Crystallized fluorite, varying in color from nearly colorless to yellow, violet, and green, has been collected recently by the author from Abergairn Lead mine, Ballater; Creag an t-Seabhaig, on the north side of the Pass of Ballater; and Na Tri Chaochain, River Avon, between Tomintoul and Inchory, Banffshire. The fluorite and associated minerals are described.

(2) On the occurrence of chondrodite in the Glenelg Limestone of Inverness-shire.

By Prof. H. H. Read and Mr. I. S. Double.

Small grains of chondrodite have been identified in forsterite-marbles from several localities in the Glenelg district. Its most common mode of occurrence is as small granules forming rims round crystals of forsterite, and it is suggested that the chondrodite has been formed from forsterite by the accession of fluorine- and hydroxyl-bearing fluids. Previous records of chondrodite in the British Isles have not been confirmed by recent work.

(3) Ankerites of the Northumberland coalfield.

By Dr. L. Hawkes and Dr. J. A. Smythe.

Ankerite and ankeritic calcite are described from veins in the Coal Measures on the coast at Hartley, and from various seams in the Northumberland Coal field. Evidence is given that, in the portion of the coal-field examined, both minerals are of constant composition, and that the deposition of the ankerite preceded that of the calcite. The ankerites are members of an isomorphous series consisting of dolomite $\text{MgCO}_3 \cdot \text{CaCO}_3$, and ferro-dolomite $\text{FeCO}_3 \cdot \text{CaCO}_3$, with small amounts of mangan-dolomite $\text{MnCO}_3 \cdot \text{CaCO}_3$, and they may hold up to 20% of $\text{CaCO}_3$ in solid solution.

(4) Apophyllite from Traprain Law, East Lothian.

By Mr. J. G. C. Anderson and Mr. S. Elder.

Well-crystallized apophyllite is described from druses in phonolite. The apophyllite is associated with analcime and pectolite. Other localities for apophyllite in Scotland are mentioned.

(5) Studies on the Zeolites, Part IX. Scolecite and Metascolecite.

By Mr. M. H. Hey.

Results of x-ray, goniometric and optical studies on analysed specimens of scolecite and of base exchange experiments are given. Vapour pressure work clearly shows that the water is divided into a more volatile group of 16 and a less volatile group of 8 mols. per unit cell. Before the whole of the first 8 of the more volatile water molecules have been expelled, transition occurs to metascolecite.

(6) A new apparatus for the determination of carbon dioxide.

By Mr. H. H. Hey.

A simple apparatus is described for the collection of carbon dioxide in baryta solution, and the subsequent filtration and washing of the barium carbonate produced with complete exclusion of atmospheric carbon dioxide.

NEW MINERAL NAMES

Janite


Name: From the locality, Janowa Dolina.

Chemical Properties: A hydrous silicate of aluminum, iron, calcium, magnesium, etc. $(\text{R}_2\text{O}, \text{RO}) \text{R}_4\text{O}_7 \cdot 5\text{SiO}_2 \cdot 5 \text{H}_2\text{O}$; (approx.) Analysis: $\text{SiO}_2$ 49.67.
Al₂O₃ 7.58, Fe₂O₃ 15.67, MnO 0.85, CaO 3.33, MgO 3.25, K₂O 0.92, Na₂O 1.46, H₂O 16.57; sum 99.30. Insoluble in hydrochloric and sulfuric acids.


**Occurrence:** Found in a plagioclase-pyroxene rock with secondary quartz, chalcedony, opal, chlorite and iron oxides in segmental spherulites of plates.

**Sahlinite**


**Name:** In honor of Dr. Carl Sahlin.

**Chemical Properties:** A basic chlor-arsenate of lead, 12PbO·As₂O₆·2PbCl₃. Analysis: (by R. Blix) PbO 89.33, As₂O₆ 6.57, CaO 0.46, CO₂ 0.43, Cl₂ 4.05, H₂O 0.10; sum 100.94, (–O:Cl₂ 0.91):10003.

**Crystallographical Properties:** Monoclinic, cleavage parallel to plane of symmetry, prominent.

**Physical and Optical Properties:** Color sulfur yellow. H. 2–3, G. 7.95. Biaxial, negative. Bxₜ is normal to (010). 2E = 96°38'. n high.

**Occurrence:** As aggregates of thin scales with hausmannite in dolomite.

**Kiscellite**


**Name:** From the name—Kiscellar Tegel (formation) of Budapest.

**Chemical Properties:** A sulfur bearing hydrocarbon resin (without oxygen). Analysis: C 84.47, H 11.12, S 3.99, Ash 0.31; sum 99.89. Difficulty soluble. m, p. not sharp. Upon heating evolves H₂S. Ignited burns with a smoky flame with a resinous, aromatic odor.


**Occurrence:** From a sandy layer in the littoral formations of the kiscellar Tegel (Middle Oligocene) formation. Plant remains including conifers, are found in this formation.

**Pseudosillimanite**


In a black aphanitic rock in the conglomerates of Hersback occurs small needle like crystals with lozenge shaped cross section with strong refringence (less than epidote), strong birefringence and positive elongation. The plane of the optic axes
lies across one diagonal and the obtuse bisectrix is perpendicular to the elongation. 2V is not large. From its resemblance to sillimanite it is called pseudo-sillimanite.

