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The founding and activities of the Pharmacy Division of the Vilnius Medical Society

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The Pharmacy Division of the Vilnius Medical Society was founded in 1819. It was the first and only pharmacy organization in Lithuania until the beginning of the 20th century. At the time of its founding, there were only three other pharmacy organizations in the Russian Empire: the Riga Chemical-Pharmaceutical Society (1803), the Mitau (now Jelgava) Pharmacy Society (1808) and the St. Petersburg Pharmacy Society (1818). The Division did much to improve the practice of pharmacy, enhance pharmaceutical knowledge and education, support and encourage pharmaceutical research, as well as provide a forum for discussion of all matters of interest and concern to the pharmacy profession. Through its publications, rich library and study collections, pharmacists in Vilnius and the Vilnius governorate stayed abreast of all the major developments and discoveries in the medical and pharmaceutical sciences. After the closing of Vilnius University in 1832 and of the Vilnius Medical-Surgical Academy in 1842, the Vilnius Medical Society, and hence its Pharmacy Division, lost its academic base. Pharmaceutical chemistry suffered especially. Pharmacists turned their attention to their practices and business interests. Their interest in the Society waned and their membership dwindled. In the beginning of the 20th century, especially after Lithuania regained its independence in 1918, other organizational opportunities opened up to them.

1. Introduction

The year 2019 marked the bicentennial of the founding of the Pharmacy Division of the Vilnius Medical Society (VMS) – the first and oldest pharmacy organization in Lithuania. Its main initiator was the Vilnius University graduate and professor of pharmacy and pharmacology Johannes Friedrich Wolfgang (1776–1859). The first meeting of the Division took place on 17 May 1819 at Vilnius University, which was then the Imperial Vilnius University of the Russian Empire. The main reason for establishing a separate pharmacy division was that there was not enough time during the general meetings of the VMS, which was founded in 1805 and which was composed mainly of physicians, to discuss all that interested and concerned the pharmacy members of the Society.

This was a time of major transformations in pharmacy. Chemistry was emerging from iatro-chemistry and becoming a separate discipline. Alchemical shops were being transformed into pharmaceutical laboratories where new materials such as organic acids, alkaloids and glucosides were discovered. These new findings were applied not only to medical therapeutics but also to agriculture, the food industry, the emerging chemical industry and other areas. All of this was of interest to Vilnius pharmacists.

Another reason for establishing a separate pharmacy division was the invitation received by Vilnius pharmacists in 1818 to join the newly founded St. Petersburg Pharmacy Society. Rather than leave the VMS, they decided to establish the Pharmacy Division and to cooperate with the St. Petersburg society (Gorski et al. 1995). At the time of the founding of the Pharmacy Division, there were three pharmacy organizations in the Russian Empire: the Riga Chemical-Pharmaceutical Society (1803), the Mitau (now Jelgava) Pharmacy Society (1808), and the St. Petersburg Pharmacy Society (Stradinš and Salaks 1996, p.134).

The activities of the VMS can be divided roughly into five periods: (1) the university period (1805–1842); (2) the post-university period (1843–1919); the Polish period (1920–1939); the Soviet period (1940–1990); and the current period (from 1991). This article, which is the first wholly devoted to the activities of the

Pharmacy Division, will focus on the first century: the period from its founding in 1819 until the end of the First World War (1919).

2. Pharmacy education in the university period (1805–1842)

The idea for founding the VMS originated in the medical faculty of Vilnius University and the activities of the Society were closely associated with those of the university. Medicine was not taught in the Jesuit Vilnius University (1579–1773). After the suppression of the Jesuit Order in 1773, the university became a secular institution of higher learning under the authority of a Commission of National Education for Poland and Lithuania, and its name was changed to the Main School of the Grand Duchy of Lithuania (1773–1803). Studies at the university were reformed to emphasize the natural sciences and medicine, in keeping with the spirit of the Enlightenment. Medical disciplines began to be taught in 1781, and that year is considered to be the beginning of the medical faculty.

Chemistry began to be taught to medical students in 1784 by Josephus Gerardus Sartorius (?–1799), a doctor of philosophy and medicine and member of the Royal Academy of Turin (Mačionis 2014, p. 46–47). He was the first professor of chemistry. In 1787, Sartorius added pharmacy to his chemistry course and thus became the first professor of pharmacy in Lithuania. In addition to medical students, pharmacists who had passed their guild courses could also attend his lectures but many found them difficult to understand since they were given in Latin (Biziulevičius 1997, p. 50). Sartorius also established the first chemistry laboratory in Vilnius and equipped it with the latest instruments. He was the first to research and test the mineral waters in Lithuania. Unfortunately, the wet and cold climate in Lithuania did not agree with him and after nine years he returned to Italy in 1793.

