

Tamara Perekupko, Yaroslav Kalymon and Kostyantyn Blazhivsky

DEPARTMENT OF CHEMISTRY AND TECHNOLOGY OF INORGANIC SUBSTANCES: THE PAST, THE PRESENT, THE FUTURE

*Lviv Polytechnic National University,
12 Bandera Str., Lviv, 79013, Ukraine
blazhivskyi@gmail.com*

Abstract. On the occasion of the 140th anniversary of the birth of professor, doctor of *honoris causa* and the Honoured professor of Lviv Polytechnic, former head of Department I. Moscicki as well as 70th birthday of professor, Doctor of Engineering, Honoured professor of Lviv Polytechnic and present head of Department V. Yavorsky a short review of the history of the Department of chemistry and technology of inorganic substances, its present days, and prospects has been made.

Keywords: history, department, technology of inorganic substances, technical electrochemistry.

2007 will be remembered by the staff of our Department by 140th anniversary of the birth of professor, doctor of *honoris causa* and the Honoured professor of Lviv Polytechnic, former head of Department I. Moscicki as well as 70th birthday of professor, Doctor of Engineering, Honoured professor of Lviv Polytechnic and present head of Department V. Yavorsky. To the glorious anniversary of I. Moscicki article [1] was devoted, where the life story of this prominent scientist and public man was widely expounded. However, insufficient attention, in our view, was given to his role in setting up and development of our Department in particular and Lviv Polytechnic on the whole. We consider it as our duty to reveal in detail an important contribution of these majestic figures to the achievements and successes of the Department and doing a short excursus in its history describe the Department's present days and prospects.

The history of our Department begins in the remote 19th century, when by the regulation of Tsisar of the Austria-Hungary Empire on June 18, 1871 three new Departments were opened in Lviv Technical Academy: of construction, geodesy and **chemical technology**. On July 16, 1872 Herman Gunsberg became the first head (professor) of the Department of chemical technology. In his capacity as an assistant (from 1857/1858 academic year) and as an adjunct of Department of general and technical chemistry (starting from 1863) he was teaching chemical technology and organized a laboratory [2, 3]. In full value the Department of chemical technology began to function from the beginning of 1872.

Prof. G. Gunsberg taught such courses as technology of water and fuel, mineral raw material, soda trade, technology of fats lighting, building materials production, chemical-engineering analysis, products of chemical technology, *etc.* Being the Dean of the Department of technical chemistry in 1874/1875 and 1875/1876 academic years, he fit out the newly built chemical building (now the 9th building of the University), which up to now strikes us by the cleanness of its architectural forms, which were renewed in 2003. Prof. G. Gunsberg was also an actual member of the Economic Society of Galicia and Head of the School of alcoholic production.

After his death in 1879 the Department was headed by Julius Bruhl – Doctor of Philosophy and associate professor of the Department of chemistry of Aachen Polytechnic School. In Lviv he began to teach chemical technology from January 1880 first as a suplent, and since August 1880 as a professor of chemical technology. Prof. Yu. Bruhl taught the following courses:

- chemical technology (part I on the 3d year of the study), which included technology of water, sulfur, sulfuric and nitric acid, as well as soda trade. As chemistry was not specialized at that time, this part also included technology of fuel and illumination materials, production of matches, metallurgy of iron and zinc, production of ceramics and glass;

- chemical-engineering analysis (on the 4th year of the study);

- chemical technology (part II on the 4th year of the study), which in addition to productions of food products, glue and soap also included one of the main courses read to the students of speciality “Chemical technology of inorganic substances” these days – production of artificial fertilizers;

- products of chemical technology and their analysis.

After a long illness in 1883 prof. Yu. Bruhl left the Department and moved to Heidelberg. From 1885 Bronislav Pavlevski, who in the years 1881-1882 worked as an assistant of the Department, in 1882 defended doctoral thesis in chemical technology and lectured replacing the ill prof. Yu. Bruhl, became the new head of the Department of chemical technology. In 1885 B. Pavlevski was given the rank of professor extraordinary, and since 1888

professor ordinary. In 1883-1891 B. Pavlevski managed the oil researches station. For several times he was elected a Dean of Department of technical chemistry, and in the academic years 1896-1897 and 1909-1910 a rector. Prof. B. Pavlevski was a well-known scientist with profound many-sided knowledge, extraordinarily hard-working, and the author of numerous works, which were published in the country and abroad. His works in the following fields are known: organic chemistry, geology of mining (for example, analysis of zinc-tin ores, ozocerite in Truskavets, mineral waters in Busk, kaolin and peat of Galicia, Bokhen salt structure, *etc*), brewing and so on.

