

## International Union of Crystallography

### Report of Executive Committee for 1957

#### Introduction

The most important event in 1957 was the Fourth General Assembly and International Congress, which by kind invitation of the National Research Council of Canada was held in Montreal in the buildings of McGill University. The General Assembly met on 10 July during the whole day, and on 17 July during the afternoon. The morning and afternoon sessions on the first day were fully devoted to discussing a draft of new Statutes and By-Laws presented by the Executive Committee in accordance with a decision of the Third General Assembly. After some amendments were made in the draft, the new rules were adopted and came immediately into force for the subsequent proceedings of the Assembly. In addition to the routine business prescribed to the General Assembly by the Statutes, the Assembly further discussed possible extensions of the publication programme of the Union, and approved of the establishment of a Commission on Electron Diffraction. A detailed report of the proceedings of the Fourth General Assembly (including the more important appendices to the Agenda, and the new Statutes and By-Laws) has been sent to the National Committees and to all persons involved in the work of the Union. Further copies of this report are still available, and persons wishing to receive a copy should write to the secretary of their National Committee. (Residents of countries not adhering to the Union may obtain a copy by writing to the General Secretary of the Union.)

The Congress, which was held during the period 11 to 17 July, was attended by about 600 active and 140 accompanying members from twenty-one countries. The scientific programme consisted of (a) a special evening lecture presented by the retiring President of the Union at the University of Montreal on 12 July; (b) five invited general lectures presented as first topics on the successive days of the Congress; and (c) about 240 contributed papers covering all branches of crystallography. The Congress was followed by two Symposia, respectively devoted to 'Physical techniques of crystallographic interest' and 'Electron-diffraction studies of solids and gases', on 18 and 19 July. In addition to the invited introductory lectures, 36 contributed papers were read at these Symposia. For the period following the Congress two excursions of mineralogical interest were organized; each of them was attended by about thirty persons. More details concerning the Congress, the Symposia and the excursions can be found in a report on the Fourth General Assembly and International Congress, which has been published in this journal, and which is followed by the abstracts of all papers presented in Montreal (*Acta Cryst.* (1957), **10**, part 12).

The new Executive Committee met directly after the close of the General Assembly, primarily to determine its policy for the period until the Fifth General Assembly, and to make arrangements in pursuance of the decisions taken by the Fourth General Assembly. It was decided to invite Dr W. H. Taylor to set up and head the Pro-

gramme Committee for the Fifth International Congress. It was further decided to invite Dr D. Rogers to be Chairman, and Prof. G. A. Jeffrey, Dr A. J. Rose and Prof. V. Schomaker to be members of an *ad-hoc* Committee on Computing Methods which would advise the Executive Committee on a number of questions put before it at Montreal. [These invitations have meanwhile been accepted.] The Executive Committee also approved of the co-option of Dr A. F. Wells on the Commission on Crystallographic Teaching, and confirmed the appointments of Prof. J. M. Bijvoet, Prof. J. Donohue and Dr W. B. Pearson as Co-Editors for Structure Reports.

The total number of adhering countries remained unchanged since the Third General Assembly, and amounted to twenty-two at the end of 1957. The Adhering Bodies, and the names and addresses of the secretaries of the National Committees, are listed in Table 1. The membership of the National Committees for Crystallography can be found at the end of the Report for 1956 (see *Acta Cryst.* (1957), **10**, 391), and in two additional notes (see *Acta Cryst.* (1957), **10**, 719; (1958), **11**, 128).

#### Work of the Commissions

##### *Commission on Acta Crystallographica*

The Commission held three meetings during the General Assembly in Montreal. Most of the time was devoted to discussing the editorial problems arising from increasing numbers of manuscripts dealing with computational methods. These highly specialized methods are usually applicable only to one type of computer (*e.g.* IBM 650 or 704) and therefore not even of general interest to all those having access to computers. The technical language employed is usually forbidding. Discussion of rules of acceptance of such papers is still actively going on.

