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HISTORY OF ENGINEERING SCIENCES AND INSTITUTIONS OF HIGHER EDUCATION

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PEDAGOGICAL AND SCIENTIFIC HERITAGE OF PROFESSOR OF RIGA POLYTECHNIC INSTITUTE MIKHAIL BERLOV (1867–1935)

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Summary. The pedagogical and scientific activity of a mechanical engineer, a faculty member (1897–1918) of Riga Polytechnic Institute (RPI), Professor (1904) Mikhail Berlov (*Михаил Берлов*; 1867–1935) at the end of the 19th century and in the first half of the 20th century was related to Riga, as well as the Russian city of Ivanovo-Voznesensk (at present – Ivanovo). M. Berlov was the first Rector of the Ivanovo-Voznesensk Polytechnic Institute (IVPI; 1918–1921), who returned to Riga in 1921, obtained Latvian citizenship, and worked at the Russian Technical School of Nikolai Okolo-Kulak. The research also revealed the contribution of the pedagogue and scientist to the compilation of textbooks that were used in the Russian Empire, including in the territory of present-day Latvia in the first half of the 20th century and in the first years of the Republic of Latvia.

Keywords: Mikhail Berlov, Riga Polytechnic Institute, Ivanovo-Voznesensk Polytechnic Institute, textbooks for engineers.

Childhood and Study Years of Mikhail Berlov

Mikhail Berlov was born on 3 June 1867 (on 22 May according to the Julian calendar) in the Kherson Governorate of the Russian Empire (at present – the Republic of Ukraine) [1]. After graduating from a vocational school in Vladikavkaz (at present – the Russian Federation) in 1885, M. Berlov entered the Technological Institute of St. Petersburg, Russia, and

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on 23 May 1891, he graduated with honours, receiving a diploma of a first-class engineer-technologist [2; 50. o. p.].

After graduating from the institute, from 3 May 1892, M. Berlov worked at St. Petersburg Arms Factory as a mechanic's assistant, and from 21 May – as the Head of the Drawing Workshop [2; p. 36, 51]. On 16 August 1892, M. Berlov left his job because he wanted to improve his knowledge and went to study abroad.

M. Berlov arrived in the Belgian city of Liège, which at that time was one of the centres of the Belgian steel industry. In 1883, thanks to the financing provided by Georges Montefiore-Levi (1832–1906), a Belgian politician and philanthropist of Jewish origin, the Montefiore Institute (Institut Montefiore) – the Department of Electrical Engineering of the University of Liège – was opened in this city. M. Berlov graduated from this institute in 1897. One of the institute's organizers and long-term Director was the then well-known Belgian Professor Éric Gérard (1856–1916), a scientist, pioneer of electrification, and the author of several monographs, including the repeatedly published book «Elements d'Electrotechnique» (Elements of Electrotechnics), which from French was also translated into English and German, and author of «Leçons sur l'électricité» (1890, 1891; Electricity Course), which was also translated into Russian. At the end of the 19th century, E. Gérard's books in French, Russian, and German were also available in the library of Riga Polytechnic Institute (until 1896 – Riga Polytechnicum) [3].

In 1897, after returning to Russia from Liège, M. Berlov wanted to continue working and get to know the position of a railway worker in practice. He worked for a short time as a locomotive driver on the St. Petersburg–Moscow or Nikolaevskaya Railway and as a ten-man (leader of a group of workers) in construction works [4].

Pedagogical and Engineering Activities (1897–1918)

In the summer of 1897, M. Berlov settled in Riga. He had received a good education, was well practically prepared for the work of an engineer, thus he started working in the Riga–Orla Railway service. It should be explained here that in the 1890s, an industrial boom began in the Russian Empire and there were changes in the national railway policy. The state began to invest in the construction of railways, and the railway network gradually came into state ownership. The statutes of all railway companies provided for their transfer to state ownership within 20 years of their commissioning. Due to large capital investments, the condition of railways improved, new railway lines were built, and the volume of cargo transportation increased [5]. Engineer M. Berlov

