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In Memory of Borys Evgenovych Paton

National Academy of Sciences of Ukraine, and the E.O. Paton Electric Welding Institute with deep sorrow inform that on August 19, 2020 the world and Ukrainian science suffered a great loss: the heart of academician Borys Evgenovych Paton stopped in 102nd year of his life. A prominent Ukrainian scientist in the field of metallurgy, technology of metals, electric welding and materials science, organizer of science, state and public figure, B.E. Paton was President of the National Academy of Sciences of Ukraine, Director of the E.O. Paton Electric Welding Institute of the NAS of Ukraine, twice hero of Socialist Labour, first Hero of Ukraine.



B.E. Paton was born on November 27, 1918 in Kiev in the family of Evgen Oscarovych Paton, Professor of the Kiev Polytechnic Institute.

His engineering and scientific activity began in 1942 at the Electric Welding Institute, which then was stationed in the territory of «Uralvagonzavod» in Nyzhny Tahl during the evacuation period. Since that time B.E. Paton worked for 11 years together with his father, who was head of the Institute. These were the years of his formation as a scientist and researcher, and later leader of a large science-production team. He carried on and brilliantly developed the activity started by E.O. Paton, together with whom he created

the world-renowned Paton scientific school, and for 67 years he headed the science and technology complex widely known all over the world — the E.O. Paton Electric Welding Institute of the NAS of Ukraine.

B.E. Paton received world-wide recognition due to his multifaceted and extremely fruitful scientific and engineering activity, his desire to focus fundamental scientific research on solving actual problems of progress of science and technology. By his works he laid a foundation for arc welding, in particular theory of automatic machines for arc welding, which was then developed by many specialists in the field of automatic control of welding processes.



B.E. Paton headed research in the field of welding power sources, development of the processes of arc, electroslag, flash-butt, electron beam and many other kinds of welding and related technologies; performance of a large package of fundamental and applied studies in the field of static and cyclic strength of welded joints, their brittle and fatigue fracture resistance, and low-temperature performance. Systems of diagnostics of welded structures, of which higher safe operation requirements are made, were introduced for the first time in Ukraine. B.E. Paton led the research on application of the electroslag process to improve the quality of metals and alloys, resulting in formation of a fundamentally new field of metallurgy — electroslag remelting and casting. Technologies developed under his leadership, are successfully used on the ground, under the water and in space. B.E. Paton also proposed applying the welding methods for joining live tissues.

For many years B.E. Paton as editor-in-chief, supervised publication of leading journals in the field of welding and related technologies — «Avtomatychnye Zvaryuvannya», «Suchasna Elektrometalurhiya» and «Tekhnichna Diahnostyka ta Neruinivnyi Kontrol» that allowed sharing with the world scientific-technical community the information on research results and new developments of the Electric Welding Institute, promoting realization of more than 150 licenses in foreign countries.

In 1962 B.E. Paton was elected President of the Academy of Sciences of Ukr.SSR (now — National Academy of Sciences of Ukraine). Deep understanding of the role of science in society, its goals and objectives, high international authority of the scientist, his devotion to science, inexhaustible energy and high moral qualities, intense social-political activity, experience of leading large scientific teams became the decisive arguments in B.E. Paton's election to this position. Since that time he headed this leading scientific organization of Ukraine for 58 years.

In the responsible position of President of the NAS of Ukraine his talent of organizer of science was revealed even more. B.E. Paton was involved in development of a new structure of the Academy of Sciences, its new Statute, aimed at the most rational use of scientific staff and means, focusing their efforts

on solution of the most important fundamental and applied scientific problems that are important for the country's economy, founding dozens of new institutes and establishments that developed and deepened the studies in priority fields of science.

B.E. Paton's outstanding abilities as a leader, scientist and organizer were revealed during the dramatic days of the accident at Chornobyl NPP. The staff of many Institutes of the Academy, and its Presidium began working on liquidation of the consequences of this catastrophe from the very first days.

During the years of independence of Ukraine, B.E. Paton did a lot for preservation and enhancing of the potential of national science, deploying new scientific areas, required for building an independent European state, its economy, scientific-technical, educational, socio-cultural sectors, strengthening the country's defense.

B.E. Paton made a significant contribution into development of international scientific cooperation of Ukraine, incorporation of national science into the European and global scientific space. By his initiative an International Association of the Academies of Sciences (IAAS) was established in 1993 that united the national academies of 15 European and Asian countries. B.E. Paton was the permanent President of this Association for almost a quarter of a century.

B.E. Paton was elected several times to the higher bodies of state power of the Soviet Union and Ukraine. He was the head and member of many important committees and commissions. Occupying high positions B.E. Paton worked fruitfully with a deep feeling of personal responsibility before the state, the people and his own consciousness.

B.E. Paton continued working until the last days of his life. His life's path is an example of devotion to his favourite cause, science and Ukraine. All those who were fortunate to communicate with B.E. Paton, knew him as an extremely creative personality, wise, deeply honest and well-wishing person with fantastic energy, desire to work, keep analytical mind, kind humour and high humanism.

Scientist recognized all over the world, an example of researcher, outstanding organizer of science, true son of the Ukrainian people — the bright memory of Borys Evgenovych Paton will live forever in the hearts of all those who knew him and worked with him.