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THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS.

IN LONDON (Burlington House).

Thursday, March 16th, 1944, at 2.30 p.m.

Ninth Pedler Lecture on "Newer Knowledge of the Biochemistry of the Thyroid Gland," by Dr. C. R. Harington, M.A., F.R.S.

Thursday, April 20th, 1944.

Annual General Meeting and the **Presidential Address.** (Further particulars will be announced.)

Wednesday, March 15th, 1944, at 2.30 p.m.

Lecture on "The X-ray Examination of Plastics," by Dr. W. T. Astbury, to be held at the London School of Hygiene and Tropical Medicine, Keppel Street, W.C. 1. Meeting of the Plastics Group of the Society of Chemical Industry, to which Fellows are invited.

OUTSIDE LONDON.

MANCHESTER.

Friday, March 24th, 1944, at 5.30 p.m.

Ninth Pedler Lecture on "Newer Knowledge of the Biochemistry of the Thyroid Gland," by Dr. C. R. Harington, M.A., F.R.S. To be held in the Chemistry Lecture Theatre of the University.

NEWCASTLE AND DURHAM.

Friday, March 17th, 1944, at 6 p.m.

Tilden Lecture on "Some Aspects of the Organic Chemistry of Phosphorus and Arsenic," by Dr. F. G. Mann, F.I.C. Official Meeting of the Society. To be held at King's College, Newcastle-upon-Tyne.

NOTTINGHAM.

Tuesday, March 28th, 1944, at 6.30 p.m.

Lecture on "Some Aspects of the Organic Chemistry of Phosphorus and Arsenic," by Dr. F. G. Mann, F.I.C. To be held in the Chemistry Lecture Theatre of University College, Shakespeare Street.

PROCEEDINGS OF THE CHEMICAL SOCIETY.

Minutes of a SCIENTIFIC MEETING

held at Burlington House, Piccadilly, W. 1, on Thursday, February 17th, 1944, at 2.30 p.m.

The PRESIDENT, DR. W. H. MILLS, M.À., F.R.S., was in the Chair, and welcomed the visitors present.

MINUTES.

The minutes of the Scientific Meeting of January 20th, 1944, which had been circulated, were taken as read and were confirmed and signed.

U.S.S.R. SOCIETY FOR CULTURAL RELATIONS WITH FOREIGN COUNTRIES, MOSCOW.

The PRESIDENT announced that the following message had been received from the U.S.S.R. Society for Cultural Relations with Foreign Countries, Moscow :

“ Hearty New Year Greetings
“ For the triumph of our common cause
“ For final defeat of Hitlerism
“ For fruitful post-war cooperation.”

FORMAL ADMISSION OF FELLOWS.

The following were formally admitted Fellows of the Chemical Society: E. W. Jackson, Miss Rosemary D. Simon, H. W. Pratt, M. N. Strachan, Gerald H. Hargreaves, B. C. L. Weedon, R. Bentley, P. Popper, U. Weigert, R. J. C. Harris, W. C. J. Ross, J. A. Elvidge, W. Tebrich, W. R. Wragg, D. Mess, R. Castle, Miss Joan Meakin, L. G. L. Unstead-Joss, Miss Daphne P. McKay-Ohm, Miss D. M. Hall, H. J. Kahn, T. Douglas Whittet, F. E. Rymill.

LECTURE.

After a brief introduction, the PRESIDENT called on Dr. A. J. Ewins, F.R.S., to deliver his Lecture entitled “ Chemotherapy in Tropical Medicine.”

At the conclusion of the Lecture, a vote of thanks to the Lecturer, proposed by Sir Robert Pickard, was carried with acclamation.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
Frederick Daniel Chattaway	1894	January 26th, 1944.
Neville Mower	1943	November 23rd, 1943.
Thomas Linton Daniel Porter	1904	November 16th, 1943.
James McConnell Sanders	1900	February 4th, 1944.
Alfred Stansfield	1895	February 5th, 1944.
John Henry Walker	1925	January 14th, 1944.
William John Willis	1925	October 29th, 1943.
Ernest Ronald Withell	1941	August 8th, 1942.
James Young	1894	December 2nd, 1943.

CONGRATULATIONS.

The congratulations of the Council have been conveyed to the following Fellows who have completed 60 and 50 years of Fellowship :

<i>60 years of Fellowship.</i>		Elected.
Edgar Francis Smith	February 21st, 1884.	
<i>50 years of Fellowship.</i>		
William Rowland Bird	February 15th, 1894.	
Chuni Lal Bose	" "	
Robert Leonard Jenks	" "	

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to Messrs. P. K. Dutt and G. W. Young for contributions to the Publications Fund and to Dr. A. F. Campbell, Mr. O. L. Hughes, Mr. D. G. Kerr, Imperial Chemical Industries, Ltd., and the Executors of the late Professor J. Young for presenting publications of the Society.

RESEARCH GRANT.

A grant of £15 has been made to Mr. G. E. Styan (Bradford Technical College) for a research on "Kinetics of base exchange reactions using crystalline synthetic zoolites."

NOMINATIONS FOR VACANT PLACES ON THE COUNCIL.

The following is the list of the nominations for the new Council :

President. (*One vacancy.*) PROFESSOR W. N. HAWORTH.

Vice-Presidents who have not filled the office of President. (*One vacancy.*)

EDMUND JOHN BOWEN. (Oxford.)

Elected Ordinary Members of Council.

Constituency I. S.E. England. (*Three vacancies.*)

MICHAEL PHILIP BALFE.	(Harpenden.)
JAMES STEWART COOK.	(Windsor.)
STANLEY HUGH HARPER.	(Southampton.)
EWART RAY HERBERT JONES.	(London.)
JOHN LANGHORNE SWEETEN.	(London.)
WILLIAM FRANCIS KENRICK WYNNE-JONES.	(Farnborough.)

Constituency IV. N.E. England. (*Two vacancies.*)

MALCOLM PERCIVAL APPLEBEY.	(Yarm-on-Tees.)
LOUIS HUNTER.	(Leicester.)
BRYNMOR JONES.	(Sheffield.)

PUBLICATIONS FOR JANUARY.

Owing to depletion of staff and the immense amount of work involved in carrying out the sorting, it was necessary to send Fellows the same publications in January 1944 as they received in December 1943. The necessary adjustments will be made when dispatching the publications for February.

The Council would much appreciate it if Fellows would kindly return to the Society any publications for January 1944 which they have received in excess of their requirements.

FELLOWSHIP.

The following 92 candidates were elected Fellows of the Society on February 17th, 1944 :

John Aldred.	Edward Teggins Borrows.	Frederick James Dent.
Rudolf Martin Anker.	Joyce Winifred Ethel Brading.	Eric George Depper.
William Henry Beck.	Bruno Breyer.	William Edward de Boutillier
William Rhys Graham Bell.	George Ludovic Buchanan.	Diamond.
Arnold Benson.	Alfred Richard Burkin.	John William Dorling.
John Dyson Blakeley.	Jack Ronald William Cheatele.	Ian Gordon Cumming Dryden.
Frank Monkman Bolton.	Kenneth Charles Cooper.	Cyril Jack Eastland.

Karl Basil Edwards.	Ralph Sidney Kahan.	Douglas Frederick Rushman.
William Albert Edwards.	Charles Kennedy.	Peter Alan Savage.
George Alfred Hugh Elton.	Paul Welberry Kent.	William Errington Scott.
Richard Bromley Evans.	Margaret Elizabeth Kieser.	Michael Shaw.
Ronald Evans.	Trevor Asher Kletz.	Alfred Einar Sherndal.
Leslie Harold Fitzgerald.	Edward Bowes Knott.	Alexander Martin Smith.
Henry John Fletcher.	Robert Lind.	Wilfred Smith.
Charles Harold Raymond Gentry.	Andrew James Little.	Francis Derek Spence.
Bhawan Showkiram Gidvani.	Bernard Lipton.	Alvappillai Sundralingham.
Ezra Golombok.	Reginald Frederick Looney.	Herbert Sweeny.
Roy William Goodrich.	Kasamali Kaderali Lophandvala.	Reginald Harold Thompson.
Julius Grant.	Alexander McLaren.	Leslie Walter Mably Tyrell.
Frank Denby Gunstone.	Trevor Gault Majury.	Arthur Joseph Victor Underwood.
Reginald Stanley Baybutt Hall.	Bernard George Mandelik.	John Vaughan.
Stephen Herbert Alois Hirsch.	Agnes Grant Mitchell.	Charles Walker.
Howard Charles Hitchcock.	Francis Michael Page.	John Geoffrey Walker.
Hans Hoch.	Francois Panzner.	Clifford Leslie Walters.
George Horner.	Stella Jean Patterson.	George Leslie Wathen.
Robert Heaton Horrocks.	Donald Bernard Powell.	Clifford Whalley.
Ladislav Hruska.	Thomas Athol Pressley.	James William Wood.
Iorwerth Price Humphreys.	Malcolm George Read.	Aubrey Maurice Woodman.
Ronald Hutt.	James Thomson Richmond.	Robert Lees Young.
Alfred Sydney Johnson.	Wolfe Rosenberg.	George William Youngson.
Norman Richard Jones.	Richard Rosenbusch.	George Bowman Yuille.

LIST OF APPLICATIONS FOR FELLOWSHIP

(*Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than Monday, March 20th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.*)

