## ONE HUNDRED AND EIGHTH ANNUAL GENERAL MEETING.

The One Hundred and Eighth Annual General Meeting of The Chemical Society was held at Burlington House on Thursday, March 31st, 1949, at 2.30 p.m. The President, Sir Ian Heilbron was in the Chair.

The notice convening the Meeting was read.
In presenting the Report of Council for 1948, copies of which were available, Sir John Simonson dealt briefly with the activities of the year in which the Society had made steady progress as was reflected in a continued growth of the Fellowship. He was able to report that the delay in publication was at last beginning to be reduced, and he hoped that, by the end of the year, this difficulty would largely be removed. He also referred to the valuable services which Dr. Driver had rendered to the Society as Editor.

Sir John Simonsen referred also to the encouraging increase in the number of meetings of the Society held throughout the Country during the year. The use of the Library by Fellows as well as by the Members of other Societies was steadily increasing, and more grants had been awarded from the Research Fund than for many years. The expansion in the activities of the Society, and the increasing popularity of its meetings had made the difficulties of accommodation even more acute during the past year than they had been before, and this matter had the Council's closest attention.

In dealing with the Accounts for 1948, the Treasurer stated that he had a less satisfactory state of affairs to describe. The published accounts showed a deficit for the year of over $£ 1000$, and this was after $£ 2100$ had been withdrawn from the Special Reserve for Publications against a total of $£ 1300$ placed to that Reserve in 1947. The increased expenditure was almost wholly due to the greatly increased cost of publication. The subscription had been increased in 1947 and the Council had asked that the contribution which Industry makes through the Chemical Council should be increased. An increased deficit in 1949 was inevitable but he hoped that the measures which were being taken would lead to more stable finances in subsequent years.

The Treasurer also referred to the arrangement whereby the Society, together with the Society of Chemical Industry, had come to an agreement with the Chemical Institute of Canada, which offered joint-membership of these three Societies to Canadian Chemists, on favourable terms.

In proposing the adoption of the Report of Council together with the Statement of Accounts and Balance Sheets for 1948, Dr. Neil Campbell referred especially to the generous consideration which the Council always gave to the problems of those Fellows who, although they lived at a distance, were enabled to take part in the activities of the Society. The motion was seconded by Dr. A. H. Lamberton, and the Report and the Accounts were adopted.

The following elections to vacancies on Council were announced :-
Honorary Secretary :
Professor Harold Burton.
Elected Ordinary Members of Council:
Constituency II :

## Professor M. Stacey.

Constituency $V$ :

## Dr. E. G. V. Percival.

The report of the Scrutators on the ballot for Vice-Presidents who have not filled the Office of President, and for Elected Ordinary Members of Council for Constituencies I and III had been received, and it was declared that the following had been elected :-

# Vice-Presidents who have not filled the Office of President: 

Professor J. W. Cook.
Professor W. Wardlaw.
Elected Ordinary Members of Council:
Constituency I:
Dr. F. S. Dainton.
Dr. R. Spence.
Dr. A. I. Vogel.
Dr. J. Walker.
Dr. W. A. Waters.
Constituency III :
Professor C. E. H. Bawn.
Mr. J. D. Rose.
On the proposal of Professor C. W. Shoppee, seconded by Dr. G. Baddeley, Messrs. W. B. Keen \& Co. were re-appointed Auditors for 1949.

A vote of thanks to the Officers and Council for their services during the past year was proposed by Professor E. R. H. Jones, who paid a tribute to the unsparing manner in which the Officers devoted their time to the Society's affairs and referred to the success which the difficulties imposed by the delays in publication were being tackled. He also paid a warm tribute to the work of the permanent staff of the Society. This vote of thanks was seconded by Dr. J. C. Withers and was accorded with acclamation.

Later in the afternoon, the Longstaff Medal for 1948 was presented to Sir Cyril Hinshelwood, Past President. After this ceremony, the President delivered his Presidential Address entitled "Concerning Amino-Acids, Peptides and Purines." At the conclusion of the Address, a vote of thanks proposed by Professor J. W. Cook was carried with enthusiasm.

The Anniversary Dinner, held at the Dorchester Hotel, was attended by two hundred and fifty Fellows and guests who were received by the President and Lady Heilbron, and by the Treasurer and the Senior Secretary. The Toast of " The Chemical Society" was proposed by Sir Edward Appleton, Secretary of the Department of Scientific and Industrial Research, and the President replied. Professor T. S. Wheeler proposed "The Guests," and replies were made by Professor G. Hevesy, Honorary Fellow, and by Lord Brabazon of Tara, President of the Royal Institution.

## REPORT OF GOUNGIL FOR 1948.

## I. FELLOWSHIP.

1. Fellowship Statistics. On December 31st, 1948, the Register contained the names of 7875 Fellows, a net increase of 350 during the year. There were 732 elections to the Fellowship and 39 Fellows were reinstated. The Society has lost 66 Fellows by death, 216 by resignation, and 139 names were removed from the Register. Of the total Fellowship 4723 were Joint Members either of the Three Chartered Bodies or of the Chemical Society and the Society of Chemical Industry.
2. Joint Student Facilities. During 1948, 32 persons have been granted Joint Student Facilities by the two Societies under the Chemical Council Scheme.
3. Honours. The congratulations of the Society were conveyed to the following, whose names appeared in the lists of Birthday and New Year Honours :

Mr. C. A. Adams, C.B.E.
Dr. G. M. Bennett, C.B.
Mr. H. W. Cremer, C.B.E.
Professor A. Findlay, C.B.E.
Dr. C. R. Harington, Knight Bachelor. Professor C. N. Hinshelwood, Knight Bachelor.

