It would seem to be better, therefore, under these circumstances to quote the number of class 2 reflexions for which $|F_c| < F_{11m}$ as a percentage of the total number of class 2 reflexions, and to use this as a measure of agreement between the actual and the postulated structures as far as these reflexions are concerned.

If, however, $|F_c| \geq F_{11m}$, useful information for the refinement of the x_i is conveyed, namely that the initial set of x_i is impossible, and should be adjusted so as to satisfy the limit on F_c. Therefore a comparatively large weight can be assigned to such a reflexion. In practice in this case, for the calculation of ΔF, either $F_o = 0$ or $|F_o| = F_{11m}$ can be taken, and it should be possible to improve the rate of convergence of the refinement by applying the weighting scheme of equation (5). Particular choice of these weights should not affect the final result of the refinement because in the last stages of refinement all $|F_c|$ should become smaller than F_{11m} anyhow, and so *all* class 2 reflexions are finally weighted zero and may just as well be left out. They are of value only in the initial stages of refinement, where they may help to accelerate convergence. There is, however, a proviso here, namely that once a class 2 reflexion satisfies $|F_c| < F_{11m}$, if it is given $w = 0$, thereafter in the refinement there is a distinct possibility that it will not continue to satisfy this constraint. It might, therefore, be appropriate, particularly when there is a large number of reflexions involved, to use the weighting scheme of equation (3) for class 2 reflexions when $|F_c| < F_{11m}$. They should be omitted from the calculation of errors in parameters.

A more rigorous treatment of non-normal distributions of errors is in progress.

In the final stages of the refinement of n-hexatriacontane, most $|F_c|$ did in fact lie below the limit F_{11m}.

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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 (G. Boom, Laboratorium voor Fysische Metaalkunde der Rijksuniversiteit, Universiteitscomplex Paddepoel, Groningen, The Netherlands). Publication of an item in a particular issue cannot be guaranteed unless the draft is received 8 weeks before the date of publication.

Bragg *Festschrift*

In March 1970 the Union journals (Sections A and B of *Acta Crystallographica*, and the *Journal of Applied Crystallography*) will form a *Festschrift* in honour of the eightieth birthday of Professor Sir Lawrence Bragg, F.R.S. Contributions are invited, which may be either strictly scientific or of an informal or biographical nature. Scientific papers should be submitted in the ordinary way to the appropriate Co-editor; other contributions should be submitted to the Editor. In order to allow sufficient time for refereeing and printing the closing date for receipt of contributions is 31 July 1969.

New Co-editors of *Acta Crystallographica*

The Executive Committee of the International Union of Crystallography has approved of the appointment of two new Co-editors of *Acta Crystallographica:* W. C. Hamilton (U.S.A.) and P. J. Wheatley (U.K.). Their addresses are printed on the inner front cover, along with those of the other Co-editors. Dr Wheatley will be active as Co-editor immediately, while Dr Hamilton will take up the actual work on 1 September 1969 as he is now engaged in the preparations for the Eighth Congress of Crystallography which takes place in August this year.

International Union of Crystallography

Prices of publications to customers in the Netherlands

Owing to the recent introduction of the turnover tax in the Netherlands, it is necessary to increase the prices of some Union publications to customers in the Netherlands. The increases apply to the publications handled by A. Oosthoek's Uitgevers Mij N.V. and are: *Structure Reports* Dfl. 5·00 per volume (Dfl. 2·50 for personal subscribers), *Fifty Years of X-ray Diffraction* Dfl. 2·00, and *Symmetry Aspects of M. C. Escher's Periodic Drawings* Dfl. 1·00. The prices of the small incidental publications remain unaltered. *These increases do not apply to orders placed with Messrs Oosthoek from countries outside the Netherlands.*

Safe Use of X-ray Equipment

The following notice has been received from the Commission on Crystallographic Apparatus:

With X-ray equipment, there is continual need to remind oneself of the potential dangers from radiation as well as those associated with high voltage. Use of equipment of this type involves a responsibility for the safety and health of one's colleagues and any other person who approaches the apparatus as well as for one's own protection. The dan-

gers of radiation dosage are accentuated by the increasing power output of present-day X-ray generators.

