

## The first catalogue of minerals of the Vilnius University and other collections

Gailė Žalūdienė

Žalūdienė G. The first catalogue of minerals of the Vilnius University and other collections. *Geologija*. Vilnius, 2008. No. 1(61). P. 58–64. ISSN 1392-110X

The present article introduces the first Lithuanian catalogue of minerals (1799). It is stored at the Lithuanian Historical Archive. The catalogue is written in Latin and basically describes mineral collections presented by M. Ogiński and J. Wichert. The minerals of the catalogue are classified into four major groups: 1) soils and stones, 2) salts, 3) tars, and 4) metals. The Cabinet of Mineralogy was rich in minerals. There was a possibility of making doublets of the collection and giving them to schools. In 1826, 13 collections of minerals with catalogues were compiled and sent to schools of the Vilnius Educational District. After the closure of the Vilnius University, the collection was inherited by the Vilnius Medical Surgery Academy. After its closure, the palaeontological, mineralogical and petrographic collections were parcelled out to the Russian higher schools. Only some samples of minerals and rocks from the old historical collection of R. Symonowicz have been recovered.

**Key words:** mineralogical collection, Cabinet of Mineralogy, Imperial University of Vilnius, A. G. Werner, Vilnius Educational District

Received 15 November 2007, accepted 10 December 2007

Gailė Žalūdienė. Institute of Geology and Geography, T. Ševčenkos 13, LT-032223 Vilnius, Lithuania. E-mail: zaludiene@geo.lt

### INTRODUCTION

Much information about the collections of the Cabinet of Mineralogy of Vilnius University<sup>1</sup> was published by researchers J. Garbowska (1993), J. Paškevičius (2002) and A. Grigelis (2003). The collections of 1803–1836 have been described in greatest detail. An *ad hoc* article was devoted to the catalogue of a collection of minerals compiled in 1836 by Ignacy Jakowicki (Gaigalas, 2003). This collection included 1283 items collected and catalogued by I. Jakowicki.

In the 17th century, the Cabinet of Mineralogy of the Vilnius University had a strong material basis largely inherited from the Lithuanian Imperial School (1781–1796). In the 16th century, Józef Sartoris was the first to distinguish between chemistry and physics and metallurgy. He referred to the collection of several tens of minerals at the Academy as a museum. This was the main prerequisite for the appearance of mineralogical collections. Some time later, Stanisław August Poniatowski bought the private E. Gilibert's collection of minerals and gave it as a present to the Academy<sup>2</sup>. It was composed mostly of minerals brought from Siberia: altogether more than 1000 items. The manager

of the collection was Professor of the Department of Natural History Jean Emmanuel Gilibert himself (1741–1814). His successor G. Forster bought a collection of minerals in Dresden and used it as a visual aid during his lectures at the university. As the Lithuanian nobility (Michał Ogiński, Joachim Chreptowicz, canon Jan Wichert and others) graciously presented their own collections of minerals their number rapidly increased. The collection included as many as 20800 items. It reached the acme of abundance in 1827. Yet later, the sets of minerals were parcelled over the Russian Empire.

The fate of mineralogical collections of the Vilnius University was most comprehensively described by A. Gaigalas (2004). He published many statistical data about collections: the number of specimens included in the collections, their origin, the number of showpieces parcelled to other Russian educational institutions and the number of specimens which remained in the collections.

**On the classifications of minerals and rocks.** For a better understanding of the principle of compilation of the catalogue under consideration, a brief overview of leading (in the 18th–19th centuries) scientific classifications of minerals is given. In the second half of the 18th century, there were several development trends of mineralogy: descriptive, systematic, chemical and crystallographic. The descriptive trend was most viable due to easily accessible popularization methods before A. G. Werner (История..., 1981). This trend was based on the description

<sup>1</sup> The other name of the Vilnius city is Vilna (Hebrew, Latin, English until 1945, Italian, Spanish, Slovene, Finnish old Romanian variant).

<sup>2</sup> LVIA, f. 567, ap. 2, b. 86., l. 13. Prof. of botany S. Jundzill's report to the administration of the Imperial Vilnius University.

of the external properties of minerals: colour, gloss, hardness, transparency, etc. J. Wallerius in his “Treatise of Mineralogy” (1747) and “System of Mineralogy” suggested the following classification: 1) soils, 2) stones, including rocks, 3) minerals, including ores and metals, 4) fossils. In 1760–1770, Swedish chemist mineralogist A. Cronstedt suggested the following classification: 1) soils (including fossils), 2) salts, 3) combustible materials, metals (Кронштедт, 1776). Based on the former classifications, A. G. Werner developed his own classification supplementing the existing ones yet accepting the fundamental classification into four groups. His descriptions of minerals were based on the external features. According to the chemical composition, the minerals were classified into species and families (Шафрановский, 1968). It should be noted that the classification of minerals into four groups was introduced by Avicenna and continued until the beginning of the 19th century. A. G. Werner grouped rocks not according to their genesis but according to their age. Notwithstanding many drawbacks (underestimation of chemical composition and crystallographic structure as a basis of classification), A. Werner’s scheme was a considerable step forward in the development of mineralogy. His method was not helpful in distinguishing between complex species of minerals but was easily applicable in distinguishing simple species of minerals. The drawbacks were not very obvious and the popularity of the method lasted for a long time.