Sir James Irvine, K.B.E.
Dr. L. A. Jordan, C.B.E.
Dr. Alexander King, C.B.E.
Mr. R. O'F. Oakley, C.B.E.
Professor G. W. Robinson, C.B.E.

The Council has also congratulated Professor E. L. Hirst on the award of a Davy Medal by the Royal Society.
4. Fellows who have completed 50 and 60 years of Fellowship. Announcements have been made at Ordinary Scientific Meetings, and published in the Proceedings, of the congratulations of the Society that have been sent to those Fellows who during the year completed 60 years and 50 years of Fellowship.
5. Deaths. The Council learned with very deep regret of the death, on December 17th, 1947, of Johannes Nicolaus Brønsted, who was elected an Honorary Fellow in 1935. A resolution of sympathy was passed by the Council and transmitted to the Danish Chemical Society for communication to Professor Brønsted's relatives. The Council also regret to record the death of Dr. Bernard Dyer, who was elected to the Fellowship in 1875, and was, for a number of years, the senior Fellow of the Society.

The condolences of the Council have been conveyed to the relatives of those Fellows whom the Society has lost by death during the year.
6. List of Fellows. Arrangements have been made for the publication in 1949 of a list containing the names and addresses of Fellows. The list will be available from the General Secretary, price two shillings and sixpence.

## II. PUBLICATIONS,

1. Journal. During the year, 548 scientific communications were received, of which 15 were declined and 2 were withdrawn. The Journal, which was larger than any previously published by the Society, comprised 535 items made up as follows:


* Class first introduced in the December Journal.

Scientific communications published included contributions from Canada (2), Australia (13), New Zealand (14), South Africa (1), India (3), U.S.A. (2), Brazil (1), Egypt (15), France (2), Hungary (6), Netherlands (1), Norway (1), Palestine (2), Spain (1), Sweden (2), and Yugoslavia (1).

The following figures show the growth of publication during recent years :

|  | 1944. | 1945. | 1946. | 1947. | 1948. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Scientific communications received | 242 | 347 | 453 | 523 | 548 |
| Published | 199 | 262 | 278 | 375 | 511 |
| Journal, pages | 679 | 930 | 1175 | 1709 | 2330 |

These figures give only an imperfect idea of the very rapid increase in the rate of publication during the last months of 1948, since nearly two-thirds of the scientific communications published during that year appeared in the last six months. Towards the end of the year far more papers were being published than were being received, and it was estimated that, at the rate of publication then being achieved, papers received at the end of the year would be appearing in the July Journal of 1949.

Before the year ended arrangements had been made with Richard Clay and Company, Ltd., and the Cambridge University Press for the printing of a small supplementary volume of the Journal during 1949, and some of the work had been put in hand. It was estimated that this, together with the larger normal Journal, would end all serious delays in publication by the end of 1949.
2. Annual Reports. The Annual Reports for 1947 were published at the end of July, and were thus available to subscribers at a much earlier date than were the 1946 Reports in the previous year.
3. Quarterly Reviews. The demand for this publication continued to increase, and arrangements were made for reprinting Volume I which had sold out.

## III. MEETINGS.

1. Scientific Meetings. The Society held 14 meetings in London during 1948. These included 8 lectures and 1 organised discussion. At the other 5 meetings 11 papers were read and discussed.

The number of meetings held outside London increased from 77 to 108 . These included 98 lectures, 8 meetings for the reading of papers, and 1 conference. Two scientific film displays and a demonstration of research work were also held. Of these meetings 77 were held jointly with local sections of other bodies or with University Chemical Societies.

Official Scientific Meetings of the Society were held at Manchester on January 8th, at Dublin on March 2nd, and at Glasgow on December 3rd, 1948.

A complete list of meetings is given in Appendix A.
2. Anniversary Meeting. A report of the Anniversary Meeting held in Oxford on March 18th appeared in the Journal for April.

The Meeting consisted of the 107th Annual General Meeting, the Presidential Address, and the Anniversary Luncheon held in Oriel College. The Annual General Meeting was adjourned until June 3rd when the Accounts were approved. These Accounts were published in the Journal for June.
3. Centenary Fund. The income arising from the fund established at the time of the Society's Centenary has enabled the Society to arrange visits by chemists from overseas, who have been invited to lecture both in London and at other centres.

## IV. LIBRARY.

The Annual Report of the Joint Library Committee for 1948 appears as Appendix B.