There was a hiatus of four years until a replacement was found for Sartorius. He was Jędrzej Śniadecki (1768–1838) who received his degree of doctor of philosophy and medicine from the University of Pavia in 1793 and furthered his studies of medicine and chemistry

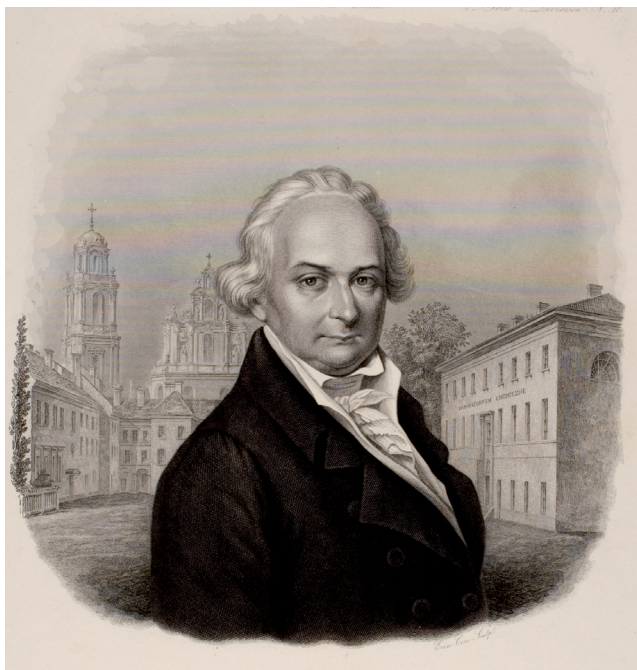


Fig. 1: Jędrzej Śniadecki (1768–1838) - first chairman of the Vilnius Medical Society, Professor of Chemistry and Pharmacy, Vilnius University medical faculty and chemistry buildings in the background.

at Edinburgh University (1793–1795). He became a professor of chemistry and pharmacy in the medical faculty of Vilnius University in 1797. He taught both chemistry and pharmacy for six years – from 1797 until 1803. He wrote and taught in Polish, so it was easier for all students to understand. He is celebrated for having introduced modern chemical terminology into the Polish language. He organized the building of a new lecture hall and a laboratory with up-to-date apparatus for teaching chemistry (Fig. 1).



Fig. 2: Johannes Friedrich Wolfgang (1776–1859) - initiator of the founding of the first pharmacy association in Lithuania, Professor of Pharmacy and Pharmacology.

In 1803, there was a major reorganization of the university. It was given the title of "Imperial". Studies were divided into four faculties: Physics and Mathematics, Medicine, Moral and Political Sciences, and Art and Literature. Chemistry and pharmacy were separated. Chemistry was taught in the physics and mathematics faculty, while pharmacy was taught in the medical faculty. Śniadecki was transferred to the physics and mathematics faculty where he continued teaching chemistry until 1822.

In the newly reorganized medical faculty, pharmacy was first taught as a course on *materia medica* together with general therapy and later toxicology by the naturalist Ferdynand Spitznagel (c. 1760–1826). This course was taught from 1803 until 1822. Starting in 1807, a course on pharmacy and pharmacology was taught by university graduate, professor of pharmacy and pharmacology, and director of the university pharmacy Johannes Friedrich Wolfgang. He taught this course until the closing of the university in 1832 (Fig. 2). Pharmacology at that time was considered the study of simple or ordinary medicines: their origins, descriptions, methods of preparation and storage as well as ways of identifying fake or adulterated medicines. Pharmacy, on the other hand, was the study of complex or compound remedies: their preparation and production as well as their effects on the human organism. Wolfgang was one of the founding members of the Vilnius Medical Society and the initiator of its Pharmacy Division.

On 1 May 1832, after suppressing the Lithuanian and Polish Uprising of 1830–31, Tsar Nicholas I signed a decree closing Vilnius University. Only the faculties of medicine and theology were kept. They were transformed into academies: the Vilnius Imperial Medical-Surgical Academy and the Vilnius Roman Catholic Theological Academy. In 1842, both were also closed. Pharmacy, pharmacology, toxicology and prescription writing were taught at the medical-surgical academy. Lectures in Latin on pharmacology and prescription writing were given by Alexander Woelk (1801–1869). Lectures in Polish on botany, pharmacy and pharmacology were given by the talented student of Wolfgang, university graduate and university botanical garden director Stanisław B. Górski (1802–1864). The impact of the closing of the university, and then of the academies, on higher education in Lithuania was huge, one could even say devastating. The medical faculty of the university and the medical-surgical academy had



Fig. 3: Joseph Frank (1771–1842) - initiator of the establishment of the Vilnius Medical Society, Professor of Pathology and Special Therapy.

graduated about 1,500 physicians and pharmacists (Biziulevičius 1997, p. 85). Most stayed and worked in various regions of Lithuania. The work of the Vilnius Medical Society continued and became more important than ever. Many professors from the medical-surgery academy remained its members.

