

We have investigated only one crystal for each compound and therefore we cannot make any generalization, but our results seem to indicate that the degree of twinning decreases drastically on going from LaFeO_3 to LuFeO_3 . We have found that it is ~27% for LaFeO_3 , ~8% for PrFeO_3 , ~3% for NdFeO_3 , barely observable in EuFeO_3 , and absent in LuFeO_3 .

References

- BERTAUT, E. F. & FORRAT, F. (1956). *J. Phys. Radium*, **17**, 129.
 BRUSSET, H., GILLIER-PANDRAUD, H. & BERDOT, J. L. (1967). *Bull. Soc. chim. Fr.* p.2886.
 CROMER, D. T. (1965). *Acta Cryst.* **18**, 17.
 CROMER, D. T. & WABER, J. T. (1965). *Acta Cryst.* **18**, 104.
 COPPENS, P. & EIBSCHÜTZ, M. (1965). *Acta Cryst.* **19**, 524.
 FRITCHE, C. J. (1967). Unpublished computer program for Fourier synthesis.
 GELLER, S. (1956). *J. Chem. Phys.* **24**, 1236.
 MAREZIO, M., REMEIK, J. P. & DERNIER, P. D. (1969). *Acta Cryst.* **B25**, 955.
 MAREZIO, M., REMEIK, J. P. & DERNIER, P. D. (1970). To be published.
 OKAZAKI, A., IWANAGA, H. & TSUKUDA, N. (1968). *J. Phys. Soc. Japan*, **24**, 209.
 PREWITT, C. T. (1966). Unpublished computer program for crystallographic least-squares refinement.
 RÜDORFF, W., DINCKE, G. & BABEL, D. (1963). *Z. anorg. allg. Chem.* **320**, 150.
 ZACHARIASEN, W. H. (1963). *Acta Cryst.* **16**, 1139.

Acta Cryst. (1970). **B26**, 302

Note on the space group of potassium hydrogeniodate(V), $\text{KIO}_3 \cdot \text{HIO}_3$. BY G. KEMPER and AAFJE VOS, *Laboratorium voor Structuurchemie, Rijksuniversiteit Groningen, Bloemsingel 10, Groningen, The Netherlands*

(Received 20 October 1969)

A pronounced piezoelectric effect shows that the space group $P2_1/c$ indicated by X-ray evidence is incorrect.

Recent experience with acid potassium iodate $\text{KIO}_3 \cdot \text{HIO}_3$ has shown that one cannot rely on X-ray evidence alone for the determination of the symmetry of a compound, even if the refinement has given good agreement between the F_o and F_c values.

In agreement with the monoclinic symmetry and the systematic extinctions, $0k0$ absent for k odd and $h0l$ absent for l odd, the space group of $\text{KIO}_3 \cdot \text{HIO}_3$ was assumed to be $P2_1/c$. The unit cell with dimensions $a=7.025(2)$, $b=8.206(2)$, $c=21.839(5)$ Å, $\beta=97.98(1)^\circ$, contains eight (two independent) formula units $\text{KIO}_3 \cdot \text{HIO}_3$. During a least-squares refinement in space group $P2_1/c$ based on

7516 accurately determined independent F values, the weighted residual $R_w = [\sum w(F_o - F_c)^2 / \sum w F_c^2]^{1/2}$ decreased to 0.043. For the standard deviations in the iodine and oxygen atom positions small values of 0.0003 and 0.0035 Å respectively were calculated by the least-squares program and reasonable values for the thermal parameters were found. Nonetheless the adopted space group is incorrect as the crystals exhibit a very pronounced piezoelectric effect (kindly measured by Professor W. G. Perdok). A discussion of the structure will be given after the deviations from centrosymmetry have been determined by means of neutron diffraction.

International Union of Crystallography

Opening of new Union office

The President of the Union, Professor A. Guinier, together with the Chairman of the Commission on Journals, the General Secretary, the Treasurer, employees of the Union and guests, attended a luncheon in Chester on 7 January to mark the opening of the new Union office. This office,

incorporating the office of the Technical Editor and the office of the Executive Secretary, is at 13 White Friars, Chester CH1 1NZ, England. All correspondence for the Technical Editor, Mr S. A. Bryant, and the Executive Secretary, Dr J. N. King, should be sent to this address. Dr King has now taken over the day-to-day business of the Union from the General Secretary and the Treasurer.