

## THE TATARSTAN NATURAL HISTORY MUSEUM AND ITS MINERALOGICAL COLLECTION

Oleg P. Shilovskiy, Oleg N. Lopatin

Tatarstan Natural History Museum, Kazan city, biarmiceras@gmail.com,

Mikhail V. Tsyganko

The "Stufnoi Cabinet" Mineralogical Museum, Severouralsk, zigankom@mail.ru

The Tatarstan Natural History Museum was established by a decree of the Cabinet of Ministers of the Republic of Tatarstan in August 2005 to preserve, study and popularize the geological heritage of the Republic of Tatarstan. It was opened on September 1, 2008.

This museum is a unique project for the republic. Its distinctive feature is the combination of classical principles of exposition and modern multimedia technologies. This allows it to be considered not only as a museum, but also as a scientific and educational center, delivering the information about geological history of the Earth, evolution of life, and mineral resources of the Republic of Tatarstan, Russia, and other countries.

The scientific concept of the museum was developed by employees of the Museum-Reserve "Kazan Kremlin," Institute for Geology and Oil and Gas Technologies, and Institute for Physics of Kazan (Volga) Federal University (KFU), Paleontological Institute of Russian Academy of Sciences (Moscow), Central Research Institute for Geology of Non-Ore Minerals (Kazan), Undorovsky Paleontological Museum (Ulyanovsk region), TsNIGR Museum (VSEGEI, Saint-Petersburg), and Engelhardt Astronomical Observatory (Kazan). The project was supervised by Vladimir V. Silantiev, Director of the Schtukenberg Geological Museum, KFU. An art concept

Specimens: Tatarstan Natural History Museum, Museum-Reserve "Kazan Kremlin" (MRKK).



1. The Tatarstan Natural History Museum is a subdivision of the Museum-Reserve "Kazan Kremlin," located in the 19<sup>th</sup> century building of the former Junkers College. Photo: Mikhail V. Tsyganko.



6. The Minerals of the Earth Hall is one of the most beautiful in the museum. Photo: Michael B. Leybov.

complex pattern when cut. These so-called "Volga agates" occur among dolomites and limestones of the Kazanian Stage. Gypsum (including "Maria's glass" and selenite) and anhydrite are also common in Tatarstan (Shishkin *et al.*, 2005).

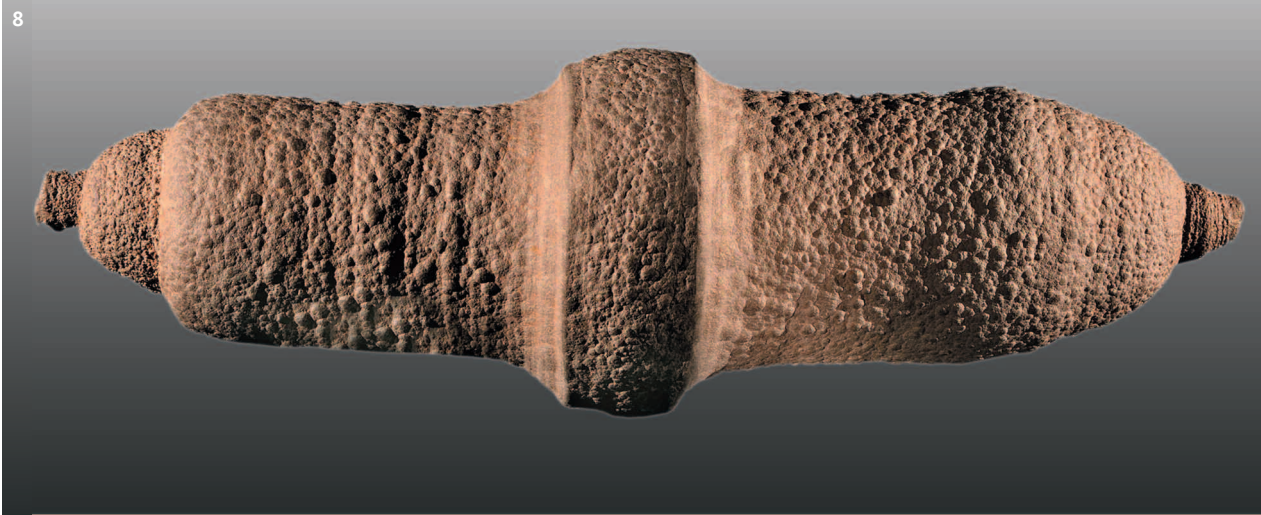
The concretions consisting of fine grained pyrite from Upper Jurassic gray clay have a specific original form. This is a Tarkhanskaya Pristan' occurrence on the right bank of the Volga River in the Tetyush District. It is also worth noting finds of up to 1.5 cm native sulfur crystals in bituminous dolomite and gypsum.

