

Prof. Dr. techn. Ing. Václav Vavřinec Pošík

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Abstract. *The following article deals with the life and work of Václav Vavřinec Pošík, undoubtedly one of the most significant personalities who distinctively contributed to development of electrical engineering in the Czech lands in the first half of the twentieth century, and who helped the electrotechnology teaching to boom at universities. His activity can be divided into three fields: the first is his work in industry, where he worked as an expert in the electrical engineering and was co-creator of electrification of the Czech lands, the second is his scientific-research activity and the last is his pedagogical work.*

Keywords

Václav Vavřinec Pošík, Mining University, electrotechnology, professor, electrification.

1. Years of Study and Practice

Václav Vavřinec Pošík was born on 30th of January, 1874 in Budiměřice near Nymburk in Bohemia to a landowner Wenceslas and his wife Barbara. He got primary education in a general school in Nymburk and town school in Jablonná in Podještědí. During the years 1887–1894 he studied the Czech grammar school in Karlín, where he passed Maturita exam. In the school year 1894/1895 he started his university studies in *Czech Technical University* in Prague, which he successfully finished passing both state exams (1896, 1900) with commendation and in 1900 he was graduated Mechanical Engineer. At this school he also gained his first electrotechnical knowledge.

His career of electrotechnical engineer began in 1898, when he joined the company Ganz et al. in Vienna, where he had an opportunity to get valuable experience from the field of electrical engineering while projecting buildings and economic management of electrotechnical centrals. He became the mediator between this company and Prague power station companies. Two years later (in 1900) he accepted a job in a joint-stock company Siemens and Halske in Vienna, where he dealt with electrotechnical machines and devices testing and he also participated in drawing up projects of electrical lighting devices. In 1901 a cooperation was offered to him by electrotechnical company Kolben et al. in Prague-Vysočany, and he

accepted this job. As the company traded with foreign countries (England, Spain, Italy and Sweden), he could expand his knowledge and experience. Due to a crisis in engineering and electrotechnical industry, he left in 1902 to services of state railways in Vienna, where he worked following four years as an electrotechnical engineer.

He was enabled to study in a newly-established electrotechnical institution of *Technical University in Vienna* due to favourable working conditions. In the school year 1904/1905 he took part in all the lectures from electrical engineering, whose content was already known to him from his practice and private studies. His aim was to revise more quicker for the rigorous study he was preparing for. Modernly equipped laboratories of electrotechnical institution enabled him to perform scientific experiments needed for his dissertation thesis, to examine and study the construction of dynamo-electrical machines. After establishing the stool buildings of dynamo-electrical machines (1905/1906), he became a proper college student of professors Pichelmayer and Hochenegg. He passed the rigorous exams from the study branches Construction of Electrical Machines and Management of Electrical Machines by professor Karel Domalípa at Czech Technical University in Prague on 24th of February 1906. Afterwards, he was graduated the first doctor of technical sciences in electrotechnical field in Austria-Hungary.

Since 1st of August 1906 he was employed as a constructor of electrotechnical machines at the biggest electrotechnical company in Austria-Hungary in Siemens-Schuckert factories in Vienna. V. Pošík was responsible for the machines, that were supplied for example to Hungary, Moravian Ostrava and others, and they proved to be efficient on both, electrical and mechanical side. On 1st of December 1908, at his own request, he was transferred to electrical railway department, where he projected electrical rails. In 1909 he moved to Prague, where he started his practice in a position of an officially authorised civil engineer for electrotechnology and construction machinery. He prepared a number of projects for the town power stations (for example a power station in Přerov for 20 000 HP and connection of city Prostějov to this power station), he supervised all the electrification events, he promoted the power system with the help of technical lectures in Czech and Moravian towns, and he explained ongoing meaning of the gasworks.

2. University Career

V. V. Pošík started his university professional career in 1909 with habilitation for the branch of commutator engines and rotary converters in Czech Technical University in Prague. In the following year 1910 he was appointed a remunerated associate professor for lectures of electrotechnology basics. Previously, he applied for professorship of constructive electrotechnology in Czech Technical University in Brno, where he took the second place.

