

ANNUAL GENERAL MEETING

THE ninety-fifth Annual General Meeting was held at the University of Bristol on Thursday, 16th April, 1936, the President, Professor N. V. SIDGWICK, C.B.E., D.Sc., F.R.S., occupying the Chair.

At 3.45 p.m. Fellows and their guests were welcomed by Dr. Stanley H. Badock, Pro-Chancellor and Treasurer of the University, and entertained to tea. Fellows subsequently proceeded to the Small Chemistry Lecture Theatre where the business portion of the meeting was held at 4.15 p.m.

The notice summoning the meeting was read, and the President formally presented the Report of Council for 1935—1936, with the Balance Sheets and Statements of Accounts for 1935. (See pp. 519—532.)

The Treasurer, who was called upon by the President, dealt with the accounts in detail and stated that, though the *Journal* had cost £194 less than in 1934, the cost of Abstracts had increased by £454. The net cost of Abstracts (£4975) was the highest on record, and the number of Abstracts published in 1935 (16,655) was more than double that published in 1927 (8010). Whereas Abstracts had continued to increase in cost, proceeds from the sale of Abstracts had steadily declined from £2405 in 1929 to £1841 in 1934. In 1935, sales had shown for the first time for six years a small increase, the amount being £51. Even if this upward tendency were to continue, it could not be expected that the revenue from this source would be sufficient to compensate the Society for the expenditure involved in coping with the continually increasing subject-matter to be abstracted. Certain steps were being taken by the Bureau of Chemical Abstracts to deal with the position, but he feared that drastic action would become inevitable unless additional subsidies from outside sources were forthcoming. During the last three years the Society had spent some £3000 in excess of its income.

The Chemical Council, which was formed in July, was now actively at work, and had given effect to the condition that the maintenance of the Library should be shared equally by contributions from each individual Chemist who is a member of one, or more, of the three constituent bodies. During 1936, the Institute of Chemistry would contribute £646 10s. and the Society of Chemical Industry £443. The Chemical Council were also hoping to effect economies by centralising the printing and distribution of the respective publications of the three chartered bodies. Funds resulting from such economies and any contribution from the Chemical Council's funds would be most welcome.

Professor C. S. Gibson, who proposed the adoption of the Report and Accounts, said, after paying a tribute to the work of the Treasurer and of the Chairman and members of the Bureau of Chemical Abstracts, that the increasing difference between the cost of production and the proceeds from the sales of the "A" Abstracts was due to the fact that better Abstracts were obtainable, and that every effort should be made to improve the Abstracts both in comprehensiveness and in indexing. The motion was seconded by Professor J. L. Simonsen, and carried.

A vote of thanks to the Auditors, proposed by Dr. W. Wardlaw and seconded by Dr. F. Fairbrother was carried, and on a motion from the Chair, Dr. H. E. Cox, Dr. H. D. K. Drew, and Dr. G. Senter were elected Auditors for the ensuing year.

Professor W. E. Garner, in proposing a vote of thanks to the Treasurer, Honorary Secretaries, Council and Committees for their services during the past year, referred in particular to the valuable services rendered by Professor S. Sugden during his term of office as Honorary Secretary from 1933—1936. This was seconded by Dr. E. B. Maxted, and carried with acclamation, Professor Sugden making brief acknowledgment.

The report of the Scrutators on the ballot for the election of Ordinary Members of Council (Town and Country Members) was presented, and elections were declared as follows :

Vice-Presidents, who have filled the office of President : Professor H. E. ARMSTRONG, Sir WILLIAM J. POPE.

Vice-Presidents, who have not filled the office of President : Mr. J. DAVIDSON PRATT, Sir ROBERT ROBERTSON, Professor R. ROBINSON.

Honorary Secretary : Professor J. W. COOK.

Ordinary Members of Council (Town Members) : Professor C. K. INGOLD, Dr. R. P. LINSTEAD, Dr. R. E. SLADE.

Ordinary Members of Council (Country Members) : Professor G. R. CLEMO, Mr. T. W. J. TAYLOR, Professor R. V. WHEELER.

A vote of thanks to the Scrutators (Dr. E. W. McClelland and Dr. W. H. J. Vernon) proposed by Dr. T. A. Henry and seconded by Dr. R. Raper was carried.

This concluded the business portion of the meeting. The company then assembled in the Large Chemistry Lecture Theatre.

The Longstaff Medal for 1936 was presented to Professor G. Barger, and in making the presentation the President said :

“ Professor Barger, it is now my very pleasant duty to present to you the Longstaff Medal, which has been awarded to you by the unanimous vote of the Council.

“ This Medal, which was established just 60 years ago, and is awarded every three years, is the highest distinction which the Society can bestow on one of its Fellows. You have well earned this distinction by the importance and extent of your researches on natural products of physiological interest. The most famous are those on ergot and its constituents, which form one of the first and still one of the most successful efforts to correlate physiological activity and molecular structure. But, in addition, you have increased our knowledge of a very large number of alkaloids, and synthesised many of them ; in fact, there is no part of alkaloidal chemistry that you have not illuminated. The brilliant work of your pupil Harington on thyroxin also undoubtedly owes much to your inspiration.

“ Further, through your wide circle of friends abroad, and your enviable command of foreign languages, you have done much to promote friendly intercourse between the chemists of all countries.

“ It is therefore with great pleasure, and I am sure with the approval of all chemists, that I hand you the Longstaff Medal, and express the hope that you may continue to extend chemical knowledge with as much success as you have done in the past.”