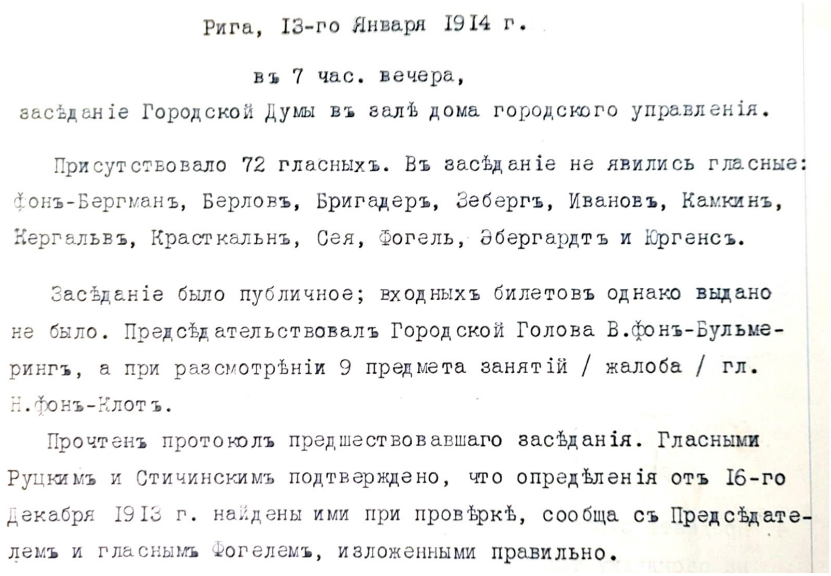
worked in the state railway service, and his scope of responsibilities was very wide – according to the projects developed by engineer M. Berlov and under his leadership, very large railway workshops and depots were built in Daugavpils [6]. The Russian-Baltic Wagon Factory (Russo-Balt) was situated in the centre of Riga, at the corner of *Valmieras* and *Bruņinieku* Streets, next to the Riga–Orel Railway line, and M. Berlov moved from working in the railway service to the Factory, where he worked as the Head of the Technical Department at the beginning of the 20th century [7]. It is noteworthy that the Chief Designer of the Factory's Automobile Department (1907–1912) was a graduate of the Montefiore Institute, Julien Potterat (1882–1962) [8]. It might be assumed that the graduates of the same institute M. Berlov and J. Potterat had not been familiar with each other before they started working at the Russian-Baltic Wagon Factory, but the knowledge gained by the two engineers in Liège was very relevant for the work they did at the Factory.

In addition to his work as an engineer, M. Berlov was offered a job at a university (institute). In 1896, Riga Polytechnicum (RP) was reorganized into RPI, in this regard, many new vacancies were opened. From a higher educational institution with German as a language of instruction, RP became a university with the Russian language of instruction, and most German lecturers had to leave their jobs due to their lack of knowledge of Russian. From 1897, a new and important phase of M. Berlov's life began. On the recommendation of the RPI Council, he was appointed an Assistant in Applied Mechanics from 1 September 1897, and became a lecturer from 1 September 1898. A year later, in 1899, he became an Adjunct Professor. Since 1 July 1904, M. Berlov was a professor at RPI [2; p. 3–5]. In May 1906, he was elected the Chairman of the Disciplinary Committee of RPI [9]. His pedagogical and scientific career developed quite successfully.

At the beginning of June 1911, the XIX Russian Railway Traffic and XVIII Russian Railway Traction Service Congress was held in Riga Latvian Society House. It was headed by an engineer Alexey Staritsky (*Алексей Старицкий*; 1872–1940), Chief Engineer of Petersburg Branch of the Moscow–*Ventspils*–Rybinsk Railway. Congress participants delivered reports, got acquainted with the layout and buildings of Riga railway stations, visited Riga factory «*Fēnikss*», Russian-Baltic Wagon Factory, elevators, etc. A one-day trip to *Ventspils* was organized to see the railway station and port. After the opening of the *Ventspils*– Rybinsk Railway line (1904), *Ventspils* had become one of the most modern export ports, a transit point for agricultural products. A large grain elevator and a freezer for storing exported butter were built here. Professor M. Berlov delivered a report on the latest metal testing methods to the congress participants [10].

