Polkovicite $(Fe, Pb)_3(Ge, Fe)_{1-x}S_4$ (x = 0.18 to 0.69)

Crystal Data: Cubic. *Point Group:* n.d. Massive with other sulfides.

Physical Properties: Hardness = n.d. VHN = 119–124 (50 g load). D(meas.) = n.d. D(calc.) = n.d.

Optical Properties: Opaque. *Color:* Brownish gray; in reflected light, white with cream-red tint. *Streak:* Dark gray. *Anisotropism:* Distinct.
R_1–R_2: (470) 43.5–44.5, (535) 43.0–44.0, (591) 44.0–45.0, (658) 45.5–46.5

Cell Data: *Space Group:* n.d. Z = n.d.

X-ray Powder Pattern: n.d.

Chemistry:

	(1)
Fe	29.3
Pb	14.6
Cu	3.6
Ge	4.5
As	1.8
S	34.2
Total	88.0

(1) Lower Silesia, Poland; by electron microprobe.

Polymorphism & Series: Forms a series with morozeviczite.

Occurrence: In epigenetic veinlets and metasomatic replacement zones replacing sandstone and older sulfides, in brecciated sandstones underlying copper-bearing shales.

Association: Marcasite, chalcopyrite, bornite, chalcocite, tennantite, sphalerite, galena.

Distribution: From the Polkovice mine, Lower Silesia, Poland.

Name: For the Polkovice mine, Poland.

Type Material: Jagellonian University, Kraków, Poland.

References: (1) Haranczyk, C. (1975) Morozeviczite and polkovicite, typochemical minerals of Mesozoic mineralization of the Fore-Sudenten monocline. Rudy Metalle, 20, 288–293 (in Polish).
(2) (1981) Amer. Mineral., 66, 437 (abs. ref. 1).