Although A. G. Werner’s neptunianistic theory took root in 1787, his lectures were translated into Russian only in 1810 (Fig. 1).

### THE CATALOGUE OF MINERALS OF VILNIUS UNIVERSITY IN 1799

Little is known about this (1799) catalogue of minerals of the Vilnius University. According to the available laconic information, this catalogue was stored at the Vilnius Central Historical Archive (Gaigalas, 2004). This is presumably the first catalogue

of minerals stored at the Vilnius University, which has survived until present.

The catalogue of minerals, dated 1799, was signed by the Rector of the Vilnius University Hieronim Strojnowski. The catalogue is handwritten in Latin and includes 159 pages. According to deletions in the title page it is possible to trace back that the catalogue included entries from collections presented by Duke M. Ogiński and canon Jan Wichert (Bielinski, 1899–1900; Žalūdienė, 2003). According to archival sources, this catalogue was written by August Beie (LVIA, f. 567, ap. 2, b. 19) (Fig. 2). The classification of minerals in this catalogue is partly based on their chemical composition. However, the group of minerals sometimes has entries of rocks, dolomites and gypsum. The group of silicates abounds in silicate shales, hornblendes, flint stones, etc. The group of metals abounds in minerals and oxides.

The present paper contains a detailed information on the classification of minerals and their illustrations. Latin equivalents of classifications are given in parentheses.

The minerals of the catalogue are grouped into four large classes: *soils and stones* (Lat. *Terra et Lapides*), *salts* (Lat. *Sal*), *tars* (Lat. *Bitumina*) and *metals* (Lat. *Metalla*). The classes in their turn are grouped into orders: the simple and the aggregate ones (Lat. *Ordo simplices* and *Ordo agregati*). The orders are subdivided into volcanic (Lat. *Ordo vulcanica*), organic (Lat. *Ordo organici*), composite (Lat. *Ordo composita*) and guide (Lat. *Ordo ductili*) ones. The four large classes are sub-divided into families (Lat. *Familia*) and according to genesis further sub-divided into genera (Lat. *Genese*) and species (Lat. *Species*). The third column of the catalogue includes the varieties (Lat. *Varietates*) and is designed for description of the exterior of rocks and minerals. It includes information about the syngony of crystals, their varieties according to colour, and detailed characteristics of the stored samples.

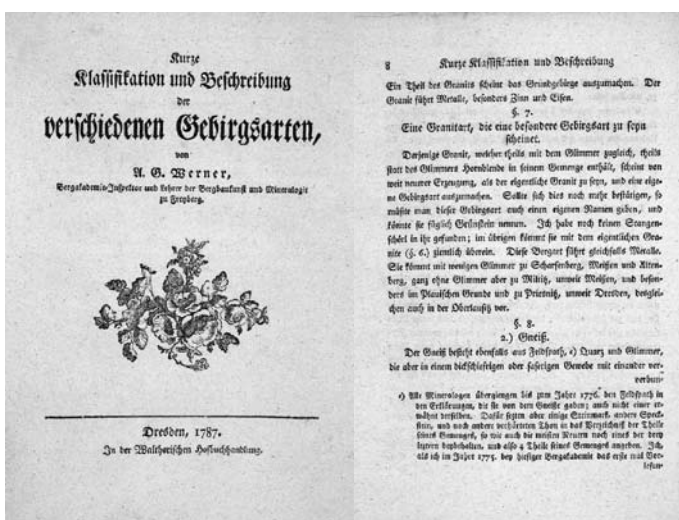


Fig. 1. Classification of minerals published by A. G. Werner. Source: <http://www.tu-freiberg.de/~ub/grafik/werner/werbuch.html>

1 pav. A. G. Wernerio publikuota mineralų skirstymo klasifikacija. Pagal <http://www.tu-freiberg.de/~ub/grafik/werner/werbuch.html>



Fig. 2. The Catalogue of Minerals of Vilnius University, 1799  
2 pav. Vilniaus universiteto mineralų katalogas, 1799

Class I (Soils and Stones) is the largest one of the four. The simple order of this class includes large families:

- I carbonate (chalk-stone) family (Lat. *Familia Terra Calcarea*);
  - II baryte or heavy soils family (Lat. *Familia Terra Ponderosae /Barytes/*);
  - III magnesium oxides family (Lat. *Familia Terra Magnesia*);
  - IV clays and alum family (Lat. *Familia Aluminose seu Argillaciae*);
  - V earth silicon (silicate) family (Lat. *Familia Terra Siliceae*).
- The latter is very large and includes simple and aggregate orders. These orders include precious and semiprecious stones and rocks respectively.

