IN MEMORIAM

Yurii Tarasovich Mazurenko

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Yuri Tarasovich Mazurenko was born on April 21, 1937 in Khabarovsk into the family of a geologist. His scientific biography began in 1960, when after graduating the Leningrad Institute of Precision Mechanics and Optics, he was assigned to the laboratory of B.S. Neporent, whose student he considered himself, at the Vavilov State Optical Institute. Precisely in Neporent's laboratory, Mazurenko formulated his scientific interests. His preference was always molecular spectroscopy, although his range of scientific interests was always uncharacteristically vast and his scientific curiosity led him to completely unexpected results. So, the theme of his candidate's dissertation, defended in 1967 was "A Spectroscopic Study of Thermal Diffusion," a work that appeared as a result of analyzing a methodical error committed by his teacher.

Nearly all of Mazurenko's creative life has been bound to the State Optical Institute, where he, combining active scientific and scientific-administrative activity, went from junior researcher to laboratory

head and chief researcher. There was always a fundamentally pioneering character inherent to the research of Mazurenko and his students. In Mazurenko's laboratory, the foundations of the institute's works were laid in the area of portable CO₂ lasers, chemical lasers, and picosecond kinetic spectroscopy. The development of kinetic nano-, and then pico- and femtosecond molecular spectroscopy in the USSR is directly related to Mazurenko's stellar works in the area of developing techniques and research of relaxation processes in liquid solutions. In 1968, Mazurenko defended his doctoral dissertation "Vibration Spectra and Stochastic Processes in Disordered Molecular Systems," where he developed fundamentally new directions and a series of new approaches in the theory of stochastic systems. In recent years, Mazurenko focused most of his attention on questions of the theory and methodology of femtosecond tomography and quantum cryptography. He actively participated in a number of international programs connected to developing techniques of ultrashort pulses and their application in solving problems of spectral holography.

Recently, Mazurenko had been working at the St. Petersburg State University of Information Technology, Mechanics, and Optics, where he invested a great deal of attention in preparing new-generation specialists in the area of information and optical technology.

For many years, Mazurenko had been a member of the editorial board of *Optika i Spektroskopiya* [*Optics and Spectroscopy*].

Mazurenko authored and coauthored more than 200 scientific works. He had published in the last three years alone more than ten journal papers. Up until his final day, he was full of creative energy and plans. He left behind him unfinished books, papers, a large scientific legacy. Yurii Tarasovich Mazurenko and his scientific ideas will forever remain in the memory of his colleagues, grateful students, and the entire worldwide scientific community.

Translated by A. Carpenter