

2006–2007: Jubilees and Their Heroes

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Description of a jubilee exhibition in the Fersman Mineralogical Museum RAS.
14 illustrations, 9 references

In 2006, 290 years elapsed from the purchase, by the order of Peter the Great, of a large, for those times, collection of minerals from Gottwald, Doctor of Medicine in Danzig. This was the beginning of the Mineral Cabinet which is now one of world's largest mineralogical museums, the Fersman Mineralogical Museum of the Russian Academy of Sciences.

So it happened that a series of anniversaries relating to the Museum itself, to the names of its curators and directors, and its collections and scientific publications fell both in 2006 and 2007. It is possible to retrace, not in detail, by these anniversary dates, the Museum's glorious path through 290 years of its existence. This idea has been the underlying concept behind the exhibition "*Jubilees in 2006–2007 and Their Heroes*" in the Fersman Mineralogical Museum.

In the showcase that initializes the exhibition, besides the general introduction and one of the most ancient specimen, limonite pseudomorph after pyrite (Fig. 1), the materials were presented referring to the 200th Jubilee of the Museum's present building. It is a monument of early 1800s architecture; the architect is unknown. The building was constructed as a riding hall for Count Aleksei Orlov-Chesmenskii who was a fanatic and connoisseur of horses. To that moment, this was the biggest riding hall in the Moscow area. Interestingly, the Count himself celebrated then his 70th jubilee: he was born in 1737.

Another jubilee related to the Mineralogical Museum's movement into this historical building. In 1936, 70 years ago, after the movement of the Academy of Sciences from Leningrad to Moscow and accommodation of its Presidium within the main building of the palace manor, "Aleksandrinskii Dvoretz" (after the Orlovs, the manor belonged to the tsar family having been bought by Nikolai I for his wife Aleksandra Feodorovna), the former Orlov's riding hall as a part of the Palace Ensemble was allocated for the Museum. Curiously, the main building itself, where the RAS Presidium maintains its position

up to now, also celebrated its jubilee in 2006: it was built by architect Mest 250 years ago in 1756 as a country house for the wife of Prokofii Akinfovich Demidov, a representative of the famous dynasty of Ural mining heads.

Seventy years ago, in 1936–1937, the first Museum expositions were opened in Moscow. One of them was the exhibition devoted to the geochemistry and minerals of Middle Asia. Photographs of this exhibition (Fig. 2) together with pictures of those times of the Museum building and exhibition hall can be seen in the exhibit described.

Originated in the *Kunstkammer* of Peter the Great and remained in the Academy of Sciences structure since its establishment by Peter, the Mineralogical Museum received 170 years ago in 1836 for the first time the status of a special museum. Afterwards, the Museum suffered difficult times and for several years was barely a section of the Lomonosovskii Institute; just a year ago, in spite of attempts to deprive it of its autonomy, it managed to assert its right for independence owing to the efforts of Margarita Ivanovna Novgorodova, Director, and the entire scientific team, which is also marked in the exposition.

Forty years ago the Museum celebrated its 250th Anniversary. A festive session by this date took place on 5 June 1967. There were many congratulations, a jubilee medal was made with the dates 1716–1966 and images of the Museum interiors and the unique alexandrite druse on it. The druse is a historical specimen placed now in one of permanent exhibits. Some of these rarities, including verses dedicated to the Museum and composed by Tatyana Borisovna Zdorik, were presented in a special case.

Five showcases narrated of the jubilees of Museum heads and reflected their contribution to enlarging and preserving the museum collection. For instance, Peter Simon Pallas (1741–1811), the German scientist, became the head of *Naturkammer* 240 years ago, in 1767. The Mineral Cabinet was then a part of this



Fig. 1. Limonite (after pyrite) with the old label, 3.5 cm in diameter. Czechia. FMM No. 197 OP. Collection: I.F. Henkel (No. 58, 1743).

Fig. 2. Exhibition of the geochemistry and minerals of Middle Asia in the Mineralogical Museum. 1936–1937.

