

in which

$$A_m = A - \Sigma A/n - x' \Sigma x' A / \Sigma x'^2, \quad (4)$$

$$aA = da/dC = -al^2/C^3 f^2. \quad (5)$$

The value of a , corrected for absorption, is then given by the Nelson-Riley extrapolation with $C = C_{\text{opt}}$.

For a typical photograph with ten diffraction lines, the factors A_m can be deduced in half an hour, and are then always available for the same crystal. A similar procedure applies to tetragonal crystals; for orthorhombic crystals, in which *two* axial ratios are unknown, the process is slightly more complex.

Hess (1951) pointed out that Cohen's method effectively weighted the a 's deduced from various reflexions by a factor $\sin^2 \theta$. The method here given assigns all reflexions

equal weight. A group of eight photographs was computed by both methods, and also by a modification which weighted reflexions by a further factor of $\tan \theta$. All the methods agreed for both parameters to within 1 part in 50,000, but Cohen's method gave values of axial ratio consistently a little low.

I wish to thank the Department of Scientific and Industrial Research for a Maintenance Grant.

References

- COHEN, M. U. (1935). *Rev. Sci. Instrum.* **6**, 68.
 HESS, J. B. (1951). *Acta Cryst.* **4**, 209.
 NELSON, J. B. & RILEY, D. P. (1945). *Proc. Phys. Soc. Lond.* **57**, 160.

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. Copy should be sent direct to the British Co-editor (R. C. Evans, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, England).

Acta Crystallographica: Important Notices

1. The Executive Committee regrets that the continually growing size of this journal makes an increase in price unavoidable. As from the beginning of Volume 7, to be published in January 1954, the subscription price per volume will be 180 Danish crowns (or \$ 25 or £ 9), post free; the preferential rate for personal subscribers (see *Acta Cryst.* (1953), **6**, 108) will be 100 Danish crowns (or \$ 14 or £ 5), post free.

2. Messrs Ejnar Munksgaard now have a banking account in the U.S.A. Subscribers (at the full rate or at the preferential rate) who place their orders direct with the publishers may pay their subscription either to Messrs Munksgaard in Copenhagen or to Messrs Munksgaard's account at the Chase National Bank, New York 15, N.Y., U.S.A. Payment for reprints may also be made to either account.

3. Parts 11 and 12 of the current volume will be published together as a single issue on 10 November 1953. To ensure continuity of supply, orders for Volume 7, with remittance, should be placed through the usual channels as soon as possible, and in any case in time to reach the publishers in Copenhagen not later than 31 December 1953. Part 1 of Volume 7 will be sent only to subscribers whose subscriptions have been renewed.

4. The arrangement whereby advance orders for complete volumes from subscribers in the U.S.A., Canada and Mexico may be placed with the American Institute of Physics has been discontinued; instead, subscriptions for future volumes (at either the full or the preferential rate) may be placed with the Polycrystal Book Service (84 Livingston Street, Brooklyn 1, N.Y., U.S.A.). Orders from these countries may alternatively be placed direct with the publishers.