An exchange of views took also place on other editorial topics, such as incomplete structure determinations, and lengthy mathematical developments. Since it is difficult to lay down hard and fast rules of acceptance, it is all the more important that the editors act in the same spirit, and this requires personal contact between them.

More intereditorial correspondence on editorial procedure has taken place since the sessions of the Commission in Montreal, a welcome result.

##### *Commission on Structure Reports*

Volume 8 of *Structure Reports*, covering the years 1940–1941, was scheduled for publication in December 1956 but through unavoidable delays actually appeared in January 1957. Volume 15, covering 1951 only, was published in December 1957.

The Commission met twice during the General Assembly in Montreal. The chief matter of discussion was methods of speeding up the publication of *Structure Reports*. In an attempt to do this, two sets of co-editors for the various sections were appointed, who will work simultaneously on different years. Considerable time was

Table 1. *Adhering Bodies*

Country	Group*	Adhering Body	Secretary of National Committee
Australia	I	Australian Academy of Science	R. I. GARROD, Aeronautical Research Laboratories, Lorimer Street, Fishermen's Bend, Victoria
Austria	I	Österreichische Akademie der Wissenschaften	F. MACHATSCHKI, Mineralogisches Institut der Universität, Vienna 1
Belgium	III	Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique	R. VAN TASSEL, Institut Royal des Sciences Naturelles de Belgique, Rue Vautier 31, Brussels
Brazil	I	Conselho Nacional de Pesquisas	E. TAVORA, Faculdade Nacional de Filosofia, Av. Pres. Antonio Carlos 40, Rio de Janeiro, D. F.
Canada	IV	National Research Council	W. H. BARNES, Division of Pure Physics, National Research Council, Ottawa 2
Chile	I	National Committee for Crystallography	I. GARAYCOCHEA, Laboratorio de Cristalografía y Física Molecular, Universidad de Chile, Casilla 147, Santiago
Czechoslovakia	I	Československá Akademie Věd	A. LÍNEK, Československá Akademie Věd, Národní třída 3, Prague 1
Denmark	I	Akademiet for de Tekniske Videnskaber	A. TOVBORG JENSEN, Den Kgl. Veterinær- og Landbohøjskoles Kemiske Laboratorium, Bülowsvej 13, Copenhagen V
France	VII	Académie des Sciences (Institut de France)	H. CURIEU, Laboratoire de Minéralogie-Cristallographie à la Sorbonne, 1 Rue Victor-Cousin, Paris 5
German Federal Republic	VI	Deutsche Mineralogische Gesellschaft	H. O'DANIEL, Mineralogisches Institut der Universität, Senckenberg Anlage 30, Frankfurt/M.
India	I	Department of Scientific Research and Technical Education	The Secretary, Ministry of Education and Scientific Research, Government of India, New Delhi
Italy	III	Consiglio Nazionale delle Ricerche	M. FORNASERI, Istituto di Geochimica, Università di Roma, Rome
Japan	IV	Science Council of Japan	T. WATANABÉ, Department of Chemistry, Osaka University, Nakanoshima, Osaka
Netherlands	IV	Stichting voor Fundamenteel Onderzoek der Materie met Röntgen- en Electronenstralen	D. W. SMITS, Laboratorium voor Anorganische en Fysische Chemie, Bloemsingel 10, Groningen
Norway	I	Det Norske Videnskaps-Akademi	I. OFTEDAL, Universitetets Mineralogiske Institutt, Blindern, Oslo
South Africa	I	South African Council for Scientific and Industrial Research	F. HERBSTSTEIN, National Physical Research Laboratory, P.O. Box 395, Pretoria
Spain	IV	Consejo Superior de Investigaciones Científicas	M. ABBAD Y BERGER, Instituto de Física 'Alonso de Santa Cruz', Serrano 119, Madrid
Sweden	I	Kungl. Vetenskapsakademien	F. E. WICKMAN, Naturhistoriska Riksmuseet, Stockholm 50
Switzerland	I	Société Suisse de Minéralogie et de Pétrographie	W. NOWACKI, Mineralogisch-Petrographisches Institut der Universität, Hermann-Sahlstrasse 6, Bern
U.K.	VIII	The Royal Society	The Secretary of the British National Committee for Crystallography, The Royal Society, Burlington House, London W. 1
U.S.A.	VIII	National Academy of Sciences—National Research Council	G. A. JEFFREY, Department of Chemistry, University of Pittsburgh, Pittsburgh 13, Pa.
U.S.S.R.	VIII	Academija Nauk U.S.S.R.	N. N. SHEFTAL, Institute of Crystallography, Pyževskij 3, Moscow 17

