

# ANNUAL GENERAL MEETING.

THURSDAY, MARCH 26TH, 1931, AT 4 P.M.

THE President, PROFESSOR J. F. THORPE, C.B.E., D.Sc., F.R.S., was in the Chair.

The Report of Council for 1930—1931, together with the Balance Sheets and Statements of Accounts for 1930, was presented by the President. The Treasurer, speaking on the Accounts, expressed anxiety with respect to the continually increasing expenditure on publications: he hoped that chemists engaged in industry would give greater support to the work of the Society, remembering that the pure chemistry of to-day becomes the applied chemistry of to-morrow. The adoption of the Report and Accounts was proposed by Professor Eric Rideal, seconded by Professor C. K. Ingold, and carried unanimously.

## REPORT OF COUNCIL, 1930—1931.

### *I. Fellowship Statistics.*

THE number of Fellows at the 31st December, 1929, was 3925. In 1930, 160 new Fellows were elected and 5 reinstated, as against 210 and 8, respectively, in 1929, making a gross total of 4090. The Society has lost 37 Fellows by death, 108 Fellows have resigned, and the names of 105 have been removed from the List of Fellows for non-payment of annual subscriptions, the corresponding figures for the previous year being 49, 107, and 117, respectively. The number of Fellows at the 31st December, 1930, was therefore 3840, showing a decrease of 85, as against 55 the previous year.

The number of new Fellows elected in 1930 is 50 less than in 1929, and is the smallest number in any year (excluding war years) since 1908; there are now 253 fewer Fellows of the Society than in 1926. Whatever may be the reason for the continuous diminution in the number of Fellows, the Council views the position with considerable anxiety. It appeals to the Fellows to urge the claims of the Society on all interested in the advancement of chemical knowledge.

The Society has suffered a great loss by the death on the 18th September of Professor Harold Baily Dixon, who was elected a Fellow in 1876, and who served as President of the Society from 1909 to 1911. The Society was represented at his funeral by Dr. R. H. Pickard, and the Council, at its meeting on the 2nd October, passed a special resolution of sympathy which was communicated to the Ordinary Scientific Meeting on the 23rd October, and conveyed to Mrs. Dixon by the Senior Secretary. An account of the life and work of Professor Dixon is being prepared by Professor H. B. Baker and Professor W. A. Bone. The Council also regrets

to record the death of Mr. Ayerst Henham Hooker, who presented the Mace to the Society last year, and of Lord Melchett, an irreparable loss to chemical industry throughout the Empire.

Monsieur Joseph Achille le Bel, Honorary Fellow, died on the 6th August. The President expressed the regret and sympathy of the Fellows to the President and Members of the Société Chimique de France. An obituary notice of this distinguished chemist has been written by Sir William J. Pope and published in the *Journal* in December.

## II. Jubilee Fellows.

The Council has conveyed the congratulations of the Society to Professor Henry Edward Armstrong and to Mr. Matthew Moncrieff Pattison Muir, who, elected on the 1st December, 1870, and the 16th February, 1871, respectively, have completed sixty years of Fellowship, and to the following who have completed fifty years of Fellowship :

	Elected.
Alfred Cooper Fryer .....	15th April, 1880.
Christopher Colborne Graham .....	15th April, 1880.
Harold Humbolt Slater .....	15th April, 1880.
Christopher Rawson .....	17th June, 1880.
Arthur Edward Barclay .....	2nd December, 1880.
Percy Faraday Frankland .....	2nd December, 1880.
Harry Baker .....	17th February, 1881.
Marcus Benjamin .....	17th February, 1881.
William Edward Kay .....	17th February, 1881.
Toyokichi Takamatsu .....	17th February, 1881.
Walter Ernest Adeney .....	17th March, 1881.
Thomas Cuthbert Day .....	17th March, 1881.
Archibald Walker .....	17th March, 1881.

## III. Journal.

The Journal for 1930 contains 2791 pages, of which 2686 pages are occupied by 371 memoirs and 29 notes, the remaining 105 pages being devoted to the account of the Annual General Meeting (21 pages), the Presidential Address (16 pages), two Lectures (47 pages), and Obituary Notices (21 pages).

The volume for 1929 contains 400 memoirs and 31 notes occupying 2899 pages.

During 1930, 410 papers were offered to the Society for publication in the *Journal*; of these, 14 were declined. The corresponding numbers for 1929 are 466 and 21 respectively.

The average interval between the dates of receipt and of publication of papers is 9.65 weeks for 1930, 9.8 weeks for 1929, and 10.75 weeks for 1928.

The Council expresses its indebtedness to those Fellows who,

during the past year, have rendered valuable service to the Society by refereeing papers.

#### IV. Abstracts.

*Abstracts.* The appended table shows the number and average length of the Abstracts in Sections "A" and "B" published during 1930, the figures for 1929 being included for comparison.

	A				B			
	1929		1930		1929		1930	
	No. of Abs.	Pages	No. of Abs.	Pages	No. of Abs.	Pages	No. of Abs.	Pages
1st Qr.	2,533	362	2,766	386	2,410	266	2,582	288
2nd "	2,550	368	3,001	442	2,010	228	2,740	300
3rd "	2,651	384	2,901	396	2,877	304	2,873	318
4th "	2,729	386	2,875	404	2,320	252	2,479	264
Total	10,463	1,500	11,543	1,628	9,617	1,050	10,674	1,170
Aver. length per abs.	0.29 Col.		0.28 Col.		0.22 Col.		0.22 Col.	