In returning thanks, Professor Barger said that he considered the award scarcely due to his own individual work, but rather a tribute to his associates in research, in whom he had been particularly fortunate. He was grateful for a long collaboration with Sir Henry Dale, for pupils such as the first recipient of the Harrison Memorial Prize, and for friendships with leaders in the field in which he had worked. The medal was a great stimulus to future effort.

In presenting the Harrison Memorial Prize for 1935 to Dr. Leslie E. Sutton, the President said :

“ Dr. Sutton, in accordance with the unanimous decision of the Committee, which consists of the Presidents of the Chemical Society, the Society of Chemical Industry, the Pharmaceutical Society, and the Institute of Chemistry, I have much pleasure in handing you the Harrison Memorial Plaque and Prize. This Prize, which was founded in memory of an eminent Fellow of this Society who gave his life to the service of his country in the War, is awarded every three years to the Chemist under 30 years of age who shall have made the most meritorious original contributions to chemical science.

"Your work has already done much to increase our knowledge of molecular structure. It has helped to elucidate the formulæ of the bivalent carbon compounds, the oximes, and the azides; your paper on the relation between dipole moment and substitution in benzene derivatives is perhaps the most important contribution that has so far been made from the physical side to the problem of the dependence of reactivity in organic compounds on structure. Your later work on electron diffraction has also thrown light on important structural questions.

"I have very great pleasure, personal as well as official, in handing you the plaque and the prize, and I hope that your scientific career may continue to develop along the lines on which it has so auspiciously begun."

In thanking the President, Dr. Sutton expressed his appreciation of the great honour that had been conferred on him and said that he would like to echo Professor Barger's remarks in a humble way. He referred to the necessity of living up to the award and stated that if he were as fortunate with his collaborators in the future as he had been in the past, he hoped to be able to do so.

The President then delivered his Address entitled "Structural Chemistry." At its conclusion, a vote of thanks to the President for his services in the Chair during the past year and for his Address, with a request that he would allow it to be printed in the *Journal*, was moved by Professor F. Francis, seconded by Dr. J. T. Hewitt, and carried with acclamation, the President making acknowledgment.

A vote of thanks to the Chancellor, Council, and Senate of the University of Bristol for granting permission for the Anniversary Meetings and Dinner to be held in the University and for their hospitality was proposed by Professor W. N. Haworth, seconded by Professor J. E. Lennard-Jones, and carried with acclamation. This was acknowledged by Dr. Stanley H. Badock.

The President then moved a vote of thanks to the Reception and Executive Committees, mentioning in particular the Chairman (Dr. Stanley H. Badock), the Honorary Treasurer (Mr. Arthur Marsden) and the Honorary Secretary (Dr. E. B. Maxted), for their services in organising the meetings. This was carried unanimously.

REPORT OF COUNCIL, 1935—1936.

The year under review has been marked by a number of important events which will take their place in the history of the Society.

The Silver Jubilee of the Accession of His Majesty King George V to the Throne was celebrated in May, and a loyal Address of Congratulation was presented to His Majesty the King.

Towards the end of the Society's year, Britain and the Empire mourned the death of King George V. An Address of Condolence was presented to His Most Excellent Majesty King Edward VIII expressing the sense of deep personal loss which the President, Council, and Fellows of the Society felt in common with all His Majesty's subjects in the deeply lamented death of His Majesty King George V.

In June, the Councils of the three participating Bodies signed the Agreement setting up a Chemical Council. The activities of this Council are referred to later in the report; its institution is a large step forward in co-operation between the separate organisations of chemists.

The Society mourns the loss of two Past-Presidents, Professor H. Brereton Baker and Sir James Walker. Professor Baker, who was President from 1926 to 1928, died on the 27th April, 1935; he was elected a Fellow in June 1884, and served on the Council for 15 years. Sir James Walker, who was President from 1921 to 1923, died on the 6th May, 1935; he was elected a Fellow in February 1890, and served on the Council for 19 years.

I. Honorary Fellows.

The Council records with deep regret the death on the 14th March of Professor Arthur Hantzsch, who was elected an Honorary Fellow on the 17th October, 1929; and on the 13th December of Professor Victor Grignard, who was elected an Honorary Fellow on the 18th March, 1920.

On the 5th December, the Society elected as Honorary Fellows Professor J. N. Brønsted, Professor J. B. Conant, Professor Georg von Hevesy, Professor L. Ruzicka, and Professor G. Tammann, and the number of Honorary Fellows at the end of the year was 36.

II. Chemical Council.

The last report of Council contained reference to the advance made during the year in the negotiations for closer co-operation between The Chemical Society, The Institute of Chemistry, and The Society of Chemical Industry. A draft Agreement setting up a Chemical Council was circulated to Fellows in March, and on the 9th May an Extraordinary General Meeting was held at which the Agreement was approved. The Agreement in its final form was signed by the Councils of the three bodies in June.

The new Chemical Council is constituted of representatives of the three bodies concerned, and of representatives of Industry, the latter, for the present, being appointed by the Association of British Chemical Manufacturers.

The Chemical Council will administer a fund for the co-ordination of scientific and educational publications, the publication of new discoveries, the promotion of research, the maintenance of a library, and the provision and equipment of a suitable building or buildings for such purposes. The new Council, which has held several meetings, the first in July 1935, has formulated Standing Orders, has appointed Committees for various purposes, and has prepared an Appeal for the Fund, which is being raised for the purposes indicated above. It has also made progress with the consideration of the cost of publications for the chemical societies, the possibility of effecting economies, and other matters of interest and importance to the constituent bodies.

For the present, in view of the urgent need for further support for the publications and library of the Chemical Society, it has been agreed that the three Societies shall contribute, proportionately to their membership, to the cost of the maintenance of the library. This will indirectly help the Society to a substantial extent in supporting the burden of its publication of new knowledge and abstracts.