Fig. 3. Halite, 7 x 6.5 x 4 cm. Astrakhan' Prov., Chapchachi. FMM No 5630. Collection: P.S. Pallas (No. 4 in I.G. Georgi's catalogue). Photo: Elena A. Borisova

Naturkammer. Pallas was invited by Catherine II; he was only 26 and already had the Doctorate degree, professorship and European acknowledgement. By the orders of the Empress, he immediately began to organize the grand Russian natural scientific expeditions. As a result, many rocks and other materials entered the Naturkammer. Particularly, the famous meteorite "Pallas's Iron", the first natural object that was acknowledged by the scientific community to be of extraterrestrial matter, was delivered from Krasnoyarsk 230 years ago in 1777. One can admire it now, too, in the Museum at the exhibition of meteorites. In the mentioned jubilee exhibition, visitors' attention was also attracted to the halite from Astrakhan' Province, the only specimen from the P.S. Pallas collection preserved to the present (Fig. 3).

Academician Vasilii Mikhailovich Severgin (1765–1826) was another remarkable director of the Museum. He was the first Russian mineralogist. Exactly 200 years ago, in 1807, he became director of the Mineral Cabinet and held this post all his remaining life long, i.e. almost for 20 years. In 2006, 180 years had elapsed since the day of his death. Another jubilee is concerned with publishing, 190 years ago, the first Russian book for identifying minerals: "*The New System of Minerals Based on External Distinctive Features*" (Severgin, 1816). The first Museum guidebook was written during Severgin's direc-

torship. And what is more, we should like to mention the special display case with guidebooks published in the Museum during the past hundred years (Fig. 4). Besides the title copies of Severgin's works, the two chalcedonies from his collection (from Kamchatka and Finland, Vuoxa River) were displayed in the exposition.

Adolf Germanovich (Fedorovich) Gebel (1826–1895) was born 180 years ago. In 1857, 150 years ago, he became custodian and, in fact, director of the Mineralogical Museum. Having been educated as a chemist (Nazarov, 1999), he was mainly engaged in meteorites and tried his best to expand the Museum collection of meteorites. In 1846, it contained 19 specimens whereas there were more than 60 by the end of the nineteenth century. Gebel's ideas of social factors playing the leading role in finding meteorites, or, formerly named, aerolites, and in their transferring to museum collections (*Gebel A.F., On the Aerolites in Russia, St. Petersburg: 1868. – In Russian*) continue to be relevant now. In the exposition, the gypsum (Azerbaijan, Menan) was exhibited; the specimen was donated to the Museum by Gebel in 1858.

In 1866, 140 years ago, Nikolai Ivanovich Koksharov (1818–1892), the prominent Russian mineralogist, was elected ordinary academician and designated to the post of Director of the Mineralogical Museum. The wollastonite from his collection found in Semipalatinsk Oblast'



Fig. 4. The guidebooks published in the Mineralogical Museum for the past hundred years.

Fig. 5. The medal of the Imperial Mineralogical Society awarded to N.I. Koksharov as the author of "Materials for Mineralogy of Russia" in connection with 50 years of the scientific activities. 5.5 cm in diameter.

Photo: Elena A. Borisova

that came into the Museum 100 years ago, in 1907, could be seen in the exposition. One of the volumes of the widely known work by this scientist, "The Materials for Mineralogy of Russia", as well as the Medal of the Imperial Mineralogical Society (Fig. 5), with which the author was awarded 120 years ago in 1887, were presented at the exposition "The History of the Museum" in the main exhibition hall. The referred-to work was being published as separate parts since 1852 – 1855 in Russian and German (Кокшаров, 1852 – 1855; 1856, 1858, 1862; 1870; Kokscharow, 1858; 1862 etc.).

Academician Feodosii Nikolaevich Chernyshev (1856 – 1914), the well-known geologist and paleontologist, Director of the Museum in 1900 – 1914, and the disciple of Academician Alexander Petrovich Karpinskii, was born 150 years ago. The 160th anniversary of A.P. Karpinskii (1847 – 1936), the first elective president of the Academy of Sciences and president of the Mineralogical Society, was at the boundary of 2006 – 2007 too (he was born on 7 January 1847). Thanks to the efforts of these two scientists, the reorganization began of the Museum that had been called since 1898 The Peter the Great Geological Museum, and it started losing its mineralogical specialization. One hundred

years ago, in 1906, an independent mineralogical department was established again; the mineral collection managed to be preserved. In commemoration of this and other merits of Academician Alexander Petrovich Karpinskii, 70 years ago the newly united Geological and Mineralogical Museum of the Academy of Sciences of the USSR was named after him. From 1937 until 1948 it was called A.P. Karpinskii Geological Museum. The diopside crystal from Congo from Karpinskii's collection (Fig. 6) and the splendid amethyst geode found by F.N. Chernyshev (Fig. 7) were displayed in the exposition.

