

OVCHARENKO Iuliia S.,

Ph.D. in History,
Assistant of the physical department of
National Technical University
«Kharkiv Polytechnic Institute»
ovcharenko.iuliya12@gmail.com
(Kharkiv city, Ukraine)

THE INSTITUTIONALIZATION OF THE SCIENTIFIC RESEARCH OF CRYOPHYSICS IN UKRAINE (THE 30 s OF THE 20 th cent. – THE BEGINNING OF THE 21 th cent.)

Summary

In the article, the process of institutionalization of research work on the field of low-temperature physics in Ukraine was reconstructed. It was established that the determining trend in the development of low-temperature physics was the creation of the specifically targeted research laboratories and institutes, which made it possible to deepen research work. It is determined that in the '30s of the 20th century a network of scientific centers for research in the field of cryophysics began to appear. It was shown that the first cryogenic laboratory in the USSR and the fourth in the world was organized by I.V. Obreimov at Ukrainian Institute of Physics and Technology, which became the basis for scientific research on the field of cryophysics in Ukraine. The contribution of Ukrainian scientists and scientific groups to the organization of science and stable social structure was specified.

With the help of Ukrainian Institute of Physics and Technology in 1954, a cryogenic laboratory was organized at the Institute of Physics in Kiev. In the late 1950s, physical science developed quite dynamically, in particular, the branch of lowtemperature physics played a significant role in the country's scientific and technological progress. Therefore, in 1960, a special research institute – Institute for Low Temperatures Physics and Engineering in Kharkov was set up to develop promising scientific research in the field of cryophysics and to solve practical problems of the country's economic complex. In 1965 for theoretical and experimental development of the problems of solid-state physics and for the further development of technical progress in the metallurgical, coal, engineering industry of Donbass DonIPE was created, which, thanks to close cooperation with the Institute for Low Temperatures Physics and Engineering, was able to develop complex research of substances in extreme conditions. In order to develop a new direction – cryobiology and cryomedicine – on the basis of the laboratory of Institute for Low Temperatures Physics and Engineering in 1972 Institute for Problems of Cryobiology and Cryomedicine was created.

The research is based on the use of a complex of general scientific and historical methods.

Key words: institutionalization, cryophysics, research work, research laboratory, research.