Paraschoepite $UO_3 \cdot 1{-}2H_2O$

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Crystals short prismatic to tabular on [001], to several mm, showing large {001}, {100}, and {010}, commonly terminated by numerous {*hkl*} forms.

Physical Properties: *Cleavage:* Perfect on {001}; good on {010}. *Tenacity:* Very brittle. Hardness = 2–3 D(meas.) = n.d. D(calc.) = [4.47–4.73] Radioactive.

Optical Properties: Translucent. *Color:* Yellow with a slightly greenish hue; yellow in transmitted light, showing zonation. *Streak:* Yellow.
Optical Class: Biaxial (–). *Pleochroism:* X = colorless to pale yellow; $Y = Z$ = yellow to golden yellow. *Orientation:* $X = c$; $Y = b$; $Z = a$. *Dispersion:* $r > v$. $\alpha = 1.700$–1.705 $\beta = 1.750$–1.760 $\gamma = 1.770$ 2V(meas.) = 40°

Cell Data: *Space Group: Pbca.* $a = 14.12(4)$ $b = 16.83(5)$ $c = 15.22(5)$ Z = 32

X-ray Powder Pattern: Shinkolobwe, Congo; identical to metaschoepite.
5.09 (100), 3.45 (25), 3.39 (17), 2.89 (7), 2.48 (7b), 2.542 (6), 1.774 (6)

Chemistry:

	(1)
UO_3	89.26
PbO	0.00
H_2O	10.73
Total	99.99

(1) Shinkolobwe, Congo; corresponds to $UO_3 \cdot 1.9H_2O$.

Occurrence: An alteration product of schoepite from the oxidized zone of uranium-bearing mineral deposits.

Association: Schoepite, becquerelite, uraninite (Shinkolobwe, Congo); schoepite, arsenuranylite, metazeunerite, uranospinite, nováčekite (Cherkasar deposit, Uzbekistan).

Distribution: At Shinkolobwe, Katanga Province, Congo (Shaba Province, Zaire). From the Cherkasar uranium deposit, Chatkal Mountains, Uzbekistan.

Name: From the Greek for *near*, and for its relation to *schoepite*.

Type Material: National Museum of Natural History, Washington, D.C., USA, 94712.

References: (1) Schoep, A. and S. Stradiot (1947) Paraschoepite and epiianthinite, two new uranium minerals from Shinkolobwe (Belgian Congo). Amer. Mineral., 32, 344–350. (2) Schoep, A. and S. Stradiot (1948) Crystals of paraschoepite. Amer. Mineral., 33, 513–514. (3) Christ, C.L. and J.R. Clark (1960) Crystal chemical studies of some uranyl oxide hydrates [schoepite-III]. Amer. Mineral., 45, 1026–1061. (4) Christ, C.L. (1965) Phase transformations and crystal chemistry of schoepite. Amer. Mineral., 50, 235–239.