Crystal Data: Monoclinic, pseudo-orthorhombic. Point Group: 2/m. As delicate needles, to several mm long.

Physical Properties: Hardness = n.d. D(meas.) = 1.43 D(calc.) = 1.467

Optical Properties: Semitransparent. Color: Yellow, yellowish green. Optical Class: [Biaxial (+).] Orientation: X || elongation. $\alpha = \sim 1.75$ $\beta = \sim 1.75$ $\gamma = \sim 2.0$ 2V(meas.) = n.d.

Cell Data: Space Group: $P2_1/a$. a = 15.81 b = 3.967 c = 7.876 $\beta = 102.67^{\circ}$ Z = 2

X-ray Powder Pattern: Synthetic. (ICDD 28-2002). 3.52 (100), 7.69 (95), 3.36 (80), 6.16 (50), 3.84 (35), 3.14 (14), 3.79 (10)

Chemistry: (1) Modern identification would depend on coincidence of X-ray powder diffraction pattern with that of synthetic material (anthraquinone).

Occurrence: Very rare, in crusts around the surface vents of a burning coal deposit.

Association: Sal ammoniac, sulfur.

Distribution: On Mt. Pyramide, Spitsbergen, Norway.

Name: Honors Adolf Hoel (1879–1964), leader of the discovery expedition to Spitsbergen during which the mineral was found.

Type Material: Mineralogical-Geological Museum, University of Oslo, Oslo, Norway, 21981.

References: (1) Oftedal, I. (1922) Minerals from the burning coal seam at Mt. Pyramide, Spitsbergen. Resultater av de Norske Statsunderstøttede Spitsbergenekspeditioner, 1(3), 9-14. (2) (1923) Mineral. Abs., 2, 10 (abs. ref. 1).