down into plastic sulfur. A perceptible surface film of plastic sulfur is formed on the crystals in a few minutes after they are exposed to air, and the crystals are largely converted after an hour or so. The plastic-sulfur stage is accompanied by a relatively slow recrystallization into orthorhombic sulfur. Hard, polycrystalline pseudomorphs are formed after a day or so. The rate of breakdown, relatively slow if the crystals are kept in the dark in the mother liquid, is markedly accelerated by exposure to X-rays.

X-ray powder photographs could not be obtained. Single crystals examined by the Weissenberg and rotation methods gave a cell with $a_0 = 10{\cdot}9$, $c_0 = 4{\cdot}26$ kX. in hexagonal coordinates ($a_0 : c_0 = 1 : 0{\cdot}392$). The unit cell contains 18 atoms of S; the calculated gravity is 2·17 and the measured gravity (Engel) is 2·135. The measured gravity of orthorhombic sulfur is 2·07. The crystal forms observed are $\{11\bar{2}0\}$ and $\{10\bar{1}1\}$ in the orientation and unit of the structure cell ($a : c = 1 : 0{\cdot}393$, morphology). A Weissenberg zero-layer photograph about [0001], very poor in quality, indicated this axis to be three-fold without vertical planes of symmetry. This observation and the crystal habit indicate the point symmetry to be $\bar{3}$ (trigonal rhombohedral class). The lattice type, which may be hexagonal or rhombohedral in this crystal class, could not be decided upon from the available X-ray photographs. It may be noted that this polymorph of sulfur is not isostructural with the hexagonal (32) polymorphs of selenium and tellurium.

References

ATEN, A. H. W. (1914). *Z. phys. Chem.* **88**, 321.
ENGEL, R. C. (1891). *C.R. Acad. Sci., Paris*, **112**, 866.
FRIEDEL, C. (1891). *C.R. Acad. Sci., Paris*, **112**, 834.

Acta Cryst. (1950). **3**, 243

Corrigenda: The molecular structure of thiophthen from X-ray crystal analysis.

By E. G. Cox R. J. J. H. GILLOT and G. A. JEFFREY. *Department of Inorganic and Physical Chemistry, The University of Leeds, England.*

(*Received* 4 *February* 1950)

In discussing the accuracy of the structure analysis (Cox, Gillot & Jeffrey, 1949) we omitted a factor of $1/\sqrt{2}$ from the calculation of the standard deviations of the carbon peak positions. The values given on p. 361 should read

$$\sigma_x = 0{\cdot}0085, \quad \sigma_y = 0{\cdot}0085, \quad \sigma_z = 0{\cdot}0113 \text{ A.}$$

A compensating error of omission was made in the formula for the significance tests, which should read

$$P = \tfrac{1}{2} - \tfrac{1}{2} \operatorname{erf} [\Delta/(\sqrt{2})\,\sigma].$$

The values given in Table 6 therefore remain unchanged, as does the subsequent discussion of accuracy based on the significance tests.

Reference

COX, E. G., GILLOT, R. J. J. H. & JEFFREY, G. A. (1949). *Acta. Cryst.* **2**, 356.

Acta Cryst. (1950). **3**, 243

Vector sets, a correction.

By M. J. BUERGER, *Crystallographic Laboratory, Massachusetts Institute of Technology, Cambridge, Massachusetts, U.S.A.*

(*Received* 3 *March* 1950)

An error occurs in Table 1 (Buerger, 1950). Fourteen space groups appear in the middle column, opposite the entry $C\bar{3}1m$ in the right column of the table. The entry $C\bar{3}1m$ should pertain to only seven space groups, the remaining seven pertaining to an additional entry $C\bar{3}m1$. The correct arrangement for these two columns is

$C31m$, $C31c$; $C312$, $C3_112$, $C3_212$; $C\bar{3}1m$, $C\bar{3}1c$	$C\bar{3}1m$
$C3m1$, $C3c1$; $C321$, $C3_121$, $C3_221$; $C\bar{3}m1$, $C\bar{3}c1$	$C\bar{3}m1$

The details of distinguishing space groups in their vector representation is treated elsewhere. All space groups can be distinguished except between members of the enantiomorphic pairs.

Reference

BUERGER, M. J. (1950). *Acta Cryst.* **3**, 87.