The 11,543 "A" Abstracts comprised 5789 in General, Physical, and Inorganic Chemistry, 266 in Geochemistry, 2589 in Organic Chemistry, and 2899 in Biochemistry. The corresponding figures for 1929 were 5146, 189, 2326, and 2602.

Of the 10,674 "B" Abstracts 4521 were from Journal literature and 6153 were abstracts of Patents (in 1929: 3963 and 5654, respectively).

The increase in the number of the "A" Abstracts in 1930 as compared with 1929 is due, as noted in last year's Report, to the continued increase of the amount of chemical literature. The average length of the abstracts, taken as a whole and in each individual section, remains almost constant.

*Annual Index.* The Joint Annual Index for the Abstracts for 1929 covered 642 pages, as compared with 576 pages for the 1928 Index. The cost of printing the Index was £1302 6s. 4d. and of the paper £315 5s. 4d. (Corresponding figures for the 1928 Index were £1187 16s. 10d. and £261 17s. 5d.)

*Decennial Index.* The response by Members of the two Societies to the invitation to subscribe to the Index has been sufficiently satisfactory, taken in conjunction with the substantial support of the two Societies and also of the Royal Society, to enable the Bureau, with the approval of the Councils, to proceed with the preparation of the Index. The work of indexing the volumes of "B" Abstracts from 1923 to 1925 inclusive and the arrangement of the cards is in active progress.

*International Abstracting and Classification of Chemical Literature.*

A Memorandum by Sir Frederic Nathan on this subject was submitted by the Federal Council for the consideration of the Bureau, and a report on the proposals contained therein has been sent to the Federal Council. The general view expressed in the Report is that the proposals do not appear to be applicable at the present time to British Chemical Abstracts.

V. *Library.*

Excluding the evenings on which meetings of the Chemical Society were held, there were 8088 attendances during the past year, as compared with 7567 in 1929. Of the 8088, 5379 were made by Fellows of the Chemical Society, whilst 2709 were made by Members of Contributing Societies, as against 2605 in 1929.

The number of books borrowed during 1930 was 5751, compared with 5402 the previous year; of these 1504 were issued by post, as against 1466 in 1929.

The additions to the Library comprise : 272 books, of which 92 were presented, 731 volumes of periodicals and 224 pamphlets, as against 231 books, 690 volumes of periodicals and 150 pamphlets last year. The total number of volumes added during the year was 1003, showing an increase of 82. The Library now contains 34,756 volumes, consisting of 10,431 books and 24,325 bound volumes of periodicals.

VI. *General.*

*Lectures.* The Hugo Müller Lecture, entitled "The Chemistry and Geo-Chemistry of the Titanium Group," was given by Professor G. von Hevesy on the 26th March, and Professor Dr. Niels Bohr delivered the Faraday Lecture, entitled "Chemistry and the Quantum Theory," on the 8th May. These two lectures were given in the Salters' Hall by kind permission of the Master, Wardens, and Court of the Salters' Company.

Arrangements had been made for the delivery of the third Liversidge Lecture by Professor Harold B. Dixon on the 27th November, but his death intervened. The Council records its indebtedness to Professor W. A. Bone, who, at short notice, undertook to fill the vacant lectureship, choosing for his subject one in which Dixon was the pioneer. The lecture, entitled "Fifty Years' Experimental Research upon the Influence of Steam on the Combustion of Carbonic Oxide (1880—1930)," in the course of which many of the classical experiments were repeated, was delivered on 11th December in the Chemistry Lecture Theatre at the Imperial College of Science (by permission of the Governors).

The thanks of the Society have been conveyed by the Council to

the Lecturers, to the Master, Wardens, and Court of the Salters' Company, and to the Governors of the Imperial College. The three lectures will be published in the *Journal* during 1931, and the Faraday Lecture will also be printed separately.

*Representation at Celebrations, at Congresses, and on Committees.* The President represented the Society at the Celebrations of the Jubilee of the Foundation of Mason Science College and the Thirtieth Anniversary of the Granting of the University Charter to the University of Birmingham, and presented an Address of Congratulation from the Council. The President and the Senior Secretary attended the Exposition Internationale de la Grande Industrie Sciences et Applications Art Wallon Ancien, which was opened at Liège on the 3rd May, and with Professor F. G. Donnan, Mr. Emile S. Mond, and Sir William J. Pope, the Dixième Conference Internationale de Chimie held in the same city from the 14th to the 20th September. At the Dixième Congrès de Chimie Industrielle, which was also held in Liège in September, the Society was represented by Mr. Emile S. Mond. An Address of Congratulation was presented to the American Society of Mechanical Engineers, on the occasion of its Fiftieth Anniversary Celebrations, by Dr. Marcus Benjamin and Dr. H. D. Dakin, who were the delegates of the Society on this occasion.

Professor H. B. Baker attended as the Society's delegate the opening of the Exhibition of the Linen Industry Research Association on the 24th November.