- Alexander, Edward Peter James**, B.Sc. (Lond.), A.R.C.S. British. 85, Manor Lane, Sunbury-on-Thames, Middlesex. Assistant Chemist at Anglo-Iranian Oil Company, Ltd., Research Station. *Signed by* : A. A. Eldridge, H. V. A. Briscoe, H. J. T. Ellingham.
- Ames, William Melville**, M.A. and D.Sc. (Edin.), F.I.C. British. c/o Messrs. J. & G. Cox, Ltd., Gorgie Mills, Edinburgh, 11. Works Manager. *Signed by* : Hugh B. Nisbet, E. G. V. Percival, R. Leslie Collett.
- †**Anderson, James Henry**, A.I.C. British. Chief Chemist to Ocean Salts (Products), Ltd. *Signed by* : W. H. Brindley, F. P. Dunn, C. Diamond.
- (d)**Ashley, Michael George**, Ph.C., M.P.S. Student of the Royal Institute of Chemistry (Registered). British. 18, St. Annes Road, Leeds, 6. Pharmaceutical Chemist in charge of Medical Supplies to County Hospitals and Institutions under the County Council of the West Riding and Yorkshire. *Signed by* : F. Jones, J. W. Gailer, James A. Hamilton.
- Atkinson, Charles Maitland**, B.Sc.Hons. (Dun.). British. 18, Woodside Grove, Tantobie, Newcastle-on-Tyne. Chemist. *Signed by* : C. W. Gibby, G. H. Christie, J. C. E. Simpson.
- (c)**Baldit, Gerald Lucien**, Inter B.Sc. British. 33, Blairderry Road, Streatham Hill, S.W. 2. Assistant Research Chemist. *Signed by* : E. de Barry Barnett, F. H. Lowe, J. C. Crocker.
- Beenstock, David**, B.Sc.Tech. (Manc.). British. "Springdene," Springfield Lane, Irlam, Manchester. Chemist. *Signed by* : John K. Wood, O. Rhys Howells, A. F. H. Ward.
- †**Beese, Dennis Clifford**, F.I.C. English. c/o Linoleum Manufacturing Co., Ltd., Staines. Assistant Works Manager. *Signed by* : Henry J. S. Sands, E. de Barry Barnett, G. G. Pullen.
- Benzie, Robert John**, B.Sc.Hons. (Lond.), A.H.W.C., A.I.C. British. c/o 36, Reginald Road, Chaddesden, Derby. Works Chemist. *Signed by* : Robert G. M. Dakers, James Sandilands, Hugh B. Nisbet.
- Billington, Edward Eric**, B.Sc. (L'pool), M.Sc. (McGill), F.I.C. British. 18, Hoscote Park, West Kirby, Wirral. Managing Director, Messrs. Wright Crossley & Co., Ltd., Spice Millers. Messrs. Edward Billington & Son, Ltd., Cattle Food Manufacturers, etc. *Signed by* : W. H. Roberts, C. F. Turner, E. Gabriel Jones, R. Leslie Collett.
- †**Bradwell, Donald**, A.I.C. British. 4, North Lodge Terrace, Darlington. *Signed by* : C. Fuller, C. S. Harper, R. Leslie Collett.
- (d)**Bristow, Frederick Jack**. British. 58, Herlingham Road, Fulham, S.W. 6. Assistant Chemist. *Signed by* : W. Davey, W. J. Clifford, M. Barent.
- Broadfield, Ernest Richard**, B.Sc. (Lond.). British. 14, Langford Grove, Harborne, Birmingham, 17. Research Metallurgist. *Signed by* : R. J. Doyle, William G. Dickson, J. Cooper Duff.
- Bruck, Thomas Andrew**. Hungarian. 5, High Path, Wellington, Som. Student at King's College, London. Studying for B.Sc. Special Honours Degree in Chemistry. *Signed by* : G. M. Bennett, Gwyn Williams, J. C. D. Brand.
- (d)**Burroughs, Leonard Frederick**, B.Sc.Agric. (Hons.) (Reading). British. "Belvedere," Long Ashton, Bristol. Chemist (Cider, Fruit and Vegetable Products). *Signed by* : Alfred Pollard, H. Martin, T. Wallace.
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- (b) **Senior, Arthur Edward**, Registered Student of R. Inst. Chem. British. 123, Broadgate Walk, Horsforth, Nr. Leeds. Laboratory Assistant engaged on Plastics Research Work. *Signed by* : C. Denton, R. Gawler, G. G. Bradshaw.
- † **Short, John Francis**, B.Sc. (Lond.). British. Distillers Co., Ltd., Research Dept., Great Burgh, Epsom. Research Chemist. *Signed by* : J. G. Maltby, E. Horton, H. P. Staudinger.
- (b) **Silk, John Arthur**. British. 200, Capstone Road, Bournemouth. Undergraduate. *Signed by* : H. J. Emeléus, L. S. Theobald, H. J. T. Ellingham.
- Slater, Reginald**, Member Institute of Medical Laboratory Technology. British. 14, Priestley Avenue, Summerway, Whipton. Technician, Bio-chemical Laboratory. *Signed by* : K. H. Treadwell, J. G. Maltby, E. R. Dawson.
- (b) **Smeaton, William Arthur**, Inter B.Sc. (Lond.). British. 28, Elm Grove, Harrow Garden Village, Harrow. Chemistry Student, Imperial College. *Signed by* : H. V. A. Briscoe, H. J. T. Ellingham, A. A. Eldridge.
- † **Smith, Albert**, B.Sc. Hons. (Lond.), A.I.C. British. 16, Alexandra Road, Blackburn. Analytical Chemist. *Signed by* : W. Taylor, J. E. Wynfield Rhodes, H. Hayhurst.
- † **Smith, Clifford William Robert**, Ph.D. and B.Sc. (Lond.), D.I.C., A.R.C.S., A.I.C. British. 35, Aldborough Road, Seven Kings, Ilford. Shop Manager. *Signed by* : D. Burns, H. V. A. Briscoe, A. G. Pollard.
- Smith, Frank Edward**, Member of British Association of Chemists, and Society of Chemical Industry. British. 71, Ealing Village, W. 5. Organic Chemist. *Signed by* : S. C. Mitchell, D. E. Seymour, K. C. Roberts.
- Smith, George Fouet**, Higher School Certificate. British. 1, Ashley Crescent, Swinton. University Student at Manchester. *Signed by* : Colin Campbell, Fred Fairbrother, G. N. Burkhardt.
- (d) **Snoad, Ronald Harvey**. British. 11, Bexhill Road, New Southgate, N. 11. Research Chemist, employed by The Varley Dry Accumulators, Ltd. *Signed by* : E. de Barry Barnett, D. H. Richardson, R. W. West.
- † **Stafford, William Edward**, A.M.C.T., A.I.C., A.I.R.I. British. 131, Peel Green Road, Eccles, Manchester. Chief Chemist, The Rubber Regenerating Co., Ltd., Westinghouse Road, Trafford Park, Manchester. *Signed by* : O. Rhys Howell, John K. Wood, T. K. Walker.
- Stobbs, Robert William**, National Certificate in Chemistry. British. "Ross Villa," Woodlands Road, Sale. Analytical Chemist and Metallographer, The Ford Motor Co., Ltd. *Signed by* : John Graymore, F. Howlett, T. Green.
- Sumner, Kenneth Granville**, Inter B.Sc. (Lond.). British. 59, Biggin Hall Crescent, Stoke, Coventry. Laboratory Assistant, Research Dept., I.C.I. Metals, Ltd. *Signed by* : R. J. Doyle, W. A. Bell, William Dickson.
- Templeton, Thomas**. British. "Benview," Langbank. Student. *Signed by* : P. C. Austin, T. S. Stevens, James Bell.
- † **Thornhill, George**, B.Sc. and Ph.D. (Durham), A.I.C. British. "The Haven," Woodcock Hill, Pleasington, Blackburn. Development Chemist and Departmental Manager. *Signed by* : H. L. Riley, H. E. Blagden, G. R. Clemo.
- † **Townsend, Leonard George**, M.Sc. (Lond.), A.I.C. British. 27, Belmont Avenue, Wembley. Works Chemist, Gas Light & Coke Co. *Signed by* : W. Lewcock, W. J. Gooderham, W. A. Voss.
- Ure, Margaret Wood**, M.A., B.Sc. (Edin.). Scottish. 24, Craven Hill Gardens, Lancaster Terrace, Lancaster Gate, W. 2. Scientific Assistant to Macleans. *Signed by* : C. S. Garland, H. J. T. Ellingham, A. A. Eldridge.
- (c) **Vernon, Edmond James**. British. 42, Baker Street, W. 1. Student of Chemistry at the Imperial College. *Signed by* : H. J. T. Ellingham, L. S. Theobald, H. J. Emeléus.
- (a) **Vernon, John Wood**, Intermediate B.Sc. British. 111, Minchenden Crescent, Southgate, N. 19. Chemistry Student Imperial College, S.W. 7. *Signed by* : H. W. Vernon, H. V. A. Briscoe, A. A. Eldridge.
- † **Ward, Terence**, B.Sc. and Ph.D. (Bristol), A.I.C. British. 2, Park Hill Court, Addiscombe Road, East Croydon. Research Chemist. *Signed by* : Leonard Mould, R. G. Heyes, J. M. Walter.
- Watson, Gordon**, Inter B.Sc., Subord. Physics in B.Sc. Special exam. (Lond.). British. 118, Queens Road West, Accrington. Research Assistant in Laboratory of Fine Chemical Manufacturers. *Signed by* : Wm. Taylor, Cyril Lipman, Edward S. Forber.
- † **Watson, James Naylor**, B.Sc. (Glas.). British. Assistant Chemist. *Signed by* : James Bell, J. W. Cook, A. E. Dunstan.
- Weston, Ralph Edward**, B.Sc. (Lond.), A.I.C. British. 263, Coventry Road, Ilford. Analytical Chemist. *Signed by* : J. K. Whitehead, E. P. Wheeler, R. Leslie Collett.
- † **Wexler, Abraham**, M.Sc., A.I.C. British. 47, Chipperfield Road, Hemel Hemstead. Head of Chem. Dept., L.C.C. Hackney Technical Inst., London. *Signed by* : Alex. Findlay, A. L. Bacharach, R. Leslie Collett.
- † **Whitney, John Edward Seager**, B.Sc. (Lond.), A.I.C. British. 13, Hillbury Road, Tooting, S.W. 17. Research Chemist. *Signed by* : R. Leslie Collett, Otto Oberländer, Kenneth B. Belcher.
- (d) **Whitaker, William**. British. Chemical Laboratory Assistant. *Signed by* : R. M. Barrer, S. C. Mitchell, H. I. Stonehill.
- Whitter, Bertha**, M.P.S. British. Vernon House, Drummers Lane, Bryn, Nr. Wigan. Pharmacist. *Signed by* : E. Foley, A. Cooksey, J. F. J. Dippy.
- (b) **Whyte, Robert Bruce**. British. 166, Crown Street, Aberdeen. Student (3rd year Chemistry, Aberdeen University). *Signed by* : T. Harold Reade, J. E. Humphries, H. W. Melville.
- Wilkinson, George Robert**, M.P.S. British. The International Chemical Co., Braydon Road, N. 16. Research Chemist. *Signed by* : Theodore White, W. T. J. Morgan, D. E. Seymour.
- Wilkinson, Robert Alfred**, B.Sc. and Ph.D. (Birm.). British. 12, Gladstone Street, Basford, Stoke-on-Trent. Process Research Chemist. I.C.I., Ltd. *Signed by* : R. Fraser Thomson, A. Spinks, H. W. Thompson.

- Williams, Richard Eryl**, B.Sc.Hons. (L'pool), A.I.C. British. 15, Ruislip Court, West End Road, Ruislip. Technical Officer, Postal Censorship Dept. *Signed by* : S. W. Collins, A. D. Mitchell, A. McGookin.
- † **Wood, Robinson Pearson**, M.Sc. (Dun.), F.I.C. British. The Laboratory, 161a, Bow Road, E. 3. Chief Chemist. *Signed by* : Albert E. Parkes, J. J. Fox, L. A. Jordan, R. Leslie Collett.
- (d) **Wright, James Victor**, A.C.G.I. British. "Buckhurst," 55, Links Road, Ashted. Experimental and Quality Control Chemist. *Signed by* : C. Rossall Pye, W. C. J. Ross, N. F. Holt.
- ‡ **Wright, William Graham Desmond**, A.R.T.C., A.I.C. British. Research Chemist, Ministry of Supply. *Signed by* : W. M. Cumming, F. J. Wilson, A. B. Crawford.

UNDER SPECIAL PROVISION APPERTAINING TO CANDIDATES RESIDENT ABROAD.

- Buchman, Edwin Raphael**, C.E. (Rensselaer Polytechnic), M.S. (Mass. Inst. Tech.), Ph.D. (Frankfurt), Fellow of Hopkins Univ. 1936-37. U.S. Gates and Crellin Laboratories of Chemistry, California Institute of Technology, Pasadena, California, U.S.A, Head of above. *Signed by* : B. H. Wood.
- ‡ **Randolph, Alan F.**, B.S. (Princeton), Ch.E. (Columbia), Service since 1916 in Research Dept., E.I. du Pont de Nemours & Co., U.S.A., Arlington, New Jersey, U.S.A., Office Manager, Plastics Dept. *Signed by* : Foster Dee Snell.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Student Membership two-body.

(b) Student Membership three-body.

(c) Junior Membership two-body.

(d) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between January 20th and February 17th, 1944. (This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.)

- "The properties of freshly formed surfaces. Part III. The rate of adsorption of *iso*amyl alcohol at the air-water surface." By C. C. ADDISON.
- "The structure of pyrethrolane and related compounds. Part II." By T. F. WEST.
- "Pyrolysis of xanthopinacol and related compounds." By A. SCHÖNBERG and A. MUSTAFA.
- "An easy method for the preparation of dianthraquinone. The action of pyridine on dianthranol and dianthrone." By A. SCHÖNBERG and A. F. A. ISMAIL.
- "Studies on indene derivatives. Part III. The constitution and some reactions of bisoxindone. The photochemical reduction of triketohydrindene." By A. SCHÖNBERG and R. MAUBASHER.
- "The course of autoxidation reactions in polyisoprenes and allied compounds. Part VIII. The photo-oxidation of methyl elaidate." By D. A. DUTTON.
- "Geranylamine. A Note." By D. A. SUTTON.
- "Derivatives of chondrosamine." By M. STACEY.
- "The triterpene resins and related acids. Part XVI. A preliminary examination of a major oxidation product of the β -amyryn group." By (the late) N. MOWER, J. GREEN, and F. S. SPRING.
- "The asymmetric photolysis of β -chloro- β -nitroso- $\alpha\delta$ -diphenylbutane with circularly polarised light." By S. MITCHELL and I. M. DAWSON.

March, 1944.

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, April 20th, 1944.

The Hundred and Third Annual General Meeting of the Chemical Society will be held at Burlington House on Thursday, April 20th, 1944. At 11.30 a.m. the business portion will be held: (a) To receive the Report of Council, together with Statement of Accounts and Balance Sheets for the year ended 31st December, 1943; (b) To declare the election of the President, and of a Vice-President who has not filled the office of President; (c) To receive the report of the Scrutators on the ballot for Elected Ordinary Members of Council for Constituency I (South-East England), and for Constituency IV (North-East England), and to declare the names of the Fellows duly elected; (d) To appoint Auditors for 1944.