From 17 to 27 April 1913, Professor M. Berlov was sent to the Congress of Mining, Metallurgy and Machine Engineering in St. Petersburg [2; p. 52]. During World War I, in August 1915, while the front line was approaching, M. Berlov, together with the RPI professors and students, evacuated to Moscow and continued working at the evacuated RPI until its closure in the summer of 1918. At that time, Riga was occupied by the German troops, so M. Berlov did not even consider returning to an independent life in Riga. M. Berlov's wife owned real estate in Riga, and on 10 June 1918, the Professor asked RPI Rector *Pauls Valdens* (Paul Walden; 1863–1957) to grant him a leave to go «to the Baltic provinces» [2; p. 44], most likely to Riga, to take care of family and property matters. It might be assumed that M. Berlov did not stay long in Riga, because he had to think about what to do in the future and look for a job.

Professor M. Berlov was always a socially active person, he was an active member of the Russian Private Loan Fund founded in 1871 [11, 12]. Before World War I, he ran for elections to Riga City Council and was elected a city councillor. Participating in the meetings of the Riga City Council, he actively discussed various issues, for example, at the meeting on 2 June 1914, when talking about the fight against drunkenness, M. Berlov proposed to change the rules on vodka shops and their working hours and also called not to mix vodka shops with beer shops [13]. The minutes of the meetings of Riga City Council show that M. Berlov worked in the City Council in 1913, 1914, and 1915. Several RP / RPI former students and graduates (*Konstantīns Pēkšēns*; 1859–1928), Hugo Wittrock (1873–1958), and others were elected councillors) [14].



Рига, 13-го Января 1914 г.

въ 7 час. вечера,
засѣданіе Городской Думы въ залѣ дома городского управленія.

Присутствовало 72 гласныхъ. Въ засѣданіе не явились гласные: фонъ-Бергманъ, Берловъ, Бригадеръ, Зебергъ, Ивановъ, Камкинъ, Кергальвъ, Краскальнъ, Сея, Фогель, Эбергардтъ и Юргенсъ.

Засѣданіе было публичное; входныхъ билетовъ однако выдано не было. Предсѣдательствовалъ Городской Голова В.фонъ-Бульмерингъ, а при разсмотрѣніи 9 предмета занятій / жалоба / гл. Н.фонъ-Клотъ.

Прочтенъ протоколъ предшествовавшаго засѣданія. Гласными Руцкимъ и Стичинскимъ подтверждено, что опредѣленія отъ 16-го Декабря 1913 г. найдены ими при провѣркѣ, сообща съ Предсѣдателемъ и гласнымъ Фогелемъ, изложенными правильно.

Figure 1. Fragment of the Minutes of the meeting of Riga City Council (13.01.1914).

As a Deputy of Riga City Council, M. Berlov was elected to the Board of the Artisan School of the City of Riga in 1913 [15]. M. Berlov also worked in Riga Branch of the Russian Technical Society. It is known that the magazine «*Железнодорожное дело*» (Railway Industry) published by the Russian Technical Society was available in RPI library and M. Berlov, apparently, as an engineer connected with the railway, also read it.

During World War I (1915–1918), RPI conducted active operations in evacuation in Moscow, and Professor M. Berlov lived in Moscow with his family and continued working at the university until April 1918, when its activity in Russia was stopped.

The Professor's work was evaluated with high awards – Order of St. Anna of Class I and II, Order of Prince St. Vladimir of Class IV. M. Berlov was issued a certificate allowing him to wear a light bronze medal minted in honour of the 300th anniversary of the rule of the Romanov Dynasty [2; p. 51–52].

Work in Ivanovo-Voznesensk (1918–1921)

The future fate of RPI after the signing of the Peace Treaty of Brest-Litovsk (Brest) on 3 March 1918 was uncertain. World War I ended on the Eastern Front, and Russia withdrew from the war as the loser, while German troops were still in Riga. On 20 April, the RPI Study Committee decided to stop working in Moscow and return to Riga. However, part of RPI faculty believed that the higher education institution could remain in Moscow and be included in other higher education institutions. Still others supported the idea of moving RPI to another Russian city. The management of RPI wanted to return to Riga, despite the offer to move to Ivanovo-Voznesensk, one of the cities of the central European part of Russia. Russian statesmen had a plan to establish a Polytechnic Institute there, and on 6 August 1918, the IVPI was established on the basis of RPI [16].

