

REPORT OF COUNCIL, 1938.

I. FELLOWSHIP.

(1) *Fellowship Statistics.*

The number of Fellows on the 31st December, 1937, was 3775. During 1938, 225 Fellows were elected and 18 reinstated, the corresponding figures for 1937 being 221 and 14, respectively. The Society has lost 61 by death, 111 by resignation and 47 by removal owing to non-payment of annual subscription, making a total loss of 219, as against 206 in 1937. The number of Fellows on the 31st December, 1938, was 3799, showing an increase of 24.

The names of those Fellows to whom the Council have conveyed congratulations on their completing 60 and 50 years of Fellowship have been published in the Proceedings.

During the year, 5 Honorary Fellows were elected, the number now being 34.

(2) *Honours.*

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

T. H. Easterfield	K.B.E.
J. J. Fox	C.B.
R. O'F. Oakley	O.B.E.
Robert Robinson	Kt.

The Council also conveyed congratulations to Professor G. Barger on his receiving the Davy Medal of the Royal Society, to Mr. B. Mouat Jones on his appointment as Vice-Chancellor of the University of Leeds and to Dr. Irvine Masson on his appointment as Vice-Chancellor of the University of Sheffield.

(3) *Deaths.*

The Council have had to mourn the loss of two Honorary Fellows, Professor Georges Urbain (on 6th November) and Geh. Reg. Rat Professor Dr. G. Tammann (on 17th December).

By the death on 30th December of the Treasurer, Mr. Emile Mond, the Council have suffered the loss of a revered and honoured colleague who was beloved by all those with whom he came into contact and who, during the eight years he was Treasurer, rendered conspicuous service to the Society by his wisdom and prudence in guiding its financial affairs. The Council have also to express their deep regret at the death on 27th October of Sir Robert Mond, a great benefactor to the Chemical Council, who had been a Fellow of the Society for over 46 years.

The Council have to mourn the loss on the 25th August of Mr. John Greenaway who served the Society as Editor or Sub-Editor for a period of over 40 years and as Vice-President from 1924 to 1927, and record their high appreciation of the valuable services he has rendered to the Society.

Resolutions passed by the Council were communicated to Fellows at the Scientific Meetings, and the condolences of the Council have been conveyed to the relatives of those Fellows whom the Society has lost by death during the year. Memorial lectures or obituary notices have been arranged.

(4) *Means of Increasing Membership.*

In December the Council appointed a Committee to consider the question of the recruitment of new Fellows, and it has been agreed that this Committee shall work in close co-operation with a Committee appointed by the Council of the Society of Chemical Industry for a similar purpose.

II. PUBLICATIONS.

(1) *Journal.*

The *Journal* for 1938 contains 2120 pages (2016), of which 1927 pages (1865) are occupied by 404 memoirs (425) and 27 notes (18). (The numbers in parentheses above are the corresponding figures for 1937.) There are also 8 lectures (86 pages), the Presidential Address (9 pages), Report of the Annual General Meeting (27 pages), Reports on Atomic Weights and Isotopes (12 pages), and Obituary Notices (59 pages). The 404 memoirs comprise 108 dealing with General, Physical and Inorganic Chemistry and 296 dealing with Organic Chemistry.

During 1938, 507 papers were received; of these, 11 were declined, 229 were accepted without amendment, and 175 after amendment.

The average interval between receipt and publication of the papers is 9.3 weeks (9.2 weeks for 1937).

	1938.	1937.	1936.	1935.	1934.	1933.
Number of papers received	507	433	466	517	504	460
Number of papers declined	11	7	9	14	8	8
Number of memoirs published	404	425	414	434	443	388
organic chemistry	296	306	286	303	289	241
inorganic, physical chemistry, etc. ...	108	119	128	131	154	147
Number of notes published	27	18	28	33	35	26
Size of <i>Journal</i> (pages)	2120	2016	1862	1907	2019	1653
Matter other than papers (pages)	193	151	97	144	93	107
Average interval between receipt and publication of papers (weeks)	9.3	9.2	10.0	9.8	9.5	9.4

(2) *Reprints.*

It has been decided to issue, as from the beginning of 1939, Reprints of Lectures (including the Presidential Address, opening contributions to discussions, report on atomic weights, etc.), appearing in the *Journal* in separate form to Fellows wishing to receive them in addition to, or instead of, certain other publications of the Society, and Fellows have been advised of this new service.

(3) *Abstracts.*

The report of the Bureau of Chemical and Physiological Abstracts for 1938 is reproduced in full as Appendix B to this Report.

Following the agreement entered into between the Biochemical Society, the Physiological Society, the Society of Chemical Industry and this Society, during 1938 *Physiological Abstracts*, which hitherto had been issued as a separate publication, has been incorporated in Abstracts A III which has been entitled *Physiology and Biochemistry*. An agreement has since been entered into with the Anatomical Society to extend the scope of Abstracts A III to include certain papers dealing with anatomy. This change will come into force at the beginning of 1939.

(4) *Annual Reports.*

The Publication Committee has had under consideration the question of making the Annual Reports of greater interest to the non-specialist without detracting from their value to those requiring detailed summaries. In future, each section will contain a short general introduction in language as little specialised as possible, indicating in general terms the directions in which fundamental progress has been made. Each of the specialised articles forming the main body of the report will have a brief introduction indicating the point of departure of the work described in it.

Volume XXXIV (1937), which was published in April, contained 492 pages compared with 469 pages in the previous volume.