At 12.45 for 1 p.m. Luncheon will be held at Stewart's Restaurant (corner of Piccadilly and Old Bond Street), and the price will be five shillings and sixpence (5s. 6d.) including coffee and gratuities.

At 2.30 p.m. Dr. W. H. MILLS, M.A., F.R.S., will deliver his Presidential Address entitled: "Old and New Views on some Chemical Problems."

Thursday, May 18th, 1944, at 4.30 p.m.

Tilden Lecture on "Some Aspects of the Organic Chemistry of Phosphorus and Arsenic," by Dr. F. G. Mann, F.R.I.C.

OUTSIDE LONDON.

SHEFFIELD.

Friday, May 12th, 1944, at 5.30 p.m.

Lecture on "Carbohydrates containing Nitrogen and other Elements," by Professor W. N. Haworth, D.Sc., F.R.S. To be held in the Chemistry Lecture Theatre of the University. Official Meeting of the Society.

PROCEEDINGS
OF THE
CHEMICAL SOCIETY.

**Minutes of a
SCIENTIFIC MEETING**

held in the Chemistry Lecture Theatre of The University of Leeds, on Thursday, March 2nd, 1944,
at 5.30 p.m.

The PRESIDENT, DR. W. H. MILLS, M.A., F.R.S., was in the Chair.

PROFESSOR JOHN D. I. HUGHES, Deputy Pro-Vice-Chancellor extended a welcome to the Chemical Society to which the President replied.

MINUTES.

The Minutes of the Scientific Meeting of February 17th, 1944, were taken as read and were signed.

FORMAL ADMISSION OF FELLOWS.

The following were admitted Fellows of the Chemical Society: M. G. Evans, N. Walker, David A. Hall, H. S. Raper, Miss Mabel L. Hemming, J. C. Speakman, Trefor Davies, S. Walter Butterworth, M. S. Robinson, H. H. Hodgson, L. Barker, S. Bywater, H. Richard Watson.

DISCUSSION.

A discussion on "The Mechanism of Oxidation-Reduction Reactions" was held, and was opened as follows:

PROFESSOR H. S. RAPER "The Nature of some Biological Oxidation Systems."
PROFESSOR M. G. EVANS "Electron Transfer Reactions."
Dr. W. A. WATERS "The Rôle of Free Radicals in Oxidation."
(communicated by Dr. J. W. Baker)

At 6.45 p.m. there was an interval for coffee and refreshments, and at 7.15 p.m. the discussion was resumed.

A vote of thanks to the Officers of the Chemical Society and to the Openers to the discussion, proposed by DR. H. BURTON, seconded by MR. D. HALL (Student President of the Leeds University Chemical Society), was carried with acclamation.

**Minutes of a
SCIENTIFIC MEETING**

held at Burlington House, Piccadilly, W.1, on Thursday, March 16th, 1944, at 2.30 p.m.

The PRESIDENT, DR. W. H. MILLS, M.A., F.R.S., was in the Chair, and welcomed the visitors present.

MINUTES.

The Minutes of the Scientific Meeting at Leeds on March 2nd were taken as read and were confirmed and signed.

U.S.S.R. SOCIETY FOR CULTURAL RELATIONS WITH FOREIGN COUNTRIES, MOSCOW.

The President announced that the following reply had been sent to the U.S.S.R. Society for Cultural Relations with Foreign Countries, Moscow:

23rd February, 1944.

MY DEAR COLLEAGUE,

The Council of the Chemical Society received with the greatest pleasure at their meeting last Thursday your hearty greetings for the New Year. This message of good will was announced to our Fellows at the Scientific Meeting held in the afternoon and was received with acclamation.

On behalf of the Council and Fellows of the Chemical Society I send to you and your colleagues warm thanks for your good wishes. We join with you in the earnest and confident hope that complete victory will crown our common efforts and that the Allies may work together in close harmony for the benefit of mankind.

With cordial greetings,
Yours sincerely,
W. H. MILLS,
President.

FORMAL ADMISSION OF FELLOWS.

The following were formally admitted Fellows of the Chemical Society: Bernard Lipton, P. N. Campbell, L. Hruska, F. Panzner, C. Edwards, B. Mandelik, S. P. Datta, G. D. Buckley, William Sabel, John Foley.

NINTH PEDLER LECTURE.

After a brief introduction, the PRESIDENT called on Dr. C. R. Harington, F.R.S., to deliver the Ninth Pedler Lecture, entitled: "Newer Knowledge of the Biochemistry of the Thyroid Gland."

At the conclusion of the Lecture, a vote of thanks to the Lecturer, proposed by Sir Robert Robinson, was carried with acclamation.

Minutes of a SCIENTIFIC MEETING

held at King's College, Newcastle-upon-Tyne, on Friday, March 17th, 1944, at 6 p.m.

PROFESSOR ALEXANDER FINDLAY, M.A., D.Sc., Vice-President, was in the Chair.

The RT. HONOURABLE THE LORD EUSTACE PERCY, Pro-Vice-Chancellor of the University of Durham, extended a welcome to the Chemical Society, to which the Chairman replied.

FORMAL ADMISSION OF FELLOWS.

The following were admitted Fellows of the Chemical Society: K. Schofield, C. M. Atkinson, S. Hornsby, R. H. Moses, R. Whitehead, K. R. Stainthorpe, K. H. Jack, G. A. Swan, J. Keaton, R. Wilson, H. L. Hutton, J. K. Blacklock, Norman Legg, J. H. Turnbull, Anthony Challis, D. G. Turner, E. Smith, Joseph Weiss.

TILDEN LECTURE.

The CHAIRMAN, after referring to the foundation of the Tilden Lectureship, called upon Dr. F. G. Mann to deliver his Tilden Lecture, entitled: "Some Aspects of the Organic Chemistry of Phosphorus and Arsenic."

At the conclusion of the lecture, a vote of thanks to DR. F. G. Mann, proposed by PROFESSOR G. R. CLEMO and seconded by PROFESSOR G. M. BENNETT, was carried with acclamation.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows:

	Elected.	Died
John Paul de Castro	1898	February 18th, 1944.
Mrs. Ida Smedley Maclean	1920	March 2nd, 1944.
Birkett Wylam	1921	January 15th, 1944.

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to Mr. R. L. Jenks for a contribution to mark his completion of 50 years of Fellowship, to Sir Prafulla Rây for a contribution to the Library, and to Dr. R. Raper and Mr. D. M. Honeyman for presenting publications of the Society.

ELECTION OF SCRUTATORS.

Mr. C. S. Salmon and Dr. J. W. Smith have been appointed Scrutators to examine the voting papers for Elected Ordinary Members of Council for Constituencies I and IV.

FELLOWSHIP.

The following 159 candidates were elected Fellows of the Society on March 16th, 1944.

Edward Peter James Alexander.	Philip Alford Griffin.	Henry Wilfred Paines.
William Melville Ames.	Sydney Grossman.	Geoffrey Charles Alan Peck.
James Henry Anderson.	John Ruff Gwilt.	Peter John Pengilly.
Michael George Ashley.	Eric Stephen Gyngell.	John Stephen Pierce.
Charles Maitland Atkinson.	Harold Lovell Haigh.	Waclaw de Junosza Piotrowski.
Gerald Lucien Baldit.	Reginald William Hale.	John Lanyon Beckett Pitcher.
David Beenstock.	George Edwin Hall.	Laurence Roy Pittwell.
Dennis Clifford Beese.	Geoffrey John Harding (Rev.).	Alan Percy Platt.
Robert John Benzie.	Thomas Sydney Harrison.	Cecil Augustine Johns Plummer.
Edward Eric Billington.	Herbert Kent Hartley.	Sidney Alan Polaine.
Donald Bradwell.	Alfred Hawkesley.	Alan F. Randolph.
Frederick Jack Bristow.	Ronald John Hay.	James Christie Robb.
Ernest Richard Broadfield.	Harold George Haynes.	Roy Roberts.
Thomas Andrew Bruck.	Kurt Heller.	Mervyn Desmond Rogan.
Edwin Raphael Buchman.	Harold Bernard Henbest.	Charles Edward Rowe.
Leonard Frederick Burroughs.	Hubert Ian Henstock.	John William Russell.
Alan Edward Callow.	Raymond Hesketh.	Colin Richard Jerome Ruthven.
Robert Stephen Card.	Arthur Hill.	James Roland Sanderson.
Maurice George Charlton.	William Hodgson.	Donald Thomas Sarfas.
Clifford George Childs.	James Robert Holland.	Arthur Edward Senior.
Paul Arthur Claret.	Arthur Herbert Holloway.	John Francis Short.
John Stanley Coleman.	John Philip Holmes.	John Arthur Silk.
Kenneth Frank Coles.	Daniel Clifford Howells.	Reginald Slater.
Leslie Alfred George Cooper.	John Herbert Hudson.	William Arthur Smeaton.
Eric Haydn Cornish.	Martin Luther Hughes.	Albert Smith.
Tom Leadbetter Cottrell.	John Ernest Inkster.	Clifford William Robert Smith.
William Arthur Cowdrey.	William Kelly.	Frank Edward Smith.
Peter Carlyle Crofts.	Brian Hugh Kingston.	George Fouet Smith.
Leslie Crombie.	Richard Norman Lacey.	Ronald Harvey Snoad.
Harold Roy Crumpler.	James Lawrie.	William Edward Stafford.
Leslie James Cutbill.	George Leaf.	Robert William Stobbs.
Eric Charles Beresford Dale.	Anthony Lewis Levy.	Kenneth Granville Sumner.
Gwyn Davies.	Alexander Lewin.	Thomas Templeton.
James Dobson.	Edward Joseph Lewis.	George Thornhill.
Douglas Peter Dodgson.	Harold Lewis.	Leonard George Townsend.
Bryce Douglas.	Peter Raymond Lewis.	Margaret Wood Ure.
Lancelot Whishaw Grimké Drayton.	James Lockett.	Edmond James Vernon.
Ernest Emsley.	Derek Albert Long.	John Wood Vernon.
Lewis Knight Evans.	James Robert McFarlane.	Terence Ward.
Humphrey Theodore Fawns.	Leonard McGrath.	Gordon Watson.
Alan Stanley Fern.	William White Marshall.	James Naylor Watson.
William Edwin John Field.	Enos Roy Marson.	Ralph Edward Weston.
Jack Prosser Fletcher.	William Edmund Mew.	Abraham Wexler.
John Mortimer Charleton Fox.	Leslie Gordon Miller.	John Edward Seager Whitney.
Roger Frankenburg.	Frank William Mitchell.	William Whitaker.
Hugh Belgrove Franklin.	William Brockie Mitchell.	Bertha Whitter.
George Cuthbert Gibbons.	Alexander Stuart McIntosh Munro.	Robert Bruce Whyte.
John Harrison Givens.	Dudley Charles Murray.	George Robert Wilkinson.
John Dalrymple Goldsworthy.	Lionel Okun.	Robert Alfred Wilkinson.
Archibald Robert Graham.	Andrew Orr.	Richard Eryl Williams.
Norman Grassie.	Harry Godfrey Oswin.	Robinson Pearson Wood.
Vincent Richard Gray.	Ronald Owen.	James Victor Wright.
Frank Joseph Green.	Archibald Bewick Owles.	William Graham Desmond Wright.

LIST OF APPLICATIONS FOR FELLOWSHIP.

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than May 15th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

- (a) **Alexander, Henry.** British. 11, Purley Road, Leicester. Laboratory Assistant. Signed by : H. L. Long, E. M. Stoddart, A. B. Macdonald.
- (b) **Allen, Graham George.** British. 27, Wicander Parade, Swansea. Student at University College, Swansea. Signed by : J. E. Coates, E. E. Ayling, L. E. Hinkel.
- (b) **Allen, Robert.** British. 15, Pearl Grove, Acocks Green, Birmingham, 27. Process Chemist. Signed by : C. H. Stephenson, J. Cooper Duff, J. Newton Friend.