\* See Statute 2.6 (*Acta Cryst.* (1957), **10**, 727).

also devoted to a discussion of possible publication of reports on Apparatus and Techniques. The General Assembly approved that the proposals concerned be further considered by an *ad-hoc* Committee, and authorized the Executive Committee to decide on the recommendations of this *ad-hoc* Committee without waiting for the next General Assembly.

#### *Commission on International Tables for X-ray Crystallography*

Volume II is in the proof stage, but proof-reading is taking longer than was expected, and it is unlikely that the Volume will be published for several months. No further progress has been made with the Supplement to Volume I, giving diagrams for the cubic space groups; in fact, in spite of criticisms of Volume I on account of their omission, the General Editor has had difficulty in

finding anyone who really seems to need these diagrams for use and not for ornament. The preparation of Volume III continues steadily.

The Commission met several times during the General Assembly in Montreal, mainly to consider details of Volume III.

#### *Commission on Crystallographic Apparatus*

The major project of this Commission during the last year has been the precision measurement of lattice parameters. Fifteen laboratories representing ten nations have undertaken a cooperative project in which the lattice parameters of silicon, diamond and tungsten were measured. All laboratories worked on the same homogeneous samples. Full reports were prepared describing in detail the various techniques, methods and instruments used. Even if the values that were furthest removed

from the others were omitted, the spread in results was 0.014% for each of the three samples. This is a much lower precision than is frequently reported in literature. The project will be continued, and many topics such as X-ray wavelengths, precision methods, and single-crystal measurements will be taken up. Additional measurements will be made. Some of the members of the Commission and participants in the project met during the General Assembly in Montreal. It is hoped that the Commission can meet in 1959 with the participants in this project, to hold a symposium on lattice-parameter measurements.

It is planned to revise the *Index of Manufacturers of Apparatus and Materials used in Crystallography*, so that it will be available before the Fifth General Assembly and International Congress in 1960.

Proposals to publish special charts for powder diffraction have been received and are being studied. Other proposals being studied include various methods of recording X-ray diffraction data, and the problems relating to the publication of Reports on Apparatus and Techniques. A summary report on radiation protection in the field of X-ray analysis is being prepared.

#### *Commission on Crystallographic Data*

The Commission organized an open meeting at the Fourth International Congress in Montreal, with invited papers on the practical and theoretical aspects of recording and classifying powder data. During 1957 close contact was maintained between the Commission and the A.S.T.M. Joint Committee on Chemical Analysis by Powder Diffraction Methods.

The collection of data for the new edition of *Crystal Data* covering the literature until the beginning of 1958, has been completed and the manuscript of the book is in preparation.

The question of systematic collection of electron-diffraction data is under discussion.

#### *Commission on Crystallographic Nomenclature*

No report has been received from this Commission.

#### *Commission on Crystallographic Teaching*

In connection with the Montreal Congress the Commission arranged for a small exhibition of apparatus, photographs, films and charts. At an open meeting organized by the Commission, a number of papers were presented dealing with various topics concerned with the teaching of crystallography. At the closed sessions the future activities of the Commission were discussed. A great interest has arisen in the use of visual aids in teaching, and action has been taken to collect information about such aids, notably films, structure models and stereoscopic views in order that anyone interested in the field can be informed about what is available and where to obtain it.

The publication of the papers presented at the meeting of the Commission held in Madrid in 1956 is in progress as a joint undertaking between the Commission and the Consejo Superior de Investigaciones Científicas. The book is expected to appear in the course of 1958.

