
IN MEMORY OF YEVGEN ANDRIYOVYCH SALKOV



On October 15, 2011, Yevgen Andriyovych Salkov, Doctor of Science in physics and mathematics, Professor, the twice winner of the State Prize of Ukraine, the Honored worker of Science and Engineering of Ukraine, the main researcher of the V.E. Lashkaryov Institute of Semiconductor Physics (ISP) of the National Academy of Sciences of Ukraine, died at the 84-th year of his life.

Ye.A. Salkov was born in the Kharkiv region. In 1955, he graduated from the Faculty of Radiophysics of the Taras Shevchenko Kyiv State University and started to work at the Department of Semiconductors of the Institute of Physics of the Academy of Sciences of Ukraine under the direction of Academician V.E. Lashkaryov.

At V.E. Lashkaryov Institute of Semiconductor Physics of the NAS of Ukraine, Ye.A. Salkov had been working since the date of its foundation. During this period, he grew from an engineer to the known scientist and the organizer of science, who was well known

both in Ukraine and abroad. For a long time (1967–1978), Ye.A. Salkov had held a position of the Deputy Director of the Institute. In 1978–1991, he managed the branch of semiconductor photoelectronics. Till 1997, he was the head of the Department of physical problems in infra-red sensorics, and, since April 1997, Ye.A. Salkov worked as a main research worker at the Department of physico-technical problems of reliability of materials and processes.

Ye.A. Salkov obtained a number of outstanding results in solid state and semiconductor physics. He was the first, who developed a phenomenological theory of nonequilibrium processes with the participation of excitons, introduced new ideas concerning the center-to-center electron transitions, and determined the mechanisms of defect formation in semiconductor crystals during the motion of dislocations.

Especially fruitful results were obtained by Ye.A. Salkov in 1978–1991, when he headed the Branch of semiconductor photoelectronics, which was organized at the ISP of the NAS of Ukraine and sponsored by the Ministry of Defense Industry of the USSR. The activity of the Branch was distinguished with four State Prizes of the Ukrainian SSR, and Ye.A. Salkov was a winner of two of them (in 1981 and 1986). In the course of those works, the complex studies of materials, which are the most important for IR photoelectronics, were carried out, the manufacture of components for twofold-purpose (military and civilian) IR photoelectronics in Ukraine was organized, and the scientific basis of the industrial metrology of semiconductors intended for the fabrication of IR equipment was implemented. Ye.A. Salkov took also the active participation in works aimed at developing electronic visionary systems in a wide spectral range of radiation, including facilities for thermovision and thermography.

In the last years, Ye.A. Salkov continued his successful work dealing with the detection and the identification of IR radiation emitted by small objects of atmospheric

and space origin, as well as the researches of fluctuation phenomena in semiconductors. His works have been published in prestigious domestic and foreign editions.

Ye.A. Salkov created a scientific school, with six Doctors of Science and more than 20 Ph.D's belonging to it. The scientific heritage of E.A. Salkov involves more than 200 publications including 2 monographies and 54 author's certificates on inventions of the USSR and Ukraine.

The best human traits such as sincere generosity, decency, responsibility for the task assigned, natural man-

agerial talent, optimism, and an inexhaustible sense of humor were inherent to Ye.A. Salkov. Those qualities of his character together with his civic stand and impeccable scientific reputation allowed Ye.A. Salkov to earn the respect and the love of the community. Those who knew Yevgen Andriyovych Salkov will keep the blessed memory of their colleague for a long time.

*V.F. Machulin, V.G. Litovchenko,
employees of the Institute, friends, and colleagues*