According to their genesis, the family of carbonates (chalk-stone) is subdivided into genera:

- I calcareous earths (Lat. *Terra Calcarea Aerata*). Chalk and even marbles, stalactites and stalagmites are attributed to this genus;
- II magnesium calcareous earths (Lat. *Terra Calcarea Magnesiata*);
- III calc-tufa earths (Lat. *Terra Calcarea Bituminosa*);
- IV calcareous argillaceous earths, marls (Lat. *Terra Calcarea Intime Juneta Argillae (carbonas calcis argilosus)*). The latter in turn are subdivided into soils and compact formations.
- V vitreous calcareous earths (Lat. *Terra Calcarea Vitriolate (gypsum, sulphas calcis)*);
- VI fluorates (Lat. *Terra Calcarea Fluorata (fluos, calcis)*).

**Baryte or heavy soils family** (Lat. *Barytes*) includes only one genus of vitreous barites (lot. *Baryta vitriolata*).

The family of magnesium oxides (Lat. *Familia Terra Magnesia*) has the following genera:

- I Talc genus (Lat. *Talcum*), II steatite genus (Lat. *Steatites*), III serpentine genus (Lat. *Serpentinus*), and IV asbestos genus (Lat. *Asbestus*).

**Clays and alum family** (Lat. *Familia Aluminose seu Argillaciae*) includes the following genera: I alum or marls (Lat. *Alumina seu argilla*), II schistose clays (Lat. *Schystus Argillaceus*), III mica (Lat. *Mica*).

Silicate family (Lat. *Familia Terra Siliceae*) is very rich. It includes all silicate minerals and semiprecious stones. Rocks make no exception:

- I quartz (Lat. *Quartz*); II gemstones (Lat. *Gemmae*); III agates (Lat. *Agathe*); IV jaspers (Lat. *Iaspis*); V flint stones (Lat. *Silex*); VI nephrite stones (Lat. *Lapis Nephritis*); VII feldspars (Lat. *Feldspathum*); VIII garnets (Lat. *Granates*); IX black tourmaline (lot. *Scorlus*); X basalts; XI zeolites (Lat. *Zeolithus*); XII tar stones (Lat. *Lapis Piceus*).
- The quartz genus is very large. It is subdivided into three species: amorphous, crystalline and figural. In the column *Variates*, the quartz species are subdivided even in greater detail according to the colour spectrum, forms, etc. (Fig. 3).

The genus of gemstones includes various species: ruby, sapphire, topaz, hyacinth, etc. The Agate genus includes chalcedony and its varieties: chrysoprase, heliotrope, cornelian, etc. At that time, chalcedony was represented even by 18 items. There were 4 items of cornelian described in detail (colour, glance, etc.). The classification of minerals into families and genera according to their chemical composition was rather innovative for the time. The influence of A. Werner's classification is demonstrated by classification of jaspers into species according to external features. Jaspers were classified into striped, green, porcelain, black, red, multi-colour, etc. The mentioned collection contained a few samples of each mineral.

The classification of mineral system is partly based on the external features. The class of minerals includes some rocks. For example, basalts and rubies are attributed to the earth silicon family (though ruby is a representative of alum family) and micas to the clays and alum family.