In 1921 he was summoned to teach in VŠB in Příbram, where he actively worked until his retirement in 1939. Since October 1921 he was a substitute teacher at Department of Electrotechnology and Technical Mechanics I, in February 1922 he became a proper electrotechnology professor and the Head of the Department. In the twenties the classes in the electrotechnical institution were negatively marked with insufficient devices equipment and insufficient laboratory capacity, that did not enable practical training for a given number of college students. The problem was also intensified by dealings regarding school transfer to Prague, so the construction of new rooms would have been unprofitable. During his stay at school, V. V. Pošík constantly tried to improve the equipment of his institution, he extended electrotechnology schooling in compliance with technical practice needs (for example teaching of subject Drive of Electrical and Furnace) and in 1922 he participated in publishing exercises of *Electrical Practicum* at Pošík's publishing house. In 1923, an authorised Research electrotechnical institution for electrical machines and materials testing, calibration counters and iron testing, was established in VŠB.

During the years 1921–1939, V. V. Pošík wrote a chronicle *Electrotechnical institution VŠB in Příbram*, where he registered various events from every school year. For example, he marked when he started his lectures and seminars, how many lessons he taught during the semester, what places pedagogues and students visited during the excursions (for example to Kolbenka, Technical Museum), what were the relationships in the professors' staff, influencing the course of the whole school, what was the process of moving VŠB to Příbram, etc.

From his records we can learn that in 1923 the school succeeded in gaining extra grant for purchase of teaching aids, namely for measuring apparatus. In 1927, a portable radiotelephone station was established nearby the electrotechnical institution and electrification of the school and its connection to the urban network took place in the same year. In 1929 the name of the institute was changed to *Institute of Electrotechnology, Statics and Dynamics* and from 1930 to *Electrotechnical Institute of Mining University in Příbram*. In May 1930 V. V. Pošík was elected a rector for the school year 1930/1931. His inauguration took place in a very ceremonial way for the first time, with the participation of academic community and other guests. During the years of Depression he tried to find broader opportunities of employment for graduates and forthcoming engineers. Parallely to teaching in VŠB

he gave lectures in Czech Technical University in Prague. His work outside of VŠB did not meet understanding of his colleagues, but numerous direct contacts with other technical school brought important scientific and pedagogical impulses.

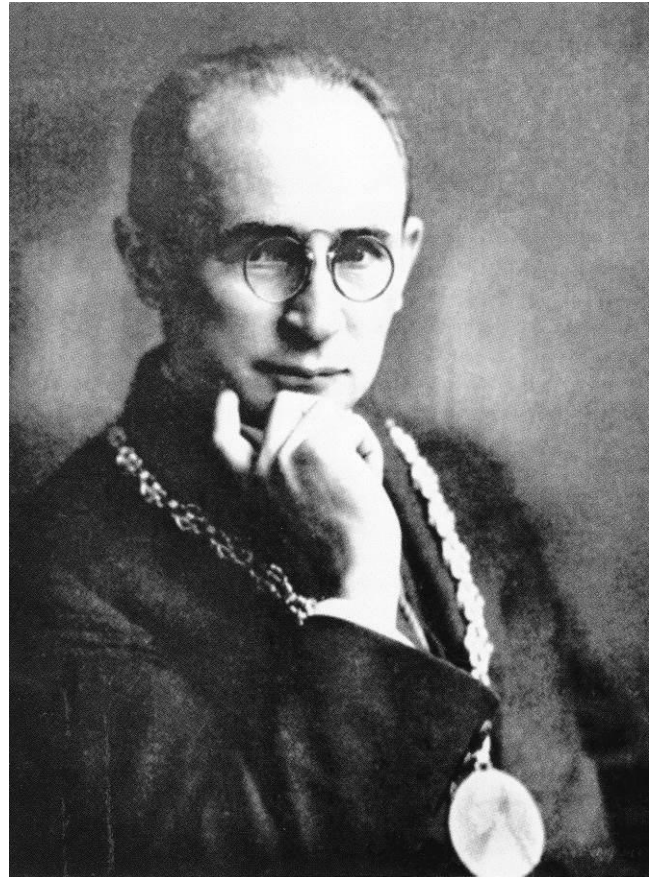


Fig. 1. Prof. Dr. techn. Ing. Václav Vavřinec Pošík. The rector of Mining University in Příbram during the 1930–1931 period. (Reference: University Archive of the VŠB-Technical University of Ostrava. The fund: University Archive of the VŠB-Technical University of Ostrava, Funding department: Rector's office, The personal file, Pošík Václav Vavřinec.)

