

**Crystal Data:** Monoclinic. *Point Group:*  $2/m$ . As equidimensional crystals; thick to very thin tabular on {010}, elongated along [010], to 1 mm; short prismatic on {110}, rarely acicular [001]; also dipyrnidal with {111} and  $\{\bar{1}11\}$ ; as crystalline efflorescences. *Twinning:* On {101}, the twinning lamellae parallel to the edge [010].

**Physical Properties:** Hardness = Low. VHN = n.d. D(meas.) = n.d. D(calc.) = 2.02–2.03

**Optical Properties:** Transparent to translucent. *Color:* Colorless to pale yellow with a greenish tinge. *Luster:* Adamantine. *Optical Class:* Biaxial (-). *Orientation:*  $X \wedge c = 1.25^\circ$ . *Dispersion:* Strong.  $\alpha$  = High.  $\beta$  = High.  $\gamma$  = High.  $2V$ (meas.) = Large.

**Cell Data:** *Space Group:*  $P2/c$ .  $a = 8.476(2)$   $b = 13.088(3)$   $c = 9.270(2)$   
 $\beta = 124.92(2)^\circ$   $Z = 32$

**X-ray Powder Pattern:** La Presta mine, Switzerland.  
4.37 (100), 3.75 (100), 3.66 (80), 3.18 (80), 3.06 (60), 3.48 (40), 2.485 (40)

**Chemistry:** (1) La Presta mine, Switzerland; pure elemental sulfur by gas chromatography, enriched in  $^{32}\text{S}$ , evidence of microbial activity.

**Polymorphism & Series:** Dimorphous with sulfur, to which it changes in time at room temperature.

**Occurrence:** In hollow “limonite” nodules in a thin clay stratum (Havírna, Czech Republic); in fumaroles (Vulcano, Italy); an alteration product of pyrite-rich asphalt (La Presta mine, Switzerland); formed from gypsum and stabilized due to microbial activity (Death Valley, California, USA).

**Association:** Pyrite, gypsum, rozenite, sulfur, calcite, “limonite”, asphalt (La Presta mine, Switzerland).

**Distribution:** In the Czech Republic, from Havírna, near Letovice [TL], and at Visky. Well-crystallized in the La Presta asphalt mine, near Travers, Neuchâtel, Switzerland. From St. Andreasberg, Harz Mountains, and at Ronneburg, Thuringia, Germany. On Vulcano, Lipari Islands, Italy. In the USA, from Point Rincon, Ventura Co., and in the salt pan of Death Valley, California.

**Name:** Honors Professor Vojtěch Rosický (1880–1942), former Director of the Mineralogical and Petrological Institute of Masaryk University, Brno, Czech Republic.

**Type Material:** Moravian Museum, Brno, Czech Republic, A6111.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1944) Dana’s system of mineralogy, (7th edition), v. I, 145–146. (2) Sekanina, J. (1931) Rosickýit, die natürliche  $\gamma$ -Schwefelmodifikation. Zeits. Krist., 80, 174–189 (in German). (3) Douglas, S. and H. Yang (2002) Mineral biosignatures in evaporites: presence of rosickýite in an endoevaporitic microbial community from Death Valley, California. *Geology*, 30(12), 1075–1078. (4) Gallacher, A.C. and A.A. Pinkerton (1993) A redetermination of monoclinic  $\alpha$ -sulfur. *Acta Cryst.*, C49, 125–126. (5) Meisser, N., K.J. Schenk, and J.E. Spangenberg (2000) Rosickýite (monoclinic  $\gamma$ -sulphur) from La Presta asphalt mine, Neuchâtel, Switzerland: new X-ray powder diffraction data. *Schweiz. Mineral. Petrogr. Mitt.*, 80, 299–303.