One hundred years ago, in 1906, the Mineralogical department was headed by Vladimir Ivanovich Vernadsky (1863 – 1945), famous Russian scientist, naturalist, thinker, and public figure, who became in the same year an adjunct of the Academy of Sciences. Reactivation of scientific work in the Museum, renovation of expositions, new systematization and inventory of Museum funds were highlights of his coming to the Museum. The entire assemblage has been divided into 5 collections, which exist up to now: the Systematic collection, Collections: Ore Deposit Samples, Crystals, Pseudomorphs, and Gem and Precious Stones. They began to be registered in



Fig. 6. Diopside, 2 x 1.5 x 1.3 cm. Congo. FMM No. 29253. From collection of A.P. Karpinskii (No. 2128, 1926).

Fig. 7. Amethyst, 12 x 10 x 5.5 cm. Arkhangel'sk oblast', Chernaya River, Timan. FMM No. 21383. From collection of F.N. Chernyshev (No. 891, 1889).

Photo: Elena A. Borisova

the big inventory books separately for each collection, which continues now.

V.I. Vernadsky was the organizer of the widely known radium expedition (1906–1914). The 100-year jubilee of its start was marked in the exposition with one of many specimens from field collecting that came into museum funds, the snow-white calcite from Tuya-Muyun, Fergana Oblast' (Fig. 8).

This period of animated scientific work at the Museum united with the publication of its own scientific journal. The bottom parts of all show-cases were dedicated to the centenary of this periodical, a copy of which the reader is holding in his hands at the moment.

Both the very first thin, black-and-white issues of "*Trudy Geologicheskogo muzeya imeni Petra Velikogo Imperatorskoi Akademii nauk*", 1907, and the recent multicolored publications, in Russian and English since 2003, were placed there. It is curious that the contemporary title, "*New Data on Minerals*", celebrated, too, its 25th anniversary.

Ninety-five years elapsed from the moment when Alexander Evgen'evich Fersman, V.I. Vernadsky's faithful disciple and companion, academician, director of the Mineralogical department (since 1919) and then, since 1925, Mineralogical Museum of the Academy of Sciences, came to the Museum as a senior scientist. The Museum was named after him in 1955. The chalcopyrite specimen from Zmeinogorskii Mine, Altai, from the collection of these two scientists, that was entered into the Museum collection in 1916, and uvarovite from Sarany collected by A.E. Fersman in 1914 (Fig. 9) were displayed in the exposition. In 2006, the jubilees

took place of A.E. Fersman's important works: 85 years elapsed since the first publication of his monograph "*Samotsvety Rossii*" (Gemstones of Russia, 1921), 75 years – "*Pegmatity*" (1931), 65 years – "*Poleznye iskopaemye Kol'skogo poluostrova*" (The Minerals of the Kola Peninsula, 1941). This event was marked too: the two latter publications were displayed. Fifty-five years ago, in 1952, A.E. Fersman's "*Selected Works*" were published for the first time.

The Museum two prominent workers, Viktor Ivanovich Vorob'ev (1875–1906) and Vladimir Il'ich Kryzhanovskii (1881–1947) were contemporaries and companions of Fersman and Vernadsky. Since 1900, V.I. Vorob'ev was custodian of Mineralogical department of the Peter the Great Geological Museum; he perished tragically 100 years ago in a glacier crack in Caucasus, having left all his money (20000 rubles) and library to the Museum. On his initiative, the large collection of the Mineralogical Society was passed to the Museum. The malachite (Fig. 10), pink topaz crystals and the topaz upon quartz crystal from the Urals, all from V.I. Vorob'ev's field works were displayed in the exposition.

