The positional parameters are in good agreement with those given by Geller and Wood,[3] who obtained $x_{Rh} = 0.144 \pm 0.003$ and $x_{Si} = 0.840 \pm 0.007$. However, the accuracy of the parameters is higher than in the earlier investigation.

In Table 1 the interatomic distances in RhSi are listed. A comparison of the distances with those given in the earlier investigation shows no significant differences.

Table 1. Interatomic distances in RhSi (FeSi-type).

Rh	−6 Rh:	2.87_5
	−7 Si:	2.47, 2.45 (3), 2.57 (3)
Si	−7 Rh:	2.47, 2.45 (3), 2.57 (3)
	−6 Si:	2.90

Acknowledgements. The authors wish to thank Prof. G. Hägg for all the facilities put at their disposal. The work has been supported by the *Swedish Natural Science Research Council*. Facilities for use of the electronic computers BESK, FACIT, and IBM 7090 were granted by the Computer Division of the *National Swedish Office for Administrative Rationalisation and Economy*.

1. Engström, I. *Acta Chem. Scand.* **17** (1963) 775.
2. Engström, I. *Acta Chem. Scand.* **19** (1965). *In press.*
3. Geller, S. and Wood, E. A. *Acta Cryst.* **7** (1954) 441.
4. Lundberg, B. Program available at BESK.
5. *IUCr World List of Crystallographic Computer Programs*, 1st Ed., Sept. 1962.
6. Lindgren, J. Program available at IBM 1620.
7. *International Tables for X-ray Crystallography*, Vol. III, The Kynoch Press, Birmingham, England 1962.
8. Cruickshank, D. W. J., Philling, D. E., Bujosa, A., Lovell, F. M. and Truter, M. R. *Computing Methods and The Phase Problem*, Oxford, Pergamon Press 1961, p. 32.

Received July 13, 1965.

The Crystal Structure of Tetramethylthiuram Disulphide

KJARTAN MARØY

Chemical Institute, University of Bergen, Bergen, Norway

Tetramethylthiuram disulphide, or bis(dimethylthiocarbamyl) disulphide, crystallizes in the space group $C2/c$ (No. 15) with four $[(CH_3)_2NC(S)]_2S_2$ molecules per unit cell, of dimensions, $a = 9.66$ Å, $b = 9.95$ Å, $c = 11.85$ Å, $\beta = 99\frac{1}{2}°$. With re-orientation of axes, these agree well with reported data.[1] The molecule possesses, by space group requirements, a twofold axis of symmetry.

The crystal structure has been solved, and refined by least squares analysis of 239 observed *h0l*, *hhl*, and *hk0* reflections, estimated visually from zero-layer Weissenberg photographs taken with Cu$K\alpha$ radiation. The reliability index, *R*, is 0.10 at the present stage. Anisotropic temperature factors were used for the sulphur atoms. The atomic coordinates, listed in Table 1, give 2.00 Å for the length of the S−S bond, with an e.s.d. of about 0.01 Å. The bond angle of the sulphur atoms of the disulphide group is 104°, and the dihedral angle is 88°. The dimethyldithiocarbamate groups, excluding the hydrogen atoms, are planar within the experimental error.

Table 1. Atomic coordinates, in fractions of monoclinic cell edges, for tetramethylthiuram disulphide. Origin at a centre of symmetry.

	x	*y*	*z*
S_1	−0.0283	0.3259	0.1651
S_2	0.1955	0.1086	0.2033
C_1	0.085	0.195	0.115
N	0.063	0.191	0.003
C_2	−0.045	0.271	−0.077
C_3	0.142	0.088	−0.056

Further refinement, based on more complete three-dimensional data, is in progress.

1. Yamada, T. and Mizuno, K. *J. Soc. Chem. Ind. Japan* **44** (1941) 708; *Chem. Abstr.* **42** (1948) 2155.

Received August 3, 1965.