The Appeal for the Fund deserves the attention of all who are interested in chemistry and its applications in industry and commerce. Fellows who feel that they are able to assist in furthering the appeal are asked to communicate with the Honorary Secretary, The Chemical Council, 30, Russell Square, London, W.C. 1.

III. Fellowship Statistics.

The number of Fellows on the 31st December, 1934, was 3628. In 1935, 228 Fellows were elected and 21 reinstated, compared with 218 and 16, respectively, in 1934. The Society has lost 48 Fellows by death, 38 by resignation, and 66 by removal for non-payment of annual subscription, the corresponding figures last year being 50, 101, and 75, respectively.

The number of Fellows at the 31st December, 1935, was 3725, giving an increase of 97 over that at the end of 1934.

In previous years, it has been the practice to include in resignations the names of Fellows who had notified their intention to resign as from the 31st December of the year under review. Council decided last April that, in future, Fellowship statistics appearing in the Report of Council should relate to the financial year ending 31st December. Accordingly, the figures given above do not include names of Fellows resigning as from the end of 1935.

For purposes of comparison with the figures appearing in the last Report of Council, resignations should be increased to 101, thus decreasing the number of Fellows at the 31st December, 1935, to 3662, giving a net increase of 34 over that of the previous year.

IV. *Birthday and New Year Honours.*

The congratulations of the Society were conveyed to the following, whose names appeared in the lists of Birthday and New Year Honours :

Honorary Fellow.

Sir Frederick Gowland Hopkins O.M.

Fellows.

Professor Shanti S. Bhatnagar O.B.E.
 Mr. Bryce C. Burt Kt.
 Professor Arthur Harden Kt.
 Dr. W. Lash Miller C.B.E.
 Dr. Frank T. Shutt C.B.E.
 Professor N. V. Sidgwick C.B.E.
 Dr. Frank S. Sinnatt C.B.
 Mr. Edward J. Wortley C.M.G.
 Mr. Charles A. Wrench Kt.

V. *Fellows who have Completed 60 and 50 Years of Fellowship.*

The congratulations of the Society have been conveyed to the following Fellows, who have completed 60 years of Fellowship :

Elected.

G. William Davey November 18th, 1875.
 J. F. M. H. Stone December 2nd, 1875.
 Sir Ernest H. Cook December 2nd, 1875.
 Bernard Dyer December 16th, 1875.
 John M. H. Munro February 17th, 1876.

and to the following, who have completed 50 years of Fellowship :

Elected.

Charles Watson March 5th, 1885.
 Walter Collingwood Williams March 5th, 1885.
 William Palmer Wynne May 7th, 1885.
 Thomas J. Greenway June 4th, 1885.
 Duncan S. Macnair June 4th, 1885.
 Sir Francis Newbolt June 4th, 1885.
 Robert Wallace June 4th, 1885.
 Hermann T. Vulté November 19th, 1885.
 John S. Adriance December 3rd, 1885.
 Matthew Hunter December 3rd, 1885.
 Charles Ranken December 3rd, 1885.
 Luther R. Scammell December 3rd, 1885.

VI. *Journal.*

The *Journal* for 1935, containing 1907 pages (112 pages fewer than the *Journal* for 1934), consists of 434 memoirs (1744 pages), 33 notes (19 pages), 5 lectures (48 pages), a report on atomic weights (8 pages), the Presidential Address (17 pages), report of the Annual General Meeting (13 pages), and Obituary Notices (58 pages).

During 1935, 517 papers were received; of these, 14 were declined. Of the 434 memoirs published, 131 deal with General, Physical, and Inorganic Chemistry, and 303 with Organic Chemistry.

The average interval between the receipt and the publication of the papers in 1935 was 9.8 weeks (9.5 weeks for 1934; 9.4 weeks for 1933).

The recommendations contained in the report of the Special Committee on the Nomenclature of the Isotopes of Hydrogen adopted by Council on the 21st March appeared in the *Proceedings* for April (p. 31) and were communicated to the American Chemical Society.

VII. Bureau of Chemical Abstracts.

Six Meetings of the Bureau were held during the year, at one of which the Assistant Editors were present.

Abstracts. The appended table shows the number and average length of abstracts in Sections "A" and "B" published during 1935, the figures for 1934 being included for comparison.

	Abstracts A.				Abstracts B.			
	1934.		1935.		1934.		1935.	
	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.
1st quarter	3,586	338	4,630	422	3,714	286	3,326	272
2nd ,,	3,946	372	4,114	376	3,486	272	3,846	304
3rd ,,	3,653	340	4,056	384	3,716	288	3,596	288
4th ,,	3,896	372	3,855	370	3,409	272	3,926	304
	15,081	1,422	16,655	1,552	14,325	1,118	14,694	1,168
Average length per abstract	0.19 Col.		0.19 Col.		0.16 Col.		0.16 Col.	

The 16,655 "A" Abstracts comprised 7601 in General, Physical, and Inorganic Chemistry, 519 in Geochemistry, 2617 in Organic Chemistry, and 5918 in Biochemistry. The corresponding figures for 1934 were 6929, 405, 2823, and 4924.

Of the 14,694 "B" abstracts, 8351 were from Journal literature and 6343 were abstracts of Patents (in 1934: 7025 and 7300 respectively).

For reasons indicated in our last Report, the numbers of abstracts published continue to increase. Part of the expansion is, however, due to the fact that the literature is being more exhaustively covered than in the past.

The Biochemistry section again shows a greater percentage increase than the other sections. The position is being fully reviewed by the Chemical Society, and as a temporary expedient the Bureau has been asked to reduce the volume of Biochemistry abstracts published in 1936 to 10 per cent. less than that which appeared during 1935.