Several jubilee dates are concerned with V.I. Kryzhanovskii. In 2006, he would be 125. In 2007, 100 years elapsed since the moment when he became custodian for the first time, 5 years later, 95 years ago, he was elected the major scientific curator of the entire Museum collection, and 60 years elapsed from his death day on the director post (1945–1947) of the Mineralogical department of the A.P. Karpinskii Geological Museum, where he worked all his life long having had contributed much to

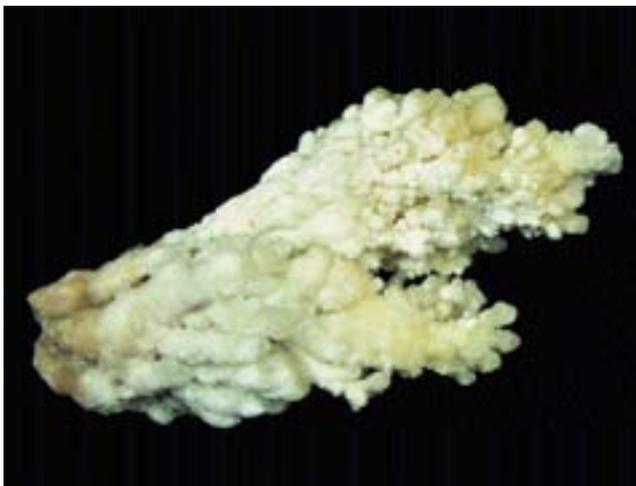


Fig. 8. Calcite, 13 x 7.5 x 4.5 cm. Fergana oblast', Margelan district, Tuya-Muyun. FMM No. 21953. From collection of Radium expedition (No. 758, 1911).

Fig. 9. Uvarovite with original label, 5 x 4.5 x 3.5 cm. Perm' prov., Perm' district, Biserskii Zavod, Saranovskii Mine. FMM No. 9677. From A.E. Fersman's collection (No. 1170, 1914).

Photo: Elena A. Borisova



Fig. 10. Malachite with original label, 6 by 3.5 by 2 cm. Urals, Perm' prov., Iron Mine of Polevskoi Zavod, FMM No. 5835.

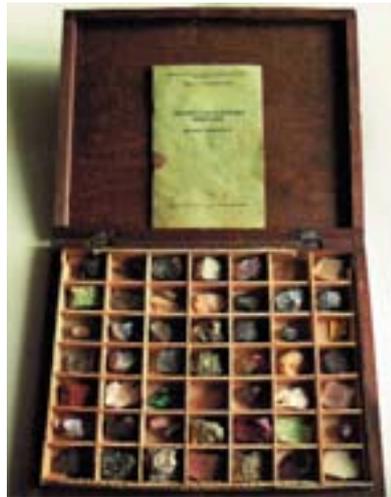
From V.I. Vorob'ev collection (No. 391/295, 1905).

Fig. 11. The genetic collection of minerals for young mineralogists composed by V.I. Kryzhanovskii. 1941. 35 by 29 by 3 cm.

Minerals of magmatic process: 1 – chromite, 2 – magnetite, 3 – labrador, 4 – apatite, 5 – nepheline. Minerals of pegmatite veins: 6 – quartz, 7 – feldspar (orthoclase or microcline), 8 – amazonite, 9 – muscovite, 10 – topaz, 11 – beryl, 12 – hornblende, 13 – corundum, 14 – ilmenite, 15 – wolframite, 16 – lazurite. Minerals of hydrothermal process: 17 – chalcopyrite, 18 – pyrite, 19 – sphalerite, 20 – galena, 21 – orpiment, 22 – calcite, 23 – fluorite, 24 – barite, 25 – asbestos, 26 – amethyst, 27 – chalcedony. Minerals of supergene process: 28 – limonite, 29 – bauxite, 30 – magnesite, 31 – malachite, 32 – crocoite, 33 – native copper, 34 – gypsum, 35 – halite, 36 – sylvite, 37 – pyrolusite, 38 – jasper, 39 – sulfur. Minerals of metamorphic processes: 40 – hematite, 41 – talc, 42 – garnet. Rocks: 43 – dunite, 44 – gabbro, 45 – syenite, 46 – nepheline syenite, 47 – granite, 48 – pegmatite, 49 – obsidian, 50 – marble.