Professor C. S. Gibson, Sir William J. Pope, and Professor J. F. Thorpe continued to represent the Society on the Federal Council for Chemistry, and Professor C. S. Gibson, Mr. A. J. Greenaway, Dr. J. T. Hewitt, Professor G. T. Morgan, and the Treasurer on the Bureau of British Chemical Abstracts. The Society's representatives on the Editorial Board of the *Journal of Physical Chemistry* were Professor A. J. Allmand, Professor F. G. Donnan and Professor J. Kendall. Mr. Ulick R. Evans has been appointed the Society's delegate on a Committee of the British Engineering Standards Association which is considering the question of preparing specifications for materials and plant used in electro-plating.

*Perkin Plaque.* On the 16th October a special meeting was held for the purpose of unveiling the Perkin Memorial Plaque which the Perkin Memorial Committee desired to present to the Society. At this meeting Professor Robert Robinson made a brief statement of the objects the Committee had in view; the plaque was unveiled by Mr. A. J. Greenaway and received by the President, and an oration on the life and work of the late Professor W. H. Perkin

delivered by Professor W. N. Haworth. A full account of the ceremony appears in the Proceedings for October, pp. 79 *et seq.* The plaque has been placed temporarily in the Council Room.

*Fellowship Statistics Committee.* In the last report of Council, it was stated that a Committee of the Council had been appointed to consider measures for increasing the number of Fellows. As a result of this Committee's report the Council invited the Councils of the Institute of Chemistry and of the Society of Chemical Industry to co-operate in the appointment of a Joint Committee composed of three representatives from each of the three bodies to explore the possibility of mutual co-operation in various directions. The Council nominated Professor C. S. Gibson, Professor J. C. Philip, and Dr. N. V. Sidgwick (failing him Professor T. S. Moore) as its representatives, and the President agreed to act as independent Chairman. The Joint Committee has met and an interim report has been submitted to the three Councils.

*A Central Building in London for Scientific and Technical Institutions.* The report of Council for last year stated that the President had been nominated to represent the Society on a Committee to consider a scheme for providing in London a Central Building for housing certain scientific and technical societies and institutions. The result of the work of the Committee has been the formation of an Association entitled "The Association for the Promotion of Co-operation between Scientific and Technical Societies and Institutions within the British Empire," which was granted a licence by the Board of Trade, under Section 19 of the Companies Act. The objects of the Association as laid down in its Articles are :

"To promote co-operation between Scientific and Technical Societies and Institutions within the British Empire."

"To establish in London or elsewhere a Central building or buildings for the use and convenience of such Societies and Institutions and the members thereof and to lease portions of any such Central building or buildings to any such Societies or Institutions and to establish, equip and maintain therein for the use of such Societies and Institutions and the members thereof Libraries, Reading Rooms, Museums, Laboratories, Council and Meeting Rooms, Offices and other conveniences and facilities for such co-operation and co-ordination as aforesaid."

The affairs of the Association are managed by a Council of Management consisting of ten members elected by members of the Association at the General Meeting, and of not less than fifteen nor

more than twenty Members nominated by the Constituent Institutions and Associated Bodies. The Council has agreed to the registered offices of the Association being temporarily in the apartments of the Society.

An appeal on behalf of the Association was officially launched at a dinner held at the Guildhall on the 13th November, which was honoured by the presence of H.R.H. the Prince of Wales, K.G. The appeal has been sent to the members of all the constituent societies and institutions, and a letter signed by Professor J. F. Thorpe, Dr. H. Levinstein, and Mr. J. Arthur Reavell accompanied the appeal issued to members of the chemical societies. The Council nominated Professor J. F. Thorpe on the Council of Management, and has granted permission for Mr. S. E. Carr to act temporarily as one of the Joint Secretaries of the Association.

*Presidency.* In the last report of Council it was stated that Professor Thorpe had accepted nomination to the office of President for a further term of two years on the understanding that he should be at liberty to retire at the end of the first year of office. Professor Thorpe's resignation as from the Annual General Meeting on the 26th March, 1931, has been accepted by the Council, which records its indebtedness to him not only for his services to the Society during his three years of office, but also for the important work he has done in furthering the scheme for the Central Building.

Professor G. G. Henderson has been unanimously nominated to the office of President.

*Resignation of Dr. N. V. Sidgwick as Chairman of the Publication Committee.* The Council received with regret in December the resignation of Dr. N. V. Sidgwick from the Chairmanship of the Publication Committee as from the 31st December, and records its indebtedness to him for the valuable services he has rendered in this office during the past seven years.

Professor J. C. Philip was unanimously elected Chairman in place of Dr. Sidgwick.

*British Chemical Standardising Organisation.* At the invitation of the Association of British Chemical Manufacturers, the Council nominated the President to attend a Conference to consider the desirability of setting up an organisation for chemistry on the lines of the British Engineering Standards Association. The Conference resolved that in the interest of efficiency and economy it was desirable that there should be a single body to deal with all forms of standardisation. A Committee was formed to consider the question and has now presented its report.

*Obituary Notices.* The Council has resolved that in future an obituary notice of every deceased Fellow shall be published in the *Journal*.