Steps have been taken during the year to improve the character of the abstracts in organic chemistry by including a concise statement of the general trend of the investigations where the nature of the original demands it.

The practice of using Roman letter symbols to denote other than chemical compounds has been found to render the abstracts obscure, and it has therefore been decided to confine the use of such symbols entirely to chemical compounds, and even in these cases to discontinue their use as far as possible.

As from the beginning of 1936 the classes in the "A" Abstracts will bear numbers as indicated in the revised Foreword published in the January issues. The corresponding numbers will appear at the top of the appropriate pages in the abstracts in order to facilitate reference to particular subjects.

Editorial Staff. The Bureau deplores the loss, by the death of Dr. H. W. Dudley, of one who had served most efficiently as Assistant Editor of Biochemistry Abstracts since 1924.

Dr. J. H. Birkinshaw has been appointed Assistant Editor to succeed Dr. Dudley, and will be assisted in the work by Dr. F. O. Howitt and Mr. A. G. Pollard.

Annual Index. The joint Annual Index of the abstracts for 1934 covered 692 pages, as compared with 640 pages for the 1933 Index. The cost of printing the Index was £1343 16s. 0d. and of the paper £259 13s. 7d. (corresponding figures for the 1933 Index were £1248 6s. 9d. and £244 3s. 4d.). The total number of entries in the Index increased from 87,675 in 1933 to 97,050 in 1934. Steps are being taken to ensure that the Index will appear considerably earlier than in the past.

Decennial Index The Subjects volume of the Decennial Index 1923–1932, comprising 1766 pages, was published in the early part of the year.

The press notices of the work were very gratifying, and the sales have been greater than was anticipated, 809 subscriptions having been received to the end of 1935. The grants from the two Societies were more than sufficient to cover the balance of the cost of production, after deducting revenue from sales, and the Bureau was able to refund the sum of £45 to the Chemical Society, and £245 to the Society of Chemical Industry (the latter having provided £200 more than the Chemical Society towards the cost).

Subscriptions are still being received, and the balance will be divided equally between the two Societies from time to time.

VIII. *Library.*

Excluding the evenings on which meetings of the Chemical Society were held, there were 8156 attendances during the year, as compared with 8549 in 1934. Of these 5128 were made by Fellows of the Chemical Society, and 3028 by Members of Contributing Societies, as against 5367 and 3182 in 1934.

The number of books borrowed was 5509, against 5525 in the previous year; of these 1378 were issued by post, compared with 1345 in the preceding year.

The Library telephone facilities are still extensively used, and the incoming calls included 852 inquiries which necessitated reference to books in the Library, as against 758 the previous year.

The additions to the Library comprise: 203 books, of which 94 were presented; 662 volumes of periodicals, and 233 pamphlets; as against 197 books, 674 volumes of periodicals, and 255 pamphlets last year.

The total number of volumes added during the year was 865. The Library now contains 39,675 volumes, consisting of 12,020 books and 27,655 bound volumes of periodicals.

Council records its thanks to Dr. T. A. Henry for the valuable services he has rendered to the Society as Chairman of the Library Committee from 1931 to 1935. Dr. O. L. Brady succeeded him in this office.

Council also expresses thanks for gifts received from Fellows, Authors, and Publishers during the year, and to Miss F. M. G. Micklethwait, Professor C. S. Gibson, Dr. E. W. Maddison, and a number of Publishers for continuing to present periodicals as issued.

IX. *General.*

Vacancies on Council.

Two vacancies on the Council have occurred during the year. Professor H. E. Armstrong was appointed to the vacancy among Vice-Presidents who have filled the office of President caused by the death of Sir James Walker, and Professor R. Robinson was appointed to the vacancy among Vice-Presidents who have not filled the office of President due to Professor N. V. Sidgwick being elected President. These appointments terminate at the Annual General Meeting in April.

Secretaryship.

In December the Council received with regret the resignation of Professor S. Sugden from the office of Honorary Secretary as from the next Annual General Meeting, and has recorded its appreciation of the valuable services he has rendered to the Society since assuming office in July 1932. Professor J. W. Cook has accepted Council's nomination to the office of Secretary.

Scientific Meetings.

Three special lectures have been held in London during the year. On the 28th February, Dr. A. S. Russell gave the Curie Memorial Lecture at the Royal Institution; on the 14th November, Dr. S. I. Levy gave the Brauner Memorial Lecture; and on the 12th February,

Lord Rutherford of Nelson gave the Sixteenth Faraday Lecture, entitled "Radioactivity and Atomic Theory," at the Royal Institution. The Haber Memorial Lecture by Professor J. E. Coates, arranged for the 23rd May, which was postponed owing to the illness of the lecturer, will be given during next session.

Twenty-four lectures were held outside London, and in addition Fellows were invited to attend three Bedson Lectures at Newcastle-on-Tyne. Five Discussions were held in London and four outside London. Nine Ordinary Scientific Meetings were held in London at which twenty-nine papers were read and discussed, and one was held at the University Chemical Laboratories, Cambridge, at which three papers were read and discussed. Meetings for the reading of Papers were also held at Leeds and Newcastle-on-Tyne.

A complete list of the lectures and discussions is given in the appendix to this Report.

Anniversary Meetings.

A report of the ninety-fourth Annual General Meeting at Burlington House on the 28th March was published in the *Journal* for April, and a brief account of the Anniversary Dinner held the same day at Grosvenor House appeared in the *Proceedings* for that month.