Fig. 12. Aragonite, 6,0 by 5,0 by 4,5 cm. Georgia, Akhalsige district, Kisatiba. FMM No. 35624. D.S. Belyankin's collection (No.2588, 1935).

Photo: Elena A. Borisova



the systematization and enlargement of the Museum funds. The described exposition was decorated with a special wooden box with sections, the so called genetic collection of minerals for young mineralogists made up 65 years ago, in 1941, by Prof. V.I. Kryzhanovskii on the base of A.E. Fersman's ideas of mineralization processes (Fig. 11).

Academician Dmitrii Stepanovich Belyankin (1876–1953) was born 130 years ago. He became 60 years ago, after Kryzhanovskii's death, Director of the Mineralogical department, which was transformed in 1948 into the separate Mineralogical Museum of the Academy of Sciences. Thanks to his efforts, the museum journal resumed its publication after the end of world war II. Two specimens from Belyankin's collection could be seen at the exposition: radiaxial pink aragonites from Georgia (Fig. 12).

The 2007 December is the 100th jubilee of the birth of the Museum's next director, Prof. Georgii Pavlovich Barsanov (1907–1991). G.P. Barsanov led the Museum for nearly a quarter of a century, the last 15 years on a voluntary basis. On his initiative, new exhibits were created: "Pseudomorphs", "Natural Mineral Forms",

"Mineral Coloring", and "Synthetic Minerals"; some others were essentially changed. He gave great attention to the history of mineralogy and of the Museum; as a result, new expositions appeared as well as articles in the Museum journal (Barsanov, 1950, 1959a, 1959b, 1968 etc.), the chief editor of which he remained for 30 years down to 1984, even after he retired as the Museum director. Besides, Georgii Pavlovich was an excellent lecturer, and he was in charge of the chair of mineralogy in Moscow University.

In the jubilee exhibition, together with the calcite specimen (Dekanie-Tskhali, Southern Osetia) from his collection, there was the portrait of G.P. Barsanov made as a friendly cartoon (Fig. 13) by Nikolai Nikolaevich Shatagin, the leading research worker, then student at Moscow University, who sketched 45 years ago, in the autumn 1962 and the springtime 1963, at one of Georgii Pavlovich's lectures. As eyewitnesses recollect, Barsanov liked the portrait very much, and it has been hanging in his university study since that time.

Yurii Leonidovich Orlov (1926–1980) was born 80 years ago. An authority in the diamond mineralogy, he succeeded G.P. Barsanov as



Fig. 13. G.P. Barsanov. The friendly cartoon by N.N. Shatagin. 1962–1963. Photo: Elena A. Borisova

Director of the Museum 30 years ago, in 1976. The two specimens of Pamir tourmaline from his fieldwork of 1959 (Fig. 14) were presented in the exposition.

One more jubilee falls in 2007: 80 years since the birthday of Prof. Alexander Alexandrovich Godovikov (1927–1995) who succeeded as Director of the Museum in 1983. He donated his own large collection of minerals to the Museum. Thanks his efforts the large and important mineralogical collection of V.I. Stepanov was donated to the Museum. The A.A. Godovikov's ideas of mineral systematics are embodied in the Museum's main exposition. At the jubilee exhibition, one could admire the whole set of marvelous Mongolian agates that he had brought from his journey to that country. On the whole, agates were one of his favorite stones. He devoted a whole monograph to them (Godovikov, Ripinen, Motorin, 1987) and three special showcases in the continual exposition within the bounds of the exhibition "The Types of Mineral Associations in the Earth's Crust".

The two more jubilees are concerned with persons who are now in good health. In 2007, Mal'va Aleksandrovna Smirnova celebrated her 80th birthday. She was the chief custodian of Museum funds for more than 20 years (1979–2000). With her participation, numerous current expositions were created, for example, the exhibition "Natural Mineral Forms" whose principles were developed by A.A. Godovikov and V.I. Stepanov. She collected sample materials in her field work in Transbaikalia, Middle Asia, and Kazakhstan. The fire opal (Kara-Agach) from her field collecting in 1963 was displayed in the jubilee exposition.