- †**Ballantyne, George Russell**, B.Sc. (Glas.), F.R.I.C. British. 8, Cleveden Gardens, Glasgow, W. 2. Chief Chemist, Clyde Paper Co., Ltd. *Signed by* : J. L. A. Macdonald, Geoffrey D. Muir, H. Ainsworth Harrison.
- (d)**Banks, Arthur Ashdon**. British. "Seathorne," 76, Queen Street, Withernsea. Student, completing B.Sc. finals in June, 1944. Royal College of Science. *Signed by* : E. R. H. Jones, A. A. Eldridge, L. N. Owen.
- (d)**Barnes, Leslie William Desborough**, B.Sc. Special Chem. (Lond.). British. 111, London Road, Burgess Hill. S/T Air Gunner (R.A.F.). *Signed by* : J. O'Mara-Bockris, J. F. Hemingshaw, G. E. Watts.
- †**Blake, John Norman**, B.Sc. (Lond.). British. 33, Welwyn Park Road, Hull, Yorks. Chemist and Assistant Works Manager. *Signed by* : P. S. Gordon, A. Cheshire, L. C. MacMahon.
- (b)**Brickman, Sidney Woolf**. British. 146, Green Lanes, Clissold Park, London, N. 16. University Student, studying for B.Sc. Special in Chemistry, King's College, London. *Signed by* : G. M. Bennett, Gwyn Williams, C. S. Salmon.
- †**Brown, Harold Frederick**, Ph.D., B.Sc. (Glas.), A.R.T.C., A.R.I.C. English, 27, Northwick Avenue, Kenton, Harrow. Civil Servant (M. of S.). *Signed by* : J. B. Wilkinson, F. J. Wilson, John B. Cranston.
- (b)**Butler, Leslie Osgood**. British. 74, Crown Lane, Southgate, N. 14. Student. *Signed by* : E. R. H. Jones, A. A. Eldridge, L. N. Owen.
- (b)**Carter, John Anthony**. British. 3, Stoughton Drive, N. Leicester. Student at Royal College of Science. *Signed by* : H. J. T. Ellingham, A. A. Eldridge, J. A. Kitchener.
- †**Charlesworth, Percy Allan**, B.Sc.Hons. (Manc.), A.R.I.C., A.M.Inst.Pet. British. 5, Chandos Road, Heaton Chapel, Stockport. Research Chemist. *Signed by* : M. Polanyi, A. R. Todd, A. E. Gillam.
- †**Charley, Vernon Leslie Smith**, B.Sc., Ph.D. (Bristol). British. Wilder Street, Bristol, 2. Chief Chemist in Oil Refinery. *Signed by* : E. L. Hirst, T. Malkin, J. K. N. Jones.
- (d)**Clapp, John William**, Nat. Certificate (Chemistry). British. 38, Dormer Road, Eastville, Bristol, 5. Laboratory Assistant. *Signed by* : P. Pyle, Arthur Marsden, J. Bridges.
- †**Clulow, Frederick William**, B.Sc. (Lond.), Ph.D. (Leeds), A.R.I.C. English. 26, Ravenswood Avenue, West Wickham, Kent. Master in Charge of Science Dept., London School of Printing, S.E. 1. *Signed by* : G. L. Riddell, W. H. Banks, R. S. Bradley, J. Colvin.
- †**Coates, Arnold Coulson**, B.Sc. (Lond.), F.R.I.C. British. The British Aluminium Co., Ltd., Research Laboratories, Bank Quay, Warrington. Acting Laboratory Manager. *Signed by* : T. G. Pearson, H. W. L. Phillips, F. Pitts.
- (a)**Coll, Francis Joseph**, M.Sc. (Univ. College, Galway). Irish. University College, Galway. Assistant in Chemistry, Dept. at University College, Galway. *Signed by* : Thos. Dillon, Vincent C. Barry, Thos. J. Nolan.
- (b)**Coombs, Thomas Llewellyn**, Student. British. 38, Scholemoor Lane, Bradford. Student. *Signed by* : H. I. Stonehill, R. M. Barrer, C. W. Davies.
- †**Cornish, George Reginald**, B.Sc.Hons. (Lond.) (to be awarded), A.R.I.C. British. 43, East View, Chingford, E. 4. Research Chemist. *Signed by* : L. W. Turner, H. Holness, I. L. Finar.
- †**Denbigh, Kenneth George**, B.Sc., Ph.D. (Leeds), F.R.I.C. British. Chief Chemist. *Signed by* : W. H. Simmons, J. M. C. Thompson, E. L. Hirst.
- (b)**Doughty, Kenneth Francis Walter**. British. 113, Fishponds Road, S.W. 17. University Student, King's College, London. *Signed by* : G. M. Bennett, D. W. G. Style, C. S. Salmon.
- Dutt, Birendra Mohan**, B.Sc. (Patna Univ.), trained in Sugar Technology and Distillery. Hindu. c/o Prof. G. N. Bose Mullick, M.A., Vice Principal, Meerut College, Meerut (U.P.), India. Technical Assistant, Central Distillery and Chemical Works, Ltd. (under U.P. Govt. Control), Meerut (U.P.), India. *Signed by* : J. C. Ghosh, R. C. Ray, K. Venkataraman.
- †**Egan, Harold**, B.Sc. (Lond.), A.R.I.C. British. 40, Balfern Grove, Chiswick, W. 4. Analytical Chemist. *Signed by* : J. R. Nicholls, J. G. A. Griffiths, J. K. Whitehead.
- †**Elias, Philip George**, M.Sc., University of Wales (Swansea). British. 34, Tan-y-Coad, Garden Suburbs, Bury Port. Chemist in factory. *Signed by* : J. E. Coates, L. E. Hinkel, E. E. Ayling.
- †**Ettle, Gilbert William**, B.Sc.Hons. (Bristol), A.R.I.C. British. 11, Grantham Road, Norton, Stockton-on-Tees. Research Chemist. *Signed by* : S. C. Bevan, Colin Stevenson, C. W. Scaife.
- †**Evans, Hywel**, B.Sc., Ph.D. (L'pool). British. Mossend, Bellshill, Lanarkshire. Plant Manager. *Signed by* : John Manning, M. P. Applebey, A. W. Taylor.
- †**Evans, Ronald Major**, B.Sc. (2nd Class Hons. Special Chemistry, Lond.). A.R.I.C. British. 4, Springfield Street, Wigan. Chemist engaged in the supervision of manufacture. *Signed by* : A. Cooksey, J. F. J. Dippy, E. Foley.
- †**Fairclough, Fred**, Assoc.M.C.T., A.R.I.C. British. 31, Woodhouse Lane, Brighouse. Works Chemist. *Signed by* : John K. Wood, T. K. Walker, O. Rhys Howell.
- Fanutt, Frank**, F.R.I.C., A.M.I.Chem.E. British. L.M.S. Research Laboratory, London Road, Derby. Paint Technologist, L.M.S. Railway. *Signed by* : W. H. J. Vernon, Guy B. Bengough, J. J. Fox.
- Fenn, Reginald Victor**, M.A. (Cantab), Foundation Scholar of Downing College, Camb. British. 13, Carson Road, S.E. 21. Assistant Master, Dulwich College, S.E. 21. *Signed by* : Claude L. Claremont, Stanley Elliott, James P. Ogilvie.
- †**Foxcroft, Cyril Lindop**, B.Sc.Hons., M.Sc. (L'pool), A.R.I.C. British. 122, Dudley Road, Whalley Range, Manchester, 16. Metallurgist and Chemist. *Signed by* : A. McGookin, W. Doran, Francis W. Kay.
- (b)**Fraser, John Berridge**. British. 20, Glebe Avenue, Enfield. Student of Chemistry. *Signed by* : E. R. H. Jones, A. A. Eldridge, L. N. Owen.
- (b)**Frohnstorf, Raymond Stanley Max**, Inter. B.Sc. British. "Touraine," 7, Wilmer Way, Southgate, N. 14. Student at Imperial College of Science and Technology. *Signed by* : L. S. Theobald, H. J. T. Ellingham, A. A. Eldridge.
- ***Gillibrand, Maurice Ivan**, B.Sc.Hons. (Sheffield). British. 51, Malvern Road, Chesterfield. Junior Fuel Engineer, Ministry of Fuel and Power. *Signed by* : Brynmor Jones, N. J. Cartwright, R. D. Haworth, E. Gertrude Turner.
- †**Grimshaw, Francis Peter**, B.Sc.Hons. (Lond.), A.R.I.C. British. 68, Cleveleys Avenue, Scale Hall, Lancaster. Research Chemist, Lansil, Ltd. *Signed by* : John Graymore, J. Bell, Jocelyn Patterson.
- (a)**Gurney, Hubert William**. British. 41, Elmhurst Drive, Romford, Essex. Student, Imperial College, London. *Signed by* : H. J. T. Ellingham, L. S. Theobald, A. A. Eldridge.