III. MEETINGS.

(1) *Scientific Meetings.*

The Society has held 16 Scientific Meetings in London during 1938. These included 6 lectures, 4 organised discussions. At the other 6 meetings 19 papers were read and discussed.

30 Meetings held outside London included 24 lectures and 6 meetings for the reading of papers. Of these meetings, 18 were held jointly with local sections of other bodies. Fellows were invited to attend the series of 3 Bedson Lectures given at Newcastle-on-Tyne.

The Perkin Centenary Lecture, on "Sir William Perkin's Adventure and What Has Come of It," by Dr. Herbert Levinstein, was given under the auspices of the Society of Chemical Industry and the Chemical Society in the Hall of the Leathersellers' Company.

The Council have welcomed a suggestion from Local Representatives that official Scientific Meetings of the Society should be held from time to time outside London. It is proposed that two meetings, which the Officers of the Society would attend, should be arranged each year at centres to be determined following invitations from Local Representatives.

A complete list of Lectures and Discussions is given in Appendix D.

(2) *Anniversary Meetings.*

A report of the Anniversary Meetings held in Manchester on the 31st March and 1st April appeared in the *Journal* and *Proceedings* for April. The cordial thanks of the Council were conveyed to all those responsible for the admirable arrangements that were made. These included the Annual General Meeting, the Presidential Address, the Anniversary Dinner, the Pictet Memorial Lecture, a Reception by the University of Manchester, and Visits to Imperial Chemical Industries, Ltd., at Blackley and Northwich and to the Shirley Institute.

IV. LIBRARY.

The Report of the Joint Library Committee for 1938 is printed as Appendix C to this Report.

V. OTHER ACTIVITIES.

(1) *Grants for Research.*

Eighty-five applications for Grants amounting to £967 for research were received. The list of grants made, amounting to £695 8s., appeared in the *Proceedings* for December.

The Council has expressed its thanks to Dr. Geoffrey Martin for presenting certain silicon compounds which have been placed at the disposal of the Research Fund Committee.

(2) *Longstaff Medal and Harrison Memorial Prize.*

The Council awarded the Longstaff Medal for 1939 to Professor I. M. Heilbron. The Harrison Memorial Prize for 1938 has been awarded by the Selection Committee to Mr. Alexander King. The presentation of the Longstaff Medal and of the Harrison Memorial Prize will be made at the Annual General Meeting of the Society on the 30th March, 1939.

(3) *General Services.*

In the last report it was mentioned that the Chemical Council was exploring the possibility of introducing a general scheme for co-ordinating some of the services rendered to Chemists by the three Constituent Bodies. In June a "Scheme for the further co-ordination of the services of the Chemical Society, the Institute of Chemistry and the Society of Chemical Industry" was put forward but was not found acceptable to all three Councils of the Constituent Bodies. It is understood that a new scheme is in course of preparation.

(4) Accommodation.

In the Report of Council for 1937 it was stated that it was impossible to accommodate any more books in the library, and that the possibility of using the Meeting Room for library and administration purposes had been considered. During the year the Council of the Royal Society consulted the Societies occupying rooms in Burlington House as to whether the accommodation provided is adequate for their needs, with a view to taking further action in the cases where more accommodation is required. The matter is still under consideration. In the meantime, as a temporary measure, the Council gratefully accepted an offer to store free of charge for a limited period a number of the less used volumes of the library.

(5) Register of Chemists.

The Council decided to assist the Council of the Institute of Chemistry in the preparation of a Register of Chemists whose services would be available in the event of a national emergency. A notice was inserted in the *Proceedings* for October inviting Fellows who wished their names placed on the list to communicate with the Registrar of the Institute of Chemistry or with the Assistant Secretary of the Chemical Society.

(6) Air-Raid Precautions.

A Committee has been appointed to consider what steps the Society should take for the preservation of its more valuable possessions and for the maintenance of its services in the event of a national emergency.

(7) Centenary Celebrations.

As stated in the Report of Council for 1937, the Society will complete the first hundred years of its existence in 1941. The Celebrations will be held during the third week of April 1941, and the XIth International Congress of Chemistry will immediately follow the Celebrations. The list of Fellows serving on the General Committee appeared in the *Proceedings* for January 1939. This Committee was given power to add to its number and to appoint Sub-Committees. Fellows will be kept informed from time to time of the arrangements that are being made.

VI. ADMINISTRATION.*(1) Personnel of Council.*

The Council decided that the President elected to office in 1939 should preside at the Centenary Celebrations of the Society to be held in April 1941, and in December nominated Professor Robert Robinson for election to this office.

Professor I. M. Heilbron was co-opted in October a Member of Council in accordance with the special provision contained in Bye-Law 19.

In December the Council accepted with deep regret the resignation of Dr. H. J. T. Ellingham from the office of Honorary Secretary as from the date of the next Annual General Meeting.

The Council received with regret in October the resignation of Professor R. P. Linstead from the office of Elected Member of Council on his appointment to the Chair of Chemistry at the University of Sheffield.

Mr. F. P. Dunn accepted the invitation of the Council to act as Deputy Treasurer during Mr. Mond's illness.

(2) Constitution of the Council and the Election of Fellows.

In the early part of the year the Council considered various proposals affecting the constitution of the Council, including a scheme for territorial representation on Council,

and the suggestion that the power of electing Fellows should be exercised by the Council. In March Fellows received particulars of these proposals, which necessitated various changes in the Bye-Laws, and, in response to the invitation of the Council, recorded their opinion by postal vote almost unanimously in favour of the proposals. At the Annual General Meeting held in Manchester on 31st March the new Bye-Laws were adopted unanimously. The new scheme for territorial representation on Council will come into operation in 1939. Since June elections to the Fellowship have been conducted by the Council.

