Strashimirite $Cu_8(AsO_4)_4(OH)_4 \cdot 5H_2O$

Crystal Data: Monoclinic. *Point Group:* $2/m$, m, or 2. Thin tabular, elongated to fibrous crystals, to 4 mm, typically in radiating spherulitic aggregates, to 1 cm, and in crusts.

Physical Properties: *Cleavage:* May exhibit parting $\perp$ elongation. Hardness = n.d. D(meas.) = n.d. D(calc.) = [3.67]

Optical Properties: Semitransparent. *Color:* White to pale green. *Luster:* Pearly to greasy. *Optical Class:* Biaxial (–). *Pleochroism:* Weak; Y = very pale yellowish green; Z = yellowish green. *Orientation:* $Z \wedge$ elongation $\simeq 5°$. $\alpha = 1.726(1)$ $\beta =$ n.d. $\gamma = 1.747(2)$ 2V(meas.) = 70°

Cell Data: *Space Group:* $P2/m$, Pm, or $P2$. $a = 9.70$ $b = 18.90$ $c = 9.127$ $\beta = 97°15'$ Z = 3

X-ray Powder Pattern: Zapachitsa deposit, Bulgaria.
18.74 (10), 2.86 (10), 8.97 (9), 3.13 (9), 9.46 (8), 4.79 (8), 4.21 (8)

Chemistry:

	(1)	(2)
As_2O_5	38.3	37.61
CuO	49.8	52.07
ZnO	2.0	
H_2O	[9.9]	10.32
Total	[100.0]	100.00

(1) Zapachitsa deposit, Bulgaria; H_2O by difference, corresponds to $(Cu_{7.70}Zn_{0.30})_{\Sigma=8.00}(AsO_4)_{4.08}(OH)_{3.52} \cdot 5H_2O$. (2) $Cu_8(AsO_4)_4(OH)_4 \cdot 5H_2O$.

Occurrence: A secondary mineral in the oxidation zone of Cu–As-bearing mineral deposits.

Association: Tyrolite, cornwallite, clinoclase, euchroite, olivenite, parnauite, goudeyite, arthurite, metazeunerite, chalcophyllite, cyanotrichite, scorodite, pharmacosiderite, brochantite, azurite, malachite, chrysocolla.

Distribution: At the Zapachitsa copper deposit, Ismerez, Stara-Planina, Bulgaria. From Novoveská Huta, Czech Republic. On the west flank of Cherbadung [Pizzo Cervandone], Binntal, Valais, Switzerland. In Germany, from Kamsdorf and Saalfeld, Thuringia; at the Clara mine, near Oberwolfach, Black Forest; in the Richelsdorf Mountains, Hesse; and elsewhere. From the Cap Garonne mine, near le Pradet, Var, and Triembach-au-Val, Haut-Rhin, France. At Wheals Gorland and Unity, Gwennap, Cornwall, England. In the Tynagh mine, near Loughrea, Co. Galway, Ireland. In the USA, in Nevada, at the Majuba Hill mine, Antelope district, Pershing Co., in the Nickel mine, Table Mountain district, Churchill Co., from the San Rafael mine, Lodi district, Nye Co., and the Burrus mine, Pyramid district, Washoe Co.; from Gold Hill, Tooele Co., and in the Centennial Eureka mine, Tintic district, Juab Co., Utah.

Name: To honor Strashimir Dimitrov, Bulgarian petrographer.

Type Material: Natural History Museum, Sofia; University of Sofia, Sofia, Bulgaria.

References: (1) Mincheva-Stefanova, I. (1968) Strashimirite, a new hydrous copper arsenate. Zap. Vses. Mineral. Obshch., 97, 470–477 (in Russian). (2) (1969) Amer. Mineral., 54, 1221 (abs. ref. 1). (3) Minčeva-Stefanova, J. (1986) Parageneses of strashimirite. Geohimija, Mineralogija i Petrologija, 20–21, 49–57 (in Bulgarian with English abs.). (4) (1988) Mineral. Abs., 39, 116 (abs. ref. 3).