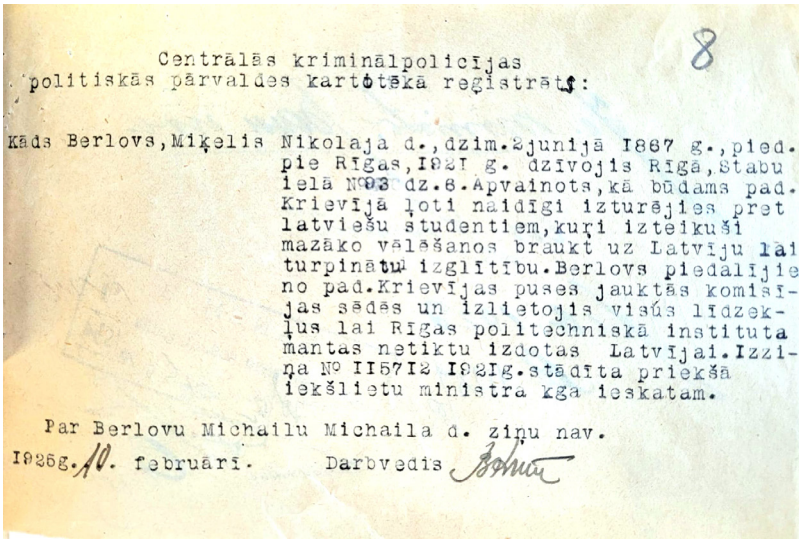
Among the lecturers of the newly founded IVPI, alongside M. Berlov, there were former RPI professors: Carl Blacher (1867–1939), Vsevolod Keldysh (*Всеволод Келдыш*; 1878–1965), Nikolai Ozmidoff (*Николай Озмидов*; 1850–1938) and Stephan Shimansky (*Стефан Шиманский*; 1868–1931). The mentioned colleagues of M. Berlov, with the exception of N. Ozmidoff, were RP / RPI graduates. Another RPI graduate – Dmitry Lastochkin (*Дмитрий Ласточкин*; 1890–1948) worked as a lecturer at the newly founded IVPI. M. Berlov became the Rector of IVPI, and he worked in this position for three years – from 1918 to 1921. M. Berlov was the Chairman of the IVPI Academic Council and the Chairman of the Presidium of this Council, as well as the chairman and member of

several committees of the institute and Dean of the Faculty of Machine Engineering (1918–1920). Today, IVPI continues its operations as Ivanovo State University of Chemistry and Technology (*Ивановский государственный химико-технологический университет*). To this day, the work of Professor M. Berlov, as well as other Riga professors, is remembered with great appreciation in the then Ivanovo Voznesensk [17; p. 3–7].

Three years later after M. Berlov left his post, Vyacheslav Sushkov (*Вячеслав Сушков*; 1880–1951), a student of M. Berlov, a graduate (1903) of the Department of Mechanics of RPI and RPI assistant (1903–1907), took the post of IVPI Rector (1924–1927) [18]. V. Sushkov, like M. Berlov, had also worked as an engineer at the Russian-Baltic Wagon Factory (1909–1910) [17; p. 18].

End of Life in Latvia (1921–1935)

The living conditions in Soviet Russia, where hunger reigned after the Civil War and the first illusions and enthusiasm for the Soviet rule soon faded for many, encouraged M. Berlov to make the decision to return to Latvia. He stopped working at IVPI in 1921, left Russia and went to Riga [1]. In 1919, the Latvian Higher School was founded on the basis of technical faculties of RPI (from 1923 – the University of Latvia (UL)). There was no place for Professor M. Berlov because the lecturer positions were already taken and he did not know the Latvian language either.