## V. OTHER ACTIVITIES.

1. Congratulations to His Majesty The King. The loyal and dutiful congratulations of the Society were conveyed to His Majesty The King, Patron of the Society, on the occasion of the birth of H.R.H. Prince Charles of Edinburgh.
2. Longstaff Medal. The Longstaff Medal for 1948 has been awarded to Sir Cyril Hinshelwood.
3. Harrison Memorial Prize. The Harrison Memorial Prize for 1947 was awarded to Dr. H. R. Barton and was presented at the Anniversary Meeting.
4. Grants for Research. During the year the Council authorised the payment of research grants amounting to $£ 887$ to $\mathbf{3 7}$ applicants.
5. Chemical Council. Copies of the Report of the Chemical Council for 1947 may be obtained by Fellows on application to the General Secretary.
6. Bureau of Abstracts. The Report of the Bureau of Abstracts for 1947, which was not available for publication with the Report of Council for 1947, has now been issued. Copies of this, and of the Report of the Bureau for 1946, may be obtained from the General Secretary.
7. Redecoration of the Society's Rooms. The Council Room and the main staircase of the Society's premises in Burlington House were redecorated during the year.
8. Accommodation. The size of the attendance at meetings has made it necessary to hold lectures and discussions in London at halls with a larger seating capacity than that afforded by the Society's own Meeting Room.

In addition, accommodation has had to be found in Burlington House for the Editorial Staff of the Society. As a result of this measure, the Society's Rooms have not been available for meetings arranged by other societies. The Council very much regret the inconvenience caused to Fellows and to other societies by these difficulties which will, it is hoped, be overcome.
9. International Exhibition of Pure and Applied Chemistry-Charleroi. The publications of the Society were exhibited on a joint stand organised on behalf of a number of British societies connected with different branches of Chemistry.

## VI. ADMINISTRATION.

1. Personnel of Council. At the Annual General Meeting held at Oxford on March 17th, the following were declared elected:

| President | Sir Ian Heilbron. |
| :---: | :---: |
| Vice-Presidents | Mr. R. P. Bell, Dr. G. M. Bennett. |
| Treasurer | Sir Wallace Akers. |
| Honorary Secretary | Dr. Alexander King. |
| Ordinary Members of Council | Dr. L. L. Bircumshaw, Professor G. R. Clemo, Dr. A. H. Cook, Dr. A. E. Gillam, Dr. T. Malkin, Dr. S. Peat, Professor F. S. Spring, Dr. L. E. Sutton, Professor T. S. Wheeler. |

The retirements of Mr. F. P. Dunn from the office of Treasurer and of Professor W. Wardlaw as Honorary Secretary were noted with special regret, and warm appreciation was expressed of the very valuable services they had rendered to the Society over a very difficult period.

During the year, the Council received with regret the resignation of a number of members who had moved out of their respective constituencies on taking up new appointments. In accordance with Bye-Law 42, the Council nominated the following to serve until the Annual General Meeting in 1949 :

Dr. E. G. V. Percival appointed in place of Professor H. W. Melville.
Dr. F. S. Dainton appointed in place of Professor F. E. King.
Professor H. W. Melville appointed in place of Professor S. Peat.
Dr. J. Walker appointed in place of Professor C. W. Shoppee.
2. Local Representatives. The Council received with regret the resignation of Professor J. E. Coates and Professor F. E. King as Local Representatives for South Wales and Oxford respectively. Professor C. W. Shoppee and Dr. W. A. Waters were appointed in their place. Dr. J. C. Roberts was appointed Local Representative at Nottingham during the absence of Dr. D. O. Jordan in the U.S.A.
3. Editors. In December the Council learned with regret of the resignation of the Editor, Dr. J. E. Driver, who has been appointed Professor of Chemistry at the University of Hong Kong. Dr. L. C. Cross was appointed as Assistant Editor in August.
4. Joint Subscription Scheme. Certain modifications designed to simplify the collection of joint subscriptions for 1949, were made in co-operation with the Chemical Council and with the other societies concerned. In December, approval was given to an extension of the joint Subscription Scheme to include the Chemical Institute of Canada, for Fellows resident in Canada.

## VII. FINANCE,

1. Investments. During the year a survey of the investments of the Society was made by a firm of stockbrokers with a view to securing the maximum income consistent with security for all the Funds. The Council accordingly rearranged the investments to ensure that at fixed intervals a certain proportion shall become due for redemption, thus providing regular opportunities for reinvestment in accordance with conditions prevailing at the date of repayment.

The Income of the Society derived from investments was reduced by some $£ 70$ as a result of the nationalisation of the railways.

Authority was given for the redemption of $\mathfrak{£ 2 0 0 3 \%}$ Defence Bonds on Special Reserve Fund.
2. Increased Prices of Publications. To help meet the increased cost of printing and publication the Council has been obliged to increase to £5 per annum as from January lst, 1949, the price at which the Journal is sold to non-Fellows.
3. Contributions. The Council records with thanks the following contributions towards the cost of publications:
£2500 from the Chemical Council.
$£ 900$ from the Government Scientific Publications Grant-in-Aid, distributed by the Royal Society.

Contributions of $£ 25$ from Mr. W. Collingwood Williams to mark his sixty years of Fellowship, and $£ 10$ from Dr. S. Horwood Tucker have also been gratefully received.