3. Founding of the Vilnius Medical Society and its Pharmacy Division

Founding of the VMS was the brainchild of Joseph Frank (1771–1842), the Professor of Pathology and Clinical Medicine in the medical faculty of Vilnius University (Fig. 3). On 12 December 1805, the birthday of Tsar Alexander I, Frank decided to do something useful. He invited to his home for dinner all six professors of the medical faculty, five of the best-known Vilnius physicians, one surgeon and three pharmacists, and proposed to them the founding of a medical society (Kondratas 2006, p. 358). Its essence was simple: to meet once or twice a month; to exchange ideas about the prevalent diseases and rare cases; to keep minutes of their meetings; to order the most important medical publications; from time to time to publish a volume of medical articles or proceedings; and to admit as members local and foreign physicians, surgeons and pharmacists.

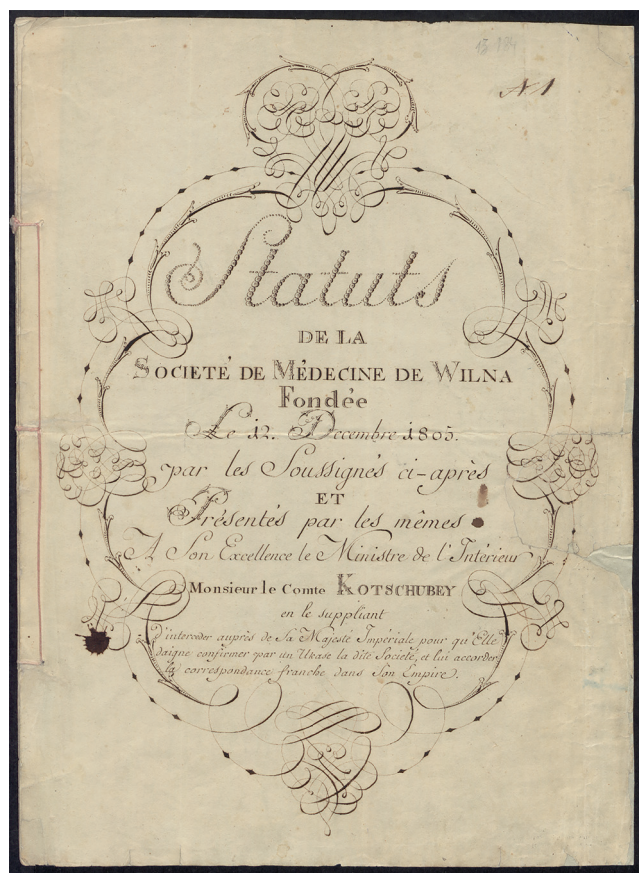


Fig. 4: Statutes of the Vilnius Medical Society, 1805.

All of the guests at Frank's dinner approved of his plan and became founding members. The three Vilnius pharmacists in attendance were: Johannes Friedrich Wolfgang, Charles Wagner (1786–1863) and George Gutt (1769–1836). Chemistry professor Jędrzej Śniadecki was elected president and anatomy professor Joannes Andreas Lobenwein (1758–1820) vice-president. Joseph Frank assumed the post of secretary and the pharmacist George Gutt was elected treasurer. He was the treasurer until 1817. Every member was required to present a paper or make a report at least once a year – failure to do so could be cause for removal. The motto of the Society became "To serve science and the homeland". The Society's statutes were written by the Vilnius University librarian and professor of ancient

literature and languages Gottfried Ernst Groddeck (1762–1825) and were adopted in 1806 (Fig. 4). The Society's emblem – the image of the Egyptian goddess of life and health Isis – was drawn by the famous portrait painter of the time Jan Rustem (1762–1835) (Fig. 5).



Fig. 5: Emblem of the Vilnius Medical Society - image of the Egyptian goddess of life and health Isis, drawn by Jan Rustem.

In the European context, the VMS was the first purely medical society in Eastern Europe and has now been in existence for 214 years. The Warsaw Medical Society was founded in 1820. The Vilnius society was particularly active in mobilizing the fight against epidemic diseases and in taking care of the poor. For example, in 1808 the Society helped found a Vaccination Institute and in 1809 a Maternal Institute for the care of poor women – both were the first of their kind in Europe.

At the meeting of the Society on 12 March 1819, Wolfgang raised the idea of establishing a pharmacy division within the society and it was met with approval. The pharmacists then carefully prepared an action plan and operating rules for the division which were approved at the next meeting on 12 April. They sent out 82 letters of invitation to pharmacists in the governorates of Vilna, Białystok, Podolia, Mogilev, Vitebsk and Volhynia to join the Division: laying out the goals of the organization and its planned activities.¹ The first official meeting of the Division took place on 17 May with Lobenwein presiding. The organization's rules were adopted and the first slate of officers elected: George Gutt (president), Fryderyk Woelk (secretary) and Maciej Schulz (treasurer). Organizational matters were discussed at this meeting and a decision was made to issue a professional periodical the following year (1820).² A new slate of officers was elected every year (Fig. 6).