#### *Commission on Electron Diffraction*

The Commission on Electron Diffraction was formed at the General Assembly at Montreal. At a meeting of the

new Commission in Montreal it was agreed to propose that electron-diffraction symposia be held in the years 1959 and 1961. It was also agreed to sponsor the preparation of tables of atomic scattering factors for electrons, to be included in Volume III of *International Tables for X-ray Crystallography*, as requested by the Editor of this work.

The general features of the programme for a symposium in 1959 have been determined by correspondence, and further arrangements are in progress. Specific proposals have been made for the material on electron scattering to be included in *International Tables*, and these are the subject of current correspondence among the members of the Commission.

#### *Commission on Macromolecules of the International Union of Pure and Applied Chemistry*

A meeting of the Commission was held during the General Assembly of the International Union of Pure and Applied Chemistry in Paris in July 1957. The matters discussed included the arrangements for the symposia on Macromolecules in Prague, 9–14 September 1957, and in Nottingham, 21–24 July 1958; and the text of the German version of the Report on Nomenclature, chiefly relating to properties of polymer solutions. The English version of this report was issued some time ago, the German version is approaching its final form. It was decided that nomenclature proposals in the Italian, Russian, and Japanese languages should be worked out. Prof. G. Natta was asked to submit to the Commission a written statement presenting his proposals for the nomenclature of the new types of vinyl polymers discovered by him.

#### *Commission on Solid-State Physics of the International Union of Pure and Applied Physics*

The 'Conference on current problems in crystal physics', which had been planned by this Commission and prepared by Prof. J. C. Slater, was held at the Massachusetts Institute of Technology from 1 to 5 July 1957. As already reported in Montreal, this was a most stimulating conference devoted mainly to two topics, namely the wave-mechanical calculation of particular crystal structures, and the experimental and theoretical investigation of the temperature motion in crystals. Most of the papers dealt with the theory of perfect crystals rather than with the influence of imperfections which has been discussed on numerous other conferences. The proceedings have been published in *Reviews of Modern Physics*.\*

The Commission held several short meetings and expressed the desire that a similar conference be arranged in 1960, when it could be attended by those going to the Assemblies of the International Union of Pure and Applied Physics and of Crystallography, both to be held in that year.

At the General Assembly of the former Union, which was held in Rome in the fall of 1957, the structure of the Commission on Solid-State Physics was changed. It remains to find out in what respects these changes, which were not brought to the notice of the Union of Crystallography before the Assembly in Rome, affect our participation in this Commission, which was originally intended to be a joint Commission of the two Unions.

\* *Rev. Modern Physics* (1958), **30**, 46.

### International Council of Scientific Unions

The Union was represented by the General Secretary, Dr D. W. Smits, at the ninth meeting of the Executive Board of ICSU, which was held in Brussels, at the Palais des Académies, from 27 to 29 June 1957. In addition to the routine business, the larger part of the agenda was devoted to matters of no direct interest to the Union, of which the following projects falling under the direction of ICSU may be mentioned: the International Geophysical Year, the Federation of Astronomical and Geophysical Sciences, the organisation of the Special Committee on Oceanic Research, and the ICSU Abstracting Board. Proposals of the Bureau of ICSU were approved that a permanent ICSU secretariat be established in order to avoid the necessity of moving the secretariat whenever a new Secretary General of ICSU is elected, and that its staff be enlarged, to meet the continuously increasing amount of work. [The permanent secretariat has meanwhile been located at The Hague, The Netherlands, at the Paleis Noordeinde.] It was further decided to replace the mimeographed *ICSU Quarterly Bulletin* by a printed quarterly journal named *ICSU Review*. This periodical should serve not only as a news vehicle but also to carry descriptive articles of a high standard on the work of ICSU and the Unions, and further act as a forum for the discussion of the major policies and projects of ICSU. The breakdown of the UNESCO subvention for the financial year 1957/58, showing an allocation of \$ 5500 to the Union of Crystallography, was approved. It was noted that the total amount of the requests received from ICSU and the Unions exceeded considerably the sum available, and it was decided to appeal to all National Members of ICSU to urge through the proper channels that the percentage of the total UNESCO budget allocated to its Natural Sciences Department be increased.