- (d) **Hall, Richard William**, B.Sc. 2nd Class Hons. (Lond.), A.R.I.C. British. c/o Mrs. Williams, "Swerford," Marina Road, Salisbury, Wilts. Research Chemist (Experimental Officer), employed at the Chemical Defence Experimental Station, Porton, Wilts. *Signed by* : B. A. Toms, F. J. Kettel, G. S. Hartley
- † **Hargreaves, Stanley**, B.Sc.Hons. (Lond.), A.R.I.C. British. 19, Bank Hey Lane South, Blackburn, Lancs. Works Chemist (Food Factory). *Signed by* : W. Taylor, J. E. Wynfield Rhodes, R. L. Collett.
- * **Hepworth, Walter**, Inter B.Sc. (Lond. External). English. 16, Kinvel Road, New Moston, Manchester, 10. Laboratory Assistant. *Signed by* : G. M. Timmis, F. R. Basford, E. Hoggarth.
- † **Hewitt, Donald Helmsley**, M.A. (Cantab.). British. 242, Chiswick Village, W. 4. Research Manager, Messrs. Lewis Berger & Sons, Ltd. *Signed by* : Neil R. Fisk, J. Musgrave, A. H. Stevens.
- * **Hegginson, William Charles Edward**. British. Balliol College, Oxford. Student in Chemistry, Univ. of Oxford. *Signed by* : F. E. King, R. M. Lodge, Ronald P. Bell.
- † **Hill, Alfred Grenville**, A.R.I.C. British. 18, Downs Court Road, Purley, Surrey. Scientific Administrative Staff, The British Drug Houses, Ltd. *Signed by* : N. H. Philip, R. J. Boscott, E. Cooper.
- (b) **Hocknell, William**. British. London House, Fforestfach, Swansea. Honours Chem. Student, University College, Swansea. *Signed by* : J. E. Coates, L. E. Hinkel, E. E. Ayling.
- † **Holmes, Kenneth Wigfield**, B.Sc. (Lond.), A.R.I.C. British. 27, North Lodge Terrace, Darlington. *Signed by* : C. Fuller, C. S. Harper, H. Lambourne.
- † **Holmes, Leslie Henry Alfred**, B.Sc. (Lond.), A.R.I.C. British. 84, Ryecroft Avenue, Whitton, Twickenham. Professional Civil Servant (Chemist) (D.S.R. Ministry of Supply). *Signed by* : W. B. Brown, N. J. L. Megson, M. G. Church.
- (d) **Hulme, Ralph**, State Scholarship in Chemistry. British. 3, Danefield Place, Liverpool, 19. Student in University of Oxford. *Signed by* : R. M. Lodge, G. D. Parkes, F. Sherwood Taylor.
- † **Joiner, Eric Millward**, B.Sc. (Birm.), F.R.I.C., A.C.I.S. British. 15, Halton Road, Sutton Coldfield. Chemist. *Signed by* : S. R. Carter, F. W. Pinkard, Garfield Thomas.
- † **Jones, Osman**, F.R.I.C. British. Chief Chemist and Technical Adviser. *Signed by* : E. L. Hirst, J. K. N. Jones, T. Malkin, E. B. Maxted.
- (a) **Kendal, Roy**, Inter B.Sc. (Lond.). British. 49, Exeter Street, Blackburn. Student, Blackburn Municipal Technical College. *Signed by* : W. Taylor, J. Wynfield Rhodes, C. W. Davies.
- † **Klyne, William**, M.A., B.Sc. (Oxon.). British. Department of Medical Chemistry, University New Buildings, Teviot Place, Edinburgh. University Lecturer. *Signed by* : G. F. Marrian, A. F. Graham, Ian Storey.
- (b) **Kullin, Roy Powell**, Registered Student of Royal Institute of Chemistry. British. 8, Gloucester Place, Mumbles, Swansea. Chemistry Student at University College of Swansea. *Signed by* : J. E. Coates, E. E. Ayling, L. E. Hinkel.
- † **Lazell, Harold**, B.Sc. (Lond.), F.R.I.C. British. The Corner House, Weston Green, Thames Ditton. Technical Director and Works Manager, Cellon, Ltd., Kingston-on-Thames. *Signed by* : L. A. Jordan, D. R. Dupcan, S. H. Bell.
- (a) **Lofthouse, Allan**, Inter B.Sc. British. 57, Shadsworth Road, Blackburn. Student. *Signed by* : W. Taylor, J. Bell, J. Wynfield Rhodes.
- † **Lord, Kenneth Alan**, B.A. (Cantab.), A.R.I.C. English. Harpenden. Assistant Chemist, Dept. Insecticides and Fungicides, Rothamsted Exptl. Station. *Signed by* : F. Tattersfield, H. M. Davies, George W. Cooke.
- (c) **McConnell, John Alexander**, Dipl. Chemical Engineering, I.C. Schools, Lond. British. 12, Haywood Avenue, Ormeau Road, Belfast. Chemist (Chief), Belfast Corporation Gas Works. *Signed by* : A. W. Stewart, H. Graham, A. Percy Hoskins.
- † **Maggs, Francis Thomas**, M.Sc., Ph.D. (Bristol), F.R.I.C. British. *Signed by* : Elwyn Roberts, A. R. Ubbelohde, W. W. Jones.
- Menzies, William Ramsay**, B.Sc. (2nd Class Hons.), (St. Andrews), A.R.I.C. British. 5, Douglas Street, Kirkcaldy. Assist. Teacher of Science in Kirkcaldy High School. *Signed by* : John Read, John Dewar, James Y. Macdonald.
- † **Milner, Francis Highland**, B.Sc., Ph.D. (Lond.), F.R.I.C. British. 4, Erncroft Way, Twickenham. Chief Research Chemist, Macleans, Ltd. *Signed by* : G. W. Ferguson, J. Kenyon, W. McGeorge.
- (d) **Munday, Leonard**, Inter B.Sc. (Lond. External), Subsid. B.Sc. (Physics). British. 61, Tavistock Road, Linthorpe, Middlesbrough. Laboratory Assistant. *Signed by* : G. I. Higson, A. J. Prince, F. J. Wilson.
- † **Murfitt, Harry Charles**, B.Sc. 1st Class Hons. (Lond.), A.R.I.C. British. 17, Ravenscroft Drive, Chaddesden, Nr. Derby. Industrial Research Chemist. *Signed by* : William Flavell, John C. Roberts, E. O'Farrell Walsh.
- † **Newman, Anthony Armin**, Chemical Engineer and D.Sc. (Techn.), Brno. British. 6, Rossmore Court, Park Road, N.W. 1. Research Chemist. *Signed by* : Stuart M. Phillips, J. C. Drummond, Leo Ivanovszky.
- † **Norwood, Arthur Frederick Bernard**, F.R.I.C., B.Sc. (Met. Engineering), 1st Class Hons. (Lond.), A.R.S.M., Member of the Australasian Institute of Mining and Metallurgy, Associate of the Institute of Engineers, Australia. British. 165, Victoria Avenue, Claremont, Western Australia. Consulting Metallurgical and Chemical Engineer. *Signed by* : Alex. Findlay, F. P. Dunn, L. H. Lampitt.
- † **Oldham, Graham**, B.Sc.Hons. (Lond.), A.R.I.C. British. 3, Hudson Street, Loughborough. Senior Lecturer in Inorganic Chemistry, Loughborough College, Loughborough. *Signed by* : C. Whitworth, J. M. Connolly, W. S. Stevens.
- (d) **Owen, Arthur Glynn**, A.R.I.C. British. 9, Manor Road, Salford, 6. Analytical Chemist. *Signed by* : J. R. Walmsley, E. Pedley, John Graymore.
- (d) **Pawson, Robert Lewis**, B.Sc.Hons. (Dun.), A.R.I.C. British. 40, West Road, Irvine. Industrial Chemist. *Signed by* : G. R. Clemo, H. L. Riley, R. Raper.
- * **Peake, Norman Berry**, Inter. B.Sc. (studying for B.Sc.Hons.). 3 years as Assistant Chemist, Research Dept. May & Baker, Ltd. British. 6, Dorset Road, Merton Park, S.W. 19. Research Chemist, Messrs. Cellon, Ltd. *Signed by* : Royston Drew, Leslie G. Luker, D. D. Libman.
- (b) **Pearson, Jack**, Inter. B.Sc. and subsidiary (Geology) to B.Sc. Special Chemistry of University of London. British. 1016, Holderness Road, Hull. Chemistry Student at Imperial College of Science and Technology, London. *Signed by* : H. J. T. Ellingham, E. R. H. Jones, L. S. Theobald.

- †**Pellowe, Ernest Frank**, B.Sc. Hons. (Reading), A.R.I.C. British. "Inglenook," Panfield, Braintree. Chemist, Analytical and Research. *Signed by*: P. M. Fisk, H. Bassett, Jas. H. McGregor.
- (b) **Penny, David Sheldon**. British. 11, Park View Road, Heaton, Bradford. Student. *Signed by*: R. M. Barrer, H. I. Stonehill, C. W. Davies.
- (d) **Percy, Nathaniel**, B.Sc. (Glas.). British. 70, Lounsdale Drive, Paisley. Research Student, Chemistry. *Signed by*: J. W. Cook, James Bell, S. Horwood Tucker.
- †**Perkins, Norman Gray**, M.Sc. (Wales), A.R.I.C. British. 210, Cathedral, Cardiff. Civil Servant (Analytical Chemist). *Signed by*: N. T. Simmons, N. M. Cullinane, I. B. Thomas.
- ***Pine, John Edward**. British. Balliol College, Oxford. Chemistry Student, Oxford Univ. *Signed by*: F. E. King, R. M. Lodge, Ronald P. Bell.
- (a) **Pool, Michael Charles**. British. "Windyrise," Wieland Road, Northwood. Student of Chemical Engineering. *Signed by*: A. H. Cook, A. G. Pollard, M. B. Donald.
- (b) **Rattee, Ian Durham**, Inter. B.Sc. (Lond.). British. 27, West Avenue, Wallington. Student at the Royal College of Science. *Signed by*: A. A. Eldridge, H. V. A. Briscoe, H. J. T. Ellingham.
- †**Raw, Robert**, B.Sc. (Lond.), A.R.I.C. British. 158, Long Lane, Dalton, Huddersfield. Chemist. *Signed by*: Thos. A. Simmons, R. F. Goldstein, Stanley J. Green.
- Rees, Vincent Richard Mansel**, Member of the Institute of Metals, Associate Member of the Institution of Petroleum Technologists, Associate Member of the Technological Inst. of Great Britain, Associate Member of the Inst. of Engineering Technology. British. 24, Soper Grove, Basingstoke. Assistant Works Chemist and Metallurgist. *Signed by*: G. S. Hartley, E. A. Evans, M. J. Green.
- †**Roberts, David John**, A.R.I.C., Ph.C.; M.P.S., D.B.A. British. "Asonia," Bathurst Walk, Iver. Assistant Works Manager. *Signed by*: W. H. Bennett, R. J. Cole, K. Wallersteiner.
- (c) **Rutherford, William Alexander**, C.G.L.I. Finalist in Oils, Fats, and Waxes, C.G.L.I. Inter. in Paints and Varnishes. British. 162, Fairfax Avenue, Hull. Analytical Chemist to a firm of Paint Manufacturers. *Signed by*: T. Balmforth, Harry Thompson, H. J. Hodsman.
- (b) **Salter, Henry Leslie**. British. 78, Warham Road, Hornsey, N. 4. Student at the Imperial College of Science and Technology. *Signed by*: H. J. T. Ellingham, A. A. Eldridge, L. S. Theobald.
- ***Scott, Mary**, B.Sc. (Glas.). British. c/o Senior, 15, Beech Mount, Harpurhey, Manchester, 9. Chemist. *Signed by*: F. R. Basford, F. L. Rose, E. Hoggarth.
- †**Shatwell, Victor Leslie**, B.Sc. Hons. (Lond.). British. 37, Burlington Lane, Chiswick, W. 4. Works Chemist (Chief). *Signed by*: W. J. Wilson, L. P. McHatton, J. Martin A. Indhope.
- ***Smith, Kenneth Arnott**, Inter. B.Sc. (Lond.), Subsidiary B.Sc. British. 62, Priory Gardens, Manger Lane, W. 5. Research Chemist at Bayer Products, Ltd. Part time studies for B.Sc. (Special). *Signed by*: M. A. Phillips, H. Shapiro, E. de Barry Barnett.
- †**Stenhouse, Thomas**, B.Sc. (Lond.), A.R.C.S., A.R.S.M., F.R.I.C. British. St. Margarets, West Lulworth, Wareham. Retired Civil Servant. *Signed by*: T. C. J. Owenston, John G. F. Miller, F. E. Wilson.
- ***Sykes, Peter**, B.Sc. Hons. (Manc.). British. Ranmoor, 11, Herrybower Road, Broughton Park, Salford, 7. Research Student in Organic Chemistry, preparing for the Degree of M.Sc. *Signed by*: Fred Fairbrother, A. E. Gillam, A. R. Todd, J. Baddiley.
- (b) **Thomas, Alun**. British. 26, Spencer Street, Cwmaman, Aberdare, Glam. Student (at Imperial College, S.W. 7). *Signed by*: E. R. H. Jones, L. N. Owen, A. H. Cook.
- (c) **Tweedy, John Martin**, B.A. (Cantab.) (Part I Nat. Sci. Tripos, Class I). British. 2, Westfield Park, Gosforth. Post Grad. Student. *Signed by*: A. C. Egerton, M. B. Donald, L. L. Katan.
- Varcoe, Alfred Harold**, B.Sc. (Sydney Univ.), Industrial Chemist, 20 years experience in Technology of Gelatine, Glue, Animal Fats, Fertilizers, etc. British. 36, Wolseley Road, Point Piper, Sydney, N.S.W., Australia. Manufacturing Superintendent and Director of Research in the organisation of Davis Gelatine (Australia) Pty., Ltd., Sydney, N.S.W. *Signed by*: J. C. Earl, K. J. Baldick, Thomas Iredale.
- †**Ward, Joseph**, B.Sc., Ph.D. (L'pool), A.R.I.C. British. 50, Cooper Street, St. Helens. Research Chemist. *Signed by*: L. J. Burrage, L. A. Haddock, A. G. Jones.
- †**Waywell, James**, A.M.C.T., A.R.I.C. British. 35, Alington Grove, Woodcote Green, Wallington. Chemist. *Signed by*: T. Moore, L. W. Bywaters, R. Leslie Collett.
- †**Westmoreland-White, Beryl**, M.Sc. (Lond.), D.I.C., A.R.C.S., A.R.I.C. British. 70, Glendower Avenue, Coventry. Research Chemist. *Signed by*: J. L. Borthwick, J. H. Burton, H. J. Emeléus.
- †**White, Eric Newman**, A.R.I.C. British. Analytical Chemist. *Signed by*: John C. Dine, J. M. C. Thompson, K. L. Graham.
- (a) **Willson, Kenneth Christopher**. British. 20, Wimmerfield Avenue, Sketty, Swansea. Student of Chemistry, University College, Swansea. *Signed by*: E. E. Ayling, J. E. Coates, L. E. Hinkel.
- †**Wilson, George Edward**, A.H.W.C., F.R.I.C. British. "Rathgar," 19, Middleton Avenue, Littleover, Derby. Chemist (Research Dept., L.M.S. Railway Co.). *Signed by*: Robert G. M. Dakers, James Sandilands, Hugh B. Nisbet.
- †**Wilson, Robert Lawrence**. British. "Highcroft," Caledonian Road, Saviletoth, Dewsbury. Director, J. Brown & Co., Ltd., Dewsbury, Yorks. *Signed by*: G. J. Denbigh, H. Burton, J. D. Jessop, J. W. Baker.
- †**Wilson, William**, F.R.I.C. British. County Laboratory, County Buildings, Dumfries. Junior County Analyst and Additional Public Analyst. *Signed by*: John W. Hawley, I. Vance Hopper, Jas. Sword.
- (b) **Wrenn, John Arthur**, Inter. B.Sc. (Lond.). British. 60, Kendal Drive, Slough, Bucks. Student, Chemistry Honours, Univ. of London, King's College. *Signed by*: G. M. Bennett, D. W. G. Style, Gwyn Williams.
- †**Wright, William Elkington**. Has been continuously engaged for the past 15 years in developing chemical treatment methods including the processes for the phosphate-coating of metals, known industrially as Parkerizing and Bonderizing. This work has initiated original research on the chemistry of surface reactions, leading to the publication, in a series of British Patents, of new knowledge on this subject. British. 14, Manor Gardens, Hampton-on-Thames. Manager, Metal Finishing Division, The Pyrene Co., Ltd. *Signed by*: Elise G. Baker, Francis Schollick, S. Barratt.