The International Commission on Radiological Protection (I.C.R.P.) has had under consideration the revision of existing (1960) I.C.R.P. recommendations on the safe use of X-ray installations. A preliminary report of the available information has been published in *Health Physics* (1968) **15**, 481–486 by Professor B. Lindell. To assist in gathering further material and examples to assess the magnitude of the problem and the methods of lessening hazards, the International Commission on Radiological Protection would welcome comments and suggestions from crystallographers from their personal knowledge and practical experience. These should be sent to the I.C.R.P. Secretary, Dr F. D. Sowby, I.C.R.P., Clifton Avenue, Sutton, Surrey, England.

This request provides an opportunity to remind X-ray users of the associated potentially serious hazards from the increasing generator power and the proliferation of automatic equipment. There is great need to ensure the incorporation of fail-safe protection devices. It is advisable that crystallographers re-read on occasions the available documents dealing with safety aspects of the use of X-rays and, in particular, ensure that colleagues just beginning to use equipment should acquaint themselves with the necessary information. This is available not only in the article by Lindell referred to above but also in the earlier Report of the I.U.Cr. Commission on Crystallographic Apparatus [*Acta Cryst.* (1963) 16, 324], while a later compilation by R. Rudman in *J. Chem. Ed.* (1967) **44**, A7 may be found useful.

World Directory of Crystallographers

Fourth Edition

The International Union of Crystallography will publish a Fourth Edition of the *World Directory of Crystallographers*. A world-wide team of (national) Sub-editors has been assembled. Every Sub-editor will prepare the list for his country. The lists will again contain biographical entries in alphabetical order within each country, giving names and addresses of crystallographers as well as their major scientific interests. An additional alphabetical listing containing the total of all names entered, with references to the appropriate national lists, will be included.

The Sub-editors will be sending out questionnaires to all persons who were listed in the Third Edition (1965). Crystallographers who are not listed there but would like to be included should write to the Secretary of the National Committee of their country; the appropriate addresses can be found in *Acta Crystallographica* (1968), A**24**, page 706. Crystallographers in countries not adhering to the Union should write to

Dr G. Boom, General Secretary I.U.Cr.
Laboratorium voor Fysische Metaalkunde der Rijksuniversiteit,
Universiteitscomplex Passepoel, Groningen 8002, The Netherlands.

International Union of Crystallography

Structure Reports

Volume 26 of *Structure Reports*, covering the literature for 1961, was published in February. Volume 24, covering the literature for 1960, was published in November 1968. The price for each of these volumes when ordered from countries outside the Netherlands is (Netherlands guilders) *f* 140 (or at present rates of exchange $39 or £16.8*s*). Note, however, that prices of all volumes of *Structure Reports* to customers in the Netherlands are increased by *f*5 because of the recently introduced turnover tax.

Volume 25 is the cumulative index for the ten years 1951–60. It is expected to be published about May 1969 (price outside the Netherlands *f*90).

Full details of various price reductions for standing orders and of reduced personal prices for *Structure Reports* were given in *Acta Cryst.* (1968), A**24**, 703 and B**24**, 1398, and in *J. Appl. Cryst.* (1968). **1**, 196.

Certain concessions offered to purchasers of ten-year sets applied originally only to orders placed before 1 April 1969. These concessions are now extended until further notice.

Orders

Structure Reports is published for the International Union of Crystallography by A. Oosthoek's Uitgevers Maatschappij N.V., Domstraat 11–13, Utrecht, The Netherlands. Orders can be placed with Oosthoek's or with any bookseller. All prices are post free from Oosthoek's.

Payments to Oosthoek's in U.S. dollars or pounds sterling may be made by cheque, which will be paid in to Oosthoek's account at the Chase Manhattan Bank, New York 15, N.Y., or the British Linen Bank, London, E.C.2., respectively. No problems of U.S. or U.K. currency control arise with such transactions.

Orders from the North American area can also be placed with Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A.

An informative prospectus for *Structure Reports*, showing specimen pages and giving price details for all volumes, can be obtained free of charge from Oosthoek's.