*Annual Reports.* The Volume for 1930 includes, in addition to the usual reports, a special report on Conductivity of Solutions and a biennial report on Radioactivity and Sub-Atomic Phenomena.

The Council is greatly indebted to all who have collaborated in the preparation of this Volume.

*Annual General Meeting in March 1932.* The Council has accepted the invitation of the Fellows resident in and near Glasgow to hold the Annual General Meeting and Anniversary Dinner of the Society in Glasgow in March 1932.

*Research Fund.* Applications for research grants received during the year amounted to £919 10s. and the sum allotted was £680. (Proceedings, pp. 71 and 122.)

*Gifts.* The Council has conveyed its thanks to Mrs. de l'Hôpital for presenting to the Society a posthumous portrait of the late Sir James Dewar painted by Mr. René de l'Hôpital. It also has to thank Mr. Noel Heaton and Mr. H. L. Robinson for sets of publications of the Society, and Mr. M. Odling for a number of the late Professor Odling's MS. note-books.

*Annual Chemical Dinner.* The Society again co-operated in the Annual Chemical Dinner which took place in the Connaught Rooms on Thursday, the 6th November. The Ordinary Scientific Meeting originally fixed for that day was held on the 30th October.

*Journal Paper.* The Council has had under consideration the questions of using a better paper for the *Journal* and of printing a certain number of copies of the *Journal* each month on paper of a "permanent" quality such as the Grade I (i) favoured by the Library Association. On account of the present financial position of the Society, further consideration of this matter has been deferred.

*Postage of Scientific Publications.* The heavy cost incurred by the Society in issuing its publications through the post has been considered, and the Council has approached the Royal Society with the suggestion that representations on behalf of all scientific societies should be made to the Postmaster-General with a view to obtaining reduced postage rates for their publications.

*Chemical Club.* The Chemical Club, which dines on the days of the meetings of Council and on other special occasions at the New



Lauriers Restaurant, 102, Jermyn Street, S.W. 1, has met twelve times during the year.

### VII. *Financial.*

*General Purposes Account.* The income for 1930 shows a decrease of £188 3s. 1d.; and the expenditure an increase of £275 18s. 10d., compared with 1929.

*Income.* Annual Subscriptions are less by £72 18s.; the yield from investments is down by £47 8s. 7d., due to the higher income tax, which, however, will be recovered in 1931; deposit interest has decreased by £110 16s. 6d. Income tax recovered is higher by £40 7s. 1d., the period for which the tax has been recovered being fifteen months instead of twelve.

*Expenditure.* The chief items of increased expenditure on administration are £63 4s. 6d. for salaries, £65 12s. for house expenses, and £34 17s. for miscellaneous printing and stationery. The extra charge of £93 0s. 10d. incurred under Superannuation of Staff is mainly due to the contribution of the Society having been increased from 5 to 10 per cent.

A special donation of £50 has been made towards the cost of the Faraday Centenary Celebrations. The sum transferred to the Publications Fund Account is higher than that of last year by £500 10s. 2d., and the amount transferred to Staff Pensions Fund Account is £82 12s. 5d. In accordance with the Council's decision in 1929, £250 has been transferred to the Special Publications Fund Account to meet in part the cost of the Collective Index, 1923-1932.

#### *Publications Fund Account.*

*Income.* Apart from the Life Composition Fees amounting to £45, which have been capitalised, and the amount transferred from General Purposes Account, the income is lower than in 1929 by £91 7s. 4d. The publications sales have realised £77 8s. 10d. less, owing to a decrease in the sales of second-hand sets. Proceeds of advertisements are down by £37 3s. 4d., subscriptions by £17 13s. 8d., and the income from investments by £58 2s. 6d. The grant from the Royal Society is, however, £100 more than in 1929.

*Expenditure.—Journal.* The total expenditure on the *Journal* is £102 3s. 11d. less than in 1929. Printing and paper are down by £136 0s. 4d., owing to there being 190 fewer pages, and a consequent saving of £31 4s. 3d. in distribution and banding. Superannuation is £85 12s. 6d. as against £42 16s. 3d.

*Abstracts.* The Abstracts cost £658 9s. 3d. more than in 1929, owing to there being 128 more pages. Of this, printing and paper account for £222 0s. 9d., Abstractors' fees for £329 19s. 8d. (of which

£92 3s. 1d. is on account of 1929), distribution for £25 4s. 4d., salaries for £41 17s. 9d., postages for £31 17s. and superannuation for £11 14s. 5d.

The Council views with concern the constantly increasing cost of the Abstracts. In 1929, the expenditure showed an advance of £84 0s. 1d. over that for 1928. To this amount must be added, for purposes of comparison, £92 3s. 1d. for Abstractors' Fees charged to the account for 1930, giving the figure £176 3s. 2d. This year, the increase, after deducting the extra cost for superannuation (£11 14s. 5d.) and £92 3s. 1d. is £462 8s. 8d. The attention of the Bureau has been called to this, and serious consideration is being given to the matter. Had it not been for the Society acting as its own Publisher, a much more serious position would have arisen.

*Staff Pensions Fund Account.* It has been necessary to transfer £82 12s. 5d. from General Purposes Account to meet the cost of the pensions paid. Last year the Council was able to transfer £350 to augment the capital of the fund; no contributions have been received during the year, and the capital fund still stands at £907 14s.