Prof. B. Pavlevski, like his predecessors, at first also taught the whole chemical technology, both inorganic and organic, but later he passed a part of the courses to his collaborators. In the last years of his work he lectured such disciplines as:

1. Chemical technology, part I (for the third year students), which included metallurgy of iron, zinc, tin, lead, copper, and other rare metals (aluminum, sodium, silver, gold, nickel, and other); important alloys and their properties; chemical technology of such inorganic substances as sulfur and its compounds, sulfites, sulfuric, hydrochloric and nitric acid, rock-salt, soda, borax, chlorine and bleaching substances, potassium chlorate, salts of ammonium and cyanides, salts of aluminium and chrome. This course also included technology of ceramics, glass wares, liquid glass, and matches.

2. Chemical technology, part II (for the third year students), including sugar refining, soap, candles and margarine production from fats; production of glue, gelatine and protein; essential oils and soft resin, lubricants, and varnishes; production of food products.

3. Chemical technology, part III (for the fourth year students): production of alcohol, yeasts, beer, vinegar, starch, dextrin, and glucose.

4. Products of chemical technology and their analysis.

In 1904 the Department of chemical technology was parted to the Department of **chemical technology I**, which prof. B. Pavlevski continued to lead, and Department of **chemical technology II (agriculture products processing) and microbiology** chaired by prof. Victor Sinevski, a former student of prof. B. Pavlevski.

From 1885 Prof. B. Pavlevski was a member of Regional Industrial Council and Regional Mining Council, in the years 1895-1916 – a counselor of Lviv and Head of Municipal Technical Commission, in years 1893-1899 – editor of the Technical magazine and held many high posts in public and state organizations. Prof. B. Pavlevski passed away on January 29, 1917.

Upon his departure Ignacy Moscicki, with whose name formation and development of chemical industry of Poland of that time are connected, became the head of the Department of chemical technology. He started his

scientific activity in electrotechnology (electro-physical researches, fixing of atmospheric nitrogen, creation of condensers of high tension, etc), the methods which he successfully used in the chemical technology of fixed nitrogen compounds. In 1910 in Switzerland Prof. I. Moscicki started a factory of nitric acid by an electro-thermal method. Prof. I. Moscicki made a lot of scientific discoveries and became a known scientist.

In 1912 the Senate of Polytechnic School in Lviv offered I. Moscicki to organize the Department of **physical chemistry and technical electrochemistry** and gave him the title of professor ordinary. I. Moscicki, in spite of his material well-being in Switzerland, accepted this offer and for his own money bought and brought to Lviv a few tons of equipment and machines for the laboratory. Prof. I. Moscicki started by reading the course of physical chemistry to 1 and 2 years students on the Department of technical chemistry. But, since the basic direction of his researches was chemical technology, in 1924 Prof. I. Moscicki passed this course to his successor T. Kuczynski, while continuing teaching the following courses:

1. Chemical technology, part Ia (on the 2d year of the study), which included technology of water and fuel, building materials, ceramics, and glass.

2. Chemical technology, part Ib (on the 2d year of the study), in which rock-salt, salts of potassium; sulfur, sulfuric, hydrochloric and nitric acid; soda; chlorine; ammonia; artificial fertilizers; mineral paints; major chemical preparations; metallurgy were taught.

3. Technical electrochemistry (on the 4th year of the study), where the electrochemical methods in basic chemical industry were studied.

Under the direction of prof. I. Moscicki the laboratories of technical electrochemistry and chemical technology were equipped on the Department and on 1921 the Department was renamed to the Department of **chemical technology I (large inorganic industry) and technical electrochemistry**. Hence, a special merit of prof. I. Moscicki consists in the fact that he was the first to understand closeness and direct connection between inorganic technology and technical electrochemistry and the first to combine them within one Department.