UNDER SPECIAL PROVISION APPERTAINING TO CANDIDATES RESIDENT ABROAD.

- Chalmers, William**, M.A. (British Columbia), Ph.D. (McGill Univ.), Post Grad., Univ. of Freiburg, Germany. British (born in Scotland). c/o Western Chemical Industries, Ltd., LaPointe Pier, Vancouver, B.C., Canada. Technical Director and Director of Research, Western Chemical Industries, Ltd., Vancouver, Canada. *Signed by* : R. H. Clark, W. H. Hill.
- Mookerjea, Nandipate**, M.Sc. and B.L. (Patna Univ.). Indian. Dungal College, Jamna Talai, Ranibazar, Bikaner, India. Professor of Chemistry. *Signed by* : P. D. Swami.
- (c)**Neeman, Moshé M.**, B.Sc. (Lond.), M.Sc. (Hebrew Univ.). 3 years Technical and Research Work in Organic Chemistry mostly. Palestinian. c/o Sieff Research Institute, P.O. Box 26, Rehobot, Palestine. Chemist. *Signed by* : L. Haskelberg.
- Ryan, Leo Edward**, B.Chem.Eng. (McGill), Member American Institute of Chemical Engineers, Fellow Canadian Institute of Chemistry. Canadian. 425, St. Patrick Street, LaSalle, P.Q., Canada. Director (in charge of Manufacturing), Mallinckrodt Chemical Works, Ltd., of Canada. *Signed by* : Leon Lortie, W. D. McFarlane.
- Smith, George Ransqm**, M.Sc. (Dalhousie), Ph.D. (McGill). Canadian. Nova Scotia Agricultural College, Truro, Nova Scotia. Nova Scotia Provincial Chemist. *Signed by* : C. M. Robinson, F. C. Collier.
- †**Tinker, John M.**, B.S. (Chicago), Chemical Research, March 1st, 1919 to date. American. 106, West 42nd Street, Wilmington, Delaware (Home), Jackson Laboratory, P.O. Box 525, Wilmington, Delaware. (Business) Director Jackson Laboratory, E.I. du Pont de Nemours & Co., Wilmington, Delaware. *Signed by* : W. S. Calcott, Foster D. Snell.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Student Membership two-body.

(b) Student Membership three-body.

(c) Junior Membership two-body.

(d) Junior Membership three-body.

PAPERS RECEIVED.

List of papers received between February 17th and March 16th, 1944. (This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.)

- “The constitution of belmacamgenin and belmacamdin. Part I.” By S. Wang and H. Su.
- “Molecular compounds between amides and sulphur dioxide. A comment on Jander’s theory of ionic reactions in sulphur dioxide.” By L. C. BATEMAN, E. D. HUGHES, and C. K. INGOLD.
- “Azoxysulphones, their preparation and properties, with observations on the structure of diazotates.” By W. V. FARRAR and J. MASSON GULLAND.
- “The triterpene group. Part XI. The non-saponifiable matter of *Lactucarium germanicum*.” By J. C. E. SIMPSON.
- “The separation of 3-nitro-1-naphthylamine and 4-nitro-2-naphthylamine by maleic anhydride, and the monobromination of 4-nitro-2-naphthylamine.” By HERBERT H. HODGSON and DAVID E. HATHWAY.
- “An interpretation of the Sandmeyer reaction. Part V. The comparative behaviour of cuprous, cupric, and ferric chlorides as catalysts.” By HERBERT H. HODGSON and DOUGLAS D. R. SIBBALD.
- “Constitution of shellac. A note on the increased yield of aleuritic acid.” By B. S. GIDVANI.
- “Some basically substituted derivatives of benzimidazole and lupinane.” By G. R. CLEMO and G. A. SWAN.
- “Separation of methylated methylglycosides by adsorption on alumina. A new method for end group determinations in methylated polysaccharides.” By J. K. N. JONES.
- “Antiplasmodial action and chemical constitution. Part VII. Derivatives of quinine and *isoquinine*.” By I. S. WORK.
- “The strengths of six monocarboxylic acids in 25% aqueous acetone and 20% aqueous sucrose.” By IDRISWYN DAVEY and J. F. J. DIPPY.
- “*D*-Ribobenzimidazole. A correction.” By GEOFFREY R. BARKER, KATHLEEN R. COOKE, and J. MASSON GULLAND.
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April, 1944

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, May 18th, 1944, at 4.30 p.m.

Tilden Lecture on "Some Aspects of the Organic Chemistry of Phosphorus and Arsenic," by Dr. F. G. Mann, F.R.I.C.

OUTSIDE LONDON.

SHEFFIELD.

Friday, May 12th, 1944, at 5.30 p.m.

Lecture on "Carbohydrates containing Nitrogen and other Elements," by Professor W. N. Haworth, D.Sc., F.R.S. To be held in the Chemistry Lecture Theatre of the University. Official Meeting of the Society.

PROCEEDINGS

OF THE

CHEMICAL SOCIETY.

OFFICIAL ANNOUNCEMENTS

ALL UNION CHEMICAL SOCIETY IN MOSCOW.

The Council have sent the following message of greeting and congratulation to the All-Union Chemical Society in Moscow :

“ The President, Council and Fellows of The Chemical Society
to

“ The All-Union Chemical Society in Moscow.

“ The President, Council and Fellows of The Chemical Society send hearty greetings to their colleagues in the All-Union Chemical Society in Moscow, and best wishes for the success of the meetings held to celebrate the epoch-making discovery of the Periodic Classification of the Elements in 1869 by their illustrious fellow-countryman, Mendeléev.

“ W. H. MILLS,
“ President.”

LIST OF APPLICATIONS FOR FELLOWSHIP

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than May 15th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

- † **Alner, David John**, B.Sc. (Lond.), A.R.I.C., Industrial Research and Plant Experience, Academic Research. British. 22, Jesmond Grove, Hartburn, Stockton-on-Tees. Research Chemist. *Signed by* : M. P. Applebey, B. W. Bradford, A. J. Prince.
- (a) **Arnstein, Heinrich Rudolf Viktor**, Inter. B.Sc. (Lond.). Austrian. 80, Priory Gardens, Highgate, N. 7. Student at the Royal College of Science, South Kensington. *Signed by* : L. N. Owen, E. R. H. Jones, A. A. Eldridge.
- (b) **Atlas, Peter Nathan**, Subsid. Physics B.Sc. Studied at University College, London University, from 1940—43. British. Shangrila, 11, Garrick Avenue, Golders Green, N.W. 11. Research Chemist to Kilol, Ltd., and Technical Director of Sure-Death Pest Exterminators, Ltd. *Signed by* : J. N. E. Day, C. K. Ingold, Henry Terrey.
- * **Baker, James Albert**, Inter. B.Sc. (Lond.). British. 93, Lea Road, Northampton. Student. *Signed by* : W. Siddall, A. Wexler, D. Plews.
- * **Belshaw, Philip Leigh**, B.Sc.Hons. (Dun.). British. 72, Regent Avenue, Gosforth, Newcastle-on-Tyne, 3. Research Chemist. *Signed by* : G. A. Swan, Wesley Cocker, D. G. Turner.
- * **Biberstein, Gerhard Viktor**, B.Sc.Hons. (Lond.). German. 25, Oakwood Avenue, Boreham Wood. Research Chemist at Dufay-Chromex, Ltd. *Signed by* : J. R. Partington, M. Davis, H. D. K. Drew.
- * **Bremner, John McColl**, B.Sc.Hons. (Glas.). British. 17, Church Street, Dumbarton. Research Student (Glasgow University). *Signed by* : T. S. Stevens, S. Horwood Tucker, Andrew Kent.
- † **Byrne, John Francis**, A.R.I.C. British. Craigmere, Greenfield Avenue, Dinas Powis. Analytical Chemist. *Signed by* : W. Idris Jones, N. T. Simmons, R. Hutt.
- (d) **Carruthers, Thomas Geoffrey**, B.Sc.Hons. (Leeds), A.R.I.C. British. Egmore, 58, Hookstone Road, Harrogate. Chemical research in ceramics. *Signed by* : A. L. Roberts, Frederick Challenger, J. W. Baker, H. Burton.
- † **Carter, John Whitaker**, B.Sc.Hons. (Lond.), A.R.I.C. British. 1, Cross Flatts Terrace, Leeds, 11. Professional and Technical Civil Servant (Analytical Chemist). *Signed by* : A. Breare, Robert Gawler, Joseph M. J. Estevez.
- † **Clark, William Richard Ernest**, B.Sc. (Lond.), A.R.I.C. British. Collyhurst, Manchester, 9. Analytical Chemist. *Signed by* : W. M. Seaber, A. C. Davall, G. Lawson.
- * **Clarke, Murray Frederick**, B.Sc.Hons. (Lond.), A.R.C.S. British. The Old Hall, Vale Road, Whitby, Wirral. Research Chemist. *Signed by* : Philip J. Garner, J. H. Beynon, P. A. Winsor.
- † **Emerson, Alfred George David**, A.R.I.C. British. 13, Arlington Gardens, Chiswick, W. 4. Chemist—Technical Assistant, Industrial Water Treatment. *Signed by* : S. Stevens, D. C. Hancock, L. A. Jordan, S. H. Bell.
- † **Emsley, Dick**, B.Sc.Hons. (Leeds), A.R.I.C. British. The Warren, Spital Road, Spital, Bromborough. Plant Control Chemist. *Signed by* : George Brearley, B. D. W. Luff, P. N. Williams.
- † **Farage, Fredrick Francis**. British. St. Mary's Street, Collyhurst, Manchester, 9. General Manager, Cumming Parsons Ltd. (Food Chemists). *Signed by* : G. Lawson, A. F. Mason, K. K. Lophandvala.

