Eliopoulosite V_7S_8

Crystal Data: Hexagonal. *Point Group*: 32. As anhedral to subhedral grains to 80 μm.

Physical Properties: Cleavage: n.d. *Tenacity*: Brittle. *Fracture*: n.d. Hardness = n.d.
D(meas.) = n.d. D(calc.) = 4.545

Optical Properties: Opaque. *Color*: Grayish brown in reflected light. *Streak*: n.d.
Luster: Metallic.
Optical Class: Weakly anisotropic, light to dark greenish. Non-pleochroic.
R_1-R_2: (470) 34.8-35.7, (546) 38-39, (589) 40-41.3, (650) 42.5-44.2

Cell Data: *Space Group*: $P3_221$. a = 6.689(3) c = 17.403(6) Z = 3

X-ray Powder Pattern: Calculated pattern.
2.049 (100), 2.591 (45), 1.672 (40), 2.896 (29), 1.296 (20), 1.096 (15), 1.024 (12)

Chemistry:

	(1)	(2)
S	41.78	41.84
V	54.11	58.16
Ni	1.71	
Fe	1.1	
Co	0.67	
Mo	0.66	.
Total	100.03	100.00

(1) Agios Stefanos chromium mine, near Domokos village, Othrys ophiolite, Greece; average electron microprobe analysis; corresponding to $(V_{6.55}Ni_{0.19}Fe_{0.12}Co_{0.07}Mo_{0.04})_{\Sigma = 6.97}S_{8.03}$. (2) V_7S_8.

Occurrence: In heavy mineral concentrates from massive podiform chromitite hosted in a strongly altered mantle tectonite in an ophiolite complex.

Association: Nickelphosphide, awaruite, tsikourasite, grammatikopoulosite.

Distribution: From the Agios Stefanos chromium mine, ~10 km south of the Domokos village, Othrys ophiolite, Greece.

Name: Honors Dr. Demetrios *Eliopoulos* (1947-2019), Institute of Geology and Mineral Exploration (IGME) and his widow, Professor Maria *Eliopoulos* (nee Economou, b. 1947), University of Athens, Greece, for their contributions to the knowledge of ore deposits of Greece and to the mineralogical, petrographic, and geochemical studies of ophiolites, including the Othrys complex.

Type Material: Natural History Museum, University of Pisa, Italy (19911).

References: (1) Bindi, L., F. Zaccarini, P. Bonazzi, T. Grammatikopoulos, B. Tsikouras, C. Stanley, and G. Garuti, (2020) Eliopoulosite, V_7S_8, A new sulfide from the podiform chromitite of the Othrys Ophiolite, Greece. Minerals, 10, 245, 1-13.