Further contributions amounting to $£ 33 \mathrm{l} 3 \mathrm{~s} .0 \mathrm{~d}$., as already recorded in the Proceedings, have also been received for the Centenary Fund.
4. Bequests. The Society received the sum of $£ 100$ bequeathed under the will of the late Mr. Hugh Main. A legacy of $£ 100$ received under the will of the late Mr. George McGowan was spent on the purchase of books for the Library.
5. Library. Contributions have been received through the Chemical Council towards the maintenance of the Library from :

6. Staff Salaries. Appropriate increases in salary have been granted to members of the Society's staff.

## VIII. RELATIONS WITH OTHER BODIES.

1. Representatives on Joint Committees and on Other Bodies. The Society's representatives at December 31st, 1948, were as follows:

## Association of British Chemical Manufacturers : <br> Joint Technical Committee on Patents: Dr. J. T. Hewitt.

## Barker Committee :

Formed to support the publication of the Barker Index of the characteristic angles of crystalline compounds: Dr. G. M. Bennett.

## Bristol University Court:

Professor F. G. Donnan.
British National Committee for Chemistry:
Sir Norman Haworth, Sir Ian Heilbron, Dr. W. H. Mills.

## British National Committee for Crystallography:

Dr. G. M. Bennett.
British Standards Institution. Technical Committees:
Co-ordinating the work of the Divisional Councils in regard to any British Standard which may be issued in future for units, conversion factors, fundamental formulæ, values for properties of materials, etc. : Professor S. Sugden.
Standardisation of microchemical apparatus : Professor H. V. A. Briscoe, Dr. H. D. K. Drew.
Specifications for Materials and Plant used in Electroplating : Dr. U. R. Evans.
Standardisation of Scientific Glassware : Dr. G. R. Davies.
Standards for use in Dairying Chemistry: Mr. Eric Voelcker.
Standardisation of Letter Symbols : Professor S. Sugden
Technical Committee C/17 Viscosity : Dr. A. E. Dunstan.
Standardisation of the pH Scale : Professor H. T. S. Britton.
Bureau of Abstracts.
Directors and Members : Dr. G. M. Bennett, Mr. F. P. Dunn, Dr. E. B. Hughes, Dr. E. H. Rodd.
Members : Mr. R. P. Bell, Professor H. V. A. Briscoe, Dr. A. H. Cook, Professor W. Wardlaw.

## Chemical Council:

Sir Wallace Akers, Professor D. H. Hey, Sir Cyril Hinshelwood, Dr. R. P. Linstead.

## City and Guilds of London Institute :

Professor H. V. A. Briscoe.
Faraday Society-Colloid Committee :
Dr. G. S. Hartley.

## Joint Library Committee :

Dr. H. Bassett, Dr. O. L. Brady, Dr. A. H. Cook, Dr. C. H. Desch, Mr. M. B. Donald, Professor H. J. Emeléus, Dr. P. Haas, Dr. T. A. Henry, Dr. J. R. I. Hepburn, Professor D. H. Hey, Professor E. D. Hughes, Dr. Harold King, Professor G. A. R. Kon, Professor E. E. Turner.

Lawes Agricultural Trust:
Committee of Management: Sir Norman Haworth.

Parliamentary and Scientific Committee:
Sir Ian Heilbron, Professor D. H. Hey.
Royal Society.
Joint Standing Committee for Symbols and Abbreviations: Professor C. W. Davies, Professor S. Sugden.

Yorkshire Council for Further Education :
Advisory Committee for Chemistry in South and East Yorkshire: Professor R. D. Haworth, Professor Brynmor Jones.

## 2. Representatives of the Society at Conferences and Other Public Functions:

Cuarto Congresso Sudamericano de Quimica: Professor J. W. Cook.
Installation of the Rt. Hon. The Viscount Halifax as Chancellor of the University of Sheffield, July 2nd : Professor R. D. Haworth.
XVIII International Geological Congress: Professor J. D. Bernal and Professor F. A. Paneth.
Royal Society, Scientific Information Conference, July 1948 : Dr. G. M. Bennett.
Rubber Technology Conference, June 23rd-25th : Professor H. W. Melville.
100th Anniversary of the Death of Berzelius, Stockholm, September 1948: The President.

## IX. ACKNOWLEDGMENTS.

The Council express their gratitude to those Fellows who have continued to give their services freely to the Society during the year. They would especially mention Local Representatives, Members of Committees, Referees of papers for the Journal, and those delivering lectures. The Council also deeply appreciated the generosity of those Fellows who have made gifts of the Society's publications, or of books, for the Library.