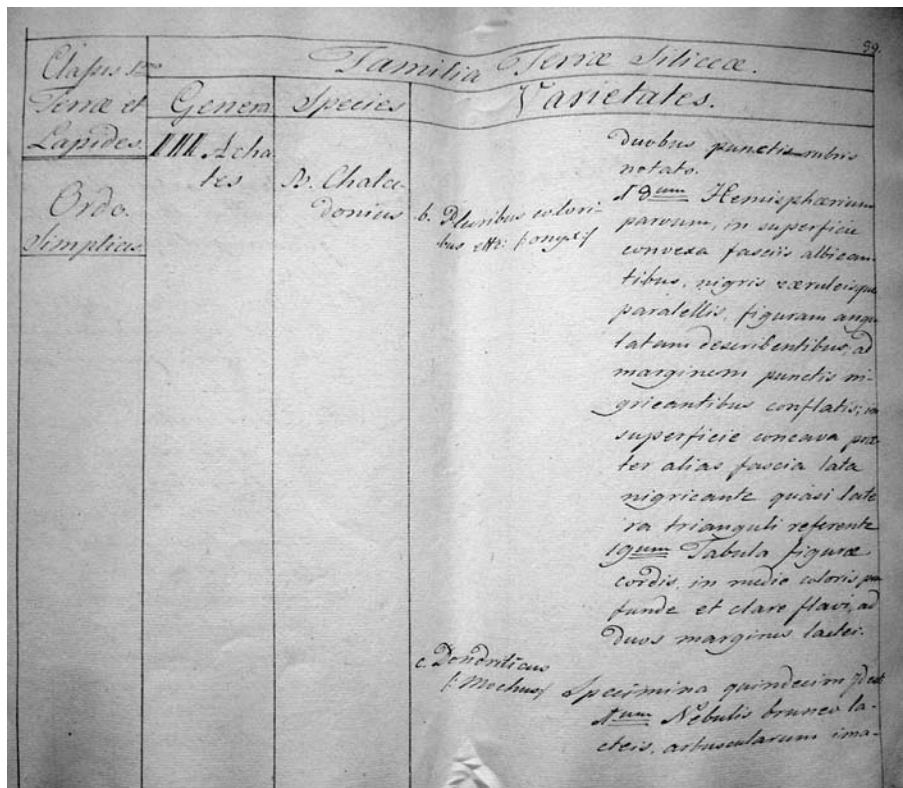


Fig. 3. The fragment of Catalogue of Minerals. Silicate family  
 3 pav. Mineralų katalogo fragmentas. Titnagių žemių (silikatų) šeima

**Arrangement of Rock Entries in the Catalogue.** The catalogue includes rocks, but they are not separately classified. They are included into class I *Soils and Stones* (Lat. *Terra et Lapides*) as earth silicon family (Lat. *Lapides Aggregati Silicei*) of the aggregate order (Lat. *Ordo Agregati*). The rocks are classified into genera according to their genesis:

I – III species of granite, syenite: graphic granite, porphyric granite (Lat. *Granites, Granitellus*). Composition: quartz, mica and feldspars, quartz with crumbs (Lat. *scorlo<sup>3</sup>, etc*);

IV mica schist (Lat. *Saxum*);

V porphyry (Lat. *Porphirius*);

VI corneous schist (Lat. *Saxum Corneum*);

VII conglomerates (Lat. *Breccia*);

VIII sandstones (Lat. *Arenavius*);

IX schists (Lat. *Saxum argillaceam*);

X serpentines (Lat. *Taleozum et Serpenticum*);

XI quartzites (Lat. *Saxum Calcareum*).

According to this classification, sedimentary rocks are included into the family of earth silicons, whereas in A. Werner's classification sedimentary rocks were classified as "secondary soils" (Fr. *Terrains secondaires*) (Jakowicki, 1827). Sandstones and conglomerates were classified into varieties depending on the type of cement: siliceous, carbonaceous, clay, etc.

Volcanic rocks (Lat. *Ordo Vulcanici*) are distinguished as a separate column. They are represented by lava (Lat. *Lava*) and obsidian (Lat. *Lapis Obsidianum*).

Organic rocks (Lat. *Ordo Organici*) are divided into the following groups:

I zoolithic (Lat. *Zoolithus*) rocks with animal remains dominant.

II ichthyolithic (Lat. *Ichthyolithus*) rocks containing dominant fish remains;

III entomolithic (Lat. *Entomolithus*) rocks containing dominant insect remains;

IV helmintolithic (Lat. *Helmintolithus*) rocks containing dominant worm remains;

V phytolithic (Lat. *Phytolithus*) rocks containing dominant plant remains;

VI dendrolithic (Lat. *Dendrolithus*) rocks. They are petrified fossils of trees.

Rocks are further subdivided according to the remains of ribs, bones and teeth or species of fossil insects and worms.

**Class II (salts)** (Lat. *Sal*). The catalogue includes 16 types of salts, one or two samples each. The total amount of samples was 39. The samples represented the following types of salts: common sulphur, saltpetre, aluminium earths, alums, iron, copper and zinc sulphates, boron salts, and many varieties of rock-salt classified according to natural form and colour. Alum stone (Lat. *Shistus Aluminosus*) is also included into the class of salts whereas I. Jakowicki, following the A. Werner's classification, attributed it to the genus of schistose clays of class I clay and alum family (Jakowicki, 1827).

**Tars of class III (tars)** (Lat. *Bitumina*) are subdivided into two orders: simple and aggregate. The aggregate order includes the following genetically distinguished genera: oil (Lat. *Petroleum*), black diamonds (Lat. *Lithantrax*), amber (Lat. *Succinum*), and sulphur (Lat. *Sulphur*). It is interesting to note that the simple

<sup>3</sup> From Latin "small lumps". Presumably pieces of various minerals were born in mind.

order of the genetic group of sulphur includes pyrites. There were especially many samples of this mineral: varieties of crystalline, prismatic and pyramidal forms.

**Class IV (metals)** is abundant. It includes 19 element families which are subdivided into species: I – platinum, II – gold, III – silver, IV – mercury, V – lead, VI – copper, VII – iron, VIII – tin, IX – wolfram, X – bismuth, XI – nickel, XII – arsenic, XIII – cobalt, XIV – zinc, XV – antimony, XVI – magnesium, XVII – molybdenum, XVIII – uranium, XIX – titanium. The following compounds were included into the class of metals: hematite (iron group), malachite (copper group), auripigment (arsenic group), and sphalerite (zinc group).

