The andersonite is much less common. It occurs as small masses of intergrown, pseudocubic crystals to 3 mm on edge. The crystals are transparent and of a bright yellow-green colour, and exhibit very bright yellow-green fluorescence under long-wave UV light, similar in colour and intensity to that of the schröckingerite aggregates.

The walls of the drive are composed of granite traversed by quartz veinstone carrying minor sulphides. However, much of the tunnel wall is coated with a friable, sandy material, cemented to the underlying rock by gypsum, and the schröckingerite and andersonite are commonly found on this substrate.

Identification of the schröckingerite was carried out by X-ray powder diffractometery. The XRD analysis showed the aggregates to be composed of a mixture of gypsum and schröckingerite. The andersonite was tentatively identified as such following examination by energydispersive X-ray analysis. Both schröckingerite and andersonite were subsequently confirmed by X-ray powder diffraction at the British Museum (Natural History) (film numbers 8567F and 8568F respectively).

The andersonite and schröckingerite occur in close association with each other at Geevor. In a few specimens, schröckingerite-gypsum aggregates are observed partially intergrown with andersonite. Other secondary uranium mineralisation occurs along the Peeth Lode. Yellow zippeite-type secondaries are widespread along the tunnel walls. Johannite is also found in the same area and specimens in the possession of the British Museum (Natural History), collected from this location in 1986/87, are associated with a mineral tentatively identified as becquerelite (P. C. Tandy and J. G. Francis, pers. comm.). However, these species are rarely seen in close with the andersonite association and schröckingerite.

Samples of the andersonite and schröckingerite have been lodged with the British Museum (Natural History) and the University Museum, Oxford.

Acknowledgements. The authors wish to thank R. F. Symes, P. C. Tandy and J. G. Francis of the British Museum (Natural History) for useful discussions and the X-ray powder photography. The authors are also grateful to ECC International for the use of analytical instrumentation.

References

Axelrod, J. M., Grimaldi, F. S., Milton, C., and Murata, K. J. (1951) Am. Mineral., 36, 1.

Frondel, C. (1958) USGS Bull., 1064, 115.

- Hurlbut, C. S. (1954) Am. Mineral., 39, 901.
- Roberts, W. L., Campbell, T. J., and Rapp, G. R. Jr. (1990) *Encyclopedia of Minerals*, 2nd Edition (Van Nostrand Reinhold, New York).
- Schrauf, A. (1873) Min. Mitt. no II, 137 [Source: Hurlbut (1954)].
- Smith, D. K. Jr. (1984) Uranium Mineralogy. In Uranium Geochemistry, Mineralogy, Geology, Exploration and Resources (De Vivo, B. et al., eds) Institution of Mining and Metallurgy.

KEYWORDS: schröckingerite, andersonite, Geevor mine, Cornwall.

N. J. Elton

Tregears, Little Treviscoe, St Austell, Cornwall PL26 7QL.

J. J. HOOPER

48 St Julitta, Luxulyan, Bodmin, Cornwall PL30 5ED

[Manuscript received 12 July 1991]

© Copyright the Mineralogical Society

Mineral nomenclature: sulrhodite

THE crystal structure of synthetic Rh_2S_3 was described by Parthé *et al.* (1967) in space group *Pbcn* (60) with *a* 8.462, *b* 5.985, *c* 6.138 Å and Z = 4, to a R value of 0.069. The Rh atoms occupy a single set of eight atomic positions.

Bowieite (Rh, Ir)₂S₃ described by Desborough and Criddle (1984) has a 8.454, b 6.002 and c 6.121 Å in space group *Pbcn* (60). Bowieite was submitted to the International Mineralogical Association Commission on New Minerals and Mineral Names (CNMMN) on 14 March, 1980. The records show that it was approved (20-0 for the mineral, 19-0-1 abstention for the name) in the CNMMN memorandum dated 21 June, 1980. The delay between approval and publication occasioned by a great deal of extra work on the composition and optics was sanctioned by CNMMN.

Sulrhodite Rh_2S_3 described by Keqiao *et al.* (1983) has *b* 8.493, *c* 5.987 and *a* 6.167Å in space group *Pnca* (60) similar to PDF 21-1017. The paper was received by *Kexue Tangbao* on July 29, 1981; however, sulrhodite was never submitted to the CNMMN.

The two minerals have an identical endmember formula of Rh_2S_3 and identical crystal structure. Based upon the rule of priority, bowie-

MINERALOGICAL NOTES

ite has precedence. Therefore, a proposal to discredit sulrhodite in favour of bowieite has been approved by CNMMN in 1990. The end-members of the solid solution series Rh_2S_3 - Ir_2S_3 will be bowieite (Rh,Ir)_2S_3 (Desborough and Criddle, 1984) and kashinite (Ir,Rh)_2S_3 (Begizov *et al.*, 1985).

References

Begizov, V. D., Zabyalov, E. N., Rudashevskij, L. N., and Vyalsov, L. N. (1985) *Zap. Vses. Min. Obshch.*, 111, 617–22 (in Russian).

Dcsborough, G. A. and Criddle, A. J. (1984) Can. Mineral., 22, 543–52.

Keqiao, C., Nicheng, S., and Zhizhang, P. (1983) *Kexue Tongbao*, 28, 221–6.

Parthé, E., Hohnke, D., and Hulliger, F. (1967) Acta Crystallogr., 23, 832–40.

KEYWORDS: sulrhodite, bowieite, nomenclature.

PETER BAYLISS

Department of Geology and Geophysics, The University of Calgary, Alberta, Canada T2N 1N4

CHEN KEQIAO

Institute of Mineral Deposits, Chinese Academy of Geological Sciences, Beijing, P. R. China.

Alan J. Criddle

Department of Mineralogy, Natural History Museum, Cromwell Rd., London SW7 2BD, U.K.

GEORGE A. DESBOROUGH

United States Geological Survey, Denver, Colorado, U.S.A.

[Manuscript received 5 December 1990]

© Copyright the Mineralogical Society

126