*Special Publications Fund.* The income for 1930 is less by £29 11s. 5d. than for 1929; this is due to a decrease in the sales of the Memorial Lectures and Faraday Lectures.

*General.* The thanks of the Society have been conveyed to the Council of the Royal Society for a grant of £350 from the Government Publications Grant and to Imperial Chemical Industries, Ltd., for the sum of £100, both these being contributions towards the cost of the Society's publications for 1930. The Council desires especially to record its thanks to those Fellows who continue to contribute to the Publications Fund.

The sum of £300 on Staff Pensions Fund Account has been invested in 3½% Conversion Loan, 1961, or after.

The Treasurer moved a vote of thanks to the Auditors, Dr. P. Haas, Professor J. C. Drummond and Dr. J. Kenyon. This was seconded by Professor J. L. Simonsen and carried, Dr. J. Kenyon making acknowledgment. It was moved from the Chair and carried unanimously that Dr. P. Haas, Professor J. C. Drummond and Dr. E. H. Farmer be elected Auditors to audit the Accounts of the Society for 1931.

A vote of thanks to the Treasurer, Secretaries, Foreign Secretary, Council and Committees for services during the past year was proposed by Sir Robert Robertson, seconded by Professor F. M. Rowe and carried, acknowledgment being made by Professor C. S. Gibson.

INCOME AND EXPENDITURE GENERAL PURPOSES ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER 1930.

1929		1930		1929		1930		1930	
£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
172	10 0	172	10 0	1550	6 3	289	13 6	1613	10 9
<p><i>Income.</i></p> <p>To Life Composition Fees ... ..</p> <p>Annual Subscriptions:—</p> <p>Received in advance, on account of 1930 ... ..</p> <p>“ during 1930 “ ... ..</p> <p>“ “ “ 1929 “ ... ..</p> <p>“ “ “ 1928 and previous years ... ..</p> <p>9448 2 0</p> <p>Less amount included in last year's Income, being valuation of Arrears as per ast. Balance Sheet ... ..</p> <p>500 0 0</p> <p>9021 0 0</p> <p>500 0 0</p> <p>9521 0 0</p> <p>Investments, Dividends on:—</p> <p>£787 London, Midland and Scottish Railway 4 per cent. Debenture Stock ... ..</p> <p>£1520 14s. 3d. Cardiff Corporation 3 per cent. Stock, 1914/54 ... ..</p> <p>£1400 India 2½ per cent. Stock ... ..</p> <p>£2400 Bristol Corporation 2½ per cent. Debenture Stock ... ..</p> <p>£2713 London, Midland and Scottish Railway 4 per cent. Preference Stock ... ..</p> <p>£1200 Leeds Corporation 3 per cent. Stock ... ..</p> <p>£1800 Transvaal 3 per cent. Guaranteed Stock, 1923/53 ... ..</p> <p>£1200 London and North Eastern Railway 3 per cent. Debenture Stock ... ..</p> <p>£700 Canada 3½ per cent. Stock, 1930/50 ... ..</p> <p>£2100 5 per cent. Conversion Loan 1944/64 ... ..</p> <p>£1100 5 per cent. Conversion Loan 1944/64 ... ..</p> <p>£600 Funding Loan, 4 per cent., 1960/80 ... ..</p> <p>£11212 3s. 3½ per cent. Conversion Stock ... ..</p> <p>819 17 0</p> <p>Income Tax recovered ... ..</p> <p>Interest on Deposit ... ..</p> <p>Miscellaneous Receipts ... ..</p> <p>Excess of Ordinary Expenditure over Ordinary Income carried to Balance Sheet ... ..</p>									
25	3 9	24	15 11	2738	11 4	162	4 6	2994	3 7
36	10 0	35	18 7	162	4 6	94	5 11	140	19 10
28	0 0	27	11 4	50	0 0	50	0 0	100	11 0
48	0 0	46	10 0	—	—	—	—	50	0 0
86	16 4	85	9 1	55	0 0	5084	9 8	50	0 0
28	16 0	28	7 0	5	0 0	172	10 0	50	0 0
36	0 0	34	17 6	5084	9 8	1804	3 7	3	0 0
28	16 0	28	7 0	172	10 0	350	0 0	50	0 0
19	12 0	19	5 10	500	0 0	500	0 0	105	0 0
105	0 0	74	11 11	27	1 3	27	1 3	5884	19 10
44	0 0	39	1 5	772	8 5	249	13 3	45	0 0
19	4 0	18	12 0	108	6 9	49	2 9	1806	7 2
313	18 11	309	0 10	437	0 8	437	0 8	82	12 5
200	6 2	200	6 2	772	8 5	249	13 3	250	0 0
219	3 3	219	3 3	249	13 3	108	6 9	—	—
46	9 10	46	9 10	108	6 9	49	2 9	—	—
—	—	—	—	437	0 8	437	0 8	—	—
£10,988	6 3	£11,109	13 10	£10,988	6 3	£11,109	13 10	£11,109	13 10



RESEARCH FUND.

