# A MINERALOGICAL MESSAGE FROM THE RUSSIAN TSAREVNA – ALEXANDRA PAVLOVNA ROMANOVA, THE PALATINE OF HUNGARY

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Figure 1. Portrait of Alexandra Pavlovna and crocoite specimen (16 x 13 x 7 cm. Berezovskii Mine, Ural, Russia. #BE24513, #AP 354) on the display. Photo: Nikolay P. Yushkin.

### Specimens: Eötvös Museum of Natural History, Eötvös Loránd University, Budapest, Hungary.

Figure 2. Exhibition hall with the mineral and rock collection in the Eötvös Museum of Natural History. Photo: Péter Pekker.

uring the 20<sup>th</sup> Congress of the International Mineralogical Association, which took place in August 2010 in Budapest, Hungary (Yushkin, 2010), I inspected a collection of minerals and rocks in the Eötvös Museum of Natural History of the Eötvös Loránd University in Budapest. This collection occupies old showcases and cupboards in the 19<sup>th</sup> century special exhibition hall (*Figure* 2). Even from a distance, my attention was drawn to the portrait of a young and attractive woman and the large specimen of crocoite. What is the relationship between the unknown dame and the first Russian mineral, which started scientific mineralogy in Russia? The label on the showcase was "*Collection of Alexandra Pavlovna Romanova, daughter of the Russian Tsar Pavel I*" (*Figure* 1). Together with crocoite, the showcase also had a concretion of coloured flint, a fragment of the stripy agate, several small specimens (*Figure* 3), an elegant volume in red leather cover with A.P. initials, and an open copybook with catalogue of minerals and brief description in Russian, written in calligraphic script (*Figure* 4).



Figure 3. Specimens from the Alexandra Pavlovna Romanova collection on display (left to right):

#### Carneol.

13 x 12 x 6 cm. Yenisey River, Russia. #BE21649, #AP 110.

Malachite. 6.5 x 4.7 x 1.8 cm. Gumeshevsky Mine, Ural, Russia. #BE24380, #AP 418.

#### Prehnite.

15 x 8.5 x 5.3 cm. Aleutian Islands, Alaska. #BE24377, #AP 13.

**Agate** (quartz). 8.2 x 5.7 x 1.5 cm. Nerchinsk, Siberia, Russia. #BE20987, #AP 103.

## Photos 3-4: Tamás Váczi.

Figure 4. Catalogues of the mineralogical collections of Alexandra Pavlovna Romanova.



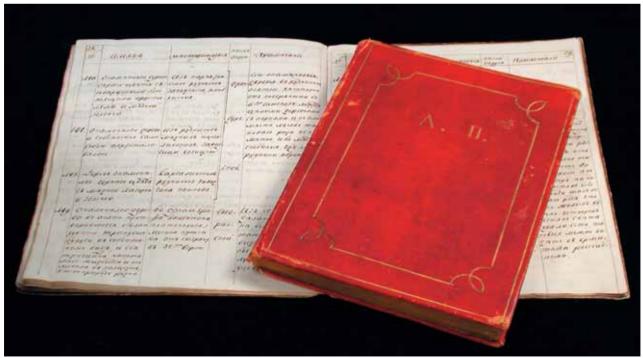






Figure 17. **Aikinite**. 7.4 x 6.5 x 4.3 cm, crystal 1.7 x 1.3 cm. Berezovskoe, Urals, Russia. #BE24385, AP#518.

#### Photos 17-18: Richárd Zoltán Papp.

Figure 18. **Malachite**. 12.4 x 9.5 x 8.5 cm. Sukhodaiski mine, Russia. #BE24508.

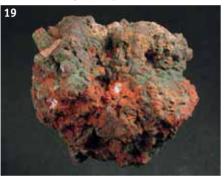


Figure 19. Malachite. 7.4 x 6.6 x 5.8 cm. Kolyvan, Transbaikalia, Russia. #BE24511, AP#387. Photo: István Gatter.

Figure 20. **Hematite**. 8.4 x 5.8 x 5.0 cm. Elba, Italy. #BE24381, AP#447. Photo: Richárd Zoltán Papp.



ed by his references to the specimens from Hermitage Museum in St.-Petersburg (Russia). Papp suspects that he could be one of the teachers of the Grand Duchess.

The most complete information about the Palatine's collections, their composition and history, is provided in the above mentioned paper by Papp (1991), which I relied on in this essay. Of special interest is the information on the primary condition of the collections according to the original Russian catalogues.

## **Origin of Interest to Mineralogy**

Collections, brought by Alexandra Pavlovna to Hungary and kept in her residence, were used by her for mineralogical studies while in Russia During the reign of Katherine II, she established a cult of gemstones, decorative stones, and minerals in general. The mineralogical studies were part of educational process in gymnasium and private courses for royal and noble children as part of natural sciences and special courses. Vasiliy Mikhailovich Severgin, the most important Russian mineralogist and first academician of mineralogy, compiled and published a textbook for gymnasium in 1804 (Severgin, 1804). It was reprinted twice since then. The subject was taught in the sixth form, one year before graduation, during 11 hours per week during the whole educational year (Voronov, 1854).

The family of Pavel I was involved in deep and detailed, almost professional, studies of mineralogy. This can be judged not only from the unordinary mineralogical preferences of Alexandra Pavlovna, but also from the fact that one of her younger sisters (Maria Pavlovna), who later became the Grand Duchess of Sachsen-Weimar-Eisenach, was a honorary member of the Jena Mineralogical Society (Papp, 1991).

## **Back to the Present**

The mineralogical collection of the Russian Tsarevna, who happened to live in Hungary, impressed me by her message from the restless and contradictory 18<sup>th</sup> century, which connected old and present times through eternity and magic of minerals. It seems especially amazing that the triple link of the Urals, St.-Petersburg, and Hungary is the main essence of the collection. The domi-



Figure 21. **Cervantite**, **stibnite**. 8.2 x 6.6 x 2.7 cm. Nerchinsk, Siberia, Russia. #BE24510, AP#494.



Figure 22. Polybasite.  $7.6 \times 5.0 \times 4.2$  cm. Banska Stiavnica, Slovakia. #BE24384, AP#324.

#### Photos 21-23: Richárd Zoltán Papp.

Figure 23. **Talc**. 6.8 x 5.2 x 3.8 cm. Ural, Russia. #BE24378, AP#204



nance of specimens from the Urals indicates that it was a backbone of the Russian Empire, an ideological catalyst and material source of the mineralogical science and practical approach.

For obvious reasons, the mineralogical collection of the Budapest University has many Russian minerals in its systematic and thematic collections. Russia is one of the richest mineralogical treasuries of the world. The Russian participants of the  $20^{\rm th}$  Congress of the International Mineralogical Association replenished this museum-collection by presenting about one hundred of mineral specimens, some of them unique. These included yushkinite  $V_{l+x}S_n$  (Mg,Al)(OH) $_3$ , which was demonstrated in the well visible showcase together with the other gifts and the namesake book by Makeev and Kovalchuk (Syktyvkar: Geoprint, 2006).

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