Fichtelite $C_{19}H_{34}$

Crystal Data: Monoclinic. *Point Group*: 2. As crystals, elongated along [010], and tabular on {001}, to 3 mm.

Physical Properties: *Cleavage*: Good on {001} and {100}. Hardness = "Soft". D(meas.) = n.d. D(calc.) = 0.631 M.P. 44.2 °C-45.0 °C.

Optical Properties: Transparent. *Color*: Colorless, white, pale yellow. *Luster*: Greasy. *Optical Class*: [Biaxial.] α = n.d. β = n.d. γ = n.d. 2V(meas.) = n.d.

Cell Data: *Space Group*: $P2_1$. a = 10.706(4) b = 7.458(2) c = 10.824(7) β = 105.85(3)° Z = 2

X-ray Powder Pattern: Sobeslav, Czech Republic.
5.206 (100), 6.100 (90), 4.292 (90), 5.644 (20), 10.533 (10), 3.029 (10), 3.710 (5)

Chemistry:

	(1)	(2)
C	87.13	86.94
H	12.86	13.06
Total	99.99	100.00

(1) Marktredwitz, Germany. (2) $C_{19}H_{34}$.

Occurrence: In fossilized pine wood from a peat bog; in organic-rich modern marine sediment.

Association: n.d.

Distribution: In Germany, from Wampen, seven km north of Marktredwitz, and at Zeitelmoos, northwest of Wunsiedel, Fichtelgebirge. At Sobeslav, Czech Republic. Additional older localities require confirmation by modern methods.

Name: For the original locality in the *Fichtel*gebirge, Bavaria, Germany.

References: (1) Dana, E.S. (1892) Dana's system of mineralogy, (6th edition), 1000-1001.
(2) Strunz, H. (1962) Fichtelit. Dimethyl-isopropyl-perhydropenanthren. Naturwissen., 49, 9-10 (in German). (3) Mace, H.A. and R.C. Peterson (1995) The crystal structure of fichtelite, a naturally occurring hydrocarbon. Can. Mineral., 33, 7-11.