- †**Farmer, Robert Harvey**, B.A. and B.Sc. (Oxon), D.Sc.Tech. (Zurich), F.R.I.C. British. 16, Lansdown Road, Sidcup. Research Chemist. *Signed by* : A. Forster, Elwyn Roberts, W. E. Garner, W. W. Jones.
- ***Giles, Mavis Evelyn**, B.Sc.Hons. (Lond.). British. 6, Dellcott Close, Welwyn Garden City. Research Chemist. *Signed by* : C. W. Picard, D. E. Seymour, S. C. Mitchell.
- Gledhill, Harold**, British. Mayfield, Argomeols Road, Freshfield, Liverpool. Chairman and General Manager General Kaputine Syndicate, Ltd. *Signed by* : G. Lawson, A. F. Mason, K. K. Lophandvala.
- (d)**Gordon, John Prebble**, awaiting A.R.C.S. and B.Sc. Degree results (Courses completed). British. 16, Audley Road, Ealing, W. 5. Student. *Signed by* : H. J. T. Ellingham, L. S. Theobald, A. A. Eldridge.
- Gray, James Ramsay**, A.R.T.C., F.R.I.C. British. 49, Southbrook Road, Lee, S.E. 12. Chief Chemist to a Tar Company. *Signed by* : S. Sugden, J. G. King, C. Montague Smith.
- †**Gregory, John Edward**, B.Sc.Hons. (L'pool), A.R.I.C., A.M.I.Chem.E. British. 15, Sibford Road, Alder Road, Liverpool, 12. Research Chemist, Messrs. J. Bibby & Sons, Ltd. *Signed by* : H. Jaspersen, Norman F. Lythgo, C. Leslie Bibby.
- †**Grudings, Donald Malcolmson**, B.Sc.Hons. (Lond.), A.R.C.S. British. 13, Sutherland Grove, Norton, Stockton-on-Tees. Research Chemist. *Signed by* : M. P. Applebey, A. J. Prince, H. N. Wilson.
- (c)**Grunberg, Erika**, B.Sc.Hons. (Lond.). Roumanian. 23, Barkston Gardens, S.W. 5. Research at King's College, London, registered as a Ph.D. Student. *Signed by* : G. M. Bennett, C. S. Salmon, Gwyn Williams.
- (b)**Hawkins, Peter Jack**, British. 99, Hall Road, Hull. Chemist. *Signed by* : L. Balmforth, E. M. Hall, Edward Chapman.
- †**Hesford, Edward**, A.R.I.C., A.M.C.T. British. 61, Moss Bank, Crumpsall, Manchester, 8. Chemist, Analytical and Investigational. *Signed by* : J. Skull, T. Harrington, R. A. E. Galley.
- Heyworth, Robert**, B.Sc.Hons. (Manc.). British. 338, Padiham Road, Burnley. Research Chemist. *Signed by* : Philip J. Garner, Harold W. Jones, J. H. Beynon.
- †**Higgins, John Charles**, B.Sc.Hons. and Ph.D. (Lond.), D.I.C. British. 8, Holly Grove, Rhosnessney, Wrexham. Analytical Chemist. *Signed by* : W. F. Bennett, M. L. Smith, F. G. Dunton.
- †**Hill, Allan**, B.Sc.Tech. (Manc.), A.R.I.C. British. No. 1 Laboratory, Courtaulds, Ltd. Research Chemist. *Signed by* : H. Paul, Ernest N. Johnson, R. L. Wormell.
- †**Hutchison, William Chalmers**, B.Sc.Hons. (Edin.), A.R.I.C. British. Daiglen, 15, Lussielaw Road, Edinburgh, 9. Research Chemist working at Royal College of Physicians Laboratory, Edinburgh. *Signed by* : E. G. V. Percival, Ernest B. Ludlam, W. O. Kermack.
- †**Janousek, Emil**, Technical University, Prague. Czechoslovakian. *Signed by* : W. G. S. Parker, G. A. Earwicker, Wm. Wardlaw.
- ‡**Jefferies, Paul**, Inter. B.Com. (Lond.). Studied Physics, Chemistry, Pure and Applied Maths. to Inter. B.Sc. standard. British. The Rossett, 1, Parsons Green Lane, Fulham, S.W. 6. Employed by Drug Importers. Attending part-time day course in entomology at Kingston Technical College and correspondence course in Chemistry, Botany, Zoology and Biology in preparation for post-war work on pyrethrum and insecticides. *Signed by* : F. Tattersfield, W. M. Seaber, A. C. Davall.
- †**Jennings, William Parker**, M.Sc. (L'pool), A.R.I.C. British. 32, Boundary Road, Carshalton. Headmaster, Wimbledon Technical School. *Signed by* : D. F. Rushman, C. R. Pye, Stuart M. Phillips.
- (c)**Leake, Olive Mary**, B.Pharm. (Lond.). British. 1, Alexandra Mansions, Beaufort Street, Chelsea, S.W. 3. Analytical Chemist. *Signed by* : Sidney G. E. Stevens, W. Davey, D. C. Garratt.
- (a)**Levin, Sarn**, Belgian. 411, Keyes House, Dolphin Square, S.W. 1. Student in Chemistry at Royal College of Science. *Signed by* : J. N. Sugden, H. J. T. Ellingham, A. A. Eldridge.
- †**Lintern, Philippe Arthur**, B.Sc. and Ph.D. (Lond.). British. Pantiles, 64, Harlsey Road, Hartburn, Stockton-on-Tees. Chemical Plant Manager. *Signed by* : R. W. Ancrum, F. R. Williams, A. Eric J. Vickers.
- †**Love, Thomas**, B.Sc. and Ph.D. (Glas.). British. 45, Reddings Road, Moxley, Birmingham, 13. Research Chemist. *Signed by* : G. Barnett, T. T. Jones, A. A. K. Whitehouse.
- †**McGill, John Heron**, A.R.I.C. British. 42, Clumber Road, Debdale Park, Gorton, Manchester, 18. Research Chemist. *Signed by* : F. S. H. Head, F. Howlett, Fredk. O. Howitt.
- †**McManus, Kenneth Stuart**, A.R.I.C. British. 22, The Crescent, Malscycwimmer, Hengold. Analytical Chemist. *Signed by* : R. Hutt, W. Idris Jones, N. T. Simmons.
- †**Maddocks, John Robert**, F.R.I.C., A.M.I.Chem.E. British. 28, Denison Road, Victoria Park, Manchester, 14. Deputy Head of Department, Dyestuffs and Organic Chemical Manufacture. *Signed by* : Alfred N. Leather, Fred. L. Sharp, Arnold Kershaw.
- Marsh, Frederick Ellison**, Higher National Cert. Chemistry, A.R.T.C. (Salford). British. c/o 41, Manor Avenue, Sale. Chemist, Research Department, Metropolitan-Vickers Elect. Co., Ltd. *Signed by* : James T. Kendall, Thomas Raine, G. A. Geach.
- †**Murfit, George**, A.R.I.C., Associateship in Ferrous Metallurgy (Sheffield). British. 40, Vernon Road, Totley Rise, Sheffield. Chief Chemist, Messrs. Wm. Jessop & Sons, Ltd. *Signed by* : D. M. Bennett, E. Gertrude Turner, Arthur W. Chapman.
- (b)**Parke, John Anthony Campbell**, H.S.C., Inter. B.Sc. British. 353, Norton Road, Stockton-on-Tees. Student, Hons. Chemistry Manchester University. *Signed by* : Colin Campbell, J. B. M. Herbert, G. N. Burkhardt.
- ‡**Pearce, Edwin Charles**, Fourth year student for A.R.I.C. British. 63, Berners Street, Lozells, Birmingham. Chemical and Metallurgical Laboratory work controlling steel heat treatment plant. *Signed by* : J. Newton Friend, J. Cooper Duff, R. J. Bithell.
- †**Plesch, Peter Hardolf**, 2nd Class Hons. Chem. Nat. Sci. Tripos M.A. (Cantab), A.R.I.C. British. Cefoil, Ltd. Research Chemist. *Signed by* : C. W. Bonnicksen, Archibald G. Clement, James S. Mofatt.
- (b)**Robins, Peter Alan**, British. 46, Fitzjames Avenue, Croydon. Student of Chemistry at Imperial College of Science and Technology, South Kensington. *Signed by* : A. H. Cook, L. N. Owen, L. S. Theobald.
- ‡**Rowe, Norman Henry**, National Cert. Chemistry, 21 years same firm, routine and research laboratory. British. Santon, 59, Zig Zag Road, Liverpool, 12. Works Chemist, non-ferrous metals, general analytical work and plant control. *Signed by* : A. E. Findley, R. R. Butler, L. J. Burrage, A. McGookin.
- (d)**Rowlands, Derek Peter**, B.Sc.Hons. (Sheffield). British. 25, Charnock Avenue, Wollaton Park, Nottingham. Analytical Chemist. *Signed by* : Brynmor Jones, E. Gertrude Turner, R. D. Haworth, Neville J. Cartwright.

- ‡**Rozsnyai, Dezider**, Chemical Engineer (Budapest). Czechoslovak. 92, Peter's Court, Porchester Road, W. 2. Research Worker and Technical Adviser. *Signed by* : A. G. Pollard, A. A. Eldridge, H. V. A. Briscoe.
- ‡**Rushworth, James**. British. Valley View, Cross Road, Keighley. Chemist. *Signed by* : F. R. Goss, J. W. Baker, H. Burton.
- (d)**Sargent, Kenneth Henry**. British. 15, Ship Street, East Grinstead. Undergraduate at Royal College of Science, Chemistry Department. *Signed by* : H. J. T. Ellingham, L. S. Theobald, A. A. Eldridge.
- †**Saunders, Sidney Walter**, B.Sc. and Ph.D. (Lond.). British. Cherwell, The Grove, Marton-in-Cleveland. Works General Manager. *Signed by* : M. P. Applebey, A. J. Prince, A. Fleck.
- (b)**Smart, Jack**. British. 22, Newtown Street, Leicester. Reading for Special B.Sc. in Chemistry at University College, Leicester. *Signed by* : A. Pilgrim, L. Hunter, A. Hickling.
- (d)**Somerville, Andrew Robertson**, B.Sc.Hons. (Glas.). British. Jessville, Cyprus Avenue, Johnstone. Chemist, *Signed by* : James Bell, J. W. Cook, F. R. Storrie.
- ‡**Stadler, August**, Ind.Dr.Tech. (Prague). Czechoslovak. 43, St. John's Avenue, Putney, S.W. 15. Research Chemist with the Aluminium Plant and Vessel Co. *Signed by* : Richard Seligman, Shuldham A. Burke, George Lewi.
- ‡**Stone, Horace Clifford**, B.Sc. (Birm.). British. Dinting Lodge, Glossop. Serving in R.A.F.V.R. as F/O. In peacetime, Schoolmaster. *Signed by* : A. E. Gillam, Edwin Young, T. H. Quibell.
- Swallow, John Francis**, B.A. and B.Sc. (Oxon). British. 24b, Lewisham Hill, Lewisham, S.E. 13. Research in Organic Chemistry. *Signed by* : W. W. Jones, T. M. Walters, A. E. Flood.
- ***Tindale, John**, M.P.S. British. 3, St. Ann's Staith, Whitby. Pharmacist. *Signed by* : J. W. Baker, H. Burton, E. Rothstein.
- d)**Whitmore, Frank Edward**, B.Sc.Hons. (Birm.). British. 48, Hall Road, Handsworth, Birmingham, 20. Research Chemist. *Signed by* : S. R. Carter, F. J. Llewellyn, W. N. Haworth.
- (a)**Whittaker, James**, Inter. B.Sc. (Lond.). British. 59, Lynton Road, Blackburn. Student. *Signed by* : W. Taylor, F. Bell, J. E. Wynfield Rhodes.
- †**Yardley, Edward Donald**, A.R.I.C. English. 20, Hertslet, Holloway, N. 7. Analytical Chemist at The British Drug Houses, Ltd. *Signed by* : Francis H. Carr, Noel L. Allport, P. G. Marshall.
- Yellin, Henry**, B.Sc. (Lond.). British (Palestinian). 28, Pandora Road, West Hampstead, N.W. 6. Organic Research Chemist, Bayer Products, Ltd. *Signed by* : H. Shapiro, R. S. Kahan, M. A. Phillips.

UNDER SPECIAL PROVISION APPERTAINING TO CANDIDATES RESIDENT ABROAD.

- ‡**Eversole, James Frank**, B.A. (Missouri), M.Sc. and Ph.D. (Iowa). American. The Laboratory of The Linde Air Products Co., East Park Drive and Woodward Avenue, Tonawanda, New York. Superintendent of Research and Development Laboratory. *Signed by* : Foster Dee Snell.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Student Membership two-body.

(b) Student Membership three-body.

(c) Junior Membership two-body.

(d) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between March 16th and April 20th, 1944. (This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.)

- "The preparation and diazotisation of *N*-methyl-*p*-phenylenediamine." By H. H. HODGSON and E. MARSDEN.
- "Photo-chemical reactions. Part VIII. Reaction of ethylenes with 1:2-diketones in sunlight. Part I. Experiments with phenanthraquinone." By A. SCHONBERG and A. MUSTAFA.
- "Experiments on the synthesis of purine nucleosides. Part V. The coupling of pyrimidine derivatives with diazonium salts. A method for the preparation of 5-aminopyrimidines." By B. LYTHGOE, A. R. TODD, and A. TOPHAM.
- "Experiments on the synthesis of purine nucleosides. Part VI. The synthesis of 9-*d*-xylosido-2-methyladenine and of 6-*d*-xylosidamino-2-methylpurine." By J. BADDILEY, B. LYTHGOE, and A. R. TODD.
- " α -Methylenic reactivity in olefinic systems. Part I. The Prins reaction with propylene." By J. W. BAKER.
- "The vibrational spectra of acrylonitrile and perbunan." By H. W. THOMPSON and P. TORKINGTON.
- "The stereochemistry of organic derivatives of phosphorus. Part I. The synthesis of acidic and basic dissymmetric tertiary phosphines. The optical resolution of phenyl-*p*-carbomethoxyphenyl-*n*-butylphosphine sulphide." By W. C. DAVIES and F. G. MANN.
- "A new reagent for primary and secondary aliphatic amines." By A. J. BIRCH.
- "Diffusion potentials and mobilities of multivalent ions. Potassium ferricyanide and ferrocyanide." By E. B. R. PRIDEAUX.
- "The kinetics of anionotropic rearrangement. Part I. The rearrangement of propenylethynylcarbinol." By E. A. BRAUDE and E. R. H. JONES.

