequency stability at a level of 10^{-17} to 10^{-19}, contribute to the generation of extremely intense stable ultrashort laser pulses and the application of lasers in basic and applied research and realize an interdisciplinary program aimed at creating and applying laser systems in medicine, biology, geophysics, ecology and navigation. Bagayev actively participates in the training of young scientists. He is professor and head of the Department of Quantum Electronics at NSU. Bagayev is a member of the Presidium of the SB, RAS, and the Bureau of the Physical Sciences Division, RAS; chairman and member of a number of scientific councils and commissions in RAS, editorial boards of Russian and foreign scientific journals; and chairman of the organising and program committees of many international conferences and simposia.

For his scientific and organisational achievements, Bagayev was honoured with important domestic and international awards: RF State Prize in science and technology (1998), the Order of Friendship (1999), V.A. Koptyug Prize (SB, RAS and the National Academy of Sciences of Belarus, 1999), the Order of the Legion of Honour (France, 2004), the P.N. Lebedev Memorial Gold Medal (RAS, 2006), the Order for Merit to the Fatherland 4th class (2006) and 3d class (2012) and a European Physical Society Prize (2013).

We heartily congratulate Sergei Nikolaevich on his seventy-fifth anniversary and wish him good health, happiness and new achievements in his tireless multifaceted activities for the benefit of Russian science.

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