It should be noted that A. Werner has included the compounds of metals (ores) into the class of metals. In the catalogue under consideration, such cases also are numerous. For example, the group of copper includes malachite, chalcopyrite, chalcocite, cuprite, etc.

**Zoological collections.** The catalogue is completed with zoological collections grouped into worms and animals (Lat. *Vermes ir Animalia*). The group of worms is composed of univalve and bivalve mollusks (Lat. *Moluckus, Bivalvia, Univalavija, Nautilus*), gastropods (Lat. *Conidae*) and vertebrae (Lat. *Zoophyta*). This group also contains sponges and corals (Lat. *Spongia, Sertularia, Flustra*), snails (Lat. *Helix*), oysters (Lat. *Ostrea*), shells (Lat. *Cardium*), etc. The collection contained many samples, e.g., human and dog skeletons, zebra jackstraw, antelope skull, scorpions and a herbarium. The section *Papilionis exotici* is composed of a collection of exotic butterflies and specimens of rare fish from southern seas, spiders and scorpions.

The Cabinet of Mineralogy of the Vilnius University also had a geographical–geognostic collection compiled in 1831 (Fig. 4). The collection contained fossil specimens from Curland, Vilnius,

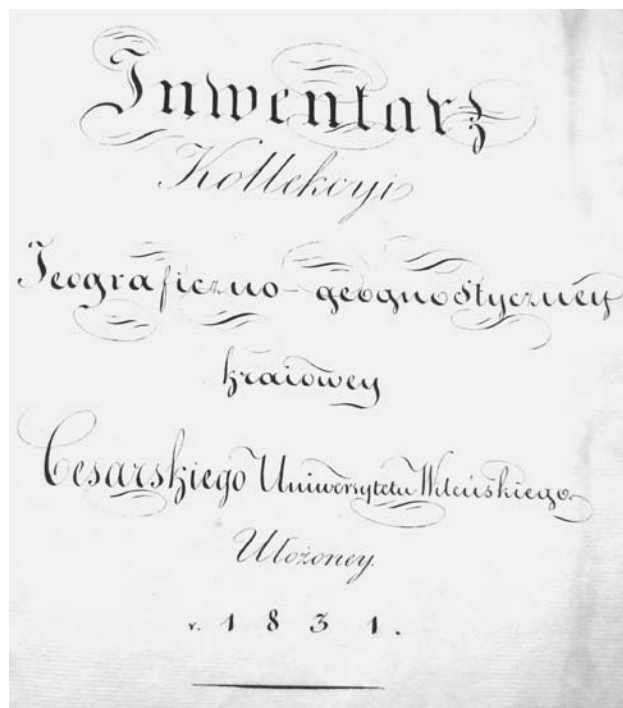


Fig. 4. The title-page of the geographical-geognostic collection, 1831  
4 pav. Geografinės-geognostinės kolekcijos titulinis puslapis, 1831

Grodno, Volhynia, Kiev, Podolia, and Cherson Governor's Districts. The showpieces were arranged in the order that occurs in nature. This collection was described in detail by Józef Bieliński in 1899–1900. It also included: 1) Prof. E. Eichwald's collection of ores compiled in 1829 after an expedition to the coasts of the Black Sea, 2) rocks collected in the Vilnius Governor's District by officer P. Czaykowski who together with Ulmanis and Lachnicki traveled in the district prospecting rock-salt, 3) fossils from Papile collected by Prof. E. Eichwald in 1828, 4) collection of ores from the Volhynia Governor's District compiled in 1827 by lyceum teacher S. Zienowicz – the total of 1283 showpieces which were moved to Kiev after closure of the university in 1841 (Žalūdienė, 2004). The approval of the transfer was signed by I. Jakowicki (*LVIA*, f. 567, ap. 2, b. 2886).

**The doublets of collection.** By 1825, the collection had become especially rich. There was a possibility to parcel collection doublets among schools and gymnasia. This is confirmed by VCIA security files. In his letter to procurator of Vilnius Educational District, Rector of the Vilnius University Waclaw Pelikan pointed out that the Cabinet of Mineralogy accumulated doublets of all varieties and species of minerals which were excrescent and could be offered to schools as visual aids (*LVIA*, f. 567, ap. 2, b. 1808, l. 1, 1a p.). Thus, six collections and catalogues of minerals were compiled and transferred to gymnasia of the Vilnius Educational District: Vilnius, Krazhiai, Grodno, Minsk, Podolia and Bialystok. The first collection contained 710 showpieces, the second 646, the third 448, the fourth 423, the fifth 484, and the sixth 445 showpieces. It was emphasized that the mentioned doublets would be a serious contribution to teaching about minerals (*LVIA*, f. 567, ap. 2, b. 1808, l. 4, 5).

