

for $\text{NH}_4\text{Br II} \rightarrow \text{I}$ and close to relation *C* of Fraser & Kennedy (1972) for $\text{NH}_4\text{Br I} \rightarrow \text{II}$, and is probably a secondary orientation in CsCl (Chatterji, Mackay & Jeffery, 1970). The commonly accepted lattice correspondence relates f.c.c. and primitive cubic (or rhombohedral) through the primitive rhombohedron of the f.c.c. lattice (Shoji, 1931) the lattice transformation being effected by a pure strain the principal axis of which is the common [111] direction. This is only one component of the total deformations that would also accommodate the structures, but the additional rotation that would produce the present relation is unexpectedly large. In fact the relation corresponds to the Bain strain (principal axis $[100]_I$), which would have to be combined with shears to produce the structure of III. Whilst the twinning in the transformation $\text{I} \rightarrow \text{II}$ was consistent with a martensitic mechanism, detailed discussion of the mechanism of $\text{II} \rightarrow \text{III}$ especially awaits further investigations.

The results already obtained nevertheless imply topotaxy not only between the NaCl-like and CsCl-like phases, but also between the RbNO_3 II and low- RbNO_3 structures. They support the view that a large structure change is consistent with topotaxy in chemical compounds; and they imply that though a particular variation may be favoured, the transformations of compounds of complex ions can fol-

low the same geometry that applies to compounds of simple or near-spherical ions.

S.W.K. acknowledges support of this project by the Australian Research Grants Committee.

References

- BROWN, R. N. & MCCLAREN, A. C. (1962). *Acta Cryst.* **15**, 974–976.
 CHATTERJI, S., MACKAY, A. L. & JEFFERY, J. W. (1971). *J. Appl. Cryst.* **4**, 175.
 FRASER, W. L. & KENNEDY, S. W. (1972). *Acta Cryst.* **B28**, 3101.
 KENNEDY, S. W. (1966). *Nature*, **210**, 936–937.
 KENNEDY, S. W. (1970a). *Phys. Stat. Sol. (a)* **2**, 415–418.
 KENNEDY, S. W. (1970b). Abstract, Roy. Austral. Chem. Inst. Solid State Conference, Canberra.
 KENNEDY, S. W., PATTERSON, J. H., CHAPLIN, R. P. & MACKAY, A. L. (1973). To be published.
 KORHONEN, U. (1951). *Ann. Acad. Sci. Fenn. AI*, **102**, 1–37.
 SALHOTRA, P. P., SUBBARAO, E. C. & VENKATESWARLU, P. (1968). *Phys. Stat. Sol.* **29**, 859–864.
 SHOJI, H. (1931). *Z. Kristallogr.* **77**, 381–397.
 STRÖMME, K. O. (1971). *Acta Chem. Scand.* **25**, 211–218.

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, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).

New Co-editor of *Acta Crystallographica*

The Executive Committee of the International Union of Crystallography has approved the appointment of Profes-

sor G. A. Jeffrey as a Co-editor of *Acta Crystallographica*. Professor Jeffrey will take up this work on 1 August 1973. His address is given in the list of Co-editors on the inner front cover of this issue.

Book Review

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.

BIDICS (Bond index to the determination of inorganic crystal structures) - 1969, 2nd ed. By I. D. BROWN and C. P. WEISS; pp. 108,
BIDICS - 1970, 2nd ed. By I. D. BROWN and C. P. WEISS; pp. 113,
BIDICS - 1971. By I. D. BROWN, C. P. WEISS and K. K. WU, pp. 126. Institute for Materials Research, McMaster University, 1972. Price (1969 and 1970) Canadian \$3.00, (1971), Canadian \$7.50 (paperback).

'BIDICS' is an acronym for Bond Index to the Determinations of Inorganic Crystal Structures. The aim is to provide a rapid and cheap service to enable anyone, not necessarily a qualified crystallographer, to discover the reference to a crystal structure containing an interatomic distance of in-

terest. Included are all crystal structures, except those of purely organic compounds, published in about 35 journals during the year in the title.

Each volume is in two parts, the first being a list of the shortest interatomic distances of each type in the compounds or minerals with chemical formulae and abbreviated references which lead to the second part, the bibliography. Entry is only through interatomic distances, *i.e.* there is no author index. BIDICS is designed to answer the question 'Where were Na–O distances reported in 1969?' In this it is successful. It can also be used to answer the question 'Was the structure of $\text{NaHSO}_2\text{HCHO}\cdot 2\text{H}_2\text{O}$ determined in 1970?'

Its most serious limitation is the small number of fairly common journals covered, so it is not comprehensive. A minor one is the use of line-printer output with its restricted