Centrālās kriminālpolicijas
politiskās pārvaldes kartotēkā reģistrēts:

8

Kāds Berlovs, Miķelis Nikolaja d., dzim. 8junijā 1867 g., pied. pie Rīgas, 1921 g. dzīvojis Rīgā, Stabu ielā №93 dz. 8. Apvainots, kā būdams pad. Krievijā ļoti naidīgi izturējies pret latviešu studentiem, kuŗi iztēikuši mazāko vēlēšanos braukt uz Latviju lai turpinātu izglītību. Berlovs piedalījies no pad. Krievijas puses jauktās komisijas sēdēs un izlietojis visus līdzekļus lai Rīgas politechniskā institūta mantas netiktu izdotas Latvijai. Izziņa № II57I8 1921g. stādīta priekšā iekšlietu ministra kga ieskatam.

Par Berlovu Michailu Michaila d. ziņu nav.

1926g. 10. februāri. Darbvedis

Figure 2. Statement of the political administration of the Central Criminal Police about *Miķelis* (*Mihails*) *Berlovs* (10.02.1926).

In addition, the attitude towards him was not favourable – M. Berlov was not forgiven that, in fact, on his proposal, a valuable academic library, technical equipment, unique mineral and zoological collections of RPI were left in Ivanovo-Voznesensk. The documents show that M. Berlov fought hard for the material base of IVPI, as well as for the students. These facts were already known to the Minister of Internal Affairs and the political administration of the Central Criminal Police in Latvia in 1921 19]. It is interesting to note that the Criminal Police claimed that they had no information about Mikhail Berlov (*Mihails Berlovs*), but wrote about *Miķelis Berlovs*, who was actually the same person.

M. Berlov wanted to obtain Latvian citizenship, justifying his request with the fact that from 1897 he lived in Riga and was the owner of a house on *Stabu* Street. He became a citizen of Latvia in October 1922 [20]. His name was Latvianized – both in his passport and in many other documents he was called *Miķelis*.

Figure 3. M. Berlov (1930s).

M. Berlov worked at the Russian Technical School of Nikolai Okolo-Kulak. It was founded on 1 February 1921 by a graduate of Moscow Technical University, engineering technician, inventor Nikolai Okolo-Kulak (*Николай Около-Кулак*; 1867–1927). At the beginning of the 20th century, N. Okolo-Kulak was the Head of the main workshops of the Riga–Orel Railway, and he briefly studied at the Department of Engineering of RPI. The Technical School had the status of a state secondary school and operated under the supervision of the Russian Education of the Department of Minorities of the Ministry of Education, which allowed students to enrol in Latvian universities after graduation. Professor M. Berlov worked at the Technical School until 1 September 1928, maintaining friendly relations with former RPI colleague S. Shimansky, who also worked at this Technical School. In 1933, the Technical School became the private technical school of the Russian Engineers Society in Latvia, which operated in this status for three years – until 1 October 1936, when it closed due to lack of students [21].

Former RPI colleague C. Blacher, writing a manual on furnace technologies and elements of heat energy equipment, expressed his gratitude to M. Berlov for his help in selecting the latest literature [22].

During the interwar period, M. Berlov was the director of JSC «*Pirmais privātais lombards*» (The First Private Pawn Shop) and the Chairman of the Council of the Third Mutual Credit Society of Riga [23], one of the founders and an Honorary Member of the Russian Engineers Society in Latvia [24].

Engineer M. Berlov passed away on 6 February 1935 [6], he was buried in Pokrov Cemetery in Riga.

Compilation and Publication of Textbooks

The first known and publicly available work of M. Berlov is «*Устройство и работа локомобиля*» (Construction and Operation of a Locomotive; 1892). These are notes of he lectures delivered to fortress artillery officers who were studying electrical engineering [25]. So far, no information about these lectures was found in M. Berlov's documents. Before starting work at RPI, M. Berlov prepared for publication the brochure «*Исследование водотрубного котла системы Шухова*» (Investigation of Tubular Steam Boilers of the Shukhov System), which was published in St. Petersburg in 1897 [26]. A contemporary of M. Berlov, a Russian engineer Vladimir Shukhov (*Владимир Шуухов*; 1853–1939) invented a horizontal and vertical tubular steam boiler in 1896. The invention was awarded a gold medal at the World Exhibition in Paris in 1900. These steam boilers were produced and used in Russia, also in the territory of present-day Latvia. As an engineer, M. Berlov was also interested in them and thus wrote the mentioned brochure.