### Finances

The audited accounts of the Union for the year 1957 are published at the end of this Report. As in previous years the amounts are expressed in Netherlands Guilders, using the current rates of exchange £ 1 = f. 10.64, \$ 1 = f. 3.80, and Fr. Fr. 420 = \$ 1.

On comparison with previous accounts, the *Acta Crystallographica* account for 1957 shows again an increased income from subscriptions to the journal and from the sale of back numbers. The number of subscribers has increased continuously since the appearance of the journal; it was in 1957 more than twice as high as in 1948, the year that Volume 1 was published. Also the income from the sale of back numbers has never been so high as in 1957. The nett yield of the advertisements was in 1957 slightly less than in 1956; it is hoped that in the course of the next year more firms will recognize *Acta Crystallographica* as a medium to reach practically everyone interested in crystallography. In 1957 two subventions from Danish sources, together amounting to D. Cr. 6000, were again received for the support of the publication; these subventions were promised some years ago for a period of three years. Since the large improvement occurred in the financial situation of *Acta Crystallographica*, no new subventions have been sought.

A comparison of the *Acta Crystallographica* accounts for 1956 and 1957 shows that the cost of printing and

binding of Vol. 10 was slightly less than the one of Vol. 9. It should, however, be realized that the size of Vol. 10 was only 874 pages, whereas the size of Vol. 9 amounted to 1050 pages. As it is rather probable that the next volumes will again exceed 1000 pages, and as the printing order has been increased from 2000 to 3000 copies as from 1958, a higher cost of publication is to be expected for the next years. As moreover the editorial expenditure may also increase, it is likely that the accounts for those years will show smaller balances than the account for 1957, which shows a rather high excess of income over expenditure amounting to f. 42,635. The accumulated balance of the *Acta Crystallographica* account, which amounted to f. 117,011 at the end of 1957, should be considered as a reserve against unexpected factors which might change the financial situation.

The *Structure Reports* account for 1957 also shows an excess of income over expenditure, even though 1957 was the first year in which no subventions were received for the support of this publication. A comparison of the accounts for the various years is, however, not justified because on each account income and expenditure are mainly related to different volumes. For instance, there has not been any expenditure with respect to Vols. 8-13 in 1957, but by far the larger part of the income in that year was received from the sale of copies of these volumes. On the other hand the larger part of the editorial expenditure paid in 1957 concerned volumes which are still in preparation. The only possibility to get a correct picture of the *Structure Reports* account is to examine the expenditure and income for the individual volumes. It then appears that the present financial situation can be considered satisfactory. The total cost of production of Vols. 10 and 13 (which respectively appeared in 1953 and 1954) has been recovered, and as the sale of copies of these volumes still continues, a reserve is formed which allows an increase in the period during which the cost of production of a volume should be recovered. It may therefore be possible to set the selling prices of the next volumes at a slightly lower level, or to introduce a reduced price for individuals for their personal use; the Executive Committee is investigating the second possibility. As the higher level of the selling prices since 1955 was mainly caused by an increase in the editorial expenditure, the publishers agreed to reducing their commission on the sales from 25 to 17½% as from Vol. 15. At the same time they adjusted, however, their price for the production, which they had kept constant for two years. The nett effect of these two changes will also permit a small decrease in the selling prices of the next volumes to appear.

The *International Tables* account for 1957 shows practically the same amount of income from the sale of copies of Vol. I as the account for 1956. As both the publication and the editorial expenses were lower in 1957 than in 1956, a higher balance resulted in 1957. It should however be mentioned that a sharp increase in the charges of the publishers occurred in that year. The amount of f. 1490 for the binding of additional copies of Vol. I in 1957 concerned 200 copies, whereas in 1956 400 copies were bound for f. 1869. The accumulated balance of the *International Tables* account increased to f. 76,102 at the end of 1957, which is more than sufficient to meet the cost of publication of Vol. II.

The accumulated balance of the General Publications

Fund, f. 86,486, remained unchanged in 1957 because no subventions were received for the credit of this account, nor were any expenses charged to it.