During the early years of the Division, meetings were held once a month, excluding summers. Members would report on their research results and there would be overviews presented of the foreign pharmaceutical press. For example, at the meeting on 3 June 1819 Wolfgang gave a report about problems training pharmacists and Charles Wagner spoke about the state of medicine and pharmacy in England. At the 2 October 1819 meeting there were four presentations, about the production of chemical remedies, about drug adulteration, about substitutes for imported drugs and about technological processes for drug production. Wolfgang and Wagner were the most active members of the Division. Between 1818 and 1822, Wolfgang made ten presentations, while Wagner during 1818–1819 made four (Gudienė 2017, p. 70-71).

Membership in the Division was open only to members of the VMS. To become a real member of the VMS, the physician, pharmacist or surgeon had to reside in Vilnius and had to obtain

1 Lista farmaceutów do których rozesłany okólnik z wyrażeniem miast w których utrzymują apteki [List of pharmacists with towns marked in which they have their pharmacies]. *Pamiętnik Farmaceutyczny Wileński* [PFW], 1820, v.1 nr. 2, p. 270-272.

2 Kronika farmaceutyczna [Pharmacy chronicle]. PFW, 1820, v.1, nr.2, p. 266-267.

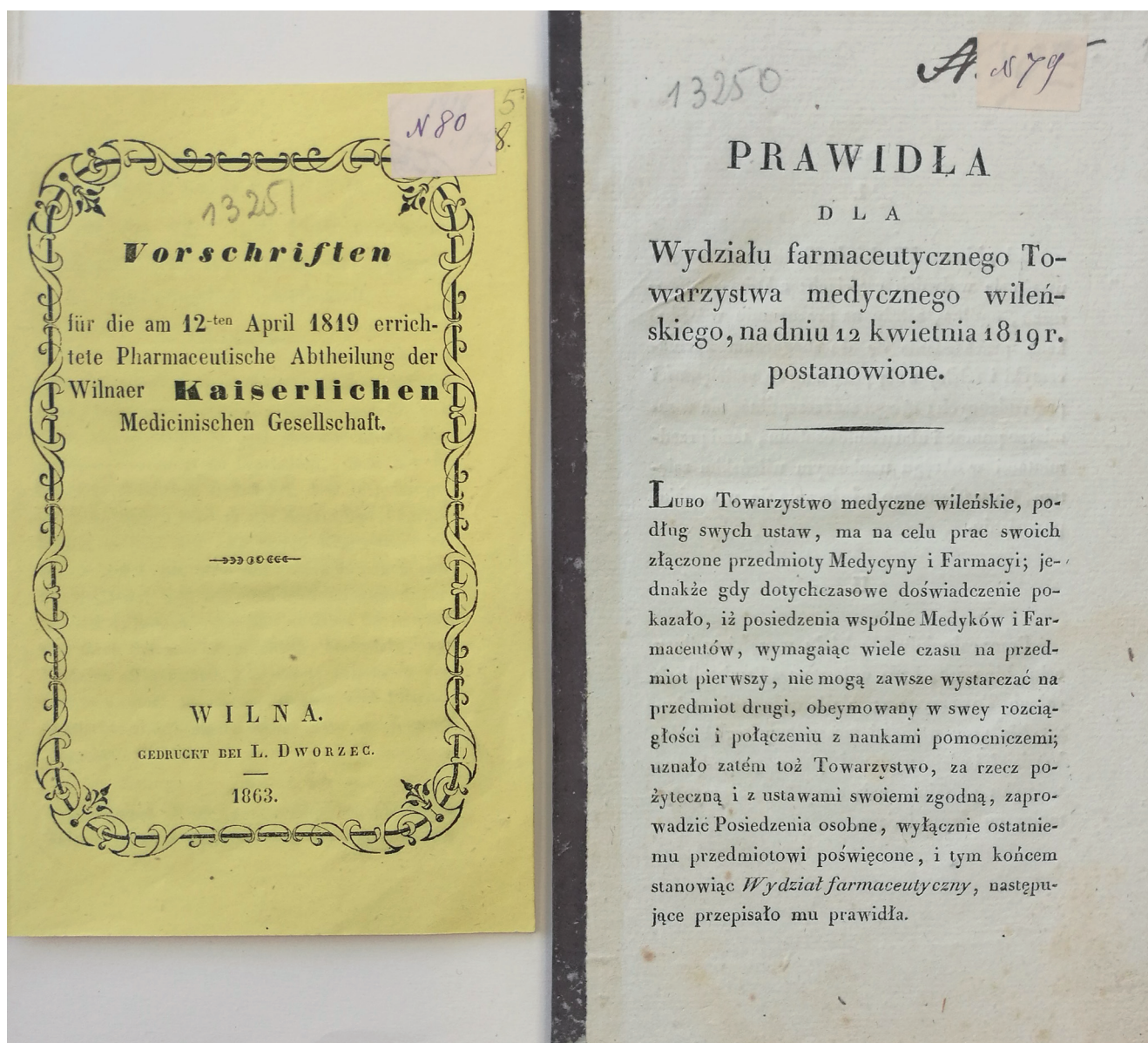


Fig. 6: Pharmacy Division's Rules of Operation, 1819.

recommendations from three members. Elections were held by secret ballot. Corresponding members, on the other hand, could be practitioners of natural science (physicists, chemists, zoologists, botanists, mineralogists) as well as physicians, pharmacists and surgeons.

4. Aims of the Pharmacy Division

Three main directions of activity of the Pharmacy Division can be discerned: (1) scientific research in botany, pharmacognosy, medicinal chemistry, phytochemistry and balneology; (2) the practice of pharmacy such as improving drug preparation by acquiring new laboratory and manufacturing equipment or improving the old; searching for local substitutes for