(3) *Local Representatives.*

During the year the Council have accepted with much regret the resignations of Professor F. Challenger (Leeds), Dr. S. Glasstone (Sheffield), and Dr. R. A. Morton (Liverpool), and have expressed their high appreciation of the valuable services rendered by them to the Society. Dr. A. McGookin was appointed Local Representative for Liverpool and the question of filling the other two vacancies is under consideration. The Council are glad to announce that Dr. T. Iredale has accepted an invitation to act as Local Representative for Australia.

A meeting of Local Representatives was held in Manchester on 31st March, and various suggestions were referred to Council for consideration.

(4) *Staff.*

In December the Council changed the official title of Mr. S. E. Carr to General Secretary and appointed Mr. H. J. Morris to the new office of Assistant General Secretary.

VII. FINANCE.

(1) *Payment of Annual Subscription in Australian and New Zealand Currencies.*¹

Following the practice of the Institute of Chemistry and the Society of Chemical Industry regarding their members, the Council proposed that Fellows resident in Australia and New Zealand should be allowed to pay their annual subscription to the Society in the currencies of these two Dominions. This proposal was confirmed by Fellows at an Extraordinary General Meeting in October and Fellows resident in these two Dominions have been informed that they may pay their annual subscription direct to the Society's Bankers in the currency of their own Dominion. This will represent a small loss of income, but it is hoped that this may be offset by an increase in Fellowship.

(2) *Contributions.*

The Council gratefully acknowledge the following substantial contributions which have been received towards the cost of the Society's publications for 1938 :

£600 from the Government Publications Grant (through the Royal Society).
£1150 from the Chemical Council.

The following donations have been received from Fellows in commemoration of completing their 50 years of Fellowship :

Mr. W. R. Criper	£40
Mr. D. A. Griffith	£5

A contribution of £50, sent with the approval of the Subscribers, and representing part of the balance remaining over from the sum collected by the Local Committee in Manchester for the Anniversary Meetings in 1938, has also been received. These sums amounting to £95 have been placed to the Centenary Fund, and the Council record their sincere thanks for these generous contributions.

The Council have also recorded their high appreciation of the generous action of the following Fellows who again subscribed to the Publications Fund :

Mr. P. Appleyard, Dr. P. K. Dutt, Dr. J. A. N. Friend, Professor W. E. Garner, Mr. F. W. Kirkbride, Professor W. H. Lewis, Mr. Emile Mond, Professor D. H. Peacock, Professor R. H. A. Plimmer, Mr. W. G. Polack, Mr. J. E. B. Price, Sir David Rivett, Dr. H. G. Rule, Mr. F. C. Smith, Professor A. Stansfield, Major R. B. Turbutt, and Mr. G. W. Young ;

also to Messrs. B. H. Bowles, A. Bracher, C. A. Buckmaster, A. J. Chapman, G. A. K. Dalrymple, F. P. Dunn, H. W. Keenan, Hugh Main, and R. Taylor, and to Mrs. Dent, Mrs. Watts, and the British Xylonite Co., for presenting volumes of the Society's publications, and to Dr. O. Rosenheim for presenting a bronze medal of Paul Karrer.

The Council are gratified to report that in November they received from the Managers of the Royal Institution, through Sir Robert Robertson, the sum of £369 4s., representing the residue of a fund collected some years ago by a Committee arranging the Faraday Benzene Centenary Celebrations, such sum to be used in connection with the Faraday Lectureship and Medal. This sum has been invested, and a Faraday Lecture Account has been opened.

(3) *Honorary Auditors.*

Since 1903, when Chartered Accountants were appointed to audit the Society's Accounts, the Honorary Auditors have not had to assume final responsibility for the correctness of the Accounts. The Council's proposal to discontinue the appointment of Honorary Auditors was approved by Fellows at the Annual General Meeting in Manchester.

(4) *Insurance against Accidents.*

The Council have covered by insurance against accident and against Third Party Risk their common law liability to the senior members of the staff not at present coming under the Workmen's Compensation Act, and have also covered against Third Party Risk anyone visiting the Society's Apartments in Burlington House.

VIII. RELATIONS WITH OTHER BODIES.

(1) *Chemical Council.*

Reference has been made above to the proposed scheme of co-operation between the three Constituent Bodies. The third Annual Report of the Chemical Council is reproduced in Appendix A.

(2) *Representatives of the Society on other Bodies.*

During 1938 the Society was represented as follows :

Bristol University Court :

Professor F. G. Donnan.

British National Committee for Chemistry :

The President, Treasurer, and Senior Secretary.

British Standards Institution :

Council of the Chemical Division : Dr. J. J. Fox.

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. : Dr. H. J. T. Ellingham.

Specifications for Materials and Plant used in Electroplating : Dr. U. R. Evans.

Standardisation of Scientific Glassware : Dr. J. J. Fox and Dr. E. B. Hughes.

Standards for use in the Dairying Industry : Mr. A. L. Bacharach and Mr. Eric Voelcker.

Bureau of Chemical and Physiological Abstracts :

Dr. C. W. Davies, Mr. F. P. Dunn, Dr. G. A. R. Kon, Professor R. G. W. Norrish, and the

Treasurer, *ex-officio*.