During his work on the Department prof. I. Moscicki elaborated the plans of building a large factory of nitric acid, ammonium nitrate, and cyanic hydrogen production, but since the First World War break out they were never realized. In the academic year 1914-1915 because of the War the studies at Lviv Polytechnic School was deferred, and from 1915 to 1919 only separate departments were functioning. In the academic years 1915-1916 and 1916-1917 prof. I. Moscicki was Dean of the chemical Department and he never stopped his active scientific activity. In 1916 he organized a society called "Methane", which was concerned in patenting and introduction of chemical technologies and developing the

chemical industry in Galicia in general. In 1917 "Methane" began to publish the magazine with the same name which was changed to "Chemical industry" in 1920.

In 1922 prof. I. Moscicki initiates relocation of "Methane" society to Warsaw, where it was reorganized to Chemical Research Institute. The main directions of his researches were rectification of oil, electrolysis of NaCl and KCl, obtaining of CCl_4 , production of HCl, distillations of coal and peat and other. The researches of obtaining sulfuric acid from gypsum have been launched.

From 1922 to 1925 I. Moscicki was general director of the large factory of ammonia and its derivatives, which he finished building in Khozhov. At the same time he remained the head of the Department at Lviv Polytechnic School.

In 1922 prof. I. Moscicki was given the title of Doctor of *honoris causa* of Lviv Polytechnic. In 1925 he was elected the Rector of Lviv Polytechnic, but did not hold this position for long as on 2 June, 1926 I. Moscicki was elected the President of Poland. In this year he was given the title of honorary professor of Lviv Polytechnic. Prof. I. Moscicki is the author of over 60 scientific works and about 40 patents. He was the head of many organizations and chemical societies, Doctor of *honoris causa* of Lviv and Warsaw Polytechnic as well as universities of Vilnius, Frayburg, Tartu.

When prof. I. Moscicki became the President of Poland Tadeush Kuczynski took over the post of the Department's chair. Prior to this (1920-1922) T. Kuczynski worked as the head of the research laboratory of mineral oils factory in Drohobych, later as a leading chemist and technical director of "Nitrogen" factory in Jaworzno, and then (1924-1927) as a professor's assistant on chemical Department of Lviv Polytechnic he taught physical chemistry, bases of electrochemistry and colloids science. In 1927 he defended his thesis and became the chairman of the Department. In 1928 he was given professor extraordinary title followed by professor ordinary in 1936.

Prof. T. Kuczynski is the author of about 50 works and patents. One of his major works is separation of emulsions by phenol addition, owing to which prof. Kuczynski became an international expert in the industry. His another important work is extraction of lubricating oils by aromatic hydrocarbons derivative. He was also an adviser of the exploitation of potassium salts Society in Kalush. Together with the colleagues he conducted the researches which were widely used in potassium production, including the new technologies of potassium salts, research of the multicomponent salt systems, works with corrosion of materials for equipment production.

Prof. T. Kuczynski was a founder of the Union of Engineers-Chemists of Poland, as well as one of the creators and editor-in-chief of "Chemical Review" up to 1939. He developed chemical engineering – a new direction in Polish science and industry. For these purposes he used

part of the laboratories of the Department he chaired. His lectures on **chemical technology of basic inorganic synthesis and metallurgy** consisted of two parts.

The first part meant for the third year students was devoted to the chemical engineering and contained such sections as history of development of chemical technology and chemical industry; theory of chemical processes; raw materials; equipment; technological regimens; optimum parameters; choice of materials for chemical equipment; technological schemes; division and cleaning of gases; dissolution, evaporation under pressure, crystallization, drying, etc.

The second part for the fourth year students included obtaining of gases (hydrogen, nitrogen); production of fertilizers; synthesis of ammonia, nitric acid and other nitrogen compounds; obtaining phosphorus, phosphoric acid, and superphosphate; potassium and mixed fertilizers; hydrochloric and sulfuric acid; soda. Metallurgy; theory of corrosion and anticorrosion protection; special alloys; electrolysis were also lectured.

In addition, for the fourth year students prof. Kuczynski lectured technical electrochemistry including: accumulators; bases of electrolysis; electrolysis of water, chlorides, electrolysis under pressure; electro-osmose, etc. After annexation of Lviv to soviet Ukraine in 1939 Lviv Polytechnic was renamed to Lviv polytechnic institute and the Department to Department **of inorganic technology**. At that time (1939-1941) professor Kuczynski was lecturing only chemical engineering. During the German occupation in 1941-1944 higher educational institutes in Lviv were liquidated, and a few months later Technical Professional Courses in Lviv Polytechnic were organized. Prof. T. Kuczynski taught there inorganic technology and took part in the clandestine teaching of the students. Before escape from Lviv the Germans robbed Lviv Polytechnic and the Department in particular taking away the apparatus and equipment. After their escape prof. Kuczynski initiated the renewal of the Department and headed it till January 3, 1945, when he was arrested together with his colleagues from Lviv Polytechnic by National Commissariat of Internal Affairs (NCIA). He was put to prison, than to the camp in Krasnodon. After being released he was taken to Voroshilovgrad where he died in a hospital on June 25, 1945.