Acta Cryst. (1950). **3**, 243

International Union of Crystallography

Second General Assembly and International Congress, Stockholm, 27 June–3 July 1951

By kind invitation of the Swedish National Committee for Crystallography the Second General Assembly and International Congress of the Union will be held in Stockholm from 27 June to 3 July 1951. These dates have been chosen in consultation with the Swedish National Committee and with the National Committees of all the Adhering Bodies. A Local Committee has been established in Stockholm under the Chairmanship of A. WESTGREN, Vice-President of the Union, with F. E. WICKMAN as Secretary.

Membership

Delegates to the General Assembly, which will be concerned with the formal business of the Union, will be nominated by the National Committees. Crystallographers throughout the world are, however, cordially invited to attend the International Congress; it is particularly hoped that they will assist the Union by bringing the Congress to the notice of their colleagues, by press announcements and otherwise, so that the attendance

may be large and fully representative of crystallographic research in all countries. The Union is unfortunately not in a position to provide funds to assist delegates in meeting travelling expenses.

Programme

The programme of the Congress has not yet been decided in any detail, but it is suggested that it might be generally similar to that of the Congress held at Harvard University in 1948. On that occasion groups of papers on related topics were briefly presented by authors or by their representatives and were followed by general discussion. The principal topics were:

1. Instruments and Measurements.
2. New Developments in Structure Determination.
3. Alloy Structures.
4. Inorganic and Mineral Structures.
5. Organic Structures.
6. Proteins and Related Structures.
7. Random and Deformed Structures.
8. Ferro-electrics.
9. Morphology, Synthesis, etc.
10. Miscellaneous.

Offers of papers for consideration by the Programme Committee, and suggestions for additional topics, are cordially invited by the Executive Committee.

Excursions

Arrangements will probably be made for visits to Uppsala University, to industrial organizations and to localities of mineralogical interest. Details will be announced later.

Symposia

It is suggested that one or more symposia of a more specialized kind might also be held in connexion with the Congress. No final arrangements for these have yet been decided, and the Executive Committee would welcome suggestions of subjects in which such symposia are likely to prove of most value.

Accommodation

Provisional reservations of a number of hotel rooms have already been made and delegates will later be given an opportunity of taking up these reservations. Those who prefer to make independent arrangements are advised to act early, as Stockholm hotels are heavily booked in the summer months.

Enrolment

It is naturally not expected that crystallographers will yet be able to commit themselves in giving notice of their proposed attendance, and ample opportunity will be given for enrolment later. Nevertheless, it would be a convenience to the Executive Committee if those hoping to attend would give provisional notice at an early date. No obligation will be incurred by this action, but those who give such notice will receive personal copies of future announcements.

Correspondence

For the time being all communications should be addressed to the General Secretary of the Union:

R. C. Evans, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, England.

(Telegraphic address: Crystals, Cambridge, England.)

Notice of provisional enrolment, suggestions for the organization of the Congress, and offers of papers for consideration by the Programme Committee should also be sent to him either by letter or, preferably, on the form accompanying the First Circular. Copies of this circular may be had from the General Secretary or from the Secretaries of the National Committees as follows:

Australia

R. I. Garrod, Defence Research Laboratories, Private Bag No. 4, P.O. Ascot Vale W. 2, Victoria.

Belgium

R. Van Tassel, Conservateur au Musée d'Histoire Naturelle, Brussels.

Canada

W. H. Barnes, Division of Physics, National Research Council, Ottawa.

Czechoslovakia

The Secretary, Czechoslovak National Research Council, Opletalova 19, Prague II.

France

E. Grison, Laboratoire Central des Services Chimiques de l'État, 12 quai Henri IV, Paris 4.

India

The Secretary to the Government of India, Department of Scientific Research, North Block, Central Secretariat, New Delhi.

Japan

T. Ito, National Committee for Crystallography, Science Council of Japan, Ueno Park, Tokyo.

Netherlands

E. H. Wiebenga, Bloemsingel 10, Groningen.

Norway

I. Oftedal, Mineralogisk Institutt, Blindern, Oslo.

South Africa

The Officer-in-Charge, Liaison Division, South African Council for Scientific and Industrial Research, P.O. Box 395, Pretoria.

Spain

M. A. Berger, Instituto 'Alonso de Santa Cruz', Serrano 119, Madrid.

Switzerland

M. Vuagnat, Muséum d'Histoire Naturelle, Geneva.

United Kingdom

The Secretary of the British National Committee for Crystallography, c/o The Royal Society, Burlington House, London W. 1.

United States of America

A. L. Patterson, Institute for Cancer Research, Fox Chase, Philadelphia 11, Pennsylvania.

Further information about the Congress will be published from time to time in these columns and elsewhere.