Chemical Council :

Professor F. G. Donnan, Professor I. M. Heilbron, Sir Gilbert Morgan.

City and Guilds of London Institute :

The President.

Faraday Society :

Colloid Committee : Mr. D. C. Henry.

Home Office :

Air Raid Precautions Department : Mr. J. Davidson Pratt.

Joint Library Committee :

Professor H. Bassett, Dr. O. L. Brady, Professor J. W. Cook, Professor C. H. Desch, Mr. M. B. Donald, Professor A. C. G. Egerton, Dr. H. J. Emeléus, Dr. C. F. Goodeve, Professor C. R. Harington, Dr. T. A. Henry, Dr. E. W. McClelland, Dr. W. H. Mills, Dr. E. E. Turner, Dr. J. C. Withers.

Laws Agricultural Trust :

Committee of Management : Dr. E. F. Armstrong.

Royal Microscopical Society :

Committee dealing with Standardisation of Biological Stains : Professor A. G. Green.

(3) *Representatives of the Society at Public Functions.*

18th Congrès de Chimie Industrielle, Nancy, 22nd September–2nd October : Mr. W. A. S. Calder.

Franklin Institute (Philadelphia, 19th–21st May). Dedication and Unveiling of a statue of Franklin : Sir James Irvine.

14th International Congress on Documentation, Oxford, 21st–26th September : Mr. F. W. Clifford.

Xth International Congress of Chemistry, Rome, 15th–21st May : Professor G. Barger, Dr. F. H. Carr, Professor F. G. Donnan, Dr. J. J. Fox, Professor C. N. Hinshelwood, Professor C. K. Ingold, Mr. Emile Mond, Sir Gilbert Morgan, Sir Robert Robertson.

Ramsay Dinner, Glasgow, 2nd December : Professor G. Barger.

Réunion Internationale pour la Commemoration de la Découverte du Radium, des Electrons, des Rayons X et des Ondes Hertziennes, Paris, 23rd–30th November : Dr. F. A. Paneth.

Rubber Technology Congress, London, 23rd–25th May : Mr. B. D. Porritt.

Société Chimique de Pologne; IVth Congrès de la Chimie Pure et Appliquée and Centenary of the death of Jędrzej Sniadecki, Wilno, 29th June–2nd July : Professor R. Truszkowski.

IX. ACKNOWLEDGEMENTS.

The Council express their cordial thanks to the many Fellows who have freely given their valuable services to the Society during the year, including Local Representatives, those serving on Committees, refereeing papers for the *Journal*, contributing to the *Annual Reports*, delivering lectures, opening discussions and reading papers.

APPENDIX A.

THIRD ANNUAL REPORT OF THE CHEMICAL COUNCIL.

In submitting its Third Annual Report, the Council would recall that it was constituted with the object of raising and administering a fund for the purpose of meeting the cost of chemical publications, of promoting research, of maintaining the Library of the Chemical Society, and eventually of providing adequate accommodation, also of co-ordinating the activities and administration of the Contributing Bodies in relation to the above object and purposes.

The Second Annual Report published on 6th December, 1937, contained the complete list of contributors to 22nd November, 1937.

No further appeal has been issued, but a number of additional contributions, which the Council acknowledges with gratitude, are recorded with the Financial Statements.

The Council will consider the question of making a further appeal for the fund in the early future, but, in the meantime, feels compelled to repeat the opinion, expressed in the Second Annual Report, that the cost of chemical publications must still be met largely by chemists themselves, and that every chemist, whether he wishes to possess the publications or not, should help in defraying the cost of their production.

The efforts of the Council during the past year have been mainly devoted to the evolution of a scheme, the object of which is to distribute the burden of the cost of publications more equitably over the membership of the three Chartered Chemical Bodies.

A scheme was prepared, as a basis for discussion, which aimed at raising funds for the publications of the Chemical Society and the Society of Chemical Industry. The Council held that a chemist could not keep up-to-date without the literature of those Societies, and suggested that every member of each of the three Constituent Bodies should eventually pay the same annual subscription, in return for certain privileges, in the form of publications.

The Council realised that there were likely to be difficulties in reconciling the views of the three Bodies, and possibly even the views of members of the Councils of each Body individually; but asked that all concerned would endeavour, so far as was possible, to maintain a broad view of the matter, and to support the efforts of the Council to solve the problem.

It was emphasised that the scheme was submitted as "a basis for discussion," and in the hope that something definite and practical might be evolved.

As an outcome of the consideration of the scheme by the Councils of the Constituent Bodies—and it is to be noted that as yet decisions have been taken by the Councils as representing the members and not by the members themselves—it was eventually found that important practical considerations necessitated a further review of the subject by the Chemical Council.

The Council has continued to endeavour to be of use to the three Constituent Bodies by stimulating collaboration in matters of important detail.

The problem of centralising routine office work has been discussed. If any centralisation of offices should become practicable in the future, a common addressing system might be brought into operation, but it is held to be essential that all such work should be carried on in the same place as the administrative work. Consideration has been given to the question of avoiding the duplication of wrappers for the distribution of the publications of the two publishing Societies; but no such scheme would be possible unless centralisation of administrative work could be effected.

The Council has continued to negotiate contracts for printing and paper supplies.

Loans have been advanced to both Societies to meet accounts for early deliveries of paper in bulk. Grants have been made towards the increasing cost of their publications, and the Council has also agreed to contribute £500 towards the cost of the Collective Index of the Bureau of Abstracts.