The General Fund is the only account showing a deficit in 1957. This deficit of f. 8497 is, however, less than the estimated deficit appearing on the budget for 1957 which was presented to the Fourth General Assembly. The main advantage differences were that the Programme Committee for the Montreal Congress needed less money than it was authorized to spend; that the total of the reimbursements to the invited speakers was lower than estimated; and that, contrary to expectation, both the administrative expenditure and the item for incidental travelling expenses of Officers was kept at the same level as in 1956.

In connection with the Fourth General Assembly and International Congress, and the subsequent Symposia, a total sum of f. 56,008 was charged against the General Fund. About half of this expenditure was covered by subventions received through ICSU from UNESCO. As already reported in the Report for 1955, the amount of f. 5429 spent as contribution to the travelling expenses of French crystallographers was received some years ago from the French National Committee as the balance remaining of funds raised in France for the Paris Congress, and was earmarked by the Executive Committee to be used to facilitate the attendance of French crystallographers at the Montreal Congress. The cost of participation in the M.I.T. meeting of the Commission on Solid-State Physics of the International Union of Pure and Applied Physics comprised a travel grant to a European crystallographer to attend this conference; for this purpose the original allocation to the Union from the total UNESCO subvention to ICSU was increased by f. 1900.

The income from interest on investments was in 1957 about f. 400 less than in 1956 because the total holding was lower. On the other hand the income from interest on banking and deposit accounts was considerably higher, namely f. 2015 in 1957 against f. 695 in 1956. The depreciation of the French Franc in 1957 caused, however, a loss to the Union amounting to f. 747. This loss being included, the total income from investments and banking accounts amounted to f. 5259 in 1957 against f. 5083 in 1956.

With respect to the Balance Sheet as at 31 December

1957, it should be stated that, as at the end of 1956, the actual value of the investments was again lower than their nominal value. For the same reason as given in the Report for 1956, namely that it is not likely that the investments will be sold below par before they are due for redemption, they are again included on the Balance Sheet at their nominal value. In 1957 the holding of Fr. Fr. 500,000 Bons du Trésor à Intérêt Progressif was sold at a guaranteed value, and f. 9000 of the holding of the 3% bonds Nederlandsch Indië 1937 were redeemed. At the end of 1957 f. 60,000 of the balance with the Amsterdamsche Bank N.V., and £1773 of the balance with the Westminster Bank Ltd, were placed on deposit accounts. The amounts due from the publishers of the Union's publications represent the balances of the 1957 accounts with these firms; the sums have meanwhile been received. As in previous years, the stocks of unsold copies of *Acta Crystallographica*, *Structure Reports* and *International Tables* are again mentioned *pro memoria* on the Balance Sheet. It should be kept in mind that these stocks represent a considerable asset which is gradually being converted into money.

#### Membership of Committees, Commissions and Other Bodies

The membership of the bodies belonging to the Union, and the names of the representatives on bodies not belonging to the Union, as at the end of 1957, are listed in the detailed report of the proceedings of the Fourth General Assembly which has been submitted to the National Committees. This membership has also been published in the Report on the Fourth General Assembly and International Congress which appeared in this journal (*Acta Cryst.* (1957), **10**, 721), except for the following additions:

##### *Commission on Structure Reports*

*Add as Co-Editors:* J. M. BIJVOET (Netherlands)

J. DONOHUE (U.S.A.)

W. B. PEARSON (Canada)

[As from 1 April 1958 R. W. ASMUSSEN (Denmark) has succeeded R. C. EVANS (U.K.) as Technical Editor of *Acta Crystallographica*.]

