Crystal morphology

A set of cleavage planes, which appeared during the final crystal growth, were nearly parallel to the axis of the large rod-like crystal formed in the Pyrex tube. The cleavage, very good and easy, is parallel to (001). Between crossed nicols, on the microscope, the rod-like crystal extinguishes when the (001) cleavage planes are approximately perpendicular to the stage, so that a vibration direction lies in the neighborhood of c^* , and we can infer that the length of the molecule is nearly perpendicular to (001).

Crystal physics

Color: colorless, transparent.

Comparison with previous work

The value of d_{001} , $25 \cdot 45 \pm 0.03$ Å, agrees within the limits of error with that, $25 \cdot 8 \pm 0.5$ Å, reported by Hoffman & Decker (1953) for samples of C₂₀H₄₂ which were 96 to 99 + mole per cent pure.

The cell of the next lower member of the series with an even

number of C atoms, n-octadecane $C_{18}H_{38}$, is also triclinic (Müller & Lonsdale, 1948; Hayashida, 1962).[†]

The authors wish to express their appreciation to G.R. Ross, of their laboratory, who carried out the gas-liquid chromatography measurements.

[†] Note that Hayashida's cell parameters yield neither the cell volume nor the (001) spacing given by him. Moreover the cell volume and interplanar spacings calculated from his data do not agree with those given by Müller & Lonsdale (1948).

References

- BEARDEN, J. A. & BURR, A. F. (1967). *Rev. Mod. Phys.* 39, 78, 125.
- DEHL, R. A. & CRISSMAN, J. M. (1968). Bull. Amer. Phys. Soc. 13, 471.

HAYASHIDA, T. (1962). J. Phys. Soc. Japan, 17(2), 306.

- HOFFMAN, J. D. & DECKER, B. F. (1953). J. Phys. Chem. 57, 520.
- HORTON, A. T. & GLASGOW, A. R. (1965). J. Res. Nat. Bur. Stand. 69C(3), 195.
- MÜLLER, A. & LONSDALE, K. (1948). Acta Cryst. 1, 129.

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography (J.N.King, 13 White Friars, Chester CH1 1NZ, England).

International Union of Crystallography

Resignation of General Secretary

Dr G. Boom has resigned as General Secretary of the Union, his resignation taking effect from the close of the recent meeting of the Executive Committee, held in London

from 31 March to 3 April. On 31 March the Executive Committee accepted his resignation with regret and, after agreeing to recombine the offices of General Secretary and Treasurer, they unanimously agreed to appoint Professor D.W.J. Cruickshank (formerly Treasurer) to this joint office as from 3 April 1970.

Book Reviews

Works intended for notice in this column should be sent direct to the Book-Review Editor (M. M. Woolfson, Physics Department, University of York, Heslington, York YO1 5DD, England). As far as practicable books will be reviewed in a country different from that of publication.

Principles of X-ray metallurgy. By T. KOVACS. Pp. vii +185. London: Iliffe Books Ltd., 1969. Price (UK) 28s.

In the preface, the author says that the book is intended as a guide in X-ray metallurgy to degree and National Diploma students. The author has attempted to give a broad treatment of the subject ranging from historical remarks and basic physical principles to graphical methods and safety precautions. For the reader already familiar with the subject, the book gives a nice exposition of a vast field. There is a lot of interesting information that is not found in ordinary text-books. On the other hand, objections must be raised against some of the theoretical sections, e.g. the treatment of the metallic bond is so intuitive that, in part, it is wide of the mark. For this reason the book will not suffice as the only text-book in an introductory course, but its stress on practical methods still makes it valuable for those actually engaged in the field.

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