

Professor V.I. Mossakovsky (1919-2006)

In 1939 V.I. Mossakovsky graduated with honors from secondary school No. 38 in the city of Dnepropetrovsk and entered the Physics Department of Dnepropetrovsk State University. In October of the same year he was drafted into the Red Army and sent to the 339th anti-aircraft artillery regiment, which was located in the vicinity of Baku, Azerbaijan. He graduated from the regimental school, received the rank of junior squadron, then sergeant, serving in various positions of junior command personnel until May 1942.

From May to August 1942 V.I. Mossakovsky was an assistant commander of the control of the 419th separate anti-aircraft artillery regiment in Maikop and Batumi, then the commander of the 11th gun-artillery regiment at the station Akstafa in Azerbaijan. From November 1942 to January 1944 he studied at the school of artillery instrumental reconnaissance of the Transcaucasian Front, specializing as soundman. Upon its completion in March 1944, he was sent to the city of Saransk of the Mordovian ASSR, to the newly formed 157th Army cannon-artillery brigade.

From May 1944 until the end of the war V.I. Mossakovsky was the commander of the interpreter unit in the 1st sound battery of the artillery reconnaissance division of the 157th Order of Alexander Nevsky of the Baranovichi Army Cannon-Artillery Brigade. By sound, he spotted enemy batteries, determined their coordinates, made the necessary calculations, and helped the gunners to carry out sighting.

With the troops of the 1st and 3rd Byelorussian, and later the 1st Ukrainian fronts V.I. Mossakovsky participated in the Brest, Kaunas, Königsberg, and Berlin offensive operations. For participation in hostilities, he was awarded the Order of the Red Star (1945), medals "For Military Merit" (1944), "For the capture of Berlin" (1945).

At the end of December 1945, V.I. Mossakovsky was demobilized and continued his studies at the University of Dnepropetrovsk with a degree in mechanics.

With honors in 1950, he graduated from the University. V.I. Mossakovsky enrolled in graduate school at the department of theoretical mechanics.

In February 1952, he defended his dissertation at Lviv State University ahead of time, worked as an assistant, then acting Associate Professor at the Department of Theoretical Mechanics at the University of Dnepropetrovsk. In 1952 a new faculty was organized at the university - Physics and Technology. Mossakovsky headed the department of continuum mechanics. Since 1954 he headed the department of aerodynamics and applied theory of elasticity. From 1986 he was the head of the department of applied theory of elasticity.

Professor V.I. Mossakovsky was a major expert in the field of mathematical and applied theory of elasticity, strength and stability of thin-walled structures.

In a large cycle of works on spatial contact problems of the theory of elasticity, he developed new mathematical methods that allowed him to solve a number of very complex problems that could not be met by the efforts of many researchers. Among them: the dismemberment of the three-dimensional problem on a series of two-dimensional, the reduction of spatial problems to flat, integral transformations, and the application of the method of small parameter.

Dealing with the study of mixed problems in the mechanics of a deformable solid, V.I. Mossakovsky obtained new results in the theory of functions of complex variables and integral transformations and the analytic theory of differential equations. The use of the modern mathematical apparatus in combination with deep penetration into the physical nature of the problem gave him the opportunity to build effective algorithms for solving contact problems for noncircular dies under fairly general conditions of interaction of the stamp and elastic medium, as well as Fuchs class differential equations applied to a number of mixed problems of elasticity theory. Interesting results were obtained in the theory of cracks and brittle fracture mechanics.

Under his direct supervision new interference-optical research methods were developed, which made it possible to obtain a number of significant experimental results in solving the problem of contact interaction of solids.

His research is reflected in more than 250 scientific papers, including 4 monographs, 2 textbooks for universities and a number of copyright certificates. Under his leadership 45 Ph.D. and 10 doctoral theses were prepared. In Dnepropetrovsk he created a scientific school in the field of mechanics of a deformable solid body. In 1967, V.I. Mossakovsky was elected a corresponding member and in 1972 a full member of the Academy of Sciences of Ukraine. Mossakovsky delivered scientific papers at the International Congress of Mechanics of the

USA in August 1969. In August – September 1976 he participated in the Congress on Theoretical and Applied Mechanics in Holland. In August 1980 he participated in the International Congress on Mechanics in Canada. In August 1984 he was a participant in the Congress on Theoretical and Applied Mechanics in Denmark. In 1999 he was in Finland taking part in the work of the IV International Conference on Steel and Aluminum Structures. Along with scientific research V.I. Mossakovsky was actively engaged in scientific-pedagogical and scientific-organizational work, leading a scientific seminar, postgraduate studies, and giving lectures on the resistance of materials, theory of elasticity and special courses in mechanics.

From 1964 to 1986, V.I. Mossakovsky was the rector of the University of Dnepropetrovsk. In 1983-1985 his work at the university earned prizes, and in 1984 the university took the second place among the universities of the USSR. He was a member of the National Committees of Ukraine and Russia on Theoretical and Applied Mechanics.

For fundamental developments in the field of mechanics of a deformable solid body and for the training of highly qualified specialists V.I. Mossakovsky was awarded the title Hero of Socialist Labor in 1982; for research in the field of durability and reliability V.I. Mossakovsky was awarded the State Prize of the USSR in 1970; for the development and introduction of new physical methods in the study and improvement of metallurgical processes and designs of new technology he was awarded the Prize of the USSR Council of Ministers in 1981. He was awarded medals named after academician M.K. Yangel (1981), named after academician S.I. Vavilova (1974) of the All-Union Society "Knowledge", the Silver Medal of the USSR Exhibition of Economic Achievements (1980).

Hero of Socialist Labor V.I. Mossakovsky was awarded two Orders of Lenin, two Orders of the Red Banner of Labor, Orders of the Patriotic War of the II degree, the Red Star, "Badge of Honor", "Prince Yaroslav the Wise" V degree, "For courage" and other awards. He is an Honored Scientist of Ukraine, an honorary citizen of the city of Dnepropetrovsk.

Until his death on 13/07/2006 he was an adviser of the Rector of Dnepropetrovsk University, managed the research work of applied mathematics and mechanics and was directly involved in the implementation of laboratory programs. In this period he was a member of the Academic Council of the University, the Council of the Faculty of Applied Mathematics and the doctoral specialized dissertation Academic Council in the field of mechanics. He was also is a member of the Presidium of the Regional Council of Veterans and the President of the City Foundation for Social Protection of Scientists and their family members.