Engineer M. Berlov became known as a compiler of textbooks in Russian. «*Детали машин*» (Machine Parts) is one of his most published and used works. It was first printed in Riga in 1902. The book was supplemented and published several times (1909, 1922, 1926, 1928, 1931, 1935, 1938), and its copies can be found in the State Library of Russia, the National Library of Belarus, the National Library of the Czech Republic, the National Library of Latvia (NLL), the Scientific Library of RTU, RTU History Museum and other places. Most of the reprints of this book were printed in Russia – in St. Petersburg (after 1924 – in Leningrad) and Moscow, in 1922 – in Minsk, Belarus. In Riga, it was printed again in 1924 by «*Valters un Rapa*» Publishing House.

The textbook «*Детали машин*» was also translated into German and French, it was used in the higher technical school of France [6]. The textbook was intended for university students, students of technical

schools, technicians, mechanics, and engineers [27]. The quick guide – the Concise Manual on the Calculation and Design of Machine Parts – was published in 1935 [28].

The books compiled by M. Berlov, especially «*Детали машин*», were popular in Russia in the first half of the 20th century. Respecting the copyright and respecting the Professor, in 1938 in Leningrad (at present – St. Petersburg) the textbook of Nikolai Zamickij (*Николай Замицкий*; 1890–1953), Professor of mechanics at Leningrad Correspondence Industrial Institute, was published – the abbreviated course of M. Berlov's textbook «*Детали машин*» was supplemented [29]. A Russian engineer Nikolai Deyev (*Николай Деев*; ?–?), supplementing this work by M. Berlov, published a textbook for students of the All-Union Correspondence Industrial Institute in Moscow in 1938 [30].

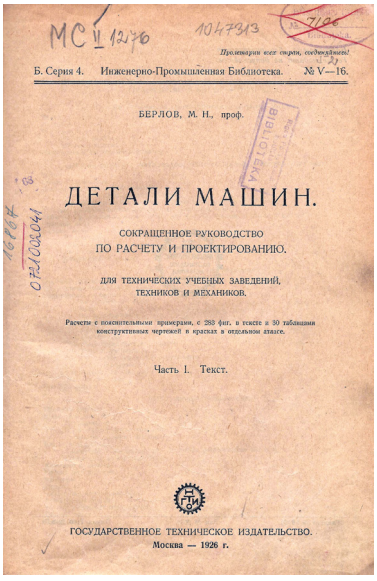


Figure 4. Title page of the 1st part of the book «*Детали машин*» compiled by M. Berlov in Russian (1926).

M. Berlov also composed other books. In 1911, his book on the mechanical theory of heat [31] was published, in 1934 – a technical graphics textbook in three parts [32]. In 1928, a large English-Russian technical dictionary was published in Moscow.

M. Berlov was the editor of many books printed in Russian. In 1915, he edited a collection of exercises in calculus and a textbook on the elements of probability theory by the mathematician, a pedagogue of Riga Commercial School Robert Bernstein (1877–?). The technical calendar for engineers, architects, builders, and mechanics for 1918 was also published under his editorship.

M. Berlov was the editor of several books published by Berlin and Riga Russian publishing house «*Наука и жизнь*» (Science and Life) at the beginning of the 20th century and in the 1920s. The books were published in Russian, and only a part of them can currently be found in Latvian libraries, a part is stored in the German National Library in Leipzig, because at least some of them were printed in Leipzig. Here we can mention the works translated from German on building drainage and cleaning, installation of toilets, general principles of bridge construction, railway rolling stock, buildings for industrial and technical companies (elevators, warehouses, factories), chemical engineering calculations, etc.

In 1923, under the editorship of M. Berlov, the publishing house «*Valters un Rapa*» published a book on electricity and magnetism by an RPI Professor Vladimir Lebedinsky (*Владимир Лебединский*; 1868–1937) and a collection of practical exercises for technical chemistry labs by an RPI graduate (1911) Pyotr Budnikov (*Пётр Будников*; 1885–1968).