The Council has also dealt with matters referred to it by the Joint Library Committee, and has provided for the representation thereon of the various contributing Societies.

The Joint Library Committee for the ensuing year will be constituted as follows :

Association of British Chemical Manufacturers :

Dr. F. H. Carr.

Biochemical Society :

Dr. W. Robson.

Faraday Society :

Prof. J. R. Partington.

Institute of Brewing :

Mr. H. W. Harman.

Institute of Chemistry :

Prof. H. V. A. Briscoe, Mr. H. W. Cremer, Dr. J. J. Fox, Dr. E. Vanstone.

Society of Chemical Industry :

Dr. J. B. Firth, Dr. L. A. Jordan, Mr. A. A. McCulloch.

Society of Dyers and Colourists :

Mr. J. Blair.

Society of Public Analysts :

Dr. C. Ainsworth Mitchell.

Chemical Society :

Prof. A. J. Allmand, Prof. H. Bassett, Dr. O. L. Brady, Prof. J. W. Cook, Prof. C. H. Desch, Mr. M. B. Donald, Mr. F. P. Dunn, Dr. H. J. Emeléus, Dr. C. F. Goodeve, Prof. C. R. Harington, Dr. T. A. Henry, Dr. E. W. McClelland, Dr. E. E. Turner, Dr. J. C. Withers.

The contributions of the three Chartered Bodies towards the maintenance of the Library during 1938 were calculated on the respective membership proportions determined in 1937, viz., the Chemical Society £406 14s. 2d., the Institute of Chemistry £718 5s. 4d., and the Society of Chemical Industry £409 15s. 6d.

The Council records with deep regret the death of Sir Robert Mond, F.R.S., a very generous contributor to the fund.

In accordance with the provisions of the constitution, Sir Robert Pickard, F.R.S., who had been Chairman of the Council since its formation, resigned from his representation of the Society of Chemical Industry, and consequently the Chairmanship of the Council.

The Council recorded its warm appreciation of the services rendered by Sir Robert as Chairman, and of his endeavours to bring about closer co-operation between the various Bodies concerned with Chemistry, for the good of the science and the profession. The members of Council, in expressing their regret on his retirement, hoped that it would not be long before he was again associated with them in their work.

Mr. J. Arthur Reavell, also representing the Society of Chemical Industry, retired from the Council, in consequence of his having ceased to be a member of the Council of the Society.

The vacancies thus caused have been filled by the appointment of Mr. C. S. Garland and Mr. H. V. Potter.

Dr. Leslie H. Lampitt has been appointed Chairman in succession to Sir Robert Pickard ; Mr. Davidson Pratt continues as Vice-Chairman ; Professor Jocelyn F. Thorpe as Honorary Treasurer, and Mr. Richard B. Pilcher as Honorary Secretary of the Council.

The Council is indebted to Mr. F. P. Dunn for very helpful advice in matters relating to paper supplies and printing, and acknowledges with appreciation the continued honorary services of the Registrar and Secretary, and of the staff of the Institute of Chemistry.

LESLIE H. LAMPITT,

Chairman.

30, *Russell Square,*

London, W.C. 1.

26th January, 1939.

APPENDIX B

REPORT OF THE BUREAU OF CHEMICAL AND PHYSIOLOGICAL ABSTRACTS
FOR 1938.

During the year seven meetings of the Bureau were held, as well as a meeting of the Collective Index Sub-Committee and two meetings each of the A III Abstracts Advisory Sub-Committee and the B Abstracts Sub-Committee.

The Bureau desires to place on record its deep sense of the loss it has suffered through the death of Mr. Emile Mond, Hon. Treasurer of the Chemical Society. The news of the death of Mr. A. J. Greenaway, who had been a member of the Bureau since its inception, and retired only at the end of 1937, was also received with great regret.

Dr. C. W. Davies has been appointed by the Chemical Society to replace Dr. Ellingham as a member of the Bureau and as convenor of the A I and A II Sub-Committee; Mr. H. W. Cremer takes the place of Dr. Carr as a representative of the Society of Chemical Industry and member of the B Sub-Committee.

Assistant Editors.—Dr. E. H. Rodd has resigned from his post as Assistant Editor in Section A II, and Dr. Harold Burton has been appointed in his place.

During the severe illness of Prof. H. M. Dawson, his editorial duties have been undertaken by Dr. F. L. Usher.

Dr. V. J. Woolley has been appointed to take charge of the Pharmacology and Toxicology Section of Abstracts A III.

Section A III.—The inclusion of physiological abstracts in the Biochemistry Section commenced smoothly in January last. So far as the Bureau is able to judge from the amount of subscriptions received for this Section, the combined abstracts are highly appreciated.

The Editor wishes to record his high appreciation of the enthusiastic help he has received during 1938 from the sub-editorial and clerical staff, especially in connexion with the transition stages of Section A III.

With the approval of the Societies constituting the Bureau, arrangements have been made with the Anatomical Society of Great Britain and Ireland whereby a larger number of abstracts of papers on anatomical subjects will be included as from the beginning of 1939, under the charge of Professor J. D. Boyd. The Anatomical Society has undertaken to provide the sum of £100 per annum to defray the cost of printing these extra abstracts, and it has been agreed to supply members of that Society with Section A III of the Abstracts at the price of 30s. per annum in place of 65s.

Abstracts.—The total number of abstracts published during 1938 was 41,677, as compared with 35,939 in 1937, an increase of 5638. The appended table shows the number of abstracts and pages printed in each quarter, the figures for 1937 being included for comparison.