Appearance and quick growth of the technology of inorganic substances in Lviv Polytechnic were caused by the fact that in the end of the 19th and in the beginning of 20th century the mineral resources of Carpathian-region (primarily polymineral potassium ores) began to be widely used in the industrial production.

From 1945 to 1960 the head of the Department was associate professor Andriy Zhyvotovskiy and the Department was named „**Technology of inorganic substances**”. At that time merely 20-25 specialists in inorganic technology were being trained. „General chemical

technology” course was read for the chemistry students of Lviv polytechnic institute. In spite of the fact that our Department was the first in Ukraine to start teaching technical electrochemistry in 1912, for some unknown reasons training of electrochemists was not renewed although there was an acute shortage of such kind of specialists in our region at that time. The second Department of technical electrochemistry was created in Kyiv polytechnic institute in 1929 followed by Kharkiv polytechnic institute in 1930 and Dnipropetrovsk chemical-engineering institute in 1953. Absence of training of specialists of technical electrochemistry in a post-war period in the Western region of Ukraine brought considerable harm to the technical level of the industry of this region.

We have all grounds to state that the absence of training of specialists in electrochemists was due to the absence of qualified instructors in this field murdered in the period of 1939-1945. Scientific research work of the Department was focused on the improvement of production of nitrate and sulfate acid, technology of thermophosphates, creation of more efficient mass exchange equipment, in particular an absorber with S-similar dispersers. It is necessary to notice that the period of A. Zhyvotovskiy chairmanship was a post-war and hard for the economy of the former USSR. As a result the Departments were underfunded and laboratory-technical base was poor. It had the negative influence on the intensity of scientific research works and on the level of the specialists training.

The end of the 50th of the 20th century was characterized by a decline in the chemical industry in the USSR, the admission of the students-chemists was reduced, Departments were closed (merged), *etc.* In particular, in 1956 the greater part of the students-chemists of Lviv Polytechnic was moved to the new speciality – “Controlling and measuring apparatus”. In 1960 the Department of technology of inorganic substances was merged with the Department of processes and apparatus of chemical productions under the direction of associate professor Alexander Chernyavsky. It was a tough period in the history of our Department. Such amalgamation was artificial and it inflicted considerable harm to the development of the two Departments, as they both had different specifics of educational process and orientation of the scientific work.

At that time in Western Ukraine chemical inorganic industry was developing rapidly. It was caused by the powerful sources of raw materials of the region. In 1959 mining-chemical industrial complex in Rozdil output the first product (sulfur), chemical metallurgical complex in Kalusch, mining-chemical complex in Yavoriv, potassium factory in Stebnyk, a complex of nitrogenous fertilizers in Rivno, *etc.* were developing. There was a considerable disbalance between the number of specialists of inorganic

technology required by the industry and the number of the specialists graduating from Lviv polytechnic institute. This deficit was compensated by the graduates of other higher educational institutions of the USSR. As a rule, they failed to get acclimatized here. The situation became even more complicated when in 1968 admission of students was stopped on speciality “Technology of inorganic substances”. This was explained by the absence of scientific-teaching staff of the proper level and a separate Department.

Victor Yavorsky, a young scientist (born 1937) and graduate of the Department of technology of inorganic substances of Lviv polytechnic institute, being aware of the importance of training of specialists in this speciality, made a lot efforts to restore the independence of our Department. In 1969 the incorporated Department was parted to the two separate Departments: chemical technology and processes and apparatus of chemical productions. This became possible owing to support of the Dean of chemical-technological Faculty professor Vasiliy Tikhonov and the Rector of the Institute professor Grigory Denysenko. In 1971 stationary form of study was halted, but training of students of external form began (two groups). Associate professor V. Yavorsky became the head of the Department of chemical technology. Its laboratory-technical base was of low level, research work was conducted only by the teachers individually and financed from the state budget.

