

Patterson projection a polygon of the  $n$ th order, with doubly-weighted maxima at the mid points of each side

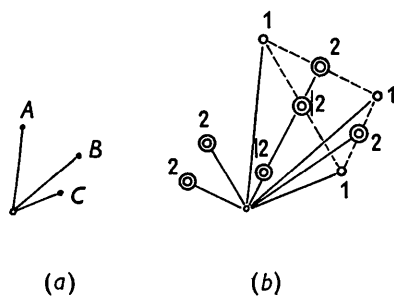


Fig. 2.

and on the straight lines passing through the origin parallel to these sides. The order of the polygon depends upon the multiplicity of the space group (e.g. in the plane group  $pg$  the polygon is of the  $2n$ th order).

The method was successfully applied in the structure determination of mercury oxychloride,  $2\text{HgCl}_2 \cdot \text{HgO}$ , which has been undertaken in this laboratory (Grdenić & Šćavničar, 1952). The crystals of this compound belong to the symmetry group  $T^4-P2_13$  with 4 formula units in the elementary cell. The interpretation of the Patterson projection in this case could obviously be restricted only to the Hg-Hg maxima. Using the method described a 'triangle' was found (Fig. 3) from which the probable preliminary mercury parameters were derived, and subse-

quently confirmed by the symmetry relations and by finding a corresponding 'hexagon' in the Patterson projection.

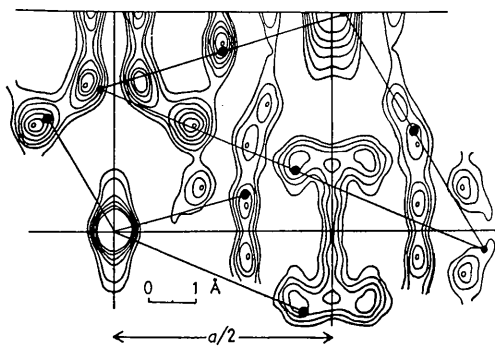


Fig. 3.

In conclusion I wish to thank Dr D. Grdenić for a very helpful discussion and also S. Šćavničar for supplying me with all data and allowing me to publish the Patterson projection in Fig. 3.

#### References

- GRDENIĆ, D. & ŠĆAVNIČAR, S. (1952). To be published. Presented at the 1st Congress of Pure and Applied Chemistry of the People's Republic of Croatia, Zagreb, October 1952.
- LINDQVIST, I. (1952). *Acta Cryst.* **5**, 667.

*Acta Cryst.* (1953). **6**, 749

## International Union of Crystallography

### Third General Assembly and International Congress, Paris, 21-28 July 1954

By kind invitation of the French Government the Third General Assembly and International Congress of the Union will be held in Paris from 21 to 28 July 1954.

#### Membership

Delegates to the General Assembly, which will be concerned with the formal business of the Union, will be nominated by the National Committees. Crystallographers throughout the world are, however, cordially invited to attend the International Congress; it is particularly hoped that they will assist the Union by bringing the Congress to the notice of their colleagues, by press announcements and otherwise, so that the attendance may be large and fully representative of crystallographic research in all countries. The Union is unfortunately not in a position to provide funds to assist delegates in meeting travelling expenses.

The membership fee will be 3000 francs for crystallographers and 2000 francs for their friends.

#### Programme

The subjects selected for consideration are:

1. Instruments and Measurements.
2. New Developments in Structure Determination.

3. Mineral Structures, including Synthetic Minerals and Ceramics.
4. Metal Structures.
5. Inorganic Structures.
6. Organic Structures.
7. Proteins and Related Structures.
8. Random and Deformed Structures.
9. Liquids and Liquid Crystals.
10. Glasses.
11. Thermal Transformations.
12. Diffuse Scattering.
13. Crystal Growth.
14. Neutron Diffraction.
15. Miscellaneous.

