

Gennadii Andreevich Mesyats



Academician Gennadii Andreevich Mesyats, D.Sc. (engineering), professor, Vice-president of the Russian Academy of Sciences, Director of the P.N. Lebedev Physics Institute, and a leading scientist in the field of pulsed power engineering and high-power electronics, will be seventy on 28 February 2006.

The pioneering works of Gennadii Andreevich on pulsed electrophysics and high-current electronics, one of the foremost directions in modern physics that opens up the possibility for developing new sources of corpuscular and electromagnetic radiation as well as new devices for defence technology, medicine, ecology, etc., are widely known in Russia and abroad.

Among the main scientific achievements of G.A. Mesyats, mention must be made of the discovery of explosive electron emission, the development of the first repetitively pulsed nano- and subnanosecond generators and electron accelerators, the invention of controllable metal–dielectric cathodes, generation of gigawatt microwave pulses, discovery of multi-avalanche volume discharge in high-pressure gases, the development of an electron-beam pump system without intermediate storage devices in high-power wide-

aperture gas lasers, the fabrication of multikilojoule CO₂ and XeCl lasers, as well as the development of the explosive-emission model of an electric discharge in vacuum and the discovery of an ecton as a portion element in explosive electron emission.

Gennadii Andreevich is a leading organiser of research activity. In 1977, he founded the Institute of High-current Electronics, Siberian Branch of the USSR Academy of Sciences. Later, he headed for 17 years (1987–2004) the Institute of Electrophysics, Ural Branch of the USSR Academy of Sciences, which was also established under his guidance. In 2004, Gennadii Andreevich was elected the Director of the P.N. Lebedev Physics Institute of the Russian Academy of Sciences, one of the oldest and foremost institutes of physics in the world. At the same time, Gennadii Andreevich retains the scientific supervision of the above-mentioned institutes founded by him in Siberia and the Urals. At his initiative, all academic branches in the Urals were united into the Ural Branch of the USSR Academy of Sciences, and Gennadii Andreevich was elected the chairman of this Branch. In 1987, Gennadii Andreevich was elected the Vice President of the USSR Academy of Sciences. Since 1991, he is the Vice President of the Russian Academy of Sciences.

G.A. Mesyats was a member of the Russian President's Council on Science and High Technologies. In 2004, he headed the Commission on Innovative Activities, Russian Academy of Sciences and was reappointed as the Chairman of the Council on Science and Education of the State Duma of the Russian Federation.

Gennadii Andreevich is the author of over 600 scientific publications, including 21 monographs. He is the founder of a reputed school of scientists including more than 30 D.Sc.'s and over 100 Ph.D.'s. He founded new departments at the Tomsk State University, Ural Technical University, and the Moscow Institute of Physics and Technology. For many years, Gennadii Andreevich was the Chairman of the Supreme Attestation Commission of Russian Federation.

Gennadii Andreevich Mesyats has been honoured with a large number of Russian and international awards. He is the winner of the Lenin Young Communist League Award, USSR and RF State and Government Awards, the Demidov Award, and the International 'Global Energy' prize, as well as the International Marx Award in High-power Pulsed Engineering and the International Dyke Award in Vacuum Technology. Gennadii Andreevich was decorated with the order of Lenin and the order of Red Labour Banner, as well as the orders 'For Services to the Motherland' of rank III and IV.

The Editorial Council, members of the Editorial Board and the staff of Quantum Electronics congratulate Gennadii Andreevich on his 70th birthday and wish him sound health and many years of fruitful research activity devoted to the welfare of Russian science.

O.N. Krokhin