

VLADIMIR I. VERNADSKY ABROAD: YEARS OF STUDIES AND RESEARCH

Jacques Touret

Mineralogical Museum of École-des-Mines, Paris,
jtouret@orange.fr

Zoya A. Bessudnova

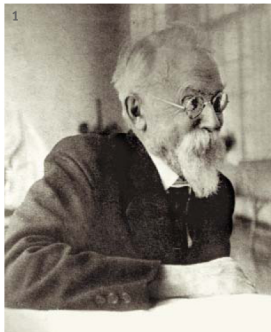
Vernadsky State Geological Museum, RAS, Moscow,
zoyaa@yandex.ru

Historical photos are provided by:

1. Historical collections of School of Mines, Paris (the Fonds Historiques, École des Mines de Paris (now Mines-Paristech)) (10, 11, 12, 13, 15);
2. National Museum of Natural History (Le Muséum National d'Histoire Naturelle (MNHN), Paris (16, 17, 19, 32, 33, 34);
3. the Group of the Geology History of the Geological Institute RAS (1, 3, 7, and 31);
4. Archive of the Russian Academy of Sciences, Moscow (4).

Photo of mineral specimens from
Vernadsky State Geological Museum,
Russia Academy of Science (VSGM RAS),
Moscow: Michael B. Leybov.

1. Vladimir I. Vernadsky at the International Geological Congress in Moscow, 1937.



Vladimir Ivanovich Vernadsky (1863–1945) — a natural scientist, explorer, thinker, public figure, mineralogist and crystallographer by education, philosopher and science methodologist by vocation, one of the founders of the biosphere theory, and the author of the concept of transformation of biosphere into noosphere — he had a deep impact on the development of science (Fig. 1). His works resulted in the development of new areas of science — genetic mineralogy, biogeochemistry, and radiogeology. Together with A.E. Fersman and V.M. Goldschmidt, Vernadsky stood at the origins of geochemistry.

Scientific heritage of V.I. Vernadsky influenced the entire world. His works were translated and published in Russian, French, English, German, and Japanese languages. In Russia and in Ukraine, there are regularly held scientific conferences, symposia, and readings dedicated to Vernadsky. He is commemorated in the names of organizations and places, including Geological Museum in Moscow, the famous Institute of Geochemistry and Analytical Chemistry (Russian Academy of Sciences), which has a memorial Vernadsky's office-museum, the National Ukrainian Library in Kyiv, Crimea Federal University, Ukrainian research station in Antarctica, streets in Moscow and Kyiv, a mountain on the Paramushir Island (Kuril Isles, Russian Far East), subglacial mountains and a peninsula in the eastern part of Antarctica.

Vernadsky's name was broadly mentioned in 2013, the year of his 150th anniversary. A commemoration symposium was organized on April 18th, 2013 in the House of Scientists, Russian Academy of Sciences in Moscow. Scientific conferences were held in Moscow, St. Petersburg, Tambov, and Simferopol. 2013 was announced by UNESCO the year of Vladimir I. Vernadsky.

A roundtable conference "Scientific Heritage of Vladimir Vernadsky — Fundamental Basis of the Scientific Revolution of 21st Century and Establishment of Noospheric Civilization" was held in the Russian Center for Science and Culture in Paris (France) as part of the international project "Vernadsky Parallels," which saw participation of scientists from many countries where V.I. Vernadsky worked during his lifetime, particularly France, Czech Republic, Germany, Ukraine, and Russia.

Experts from many countries spoke of Vernadsky's role in the unification of the scientific potential of many world's nations, including Russia and France. In Vernadsky's words: "The primary focus of my life is scientific work, research, free scientific thinking, and creative search of truth by an individual."

Just recently, the name of V.I. Vernadsky was in the news in France in part due to the new translation and revised edition of one of his important works "Biosphere" (Fig. 37).

26



26. **Amblygonite**. 8 x 4.5 x 4 cm. Montebas, Creuse, France. Type locality of the mineral. Specimen: VSGM RAS, #MH-22243, Collection of V.I. Vernadsky, 1906.
27. **Romanèchite**. 12 x 9 x 5 cm. Saône-et-Loire, Romanèche, France. Type locality of the mineral. Specimen: VSGM RAS, #MH-13902, Collection of V.I. Vernadsky, 1900.
28. **Quartz**. 13 x 8 x 3.5 cm. Mine de Collette, Dep. Allier, France. Specimen: VSGM RAS, #MH-03139, Collection of V.I. Vernadsky, 1900.

Specimens on photo 20–30: Vernadsky State Geological Museum RAS (VSGM RAS),
Photo 20–30: Michael B. Leybov.

29. **Fluorite**. 5 x 3.5 x 3 cm. Château-sur-Cher, Puy-de-Dôme, Auvergne, France. Specimen: VSGM RAS, #MH-17975, Collection of V.I. Vernadsky, 1900.

30. **Baryte**. 7 x 6 x 2.5 cm. Ceyrat, Saulzet, Puy-de-Dôme, Auvergne, France. Specimen: VSGM RAS, #MH-39870, Collection of V.I. Vernadsky, 1900.

27



28



29



30



¹ Genetic mineralogy studies the genesis of minerals: finds out the conditions, patterns, processes that lead to the formation of minerals and their deposits. This term was introduced in 1912 by A.E. Fersman, who was the first in the world to study pegmatites from the point of view of genetic mineralogy.