	A I.				A II.			
	1937.		1938.		1937.		1938.	
	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.
1st quarter	1912	156	2075	164	733	130	683	120
2nd „	2376	178	2065	170	801	138	773	132
3rd „	1937	150	1778	150	781	126	811	134
4th „	1864	152	1900	160	750	136	714	132
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	8089	636	7818	644	3065	530	2981	518
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Average length per abstract	0.158 Column		0.165 Column		0.346 Column		0.347 Column	

	A III.				B.			
	1937.		1938.		1937.		1938.	
	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.
1st quarter	1458	108	2897	252	3925	298	4010	326
2nd ,,	1821	138	3490	294	4424	328	4869	414
3rd ,,	1598	122	2909	228	4555	360	4439	368
4th ,,	1508	136	3658	292	5496	428	4606	404
	<u>6385</u>	<u>504</u>	<u>12,954</u>	<u>1066</u>	<u>18,400</u>	<u>1414</u>	<u>17,924</u>	<u>1512</u>
Average length per abstract	0.158 Column		0.164 Column		0.154 Column		0.170 Column	

Of the 17,924 B Abstracts, 11,754 were from journal literature and 6170 from patents. The increase noted above in the average length of the B Abstracts is due to the fact that an increased proportion of these was from the journals compared with patents (figures for 1937: 10,883 and 7517, respectively). There is very little change in the average length of the other Sections, but the doubling of the size of Section A III as a result of the inclusion of Physiological Abstracts is noteworthy.

Annual Index.—The joint Annual Index to the Abstracts for 1937 covered 823 pages, an increase of 29 pages over the 794 of the 1936 Index. The cost of printing the Index was £1678 14s. 9d. and of the paper (including handling) £318 19s. 6d. (corresponding figures for the 1936 Index were £1539 7s. 11d. and £231 11s. 9d.). The total number of entries in the Index was 119,070 compared with 113,160 in 1936.

Quinquennial Index.—The Bureau received and adopted a report of a Sub-Committee appointed to consider the question of the next Collective Index to the Abstracts, and recommended to the two Societies that, in view of the fact that a ten year's Index starting from 1933 would be unduly costly and cumbersome, and that the beginning of 1938 marked the inclusion of Physiological Abstracts, a Quinquennial Index covering the period 1933–1937 should be produced provided sufficient support was received from the members.

It was recommended that the price to be charged to members applying (with deposits of 10s.) before printing commences be £3 10s., and after that date £4 (postage extra in each case), and that the price to non-members be £8 and £10, respectively). The two Councils have approved these recommendations, and have promised their financial support; in addition, the Bureau is glad to record that the Chemical Council has also promised a contingent contribution of £500 towards the cost of the work.

The response to the notice circulated to members and subscribers inviting subscriptions has been satisfactory, 482 members having ordered the Index and 101 copies having been subscribed for in advance by non-members.

It is hoped to commence the printing of the Index in the summer.

A room adjoining the Indexing office of the Bureau in Charing Cross Road has been secured for the housing of the Quinquennial Indexing department at the rent of £130 per annum and the work is proceeding satisfactorily.

Indexing Staff.—Miss Tanner, who was engaged in 1937 as assistant to Miss Le Pla, has been formally appointed Assistant Indexer.

An additional staff has been engaged to deal with the extra work connected with the Quinquennial Index.

Decennial Index, 1923–1932.—Twenty-two more copies were sold during the year 1938, making a total of 847, and a further sum of £60 each has been refunded to the Chemical Society and to the Society of Chemical Industry.

Abstracts B.—The Council of the Society of Chemical Industry requested the Bureau to report on means whereby economy in the B Abstracts might be effected. The matter was referred to the B Abstracts Sub-Committee, who reported certain directions in which small economies could be effected, but pointed out substantial savings appeared to be

possible only by fundamental changes or by collaboration with other organisations that produce abstracts covering similar lines.

The Council of the Society of Chemical Industry has requested the Bureau to report further on the matter.

Status of the Bureau.—In view of the developments in its activities, the Bureau suggested to the Societies that some method for unifying the financial control should be considered. With the approval of the Councils, a Sub-Committee consisting of the Chairman, Dr. L. H. Lampitt and Professor B. A. McSwiney, with Dr. C. W. Davies, Dr. G. A. R. Kon, Professor R. G. W. Norrish (representing the Chemical Society), Mr. F. P. Dunn, Dr. L. A. Jordan (representing the Society of Chemical Industry), and Professor J. H. Gaddum (representing the Physiological Society), has been appointed to examine the suggestions.

During September Mr. F. P. Dunn and Mr. W. Macnab attended the Fourteenth International Conference of the International Federation for Documentation, at Oxford, as representatives of the Bureau.

APPENDIX C

REPORT OF THE JOINT LIBRARY COMMITTEE FOR 1938.

Excluding the evenings on which meetings of the Chemical Society were held, there were 8507 attendances during the year, as compared with 8554 in 1937. Of these 4803 were made by Fellows of the Chemical Society, and 3704 by Members of other Constituent and Contributing Bodies, as against 4988 and 3566 in 1937.

The number of books borrowed was 5948, against 5666 in the previous year; of these 1697 were issued by post, compared with 1468 in the preceding year.

The Library telephone facilities are still extensively used, and the incoming calls included 1057 enquiries which necessitated reference to books in the Library, as against 941 the previous year.

