

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As irregular masses, to 30 μm, in between other minerals.

**Physical Properties:** *Cleavage:* None. *Fracture:* Irregular. *Tenacity:* Brittle. *Hardness* = 5 VHN = 534 (25 g load). D(meas.) = n.d. D(calc.) = 5.322  
Weak yellowish fluorescence under SW and LW UV.

**Optical Properties:** Transparent. *Color:* Yellow-brown. *Streak:* Yellowish white.  
*Luster:* Strongly vitreous.

*Optical Class:* Biaxial (n.d.). *n*(calc.) = 1.78(3) *α* = n.d. *β* = n.d. *γ* = n.d. 2*V* = n.d.

**Cell Data:** *Space Group:* P2<sub>1</sub>/n. *a* = 5.739(1) *b* = 5.951(1) *c* = 8.312(1) *β* = 90.4(1)° *Z* = 2

**X-ray Powder Pattern:** Jabel Harmun, Judean desert, West Bank, Palestinian Autonomy, Israel. 2.938 (100), 2.922 (99), 4.131 (79), 4.838 (78), 2.975 (47), 2.065 (47), 2.869 (43)

<b>Chemistry:</b>	(1)
UO <sub>3</sub>	63.36
CaO	36.28
Total	99.64

(1) Jabel Harmun, Judean desert, West Bank, Palestinian Autonomy, Israel; average of 14 electron microprobe analyses supplemented by Raman spectroscopy; corresponding to Ca<sub>2.98</sub>U<sub>1.02</sub>O<sub>6.04</sub>.

**Occurrence:** In the Hatrurim Formation (“Mottled Zone”). Formed by pyrometamorphism due to combustion of organic-rich material at temperatures above 800 °C., during a retrograde stage by fluids/melts of high alkalinity.

**Association:** Larnite, brownmillerite, ye’elimite, vorlanite, fluorellestadite.

**Distribution:** At Jabel Harmun and Nabi Musa, Judean desert, West Bank, Palestinian Autonomy, and from the Hatrurim Basin, Negev Desert, Israel.

**Name:** Honors Yevgeny Vapnik of Ben Gurion, University of the Negev, Beer Sheva, Israel, for his mineralogical studies of the Hatrurim Formation.

**Type Material:** Museum of Natural History, Bern, Switzerland (NMBE 42401).

**References:** (1) Galuskin, E.V., I.O. Galuskina, J. Kusz, T. Armbruster, K.M. Marzec, P. Dzierżanowski, and M. Murashko (2014) Vapnikite Ca<sub>3</sub>UO<sub>6</sub> - a new double-perovskite mineral from pyrometamorphic larnite rocks of the Jabel Harmun, Palestinian Autonomy, Israel. *Mineral. Mag.*, 78(3), 571-581. (2) (2015) *Amer. Mineral.*, 100, 1330-1331 (abs. ref. 1).