U,* V, W, Zn, Zr. Those marked (*) were rephotographed for this edition. Facing these plates are wave length tables of the most important lines. The spectra for 17 elements are reproduced in two different spectral ranges. Two to four individual spectra of each element prepared by sparking varying weights of material are shown in juxtaposition, which is of great value in selecting useful lines for analytical work.

There are 9 pages of text which contains a brief annotated bibliography of published wave length tables and atlases. The wave lengths of 629 important lines are arranged in numerical order on the last ten pages of the book. The next (longer) stronger line is stated for each. This compact little volume can be recommended both as a handy laboratory manual and reference book of spectral line patterns, as well as a convenient wave length tabulation of the most characteristic spectral lines.

LESTER W. STROCK

ELEMENTS OF OPTICAL MINERALOGY—An Introduction to Microscopic Petrography. ALEXANDER N. WINCHELL. Fifth edition, revised and enlarged. *Part I. Principles and Methods*. xii+263 pages, over 300 illustrations. John Wiley A Sons, Inc., New York, **1937,** Price $3.50.

Professor Alexander N. Winchell's book on *Optical Mineralogy*, has served for many years as one of the leading American texts in this field of Mineralogy. Its popularity is shown by the short intervals between succeeding editions epsecially in recent years: 1908, 1922, 1928, 1931, 1937.

In this the fifth edition the changes made have been in the nature of corrections, minor additions and refinements. Over 60 new or revised illustrations have been added, including recent models of microscopes and other accessory optical instruments. The last chapter is devoted to "Special Methods of Study" in which the applications of the universal stage of Fedorov and the dispersion methods of immersion liquids for the accurate determination of the optical properties of crystallized materials are described in considerable detail.

W. F. H.

NEW MINERAL NAMES

Chlopinite (Klopinite, Hlopinite)

I. E. STARIK: Studies of the "lead method" for measuring geologic time and its application to the determination of chlopinite from Khilok, Transbaikalia. *Inter. Geol. Cong. Report of the XVI session*, U. S. A., **1933,** vol. 1, pp. 217–224, 1936.

NAME: In honor of the Russian chemist, V. G. Chlopin.

CHEMICAL PROPERTIES: A columbo-titanate of uranium, thorium, yttrium and iron. $M_2Cb_2TiO_8$. Analysis: Cb_2O_5 39.92, Ta_2O_5 7.37, TiO_2 10.01, SiO_2 0.61, UO_2 8.12, ThO_2 2.22, Y_2O_3 17.65, Fe_2O_3 8.16, FeO 1.83, MnO 0.26, CaO 0.96, PbO 0.19, BeO 0.03, K_2O+Na_2O 0.24, H_2O 2.94. Sum 100.64. 1.15 cc. helium per gram.

PHYSICAL PROPERTIES: Color black. Isotropic, $n>1.768$. $G=5.24$.

OCCURRENCE: Found with monazite and feldspar at Khilok, Transbaikalia.

W. F. FOSHAG

Talasskite

W. D. NIKITIN: A new variety of the olivene group. *Mem. Soc. Russe. Mineral.*, 2d series, vol. **65,** pp. 281–288, 1936.

NAME: From the locality, Talassa Valley, Kirghizian, U. S. S. R.

CHEMICAL PROPERTIES: A silicate of ferrous and ferric iron, $(FeMg)_5\ Fe'''(SiO_4)_3$. Analysis: SiO_2 29.87, TiO_2 0.08, Fe_2O_3 12.07, FeO 54.88, CaO 0.20, MgO 2.54, Na_2O 0.71, K_2O 0.08, MnO 0.02; Sum 100.45.

PHYSICAL AND OPTICAL PROPERTIES: Color brown, translucent. Not pleochroic. Biaxial. $2V=49°$. Dispersion weak, $r>v$. Plane of the optic axes parallel to the (001) cleavage. $X=b$, $Y=c$, $Z=a$. Cleavage (001) and (010) perfect, (100) good. Brachydome cleavage poor. *G.* 4.1

OCCURRENCE: Found in masses of 4–5 cm. size in a pegmatite vein cutting alaskite granites in the Talassa Valley, Kirghizian, U. S. S. R.