The additions to the Library comprise :

250 books, of which 70 were presented, 744 volumes of periodicals and 283 pamphlets, as against 274 books, 738 volumes of periodicals and 201 pamphlets last year.

Analysis.

	Attendances.	Books borrowed.	Books added.	Volumes of periodicals.	Pamphlets.
1938	8507	5948	250	744	283
1937	8554	5666	274	738	201

The total number of volumes added during the year was 994. The Library now contains 42,672 volumes, consisting of 12,801 books and 29,871 bound volumes of periodicals.

The Committee wishes to record its grateful appreciation of the gifts received from Fellows and others during the year.

The question of Library accommodation continues to be a most urgent one. (See Section V, item 4.)

APPENDIX D

LECTURES AND DISCUSSIONS.

Lectures given in London.

27th January, Sixth Pedler Lecture, entitled "Synthesis of Polyenes," by Professor Dr. Richard Kuhn; 17th February, Franklin Memorial Lecture, by Professor A. Findlay; 5th May, on "Nucleic Acids," by Professor J. M. Gulland; 17th November, on "Some

Carbohydrate Problems," by Professor W. N. Haworth; 24th November, Public Lecture under the auspices of the Society of Chemical Industry and the Chemical Society to commemorate the Centenary of the birth of Sir William Henry Perkin, by Dr. H. Levinstein; 15th December, Seventeenth Faraday Lecture, entitled "Monolayers on Solids," by Dr. Irving Langmuir.

Discussions held in London.

3rd February, on "Associated Liquids," opened by Professor J. D. Bernal; 17th March, on "Electron Diffraction and Surface Structure" (Joint discussion with the Physical Society), opened by Professor G. I. Finch; 19th May, on "Organic Intermolecular Complexes," opened by Professor G. M. Bennett; 1st December, on "Aggregation of Ions in Paraffin-chain Salt Solutions," opened by Dr. G. S. Hartley.

Lectures given outside London.

Aberdeen. At Marischal College (Joint meeting with the Institute of Chemistry): 4th February, on "Alchemy in Scotland," by Professor John Read.

Birmingham. At the University, Edgbaston (Joint meetings with the Birmingham University Chemical Society): 7th February, on "The Thermal Decomposition of Solids," by Professor W. E. Garner; 14th February, on "Sterols, Vitamin D, and Related Hormones," by Professor I. M. Heilbron.

Edinburgh. At North British Station Hotel: 14th March (Joint meeting with the Institute of Chemistry and the Society of Chemical Industry): on "Multiple Links," by Professor N. V. Sidgwick; at the University: 1st November (Joint meeting with the University of Edinburgh Chemical Society), on "Plastics and Polymerisation," by Professor R. G. W. Norrish.

Glasgow. At the Royal Technical College; 18th November (Joint meeting with the Local Sections of the Institute of Chemistry and the Society of Chemical Industry): on "Heavy Water and its Use as a Chemical Reagent," by Dr. J. A. V. Butler.

Leeds. At the University: 11th November, on "The Structure of Films Adsorbed at Solid Surfaces," by Dr. D. H. Bangham.

Liverpool. At the University: 28th January, on "The Chemical Structure and Physiological Action of Drugs," by Dr. H. R. Ing; 7th November, on "Recent Progress in the Chemistry of the Starches," by Professor E. L. Hirst.

Manchester. At the University: 31st January, Sixth Pedler Lecture, entitled "Synthesis of Polyenes," by Professor Dr. Richard Kuhn (repeated); 8th February (Joint meeting with the Manchester Section of the Institute of Chemistry and the Manchester University Chemical Society), on "The Significance of Synthetic Oestrogenic Agents," by Professor E. C. Dodds; at the Central Library: 1st April, Pictet Memorial Lecture, by Professor G. Barger; at the College of Technology, 15th November (Annual Conjoint Meeting of Manchester Chemical Societies arranged by the Manchester Literary and Philosophical Society), on "Camouflage in Nature and in War," by Dr. H. B. Cott.

Newcastle and Durham. Bedson Lectures at King's College, Newcastle-on-Tyne: 4th February, on "Aliphatic Diazo Compounds," by Professor J. Kenner; 19th May, on "The Impact of Chemistry on Biological Science," by Sir Henry H. Dale; 28th October, on "Statistics in Chemistry and Physics," by Professor Max Born.

North Wales. At the University College of N. Wales, Bangor (Joint meetings with the University College of North Wales Chemical Society): 10th February, on "Some New Aspects of the Organic Chemistry of Nitrogen," by Professor G. R. Clemo; 25th November, on "The Origins of the Atomic Theory," by Professor J. R. Partington.

Nottingham. At the University College, University Park (Joint meetings with the University College of Nottingham Physical and Chemical Society): 20th October, on "The Chemistry of Podocarpic Acid," by Dr. W. F. Short; 24th November, on "Some Chemical Aspects of a Widespread Phenomenon—Biological Methylation," by Professor F. Challenger.

Sheffield. At the University: 18th February, on "Multiple Links," by Professor N. V. Sidgwick.

South Wales. At the University College of S. Wales and Monmouthshire, Cardiff (Joint meetings with the Cardiff and District Section of the Institute of Chemistry) : 11th March, on "Strong Electrolytes," by Dr. C. W. Davies; 28th November, on "Some Topics in Inorganic Chemistry," by Professor W. Wardlaw; (Joint meeting with the Chemical and Physical Society of the University College of S. Wales and Monmouthshire), 29th April, on "Some Recent Developments in the Reactions of Surfaces," by Professor E. K. Rideal; at the Technical College, Cardiff, 26th October (Joint meeting with the Cardiff Technical College Chemical Society) : on "Optical Activity as a Guide to Reaction Mechanism," by Dr. J. Kenyon; at the University College, Swansea (Joint Meetings with the University College of Swansea Chemical Society) : 4th February, on "Structural Crystallography and Chemistry," by Dr. E. G. Cox; 10th November, on "Chemical Carcinogenic Agents," by Professor J. W. Cook.

