

## THE ECOLE des MINES: Two Centuries of Friendly Relations with Russia

Lydie Touret, Jacques Touret  
Musée de Minéralogie, Paris (France)  
jacques.touret@ensmp.fr

All documents & samples from the library or Musée de Minéralogie Ecole des Mines (MM EM).

*Credit photos: Jacques Touret, if not indicated otherwise.*

*Photo 1.* Facade hotel «Vendôme» (detail, architect J.B.A. Le Blond), facing Jardin du Luxembourg.

*Photo 2.* The central part of Peterhof Palace, built by the same architect, J.B.A. Le Blond.

The Ecole des Mines de Paris was founded by the decree of King Louis XVI of 1783 (photo 4), ten years after those of empress Catherine II the Great which founded the Cadet Mining Corps of Saint Petersburg (October 21, 1773). Probably because of its many mines, Russia was somewhat faster than France to follow a model first initiated in Saxony with the Freiberg Mining academy of A.G. Werner (1765). France was apparently more concerned with roads or bridges than mines, as the first of the «Grandes Ecoles», which under Napoléon should become the cornerstone of French scientific and technical education, was the «Ecole Royale des Ponts et Chaussées», founded as early as 1747 by Daniel-Charles Trudaine, minister of the «Roi Soleil», Louis XIV.

All these establishments went through the «meanders of history», as French people say, loosing or regaining their royal stature in the course of successive revolutions or restorations, changing their names (presently: Mines-ParisTech for Paris and State Mining Institute and Technical University for Saint Petersburg), but never ceasing to play a most important role in their respective countries. This is especially true for the Ecole des Mines (the old name still continues to be in common use), which in this year 2009 is just between two anniversaries: 225 years of its foundation as «Ecole Royale des Mines» and, possibly more important, the bicentennial anniversary of the Code Minier by Napoléon (1810), which gave to the Ecole the place and status it has today in French society. It is interesting to note that the Paris Ecole des Mines and the Mining





Photo 3. The rare portrait of J.G. Schreiber, technical director of the Ecole des Alpes (now in the Ecole des Mines, Paris, France).

Photo 4. The decree, signed by Louis XVI, founding the Ecole des Mines.

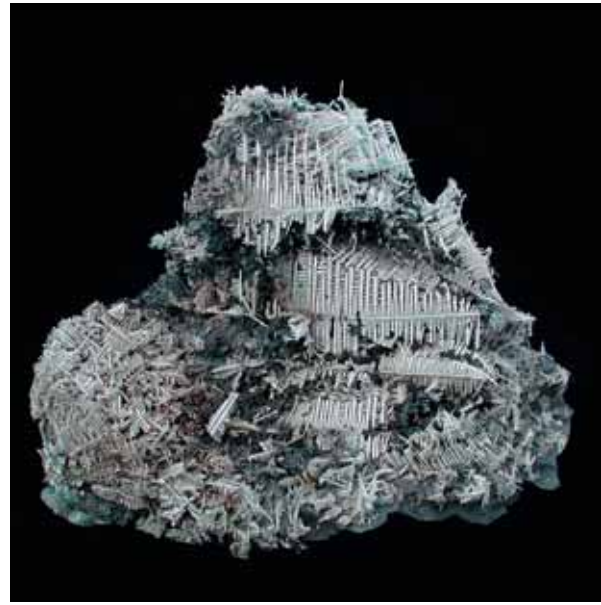


<sup>1</sup> Bessudnova Z.A. (2006) // Mineral Observer, Mineralogical Almanac, volume 10, pp 34–45

Institute in Saint Petersburg, which despite all problems which may have happened between their respective countries, have always kept close relationships, share many points in common: both are located in spectacular historical buildings in the centers of their respective cities, which both were built or rebuilt almost at the same time: In Saint-Petersburg, the neoclassical, Greek-looking temple built by Andrey Voronikhin in 1811, and, in Paris, the «Hôtel de Vendôme», first constructed by the architect Jean Baptist Alexandre Le Blond in 1707, but completely transformed when the Ecole des Mines finally entered the place in 1815. This architect is by no mean an unknown person in Saint Petersburg. He was named by Tsar Peter the Great in Saint-Petersburg in 1716, as one of the first of an international group (Germans, Italians) which should design the new city. Unfortunately he died from smallpox after only 5 years, but had already drawn the plans for several buildings, notably the central part of Peterhof (which, in its conception, shares a number of features in common with the Hôtel de Vendôme) (photo 1, 2). According to Zoya A. Bessudnova<sup>1</sup>, the «Father» of Russian mineralogy, Nickolai Ivanovich Koksharov, one of the students of the Cadet Mining Corps, (as the Saint Petersburg Mining Institute was then know), was so impressed by R.J. Haüy's *Traité de Minéralogie*, with its excellent drawings and plates, that he decided «to make something similar for Russian minerals». René-Just Haüy was the first professor of crystallography and mineralogy at the Ecole des Mines, writing his treatise using samples from the Ecole collections. Then, as Napoléon has decided to send the Ecole to the Alps (he thought that the center of Paris was not the best place to find new mines!), Haüy just moved a few blocks to join the Museum d'Histoire Naturelle. The fall of Napoléon brought an abrupt end to the Alpine idea, even if the results had not been negligible. The Ecole had to gain its own funding from an old silver mine, the Monts d'Argent at Pesey-Nancroix (Savoie). Thanks to the skills of its director, Freiberg-trained Johann Gottfried Schreiber (photo 3), the mine made money only during the seven years of the Ecole presence. In 1815, students, professors and specimens came back to Paris (by foot!), to enter first the Petit Luxembourg palace, close to the Palais du Luxembourg, home of the Senate. Then, as the president of the Senate wanted to have the Petit Luxembourg for his own apartment (which the present president still has), the Ecole moved across the Jardin du Luxembourg, to find its final location at the Hôtel de Vendôme.

