BOOK REVIEW

SEDIMENTARY PETROGRAPHY by HENRY B. MILNER. Third edition. XXIII+666 pages, 52 plates, 100 figures. Thomas Murby & Co., London; Nordeman Publishing Co., New York. 1940. Price $10.00.

Since the appearance of the second edition of this well-known text in 1929 great strides have been made in the study of sedimentary materials. This is particularly true of the present technique employed in investigating clays and soils. In order to present these modern procedures as well as outline the application of petrographic methods in certain industries, the author has found it necessary to materially revise and expand the earlier edition. The present third edition contains approximately 150 more pages and a change has likewise been made to a larger format (demy 8-vo instead of crown 8-vo).

Additional data are recorded on descriptive mineralogy while the portion devoted to laboratory technique has been expanded to six chapters covering mechanical analysis, *x*-ray, spectrum, fluorescence, and microchemical and microscopical methods employed in the solution of practical problems where sedimentary materials are involved. In the chapter on "Applied Sedimentary Petrology" interesting suggestions are given in the application of optical methods to problems relating to the asphalt industry, ceramics, highway construction, refractories, industrial maladies, and to building and glass technology.

The determinative tables of the former edition have been replaced by a series of appendices listing the essential physical and optical properties in order of increasing numerical values. The book can serve as a comprehensive treatise on the petrology of both consolidated and unconsolidated sediments and is indispensable to petrographers interested in this field, although the high price will no doubt restrict its sale.

W.F.H.

NEW MINERAL NAMES

Saamite

M. I. VOLKOVA AND B. V. MELENTIEV: *Comp. Rend.* (Doklady) *Acad. Sci., U. S. S. R.*, **25,** 120–122 (1939).

Name proposed for high strontium apatites from Poachvumchorr, Takhtarvumchorr and Aevesogchorr, Kola Peninsula, U. S. S. R. They differ from the other apatites of the region in their higher SrO content (6–11%, as opposed to 2–3%).

J. P. MARBLE

Titano-lovenite = (låvenite)

E. I. KUTUKOVA: Titano-lovenite of the Lovozero tundras, *Trans. Inst. Geol. Sci., Acad. Sci. U. S. S. R., Fasc.* **31,** *Mineral.-Geochem. Ser.* (No. 6) 23–29, (**1940**), 2 fig. [Russian, with English summary.]

Essentially låvenite (Brøgger, 1885), with TiO_2 11.30% in place of about 2.00% in the original species. Physical and chemical properties as for låvenite.

OPTICAL PROPERTIES: Optically—; $n_g = 1.760$, $n_m = 1.746$, $n_p = 1.720$; $2V = 73–74°$. Pleochroism distinct: n_g = orange-yellow, n_m = weakly greenish-yellow, n_p = pale yellow with a greenish tint.

OCCURRENCE: Found as xenomorphic grains up to 0.5 mm. diameter in aplite stringers and hornblende syenite, in the central part of the Lovozero alkaline massif, on the Koklukhtiyai River, Kola Peninsula, U. S. S. R.

J.P.M.

Jarošite

JAROSLAV KOKTA, Einigen sulphaten von Smolnik in Slovakia: *Sbornik Kl. Prir. Brne*, **19**, 75–79 (1937), through *Min. Abs.*, **7**, 316 (1939).

NAME: For Zdeněk Jaroš, keeper of minerals in the museum at Brno. (Pronounced jaroschite, yarroshite).

CHEMICAL PROPERTIES: A magnesian melanterite, (Fe, Mg)$SO_4 \cdot 7H_2O$. Analysis: SO_3 30.13, FeO 17.10, CuO 0.04, MgO 5.55, H_2O 47.30; sum 100.12.

PHYSICAL PROPERTIES: Sp. gr. = 1.818. Optically negative, $n = 1.471 - 1.478$ on (001).

MICHAEL FLEISCHER

Cuprojarosite

JAROSLAV KOKTA, *op. cit.*

CHEMICAL PROPERTIES: A magnesian cuprian melanterite. Analysis: SO_3 29.93, FeO 15.18, CuO 4.40, MgO 4.29, MnO tr., H_2O 46.50; sum 100.30.

PHYSICAL PROPERTIES: Sp. gr. = 1.868. Optically positive, mean **n** = 1.472.

M. F.

Kirovite

G. N. VERTUSHKOV, Kirovite and cuprokirovite—new minerals from the pyrite conflagrations of the Urals: *Bull. Acad. Sci. URSS, Sér. Geol.*, **1939**, pp. 109–115; through *Min. Abs.*, **7**, 418 (1940).

CHEMICAL PROPERTIES: A magnesian melanterite. Analysis: SO_3 30.51, FeO 12.75, MgO 7.45, ZnO 0.50, CuO 0.30, MnO 0.18, Al_2O_3 1.42, CaO tr., H_2O 46.68; sum 99.79.

CRYSTALLOGRAPHIC PROPERTIES: Monoclinic, pseudo-octahedral, $a:b:c = 1.1746:1:1.5323$, $\beta = 75°38'$. Cleavages (110) perfect, (001) less perfect.

PHYSICAL PROPERTIES: Sp. gr. = 1.76, H. = $2\frac{1}{2}$. Optic axial plane (010), $\gamma:c = 12°$, $\alpha = 1.467$, $\gamma = 1.476$, 2V large, positive.

OCCURRENCE: Abundant as large yellowish-green stalactites and stalagmites on walls and mine timbers of the Kalata mine, Kirovgrad, where fires have enriched mine waters in sulfates.

M. F.

[Cuprokirovite

G. N. VERTUSHKOV, *op. cit.*

CHEMICAL PROPERTIES: A magnesian cuprian melanterite. Analysis: SO_3 30.11, FeO 18.48, MgO 3.36, ZnO 0.38, CuO 3.18, MnO 0.05, Al_2O_3 0.29, Fe_2O_3 0.22, H_2O 44.50, CaO tr.; sum 100.57.

PHYSICAL PROPERTIES: Monclinic. Pale blue. Sp. gr. = 1.81.

$\alpha = 1.469$, $\gamma = 1.478$.

OCCURRENCE: Same as kirovite.

DISCUSSION: The literature is burdened with four unnecessary names for varieties of melanterite. The name jarošite is particularly bad because it is so readily confused with jarosite.

M. F.