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1938.

RESEARCH FUND.

		1938		1937		1938		1937	
		£	s. d.	£	s. d.	£	s. d.	£	s. d.
<i>Income.</i>						<i>Expenditure.</i>			
£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
480	18 9	469	16 8	21	0 0	By Honorarium, Hugo Müller Lecturer	...	...	...
139	18 10	148	16 0	644	17 6	" Grants	...	...	...
67	15 9	30	11 1	5	15 8	" Miscellaneous Expenses	...	...	...
31	0 0	15	0 0	65	1 2	" Balance, being Excess of Income over Expenditure, carried to Balance Sheet	...	...	...
16	2	1	8 10	22	13 5				
16	4 10	22	13 5	22	0 0				
—	—	—	—	—	—				
£736	14 4	£710	5 0	£736	14 4				

SPECIAL PUBLICATIONS FUND.

		1938		1937		1938		1937	
		£	s. d.	£	s. d.	£	s. d.	£	s. d.
<i>Income.</i>						<i>Expenditure.</i>			
£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
7	14 0	6	8 6	14	5 9	By Production of Report on Physico-Chemical Symbols	...	...	...
6	4 9	3	4 9	—	—	" Reprints for Memorial Lectures, Vol. IV, ...	...	...	...
7	12 0	5	17 9	103	18 1	" Excess of Income over Expenditure carried to Balance Sheet	...	...	...
3	4 0	...	...				
5	4 0	...	...				
7	18 11	...	...				
1	0 4	...	...				
5	12 0	...	...				
42	8 10	27	18 4						
74	0 8	74	0 8						
1	14 4	2	2 7						
£118	3 10	£104	1 7	£118	3 10				

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1938.

CENTENARY FUND.

		1938		1937		1938	
		£	s. d.	£	s. d.	£	s. d.
<i>Income.</i>							
To Donations	...	145	10 6	260	6 9	...	...
" Contribution from General Purposes Account	...	200	0 0	...	...	...	...
" Interest on Deposit	...	11	10 9	...	...	...	...
		<u>£260</u>	<u>6 9</u>	<u>£260</u>	<u>6 9</u>		
<i>Expenditure.</i>							
By Excess of Income over Expenditure carried to Balance Sheet	...	...	...	...	...	357	1 3
						<u>£357</u>	<u>1 3</u>

THE HERBERT SPENCER BEQUEST.

		1938		1937		1938	
		£	s. d.	£	s. d.	£	s. d.
To Interest on Deposit in Post Office Savings Bank	...	11	15 9	200	0 0	...	...
" Excess of Expenditure over Income carried to Balance Sheet	...	267	16 5	...	...	...	...
		<u>£279</u>	<u>12 3</u>	<u>£200</u>	<u>0 0</u>		
By Transfer to Library Account for purchase of Books		...	...	...	...	200	0 0
" Purchase of Office Furniture		...	...	...	...	79	12 2
						<u>£279</u>	<u>12 3</u>

THE FARADAY LECTURE FUND.

		1938		1937		1938	
		£	s. d.	£	s. d.	£	s. d.
To Interest on Deposit
						<u>£</u>	<u>2 8</u>
By Excess of Income over Expenditure carried to Balance Sheet	

THE CHEMICAL SOCIETY. BALANCE SHEETS, 31ST DECEMBER, 1938.

		CENTENARY FUND.			
		1938	1937	Assets.	
£	s. d.	£	s. d.	£	s. d.
260	6 9	260	6 9	By Cash at Bank	...
---	---	357	1 3	By Cash on Deposit in Post Office Savings Bank	...
---	---	617	8 0	...	...
<hr/>		<hr/>		<hr/>	
£260	6 9	£617	8 0	£617	8 0
<hr/>		<hr/>		<hr/>	

Liabilities.

To Excess of Assets over Liabilities as per last Balance Sheet ...
Add Excess of Income over Expenditure for Year ...

THE HERBERT SPENCER BEQUEST.

£	s. d.	£	s. d.	£	s. d.
931	16 6	741	4 0	231	16 6
190	12 6	267	16 5	509	7 6
<hr/>		<hr/>		<hr/>	
741	4 0	473	7 7	By Cash at Bank	...
<hr/>		<hr/>		By Cash on Deposit at Post Office Savings Bank	
£741	4 0	£473	7 7	...	...
<hr/>		<hr/>		<hr/>	

THE FARADAY LECTURE FUND.

£	s. d.	£	s. d.	£	s. d.
369	4 0	369	2 8	By Investment as per Schedule (cost or value when acquired)	...
---	---	369	6 8	By Cash at Bank	...
<hr/>		<hr/>		<hr/>	
---	---	£369	6 8	...	...
<hr/>		<hr/>		<hr/>	

THE TILDEN BEQUEST.

£	s. d.	£	s. d.	£	s. d.
---	---	1492	2 0	By Investments as per Schedule (cost or value when acquired)	...
<hr/>		<hr/>		<hr/>	
---	---	1492	2 0
<hr/>		<hr/>		<hr/>	

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