The Council has accepted an invitation from Fellows resident in Bristol to hold the Anniversary Meetings in the University of that city on the 16th and 17th April, 1936.

Longstaff Medal and Harrison Memorial Prize.

The Council has awarded the Longstaff Medal for 1936 to Professor G. Barger. The presentation of this medal and of the Harrison Memorial Prize, awarded by the Harrison Memorial Prize Selection Committee to Dr. L. E. Sutton, will be made at the Annual General Meeting in Bristol on the 16th April, 1936.

Representatives of the Society on other Bodies.

Association of British Chemical Manufacturers :

Professor W. A. Bone on Joint Committee dealing with Patents and Designs Act, and Medical Patents.

Association of Scientific and Technical Institutions :

Professor J. F. Thorpe on Council of Management.

Bristol University :

Professor F. G. Donnan on Court.

British Standards Institution :

Professor W. A. Bone on Council of the Chemical Division.

Dr. U. R. Evans on Committee to consider the question of preparing specifications for materials and plant used in electro-plating.

Drs. J. J. Fox and E. B. Hughes on Committee on Standardisation of Scientific Glassware.

Mr. A. L. Bacharach on Committee on Standards for Use in Dairying Chemistry.

Dr. A. D. Mitchell on Committee to prepare a British Standards Specification for Chemical Symbols and Abbreviations.

Bureau of Chemical Abstracts :

Mr. F. P. Dunn, Mr. A. J. Greenaway, Dr. J. T. Hewitt, Professor S. Sugden, and the Treasurer.

Chemical Council :

Professor N. V. Sidgwick (President), Professor I. M. Heilbron, and Professor G. T. Morgan.

City and Guilds of London Institute :

The President on Council.

Federal Council for Chemistry (until 31st December, 1935) :

Sir William J. Pope, Professor S. Sugden, and Professor J. F. Thorpe.

British National Committee for Chemistry (as from 1st January, 1936) :

The President, the Treasurer, and the Senior Secretary.

Home Office Air Raid Precautions Department to consider protection of population against hostile air attack :

Mr. J. Davidson Pratt.

Representatives of the Society at Public Functions.

Tercentenary Celebrations of the Muséum National d'Histoire Naturel (Paris, June 24th to 29th).

Prof. A. Béhal.

Canadian Chemical Convention (Kingston, June 4th to 6th).	Dr. Léon Lortie.
Associazione Italiana di Chimica Fifth National Congress of Pure and Applied Chemistry (Sardinia, May 1st to 7th).	Prince Ginori Conti.
University of Warsaw, Meeting held to commemorate Madame Curie's services to Science (Warsaw, April 1st).	Dr. R. Truszkowski.
Fifteenth Congress of Industrial Chemistry (Brussels, Sept. 22nd to 28th).	Dr. E. B. Hughes.
Opening of the Rubber Exhibition organised by the Rubber Growers' Association (Manchester, June 4th).	Dr. R. H. Pickard.
Opening of a New Museum of Practical Geology (London, June 3rd).	Prof. C. S. Gibson.

Local Representatives.

A meeting of Local Representatives was held at the Imperial College (London) on the 29th March, at which it was reported that the steps already taken for increasing the activities of the Society were working satisfactorily. Various suggestions for increasing their usefulness were considered, and a memorandum defining the duties and activities of Local Representatives was approved.

Acknowledgments.

The Council expresses cordial thanks to all those Fellows who have served the Society in many ways, and would especially mention members of Committees, referees of papers submitted for publication, contributors to the Annual Reports, lecturers, Fellows who have opened discussions, and Local Representatives.

The Council has received volumes of the Society's publications from Mr. C. R. Beck, Mrs. Cockburn, Mr. A. J. B. Cooper, Dr. E. L. Kennaway, Mr. Frank Moul, Mr. O. J. W. Napier, Mrs. F. L. Overend, and Mr. C. Wyatt-Edgell, and records its thanks for these gifts.

*X. Financial.**General Purposes Account.*

Expenditure has exceeded income by £1642, the adverse balance in 1934 being £825. Expenditure is up by £809. This increase is mainly due to cost of administration, meetings, and local representatives, £187; a contribution towards the cost of the decennial index, £488, and legal and incidental expenses in connection with the formation of the Chemical Council and the consequent alteration of the Bye-Laws, £107.

Publications Fund.

Sales of publications and proceeds from advertisements have realised £228 more than in 1934; expenditure on the *Journal* was less by £193, but £453 more was spent on the *Abstracts* than in 1934.

Investments.

£1142 16s. New South Wales 3% Stock 1935 (Research Fund Account) was repaid at par. This, together with £90, the proceeds of a bequest from the late Dr. H. M. Atkinson, was invested in Conversion 3½% Stock, 1961.

General.

The following contributions have been received :

£700 from the Government Publications Grant (through the Royal Society).

£200 from Imperial Chemical Industries, Ltd.

£25 from Mr. W. R. Criper to the Publications Fund to commemorate the King's Silver Jubilee.

£5 from Mr. W. Collingwood Williams to General Purposes Account to commemorate his jubilee of Fellowship.

£5 from Dr. G. McGowan to the Library.

£3 from Sir Prafulla C. Rây to the Library.

The Council records its thanks for these gifts and to those Fellows who continue to subscribe to the Publications Fund.

Research Fund.

In December applications for grants for research were received amounting to £1013 from 93 Fellows and to £42 10s. from 4 non-Fellows. Grants amounting to £740 were allotted.

The Council has received a bequest of £100 from the Executors of the late Dr. H. M. Atkinson.

