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From Galicia to Vienna: Scientific careers of I. Puluj and I. Horbaczewski

BECAUSE OF DIFFERENT REASONS, Ukrainian young people from Galicia have very restricted possibilities to make the scientific career at Lviv University. However, some of them were successful in Vienna or Prag. In this context the very interesting figure are Professors Ivan Puluj and Ivan Horbaczewski.



Ivan (Johann) PULUJ (1845, Hrymajliv, Ternopil' region, Ukraine – 1918, Prague)

In 1884–1916 Professor of *Deutsche Technische Hochschule* in Prague (1888–1889 — Rector, 1890–1891 — Dean, 1902 — first Head of the chair for Electrical Engineering).

Prof. Dr. Gerhard Kowalewski, Deutschland:

"... Never in my life I have met such personality as Puluj ...".1

Prof. Dr. Wilhelm Formann, Österreich:

"Dr. Puluj ... belongs to the most interesting persons of science of the period 19 – beginning 20 century".²

1869 — graduated from Theological Faculty of Vienna University; 1872 — graduated from Philosophical Faculty of Vienna University; 1872–1874 — at the Laboratory of Prof. von Lang of Vienna University; 1875–1876 — at the Physical Institute of Prof. August Kundt of Strasbourg University; 1876 — PhD degree of Strasbourg University; 1876–1883 — at Vienna University; 1883–1884 — in Steyr, the firm of Werndel; 1910 — titled "Hofberaters"; 1913 — Honorary Member of the Society for Electrical Engeneering in Vienna; 1916 — proposition to head the Ministry of Education of Austria.

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¹ The original German text: "... Nie mehr im Leben bin ich einer solchen Persönlichkeit wie Puluj begegnet ..." (translated by Yu. Holovatch).

² "Dr. Johann Puluj ... gehört zu den interessantesten Gestalten der Wissenschaft im 19. und ibeginnenden 20. Jahrhunder" (translated by Yu. Holovatch).

Works on the molecular physics, the cathode and X-rays, electricalengineering. His series of papers "Strahlende Elektroden-Materie und der sogenannte vierte Aggregatzustand" (Wien: Karl Gerold Sohn, 1883) was published by the Physical Society in London in the series "Physical Memoirs (selected and translated from foreign sources)", 1889, Vol. 1, Part 2. Prof. J. Puluj was the first who discovered the ionizing action of X-rays and gave the correct explanation of their origin (*Wiener Berichte*, 1896, Bd. 105, p. 228–238). The cathode tube of the Puluj's construction from 1882 produced the most intensive flow of X-rays (just the "Puluj lamp" was used for getting the first X-ray picture in the USA, Darthmouth College, 1896, February 3). In the electrical engineering J. Puluj is an author of many inventions and projects for some electric power stations in Czechia.

Ukrainian aspects of the J. Puluj's activity:

1872–1873 — Head of the Ukrainian student Society "Sitch" in Vienna; 1880 — publication of the "New Testament" in the contemporary Ukrainian, translated by P. Kulish and J. Puluj from the Greek and Latin:

1899 — full Member of the Shevchenko Scientific Society [this Society was founded in Lviv, 1873 and from 1892 functioned as the Ukrainian Academy of Sciences; among the foreign Members of the Society were M. Plank (elected 13.03 1924), A. Einstein (17.03 1929), D. Hilbert (1924), A. Jensen, T. Masaryk and other known scientists]; 1903 — publication of the complete text of the Bible in Ukrainian;

1915 — publication of the paper "Ukraina und ihre internationale politische Bedeutung" (Prag, 1915) [a citate: "Eine freie Ukraine bedeutet die Bastion, die Sicherheit der mitteleuropäischen Staaten, darum liegt ihre Befreiungnicht nur im Interesse dieser Staaten, sondern des ganzen Europas"].



Ivan HORBACHEVS'KYJ [in Chech: Jan Horbaczewski] (1854, Zarubyntsi, Ternopil region, Ukraine–1942, Prague)

In 1883–1917 Professor of Chech University in Prague (1902–1903 — Rector, 1889, 1894, 1904, 1911 — Dean of the Medical Faculty); 1877 — graduated from Vienna University, PhD degree; 1877–1883 — at Institute for Medical Chemistry of Vienna University; 1882 — 1st synthesized the urinic acid; 1904–1908 — published the first university textbook of medical chemistry in 4 volumes (in Czech); 1908 — titled "Hofberaters"; 1917–1918 — 1st Minister of Health of Austria; 1925 — Academican of the Ukrainian Academy of Sciences in Kyiv (in biochemistry); 1875–1877 — Head of the Ukrainian student Society "Sitch"; 1899 – full Member of the Shevchenko Scientific Society; 1923, 1931, 1934 — Rector of the Ukrainian Free University in Prague; 1924 — published in Prague the textbook "Organic chemistry" in Ukrainian; 1926, 1932 — organized the 1st and 2nd Ukrainian scientific Congress in Prague; 1939 — honorary Head of the Committee for defense of Carpathian Ukraine in Prague. Both I. Puluj and I. Horbaczews'kyj had considerable authority with Austrian Government. Just due to the efforts of Prof. Puluj and Horbaczews'kyj the Austrian Government announced in 1912 the project of founding Ukrainian University in Lviv.

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Kinfter als beilgteit diem angeweben

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St. M. Flanck.