expensive foreign drugs; testing the quality of raw materials used in drug preparation and reporting adulterated or falsified materials; finding ways to stop drug adulteration and; (3) the spread and popularization of the science and practice of pharmacy through the publication of a periodical journal, through the enrichment of the library collection, through the creation and organization of a pharmacology cabinet (materia medica study collection); through cooperation with other pharmaceutical societies, and through the regular presentation of research results and findings at meetings of the Division.

Publication was a major aim of the Division. In 1820, as planned, the Division began publishing a periodical journal in Polish called *Pamiętnik Farmaceutyczny Wileński* (*Notes of Vilnius Pharmacy*) (Fig. 7). This was the first of its kind publication in the Polish language. Wolfgang was its editor. Four issues came out in the first year (totaling 558 pages); three issues in the second year (1821); and, one issue (200 pages) in its final year – 1822 (Stakulienė 2003, p. 162). About half of the journal (160 articles) was original articles; the rest were translations from European pharmaceutical journals – mostly German and French.

Works of prominent pharmacists and chemists, such as Johann B. Trommsdorf (1770–1837), Louis Nicolas Vauquelin (1763–1829), Johann W. Döbereiner (1780–1849), Johann A. Buchner (1783–1852) and others were published in the journal (Lichocka 1981). J.A. Buchner was a corresponding member of the Pharmacy Division as well as the founding editor of the journal *Repertorium für die Pharmacie*. He sent articles on toxicology, pharmacy, physics and chemistry to the division's journal. But the most articles by a foreign author were from J.B. Trommsdorf (about 10%). Most were translations from his edited journal – *Journal der Pharmacie*. About 6% of the translated articles were from the *Allgemeine nordische Annalen der Chemie*, which was edited from 1817 until 1822 by another corresponding member of the Division Alexander