APPENDIX.*Discussions held in London.*

21st March, on "Recent Progress in the Chemistry of the Terpenes," opened by Professor J. L. Simonsen; 16th May, on "The Significance of Phosphoric Esters in Biochemical Processes," opened by Professor R. Robison; 21st November, on "Some Aspects of the Interaction between Gases and Solids," opened by Professor E. K. Rideal; 16th January, on "Stereochemistry," opened by Dr. W. H. Mills, and 20th February, a joint discussion with the Faraday Society on "The Kinetics of Gaseous Combustion," opened by Dr. R. G. W. Norrish.

Discussions held outside London.

Manchester. At the College of Technology and Engineers' Club: 6th December (joint meeting with the Food Group of the Society of Chemical Industry and the Manchester Section of the Society of Chemical Industry), a symposium on "Micro-organisms and Foodstuffs."

Oxford. At the Department of Biochemistry: 26th October (joint meeting with the Oxford University Alembic Club), on "Aromatic Character," opened by Professor R. Robinson, Dr. W. H. Mills, Dr. W. G. Penny, and Dr. L. E. Sutton.

Sheffield. At the University: 8th February (joint meeting with the Yorkshire Branch of the Science Masters' Association), on "The Teaching of New Ideas in Chemistry in School and University."

South Wales. At University College, Cardiff: 22nd November, on "Some Problems of Sugar Chemistry in Relation to Biology," opened by Dr. E. L. Hirst.

Lectures held outside London.

Aberdeen. At the University: 17th May (joint meeting with the Institute of Chemistry and the Society of Chemical Industry) on "The Agricultural Utilisation of Peat Land," by Dr. Ian M. Robertson.

Birmingham. At the University, Edgbaston: 1st March, on "Recent Progress in Sesquiterpene Chemistry," by Professor J. L. Simonsen; 2nd December, on "Alkaloids—General Ideas and Methods," by Professor G. Barger; 9th December, on "The Decomposition of Molecules by Light," by Dr. R. G. W. Norrish.

Edinburgh. At the North British Station Hotel: 23rd January, on "Some Recent Developments in Surface Chemistry," by Professor E. K. Rideal.

Glasgow. At the Royal Technical College: 15th March, on "From Governor Phillip to d-neoisomenthol, the Story of a Research, 1788—1934," by Professor J. Read; 7th February, on "Some Recent Developments in Surface Action," by Professor E. K. Rideal.

Leeds. At the University: 14th October, on "The Fat-soluble Pigments of Nature," by Professor I. M. Heilbron; 31st January, on "The Formation of Nuclei in Solids and their Rate of Growth," by Professor W. E. Garner.

Liverpool. At the University: 27th February, on "Solid Reactions and Explosive Decomposition," by Professor W. E. Garner; 18th October, on "Some Recent Advances in Stereochemistry," by Dr. W. Wardlaw; 10th December, on "Formation of Anthocyanins in Plants," by Professor R. Robinson; 7th February, on "The Play of the Molecules in a Simple Chemical Reaction," by Professor H. M. Dawson.

Manchester. At Manchester Central Library: 10th October (joint meeting with the

Manchester Section of the Institute of Chemistry and the Society of Chemical Industry), on "Modern Structural Chemistry," by Professor N. V. Sidgwick. At the University: 26th November (joint meeting with the University of Manchester Chemical Society), on "The Calcification of Animal Tissues," by Professor R. Robison. At the Engineers' Club: 10th January (joint meeting with the Manchester Sections of the Institute of Chemistry and the Society of Chemical Industry), on "A Chemical Contribution to the Cancer Enigma," by Professor J. W. Cook. At the University: 4th February (joint meeting with the University of Manchester Chemical Society), on "The Structure of Benzene," by Professor C. K. Ingold. At Manchester Central Library: 20th February (joint meeting with the Manchester Sections of the Institute of Chemistry and the Society of Chemical Industry), on "Chemistry and Medicine," by Dr. J. F. Wilkinson.

Newcastle and Durham. Bedson Lectures at Armstrong College: 8th November, on "Carcinogenic Hydrocarbons and their Effects," by Professor J. W. Cook; 6th December, on "Modern Theory of Valency," by Professor J. E. Lennard-Jones; 21st February, on "The Application of X-ray Diffraction to Chemistry," by Mr. J. D. Bernal.

North Wales. At University College, Bangor (joint meetings with the University College Chemical Society): 1st November, on "Thermodynamics and Reaction Velocity," by Professor M. Polanyi; 7th February, on "Ergot and Ergotism," by Professor G. Barger.

Sheffield. At the University: 15th March, on "The Simplest Free Radicals," by Professor F. Paneth; 29th November, on "Some Modern Views on Chemical Reaction Velocity," by Professor M. Polanyi.

South Wales. At University College, Swansea: 21st March, on "Recent Work on Molecular Structure," by Professor N. V. Sidgwick; 8th November (joint meeting with the University College of Swansea Chemical Society), on "Recent Investigations in the Chemistry of Gold," by Professor C. S. Gibson.

INCOME AND EXPENDITURE GENERAL PURPOSES ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1935.

1934		1935		1934		1935	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
864	5 5	888	3 0	1934	4 7	1935	6 3
7486	10 4	7657	10 0	229	15 2	256	16 8
465	1 0	369	4 3	194	17 1	214	2 8
52	18 0	20	0 0	52	10 0	52	10 0
1970	14 9	8934	17 3	243	8 6	279	15 1
575	0 0	350	0 0	154	12 4	167	8 5
5695	14 9	8584	17 3	39	8 6	62	12 0
350	0 0	350	0 0	2848	14 2	2891	10 11
8945	14 9	8934	17 3	148	2 3	163	2 10
771	18 8	795	6 4	50	0 0	5	5 0
250	2 0	225	15 6	5	5 0	5	5 0
26	16 10	14	18 2	2	2 0	5	5 0
55	10 7	64	9 6	57	7 0	5908	0 4
825	1 10	1642	0 1	53	10 0	75	0 0
£10,930	14 8	£11,759	6 10	1923	12 1	1809	10 4
				76	14 8	74	16 3

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1935.

