Silesiaite $Ca_2Fe^{3+}Sn(Si_2O_7)(Si_2O_6OH)$

Crystal Data: Triclinic. *Point Group*: 1. *Twining*: Polysynthetic.

Physical Properties: *Cleavage*: *Tenacity*: *Fracture*: Hardness = D(meas.) = D(calc.) =

Optical Properties: *Color*: *Streak*: *Luster*:
Optical Class: Biaxial. *Pleochroism*: Distinct, uncolored to yellowish. Hourglass and sector optical zoning.

Cell Data: *Space Group*: *C*1. a = 10.028(1) b = 8.408(1) c = 13.339(2) α = 90.01(1)° β = 109.10(1)° γ = 90.00(1)°

X-Ray Diffraction Pattern: Szklarska Poręba Huta quarry, Lower Silesia, Poland.
9.147 (100), 6.607 (64), 8.408 (12), 3.151 (12), 4.413 (10), 3.095 (9), 3.312 (7)

Chemistry:

	(1)	(2)
SiO_2	37.93	38.95
Al_2O_3	0.35	1.04
TiO_2		0.07
Fe_2O_3	8.89	10.95
SnO_2	33.10	28.24
MnO	0.05	0.04
CaO	17.63	18.19
CuO	0.12	0.08
Total	97.53	97.44

(1) El Valle-Boinás, Asturias, northern Spain; average electron microprobe analysis, FeO/Fe_2O_3 calculated for charge balance. (2) Do.

Mineral Group:

Occurrence: In granitic pegmatite (Poland); in calcic Cu-Au skarn (Spain).

Association: Andradite (Adr_{96-100}), clinopyroxene (Hd_{30-47}), actinolite, apophyllite-(KOH), babingtonite, hydroandradite, quartz, calcite, chalcopyrite (Spain).

Distribution: From the Szklarska Poręba Huta quarry, Lower Silesia, Poland [TL]. At El Valle-Boinás, Asturias, northern Spain.

Name: For the region of Poland where the studied material was collected.

Type Material: Mineralogical Museum, University of Wrocław, Poland (MMWr IV7929).

References: (1) Hålenius, U., F. Hatert, M. Pasero, and S.J. Mills (2017) IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) Newsletter 40. New minerals and nomenclature modifications approved in 2017. Mineral. Mag., 81(6), 1578. (2) Cepedal, A., M. Fuertes-Fuente, and A. Martin-Izard (2021) Occurrence of silesiaite, a new calcium-iron-tin sorosilicate in the calcic skarn of El Valle-Boinás, Asturias, Spain. Eur. J. Mineral., 33, 165-174.