At the same time inorganic industry, which was actively developing in the Western regions of Ukraine needed rapid solutions for a great number of scientific and engineering problems. The raw materials base for sulfuric industrial complexes in Rozdil and in Yavoriv were the natural sulfuric ores of the Carpathian region. Implementation of the large complex of research works was needed to organize an effective process of extraction of sulfur from sulfuric ore, increasing its quality, decreasing the production volumes, expanding the range of the commodities and special types of the finished products, *etc.* At that time the sulfuric industry of USSR had practically no proper scientific base. A small laboratory of sulfur in the State institute of mining-chemical raw materials (Lyubertsy in Moscow region) with the staff of 8 persons could not provide the solutions to the vital scientific questions appeared in the process of the sulfuric industry development.

The above mentioned was also true for polymineral potassium ores of the Carpathian region as the unique source of potassium substances in Ukraine. Therefore there was an acute need for the scientific personnel of higher qualification which could define and solve complex problems of theory and practice of sulfur and potassium salts technologies.

Starting from 1969 under the direction of professor V. Yavorsky a wide range of research works devoted to the solution of the major problems of sulfur and potassium

technologies were launched. In short time a considerable volume of scientific researches devoted to the elimination of the defects of the existing technologies, their improvement and intensification, the development of the novel technologies of obtaining end products from the new powerful sources of raw materials was conducted by the staff of the Department, the postgraduate students, and the seekers. Considerable attention was given to increase of quality of the obtained products as well as to harmful waste neutralization and utilization. The researches were conducted in close collaboration with the sulfuric and potassium plants.

With the money obtained from the research works conducted for the industrial plants scientific laboratories were modernized and equipped by the newest apparatus. This allowed to raise the level of the educational process and the scientific-research works as well as successfully train scientific and scientific-pedagogical personnel of higher qualification. Annually 2-3 postgraduate students or co-seekers defended their thesis on the Department. This enabled to properly staff the Department with scientific-pedagogical personnel as well as supply sulfuric and potassium industries with the qualified researchers. It was mainly the research workers, trained on the Department, who organized the Central research laboratory of sulfur in New Rozdil and worked in Kalush branch of the all-USSR Research Institute of halurgy.

In 1973 the Department of chemical technology was appropriated such fundamental course of chemical training of chemists-technologists as "General and inorganic chemistry". In 1990 it was renamed to the Department of chemistry and technologies of inorganic substances. Integrating the courses of theoretical inorganic chemistry with inorganic technology appeared very fruitful, as it enabled to increase the scientific level of the special courses teaching and to teach theoretical courses more target oriented. In 1989 admission of the students of stationary form of teaching was renewed on speciality „Technology inorganic substances”, and in 1992 on speciality "Technical electrochemistry".

Under the direction of professor V. Yavorsky the first scientific school of the problems of chemistry and technology of sulfur and its major combinations in Ukraine was created on the Department. Its great achievements were the new technological developments, major part of which was applied in the industry. These are the following:

- cleaning of natural sulfur from flying organic admixtures by air (Rozdil Production Association "Sulfur", in 1970);
- cleaning of natural sulfur from organic admixtures by the overheated aquatic steam and sulfate acid (Rozdil Production Association "Sulfur", in 1982);
- cleaning of oxygen containing gases from hydrogen sulfide using the quinhydrone method (Rozdil Production Association "Sulfur", in 1983);

- the complex of research works on improvement and intensification of the sulfur production processes from different types of raw materials (Rozdil and Yavoriv Production Association "Sulfur");

- cleaning of the sulfate-acid systems gases emission (JSC "Crimean titanium", 2004);

- cleaning of volley emissions of ilmenite sulfate-acid decomposition reactors (JSC "Crimean titanium", in 2005);

- utilization of warmth and cleaning of emissive gases of methatitanic acid paste calcinators (JSC "Crimean titanium", in 2005);

- cleaning of smoke gases of colored iron oxide production (JSC "Crimean titanium", in 2006).

Great scientific achievements of the Department were also made in the technology of potassium and phosphoric fertilizers. A range of new ecologically clean technologies of the complex processing of domestic polymineral potassium ores of the Carpathian-region was developed. Scientific-technological bases of solid-phase reducing of phosphates and sulfates by natural gas in the presence different additives were elaborated. Topicality and value of these works is growing in connection with the acute need for utilizing the domestic phosphatic ores in the industrial production, as up to now our phosphoric fertilizers industry has been working on imported raw material. A new direction in the technology of phosphoric fertilizers is being developed – transforming water insoluble phosphorus forms to water soluble ones by thermal processing of domestic phosphorites with additives. For the last 15 years the researches directed at utilization of the nonferrous, rare and precious metals from various wastes of production, dead catalysts, etc have been started.