The Executive Committee has decided that no report of the Congress shall be published, it being felt that most of the contributions will find their way into the scientific literature in the normal manner and that the expense of separate publication would not be warranted. Full abstracts of the contributions will, however, be distributed in advance; speakers will then be expected to present their papers quite briefly at the Congress in order that ample time may be available for discussion.

The Programme Committee expects that a large num-

ber of papers will be offered for consideration. In offering contributions crystallographers are, therefore, earnestly requested to exercise discretion and to confine themselves strictly to aspects of their work which are novel and of crystallographic interest. The Executive Committee has decided that *no paper can be accepted which has already been published or which is expected to appear in print before 1 June 1954*. The Programme Committee reserves the right to decline any contribution and to determine the length of time to be allotted to each speaker.

In addition to papers on the above topics it is hoped to arrange a number of somewhat longer invited survey lectures on subjects of general crystallographic interest.

### Exhibition and Advertisements

It is hoped to arrange an exhibition of apparatus and books of crystallographic interest; it is also hoped to carry advertisements of these items in the final programme. Manufacturers and publishers wishing to take part in the exhibition or to advertise in the programme should approach the Secretary of the Local Committee without delay, and in any case not later than 15 February 1954.

### Excursions

Arrangements are being made for visits to localities of mineralogical interest after the close of the Congress. Details will be announced later.

It is hoped also to arrange a programme of excursions and other events for the benefit of friends accompanying those attending the Congress.

### Symposia

It is proposed to hold two Symposia on the following topics:

1. The Location and Function of Hydrogen.
2. The Mechanism of Phase Transitions in Crystals.

These Symposia are intended primarily for specialist workers in these fields, but in so far as accommodation is available all crystallographers will be welcome. The Symposia will be held on 29 and 30 July but introductory sessions will be arranged during the period 21-28 July.

### Languages

Although contributions may be presented in any language, the Executive Committee feels that those in English, French and German, and especially those in English and French, will be most readily understood by the majority of the delegates. The Committee, therefore, hopes that authors will as far as possible present their papers in one of these three languages.

### Accommodation

Provisional reservations of a number of rooms have already been made in hotels of all classes, in the Cité Universitaire and in schools and colleges, and crystallographers are requested to give details of accommodation required.\* Those who prefer to arrange their accommodation independently are advised to act early, as Paris hotels are heavily booked in the summer months.

### Enrolment

It is hoped that crystallographers will now be in a position to give firm notice of their intention to be present and it is requested that such notice should reach the Secretary of the Local Committee as soon as possible, and in any case not later than 15 February 1954.\* While every effort will be made to meet the convenience of those able to register only after this date, no guarantee can be given that it will be possible to find accommodation for them.

*No further public announcements about the Congress will be made and future notices will be distributed only to those who have indicated their interest. All those who expect or hope to be present are, therefore, earnestly requested to register their names with the Secretary of the Local Committee.\**

Offers of papers for consideration by the Programme Committee are cordially invited and should be submitted to the Secretary of the Programme Committee as soon as possible, and in any case not later than 15 February 1954.\* Each offer must be accompanied by a brief abstract (about 25 words) of the proposed paper. Crystallographers whose contributions are accepted will be notified shortly after this date and will then be requested to submit more detailed abstracts of their papers not later than 31 March 1954.

### Correspondence

All correspondence concerning the Congress and the Symposia should be addressed to the Secretary of the Local Committee and of the Programme Committee:

A. J. ROSE, Laboratoire de Minéralogie, 1 rue Victor Cousin, Paris 5<sup>e</sup>, France.

All correspondence concerning the General Assembly and the business of the Union should be addressed to the General Secretary:

R. C. EVANS, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, England (*Telegraphic address*: Crystals, Cambridge, England).

### Other Meetings

Details of some other events in Europe in the summer of 1954 which may be of interest to crystallographers are tabulated below.

