Mr. Broadwell:- Bismuth from Kingsgate, N. S. Wales. Molybdenite from Deepwater, N. S. W. Arsenopyrite from Emmaville, N. S. W.

Mr. Maynard:- Calcite in fluorite from Weardale, Eng. Fluorite from Cornwall, Eng. Calcite from Weardale, Eng.

Mr. Ashby:- Amethyst with cavities after aragonite. Capped quartz from Schlaggenwald, Bohemia, with 4 cappings each about ¼ inch thick, the complete separation being between the second and third cap. Fossil copal from near Paramaribo, Dutch Guiana, South America, and containing the pupa of insects, similar to white ants. The interesting point being that the contents of the pupa cavity is still liquid in the fossil gum.

Meeting adjourned 9.35 P. M.

HERBERT P. WHITLOCK, *Recording Secretary.*

NEW MINERALS: NEW SPECIES

CLASS: PHOSPHATES, ETC. DIVISION: $R'':U^{vi}:P:H_2O = 2:1:2:1$.

Parsonsite

ALFRED SCHOEP: Sur la parsonsite, nouveau minéral radioactif. [Parsonsite, a new radioactive mineral.] *Compt. rend.*, **176,** (3) 171-173, 1923.

NAME: Dedicated to Professor A. L. *Parsons* of Toronto.

CHEMICAL PROPERTIES: Formula, regarded as probably $2PbO.UO_3.P_2O_5.H_2O$ or $Pb_2(UO_2)(PO_4)_2.H_2O$. Theory, PbO 50.0, UO_3 32.1, P_2O_5 15.9, H_2O 2.0%. Analysis on small samples purified by washing gave: PbO 44.71, CuO 0.25, CaO 0.63, Al_2O_3 1.23, UO_3 29.67, P_2O_5 15.08, TeO_3 3.01, MoO_3 0.43, CO_2 1.19, H_2O 1.56, insol. 1.51%; summation given as 99.47, but actually 99.27%. The Cu is believed to come from admixed torbernite which likewise contains Te and Mo. [Other admixture appears to be present, and it is to be hoped that the formula can be confirmed on purer material.] In the closed tube yields H_2O and becomes yellowish. On charcoal fuses to a black globule. Readily soluble in acids, leaving a slight insoluble residue and giving reactions for Pb, U, and P.

CRYSTALLOGRAPHIC PROPERTIES: Monoclinic or triclinic. Crystals very minute; habit tabular; taking the dominant form as (010), the angles are (100):(001) = 81°; (100):(*hol*) = 47-48°; (001):(*hol*) = 28-29°(?).

OPTICAL PROPERTIES: Biaxial; $n > 1.99$; birefringence weak; elongation +; extinction 12°.

PHYSICAL PROPERTIES: Color, pale brown, mostly due to inclusions; streak, pale brown with rose tinge; structure earthy, minutely crystalline to compact; luster greasy; density = 6.23; radioactive.

OCCURRENCE: Associated with torbernite at Kasolo, Katanga, Belgian Congo.

DISCUSSION: Acceptable as a new species, although the data are not as complete as might be desired. E. T. W.

CLASS: PHOSPHATES, ETC. DIVISION: $R:P:H_2O = 1:1:2$.

Weinschenkite

F. HENRICH: Ueber ein neues Mineral, das seltene Erden als Hauptbestandteil enthält. (A new mineral which contains rare earths as essential constituents); with analytical data by G. HILLER and mineralogical data by H. LAUBMANN. *Edel-Erden und Erze,* **2,** 181, 1921; *Ber. deutsch. chem. Ges.*, **55,** (9), 3013-3021, 1922.

NAME: Given by Dr. Laubmann after the late petrographer of Munich, Professor Ernst *Weinschenk.*

CHEMICAL PROPERTIES: Formula, $(Y,Er)(PO_4)(H_2O)_2$ with Y:Er = 5:1. Theory: R_2O_3 54.1, P_2O_5 30.5, H_2O 15.4, sum 100.0%. Analysis gave: R_2O_3 52.47, P_2O_5 30.20, Fe_2O_3 0.24, insol. 0.38, loss on ign. 16.42, sum 99.71%. Mean atomic weight of rare earths (R) = 102; methods of analysis are described in detail; small amounts of other rare earths are present.

In the closed tube yields water, but no fluorine. Infusible; heated with cobalt solution becomes dark. Readily soluble in dilute acids, but not in alkalies.

PHYSICAL PROPERTIES: Color white; form, matted globular masses, also radiated needles. Closely resembling wavellite, but found by Laubmann to be optically distinct (no data given).

OCCURRENCE: As a coating on limonite iron ores in the Amberg-Auerbach mine, Bavaria. An associated mineral containing much less rare earths is called by Dr. Laubmann "pseudo-wavellite."

REMARKS: Evidently a new species, although the incomplete description is to be regretted. E. T. W.

CLASS: PHOSPHATES, ETC. DIVISION: $R'':R''':P:H_2O = 4:4:6:27.(?)$.

Vauxite

S. G. GORDON: See *Am. Min.*, **7**, (6), 108, 1922; *Science*, **56**, 50, 1922.

CLASS: PHOSPHATES, ETC. DIVISION: $R'':R''':P:H_2O = 1:2:2:11.(?)$.

Paravauxite

S. G. GORDON: *loc. cit.* E. T. W.

ABSTRACTS: CRYSTALLOGRAPHY

THE OPTICAL PROPERTIES OF EPIDOTE. M. GOLDSCHLAG. *Tscher. Min. Petr. Mitt.*, **34**, 23-60, 1917; through *Mineralog. Absts.*, **1**, 346.

The following minerals were examined: (I)Clinozoisite, wine-yellow crystals from the Schwarzenstein Alp, Zillerthal, Tyrol; (II)Olive-green epidote from Pfarrerb, Zöptau, Moravia; (III)Pistachio-green epidote from the Knappenwand, Sulzbachthal, Salzburg; (IV)Deep-green pistazite from Rauhbeerstein, Zöptau. The results were:

	Iron-epidote molecule	α	β	γ	2V (over α)	$\alpha:c$
I.	0%	1.7136	1.7172	1.7188	113°47′	+12°17′
II.	22	1.7217	1.7422	1.7500	80 15	− 2 05
III.	34	1.7262	1.7569	1.7737	73 06	− 4 28
IV.	37	1.7291	1.7634	1.7796	68 53	− 4 53

These and others from the literature are tabulated to show the variation of optical properties (Na light) with the amount of the iron-epidote molecule. E. F. H.

THE BINNENTHAL DOLOMITE, ITS CRYSTAL FORMS, INDICES OF REFRACTION, AND ETCH PHENOMENA. PAUL KOLLER. *Neues Jahrb. Min. Geol.*, Beil.-Bd. **42**, 457-98, 1918; through *Mineralog. Absts.* **1**, 350.

Four types of crystals are described. On the colorless transparent crystals 35 forms are noted. Striations, etch figures, and several third order rhombohedrons show the symmetry. For crystals with $FeCO_3 = 0.09$-0.13%, the indices were: ω_ρ 1.6733, ω_{Na} 1.6799, ω_ν 1.7030, ϵ_ρ 1.4984, ϵ_{Na} 1.5013, ϵ_ν 1.5110. Sp. gr. 2.882.