1934		1935		1934		1935	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
222	17 9	9470	19 2	1169	13 9	1169	9 7
1840	11 7	1891	15 7	59	13 6	59	13 6
18	3 0	22	7 6	35	0 9	35	0 9
679	7 7	848	5 0	378	19 11	3967	13 4
264	9 4	151	19 7	17	11 5	902	11 0
5312	1 4	5451	15 4	5774	18 2	352	9 6
520	13 8	663	6 0	1302	12 0	18	10 3
168	11 1	197	15 6	20	18 10	1318	3 6
377	2 7	465	11 0	79	1 3	20	18 10
55	10 0	75	0 0	1402	7 9	77	5 8
336	10 6	247	10 0	365	1 11	1926	18 2
700	0 0	700	0 0	365	1 11	3463	7 2
354	17 5	330	16 11	88	6 2	376	12 3
102	4 0	96	0 11	6413	2 7	93	10 9
11	1 1	7	7 11	737	2 11	737	10 2
5868	18 9	5908	0 4	10	2 0	22	9 0
£18,080	15 8	£18,273	2 5	55	10 0	75	0 0
				100	0 0	—	—
				£18,080	15 8	£18,273	2 5

1934		1935		1934		1935	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
1169	13 9	1169	9 7	1169	13 9	1169	9 7
59	13 6	59	13 6	59	13 6	59	13 6
35	0 9	35	0 9	35	0 9	35	0 9
378	19 11	3967	13 4	378	19 11	3967	13 4
17	11 5	902	11 0	17	11 5	902	11 0
5774	18 2	352	9 6	5774	18 2	352	9 6
1302	12 0	18	10 3	1302	12 0	18	10 3
20	18 10	1318	3 6	20	18 10	1318	3 6
79	1 3	20	18 10	79	1 3	20	18 10
1402	7 9	77	5 8	1402	7 9	77	5 8
365	1 11	1926	18 2	365	1 11	1926	18 2
365	1 11	3463	7 2	365	1 11	3463	7 2
88	6 2	376	12 3	88	6 2	376	12 3
6413	2 7	93	10 9	6413	2 7	93	10 9
737	2 11	737	10 2	737	2 11	737	10 2
10	2 0	22	9 0	10	2 0	22	9 0
55	10 0	75	0 0	55	10 0	75	0 0
100	0 0	—	—	100	0 0	—	—
£18,080	15 8	£18,273	2 5	£18,080	15 8	£18,273	2 5

1934		1935		1934		1935	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
9470	19 2	9470	19 2	9470	19 2	9470	19 2
1891	15 7	1891	15 7	1891	15 7	1891	15 7
22	7 6	22	7 6	22	7 6	22	7 6
848	5 0	848	5 0	848	5 0	848	5 0
151	19 7	151	19 7	151	19 7	151	19 7
5451	15 4	5451	15 4	5451	15 4	5451	15 4
663	6 0	663	6 0	663	6 0	663	6 0
197	15 6	197	15 6	197	15 6	197	15 6
465	11 0	465	11 0	465	11 0	465	11 0
75	0 0	75	0 0	75	0 0	75	0 0
247	10 0	247	10 0	247	10 0	247	10 0
700	0 0	700	0 0	700	0 0	700	0 0
330	16 11	330	16 11	330	16 11	330	16 11
96	0 11	96	0 11	96	0 11	96	0 11
7	7 11	7	7 11	7	7 11	7	7 11
5908	0 4	5908	0 4	5908	0 4	5908	0 4

SPECIAL LECTURES FUND.		1934		1935		1936	
		£	s.	£	s.	£	s.
<i>Income.</i>							
To Dividends on Investments	...	34	13	37	15	25	0
" Income Tax recovered	...	11	7	10	4	9	16
" Interest on Deposit	...	7	2	6	0	10	6
" Balance, being Excess of Expenditure over Income, carried to Balance Sheet	...	18	5	—	—	12	19
		<u>£47</u>	<u>6</u>	<u>£48</u>	<u>5</u>	<u>£48</u>	<u>5</u>
<i>Expenditure.</i>							
By Honorarium	...	25	0	25	0	25	0
Lecture Expenses	...	0	0	0	0	0	0
Miscellaneous Expenses	...	9	16	9	16	9	16
Balance, being Excess of Income over Expenditure, carried to Balance Sheet	...	12	19	12	19	12	19
		<u>£48</u>	<u>5</u>	<u>£48</u>	<u>5</u>	<u>£48</u>	<u>5</u>

STAFF PENSIONS FUND.		1935	
		£	s.
To Transfer from General Purposes Account	...	74	16
Dividends on Investments	...	36	12
Income Tax recovered	...	9	11
Income Tax recovered	...	120	0
		<u>£120</u>	<u>0</u>

THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.		1935		1936	
		£	s.	£	s.
To Dividends on Investments	...	41	1	—	—
Income Tax recovered	...	11	5	—	—
Interest on Deposit	...	1	0	53	14
		<u>£53</u>	<u>7</u>	<u>£53</u>	<u>14</u>

THE CHEMICAL SOCIETY.—BALANCE SHEETS, 31st December, 1935.

