To memory of Academician Vladimir Evseevich Zuev

A year ago, on June 6, 2003 we have lost Vladimir Evseevich Zuev, academician, founder of the Tomsk school on atmospheric optics and physics, the organizer of the Institute of Atmospheric Optics SB RAS, Tomsk Scientific Center, and Akademgorodok.

Vladimir Evseevich Zuev has initiated publication (since 1988) of the scientific journal on atmospheric optics (journal of *Atmospheric and Oceanic Optics* since 1992) and was its editor-in-chief. Under his continuous and careful leadership, the journal has passed all the stages of formation and growth, survived in recent years, which were very hard for the Russian science, kept its own style, authors, and, hopefully, readers. Now we are trying to do our best in keeping the traditions laid down by Academician Zuev.

This issue of the journal is devoted to the problems of aerosols. There is a certain symbolic meaning here, because Vladimir Evseevich Zuev was one of the world scientific leaders in development of aerosol research, being the President of the Russian Aerosol Society. He actively, in his inherent manner, supported the annual workshops on Siberian Aerosols held by the Institute of Atmospheric Optics with the materials published in this journal.

The aerosol program always occupied a significant place in Zuev's creation. Already in the 1950s, a cycle of experimental and technical works has been carried out, which resolved the problem of systematic significant differences between the measured and calculated transmittance of artificial mists for the IR and visible radiation, which was intriguing at that time. In the following years, laser sensing of the aerosol component of the atmosphere was the subject of rapt attention of Vladimir Evseevich Zuev. The today's team of specialists in aerosol optics and physics at the Institute of Atmospheric Optics is, certainly, one of the leading groups in Russia and not only in the Russia.

Many words can be said about the versatility of Zuev's figure: science, institute, academic center, Akademgorodok, etc. However, two points are worth mentioning in the first place.

First, we would emphasize his significance as of the organizer of academic science in Tomsk. Historically, in the 1960s there was a real risk for Tomsk to become the second-rated center, in the scientific community. Luckily, just at that time Vladimir Evseevich Zuev with his courage and energy terminated this tendency. Owing to his commitment to science, now we have what we have.

Second, to be necessarily mentioned is his surprising, unique intuition. Along with in-depth knowledge, the intuition was quite characteristic of Zuev's research activity. It was a real physical insight, ability to see "pitfalls" and rational ways to avoid them, as well as to foresee the significance of the expected result and its prospects.

His talent showed itself completely in the formulation of the task of aerosol studies. Now it is becoming clear that Zuev's combined approach to studying any problem was the only possible way in research into the atmospheric aerosol being the multifactor atmospheric object. At the very beginning, when many world-level specialists understated the role of aerosol in the climate system and it was believed that if it would be needed to study it, it would be sufficient to simply analyze the dust samples in different areas, Zuev had already laid the combined foundation for tackling this problem. In the first turn, it was the extensive development of the technological basis for the experiments. This included construction of the Big and Small Aerosol Chambers, unique stations and paths for measurement of atmospheric transmittance, which are still unique in the world, airborne laboratory, the wide set of aerosol lidars: ground-based (from the troposphere to the stratosphere), shipborne, airborne, and spaceborne. Understanding clearly the future problems, Vladimir Evseevich Zuev created and supported theoretical teams organized for solution of direct and inverse problems. He also understood the role of modern computers, and thanks to his astuteness as early as in the 1970s it was possible to calculate the optical characteristics of aerosol, which are still in the basis of aerosol theory. It is obvious that a single short paper is insufficient for describing the contribution of V.E. Zuev to the aerosol science.

Vladimir Evseevich Zuev has gone, but his work lives in his followers and in the high scientific rank of the Institute, he founded; every published paper realizes the ideas and the foundation laid by ***Academician Vladimir Evseevich Zuev.***

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0235-6880/04/05–06 329-01 $02.00