*Acta Cryst.* (1958). **11**, 572

### International Union of Crystallography

#### *Acta Crystallographica* Account for the year ended 31 December 1957

	<i>Netherlands Guilders</i>	<i>Netherlands Guilders</i>
Publication Expenses:		
Printing and Binding, Vol. 10, 1957	(D. Cr. 133,483.79)	73,416.08
Distribution and Postage	(D. Cr. 17,260.86)	9,493.47
Insurance on Stock at Cambridge;		
Shipping Back Volumes to Copenhagen	315.59	315.59
Editorial Expenses:	83,225.14	83,225.14
Editorial Honoraria and Secretarial Assistance	14,377.74	14,377.74
Office Rent, Postages, Telephone, Stationery, Printing and Sundries	1,708.87	1,708.87
Travelling Expenses	4,398.68	4,398.68
Depreciation of Office Equipment	42.50	42.50
Cost of Advertisements	20,527.79	20,527.79
	2,054.62	2,054.62
	42,635.12	42,635.12
<i>Excess of Income over Expenditure carried to Balance Sheet</i>	<u>f. 148,442.67</u>	<u>f. 148,442.67</u>
		134,401.79
		12,779.36
		2,038.48
		10,740.88
		3,300.00
		(D. Cr. 6,000.00)
		27,151.88
		14,933.53
		149,335.32
		22,077.64
		49.50
		90.00
		231,287.60
		127,208.18

#### *Structure Reports* Account for the year ended 31 December 1957

Publication Expenses:			
Printing and Binding Vol. 15 (1951)	20,736.05	20,736.05	40,480.25
Editorial Expenses:			
Editorial Honoraria, Abstractors' and Assistants' Salaries	19,426.68	19,426.68	7,528.50
Subscriptions to Journals, Photocopies	473.13	473.13	2,510.24
Stationery, Postages and Sundries	343.63	343.63	2,385.50
Travelling Expenses	1,449.75	1,449.75	2,134.66
Depreciation of Office Equipment	36.00	36.00	5,332.25
	21,729.19	21,729.19	19,374.25
<i>Excess of Income over Expenditure carried to Balance Sheet</i>	<u>f. 61,262.31</u>	<u>f. 61,262.31</u>	<u>f. 61,262.31</u>
			79,745.65
			18,483.34
			61,262.31
			18,483.34
			79,745.65
			19,374.25
			5,332.25
			2,134.66
			2,385.50
			2,510.24
			7,528.50
			40,480.25

**International Tables Account for the year ended 31 December 1957**

	<i>Netherlands Guilders</i>	<i>Netherlands Guilders</i>
Publication Expenses:		
Binding additional Copies of Vol. I	1,489.80	7,966.83
Sale of Copies of Vol. I		1,311.91
Less Publisher's Commission on Sales		30.90
Bank Charges		1,342.81
Editorial Expenses:		6,624.02
Stationery, Postages and Sundries	466.39	
Travelling Expenses	1,235.00	
1,701.39		
3,433.03		
<i>Excess of Income over Expenditure carried to Balance Sheet</i>	<u><u>f. 6,624.02</u></u>	<u><u>f. 6,624.02</u></u>

**General Fund Account for the year ended 31 December 1957**

Subscription to ICSU (2% of Subscriptions received from Adhering Bodies in 1957)	472.56	(\$ 500)	1,900.00
Administrative Expenses:			(\$ 4500)
Honorarium General Secretary and Secretarial Assistance	3,838.48		(\$ 2500)
Auditors' Fees	994.79		28,500.00
Postages, Stationery, Printing and Sundries	1,452.61		1,900.00
Bank Charges and Differences on Exchange	244.76		
6,530.64			
Expenses in Connection with Fourth General Assembly and International Congress:			
Travelling Expenses of Members of Executive Committee	23,151.39		30,400.00
Travelling Expenses of Invited Speakers and Invited Participants in the Symposia	16,223.35		21,978.64
Contribution to Travelling Expenses of French Crystallographers	5,428.57		
Expenses of Programme Committee	4,001.66		3,991.14
Miscellaneous Expenses (Abstracts, Report, etc.)	7,202.87		2,015.00
56,007.84			
Cost of Participation in M.I.T. Meeting of the Commission on Solid-State Physics	1,900.00		8,497.01
Incidental Travelling Expenses of Officers	1,010.65		
Expenses of Commission on Crystallographic Teaching	213.13		
Loss at Depreciation of French Franc	746.97		
<i>Excess of Expenditure over Income carried to Balance Sheet</i>	<u><u>f. 66,881.79</u></u>		<u><u>f. 66,881.79</u></u>