GENERAL PURPOSES.		1934		1935		1936	
		£	s.	£	s.	£	s.
<i>Liabilities.</i>							
To Subs. received in advance	...	892	13	922	7	25,854	5
" Sundry Creditors (Printing and other Expenses)	...	3,255	12	4,372	4	446	9
" Excess of Assets over Liabilities as per last Balance Sheet	...	23,075	9	22,883	9	350	0
Deduct Excess of Expenditure over Income for Year	...	825	1	1,642	0	380	19
		<u>22,850</u>	<u>7</u>	<u>21,241</u>	<u>9</u>	<u>25,854</u>	<u>5</u>
Add Transfer from Suspense Account unexpended balance	...	83	1	—	—	407	8
" Current Account at Bankers (overdrawn)	...	—	—	116	17	—	—
		<u>£27,081</u>	<u>14</u>	<u>£27,081</u>	<u>14</u>	<u>£26,652</u>	<u>18</u>
<i>Assets.</i>							
By Investments as per Schedule (cost or value when acquired)	...	—	—	—	—	25,854	5
Sundry Debtors	...	—	—	—	—	407	8
Subscriptions in Arrear, £546 7s. 0d. Estimated to realise	...	—	—	—	—	350	0
Cash in hand	...	—	—	—	—	41	5
		<u>£26,652</u>	<u>18</u>	<u>£26,652</u>	<u>18</u>	<u>£26,652</u>	<u>18</u>

PUBLICATIONS FUND.		1935		1936	
		£	s.	£	s.
To Excess of Assets over Liabilities as per last Balance Sheet	...	11,275	0	11,226	3
Add Amount transferred from Income and Expenditure Account for Investment	...	75	0	48	17
		<u>£11,350</u>	<u>0</u>	<u>£11,350</u>	<u>0</u>

SCHEDULE OF INVESTMENTS.

GENERAL PURPOSES.

Nominal Details.	Cost or Value when Acquired.		Market Value 31st December, 1935.	
	£	s. d.	£	s. d.
£787 London, Midland and Scottish Railway 4% Debenture Stock	839	3 7	849	19 2
£1850 1st, 3rd, Cardiff Corporation 3% Stock, 1914/64	1850	0 0	1520	14 3
£1400 India 2½% Stock	1318	1 0	1050	0 0
£2400 Bristol Corporation 2½% Debenture Stock, Bristol Dock	2070	2 0	2208	0 0
£2718 London, Midland and Scottish Railway 4% Preference	3572	0 4	2251	15 10
£1900 Leeds Corporation 3% Stock	1143	1 0	1140	0 0
£1098 6s. 2d. Union of South Africa 3% Stock, 1934/64	1087	12 10	1107	5 5
£1200 London and North Eastern Railway 3% Debenture Stock	1033	11 0	984	0 0
£700 Crompton 3½% Stock, 1930/50	704	8 6	707	0 0
£2959 6s. 9d. 3½% Conversion Loan, 1944/64	2448	2 6	3035	4 2
£1100 5% 3½% Conversion ditto	1048	0 2	1320	0 0
£600 4% Funding Loan, 1900/90	480	0 0	702	0 0
£11,212 8s. 3½% Conversion Stock 1961, or after	8487	2 2	12,081	8 3
	<u>£25,854</u>	<u>5 1</u>	<u>£28,957</u>	<u>7 1</u>

Nominal Details.	Value or Cost when Acquired.		Market Value 31st December, 1935.	
	£	s. d.	£	s. d.
£1000 London and North Eastern Railway 4% 2nd Guaranteed Stock	1010	0 0	920	0 0
£1034 Great Western Railway 2½% Debentures	1049	15 11	764	16 5
£1122 Metropolitan Water Board 3% "B" Stock	1002	16 9	1088	6 8
£1483 London, Midland and Scottish Railway 4% Debenture Stock	1508	3 6	1601	12 10
£806 Victoria 3% Stock, 1929/49	708	6 2	789	17 7
£4498 11s. 5% Conversion Loan, 1944/64	4267	4 10	5398	5 2
£6311 6s. 10d. 3½% Conversion Stock, 1961, or after	5131	10 10	6800	9 5
	<u>£14,675</u>	<u>18 0</u>	<u>£17,353</u>	<u>8 2</u>

SPECIAL PUBLICATIONS FUND.

; 2118 8s. 10d. 3½% Conversion Stock, 1961, or after	£1600	0 0	£2279	7 9
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SPECIAL LECTURES FUND.

£1299 9s. 4d. 3½% Conversion Stock, 1961, or after	£1000	0 0	£1400	3 6
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STAFF PENSIONS FUND.

£883 6s. 1d. 3½% Conversion Stock, 1961, or after	527	13 9	736	5 2
£371 17s. 1d. ½% Conversion Loan, 1944/64	375	0 0	446	4 6
	<u>£902</u>	<u>13 9</u>	<u>£1182</u>	<u>9 8</u>

THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.

£81 18s. 8d. 3½% Conversion Stock, 1961, or after	80	1 5	86	11 4
£1285 London Midland and Scottish Railway 4% Debenture Stock	1051	6 6	1355	8 0
	<u>£1101</u>	<u>7 11</u>	<u>£1421</u>	<u>19 4</u>

I have examined the above Balance Sheets and accompanying Income and Expenditure Accounts with the Books and Vouchers of the Society, and certify them to be in accordance therewith. I have also verified the Balances at the Bankers and the Investments. The figures relating to the Bureau of Chemical Abstracts are included in the above accounts subject to the production of certified accounts by the Bureau.

23, QUEEN VICTORIA STREET, E.C. 4,
18th February, 1936.

W. B. KEEN,
Chartered Accountant.

Approved { W. MORRIS COLLIER
HARRY D. K. DREW
GEORGE SENTER