## 19<sup>th</sup> Century: The Ecole des Mines' Golden Age

The years that followed Waterloo initiated a tumultuous period of successive restorations and revolutions in France, which finally experienced only two decades of relative tranquillity during the Second Empire, between 1852 and 1870. Political troubles also coincided with a real industrial revolution, the introduction of modern technology. The new industry was in great need of new mineral resources, first of all coal and iron, as well as new means of communication and transportation, especially railways. These objectives fit perfectly with the mission of the Ecole des Mines but, after 1815, everything had to be started again. Sold to a notary after the Revolution, the Hôtel de Vendôme had progressively deteriorated, being transformed into a number of cheap apartments. It was on the verge of collapse, when the Ecole finally entered it. Luckily Napoléon III, the new emperor, was himself very fond of mineralogy and geology, and he ordered his adminis-



*Photo 18. Hematite (Iron rose) on quartz, diameter 30 cm. Brazil. MM EM No 6268.*

*Photo 19. Silver (skeletal crystals), width 15cm. From old mine dumps, Pohla, Erzgebirge, Germany. MM EM No 63958.*

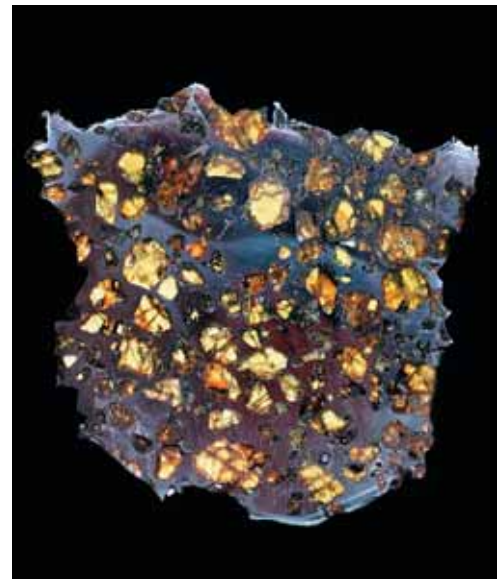
*Photo 20. Quartz with methane inclusions (Herkimer diamond), length 1.5 cm. Herkimer Co, New York, USA. MM EM No 1068.*

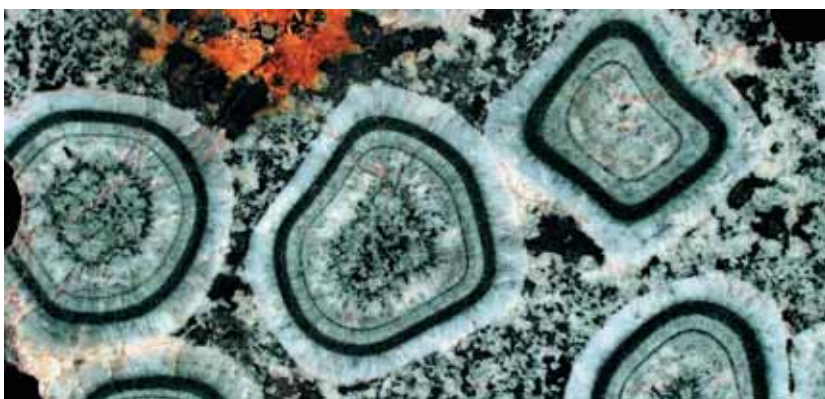
*Photo 21. Pyrrargyrite (crystals up to 2–2.5cm). Harz, Germany. MM EM No 554.*

*Photo 22. Autunite, 20 cm. L'Huis Saint Jacques, Morvan, France. MM EM No 16270.*

*Photo 23. Pallasite (polished slab), 17 cm. Esquel meteorite, Argentina, fall 1961. MM EM No LT2.*

**Photo: J.M. Le Cléac'h.**





*Photo 24.* Group of **amethyst** crystals, 17 cm. Due West, Abbeville Co., South Carolina, USA. MM EM No 1505.

*Photo 25.* **Dufrenoyite** crystal (3 cm) and quartz in gypsum. Lengenbach, Binn Thal, Switzerland. MM EM No 522.

*Photo 26.* **Orbicular diorite** (Napoleonite), diameter orbicules: 5 cm. Santa Lucia di Tallano, Corsica, France. Specimen was on World Exhibition, Paris, 1855. MM EM No E97.

*Photo 27.* **Franklinite**, biggest crystal 10 cm. Franklin Furnace, New Jersey, USA. MM EM No 6279.

*Photo 28.* Blue **fluorite**, 4.2 cm. Le Beix, Puy de Dôme, France). MM EM No 45662.