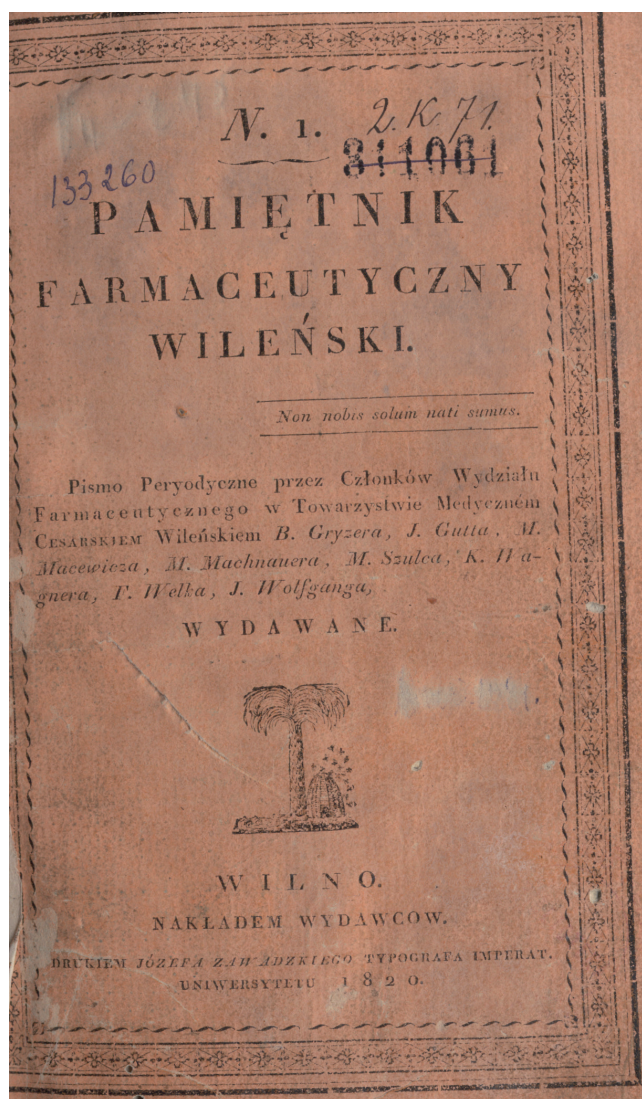


Fig. 7: The Pharmacy Division published a periodical journal *Pamiętnik Farmaceutyczny Wileński* (Notes of Vilnius Pharmacy) during 1820–1822.

Nicolaus Scherer (1771–1824). Scherer was the initiator and first president of the St. Petersburg Pharmacy Society and member of the St. Petersburg Academy of Sciences. Another 4% of the translated articles was from the *Jahrbuch für Chemie und Physik*, which was edited by the University of Halle professor of physics and chemistry Johann Salomo Christoph Schweigger (1779–1857). Vilnius pharmacists wrote mostly about scientific investigations in the fields of botany (native plant morphology), phytochemistry, balneology and about drug adulteration.

The Vilnius *Notes* and the pharmacy journal published in Erfurt, the *Journal der Pharmacie*, presented very similar scientific topics. The editors of both journals – J. F. Wolfgang and J. B. Trommsdorf – were of the same age and friends. Each in their own country was a reformer of pharmacy education and practice, an organizer of pharmaceutical activity, and a promoter of international cooperation (Gorski 2001).

A survey of articles from foreign journals was an important part of the Division's meetings. The pharmaceutical press was an important means for the transfer and exchange of scientific knowledge and practice as well as a way for pharmacists from different countries to interact and cooperate with one another. Some of the journals that the Division subscribed to and read were: the *Almanach oder Taschenbuch für Scheidekünstler und Apotheker*, which began publication in Germany in 1780 and was edited by Johann F. A. Götting; the *Journal der Pharmacie für Ärzte und Apotheker*, which began publication in Leipzig, Germany in 1793 and was edited by Wolfgang's friend and corresponding member of the

VMS J.B. Trommsdorf; the *Journal de la Société de pharmacie de Paris*, which was published in Paris from 1797–1799 by the pharmacy society of Paris and later combined with the *Annales de chimie*; the *Bulletin de pharmacie* (1808–1814); the *Journal de pharmacie et des Sciences Accessoires* (1815–1841); the Russian pharmacy journal *Russisches Jahrbuch der Pharmacie* (1803–1808), which was published in German in Riga; and others. At their meeting on 2 October 1819, Wagner and Woelck presented an overview of the new French journal *Journal de Pharmacie et des Sciences Accessoires* (1815–1841). Overviews of the German journals were made by Wolfgang and Gutt.³ In 1820, French researchers Pierre-Joseph Pelletier (1788–1842) and Joseph Bienaimé Caventou (1795–1877) isolated the alkaloid quinine. Wolfgang announced their discovery at a meeting of the Division on 17 February 1821, and the following year (1822) it appeared in the *Notes*⁴.

Important pharmaceutical news from these foreign journals soon made its way into the *Notes* and reached subscribers in Vilnius and other cities, such as Warsaw, Kiev, Daugavpils, Minsk and Ryga. Subscribers were not only pharmacists and pharmacies but also priests, students, manor owners, the intelligentsia, and even army officers (Grakauskas 1988, p. 35). In the first issue of the *Notes* there was a list of 70 subscribers: 30 of them lived in Lithuania (outside of Vilnius) and 19 in Vilnius⁵. Later the number of subscribers dropped. Eventually, there were not enough subscribers and funds to pay for a separate journal and it stopped publication in 1822.

The journal of the VMS, the *Pamiętnik Wileńskiego Towarzystwa Lekarskiego* [Notes of the Vilnius Medical Society], also had problems with subscribers. The first volume appeared in 1818 and the second in 1821. So, in 1822, a decision was made to combine the two journals and to call the new publication *Dziennik medycyny, chirurgii i farmacji* [Journal of medicine, surgery and pharmacy]. Four issues were published in 1822, three in 1823, one in 1824, and four in 1830 (Stakulienė 2003, p. 162). Wolfgang and Woelck published articles in this journal.