According to the government regulation from 1938 business hours of university professors were decreased to 65 years in year 1939. V. V. Pošík had to leave for pension on 15th of February 1939 before the end of the semester. His early retirement meant a big loss for the school, because the specialization of his field (electric furnaces) was greatly special and it was impossible to find a new qualified successor immediately. In the summer semester he wanted to come back to give lectures again, but taking into consideration the threats he had received, he gave up his intentions and withdrew. In March 1939, a professor Šebesta became the new institute administrator and the new substitute teacher was chosen Ing. Dr. Jan Bašta, who in 1945 became a professor for electrotechnology in VŠB, which moved from Příbram to Ostrava. The Professor Pošík did not go to Ostrava to give lectures, but he at least restored electrotechnic lectures in Prague Technical school. V. V. Pošík died in Stará Boleslav on 25th of May at the age of 78.



Fig. 2. The inspection in power station at Příbram in November 1923. V. V. Pošík is sitting in the middle. (Reference: The National Technical Museum Archive. The personal fund: Pošík Václav Vavřinec, prof. Ing. Dr. tech.)

3. Cooperation with Vocational Institutions

V. V. Pošík was the member of a number of professional and scientific societies, among which we can state *Masaryk Academy of Work*, *Water Union of ČSR*, *Board of Directors of the KABLO company*, *The Society of Architects and Engineers*, *Engineering Chamber for ČSR*, *Electrotechnical Czechoslovak Union* or *Technical Museum*. He also was the member of *Syndicate of Czechoslovak Writers*, emeritus member of *State Power Station Council*, *National Unity pošumavská and severočeská*, *Czechoslovak Unity*, he was the honourable member of *Confédération internationale des Ingenieurs-Conseils* in Brussels, *Society of Assistants of University VŠB in Příbram* and *Society of Slavic students Prokop*. He was an expert witness for electrotechnics. He took part in national and international vocational congresses (for example The Electrotechnical Congress in Stockholm), meetings of Electrotechnics Czechoslovak Society, and others. During his life he undertook study journeys to Slovenia, England, Belgium, Pyrenees, Denmark or Poland. He also visited Norwegian and Swedish water power stations. Thanks to these trips he got invaluable experience not only for the field of electrotechnology, but he also obtained a credible comparison of teaching and equipment quality in other schools.

4. Literary Work

His first scientific book, *Rotational Electrical Converters, its Theory and Effects*, was published in 1907 (he comes from his dissertation). Since that time he energetically participated on publishing activity that currently counts more than forty professional works not only in Czech, but also in French and German. Some of them were published in more editions. In 1925 the Masaryk

Academy initiated the creation of the book *Hospodaření energie výrobní a přebytekové*, for which he got an award of *Národohospodářský ústav* by Česká akademie věd a umění in Prague. He was the co-author of *Technical Horizon* and the leader of *Electrotechnical Horizon*. His professional studies made published in *Zprávy spolku architektů a inženýrů*, in foreign press *La Traction Électrique*, *Zeitschrift für Berg-und Huttenwesen* etc. With his articles in daily press and various magazines he tried to popularize electrotechnics for the wider public. He also contributed into *Technical Educational Dictionary* and *Otto's Educational Dictionary*, for which he wrote slogans like *Electrical Net*, *Synchronism in Electrotechnics*, *Phone At Railway Transport*. *Brief Basics of Electrotechnics* were released for university students by Society of Electricians in Prague in three editions (1918, 1925, 1946). The Society of Engineering Students in Prague published a publication *Hydroelectric Plant* (1919, 1924).