It is known that M. Berlov collaborated with a graduate (1907) of the Department of Mechanics of RPI, Professor's student *Aleksandrs Kleinenbergs* (1882–?) in drawing up technical publications [33].

The Family of M. Berlov

Engineer M. Berlov was married to Vasa Berlov, b. Fyodorova (*Васа;* b. *Федорова*), born on 1 September 1868 in Tver Governorate, Russia [2; p. 2]. There were two daughters in the Berlov family – Yevgenia Berlov (*Евгения Берлова*), born on 14 December 1891, and Darya Berlov (*Дарья Берлова*), born on 21 March 1902, as well as a son Mikhail (also *Miķelis*) Berlov (*Михаил Берлов*) born on 25 September 1899. Darya and Mikhail were born in Riga and in 1921 returned to their hometown with their mother and father.

Figure 5. Yevgenia Berlov (c. 1928).

Figure 6. Darya Petrova (b. Berlov) (c. 1927).

Yevgenia Berlov decided to stay in Russia after World War I – in the city of Ardatov, Nizhny Novgorod Governorate. In January 1928, she went to the Latvian embassy in Moscow to get permission to enter Latvia and meet her parents. Due to health problems, Yevgenia stayed with her parents after the visit [34]. The Berlov family owned a house with rental apartments at 93 *Stabu* Street, Riga. The documents show that the property was registered in the name of Vasa Berlov [35; p. 1–2] and Mikhail Berlov owned a tenement at 91 *Stabu* Street [36]. Mikhail lived at 93 *Stabu* Street with his wife Vasa and daughter Yevgenia.

The son of Berlov family Mikhail was a Russian citizen and studied at Braunschweig Polytechnic Institute. He visited Latvia in 1924 and 1927, in 1925 he was refused entry because there was no «established reason for entry» [37]. The immigration case was handled by a Latvian citizen *Helene Podoļskija* (1904–?), who lived in the house owned by the Berlovs at 93 *Stabu* Street, as well as Mikhails' father Mikhail Berlov. After coming to Latvia, M. Berlov lived and rested in *Ķemeri*, *Jūrmala* of Riga.

Vasa's sister Praskovya Bolshakova (*Прасковья Большакова*; 1879–?) also lived with Mikhail and Vasa. She spoke only Russian and was provided for by Professor M. Berlov. P. Bolshakova's request to grant her Latvian citizenship was rejected because she did not have a certain occupation and income that would ensure her sustenance [38].

Professor M. Berlov travelled to France, Austria, and Germany in 1928. The authors have not been able to find out whether these were private trips to visit relatives or acquaintances. Presumably, some relatives lived in Western Europe, because the Professor's daughter D. Petrova also went to France at the end of 1928.

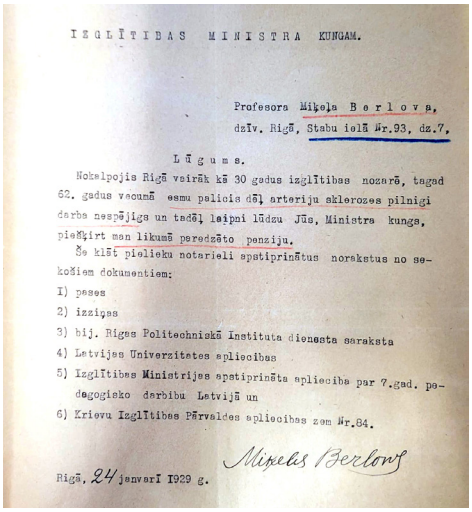
On 5 April 1941, M. Berlov's wife Vasa and her sister moved from 93 *Stabu* Street to 40 *Brīvības* Street [35; p. 129]. When the Soviet power was established in Latvia, the large real estate properties were nationalized. It was not possible to find any information about Berlov family's further fate.

