Crystal Data: Triclinic. *Point Group*: $\bar{1}$. As crystals, to 20 μm. *Twinning*: On ($0\bar{1}$ 0), polysynthetic.

Physical Properties: *Cleavage*: n.d. *Fracture*: n.d. *Tenacity*: n.d. Hardness = n.d. D(meas.) = n.d. D(calc.) = 3.906

Optical Properties: n.d. *Color*: n.d. *Streak*: n.d. *Luster*: n.d. *Optical Class*: n.d. (for terrestrial Fe-rich rhönite) α = 1.805(7) β = 1.815(7) γ = 1.845(7) 2V(meas.) = 50(3)° *Orientation*: $Z \wedge c$ = 38-58°.

Cell Data: *Space Group*: $P\bar{1}$ (by analogy to rhönite.) a = 10.513(7) b = 10.887(7) c = 9.004(18) α = 105.97(13)° β = 96.00(12)° γ = 124.82(04)° Z = 1

X-ray Powder Pattern: n.d.

Chemistry:	(1)		(1)
SiO_2	25.55	SrO	0.05
TiO_2	8.70	ZnO	0.04
Al_2O_3	9.80	MgO	0.01
Cr_2O_3	0.01	CaO	11.86
Y_2O_3	0.03	Na_2O	0.04
La_2O_3	0.04	K_2O	0.00
Pr_2O_3	0.09	P_2O_5	0.00
Nd_2O_3	0.07	F	0.01
FeO	41.60	Cl	0.02
MnO	0.11	SO_3	0.08
NiO	0.07	Total	98.38

(1) D'Orbigny angrite meteorite; average of 8 electron microprobe analyses supplemented by Raman spectroscopy; corresponds to $(Ca_{3.88}Na_{0.02}REE^{3+}_{0.03}Mn_{0.03}Mg_{0.01}Ni_{0.02}Zn_{0.01}Sr_{0.01})_{\Sigma=4.01}(Fe^{2+}_{9.98}Ti_{2.00})_{\Sigma=11.98}(Si_{7.80}Al_{3.52}Fe^{3+}_{0.64}P_{0.05}S_{0.02})_{\Sigma=12.03}O_{39.98}F_{0.01}Cl_{0.01}$.

Mineral Group: Sapphirine supergroup, rhönite group.

Occurrence: In multiple-phase pockets, located mainly at olivine-augite triple junctions in an angrite meteorite, probably crystallized from an interstitial melt. Terrestrial occurrences include as a component in tephrite glass, basalt and phonolite.

Association: Whitlockite, an Fe sulfide, ulvöspinel, Ca-rich fayalite, Al-Ti-bearing hedenbergite (meteorite).

Distribution: From the D'Orbigny angrite meteorite. At Puy de Saint-Sandoux, Auvergne, France. From Foster Crater, McMurdo Volcanic Group, Antarctica and Saint-Leu, Réunion Island. From the Kaiserstuhl volcanic complex, Upper Rhine Graben, SW Germany.

Name: Honors Professor Gero Kurat (1938-2009), former Head of the Mineralogical-Petrographical Department and Curator of the Meteorite Collection, Natural History Museum,Vienna, Austria.

Type Material: Natural History Museum, Vienna, Austria (Section D'Orbigny C-N1172-NH Wien).

References: (1) Hwang, S.-L., P. Shen, H.-T. Chu, T.-F. Yui, M.-E. Varela, and Y. Iizuka (2016) Kuratite, $Ca_4(Fe^{2+}_{10}Ti_2)O_4[Si_8Al_4O_{36}]$, the Fe^{2+}-analogue of rhönite, a new mineral from the D'Orbigny angrite meteorite. Mineral. Mag., 80(6), 1067-1076. (2) (2017) Amer. Mineral., 102, 696 (abs. ref. 1).