In October, 1726, 13 smaller collections of minerals were compiled and together with catalogues transferred to circuit schools in Kamenets, Zhytomir, Molodechno, Mendzibozh, Bobruisk, Nemirov, Kaunas, Lutsk, Mozyr, rustic circuit school and clerical gymnasia (*LVIA*, f. 567, ap. 2, b. 1808, l. 9, 10). Each of the collections contained about 500 showpieces. The total of the transferred showpieces was rather impressive: 6226 items.

It is known that on January 20, 1827, the manager of the Vilnius Educational District received a letter from Rector W. Pelikan to the effect that adjunct Józef Jundziłł had submitted a catalogue of minerals compiled in cooperation with F. Drzewiński. The catalogue included 17547 entries of minerals (*LVIA*, f. 567, ap. 2, b. 1808, l. 14). The catalogue was compiled while preparing for transference of collection to new halls of the museum.

On March 12, 1828, the manager of the Vilnius Educational District received a letter from the minister of Educational Department A. Shishkov offering to obtain showpieces from T. Rozenberg's cabinet of mineralogy (1570 units; their total cost 8850 Rb.) The sets of minerals were very valuable and described following the A. Werner's and R. J. Hüy's system. The description was supplemented with entries in French. The cost of some showpieces reached 100 Rb. Due to its high value, the collection could not be split and parceled among gymnasia. Therefore, there was a suggestion that it should be obtained by Vilnius University. However, Rector W. Pelikan refused to purchase the collection motivating that the cabinet of the university

had many collections and even compiled 12 collections of doublets for schools of Vilnius Educational District. Eventually, the Cabinet of Mineralogy of the Vilnius University did not obtain the T. Rozenberg's collection.

## PARTITION OF COLLECTIONS

As soon as in 1834, after the closure of the Vilnius University, the process of partitioning the collections stored at the Cabinet of Mineralogy began. In that year, 34 small collections of minerals of the Vilnius Medical Surgery Academy were packed and prepared for transference to gymnasia and schools of the Vilnius Educational District. Twenty collections were transferred to the first and the second gymnasia of Vilnius, to Minsk, Svisloch, Bialystok, Krozhhai and Vinitz gymnasia, the circuit school of Kaunas, Slutsk gymnasium, and Mozyriov, Bobruisk, Molodechno, Rezhick, Zhytomir, Lutsk, Kamenets, Klevansk, and Mendzibozh circuit schools. The remaining 14 collections were given to schools of the Vilnius Educational District. I. Jakowicki was in charge of transference of these collections to schools and gymnasia (*LVIA*, ap. 2., b. 3487, l. 9).

In 1835, the most beautiful part of the collection of minerals and jewelry was obtained by the Vinitz gymnasium. The Lithuanian Historical Archive (*LVIA*, F. 567, ap. 2, b. 3810, l. 4, 5) stores a catalogue of minerals including the most valuable specimens of the collection of minerals: diamond, precious stones, grey sapphire in the onyx casing, agate and heliotrop plates, jasper tobacco-box, agate ball, chalcedonic signet, "cat's eye", two perches made of white marble, amber table, samples of platinum and silver; the total of 45 units. In author's opinion, they were part of a collection presented by count M. Walicki. The catalogue of this collection is also stored at the Vilnius Historical Archive (Žalūdienė, 2003). Unfortunately, this collection was also transferred to the Vinitz (Ukraine) gymnasium (Fig. 5).

By the efforts of the Vilnius University staff, some specimens of minerals have been recovered (Rudnickaitė, Žalūdienė, 2003). There are some very beautiful and valuable specimens supplemented with labels to fix historical information – "travel in time and space".

## CONCLUSIONS

A thorough analysis of the catalogue of minerals under discussion leads to a conclusion that it was compiled following the classification of rocks developed before A. G. Werner. However, a great number of mineral samples attributed in the catalogue to different groups of minerals shows that A. Werner's classification was taking root in the educational institutions of the then Russian Empire. Stanislaw Bonifacy Jundziłł was a lecturer of mineralogy at the Vilnius University (1797–1803). A. Werner's theory of neptunism was consolidated at the Vilnius University by lecturer R. Symonowicz. He also enriched the collection of minerals and rocks (Grigelis, 2003). Nevertheless, due to underestimation of the chemical composition of minerals, Werner's classification of minerals was admitted tardily. This is also proven by the fact that R. Symonowicz was rejected as a candidate professor at the Department of Mineralogy.



