

and these data were used to determine the lattice constants by least squares. The procedure minimized the function

$$\varphi = \sum w_i \{(\sin^2 \theta_c)_i - (\sin^2 \theta_0)_i\}$$

where the weights, w , were taken proportional to $1/\sin^2 2\theta$.

The values of the unit cell dimensions and their standard deviations obtained from this least squares procedure are:

$$a_0 = 5.6170 \pm 0.0005, \quad b_0 = 5.9146 \pm 0.0003, \\ c_0 = 6.0057 \pm 0.0005 \text{ \AA}.$$

The value of a_0 for potassium chloride was found to be $6.2933 \pm 0.0009 \text{ \AA}$, which may be compared with the

value 6.29294 \AA which was determined by Hambling (1953). The wavelengths for Cu K radiation were assumed to be those given by Bragg (1947)

$$\alpha_1: 1.54050, \quad \alpha_2: 1.54434 \text{ \AA}.$$

Table 1 shows the observed and calculated values of $\sin \theta$ for the reflections used.

The density as measured by previous investigators is:

| | |
|----------|--------------------------|
| Bassiere | 4.81 g.cm. ⁻³ |
| West | 4.50 |
| Hughes | 4.837 |

Hughes has indicated that his procedure probably leads to a low result, so that his value should represent the lower limit. The calculated value for the density, using the cell dimensions of this investigation, is 4.99 g.cm.^{-3} .

Table 1. Observed and calculated values of $\sin \theta$

| hkl | Film 1 $\sin \theta_0$ | Film 2 $\sin \theta_0$ | $\sin \theta_c$ |
|------------------|---------------------------|---------------------------|-----------------|
| AgN ₃ | | | |
| 462 α_2 | 0.99108 | 0.99103 | 0.99100 |
| 462 α_1 | 0.98847 | 0.98849 | 0.98854 |
| 426 α_2 | 0.98265 | 0.98268 | 0.98268 |
| 426 α_1 | 0.98027 | 0.98023 | 0.98023 |
| 604 α_2 | 0.97183 | 0.97180 | 0.97202 |
| 604 α_1 | 0.96983 | 0.96979 | 0.96961 |
| KCl | | | |
| 800 α_2 | 0.98173 | | 0.98188 |
| 800 α_1 | 0.97964 | | 0.97947 |
| 642 α_2 | 0.91941 | | 0.91939 |
| 642 α_1 | 0.91710 | | 0.91713 |

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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 General Secretary of the International Union of Crystallography (D. W. Smits, Mathematisch Instituut, University of Groningen, Reithdiepskade 4, Groningen, The Netherlands).

Appointment of Technical Editor

As already announced in this journal, the Executive Committee of the Union decided at its meeting in Munich that the time had come to appoint a full-time technical editor for the publications of the Union; and applications for this post were invited soon thereafter. The matter had become urgent because the increasing size of *Acta Crystallographica* had made it impossible to find a successor to Prof. Asmussen, who had requested to be relieved of the technical editorship of the journal with the completion of the 1962 volume.

The Executive Committee is glad to announce the appointment of Mr S. A. Bryant to the new post. Mr Bryant studied chemistry and crystallography in Oxford, where he obtained his B. A. with First Class Honours and the research degree of B.Sc. After a two-year lectureship at Armstrong (now King's) College, Newcastle, and another two-year period of structure research at

Bristol University, he joined the Department of Scientific and Industrial Research as a Scientific Officer at the Forest Products Research Laboratory at Princes Risborough. Ten years later he became attached to Shell, originally as research chemist, but some three years later he was charged with the supervision and reorganization of a large library and a documentation and technical enquiry service which served as a central technical information organization for the world-wide Shell Group. Since 1952 Mr Bryant had been working as Senior Technical Editor at the Shell Thornton Research Centre.

Mr Bryant started his work for the Union on 15 November 1962. It is the intention that as soon as he has become acquainted with the technical editorship of *Acta Crystallographica*, he will also devote himself to the technical side of the editing of *Structure Reports*, and gradually of the other publications of the Union. His office address is 9 Queensway, Newton Lane, Chester, England.