## To the 70th anniversary of Stanislav Dmitrievich Tvorogov, Corresponding Member of RAS



Professor Stanislav Dmitrievich Tvorogov turned 70 on October 1, 2006. Stanislav Dmitrievich Tvorogov is a Professor of Tomsk State University, Head of the Laboratory of Statistical Optics at the Institute of Atmospheric Optics SB RAS, and editor-in-chief of the journal of *Atmospheric and Oceanic Optics*.

S.D. Tvorogov is known for his theoretical results in the fields of linear and nonlinear optics, spectroscopy of intermolecular interactions, and their applications to atmospheric physics. His principal results include the theory of periphery of the spectral line profiles in rotational-vibrational spectra of gases, and spectroscopic approaches to the investigation of the intermolecular interaction potential, method of semiclassical representation of the quantum theory, application of general theorems of electrodynamics to the solution of some basic problems in light scattering by aerosols, the problem of rotator in a biharmonic electric field as an object of nonlinear dynamics and synergetics. The list of his publications includes four monographs and about 90 papers in Russian and foreign journals.

S.D. Tvorogov went to school in Malo-Peschanka village of Mariinsk District, Kemerovo Region. In 1954 he finished school and entered Physical Department of Tomsk State University, where he met Professor Vladimir Evseevich Zuev. When he was a second-year student, V.E. Zuev initiated his

research work. Stanislav Dmitrievich told "It was the happiest event in my life. Because just owing to Zuev I lived my life as safe as houses, protected against the rubs and worries of life. In essence, I can do nothing except for research and will hardly learn to do something else already. In fact, there is no need..."

In 1962 S.D. Tvorogov finished under the scientific supervision of V.E. Zuev post-graduate course and in 1963 defended his candidate's thesis. As one of the best learners, he became one of the first employees of the Institute of Atmospheric Optics, founded by V.E. Zuev. All his life until now turned out to be connected with this institute. In 1969 he became the head of the laboratory of statistical optics at the IAO; in 1973 he defended the doctor's thesis "Some Problems in Atmospheric Optics," and in 1994 he has been elected a Corresponding Member of RAS. Theoretical physics is his vocation. It determines his way of thinking and living. He believes that the science will

Theoretical physics is his vocation. It determines his way of thinking and living. He believes that the science will always exist in Russia. Here are some his thoughts about the science: "A man, truly devoted to the science, cannot live without it for a long time. In addition, thinking is a grace. Such people deal with science at any government, in any situation ... The problem of funding the scientific research is connected with other, wider and even philosophical problems: what should be a guide for the science – practical needs, orders, or the intrinsic logics of facts? I think as Dostoevsky, who said that wherever the science is guided by practical needs, degeneracy and desolation begin.

In my opinion, there is a difference between a workman and a professional ... A professional always has a strong humanitarian basis. It is important for any exact science. This does not mean that a physicist must read fiction, visit museums or theaters. The most important are the humanitarian principles, he follows. In this case, a professional physicist sees not merely the result, but something more ..."

The Spectroscopic School, organized by S.D. Tvorogov, has passed the competitions among leading scientific schools of Russia (1995–2005). He took part in and supervised the accomplishment of four RFBR projects and one INTAS-RFBR project.

The teaching work of S.D. Tvorogov is quite extensive. He is a professor of the Chair of Optics and Spectroscopy of Tomsk State University. His activity includes courses of lectures at the Physical and Radiophysical departments of Tomsk State University, as well as at Omsk, Altay, Udmurtiya, and Yakutsk universities. Stanislav Dmitrievich is involved in the education of researchers. He was a scientific consultant for 11 doctor's theses, and more than 20 his learners became candidates of science and more than 10 became doctors of science.

S.D. Tvorogov is a member of specialized panels of experts on awarding doctor's and candidate's degrees in science, academic council on physical and technological sciences at SB RAS. In 1993 he served an expert for the Russian Foundation for Basic Research (RFBR), in 1995 he was a member of the RFBR Expert Council in Earth's Sciences. He was an associate editor and, in recent years, editor-in-chief of the journal of *Atmospheric and Oceanic Optics*.

For his fruitful scientific and educational activity, S.D. Tvorogov was decorated with the Order of Friendship, Medals for Labor Valor, In Commemoration of the 100th Anniversary of V.I. Lenin, and Veteran of Labor, as well as Honorary Title of Honored Veteran of the Siberian Branch of the USSR Academy of Sciences.

The Administration and Collective of the Institute of Atmospheric Optics SB RAS, colleagues and learners, Editorial Board of *Atmospheric and Oceanic Optics* cordially congratulate Stanislav Dmitrievich on his 70th birthday and wish him sound health and creative longevity.