1929		Income.		1930		1929		Expenditure.		1930		
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	
53	0	0	To Dividends on:—	31	10	0	736	0	By Grants ...	680	0	0
20	18	8	£1000 London and North Eastern Railway, 4 per cent. 2nd Guaranteed Stock ...	20	7	2	3	19	" Commission on Recovery of Income Tax ...	4	10	6
27	8	8	£1004 Great Western Railway 2½ per cent. Stock ...	27	0	1	—	—	" Longstaff Metal ...	2	0	0
26	18	8	£1143 16s. New South Wales 3 per cent. Stock ...	26	10	3	7	18	" Honorarium Longstaff Metallist ...	20	0	0
47	9	1	£1122 Metropolitan Water Board 3 per cent. " B " Stock ...	46	14	2	—	—	" Do. Hugh Miller Lecturer ...	21	0	0
19	6	10	£1483 London, Midland and Scottish Railway 4 per cent. Debenture Stock ...	19	0	10	—	—	" Miscellaneous Expenses ...	7	2	0
224	18	6	£806 Victoria 3 per cent. Stock, 1929/49 ...	142	7	0	—	—				
144	12	2	£4488 11s. 0d. 5% Conversion Loan, 1944/64 ...	473	5	4	—	—				
			£5164 13s. 9d. 3½% Conversion Stock ...	90	10	5	—	—				
			Income Tax recovered ...	83	6	6.	—	—				
			" Repayment of Grants ...	1	14	1.	—	—				
			" Interest on Deposit ...	—	—	—	—	—				
			" Sale of Apparatus ...	—	—	—	—	—				
			" Balance, being Excess of Expenditure over Income, carried to Balance Sheet ...	85	16	2	—	—				
				£734	12	6	£747	17		£734	12	6

THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.

1929		Income.		1930		1929		Expenditure.		1930		
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	
10	8	11	To Dividends on:—	41	13	10	6	13	By Advertisements ...	150	0	0
8	7	7	£500 National War Bonds, 5% 1929 ...	11	10	7	—	—	" Harrison Prize ...	6	16	0
2	3	2	£527 10s. Treasury Bonds, 5% 1933/35 ...	2	3	2	—	—	" Balance being excess of Income over Expenditure carried to Balance Sheet ...	—	—	—
20	1	7	£61 15s. 8d. Conversion Stock, 3½% 1925 London, Midland and Scottish Railway 4% Debenture Stock ...	39	10	8	43	2				
			Income Tax recovered, Net ...	41	13	10	—	—				
			" Interest on Deposit ...	11	10	7	—	—				
			" Balance, being Excess of Expenditure over Income, carried to Balance Sheet ...	1	1	8	—	—				
				102	8	11	—	—				
				£166	15	0	£48	16		£166	15	0

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1930.

LIBRARY.

1929		1930		1929		1930	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
Income.							
To Donations:—							
150	0	0	0	137	1	6	0
10	10	0	0	94	0	0	0
5	5	0	0	667	5	0	0
45	0	0	0	167	11	8	0
250	0	0	0	79	14	3	0
100	0	0	0	56	3	5	0
10	10	0	0	10	6	8	0
21	0	0	0	542	5	0	0
				15	5	0	0
				1806	7	2	0
				£2363	17	2	0
To Donations:—							
				15	5	0	0
				1806	7	2	0
				£2363	17	2	0
Expenditure.							
By Salaries and Wages							
Staff							
Superannuation Premium for Library							
Books and Periodicals							
Less Paid in advance in 1929							
Binding							
Printing, Stationery and Postages							
Lighting, Heating, Furniture, Insurance, House, etc.							
Miscellaneous							
				£2363	17	2	0

STAFF PENSIONS FUND.

350	0	0	82	12	5	120	0	0
1	11	2	1	18	10	266	16	5
18	11	10	15	4	2			
5	9	0	32	0	10			
1	0	2	3	7	11			
9	11	3						
£388	16	5	£120	0	0	£388	16	5
To Transfer from General Purposes								
Account								
Interest on Deposit								
Dividends on:—								
£371 17s. 1d. 5% Conversion Loan, 1944/64								
£683 8s. 1d. Conversion Stock, 3½%								
Income Tax recovered								
Miscellaneous Receipts								
			£120	0	0	£388	16	5

SPECIAL LECTURES FUND.

36	7	8	21	0	0			
4	6	4	15	15	0			
			3	19	0			
£40	14	0	£44	9	1			
To Dividend on £1299 9s. 4d. Conversion Loan, 3½%								
Income Tax recovered (Net)								
Excess of Income over Expenditure carried to Balance Sheet								
			£44	9	1			