**Fig. 5.** Showpieces of the old collection of minerals of Vilnius University. At present stored at Geological and Mineralogical Museums

**5 pav.** Senosios Vilniaus universiteto mineralų kolekcijos eksponatai, šiuo metu saugomi Vilniaus universiteto Geologijos ir mineralogijos muziejuje

A comparison of the first catalogue of minerals (1799) with the dominant in Europe A. Werner's classification showed that the classification of minerals is rather confusing. The major four classes of minerals (soils and stones, metals, tars and salts) are clearly distinguished. However, rocks are included into the first class of soils and stones, a feature characteristic of the early (J. Cronstedt's and Walerius') classifications. Also typical is the division into simple and aggregate rock orders and distinguishing between fossil organisms and minerals. Fossils are attributed to organogenic rocks of class I (soils and stones). This classification was innovative and typical of J. Cronstedt's classification of minerals. A. Werner's classification was consolidated only in 1803 after the establishment of the Department of Mineralogy when R. Symonowicz became lecturer of mineralogy. It served as the basis of the first mineralogical research works and textbooks in mineralogy (Symonowicz, 1806; Jakowicki, 1827). The described catalogue of minerals of 1799 provided information about the minerals stored at the museum. The richness of the collection of minerals was possible because of a significant financial support of the Russian Empire to the Vilnius University, the activity of leaders of the University and of the heads of the Cabinet of Mineralogy and, undoubtedly, the fashion of collecting minerals among the nobility. Due to these factors, the Cabinet of Mineralogy had a possibility to compile doublets of collections of minerals and parcel them among schools and gymnasia of the Vilnius Educational District.

#### ACKNOWLEDGEMENTS

I am deeply indebted to Prof. Juozas Paškevičius (Vilnius), and Professor Wojciech Narębski (Cracow), for valuable and helpful comments. I also thank Historical Archives of Lithuania and Geological and Mineralogical Museums of Vilnius University for the possibility to access protected materials and the collection of minerals.

#### References

1. Bielinski J. 1899–1900. Uniwersytet Wileński (1579–1831). Kraków. Druk W. L. Anczyca i spółki. T. 1, 485 s.; t. 2, 842 s.; t. 3, 729 s.
2. Gaigalas A. 2004. Senojo Vilniaus universiteto geologinės kolekcijos Ignoto Jakovickio katalogo analizės pagrindai. *Geologija*. **48**. 1–14.
3. Garbowska J. 1993. Nauki geologiczne w uczelniach Wilna i krzemienia w latach 1781–1784. *Prace Muzeum Ziemi*. **42**. Warszawa. 6–112.
4. Grigelis A. 2003. Vilniaus universiteto Mineralogijos katedra 1803–1832. *Geologija Vilniaus universitete*. Vilniaus univ. leidykla. 18–37.
5. Jakowicki I. 1827. Wykład oryktognozy i początków geognozy. Wilno. 396 s.
6. Rudnickaitė E., Žalūdienė G. 2003. Vilniaus universiteto Geologijos ir mineralogijos muziejus. *Geologija Vilniaus universitete*. Vilniaus univ. leidykla. 138–150.
7. Symonowicz R. 1806. O stanie dzisiejszym Mineralogii. Diss. Wilno. 189 s.
8. Žalūdienė G. 2003. Mineralogijos katedros Vilniaus universitete įkūrimo aplinkybės ir jos veikla 1803–1832 metais. *Geologija*. **43**. 3–18.
9. Žalūdienė G. 2004. Vilniaus universiteto profesoriaus Eduardo Eichwaldo ekspedicija. *Geologija*. **46**. 1–7.
10. История геологии. 1973. Ред. И. Батюшкова. М.: Наука. 385 с.
11. Кронштед А. Ф. 1776. Опыт классификации царства минералов. СПб.
12. Шафрановский И. И. 1968. А. Г. Вернер. Знаменитый минералог и геолог 1749–1817. Л.: Наука. 197 с.

#### Archival materials

- LVIA, f. 567, ap. 2, b. 19. Каталог минералов, хранившихся в музее Виленского Университета, 1799.
- LVIA, f. 567, ap. 2, b. 2886. Инвентарь местной геогностической коллекции Императорского Виленского Университета, составлен 1831 г.
- LVIA, f. 567, ap. 2, b. 1808. Минералогический кабинет. О снабжении училищ коллекциями минералов, 1925 г.
- LVIA, f. 567, ap. 2, b. 3810. О принадлежавших Виницкой гимназии минералах, хранившихся в Минералогическом кабинете Имп. Виленской Медико-хирургической Академии, 1835 г.
- LVIA, f. 567, ap. 2, b. 3487. О минералогических коллекциях в Виленском Университете, составленных для училищ Виленского учебного округа, 1834 г.