5. Activities during the post-university period (1843–1919)

The closing of Vilnius University in 1832 and of the Vilnius Medical-Surgical Academy in 1842 had a devastating effect on higher education, especially the medical sciences, in Lithuania. The medical faculty of Vilnius University had been the best in the Russian Empire. Now, those wanting to study medicine or pharmacy had to go to other universities in the Russian Empire or abroad. The Vilnius Medical Society (VMS) remained the only domain for the medical and pharmaceutical sciences, though greatly weakened by the loss of its academic base (Triponienė 2006).

The “savior” of the VMS and its long-term president was the Vilnius-born and Vilnius-educated professor of veterinary medicine Adam F. Adomowicz (1802–1881). After the closing of the medical-surgical academy, he refused offers to teach at the universities of Kharkov, Kazan and Berlin, and stayed in Vilnius as a medical and veterinary doctor (Jazgevičienė and Triponienė 2015). All of his spare time he spent at the VMS. He made about 60 presentations at society meetings. He built up the pharmacy and pharmacology cabinet which at the time of the First World War had about 1,500 specimens.

The work of the Pharmacy Division continued, but in a diminishing way. Additions continued to be made to the pharmacy and pharmacology cabinet. But, for over fifty years, from 1843 until 1895, only 10 presentations were made on pharmacy themes (Grakauskas 1988, p. 36). During the early active years of the Division, that many presentations were made in a year. There were changes at this time in some of the pharmacy practices, especially

3 Kronika farmaceutyczna [Pharmacy chronicle]. PFW, 1820, v.1, nr. 3, p. 407.

4 PFW, 1822, v. 2, nr. 1, p. 659.

5 Prenumeratowic [subscribers], PFW, 1820, v. 1, nr. 1, p. 1.

the writing of prescriptions. When the control of pharmacies in the Russian Empire came under medical supervision, it was required that medicines should be dispensed with a copy of the prescription written by the physician saying what the medicine should be used for and with the physician's signature. The Division members discussed this change at their meeting on 12 January 1846 and agreed (Biziulevičius 1960, p. 149).

Attempts were made in 1860 to organize pharmacy lectures for pharmacy students (apprentices) working in pharmacies, but some pharmacists objected and this project came to nothing. In 1863, division members spent a lot of time working together with their colleagues at the St. Petersburg Pharmacy Society on a pharmacy reform project. This project touched on many very actual questions: the reorganization of pharmacies, control of rural pharmacies, qualifications for pharmacists, rules for the establishment of new pharmacies, a ban on establishing and operating a pharmacy by unqualified or unlicensed pharmacists, and others.

During the latter half of the 19th century, patent medicines began to be sold in Vilnius pharmacies and in pharmacies throughout the Russian Empire. They appealed through their effective advertisement and claims as medical panaceas, but without any proven effectiveness. Division members were among the first in the Russian Empire to speak out against them. At their meeting on 12 January 1866, they condemned the sale of such products if they did not list their contents. This opinion was circulated among pharmacy societies in the Russian Empire who also came out in favor of disclosing contents. Eventually, manufacturers began listing contents (Biziulevičius 1960, p. 150).

The Division did not send any delegates in 1868 to the conference in St. Petersburg organized by the Imperial Russian Society of Pharmacy but did send a letter stating the themes that they would like discussed: the need to raise qualification standards for pharmacists, to tighten oversight control of pharmacies and to seek that only pharmacists could establish pharmacies.⁶

We can tell more about the membership of the VMS and of the Pharmacy Division from the *Golden Book of the Imperial Vilnius Medical Society (Liber Aureus Caesareae Societatis Medicae Vilnensis)* (Fig. 8).⁷ This register of real and corresponding members was approved by members at their meeting on 12 March 1853. It listed the names and degrees of the members, the year that they were elected into the Society, sometimes several biographical facts, and their date of death. Among the well-known corresponding members were: Edward Jenner, Antoine Portal, Georg Beer, Antonio Scarpa, Christoph Hufeland, Dominique Jean Larrey, René Theophile Laennec, Nikolay Pirogov, Dmitri Mendeleev, Rudolf Virchow and Robert Koch. During the early years of the Society such well-known pharmacy professors as Ferdinand Giese⁸ (1781–1821), David Gründel⁹ (1776–1836), Alexander Nicolaus Scherer¹⁰ (1771–1824), and Johann Bartholomäus Trommsdorff¹¹ (1770–1837) became corresponding members. During the second half of the 19th century, corresponding members were mostly drugstore pharmacists. In 1831, the VMS had 306 members. That number dropped to 39 in 1895 (Grakauskas 1999, p. 199).

After the ban on the use of the traditional Lithuanian alphabet in the press was lifted in 1904, various Lithuanian societies and associations began to form. In 1907, the Lithuanian Scientific

Society (1907–1940) was founded in Vilnius. Although the main emphasis of the society was on Lithuanian culture and history, there was an interest in medicine and pharmacy as well. Among the founding members there were 25 physicians and four pharmacists (Grakauskas 1999, p. 200).