## SPECIAL PUBLICATIONS FUND.

1929		1930		1931	
£	s. d.	£	s. d.	£	s. d.
<i>Income.</i>					
To Sales of Publications:—					
41	10 0	56	3 0	60	2 7
26	3 0	15	6 6	14	10 0
24	4 9	13	13 3	14	10 2
19	7 3	12	4 7	11	17 6
20	7 0	14	10 2	111	17 6
" Dividend on £2115 8s. 10d. Conversion Stock 3½% ... .. 58 6 2					
" Interest on Deposit ... .. 2 1 9					
" Income Tax recovered ... .. 14 16 0					
" Miscellaneous Receipts ... .. 4 8					
<hr/>					
£216 15 10		£187 4 5		£216 15 10	
<hr/>					
<i>Expenditure.</i>					
By Advertising, &c. ... .. 60 2 7					
" Reprints for Memorial Lectures, Vol. III. ... .. 6 11 3					
" Production of Abstracts "A" printed on one side of the paper ... .. 58 19 0					
" Commission on recovery of Income Tax ... .. 14 10					
" Excess of Income over Expenditure carried to Balance Sheet ... .. 120 19 4					
<hr/>					
£187 4 5		£187 4 5		£187 4 5	

## THE CHEMICAL SOCIETY.—BALANCE SHEETS, 31st December, 1930.

## PUBLICATIONS FUND.

1929		1930		1931	
£	s. d.	£	s. d.	£	s. d.
<i>Liabilities.</i>					
To Excess of Assets over Liabilities as per last Balance Sheet... .. 10,839 3 8					
Add Amount transferred from Income and Expenditure Account for Investment 45 0 0					
<hr/>					
10,695	4 3	10,839	3 8	10,822	9 1
243	19 5	10,839	3 8	61	14 7
<hr/>					
£10,839 3 8		£10,839 3 8		£10,839 3 8	
<hr/>					
<i>Assets.</i>					
By Investments (value when acquired)—					
£6141 15s. 6d. 5½% Conversion Stock 4663 10 0					
£3079 3s. 9d. 5% Conversion Loan 3100 0 0					
1944/64 ... .. 3100 0 0					
£817 P. & O. Steam Navigation Co. 2060 0 0					
Deferred Stock ... .. 2060 0 0					
186 Ordinary Shares (£1) Langia (Synthet) Tea Co. Ltd. ... .. 280 12 6					
124 Ordinary Shares (£1) Nedecm Tea Co. Ltd. ... .. 403 0 0					
£383 London, Midland and Scottish Railway 4% Guaranteed Stock ... 305 6 7					
<hr/>					
(Market Value £10,407 0s. 3d.) 10,822 9 1					
" Cash at Bank ... .. 61 14 7					
<hr/>					
£10,839 3 8		£10,839 3 8		£10,839 3 8	

THE CHEMICAL SOCIETY.—BALANCE SHEETS, 31ST DECEMBER, 1930.

GENERAL PURPOSES.

1929		1930		1929		1930	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
25,851	15 0	25,878	16 3	839	3 7	839	3 7
27	1 3	—	—	1650	0 0	1650	0 0
—	—	437	0 8	1316	1 0	1316	1 0
—	—	25,441	15 7	2070	2 0	2070	2 0
25,878	16 3	—	—	3572	0 4	3572	0 4
—	—	—	—	1143	1 0	1143	1 0
—	—	—	—	1460	13 6	1460	13 6
—	—	—	—	1083	11 0	1083	11 0
—	—	—	—	704	8 6	704	8 6
—	—	—	—	1995	0 0	1995	0 0
—	—	—	—	1045	0 2	1045	0 2
—	—	—	—	480	0 0	480	0 0
—	—	—	—	8487	2 2	8487	2 2
—	—	—	—	25,796	3 3	25,796	3 3
—	—	—	—	316	1 6	316	1 6
—	—	—	—	500	0 0	500	0 0
—	—	—	—	6	8 8	6	8 8
—	—	—	—	1,043	13 6	1,043	13 6
—	—	—	—	2,000	0 0	2,000	0 0
—	—	—	—	£29,662	6 10	£29,662	6 10
—	—	—	—	£29,038	4 0	£29,038	4 0

Assets.		1930	
£	s. d.	£	s. d.
By Investments (value when acquired)—			
£787 London, Midland and Scottish			
Railway 4% Debenture Stock	839 3 7	839 3 7	
£1590 14s. 3d. Cardiff Corp. 3% Stock,			
£1400 India 2½ per cent. Stock	1650 0 0	1650 0 0	
£2400 Bristol Corpn. 2½% Debenture	1316 1 0	1316 1 0	
Stock, Bristol Dock Account			
£2713 London, Midland and Scottish	2070 2 0	2070 2 0	
Railway 4 per cent. Preference Stock			
£1200 Leeds Corporation 3% Stock	3572 0 4	3572 0 4	
£1500 Transvaal 3 per cent. Guarant-			
eed Stock, 1923-53	1143 1 0	1143 1 0	
£1200 London and North Eastern	1460 13 6	1460 13 6	
Railway 3 per cent. Debenture Stock			
£700 Canada 3½% Stock, 1930/50	1083 11 0	1083 11 0	
£2100 5% Conversion Loan, 1944/54	704 8 6	704 8 6	
£1100 5% ditto ditto	1995 0 0	1995 0 0	
£500 4 per cent. Funding Loan,	1045 0 2	1045 0 2	
1960/90			
£11,212 9s. 3½ per cent. Conversion	480 0 0	480 0 0	
Stock	8487 2 2	8487 2 2	
(Market Value £22,034 11s. 10d.)	25,796 3 3	25,796 3 3	
Sundry Debtors	316 1 6	316 1 6	
Subscriptions in Arrear, £854 18s. 0d.	500 0 0	500 0 0	
Estimated to realise	6 8 8	6 8 8	
Cash in Hand	1,043 13 6	1,043 13 6	
Cash at Bankers, Current Account	2,000 0 0	2,000 0 0	
Cash at ditto, Deposit ditto	£29,662 6 10	£29,662 6 10	
	£29,038 4 0	£29,038 4 0	



RESEARCH FUND.