Gailė Žalūdienė

## PIRMASIS VILNIAUS UNIVERSITETO MINERALŲ KATALOGAS IR KITI RINKINIAI

### *S a n t r a u k a*

Vilniaus universiteto Mineralogijos kabineto rinkiniai pradėti kaupiti dar XVII a. Jų pagrindą sudarė Lietuvos didikų dovanos, katedros profesorių užsienyje pirkti mineralų ir uolienų rinkiniai. Savo gausos apogėjų kolekcija pasiekė 1827 m. – tuo metu buvo 20800 vnt. eksponatų. Tačiau netrukus po Vilniaus universiteto uždarymo rinkiniai buvo išblaškyti po Rusijos imperiją. Straipsnyje apžvelgiamas lig šiol spaudoje nenagrinėtas 1799 m. mineralų katalogas, kurio rinkinius, kaip manoma, Vilniaus universitetui dovanavo kunigaikštis M. Oginskis ir kanauninkas J. Wichertas. Katalogas surašytas lotynų kalba, sudarytas vadovaujantis dar iki A. Wernerio vyravusia uolienų klasifikacija. Lyginant 1799 m. pirmąjį katalogą su A. Wernerio mineralų klasifikacija pastebima, kad mineralų skirstymas gana painus. Nors pagrindinės keturios mineralų klasės – *žemės ir akmenys, metalai, bitumai, druskos* – išlieka, tačiau uolienos atsiduria pirmoje *žemių ir akmenų* klasėje, o tai būdinga ankstyvesnėms (J. Cronstedto, Waleriuso) klasifikacijoms. Uolienos skirstomos į sudėtingas ir paprastas, suakmenėjusių organizmų liekanas – fosilijas – atskiriamos nuo mineralų ir priskiriamos pirmosios klasės *žemės ir akmenys* organinėms uolienoms. Tik nuo 1803 m., įkūrus Mineralogijos katedrą ir R. Simonavičiui pradėjus dėstyti mineralogijos kursą, įsigalėjo A. Wernerio uolienų ir mineralų klasifikacija. Jos pagrindu buvo parašyti pirmieji mineraloginiai darbai, vadovėliai (Symonowicz, 1806; Jakowicki, 1827). Straipsnyje analizuotas 1799 m. mineralų katalogas suteikė nemažai informacijos apie muziejuje saugomus mineralus.

Mineralų rinkinių gausa patvirtina neblogą Rusijos imperijos dotavimą tuometiniam universitetui, universiteto vadovybės dėmesį Mineralogijos kabinetui ir ano laikmečio aukštuomenės madą kolekcionuoti mineralus. Mineralogijos kabinetas turėjo galimybę sudaryti mineralų rinkinių dubletus ir dovanoti Vilniaus švietimo apygardos mokykloms bei gimnazijoms.

Uždarius Vilniaus universitetą Mineralogijos kabineto kolekciją pradėta dalinti: 1834 m. dalis jos buvo atiduota Rusijos aukštosioms mokykloms, Vilniaus, Minsko, Kražių, Vinicos, Kijevo, Odesos, Kazanės gimnazijoms. Už rinkinių surinkimą ir išsiuntimą į apygardos gimnazijas bei mokyklas buvo atsakingas I. Jakovickis.

Гайле Жалудене

## КОЛЛЕКЦИИ МИНЕРАЛОВ ВИЛЬНЮССКОГО УНИВЕРСИТЕТА. ПЕРВЫЙ МИНЕРАЛОГИЧЕСКИЙ КАТАЛОГ

### *Р е з ю м е*

В старом Вильнюсском университете собрание коллекций начато ещё в XVII веке. Их основой стали коллекции, подаренные самими знатными лицами Литвы – князьями, также отдельные наборы минералов и пород, приобретенные за границей профессорами университетской Кафедры минералогии. Коллекция минералов Вильнюсского университета достигла апогея в 1827 г., когда число экспонатов составило 20800 ед. минералов и пород.

В статье рассматривается Каталог минералов 1799 года, анализ которого до сих пор не был осуществлен. Указанные в этом Каталоге собрания минералов, как предполагается, подарили Университету князь М. Огинский и каноник И. Вихерт. Каталог составлен на латинском языке, руководствуясь доминировавшей в науке до А. Вернера классификацией пород. При сравнении использованной в анализируемом Каталоге 1799 года классификации с классификацией Вернера видно, что в первой разделении минералов довольно путанное, хотя сохраняется их деление на четыре основных класса: *земли и камни, металлы, битумы, соли*. Породы отнесены к первому классу – *земли и камни*, что свойственно ранним классификациям (И. Кронштедта, Валериуса). Породы также распределены на сложные и простые ряды, окаменевшие организмы отделены от минералов. Последние причислены к органическим породам первого класса – *земли и камни*. Только после основания в Университете Кафедры минералогии, когда минералогический курс преподавал Р. Симонович, стала применяться классификация минералов по А. Вернеру. На её основе были опубликованы первые работы по минералогии, учебники (Symonowicz, 1806; Jakowicki, 1827). В результате анализа Каталога 1799 г. получено немало информации о хранившихся в университетском музее минералах. Обилие минералогических коллекций говорит о хорошем снабжении Университета, о внимании руководства к Кабинету минералогии и, конечно, отражает господствовавшую в то время в светском обществе моду коллекционировать минералы. Кабинет минералогии, обладая богатыми коллекциями, имел возможность дублировать собрания минералов, дарить их уездным училищам Вильнюсского округа. После закрытия Вильнюсского университета в 1832 г. его коллекции были распределены по Российской Империи. В 1834 г. часть их была отослана в учебные заведения – гимназии Вильнюса, Минска, Кражяй, Казани, Одессы, Киева и др. Ответственным лицом за отбор и отправку таких собраний стал И. Яковицкий.