

Crystal Data: Monoclinic. *Point Group:* 2/*m*. Subhedral to euhedral grains, to 2 mm, and as rims on olivine.

Physical Properties: *Cleavage:* {100} and {010}, fair to good. Hardness = n.d.
D(meas.) = ~2.80 D(calc.) = 2.76

Optical Properties: Transparent to opaque. *Color:* Colorless, white, yellow, dark amber.
Optical Class: Biaxial (+). *Orientation:* $Z \wedge c = 16^\circ\text{--}17^\circ$. $\alpha = 1.540(2)$ $\beta = 1.544(2)$
 $\gamma = 1.559(2)$ 2V(meas.) = $47^\circ\text{--}55^\circ$

Cell Data: *Space Group:* $P2_1/a$. $a = 8.79(1)$ $b = 8.22(2)$ $c = 5.07(1)$ $\beta = 120.5(5)^\circ$
 $Z = 2$

X-ray Powder Pattern: Springwater meteorite.
3.443 (100), 3.85 (67), 2.411 (48), 4.09 (40), 4.34 (38), 3.65 (37), 2.122 (33)

Chemistry:

	(1)	(2)	(3)
P ₂ O ₅	53.2	53.9	54.00
SiO ₂	0.09	0.07	
FeO	4.1	2.7	
MnO	0.19	0.13	
MgO	43.1	44.9	46.00
CaO	0.07	0.08	
Total	100.8	101.8	100.00

(1) Springwater meteorite; by electron microprobe, average of six grains, total Fe and Mn as FeO and MnO; corresponding to (Mg_{2.84}Fe_{0.15}Mn_{0.01})_{Σ=3.00}(PO₄)₂. (2) Krasnojarsk meteorite; by electron microprobe, average of six grains, total Fe and Mn as FeO and MnO; corresponding to (Mg_{2.92}Fe_{0.10}Mn_{0.01})_{Σ=3.03}(PO₄)₂. (3) Mg₃(PO₄)₂.

Occurrence: A rare component in pallasite meteorites, rimming and cementing olivine nodules.

Association: Olivine, stanfieldite, troilite, schreibersite, kamacite.

Distribution: In the Springwater, Krasnojarsk, Zaisho, Imilac, and Port Orford pallasite meteorites.

Name: To honor Dr. Oliver Cummings Farrington (1864–1933), Curator of Geology, Field Museum of Natural History, Chicago, Illinois, USA, an authority on meteorites.

Type Material: The Natural History Museum, London, England, 1960,150 and 1960,151.

References: (1) DuFresne, E.R. and S.K. Roy (1961) A new phosphate mineral from the Springwater pallasite. *Geochim. Cosmochim. Acta*, 24, 198–205. (2) (1961) *Amer. Mineral.*, 46, 1513 (abs. ref. 1). (3) Fuchs, L.H., E. Olsen, and E. Gebert (1973) New X-ray and compositional data for farringtonite, Mg₃(PO₄)₂. *Amer. Mineral.*, 58, 949–951. (4) Nord, A.G. (1986) Determination of cation distributions in mineral structures by use of the Rietveld full-profile refinement technique. *Chemica Scripta*, 26A, 115–118.