W. F. F.

**Lusakite**


**NAME:** From the locality Lusaka, Northern Rhodesia.

**CHEMICAL COMPOSITION:** A silicate of iron, aluminum, cobalt and magnesia: \( \text{H}_2\text{O}.4\text{R}''\text{O}.9\text{Al}_2\text{O}_3.8\ \text{SiO}_2(\text{R}''=\text{Co,Mg,Fe}) \)

- Analysis no. 1 (not quite pure): SiO\(_2\) 27.07, TiO\(_2\) 0.80, Al\(_2\)O\(_3\) 45.15, Cr\(_2\)O\(_3\) trace, Fe\(_2\)O\(_3\) 10.83, FeO 2.22, NiO 0.53, CoO 6.79, MnO trace, MgO 2.44, CaO nil, H\(_2\)O (+110°) 1.00, H\(_2\)O (–110°) 0.35, S 0.07; total 100.25. Analysis no. 2: SiO\(_2\) 27.23, TiO\(_2\) 0.50, Al\(_2\)O\(_3\) 50.72, Cr\(_2\)O\(_3\) n.d., Fe\(_2\)O\(_3\) 4.96, FeO 3.42, NiO 0.89, CoO 8.43, MnO 0.03, MgO 2.56, CaO nil, H\(_2\)O (+110°) 1.19, H\(_2\)O (–110°) nil; total 100.03. Insoluble in all acids including HF.

B. B. infusible but yields a black bead in the electric arc.

**CRYSTALLOGRAPHICAL PROPERTIES:** Orthorhombic; habit tabular to equidimensional. Forms (010) and (110). 010, 110: 64°37'. a:b:c=0.474:1 (Goniometric); 0.473:1:0.340 (x-ray). Space group \( V_\text{h}17 \). Unit cell dimensions \( a=7.86 \), \( b=16.62 \), \( c=5.65\AA \).

**PHYSICAL AND OPTICAL PROPERTIES:** Color black, small crystals deep cobalt blue by transmitted light. Streak light blue. Luster vitreous. Brittle. Fracture subconchoidal. \( \alpha=7.7-11.2 \). G. 3.767. Under the microscope vivid cobalt blue. Cleavage (010) distinct, (100) less so. \( n \) about 1.74. 2V large, parallel extinction. Strongly pleochroic. X=coalt-blue, Y=violet blue, Z=violet.

**Occurrence:** Found in a gneissoid rock intimately associated with quartz, cyanite and magnetite, about 80 miles east of Lusaka, Northern Rhodesia. Lusakite forms from 5–40% (average 30%) of the rock.

W. F. F.

**Hydrocalumite**

C. E. Tilley: Hydrocalumite \( (4\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 12\text{H}_2\text{O}) \), a new mineral from Scawt Hill, Co. Antrim. *Mineral. Mag.*, vol. 23, no. 146, pp. 607–615, 1934.

**NAME:** In allusion to its composition as an hydrated calcium aluminate.

**CHEMICAL COMPOSITION:** An hydrated calcium aluminate; \( 4\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 12\text{H}_2\text{O} \).

- Analyzes (by M. H. Hey): CaO 41.5, 40.0; Al\(_2\)O\(_3\) 18.8, 18.1; H\(_2\)O 38.5; CO\(_2\) 1.8; [ign. 40.3]. Soluble in weak HCl. Alkaline to litmus. In closed tube decrepitates and gives off water.

**CRYSTALLOGRAPHICAL PROPERTIES:** Monoclinic, pseudo-hexagonal. \( a=9.6 \AA, b=11.4 \AA, c=16.84 \AA, \beta=69° \). Space-group \( P2_1 \). Cleavage: basal, perfect.

**PHYSICAL AND OPTICAL PROPERTIES:** Colorless to light green. Luster vitreous inclining to pearly on cleavage surfaces. Blaixial negative. Cleavage fragments show emergence of acute bisectrix almost normal to cleavage. Plane of optic axis parallel to (010). Y=b, a=1.535, \( \beta=1.553, \gamma=1.557. \) 2V=24°-2°. Uniaxial at 90–95°C. H. d. 3. G. 2.15.

**Occurrence:** Found as infillings in larnite rock from Scawt Hill with afwillite, portlandite and ettringite.

W. F. F.
Matlockite


A new analysis of matlockite from Cromford, Derbyshire, gave: Pb 79.55, F 7.11, Cl 13.44. G. = 7.05. These results confirm the suggestion of Nieuwenkamp (cf. Am. Mineral., vol. 19, p. 287, 1934) that matlockite is a lead fluochloride. X-ray and optical data are also given.

W. F. F.

Errata

The following corrections should be noted in the article by N. Sundius, Am. Mineralogist, vol. 16, pp. 488-518, 1931: Page 505, fourth line from top, read “γ−β=0.014,” instead of “β−α=0.014.” Read “β=1.740” instead of “β=1.752.” Page 518, Table II, for No. 13, Sobralite, V. Silvberg (anal. 14), read under β “1.740” instead of “1.752.”