In 1910, a Medical and Pharmaceutical Section of the Society was formed. Among its goals was to research Lithuanian medicinal plants, to collect materials for a Lithuanian medical and botanical dictionary, to study and collect Lithuanian folk medicine as well as to collect Lithuania's pharmaceutical history. In 1917, Lithuanian pharmacists working and studying in Russia united in a Society of Lithuanian Pharmacists (Gudienė and Kripaitytė 2002, p. 1232). So we can see that in the first two decades of the 20th century there arose other opportunities for Lithuanian pharmacists to associate besides the Vilnius Medical Society and its Pharmacy Division.

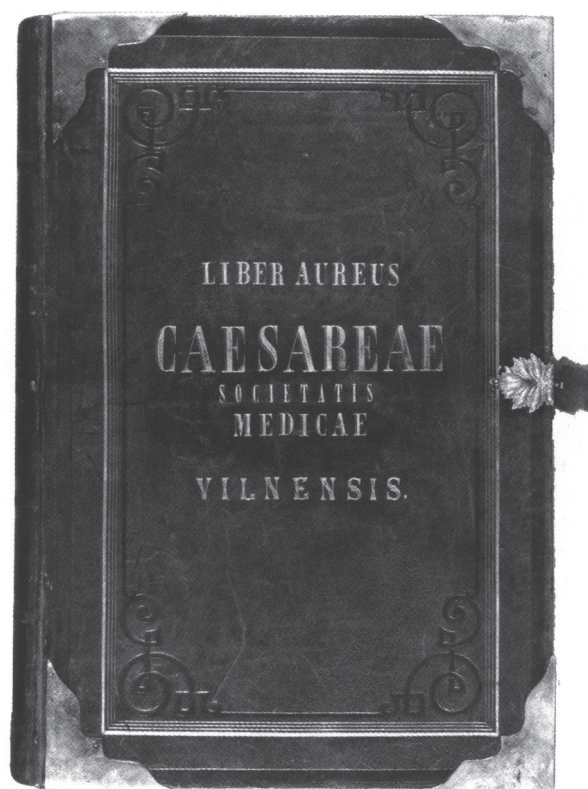


Fig. 8: *Golden Book of the Imperial Vilnius Medical Society, Liber Aureus Caesareae Societatis Medicae Vilnensis*, 1853–1928.

6. Conclusion

During the first century of its existence, the Vilnius Medical Society played an important role as a scientific and professional organization – the first of its kind in Eastern Europe. It was based on the model of the best medical and pharmaceutical societies of Western Europe with which Joseph Frank became acquainted with and been made a member of during his travels through Europe in 1802–1803. The VMS was a postgraduate form of professional development for physicians and pharmacists: an organization for the exchange of experience and scientific information. Its golden age was the first quarter of the 19th century, which was also the golden age for Vilnius University. This was the time when the Pharmacy Division was the most active. It was the first and only pharmacy organization in the country until the beginning of the 20th century. It did much to improve the practice of pharmacy, enhance pharmaceutical knowledge and education, support and encourage pharmaceutical research, provide a forum for discussion of all matters of interest and concern to the pharmaceutical profession. Through the Society's publications and rich library,

6 A copy of this letter dated 24 October 1868 can be found in the Manuscript Division of the Vilnius University Library (F. 26-2941, I. 2).

7 This book which encompasses the years 1853–1928 can be found in the Manuscript Division of the Vilnius University Library (F. 26-290).

8 Professor of pharmacy at the universities of Kharkov and Dorpat, rector of Dorpat University (1816–1818).

9 Initiator of the Riga Chemical-Pharmaceutical Society (1803); professor of chemistry and pharmacy at Dorpat University (1804–1814); rector of Dorpat University (1810); editor and publisher of the first pharmacy periodical in the Russian Empire – *Russisches Jahrbuch der Pharmacie von 1803-1808*.

10 German chemist and pharmacologist; professor of chemistry and pharmacy at the St. Petersburg Medical-Surgical Academy; initiator and president of the St. Petersburg Pharmacy Society; member of the St. Petersburg Academy of Sciences.

11 German chemist and pharmacist; professor at the University of Erfurt; founder of the first pharmaceutical institute in Germany for the training of prospective pharmacists; editor of the *Journal der Pharmacie für Ärzte und Apotheker* (1793/94–1817).

Vilnius pharmacists stayed abreast of all the major developments and discoveries in the medical and pharmaceutical sciences. After the closing of Vilnius University in 1832 and of the Vilnius Medical-Surgical Academy in 1842, the Society lost its academic base. Pharmaceutical chemistry suffered especially. Pharmacists turned their attention to their practices and business interests. Their interest in the Society waned and their membership dwindled. In the beginning of the 20th century, other organizational opportunities opened up to them.

Conflicts of interest: None declared.

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