



Alexander Stanislavovich SHUMOVSKY
(1945 - 2007)

Alexander Stanislavovich Shumovsky, member of the Editorial Board of *The Old and New Concepts in Physics*, passed away on 14 June, 2007. His sudden death deeply shocked all his friends and colleagues all over the world.

Professor Alexander S. Shumovsky was born on 20 January 1945 in Moscow. He graduated from the Physics Department of M. V. Lomonosov Moscow State University in 1969, and in January 1972 he defended his PhD thesis entitled “Asymptotically exact methods in the theory of quasispin models” under the supervision of Professor N. N. Bogolubov, Jr. After receiving the PhD degree, Alexander S. Shumovsky worked for 10 years as a young researcher at the Physics Department of M. V. Lomonosov Moscow State University. The second academic degree (Habilitation) was awarded to him in 1983 by the Joint Institute for Nuclear Research in Dubna (Moscow Region). The title of the habilitation thesis was “Quasispin formalism in the problem of phase transitions.” From 1981 until 1998 he was a Senior Researcher and Head of Quantum Optics Division (1987–1998) at the Laboratory of Theoretical Physics of the Joint Institute for Nuclear Research in Dubna. In 1992–1995 he was a visiting professor at the Physics Department of Bilkent University in Ankara, and from 1995 he had a permanent position of professor at this department.

The realm of scientific interests of Professor Alexander Shumovsky was quite large – theory of phase transitions, superradiance, nonclassical states of light, quantum entanglement, and quantum information technologies. He published more than 150 scientific papers and was a coauthor of five books on these subjects. In addition, he coedited seven books and several special issues of different journals publishing the proceedings of scientific meetings.

In the beginning of his scientific career, A. Shumovsky concentrated on problems related to spin systems but since the middle of 1980s the focus of his research shifted to different aspects of the theory of interaction between two-, three-, and multi-level quantum systems and quantized electromagnetic field modes, such as the Dicke model or multiphoton generalizations of the Jaynes–Cummings model, with the emphasis on multiphoton processes, phase properties, photon statistics, and squeezing and entanglement in these systems. His contribution to quantum optics was widely recognized by the physical

community.

Professor Shumovsky was a supervisor of about 20 master (diploma) and 15 PhD degree works at the M. V. Lomonosov Moscow State University, Joint Institute for Nuclear Research, and Bilkent University. Besides being a member of organizing or advisory committees of many international conferences, he was the principal organizer of five international workshops and summer schools on quantum optics and quantum field theory in Dubna and Ankara.

With death of Alexander Shumovsky, the physics community has lost a remarkable scientist and teacher. His friends, students, and colleagues will remember his talent and personality forever.

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