## APPENDIX A.

## MEETINGS HELD DURING 1948.

IN LONDON.
Unless otherwise stated all meetings were held in the Rooms of the Society at Burlington House.
January 8th, Lecture, "Structural Relationships in the Natural Unsaturated Higher Fatty Acids", by Professor T. P. Hilditch; January 22nd, Meeting for reading papers; February 5th, Meeting for reading papers; February 19th, Sir Frederick Gowland Hopkins Memorial Lecture, by Sir Edward Mellanby; March 4th, Hugo Mïller Lecture, "The Occurrence and Significance of the Pentose Sugars in Nature, and their Relationship to the Hexoses ", by Professor E. L. Hirst; April 22nd, Meeting for reading papers; May 6th, at the Royal Institution, Lecture, "The Molecular Orbital Theory of Valency", by Sir John LennardJones; May 20th, Victor Moritz Goldschmidt Memorial Lecture, by Professor J. D. Bernal; June 3rd, at the Royal Institution, Liversidge Lecture, " The Modern Theory of Valency ", by Professor L. C. Pauling; October 14th, Meeting for reading papers; October 28th, Lecture, " Strychnine, Brucine, and Vomicine", by Sir Robert Robinson; November llth, Tilden Lecture, "The Structure and Reactivity of Free Radicals", by Professor C. E. H. Bawn; November 25th, at Imperial College of Science and Technology, Discussion, "The Theory and Practice of New Techniques in Separation and Purification ", introduced by Dr. R. P. Linstead; December 9th, Meeting for reading papers.

## OUTSIDE LONDON.

Aberdeen. Joint meetings with the local sections of the Royal Institute of Chemistry and the Society of Chemical Industry : January 23rd, Demonstration of Current Research Work in the Chemistry Department, University of Aberdeen; at Marischal College: February 27th, Lecture, "Applications of Acetylenic Compounds in Organic Synthesis", by Dr. A. W. Johnson; March 24th, Lecture, "Some Stereochemical Problems", by Professor E. E. Turner; October 22nd, Display of Scientific Films; November 4th, Lecture, "Problems involved in the Generation of Useful Power from Nuclear Energy", by Sir Wallace Akers; December 10th, Lecture, " Macromolecular Adventures with the Electron Microscope ", by Professor W. T. Astbury.

Birmingham. At the University: January 30th, Lecture, " Recent Developments in the Application of Infra-Red Spectroscopy to Chemical Problems ", by Dr. G. B. B. M. Sutherland; March lst, Lecture, "Steric Hindrance", by Professor C. K. Ingold; April 26th, Lecture, "Electron Transfer Reactions", by Professor M. G. Evans; (joint meetings with the University Chemical Society) : May 24th, Lecture, "The Valency of Metals and the Structure of Intermetallic Compounds", by Professor L. C. Pauling; October 22nd, Lecture, "Cell Growth Phenomena and Chemical Kinetics", by Sir Cyril Hinshelwood; December 3rd, Lecture, "The Liquid State", by Dr. E. A. MoelwynHughes.

Bristol. At the University: February 12th, Lecture, " The Formation of Ethylenic Polymers", by Professor H. W. Melville; November 4th (joint meeting with the local sections of the Royal Institute of Chemistry and the Society of Chemical Industry), Lecture, "Recent Advances in Chromatography", by Dr. T. I. Williams.

Edinburgh. At the North British Station Hotel (joint meetings with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), January 22nd, Lecture, "Some Recent Developments in Alkaloid Chemistry", by Dr. H. T. Openshaw ; February 12th, Lecture, "The Chemistry of Rumination", by Dr. James Stewart: February 24th, at the University (joint meeting with the University Chemical Society), Lecture, "Proton Transfer and Analogous Reactions", by Professor W. F. K. WynneJones: March llth, at the North British Station Hotel (joint meeting with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), Lecture, "Practical Aspects of Wetting and Detergency", by Dr. E. S. Paice : April 20th, at the University, Lecture, "The Valency of Metals", by Professor L. C. Pauling : at the North British Station Hotel (joint meetings with the local sections of the Royal Institute of Chemistry and the Society of Chemical Industry), October 21st, Lecture, " Some Aspects of the Chemistry and Biochemistry of Polycyclic Aromatic Hydrocarbons", by Professor J. W. Cook; November 18th, Lecture, " The Chemical Research Laboratory, Teddington ", by Dr. R. P. Linstead; December 9th, Lecture, "Bread and its Influence on History", by Dr. D. W. Kent-Jones.

Eire. January 21st, at Trinity College, Dublin (joint meeting with the Irish Chemical Association), Lecture, "Santonin", by Professor Wesley Cocker; at University College, Dublin, February 27th (joint meeting with University College Chemical Society), Lecture, "Aromatic Nitration", by Professor C. K. Ingold; March 2nd, Official Meeting of the Society, Pedler Lecture, "Recent Developments in the Vitamin A Field", by Sir Ian Heilbron; at Trinity College, Dublin (joint meetings with the Werner Society), March 3rd, Lecture, " Recent Researches in the Azole Field", by Sir Ian Heilbron; May 28th, Lecture, "Absorption Spectra as Chemical Tools", by Dr. A. E. Gillam; July lst, Lecture, " The Chemical and Biochemical Oxidation of Polycyclic Hydrocarbons", by Professor J. W. Cook; November lst (joint meeting with University College Chemical Society and the Werner Society), Lecture, "Some Advances in the Chemistry of Fluorine", by Professor H. J. Emeléus; (Joint meetings with the Irish Chemical Association and Dublin Section of the Royal Institute of Chemistry) at University College, Dublin, November 2nd, at University College, Cork, November 4th, at University College, Galway, November 8th, " The Production and Uses of Radioactive Tracers ", by Professor H. J. Emeléus; Lecture, November 12th, at Trinity College, Dublin (joint meeting with the University College 4 т

Chemical Society and the Werner Society), Lecture, " Some Properties of the Hydrogen Bond in Solids", by Professor A. R. Ubbelohde.

