NEW MINERALS

FLOKITE


NAME: After the Viking, Floki Vilgerdarson, Iceland's third discoverer, who gave the island its name.

PHYSICAL PROPERTIES

COLOR: Transparent and colorless, or with a faint gold-greenish hue, sometimes dark colored by inclusions. Luster: vitreous. Form: thin slender prismatic crystals 1-1.5 cm. by ½ mm. H. = 5; Sp. Gr. = 2.102.

CRYSTALLOGRAPHIC PROPERTIES

Monoclinic. 100:110 = 41° 18'. Forms: (110), (100), (010), faces vertically striated. Sections parallel to (010) show twinning on (010). Cleavage (100) and (010) perfect. Fracture: conchoidal across prism zone.

OPTICAL PROPERTIES

Thin sections perpendicular to the prism zone show a division into segments with different optical orientation. In the center the optical axial plane is perpendicular to (010). b = γ, c : α = about 5°. Optically —. Axial angle large. Acute bisectrix nearly parallel to c axis. αγα = 1.4720, γαα = 1.4736 (γ-α) = 0.0016. On warming to 117°-118° the sign changes.

CHEMICAL PROPERTIES

Composition: H₄(Ca,Na₂)Al₂Si₆O₁₈·2H₂O. Analysis by C. Christensen: SiO₂ 67.69, Al₂O₃ 12.43, MgO 0.09, CaO 2.65, Na₂O 4.36, K₂O 4.53, H₂O 8.82, sum 100.57.

B. B. fuses easily with intumescence. Insol. in boiling HCl.

Locality uncertain; the material was found on an old specimen of mesolite in the museum at Copenhagen labeled from “Eskelfjord Iceland”, but a specimen from Teigerhorn showed optically the presence of flokite. S. G. G.

TUNGSTENITE


NAME: Tungstenite from its composition, a tungsten sulfide, and its similarity in formula and some of its properties to molybdenite.

PHYSICAL PROPERTIES


CHEMICAL PROPERTIES

Composition: probably WS₂; not yet found pure.

Unattacked by hydrochloric acid or nitric acid; decomposed by aqua regia or by fusion with sodium nitrate.

Occurrence

In a hydrothermal deposit, a replacement of a brecciated zone in Paleozoic limestone, the Emma mine, Little Cottonwood District, Salt Lake Co., Utah, associated with tennantite, tetrahedrite, pyrite and galena. S. G. G.