\* To save unnecessary correspondence these communications should, if possible, be on the form accompanying the First Circular. A copy of this circular is enclosed in this issue of *Acta Crystallographica* and further copies may be had from the General Secretary, from the Secretary of the Local Committee or from the following regional representatives of the Programme Committee:

G. MENZER, Universitätsinstitut für Kristallographie und Mineralogie, Luisenstrasse 37/II, München 2, Germany.  
W. H. TAYLOR, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, U. K.  
J. D. H. DONNAY, The Johns Hopkins University, Baltimore, Maryland, U. S. A.

*Some events in Europe in 1954*

Date	Place	Description	Secretariat
30 June	Norway and Sweden	Total solar eclipse visible in southern Norway and Sweden	—
6-9 July†	London, England	Meeting of the Joint Commission on Electron Microscopy of International Council of Scientific Unions	F. W. CUCKOW, Chester Beatty Institute, Royal Cancer Hospital, Fulham Road, London S.W. 3
13-17 July	Bristol, England	Symposium on Solid-State Physics, organized by the International Union of Pure and Applied Physics	P. FLEURY, 3 Boulevard Pasteur, Paris 15°, France
19-20 July	Birmingham, England	Conference on Mechanical Effects of Dislocations in Crystals	A. H. COTTRELL, Department of Metallurgy, The University, Birmingham 15
July†	Brussels, Belgium	Symposium on Photoelasticity and Photoplasticity, organized by the International Union of Theoretical and Applied Mechanics	F. H. VAN DEN DUNGEN, 48 avenue de l'Arbalète, Boitsfort, Brussels
1-8 September	Oxford, England	Annual Meeting of the British Association for the Advancement of Science	D. N. LOWE, British Association for the Advancement of Science, Burlington House, Piccadilly, London W. 1
2-9 September	Amsterdam, Netherlands	Congress of the International Mathematical Union	J. F. KOKSMA, 2e Boerhaavestraat 49, Amsterdam O
5-14 September	Zürich and Montreux, Switzerland	Annual Meeting of the Institute of Metals	The Secretary, The Institute of Metals, 4 Grosvenor Gardens, London S.W. 1, England

† Provisional dates.

**Book Reviews**

*Works intended for notice in this column should be sent direct to the Editor (P. P. Ewald, Polytechnic Institute of Brooklyn, 99 Livingston Street, Brooklyn 2, N.Y., U.S.A.). As far as practicable books will be reviewed in a country different from that of publication.*

**X-ray Crystallographic Technology.** By A. GUINIER, translated from the French by T. L. TIPPELL and edited by K. LONSDALE. Pp. xiii+330, with 18 plates and 148 diagrams. London: Hilger and Watts. 1952. Price 56s. (Obtainable in U.S.A. from Jarrell-Ash, Boston; price \$9.50.)

Instructors desirous of presenting students with a well-balanced, completely authoritative account, of moderate length, of the scientific background for technological applications of X-ray diffraction, hailed the appearance in 1945 of Prof. André Guinier's *Radiocristallographie* (Paris: Dunod). Unfortunately this excellent work was printed on paper of very poor quality, and insubstantially bound. This, plus the limited linguistic facility of American students, at least, seriously limited the utility of the treatise. The appearance in 1952 of an English translation

of Guinier's volume, under the title *X-Ray Crystallographic Technology*, excellently printed and bound, is thus a very welcome event among English-speaking workers. The translation has been accomplished by Mr T. L. Tippell, and has been edited by Prof. Kathleen Lonsdale, who furnished a foreword to the translation.

The material is essentially identical with that of the 1945 original. Only one small section of the earlier edition has been modified. This is the last part of Chapter VII, in the discussion of strain measurements in metals, where the discussion of the method of oblique incidence is expanded. Some new figures have been added. The use of good quality paper has so vastly improved the clarity of figures and tables alike that one must look twice to assure himself that most of these are unchanged from the French edition. Guinier's own contributions to focusing monochromator methods are properly emphasized. His