Lastly, 10 years elapsed in 2006 from the Professor Margarita Ivanovna Novgorodova's inauguration as the Museum director. Under

her leadership, the complete revision of the exhibit hall was done, electronic databases, the museum site, new exhibits, and a modern analytical laboratory were created, and publishing of the "New Data on Minerals" scientific yearly with its modern appearance was resumed after the long pause.

Margarita I. Novgorodova donated about 30 specimens to the Museum collection. Mostly they are rare native elements (Al, Cd, Pb, Mg), intermetallides (jedwabite, chromferide, ferchromide), iron silicide – suessite, carbides – khamrabaevite and niobocarbide as well as the specimens from the Republic of South Africa – pyrite and auriferous conglomerates from the Witwatersrand, and the decorative stone "tiger eye". Many of the specimens are holotypes of new mineral species described by her: aluminium, cadmium, khamrabaevite, niobocarbide, chromferide, ferchromide. These minerals can be seen in the Museum permanent expositions: "Structural-Chemical Systematics of Minerals", "Mineralogy of Chemical Elements", and "Gems and Precious Stones". In 2007, M.I. Novgorodova was awarded the medal of the Order "For merits for Motherland of II degree" for her great contributions to the Museum and to mineralogical science.

One may also consider the jubilees of the dates of entering some collections into the Museum. The Shenshin, de Bournon, Wagner, and Razderishin private collections commemorated their 200 years in Museum. An especially interesting collection is that of Alexander Vasil'evich Razderishin (1754–1812), a state councilor and a member of the Berg-Collegia, discoverer of many occurrences of gems and precious stones, director of gold and silver mines, supplier of the Imperial Court at Catherine II, the author of training collections for numerous public schools, the Artillery Corps, Moscow University, and St. Petersburg



Fig. 14. Tourmaline, 12.5 x 7.5 x 6 cm. Southwestern Pamirs, Kuh-i-Lal. FMM No. 61088. From Yu.L. Orlov's collection (No. 3752, 1959). Photo: Elena A. Borisova

Teacher Seminary. The collection is accompanied with a detailed catalogue preserved in the Museum Archive. In the jubilee exposition, there was the gypsum from the Kama River banks registered in this catalogue under number 14 (Perm' Province, Osinskii District, Kama River opposite Osy town).

Some other collections connected with the jubilees of the transferring dates are collections of the Stroganovs and A.F. Volbort (130 years ago they were received by the Museum), V.A. Iossa's collection (90 years), E.N. Barbot-Marni's collection (80 years)*. Some specimens from these collections were demonstrated: moonstone (Ceylon) and serpentine, topaz (Transbaikalia, Nerchinskii District), malachite (Perm' Province, Verkhotur'skii District, Mednorud'yanskii Mine), and epidote (Ufa Province, Zlatoust District, Zelentsovskaya Kop').

In conclusion, the exhibition authors congratulated many of their colleagues (16 persons out of 50 Museum workers) who continue now the affairs of their precedents and work actively in the field of enlarging and preserving the very rich museum assemblage of minerals and whose jubilees, thanks to the lucky conjuncture, were in 2006–2007 too. Their jubilees marked Dr. Evgenii Ivanovich Semenov, Dr. Andrei Andreevich Chernikov, Dr. Ludmila Andreevna Matveeva, Dr. Elena Alekseevna Borisova, Dr. Elena Nikolaevna Matvienko, Dr. Alexander Dmitrievich Esikov, Elena Anatol'evna Kuvarzina, Nina Alekseevna Mokhova, Galina Alekseevna Osolodkina, Dmitrii Il'ich Belakovskii, Raisa Ivanovna Solov'eva, Vyacheslav Vladimirovich Gusakov; 50 years worked in the Museum Dr. Marianna Borisovna Chistyakova and Galina Alekseevna Osolodkina, 40 years – Tatyana Mikhailovna Pavlova, 30 years – Dr. Oksana Leonidovna Sveshnikova; 25 years ago Elena Leonidovna Sokolova began to work in the Museum.

Thus, the exhibition "*The Jubilees in 2006–2007 and Their Heroes*" showed once more the complicated and long way of the Museum development and reflected a succession of generations of scientists who headed the Museum and supervised its collection.

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* The dates are given according Barsanov, Kometova, 1989; Godovikov, 1989

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