will be non-zero no matter what the value of B, and in such a situation the refinement of B or Q will not use the same modification to the scattering factors and hence the two refinements are different in this respect.

Fig. 1 shows the differences between the scattering factors modified by Q and B separately. For a particular value of Q, B is varied from 0 to 35 Å^2 using a step of 1 Å^2 and the values of R (vertical axis) are plotted. The summation was carried out for Bragg spacings of 10, 5, 3·3 and 2·5 Å; and $f(s)$ of an oxygen atom was used. The graph for $Q = 0{\cdot}9$ goes through a low value around $B = 4$ Å^2, showing that instead of using a Q of 0·9 and a B of 0, one may use a Q of 1·0 and a B of 4 Å^2 to obtain very similar scattering-factor curves out to 2·5 Å. In other words, the scattering-factor curve out to 2·5 Å obtained after refining Q to 0·9 and B to 0 is very similar to the scattering-factor curve obtained by fixing Q at 1·0 and refining B to 4 Å^2. However, the scattering-factor curve used after refining Q to 0·5 and B to 0 is significantly different from the scattering-factor curve used after fixing Q at 1·0 and allowing B to take any possible value.

These graphs reveal that, at medium resolution (to 2·5 Å) for small error in Q (for example, $Q = 1{\cdot}0$ is used instead of $Q = 0{\cdot}9$), there exists a suitable change in the value of B (4 Å^2) for which R is small (0·06). However, for larger errors in Q, R remains rather high for B ranging from 0 to 35 Å^2. Extension of the summation to smaller values of Bragg spacing obviously increases the discrepancy between scattering factors modified independently by Q and B. These graphs show that, at medium resolution (to 2·5 Å), B can modify scattering factors to compensate for a small error in Q, but larger error in Q cannot be accurately compensated for by B. In practice, the need to refine Q arises only for atoms suspected of disorder, and these atoms pose special problems. A disordered atom, unlike the rest of the atoms in the unit cell, may not contribute significantly to the higher-resolution diffraction patterns and hence the structure-factor least squares may tend to wipe out its contribution to higher-resolution reflections. In such situations the existence of higher-resolution data by itself may not suggest the independence of Q and B for disordered atoms. Therefore, for atoms suspected of disorder, it might be expedient to impose the desired constraints through tight restraints on B and Q rather than by elimination of variables (Hendrickson, 1985).

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Electron microscope analyses of domains and discommensurations in ferroelectric Rb_2ZnCl_4. Erratum.

By K. TSUDA, N. YAMAMOTO and K. YAGI, *Physics Department, Tokyo Institute of Technology, Oh-okayama, Tokyo* 152, *Japan*

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Abstract

The following corrections should be made in Tsuda, Yamamoto & Yagi [*Acta Cryst.* (1988). A**44**, 864-870].

(1) 'only two kinds of domain boundaries' in the *Abstract* should be changed to 'two kinds of image contrast of domain boundaries'.

(2) The expressions for h_2, h_4, h_6 in § 4.1 should be replaced by

h_2: $-x$ $-y$ $-z+\frac{2}{3}$
h_4: $-x$ $-y$ $-z$ (inversion)
h_6: $-x$ $-y$ $-z+\frac{1}{3}$.

(3) 'two kinds of DC's showing different contrast' in the second paragraph in § 4.1 should be changed to 'two kinds of DC contrast'.

All relevant information is given in the *Abstract*.

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International Union of Crystallography

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