

THE SCIENTIFIC HERITAGE OF PROFESSOR P.P. KOPNYAEV (FOR 150TH ANNIVERSARY OF THE SCIENTIST)

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P.P. Kopnyaev was born in 1867 year in the Ural Cossack family. After graduating from the Cadet Corps and Artillery School, he served in the Orenburg Cossack Regiment, but in 1892 year left military service and entered the St. Petersburg Institute of Technology. After his graduation as a mechanical engineer, he decided to embody the old hobby of electrical engineering in life and left in 1896 year to study in Germany at the Darmstadt Polytechnic School of Electrical Engineering. It should be noted that this faculty was at that time the center of electrical engineering. After the successful completion of the Darmstadt Polytechnic and an internship at the electrical engineering enterprises of Germany and with the title of an electric engineer, P.P. Kopnyaev returned to St. Petersburg in 1898 year. And immediately, he with the recommendation of the only professor of electrical engineering in Russia - A.A. Voronov, was invited as a teacher of electrical engineering at the Kharkov Institute of Technology.

With great enthusiasm, the young teacher undertook teaching a new discipline for the institute - electrical engineering. His work "Dynamometers of direct current" became widely known and was published in 1904 year." In addition, he initiated the electrification of the institute, which was then covered with kerosene. And, I must say, this business he subsequently completed.

As an adjunct professor, Pavel Petrovich writes scientific articles, equips electrical laboratories, composes and publishes manuals on laboratory work, plans the construction of a building for electrical laboratories. In 1905-1907 years. he developed schemes for switching tramway substations in St. Petersburg and the Lubyanka substation in Moscow. In 1911 he published the book "Electrical installations", and in 1913 year he published his work - "Fundamentals of electricity and magnetism." He always sought practical application of scientific developments. So in 1914-15, he wrote articles on methods for calculating tramway traction, he took a direct part in the reconstruction of Kharkiv and the creation of Mariupol trams.

In 1919-1920 years, Professor P.P. Kopnyaev is elected as a rector of the Institute. In December of 1920 year, Professor P.P. Kopnyaev was appointed as a chairman of the commission for the organization of the electrotechnical faculty, its departments and curriculum development.

The Kharkov Institute of Technology was officially opened electrotechnical faculty at the 22 of January in 1921 year, and his first dean was elected organizer of the faculty - Professor P.P. Kopnyaev, who remained in this post until the 1930 year. At the same time, he was the organizer of the Department of Electrical Machines and its first head.

With the opening of the faculty, Pavel Petrovich again raises the question of the construction of a new electrical building and himself developed its detailed project. A.A. Beketov was invited to solve issues of architectural design. In the end of 1924 year, the plan for a three-story electrical engineering corps was adopted with some modifications, but its construction only begun in 1929.

Thanks to the perseverance of P.P. Kopnyaev, the Kharkov city authorities attempted to pass through the territory of the institute a tram line. Our contemporaries can appreciate this merit to the Institute.

Pavel Petrovich personally designed and equipped a number of laboratories: electromachine, electrical measuring, high-voltage, radio engineering, which are still the pride of NTU "KhPI".

Even being sick and half-blind, Professor PP. Kopnyaev devoted all his energy to the cause of electrical engineering education. He died on 3 June, 1932, from a rupture of the heart vessel and was buried in the cemetery on the Pushkin street.

The merit of PP. Kopnyaev in the creation of an electrotechnical school in Ukraine is not only his personal contribution to almost every major development of electrical engineering of the time. His most important merit is that he brought up far too many students who have become prominent specialists, scientists and leaders of new scientific trends and schools. Within the framework of this article, it is impossible to fully describe the contribution, which the students of Pavel Petrovich made to the electrical engineering science. There is more detailed description in book published by E.E. Tveritnikova. Pupils of P.P. Kopnyaev played an important role in the development of electrical engineering, the electrification of the country, the creation of electrotechnical schools, scientific and technical centers and industries, not only in Kharkov, but also in other cities.

About the personal qualities of Pavel Petrovich. He belonged to a number of scientists who exert a strong influence on others not only with his scientific achievements, but also with personal charisma, nobility, incorruptibility of convictions, courage. Pavel Petrovich was distinguished by high culture and versatility of interests. He learned several foreign languages, liked poetry, played the piano, understood and appreciated humor. He was also interested in philosophy, astronomy and politics. One could even say that Pavel Petrovich could become anyone, if he wanted to. In 1926 he was awarded the title of Honored Professor of Ukraine.

Considering the enormous contribution of P. P. Kopnyaev to the creation of an electrical school, the Ukrainian Association of Electrical Engineers and the Academic Council of the NTU KhPI, was decided to create for him a monument.