Exeter. At Washington Singer Laboratories: February 2nd, Lecture, "Elucidation of the Structure of Penicillin", by Professor W. Baker; February 21st, Lecture, "Some Reactions of Free Radicals", by Dr. W. A. Waters; February 27th, Lecture, "Surface Films", by Professor N. K. Adam; May 28th, Lecture, " Advances in Immunochemistry", by Professor M. Stacey.

Glasgow. At the Royal Technical College : February 20th, Annual General Meeting of the Local Section followed by the reading of papers; March 12th, at the University, Lecture, " Some Problems in the Chemistry of Starch and Glycogen", by Professor E. L. Hirst; October 29th, at the Royal Technical College (joint meeting with the Andersonian Chemical Society and the Glasgow University Alchemists Club), Lecture, "Chemical Personalities a Century Ago "', by Professor John Read; November 19th, at the University, Tilden Lecture, "The Structure and Reactivity of Free Radicals", by Professor C. E. H. Bawn; December 3rd, at the Royal Technical College, Official Meeting of the Society, Meeting for reading papers.

Hull. At University College: January 30th (joint meeting with the local sections of the Oil and Colour Chemists Association and University College Scientific Society), Lecture, "Phthalocyanines and Related Recent Developments in Pigments", by Dr. R. P. Linstead; February 19th (joint meeting with the Hull and District sections of the Royal Institute of Chemistry and University College Scientific Society), Lecture, "The Optical Properties of Molecules ", by Professor E. G. Cox ; May 20th (joint meeting with the University College Scientific Society), Lecture, "Kinetics of Some Organic Halogenation Reactions ", by Mr. R. P. Bell; October 21st (joint meeting with the local section of the Oil and Colour Chemists' Association and the University College Scientific Society), Lecture, " Surface Chemistry-its Achievements and its Future", by Dr. A. E. Alexander; November 18th (joint meeting with the University College Scientific Society), Lecture, " The Preparation and Uses of Radioactive Isotopes", by Professor H. J. Emeléus.

Leeds. At the University: March 2nd (joint meeting with the University Chemical Society), Display of Scientific Films followed by a Lecture, " The Protein Molecule and its Degradation by Enzymes "', by Dr. J. A. V. Butler; March 19th and 20th, Joint Conference of local societies, " Rheology in the Textile Industries"; May 3rd, Lecture, "The Valency of Metals and the Structure of Intermetallic Compounds", by Professor L. C. Pauling; November 22nd, Lecture, "The Mechanism of Autoxidation", by Professor C. E. H. Bawn.

Liverpool. At the University: February 19th (joint meeting with the local section of the Royal Institute of Chemistry), Lecture, "The Chemistry of Deterioration of Milk Powder", by Dr. C. H. Lea; March 4th, Tilden Lecture, "Crystallographic Technique and its Chemical Significance", by Professor E. G. Cox; March 16th, Lecture, " The Valency of Metals and the Structure of Intermetallic Compounds", by Professor L. C. Pauling; (joint meetings with the local sections of the Royal Institute of Chemistry, the Society of Chemical Industry, and the British Association of Chemists), October 14th, Lecture, "The Preparation, Properties, and Handling of Elementary Fluorine", by Dr. A. J. Rudge; November 10th, Lecture, " The Chemistry of some Carbohydrate Constituents of Bacteria ", by Professor M. Stacey; December 2nd, Lecture, " Modern Theories of Chemical Valency ", by Sir John Lennard-Jones.

Manchester. January 8th (joint meeting with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), at the University, Lecture, "Crystallisation of Fertilisers", by Dr. M. P. Applebey; January 20th (joint meeting with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), at the Engineer's Club, Lecture, "Nitration by Mixtures of Nitric and Sulphuric Acids", by Dr. G. M. Bennett ; at the University, February 12th, Official Meeting of the Society and Lecture, "Some Problems in Nucleotide Synthesis", by Professor A. R. Todd; April 8th, Meeting for reading papers; October 14th (joint meeting with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), Lecture, " Biochemistry of Vitamin A ", by Professor R. A. Morton ; November 5th (joint meeting with
the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), at the Engineer's Club, Lecture, "Studies in Australian Plant Chemistry", by Professor John Read; at the University: November 11th, Meeting for reading papers; December 9th (joint meeting with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), Lecture, "Aromatic Nitration", by Professor C. K. Ingold.

Nerocastle and Durham. At King's College, Newcastle-on-Tyne : March 5th, Meeting for reading papers; April 23rd, Bedson Club Lecture, " The Valency of Metals and the Structure of Intermetallic Compounds ", by Professor L. C. Pailing ; May 21st, Bedson Club Lecture, "Modern Theories of the Mechanism of Drug Action", by Professor A. R. Todd; October 29th, Bedson Club Lecture, " Recent Work on Systems of Aromatic Type ", by Professor W. Baker; November 12th, Meeting for reading papers.