Unfortunately, the widespread sedimentary rocks on the territory of Tatarstan do not favor a variety of mineralogical finds, making them most valuable when they do occur. Museum staff conduct classes for students of local educational institutions and organize field trips to study the geology of Tatarstan, collect paleontological and mineralogical samples, and search for meteorites. As a result of such work, Danir Akhmetshin,

7. Visitors at the showcase of the physical properties of minerals. Photo: Mikhail V. Tsyganko.







8. **Pyrite** (concretion). 24 x 7.5 cm. Tarkhanskaya Pristan' occurrence, Tetyush District, Republic of Tatarstan, Russia. MRKK NVF #813/5. Photo: Michael B. Leybov.

one of the students, recently discovered a previously unknown amethyst occurrence in sili-cified sedimentary rocks in the Bauly District. The best specimens occupy a well-deserved place in the showcases of the mineralogical collection.

Of the minerals found in other regions of our country, there is a rather large collection from the Dalnegorsk polymetallic deposit. These are beautiful specimens of pyrrhotite, galena, sphalerite, and arsenopyrite.

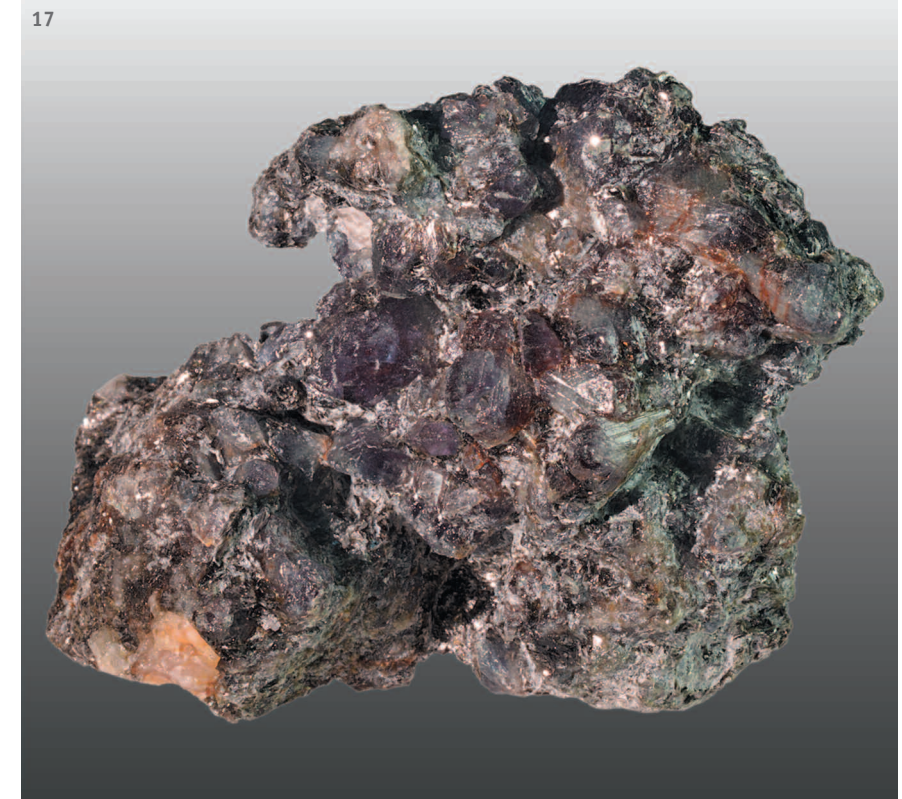
The interesting exhibits from the Urals include a classical perovskite crystal on mag-netite from the famous Perovskite mine near Zlatoust (*Fig. 10*). The collection include specimens from deposits and occurrences not very well-known to many mineral enthu-siasts, such as, for example, a fairly large chromite crystal from the Morkovkino occur-rence in the Polar Urals (*Fig. 15*).

The druse of red-brown calcite twins on light-colored limestone from the North Urals bauxite mine number 14-14bis, so called *Krasnaya Shapochka* (*Little Red Riding Hood*)



9. **Quartz** (amethyst). 9 x 4.5 x 4 cm. Bauly district, Republic of Tatarstan, Russia. MRKK NVF. Photo: Mikhail V. Tsyganko.

17. **Chrysoberyl** (alexandrite). 6.5 x 5.5 cm. Mariinskoe deposit, Ural Emerald Mines, Middle Urals, Russia. MRKK KP #1667.



18. **Spinel**. 10.5 x 9.0 cm. Goron-dara River, Southwestern Pamir, Tajikistan. MRKK KP #1668.

