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INTRODUCTION TO 75th ANNIVERSARY OF THE INSTITUTE OF ENERGY SAVING AND ENERGY MANAGEMENT

Institute of Energy Saving and Energy Management of Igor Sikorsky Kyiv Polytechnic Institute as the successor of the glorious mining faculty of KPI entered the jubilee 75th year from its foundation. Peaceful 1946 came. After returning to peace, the world began the revival of all spheres of life, each country - a participant in world war began primarily to revive the destroyed economies. Kyiv Polytechnic Institute, along with other similar institutions of higher education, responded to the call of the state by expanding its capabilities by organizing new faculties that would quickly meet the country's need for qualified specialists of various profiles. And not least the country needed the rise of the mining industry. For 75 years, the history of the faculty was created and created by a number of prominent figures of mining science - at first they were veterans of war and military rear, and then their own successful pupils, who headed and headed a number of departments of our institute. In this number of departments since 1948, the Department of Mine Construction took a worthy place.

Modern period in the history of the Department of Geoengineering

At the time preceding the resumption of the department, in the world mining practice began to actively develop the direction associated with the need for wider development of the underground space of large cities. As in the whole developed world, the need to train specialists for the construction of underground urban buildings in Kiev and other cities of Ukraine has matured. In this regard, the decision of the Academic Council of KPI and the rector's order no. 60-1 of 20.03.1991 on the basis of the Department of Technology and Mechanization of Mining Faculty of KPI began training specialists in the specialty "Mine and underground construction" and specialization "Construction of urban underground structures". In the same year, the first set of a group of students took place. The first graduation of specialists of the specialty "Mine and underground construction" took place in February 1997 for the concentration of training bachelors in the direction of "Mining" since 2000 began the transfer of training of specialists in the specialty "Development of mineral deposits" (now "Geoengineering of mineral resources") with renaming to the Department of Geo-Construction and Mining Technologies, since 2017 - to the Department of Geoengineering (GI). The Department of GI provided training of specialists in the field of complete and part-time education under the educational and professional program of the level of higher education of the degree "Bachelor" 6.050301 "Mining"; educational-professional (educational and scientific) program of the second (master) level of higher education degree "Master" in specialty 184 "Mining".

Simultaneously with the foundation of the department began the formation of the scientific school "Formation of engineering properties of rocks by means of geodynamics", which was founded by the then head of the department Laureate of the State Prize for Science and Technology of Ukraine (1991), Doctor of Technology Sciences, Professor Viktor Kravets.

Search and research works gradually increased the scientific and educational - methodical level of the teaching staff of the department. At this time, cooperation with leading foreign mining higher educational institutions is developing intensively.

Since 2006, the Department of Geo-Construction has participated in the joint efforts of Ukrainian universities in the field of mine and underground construction, organizes an annual joint International Conference of Young Scientists, Postgraduates and Students. In order to increase the level of theoretical developments, to obtain opportunities to use laboratory bases and to create more favorable conditions for the training of scientific personnel, the department concluded agreements with educational and academic scientific institutions. In the course of research in 2011 - 2019. 20 monographs were published by the staff of the department (staff and compatible), 146 articles were published in professional scientific journals, more than 30 articles in scientometric databases, publications, 121 in foreign publications.

Scientific developments found implementation in the educational process at the department, contributed to the intensification of postgraduate work in the specialties 05.15.09 - geotechnical and mining engineering and 05.15.03 - open development of mineral deposits, which the department conducted training of scientific personnel. During 1993-2019 within the scientific direction of the department 11 candidate dissertations (6 of them - employees of the department) and 9 doctoral dissertations (4 of them - employees of the department) were defended. The scientific traditions of the school are successfully continued by the students of the founder of the school, currently 4 candidate works, 1 doctoral work and 2 doctoral dissertations of the Doctor of Philosophy (PhD) level are protected.

Taking into account the existing composition of doctors of sciences and having significant scientific potential, the staff of the department is mastering new areas of scientific research, namely, research related to the development of geourbanistics. Since the growth of large cities leads not only to an increase in size, but also to a significant complication of the functional and spatial organization of the city, there is a need to solve a number of acute problems, namely, territorial, transport, energy, water supply, environmental and the like. Scientific research is planned to be carried out in common with the leading scientific centers of the Institute and the University, with close academic institutions - this is the basis of plans for scientific activities of the department staff for the coming years.

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