Based on the results of the researches a monograph "Technologiya sery" and over 700 scientific works were published. The novelty of these scientific works was proved by over 140 inventions considerable part of which was applied in the industry. During the last 35 years 47 candidate's and 5 doctoral dissertations have been defended.

The academic subjects taught at the Department are fully provided by the methodical materials which are being systematically renewed. Considerable attention is given to writing textbooks and other educational materials. For instance, textbook "General chemical technology" (published in 2005) is the only one in Ukraine and has been awarded the diploma of the 2nd degree in the nomination "The Best textbook in natural sciences" on the 1st International forum "Informational support of educational process in High schools".

Today the Department has a modern laboratory-technical base and provides training of bachelors, engineers, and master's degree students in specialities "Chemical technology of inorganic substances" and "Technical electrochemistry", candidates and doctors of sciences.

Theoretical and technological academic subjects are organically connected. Thus theoretical disciplines are taught meeting the requirements of the modern technologies and the theoretical teaching of technological disciplines is improved. Since water treatment has been read on the Department for a long time already, and since the Department is staffed with the instructors of the necessary qualification and equipped with material and methodological resources starting from the next year a new speciality "Technology of drinking water and water processing for food productions" is planned to be launched. It is common knowledge that the quality of most food products is determined by their base which is usually water. Consequently such specialists are highly demanded by the modern food industry.

The highly qualified scientific personnel of the Department consists of 4 doctors, 14 candidates of sciences and is mainly staffed by the graduates of the Department, its former postgraduate students doctoral candidates, is capable of solving complex pedagogical and scientific and technical problems faced higher school and industry of Ukraine.

In 2007 on the occasion of 70th birthday of the head of our Department, the Honoured Science and Technology Worker of Ukraine, academician of Engineering Academy of Sciences of Ukraine, Ecological Academy of Sciences of Ukraine, New York Academy of Sciences, professor, doctor of engineering sciences Victor Yavorsky and his outstanding achievements in science, fruitful pedagogical activity and training of scientific-pedagogical personnel of high qualification he was entitled Honoured Professor of National University Lviv Polytechnic National University. Only two heads of the same Department were entitled such a high rank: I. Moscicki and V. Yavorsky. Number 7 is really lucky for our Department: I. Moscicki was the seventh Honoured

professor of Lviv Polytechnic, 81 years later V. Yavorsky was entitled the 21st Honoured Professor. During these years not only our Department preserved the glorious initiatives of its first leaders, but managed to increase and develop the creative and pedagogical traditions.

The collaborators of our Department take pride in the prominent scientists G. Gyunzberg, B. Pavlevski, I. Moscicki, T. Kuchinski, A. Zhivotovskiy V. Yavorsky and others who made a great contribution to the establishment and development of our Department and expresses hope that the Department's glorious history and traditions will be cherished and developed by the coming generations.

References

- [1] Stanik W.:Ch&ChT, 2007, **1**, XI.
- [2] Zajaczkowski W.: C.K. Szkoła Politechniczna we Lwowie. Rys historyczny jej zalozenia i rozwoju, tudziez stan jej obecny. Lwow 1894.
- [3] Politechnika Lwowska 1844-1945. Wroclaw 1993.

КАФЕДРА ХІМІЇ І ТЕХНОЛОГІЇ НЕОРГАНІЧНИХ РЕЧОВИН: МИНУЛЕ, СЬОГОДЕННЯ І МАЙБУТНЄ

Анотація. З нагоди 140-річчя від дня народження професора, доктора honoris causa і Почесного професора Львівської політехніки, колишнього завідувача кафедри І. Мосцицького і 70-х роковин професора, доктора технічних наук, Почесного професора Львівської політехніки, нинішнього завідувача кафедри В. Яворського, зроблено короткий екскурс в історію кафедри хімії і технології неорганічних речовин «Львівської політехніки», розглянуто її сьогодення і перспективи.

Ключові слова: історія, кафедра, технологія неорганічних речовин, технічна електрохімія.