W. F. F.

Labite

N. E. EFREMOV: Labite, a new mineral. *Mem. Soc. Russe Mineral.*, Ser. **2,** 65, pp. 108–117, 1936. English summary.

NAME: From the locality Bolshaya Laba, Northern Caucasus.

CHEMICAL PROPERTIES: A hydrous silicate of magnesium. $H_2MgSi_3O_8 \cdot H_2O$. Analysis: (1) SiO_2 66.23, Al_2O_3 2.24, Fe_2O_3 0.69, CaO 1.15, MgO 14.66, H_2O+ 7.04, H_2O- 8.39; Sum 100.40. (2) SiO_2 67.43, Al_2O_3 1.83, Fe_2O_3 0.50, CaO 0.55, MgO 15.61, H_2O+ 7.10, H_2O- 7.33; Sum 100.35.

PHYSICAL AND OPTICAL PROPERTIES: Color yellowish green. Biaxial, negative; n = about 1.52, birefringence 0.004–0.006. Extinction parallel; plane of the optic axes parallel to the fibers. *G.* about 2.25.

OCCURRENCES: As an aggregate of interlaced fibers in serpentine near granite contact in Laba province, northern Caucasus.

W. F. F.

Calcium ferri-phosphate

N. E. EFREMOV: Calcium ferri-phosphate, a new mineral of the phosphate class. *Mem. Soc. Russe Mineral*, Ser. **2,** 65, pp. 225–232, 1936, with English summary.

CHEMICAL PROPERTIES: A hydrous phosphate of calcium and ferric iron. $2CaO \cdot 3Fe_2O_3 \cdot P_2O_5 \cdot 10\ H_2O+$. Analysis: P_2O_5 22.70, CaO 8.20, FeO 0.53, MgO 0.62, MnO 0.12, Fe_2O_3 28.96, Al_2O_3 2.65, SiO_2 1.42, H_2O+ 1.346, H_2O- 20.89; Sum 99.55. Soluble in acids.

PHYSICAL AND OPTICAL PROPERTIES: Color light brown. Isotropic, $n=1.605$—1.610. Hd. between 2 and 3. Brittle. Gel-like.

OCCURRENCE: Found in fossil shells in the iron ore beds of the Zelesny ravine, Tamanskaya, South Russia.

W. F. F.

Vanado-Magnetite

G. H. TEPPER: Vanadium-bearing magnetite deposits of Dhalbum and Mayurbhang, Behar, India. *Bull. Imp. Inst. London*, vol. **34,** No. 4, pp. 449–452, 1936.

Analysis of magnetites found at Dublabera, Kumharoubi, and other localities in northeastern India showed vanadic oxide contents ranging from 0.59% to 4.84%. Reference is made to vanado-magnetite, without further data, as a constituent of these magnetites, associated with magnetite, hematite, ilmenite and rutile.

W. F. F.

PRESENTATION TO PROFESSOR CHARLES PALACHE

On May 24, at an informal meeting of the Division of Geological Sciences of Harvard University, a collection of "Studies in Mineralogy" was presented to Professor Charles Palache as a token of personal regard and an appreciation of his outstanding and still-continuing service to mineralogy. The presentation volume, which forms the May issue of

The American Mineralogist, contains thirty-five papers by American and European mineralogists and a list of Professor Palache's writings. The short speeches of congratulation emphasized Doctor Palache's eminence as investigator and teacher, collector and curator, and his constant encouragement to every form of mineralogical study. In reply Professor Palache expressed his total surprise at the appearance of the volume and his sincere appreciation of the tribute it conveyed.

Dr. C. H. Smyth, Jr., emeritus Professor of Geology at Princeton University, died April 4 at the Princeton Hospital, from pneumonia and complications resulting from a fractured hip received in a fall two weeks previously. He was 71 years old. He was a member of the Hamilton College faculty for 14 years and of the Princeton faculty for 29 years. His major scientific contributions related to the Clinton type of iron ore, the regional geology and mineral deposits of the northwest Adirondacks, the origin of alkali-rich igneous rocks, and problems of chemical geology.

Mr. Edgar H. Bailey of Ontario, California, has been appointed Teaching Fellow in Mineralogy at Stanford University for 1937–38.

Correction

In the April issue of *The American Mineralogist* transpose the first two lines on page 269.