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).

I thank Drs D. R. Davies, E. A. Padlan and S. Sheriff for useful discussions.

References

FREEMAN, A. J. (1962). *International Tables for X-ray Crystallography*, Vol. III, pp. 201-209. Birmingham: Kynoch Press. (Present distributor Kluwer Academic Publishers, Dordrecht.)

HENDRICKSON, W. A. (1985). *Methods Enzymol.* **115**, 252-270.

KUNDROT, C. E. & RICHARDS, F. M. (1987). *Acta Cryst.* B**43**, 544-547.

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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*

(*Received* 1 *November* 1988)

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

XV International Congress of Crystallography Bordeaux, France, 19–28 July 1990 Call for programme proposals

The XV Congress of the International Union of Crystallography will be held on the Campus of Bordeaux University. The opening ceremony will take place on Thursday 19 July 1990 and the closing ceremony on Saturday 28 July. The Chairman of the Organizing Committee is Dr M. Hospital, Laboratoire de Cristallographie et Physique Cristalline, Université de Bordeaux I, F-33405 Talence CEDEX, France.

0108-7673/89/010146-01$03.00

There will be, as usual, Main Lectures, Microsymposia and Poster Sessions. In addition, Discussion Sessions following Poster Sessions will be organized experimentally in a certain number of cases. The list of Topics and Categories for submission of papers will be revised and the Microsymposia topics will be included as a subset of the general list of Topics.

The National Committees and the Commissions of the Union have been invited to submit proposals for all parts of the scientific programme. Individual suggestions are also welcome and I invite all crystallographers to send in their proposals for:

Main lectures, topics and speakers
Microsymposia topics, chairpersons and speakers
revision of the list of Categories and Topics

either through the Secretary of their National Committee or directly to me.

This announcement will only appear late 1988, early 1989. It is however absolutely necessary that answers reach me by **28 February 1989** at the latest to allow sufficient time for consultations with Programme Committee Members before the Programme is finalized in July 1989.

A list of the Satellite Meetings which will accompany the main Congress is included in this announcement with the names and addresses of the organizers who can give information on these meetings. It is important to note that all of these Satellite Meetings are organized in conjunction with or by Commissions of the Union.

A list of the Members of the International Programme Committee is also included.

A. AUTHIER
Chairman of the Programme Committee

Programme Committee

Professor André Authier
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Professor John Stezowski
Institut für Organische Chemie, Biochemie und Isotopenforschung
Universität Stuttgart
Pfaffenwaldring 55
7000 Stuttgart 80
Federal Republic of Germany

Professor Xiao-Jie Xu
Laboratory for the Structure of Matter
Department of Chemistry
Peking University
Beijing
People's Republic of China

Satellite Meetings

1. *Short Range Order in Ill Ordered Materials*
Orsay (near Paris), 16–18 July 1990.
Organizing Committee: Dr D. Raoux, LURE, Université Paris-Sud, Bâtiment 209 C, 91405 Orsay, France.
Programme Committee: Dr A. Delapalme.

2. *Powder Diffraction*
Toulouse, 16–18 July 1990.
Organizing Committee: Dr J. Galy, Laboratoire de Chimie de Coordination, CNRS, 205, Route de Narbonne, 31400 Toulouse, France.
Programme Committee: Professor R. A. Young.

3. *Complementary Applications of Diffraction by Neutrons and by X-ray Synchrotron Radiation*
Near Grenoble, 29–31 July 1990.
Organizing Committee: Dr M. Marezio, Laboratoire de Cristallographie, CNRS, BP 166 X, 38042 Grenoble CEDEX, France.
Programme Committee: Dr C. Vettier.

4. *Symmetry in Physical Space and in Superspaces. Physical Applications: Quasicrystals, Incommensurate Phases, ...*
Chatenay-Malabry (near Paris), 29–31 July 1990.
Organizing Committee: Professor D. Weigel, Chimie-Physique du Solide, Ecole Centrale, Grande Voie des Vignes, 92295 Chatenay-Malabry CEDEX, France.
Programme Committee: Professor Th. Hahn.

5. *International School on Crystallographic Computing*
Bischenberg (near Strasbourg), 29 July–5 August 1990.
Organizing Committee: Dr J. C. Thierry, Laboratoire de Cristallographie Biologique, IBMC, 15, Rue Descartes, 67084 Strasbourg CEDEX, France.
Programme Committee: Dr D. Moras.

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Report on the IUCr Logo Design Contest

A total of 165 designs sent in by 68 entrants from 21 different countries (see Table 1) were received by the IUCr Logo Committee as entries for the Logo Design Contest [*Acta Cryst.* (1988), A**44**, 231–232]. The Committee reached the final conclusion on Sunday 28 August 1988 in Vienna, prior to the Eleventh European Crystallographic Meeting. The sealed envelope containing the name of the winner was opened in the presence of the President of the IUCr, Professor M. Nardelli, and another member of the Executive Committee, Dr E. N. Maslen. The winning entry was designed by:

Professor Giovanni Predieri
Istituto di Chimica Generale ed Inorganica
Università di Parma
Italy

Mrs Susanna Ciribolla
Centro Grafico
Università di Parma
Italy.

The final design of the IUCr logo will be published in the Union's journals after some small adjustments have been made to the winning submission.

Table 1. *Entrants to logo competition*

Country	Number of entrants	Number of entries
China PR	1	1
Czechoslovakia	2	7
Denmark	1	3
France	1	3
Germany DR	3	9
Germany FR	1	1
Hungary	7	18
Iran	1	3
Israel	1	2
Italy	7	18
Mexico	1	2
Netherlands	4	8
Philippines	1	3
Poland	7	19
South Africa	1	2
Spain	1	1
Sweden	2	6
Switzerland	4	7
UK	8	23
USA	13	28
Yugoslavia	1	1
	68	165

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Books Received

The following books have been received by the Editor. Brief and generally uncritical notices are given of works of marginal crystallographic interest; occasionally a book of fundamental interest is included under this heading because of difficulty in finding a suitable reviewer without delay.

Organic solid state chemistry. (Vol. 32 of **Studies in organic chemistry.**) Edited by G. R. DESIRAJU. Pp. xii + 550. Amsterdam: Elsevier Science Publishers, 1987. Price Dfl 360 or US $175.50. A review of this book, by K. J. McCullough, has been published in the October 1988 issue of *Journal of Applied Crystallography*, page 580.

Mineralogie. By SIEGFRIED MATTHES. Pp. xvii + 444. Berlin: Springer-Verlag, 1987. Price DM 69. A review of this book, by J. E. Chisholm, has been published in the December 1988 issue of *Journal of Applied Crystallography*, page 996.