1929		1930		1929		1930	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
<i>Liabilities.</i>							
To Excess of Assets over Liabilities as per last Balance Sheet ...				By Investments (value when acquired):—			
14,564	19	9		1010	0	0	
Less Excess of Expenditure over Income for Year ...				1049	15	11	
35	4	5		1000	0	0	
14,529 15 4				1002	16	9	
				1508	3	6	
				706	6	2	
				4267	4	10	
				3898	14	10	
				14,443	2	0	
				86	13	4	
				£14,529	15	4	
				£14,443	19	2	

*Assets.*

£1000 London and North Eastern Railway 4 per cent. 2nd Guaranteed Stock ... 1010 0 0  
 £1034 Gt. West. Ry. 2½% Debentures ... 1049 15 11  
 £1142 16s. New South Wales 3 per cent. Stock, 1935 ... 1000 0 0  
 £1122 Metropolitan Water Board 3 per cent. "B" Stock ... 1002 16 9  
 £1483 London, Midland and Scottish Railway 4% Debenture Stock ... 1508 3 6  
 £806 Victoria 3% Stock, 1929/49 ... 706 6 2  
 £4498 11s. 5s. Conversion Loan, 1944/64 4267 4 10  
 £5164 13s. 9d. 3½% Conversion Stock (Market Value £13,422 16s. 3d.) 3898 14 10  
 Cash at Bank, Current Account ... 14,443 2 0

THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.

To Excess of Assets over Liabilities as per last Balance Sheet ...		By Investments (value when acquired):—	
1168	16	0	
Add Excess of Income over Expenditure for year ...		50	1
43	2	2	
Profit on Sale of Investments ...		1051	6
55	10	11	
1267 18 1		1101	7
		26	10
		140	0
		14	1
		60	0
		£1267	18
		1165	9
		£1165	9
		£1267	18

STAFF PENSIONS FUND.

To Sundry Creditors ...		By Investments (value when acquired):—	
122	0	0	
Excess of Assets over Liabilities as per last Balance Sheet ...		226	12
640	17	7	
Add Excess of Income over Expenditure for year ...		375	0
266	16	5	
907 14 0		28	1
		390	0
		907	14
		£907	14
		£1029	14

1930

£	s. d.	£	s. d.
1010	0	0	
1049	15	11	
1000	0	0	
1002	16	9	
1508	3	6	
706	6	2	
4267	4	10	
3898	14	10	
14,443	2	0	
86	13	4	
£14,443	19	2	

1930

£	s. d.	£	s. d.
50	1	5	
1051	6	6	
1101	7	11	
26	10	2	
140	0	0	
14	1	3	
60	0	0	
£1165	9	2	

1930

£	s. d.	£	s. d.
527	13	9	
375	0	0	
902	13	9	
5	0	3	
5	0	3	
£1165	9	2	



The President recalled the circumstances in which last year he had agreed to serve in the Chair for a second term of office, when it was understood he should be allowed to resign at the end of the first year of the new term. The formation of the Association of Scientific and Technical Institutions had been accomplished and he had placed his resignation before the Council.

The President then delivered the first part of his Presidential Address entitled "A Retrospect." The second part, entitled "The Outcome of some Recent Research Work," he left to Fellows to read at their leisure. At the conclusion of his Address, a vote of thanks to the President for his services in the Chair during the past three years, with the request that he would allow his Address to be printed in the Journal, was proposed by Professor W. P. Wynne, who referred to the President's valuable services in the Chair, and to his activities in connexion with the project for a Central Building, expressing the hope that the scheme would materialise. The vote was seconded by Sir Frederic Nathan and carried with acclamation. In acknowledgment, the President stated that though the present difficult financial position of the country might mean delay, the scheme for a Central Building would be carried out.

It was announced that the following had been elected to fill the vacancies on the Council for the year 1931—32 :—

*President* : G. G. Henderson.

*Vice-Presidents who have filled the office of President* : H. E. Armstrong, J. F. Thorpe.

*Vice-Presidents who have not filled the office of President* : F. A. Freeth, R. H. Pickard.

*Ordinary Members of Council* :—

*Town Members* : C. R. Bailey, C. R. Harington, J. Kenyon, G. A. R. Kon, I. S. Maclean, J. Davidson Pratt.

*Country Members* : W. N. Haworth, F. M. Rowe.

Professor Henderson then took the chair.

At the invitation of the President, Professor Thorpe, on behalf of some 20 subscribers, asked Dr. M. A. Whiteley to unveil a portrait in oils of Thomas Graham, the first President of the Society. The portrait had been painted by Mr. H. A. Budd, R.O.I., from a lithograph by W. Bosley made from a daguerreotype by Claudet. The President, in accepting the portrait for the Society, expressed the thanks of the Fellows to Professor Thorpe and all the subscribers for their generosity.