*Excess of Expenditure over Income carried to Balance Sheet*

## Balance Sheet as at 31 December 1957

<i>Liabilities</i>	<i>Netherlands Guilders</i>	<i>Assets</i>	<i>Netherlands Guilders</i>
Sundry Creditors:		Cash at Bank:	
Administrative Expenses	2,553.98	Amsterdamsche Bank N.V., including interest on account, due for 1957	65,234.36
Subscription to ICSU., due for 1957	472.56	Comptoir National d'Escompte de Paris (Fr. Fr. 412,800.00)	3,734.86
<i>Acta Crystallographica</i> Expenses	999.40	First National City Bank of New York (\$ 17,796.87) (£ 2041.9.9)	67,628.11
<i>Acta Crystallographica</i> Account:		Westminster Bank Ltd, Cambridge	21,721.43
Balance as at 1 January 1957	74,376.04	Cash with Editors:	158,318.76
Add Excess of Income over Expenditure for the year to date	42,635.12	Technical Editor of <i>Acta Crystallographica</i> (£ 26. 9. 0)	281.42
<i>Structure Reports</i> Account:		General Editor of <i>International Tables</i> (£ 14. 7. 3)	152.82
Balance as at 1 January 1957	38,842.52	General Editor of <i>Structure Reports</i> (£ 256.12.11)	2,730.71
Add Excess of Income over Expenditure for the year to date	18,797.07	Due from:	3,164.95
<i>International Tables</i> Account:		N. V. A. Oosthoek's Uitgevers Mij, Utrecht	40,526.26
Balance as at 1 January 1957	72,668.60	Messrs Ejnar Munksgaard, Copenhagen (D. Cr. 85,831.92) (£ 296.1.5)	47,207.56
Add Excess of Income over Expenditure for the year to date	3,433.03	The Kynoch Press Ltd, Birmingham	3,150.19
General Publications Fund:		Advertisements in <i>Acta Crystallographica</i> , due for 1957, after deduction of Advertising Agent's Commission	90,884.01
Balance as at 1 January 1957	86,485.99	Investments:	4,125.85
General Fund:		£ 3,000 4½ % Conversion Stock 1962 (at Par)	31,920.00*
Balance as at 1 January 1957	54,679.74	f. 85,000 3 % Nederlandsch Indië 1937 (at Par)	85,000.00*
Less Excess of Expenditure over Income for the year to date	8,497.01	f. 6,000 4½ % Noorwegen 1955 (at Par)	6,000.00*
		f. 6,000 4 % Unie van Zuid Afrika 1955 (at Par)	6,000.00*
		Interest accrued thereon	128,920.00
			1,513.47
		Office Equipment at Cambridge, Cardiff and Manchester:	180,433.47
		As at 1 January 1957	598.50
		Less Depreciation	78.50
		Stocks of unsold Copies of <i>Acta Crystallographica</i> , <i>Structure Reports</i> and <i>International Tables</i>	520.00
			<i>pro memoria</i>
			<u>f. 387,447.04</u>

£ 1 = f. 10.64; \$ 1 = f. 3.80 (UNESCO rates of exchange)

\* The investments are valued at par to avoid the necessity of accounting for differences in their quotations each year, and as so far no investments have been sold before they were due for redemption. The quotations as at 31 December 1957 were as follows:

4½ % Conversion Stock 1962	...	95½	4½ % Noorwegen 1955	...	85
3 % Nederlandsch Indië 1937	...	89	4 % Unie van Zuid Afrika 1955	...	83

We declare that the above Balance Sheet as at 31 December 1957, and the attached *Acta Crystallographica* Account, *Structure Reports* Account, *International Tables* Account and General Fund Account, exhibit a true and correct view of the affairs of the International Union of Crystallography.

Groningen, Netherlands  
 Ubbo Emmiusingel 75  
 31 May 1958

Signed: VAN DIEN, VAN UDEN & Co.

*Accountants*