5. Private Life

On 12th of November 1901, he married Hilda (born Čuprová), a daughter of property developer in Brno. Three children were born to them: Jarmila Pachlová, Věra Límanová and Jiřina Límanová. During the Second World War he was twice interrogated because of a letter sent to Slovakia. In 1940 the family moved from Prague to own detached house in Stará Boleslav. In Prague he lived twenty-seven years in the house above Alois Jirásek, in Reslová Street no. 1. His pseudonyms were for example: Justus, V., Souček, Dr., Pk, Dr. X., Y.Z., V.P-ík. Among his hobbies we can state music, skating, swimming, skiing and tourism.

Matěj Hůla, Pošík's teacher in Budiměřice, discovered his musical talent and he started to teach him playing the violin. Although V. V. Pošík showed an interest in attending the conservatory, he left to study in Prague. There he paid a piano teacher and simultaneously he continued playing the violin as an autodidact. During his studies, he used to write theatre critics and his first own poems. Jaroslav Vrchlický was his idol. In 1939 he donated *A Metallurgical Song* to Society of Metallurgical Engineering Students in Příbram. This song was supposed to become their new anthem. He as well donated his metallurgical songs to Society of Slavonic Students of VŠB in Příbram. In 1949 the publishing house Maják in Brno published his two collection of poems: *Dreams and Life* and notes from the Second World War *Fragments of Great Time*. In the firstly mentioned poem technical motives important by its depth of the thoughts can be found.

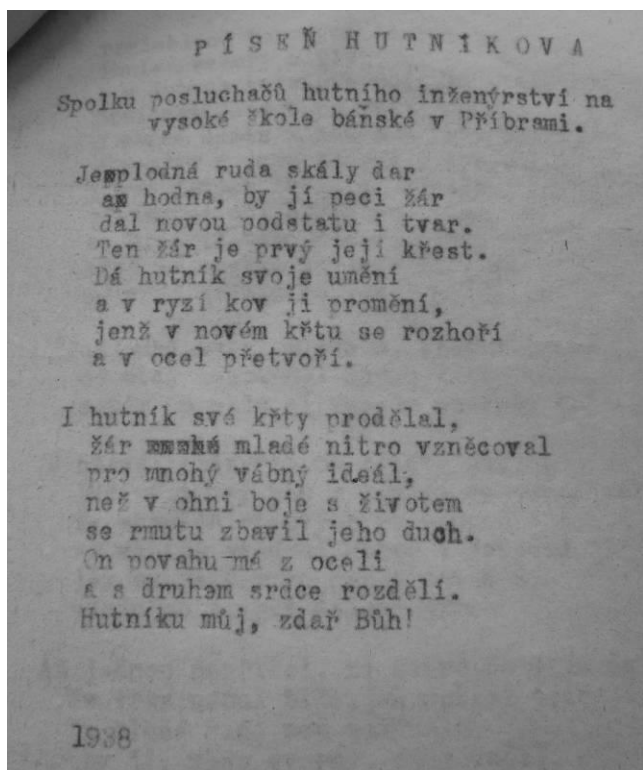


Fig. 3. V. V. Pošík: A Metallurgical Song. (Reference: The National Technical Museum Archive. The personal fund: Pošík Václav Vavřínek, prof. Ing. Dr. tech.)

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About Author

Mariana STONIŠOVÁ was born in Ostrava (Czech Republic) in 1987. After graduation at Episcopal grammar school in Ostrava (2006) she began to study at the Faculty of Arts under the University of Ostrava. She completed her undergraduate (in 2009) and graduate (in 2012) study programme History, where she was awarded a master's degree. In 2012 she simultaneously completed her undergraduate study programme Education and was awarded a bachelor's degree. Since 2011 she cooperates with Centre of Outdoor Programmes as an instructor in experience and educational programs. Since 2012 she cooperates with Catechetical and Pedagogical Centre under the Diocese of Ostrava-Opava as an instructor. She is employed as an academic staff member at Department of Social Sciences under the VŠB-Technical University of Ostrava since autumn of 2012. There she guarantees and lectures subjects of History of Science and Technology and History of Science and Technology in Engineering. She was a member of authors collective who published *Ostravské dělnické kolonie I., II., III.* (2011, 2012, 2016). Today she cooperates with the archives of VŠB-Technical University of Ostrava on publications about the history of this university. Since autumn of 2015 she is a Ph.D. student at study programme History of Technology at The Masaryk Institute of Advanced Studies under the Czech Technical University in Prague.