Conclusion

Professor M. Berlov was a professional in applied mechanics, the author of widely used and highly rated textbooks, a respected engineer in the late 19th and early 20th centuries. The textbooks compiled by M. Berlov are stored in the libraries of several countries (Belarus, Bulgaria, Czech Republic, Russia, Latvia, and Germany) as witnesses of the achievements and inventions of the era.

In the history of education in Latvia, the name of M. Berlov is associated with the pedagogical and scientific activities of RPI, as well

as the Russian Technical School of Nikolai Okolo-Kulak – he worked as a teacher in the educational institutions founded on the territory of Latvia for almost 28 years, until he retired on 1 September 1928 [39].



IZGLĪTIBAS MINISTRA KUNGAM.

Profesora Mihela B e r l o v a,
dzīv. Rigā, Stabu ielā Nr.93, dz.7,

L ū g u m s.

Nokalpojis Rigā vairāk kā 30 gadus izglītības nozarē, tagad 62. gadus vecumā esmu palicis dēļ arteriju sklerozes pilnīgi darba nespējīgs un tādēļ laipni lūdzu Jūs, Ministra kungs, piešķirt man likumā paredzēto pensiju.

Šo klāt pielieku notarieli apstiprinātus norakstus no sekošiem dokumentiem:

1) pases
2) izziņas
3) bij. Rigas Politechniskā Instituta dienesta saraksta
4) Latvijas Univerzitates apliecības
5) Izglītības Ministrijas apstiprināta apliecība par 7.gad. pedagogisko darbību Latvijā un
6) Krievu Izglītības Pārvaldes apliecības zem Nr.84.

Mihels Berlovs

Rigā, 24 janvarī 1929 g.

Figure 7. M. Berlov's request to the Minister of Education to grant him a pension (24 January 1929).

In Russia, he laid the foundations of Ivanovo-Voznesensk Polytechnic Institute and became its first Rector in the first years of the Soviet rule.

His merits were not forgotten even in the 1950s. In 1953, representatives of Kyiv Technological Institute of Silicates (*Киевский технологический институт силикатов*; Ukraine, currently – the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute» (*Национальный технический университет Украины «Киевский политехнический институт имени Игоря Сикорского»*)) wanted to obtain M. Berlov's photograph and autobiography from the State University of Latvia in order to present it to their students, as the Professor was known in Kyiv as a theoretician and designer of elevators [2; p. 60–62]. M. Berlov was a citizen of Latvia, but he did not speak the Latvian language. He returned to Riga when the faculty of the Latvian Higher School, later the University of Latvia, was already complete. The Professor chose Latvia as his place of residence at the end of his life, because his wife had real estate in Riga and his daughters did not stay in Russia either. The authors, after studying the activities of the Professor, have concluded that M. Berlov and his family, finding refuge in Latvia, found political and financial security, they had the opportunity to visit Western European countries and had the opportunity to realize at least some of their plans.

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Rīgas Politehniskā institūta profesora Mihaila Berlova (1867–1935) pedagoģiskais un zinātniskais mantojums

Mašīnbūves speciālista, Rīgas Politehniskā institūta (RPI) mācībspēka (1897–1918), profesora (1904) Mihaila Berlova (*Михаил Берлов*; 1867–1935) pedagoģiskā un zinātniskā darbība saistīta ar Rīgu 19. gadsimta beigās un 20. gadsimta pirmajā pusē, kā arī ar Krievijas pilsētu Ivanovovozņesensku (patlaban – Ivanova). M. Berlovs bija pirmais Ivanovovozņesenskas Politehniskā institūta (IPI) rektors (1918–1921), kurš 1921. gadā atgriezās Rīgā, ieguva Latvijas pavalstniecību un strādāja Nikolaja Okolo-Kulaka Krievu tehnikumā. Pētījumā atklāts arī pedagoga un zinātnieka ieguldījums mācību grāmatu sastādīšanā, kas tika izmantotas studijās Krievijas impērijā, tostarp tagadējās Latvijas teritorijā 20. gadsimta pirmajā pusē un Latvijas Republikas pastāvēšanas pirmajos gados.

Atslēgvārdi: Mihails Berlovs, Rīgas Politehniskais institūts, Ivanovozņesenskas Politehniskais institūts, mācību grāmatas inženieriem.