Northern Ireland. At Queen's University, Belfast : March 4th, Pedler Lecture, " Recent Developments in the Vitamin A Field", by Sir Ian Heilbron; (Joint meetings with the Local Sections of the Royal Institute of Chemistry and Society of Chemical Industry), September 22nd, Lecture, "The Alumina and Aluminium Hydrate Industry", by Mr. A. N. Adamson; at the Royal Belfast Academical Institution; October 5th, Lecture, " The Development of Chemical Institutions", by Dr. H. J. T. Ellingham; December lst (joint meeting with the local sections of the Royal Institute of Chemistry and Society of Chemical Industry), Lecture, " Some Chemical Aspects of Plastics Manufacture", by Dr. R. G. R. Bacon.

North Wales. January 29th, at University College of North Wales, Bangor (joint meeting with the University College of North Wales Chemical Society), Lecture, " Reactions of the Ethylene Bond "', by Professor D. H. Hey; January 30th, at University College of Wales, Aberystwyth (joint meeting with the University College of Wales Chemical Society), Lecture, " Some Recent Advances in the Theory of Polymerisation", by Professor D. H. Hey; at University College of North Wales, Bangor (joint meetings with the University College of North Wales Chemical Society), February 13th, Lecture, " Some Aspects of Solid Reactions", by Professor W. E. Garner; November 25th, Lecture, " Problems in Inorganic Chemistry", by Professor W. Wardlaw.

Nottingham. At the University (joint meetings with the University Chemical Society) : January 22nd, Lecture, " Some Aspects of Aromatic Substitution", by Professor Brynmor Jones; February 19th, Lecture, "The Application of Infra-Red Analysis to Problems in Molecular Structure", by Dr. G. B. B. M. Sutherland; March 4th, Meeting for reading papers; November 18th, Lecture, " The Mechanism of Free-radical Reactions in Polymerisation ", by Professor M. G. Evans; December 9th, Meeting for reading papers.

Oxford. At the Physical Chemistry Laboratory, Alembic Club Lectures: May 10th, Lecture, " Some Recent Investigations of Natural Products", by Professor R. D. Haworth; May 24th, Lecture, "Chemical Reactions induced by Nuclear Radiation", by Dr. F. S. Dainton; June 7th, Lecture, "Exchange Reactions and Electrolytic Dissociation", by Professor S. Sugden; October 18th, Lecture, " Aspects of Vapour-phase Oxidation ", by Dr. A. D. Walsh; November lst, Lecture, " Some New Methods for the Preparation of Amidines", by Dr. W. F. Short ; November 15th, Lecture, "The Chemistry of Semiconducting Solids", by Dr. J. S. Anderson.

St. Andrews and Dundee. At United College, St. Andrews: February 13th, Lecture, "Recent Developments in the Chemistry of Starch and Glycogen", by Professor E. L. Hirst; April 21st, Lecture, " The Valency of Metals and the Structure of Intermetallic Compounds ", by Professor L. C. Pauling; at University College, Dundee (joint meeting with the Royal Institute of Chemistry and Society of Chemical Industry), December 10th, Lecture, " Problems of Biosyntheses", by Professor J. N. Davidson.

Sheffield. At the University (joint meetings with the University Chemical Society) : January 29th, Lecture, " Stereochemical Regularities in Catalytic Reactions", by Dr. R. P. Linstead; February 12th, Lecture, " The Factors Influencing Radical Reactions in Solution ", by Professor M. G. Evans; November 4th, Lecture, " The Electron Microscope, and some Recent Discoveries with it in the Field of Macromolecules", by Professor W. T. Astbury; November 18th, Lecture, " A Theory of Organic Reactions", by Professor E. D. Hughes; December 2nd (joint meeting with the local section of the Royal Institute of

Chemistry and Sheffield University Chemical Society), Lecture, "Problems in the Production of Useful Power from Nuclear Energy", by Sir Wallace Akers.

Southampton. January 23rd (joint meeting with the Southampton University College Chemical Society), at University College, Lecture, "Synthetic Organic Chemistry in Relation to Biology ", by Professor E. C. Dodds; March 12th (joint meeting with the University College Chemical and Physical Society), at University College, Southampton, Lecture, "Some Aspects of Infra-red Spectroscopy", by Dr. G. B. B. M. Sutherland; May 2lst (joint meeting with the Portsmouth and District Chemical Society), at Municipal College, Portsmouth, Lecture, "Cosmic Rays", by Professor F. H. Newman; May 27th (joint meeting with the Chemical and the Physical Societies of University College), at University College, Southampton, Lecture, " Intermolecular Forces and Biological Specificity", by Professor L. C. Pauling; October 19th (joint meeting with the Portsmouth and District Chemical Society), at Municipal College, Portsmouth, Lecture, "Tribochemistry and the Initiation of Explosives "', by Dr. F. P. Bowden; University College, Southampton, November 19th (joint meeting with the Mid-Southern Counties Section of the Royal Institute of Chemistry and University College of Southampton Chemical Society), Lecture, "Recent Advances in the Use of Organic Reagents in Analysis", by Mr. G. H. Osborn; December 3rd (joint meeting with the University College of Southampton Chemical Society), Lecture, "Free Radical Mechanisms in the Initiation of Polymerisation Reactions ", by Professor M. G. Evans.

