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ANNIVERSARIES OF SCIENTIST AND PEDAGOGUE

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Anniversaries of professor who reconstructed the basic Department with centenary history and has been heading it for 40 years, created and developed his own scientific school, trained a galaxy of scientists and pedagogues, and has been actively working in the field of science and education for 50 years, coincide with the 165th anniversary of the foundation of Lviv Polytechnic National University which will be celebrated in the end of 2009. The name of this professor is Victor Teofilovych Yavorsky. He is a famous scientist, pedagogue, Honoured worker of science and engineering of Ukraine, Honorary professor of Lviv Polytechnic National University, academician of the Academy of engineering sciences of Ukraine and Ukrainian ecological academy of science, DSc (in technical sciences), professor, Head of Department of chemistry and technology of inorganic substances, and avowed public figure.

In 1954 V. Yavorsky threw in his lot with chemical-technological faculty of Lvivska Polytechnica. After graduation with distinction in 1959 he was the only one among graduates who stayed at the Department and worked as a researching engineer. Then he worked as assistant of professor, defended his PhD ahead of time (in 2.5 years) and in 7 years defended his doctoral degree. His advance in the career – vice-dean, dean of the chemico-technological faculty, and from 1969 till now Head of the Department – testifies to his administrative talent. V. Yavorsky is a hard-working, sociable and energetic leader.

At the beginning of the '60s the intensive development of chemical industry in Western Ukraine caused the urgent need in specialists and modern effective technologies. Therefore, in 1969 on initiative of young associate professor V. Yavorsky the Department of inorganic substances technology capable to train necessary specialists was reestablished. V. Yavorsky united professionals, created a solidary team and directed it to scientific researches concerning the development of sulfur, potassium, phosphorus and their compounds technologies. At the same time under the guidance of V. Yavorsky the training of scientific-educational staff with the highest qualification was started. For a short period of time he succeeded in the solving of such important scientific-technical problems as improvement of existing and



development of new effective and environmentally friendly technologies, products upgrading and diversification, *etc.*

The only Ukrainian scientific school dealing with the problems of sulfur and its compounds chemistry and technology was formed at the Department under the guidance of Prof. V. Yavorsky. Its main achievements are: development of theoretical and technological bases for commercial and special sulfurs production; water and gases desulfurization, utilization of sulfur-containing compounds, *etc.* The majority of the mentioned developments were approved and implemented into the industry (Rozdil and Yavoriv production association "Sirka", JSC "Krymskyi TITAN"). Thus Prof. Yavorsky became a broadly recognized leader in the field of sulfur chemistry and technology. In 1985 he summarized his scientific results in the monograph "Technology of Sulfur".

Prof. Yavorsky marches in step with advanced directions of science and engineering development. It is reflected in the development of hydrogen sulfide

plasmochemical decomposition technology which has not analogues in the world practice. So the scientific school under the guidance of V. Yavorsky made an important contribution not only in the theory and technology of special kinds of sulfur but in the development of the modern direction of energetics – hydrogen energetics.

Prof. Yavorsky does not keep away from the global ecological problems, namely from Black Sea pollution by hydrogen sulfide. The result of his investigations is the development of hydrogen sulfide recovery from sea water with the obtaining of another special kind of sulfur – fine-dispersated sulfur – which is in sharp demand in agriculture.

Scientific interests of V. Yavorsky cover the development of theoretical bases and technologies of complex processing of Prycarpathian polymineral potassium ore – a single source of potassium compounds in Ukraine. The solution of this problem has been found. It is the application of mineral acids, organic solvents and selective extractive substances. V. Yavorsky and his followers were able to propose and develop the original technologies of magnesite – the refractory material, demands of which are mainly satisfied by import; potassium sulfate – high-quality potash fertilizer; usage of large-tonnage wastes of potassium industry for the production of other valuable materials.

Prof. Yavorsky has essential scientific achievements in the field of phosphorus technology. The scientific-technological bases of solid-phase method of phosphates

and sulfates reduction using natural gas have been developed. The value of these works has even more grown in connection with the urgent necessity of using domestic phosphorus ores in the industrial production because our phosphorus industry has been using imported raw material till the present time. The new direction in the technology of phosphate fertilizers using domestic raw material is being developed.

Taking into account the exigency of the region in specialists-electrochemists and feeling public duty of a scientist, Prof. Yavorsky with co-workers were able to create the necessary laboratory base and to provide future specialists in electrochemistry with training-methodic materials and teaching personnel (1995). This allowed to set up Ukrainian galvanic centre with participation of Germany partners. At the same time new directions have been developed: electrochemistry of dispersive and nanodimensional metallic systems; processing of secondary raw material of non-ferrous, less-common and precious metals via electrolysis; electrochemical obtaining of semi-conductive films. The results of the mentioned works are a monograph (2008), DSc. thesis (2008) and PhD thesis (2009) in the speciality “Technical electrochemistry”.

Prof. V. Yavorsky has more than 600 scientific papers, 115 inventions, 90 techniques, unique monograph “Technology of Sulfur”, 2 textbooks, and 3 tutorials. Under his guidance 6 doctoral and 43 PhD theses have been defended.