Wampenite $C_{18}H_{16}$

Crystal Data: Monoclinic. *Point Group*: 2/*m*. As tablets, flattened on {001}, and blades elongated parallel to [100], to ~ 0.4 mm. *Twinning*: By reflection on {001}, ubiquitous.

Physical Properties: *Cleavage*: {001}, distinct; also, perhaps on {010} and {110}. *Tenacity*: Brittle. *Fracture*: Irregular. Hardness = < 1 D(meas.) = 1.15(1) D(calc.) = 1.113 Soluble in index of refraction liquids.

Optical Properties: Transparent. *Color*: Pale amber. *Streak*: n.d. *Luster*: Greasy. *Optical Class*: Biaxial (+). $\alpha \approx 1.58$ (est.) $\beta \approx 1.66$ (calc.) $\gamma \approx 1.79$ (calc.) 2V(meas.) = 82(2)° 2V(calc.) = n.d. *Orientation*: $X = b$, $Z \wedge c \approx 20°$. *Pleochroism*: $X = Y$ = pale amber, Z = amber. *Absorption*: $X = Y < Z$.

Cell Data: *Space Group*: $P2_1/a$. $a = 6.7331(19)$ $b = 8.689(3)$ $c = 23.709(7)$ $\beta = 90.118(6)°$ Z = 4

X-ray Powder Pattern: Wampen, Fichtelgebirge, Bavaria, Germany.
4.88 (100), 11.92 (49), 5.32 (43), 3.504 (33), 4.366 (28), 3.656 (23), 2.164 (9)

Chemistry:	(1)	(2)
C	92.5	93.04
H	7.6	6.96
Total	100.1	100.00

(1) Wampen, Fichtelgebirge, Bavaria, Germany; average CHN analysis supplemented by high-resolution mass and FTIR spectroscopy. (2) $C_{18}H_{16}$.

Occurrence: On a specimen of fossilized conifer wood.

Association: Fichtelite (perhaps).

Distribution: From the fossil conifer locality at Wampen, Fichtelgebirge, Bavaria, Germany.

Name: For the locality that produced the first specimens, *Wampen*, Germany.

Type Material: Mineral Sciences Department, Natural History Museum of Los Angeles County, Los Angeles, California, USA (63558).

References: (1) Mills, S.J., A.R. Kampf, F. Nestola, P.A. Williams, P. Leverett, L. Hejazi, D.E. Hibbs, M. Mrorsko, M. Alvaro, and A.V. Kasatkin (2017) Wampenite, $C_{18}H_{16}$, a new organic mineral from the fossil conifer locality at Wampen, Bavaria, Germany. Eur. J. Mineral., 29(3), 511-515. (2) (2018) Amer. Mineral., 103, 662 (abs. ref. 1).