

Academician Alexei V. Simashchkevich's Jubilee (On His 85th Birthday)



For Moldovan physicist Alexei V. Simashkevich 2014 is the year of his 85th jubilee. It is a special year for his family, friends and colleagues.

He is Full Member of the Academy of Sciences of Moldova, doctor habilitate in physics-and-mathematics, professor, researcher-consultant of the Institute of Applied Physics of the Academy of Sciences of Moldova (IAP), laureate of the State Prize of the Republic of Moldova in Science and Technology, decorated with the Orders "Badge of Honor" and "Labor Glory", and the medals "Meritul Civic" (the state medal of the Republic of Moldova for exceptional contribution into the development of different areas of economy) and "Dimitrie Cantemir" (the highest distinction of the Academy of Sciences of Moldova).

Academician Simashkevici is the founder of the scientific school of the studies of group AII-BVI semiconductors and hetero-junctions based on these. He has contributed a lot in the development and successes of semiconductor physics in Moldova, in training of specialists in physics of a high level.

He was born on June 27th, in Chisinau, into a family of intellectuals.

A part of his life is connected with the Moldova State University (MSU), where he was a student at the Faculty of Physics and Mathematics, Department of Physics, then a PhD candidate at the Chair of Experimental Physics of the same university.

He received his PhD in physics and mathematics from Vilnius University, Lithuania, in 1962. In 1979 – a higher scientific degree – that of doctor (now "doctor habilitate") in physics and mathematics from the then Leningrad Polytechnic Institute, one of the reviewers being Zhores Alferov, the winner of 2000 Nobel Prize in Physics.

In 1981 he got the title of Full Professor.

At MSU he was a disciple of Professor Mihail Kot; an expert in optoelectronics. After defending his PhD dissertation A.V. Simashkevici became the Head of the Chair and of the Laboratory of Studies in Semiconductor Physics of the MSU (serving there for 28 years). During that time, A.V. Simashkevici actively participated in preparing and delivering general physics and

specialized courses for students not only from Moldova, but also from Algeria, Cuba, Germany, Mexico, Mozambique, Syria, Vietnam, etc. combining teaching, research and social activities.

He was Scientific Advisor for 25 PhD candidates, all of them successfully defending their dissertations of Doctor in physico-mathematical and technical sciences and becoming respected members of the world scientific community. Research of the collaborators of the Chair and Laboratory of Semiconductor Physics of MSU related to the properties of AIII-BV and AII-BVI semiconductors and hetero-junctions based on them was highly appreciated by colleagues. It was demonstrated in 1974 when the USSR Academy of Sciences decided to organize in Chisinau the first all-union conference on properties of hetero-structures. The Conference was chaired by Zh.I. Alferov, from the Ioffe Physico-Technical Institute of the USSR Academy of Sciences. and A.V. Simashkevici, from the MSU, Chisinau, Moldova.

A. Simashkevici has always worked in the forefront directions of semiconductor physics research. Academician Simashkevici was the first to obtain the electroluminescence when minor carriers are injected in AII-BVI semiconducting materials. Besides, he studied electron-voltaic effect in heterostructures and demonstrated a possibility to control their properties under the influence of laser irradiation. He has designed and developed a large number of various sensors as well as devices for photovoltaics and optoelectronics.

Academician Simashkevici has 27 patents of the USSR, Republic of Moldova and other countries. He is the author or co-author of 10 books, including 3 Course books in French (prepared and published when he was working as Invited Professor of general physics at the Algerian Petroleum Institute), and more than 600 articles and 300 abstracts of national and international conferences.

The colleagues from the Institute of Applied Physics of the ASM and Moldova State University congratulate Academician A.V. Simashkevici and wish him health, further successes in research and happiness among his family members.