South Wales. At University College, Swansea: January 19th (joint meeting with the University College of Swansea Students' Chemical Society), Lecture, "The Physical Chemistry of Some Vacuum Metallurgical Processes ", by Dr. Philipp Gross; February 9th, Lecture, "Free-radical Reactions in Hydrocarbon Chemistry", by Professor C. E. H. Bawn; March 5th (joint meeting with the University College of Swansea Students' Chemical Society), Lecture, "The Antibacterial Compound, Aspergillic Acid", by Professor F. S. Spring; March 12th, at University College, Cardiff, Lecture, "The Contribution of the Organic Chemist to Medical Research ", by Professor C. R. Harington; November 15th (joint meeting with the University College of Swansea Students' Chemical Society), at University College, Swansea, Lecture, "The Structure of the Boron Hydrides and Similar Compounds "', by Mr. R. P..Bell; November 18th, at University College, Cardiff, Lecture, " The Chemistry of Penicillin ", by Professor Wilson Baker.

## APPENDIX $B$.

## ANNUAL REPORT OF THE JOINT LIBRARY COMMITTEE FOR THE YEAR 1948.

There was a slight decrease in the number of attendances by readers during the year. This is easily accounted for by the fact that the Reading Room was closed for a longer period than usual in the summer, when the staircase walls were being painted. The increasing value of the Library services is testified to both by letters and by comments from those using the Library in person and from those only able to do so by post.

Books issued, again show an increase, particularly in the case of those issued by post, all of which are registered.

The pressure on the photostat service has apparently been eased by the fact that the Science Library now undertakes copying, and is usually able to do it at a cheaper rate. The number of printed pages copied was 4605, a decrease of 435 on the previous year. Telephone enquiries dealt with again showed an increase, the respective figures for 1947 and 1948 being 1711 and 1764.

The number of books added to the Library was 282 , of which 90 were presented. 583 volumes of periodicals were added, and 187 pamphlets. The total number of volumes in the Library is now 49,787 , of which 15,054 are books and 34,733 volumes of periodicals.

Analysis.

|  | Attendances. | Books borrowed. | Books added. | Volumes of periodicals. | Pamphlets. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1948 | 11,547 | 9741 (3569 by post) | 282 | 583 | 187 |
| 1947 | 11,710 | 9678 (3427 by post) | 442 | 593 | 181 |

The number of books added shows a decrease because the books which were purchased in Germany by the BIOS team are included in the figure for 1947.

A thorough revision of the books in the Reading Room took place in the summer, and by sending over 1000 volumes to the basement stores the position on the shelves was eased, but the reserve space has been so severely reduced that the overall picture of accommodation is again becoming grave.

Some concern was caused by the sudden appearance of extensive mould on books in one of the Library stores. The Committee is most grateful to Messrs. R. Faraday Innes and A. J. Musgrave of the British Leather Manufacturers' Research Association and Dr. H. J. Plenderleith of the British Museum for their extensive researches into the cause of this attack and suggestions for its cure. Precautions recommended by them have been taken, which, it is hoped, will prevent any recurrence.

Books both new and historical have been presented to the Library by authors, publishers, and others, and the Society's collection of medals has also been enriched. To all the donors of such gifts the Committee desires to express its warm thanks.
income and expenditure general purposes account for the year mnded 31st december, 1948.



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$$

$1947 \quad$ Expenditure.

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\begin{array}{lll}
821 & 17 & 7 \\
160 & 12 & 4 \\
160 & 12 & 4 \\
533 & 19 & 6 \\
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\end{array}
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„ Expenses on Account of Conjoint Chemical
 For Fittings, Furniture, Books, Periodicals,
and Binding
Proportion of Maintenance...
.... ......






* The basis of adjustment for the years 1947 and 1948 has not yet been settled.
Income and Expenditure Accounts of other Funds for the Year ended 31st December, 1948.

Income and Expenditure Accounts of other Funds for the Year ended 31st December, 1948.


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Incomer and Expenditure Accounts of other Funds for the Year ended 31st December， 1948.



## SPECIAL PUBLICATIONS FUND．

| $£$ | 3. | $d$. |
| ---: | ---: | ---: | ---: |
| 425 | 6 | 0 |
| 6 | 16 | 9 |
| 2 | 9 | 0 |
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| :---: | :---: | :---: |
| 40 | 7 | 6 |
| 74 | 0 | 8 |
| 27 | 8 | 7 |
| - | - | - |
|  |  |  |

Income and Expenditure Accounts of other Funds for the Year ended 31st December, 1948.

Income and Expenditure Accounts of other Funds for the Year ended 31st Deoember, 1948.





The Chemical Society. Balance Sheets, 31st December, 1948.

The Chemical Society. Balande Sheets, 31st December, 1948.

The Chemical Society. Balance Sheets, 31st December, 1948.


[^0]> THE FARADAY LECTURE FUND.

The Chemical Society. Balance Sheets, 3lst December, 1948.

SCHEDULE OF INVESTMENTS.



[^0]:    s.a
    
    $\left|\begin{array}{c}7 \\ 0 \\ 0 \\ \infty \\ \infty \\ \mathbf{\infty}\end{array}\right|$