- "The formation of azo-compounds from *o*-nitrothiophenol and its methyl ether." By C. SIMONS and L. G. RATNER.
- "On the mechanism of some ionic reactions in aqueous solutions." By J. WEISS.
- "Spectroscopic evidence for the N-H-N bond in ethyleneimine." By H. W. THOMPSON and G. P. HARRIS.
- "Preparation of some aminopyridoquinolines and their quaternary salts." By R. D. HAWORTH and W. O. SYKES.
- "Clavatin, an antibacterial substance from *Aspergillus clavatus*." By F. BERGEL, A. L. MORRISON, A. R. MOSS, and H. RINDERKNECHT.
- "Steric inhibition of resonance. Part I. The dichloronitrobenzenes." By G. THOMPSON.
- "Steric inhibition of resonance. Part II. The *m*-xylydines and N-dimethyl-*m*-xylydines." By G. THOMPSON.
- "The constituents of natural phenolic resins. Part XX. The oxidation of ferulic acid." By N. J. CARTWRIGHT and R. D. HAWORTH.
- "Evidence for the isonitrile and nitrile structures of Hantzsch's aryl *syn*- and *anti*-diazocyanides." By H. H. HODGSON and E. MARSDEN.
- "The vibrational spectra of the vinyl halides." By P. TORKINGTON and H. W. THOMPSON.
- "The reduction-potentials of acridines with reference to their antiseptic activity." By B. BREYER, G. S. BUCHANAN, and H. DUEWELL.

PROCEEDINGS
OF THE
CHEMICAL SOCIETY.

Minutes of a
SCIENTIFIC MEETING

held at the University of Sheffield, on Friday, May 12th, 1944, at 5.30 p.m.

The PRESIDENT, PROFESSOR W. N. HAWORTH, D.Sc., F.R.S., was in the Chair.

PROFESSOR J. I. O. MASSON, M.B.E., D.Sc., F.R.S., Vice-Chancellor of the University, extended a cordial welcome to the Society, and the PRESIDENT, in reply, expressed the pleasure the Officers and Council felt in receiving the invitation to visit Sheffield; he then welcomed the visitors present.

FORMAL ADMISSION OF FELLOWS.

The following were admitted Fellows of the Chemical Society: Dorothy M. Bennett, Arthur W. Chapman, Thomas B. Smith, Alex. H. Lamberton, R. E. Davies, Robert C. Brian, Colin Lindley, D. Woodcock, J. P. Fletcher, Neville J. Cartwright, W. O. Sykes, Neville Smith, T. S. Harrison, and Brynmor Jones.

LECTURE.

The PRESIDENT then delivered his lecture on "Carbohydrates containing Nitrogen and other Elements."

At the conclusion of the lecture, a vote of thanks to the President was proposed by PROFESSOR R. D. HAWORTH, seconded by Mr. N. J. CARTWRIGHT, and carried with acclamation.

Minutes of a
SCIENTIFIC MEETING

held at Burlington House, Piccadilly, W. 1, on Thursday, May 18th, 1944, at 4.30 p.m.

The PRESIDENT, PROFESSOR W. N. HAWORTH, D.Sc., F.R.S., was in the Chair, and welcomed the visitors present.

MINUTES.

The minutes of the Scientific Meetings of March 16th and 17th, 1944, and of the Annual General Meeting on April 20th, 1944, which had been circulated, were taken as read and were confirmed and signed. The minutes of the Scientific Meeting on May 12th were read and were confirmed and signed.

FORMAL ADMISSION OF FELLOWS.

The following were formally admitted Fellows of the Chemical Society: Valentin S. Rawson, Chas. A. McDowell, R. Anker, H. M. Davies, H. G. Haynes, D. H. Widocks, J. A. Silk, J. L. B. Pitcher, L. R. Pittwell, J. W. Vernon, Paul Winter, H. B. Henbest, A. L. Levy, F. G. Holliman, and Miss S. J. Patterson.

TILDEN LECTURE.

After a brief introduction, the PRESIDENT called on Dr. F. G. Mann to deliver his Tilden Lecture entitled: "Some Aspects of the Organic Chemistry of Phosphorus and Arsenic."

At the conclusion of the lecture, a vote of thanks to the Lecturer, proposed by Professor J. W. Cook, was carried with acclamation.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
William Martin Blanchard	1934	December 21st, 1942.
David Gwynne Davies	1932	April 12th, 1944.
John Simpson Ford	1889	March 27th, 1944.
Henry Winston Harper	1899	August 28th, 1943.
Frederick Richard Hollman.....	1891	March 13th, 1944.
Ernest John Parry	1892	April 30th, 1944.
John Keith Roberts	1935	April 26th, 1944.

Killed in Air Raid.

Robert Owen Jones	1941	February 23rd, 1944.
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CONGRATULATIONS.

The congratulations of the Council have been sent to the following :

(a) On completing 50 years of Fellowship on May 3rd, 1944 : Mr. Robert W. Buttemer, Mr. George H. Gabb, Professor Matthew A. Parker, Mr. Edwin Terry.

(b) On election to Fellowship of the Royal Society on March 16th, 1944 : Mr. Ronald P. Bell, Sir Jack Drummond, Professor R. D. Haworth, Dr. William O. Kermack, Professor Guy F. Marrian, Professor Michael Polanyi.

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to Messrs. S. Hoare Collins, T. Heap, J. A. Kitchener, H. E. Stevenson and Mrs. O. D. White, for gifts of publications of the Society, to Mr. F. C. Smith for a contribution to the Publications Fund, and to Messrs. Genatosan, Ltd., who have entered into a deed of covenant to contribute £25 a year to the Library for seven years.

LOCAL REPRESENTATIVE FOR LEEDS.

Dr. F. R. Goss has accepted the invitation of the Council to act as Local Representative for Leeds.

RESEARCH GRANT.

The Council have made a grant of £10 to Mr. E. L. Shimmin (Leeds University) for a research on "Substitution products of simple γ -pyrones."

HARRISON MEMORIAL PRIZE, 1944.

In accordance with the Trust Deed governing the Harrison Memorial Fund, the Selection Committee consisting of the Presidents of the Chemical Society, the Royal Institute of Chemistry, the Society of Chemical Industry and the Pharmaceutical Society, will proceed to make an award of the Harrison Memorial Prize in December 1944, subject to the condition that the Selection Committee shall be of opinion that there is a candidate of sufficient distinction to warrant an award of the Prize.

The Prize, not exceeding £150, will be awarded to the chemist of either sex, being a natural born British subject and not at the time over thirty years of age, who, in the opinion of the Selection Committee, shall, during the previous five years, have conducted the most meritorious and promising original investigations in Chemistry and published the results of those investigations in a scientific periodical or periodicals.

Applications, five copies of which must be submitted, should contain the following information :

- (a) Name (in full).
- (b) Age (Birth certificate must accompany application).
- (c) Degrees (name of University where obtained).
- (d) Other qualifications.
- (e) Experience.
- (f) Titles of published papers, with authors' names, including full references to publication.
- (g) Where research was carried out.
- (h) Testimonials and references.
- (i) Any other particulars bearing on the application.

The Selection Committee is prepared to consider applications, nominations, or information as to candidates eligible for the Prize. Any such communication must be received by :

The President,
The Chemical Society,
Burlington House,
Piccadilly,
London, W.1.

not later than Friday, December 1st, 1944. Candidates must not be more than 30 years of age at this date.

APPEAL FOR PUBLICATIONS OF THE SOCIETY.

To assist in building up reserve stocks of publications that will be required to replace those lost by libraries, institutions and individuals as the result of enemy action, the Council will welcome gifts of publications of the Society from Fellows who do not need to retain them for reference purposes. The Council would particularly welcome gifts of the *Journal* for January 1943 and of the *Annual Reports* for 1942.

HONORARY FELLOWS.

The following letters have recently been received from Professor Nikolai Semenov and Professor Nikolai D. Zelinsky, who were elected Honorary Fellows of the Society on April 15th, 1943 :

" DEAR SIR,

" Please allow me to express my sincere thanks for the high honour bestowed upon me in being elected Honorary Fellow of the Chemical Society, one of the most authoritative organisations in world science.

" My election to the Chemical Society is a source of particular pleasure in view of the fact that for a number of years close ties of friendly scientific work and noble rivalry in disclosing the secrets of chemical dynamics have brought me into close contact with many English scientists.

" Yours truly,
N. SEMENOV."

" MY DEAR SIR,

" The letter by which you informed me of my being elected by the Council an Honorary Fellow of the Chemical Society reached me in October, but until now I was unable to answer it having been ill throughout the autumn and part of the winter.

" I wish to express to the Council and to you personally my deep gratitude for such a high appreciation of my scientific work.

" I consider it a great honour to be among the Honorary Fellows of a society so highly renowned for its scientific deserts.

" With cordial greetings.

" I am, my dear Colleague,"

" Yours sincerely,
" N. D. ZELINSKY."

FELLOWSHIP.

The following 163 candidates were elected Fellows of the Chemical Society on May 18th :

Henry Alexander.	John Francis Byrne.	Harold Egan.
Graham George Allen.	Thomas Geoffrey Carruthers.	Philip George Elias.
Robert Allen.	John Anthony Carter.	Alfred George David Emerson.
David John Alner.	John Whitaker Carter.	Dick Emsley.
Heinrich Rudolf Viktor Arnstein.	William Chalmers.	Gilbert William Ettle.
Peter Nathan Atlas.	Percy Allan Charlesworth.	Hywel Evans.
James Albert Baker.	Vernon Leslie Smith Charley.	Ronald Major Evans.
George Russell Ballantyne.	John William Clapp.	James Frank Eversole.
Arthur Ashton Banks.	William Richard Ernest Clark.	Fred Fairclough.
Leslie William Desborough Barnes.	Murray Frederick Clarke.	Frank Fancutt.
Philip Leigh Belshaw.	Frederick William Clulow.	Robert Harvey Farmer.
Gerhard Viktor Biberstein.	Arnold Coulson Coates.	Reginald Victor Fenn.
John Norman Blake.	Francis Joseph Coll.	Cyril Lindop Foxcroft.
John McColl Bremner.	Thomas Llewellyn Coombs	John Berridge Fraser.
Sidney Woolf Brickman.	George Reginald Cornish.	Raymond Stanley Max Frohnsdorff.
Harold Frederick Brown.	Kenneth George Denbigh.	Mavis Evelyn Giles.
Leslie Osgood Butler.	Kenneth Francis Walter Doughty.	Maurice Ivan Gillibrand.
	Birendra Mohan Dutt.	

- John Prebble Gordon.
 James Ramsay Gray.
 John Edward Gregory.
 Francis Peter Grimshaw.
 Donald Malcolmson Grudgings.
 Erika Grunberg.
 Hubert William Gurney.
 Richard William Hall.
 Stanley Hargreaves.
 Peter Jack Hawkins.
 Walter Hepworth.
 Edward Hesford.
 Donald Helmsley Hewitt.
 Robert Heyworth.
 John Charles Higgins.
 William Charles Edward Higginson.
 Alfred Grenville Hill.
 Allan Hill.
 William Hocknell.
 Kenneth Wigfield Holmes.
 Leslie Henry Alfred Holmes.
 Roy Powell Hullin.
 Ralph Hulme.
 William Chalmers Hutchinson.
 Emil Janousek.
 Paul Jefferies.
 William Parker Jennings.
 Eric Millward Joiner.
 Osman Jones.
 Roy Kendal.
 William Klyne.
 Harold Lazell.
 Olive Mary Leake.
 Sarn Levin.
 Philippe Arthur Lintern.
 Allan Lofthouse.
 Kenneth Alan Lord.
- Thomas Love.
 John Alexander McConnell.
 John Heron McGill.
 Kenneth Stuart McManus.
 John Robert Maddocks.
 Francis Thomas Maggs.
 Frederick Ellison Marsh.
 William Ramsay Menzies.
 Francis Highland Milner.
 Nandipate Mookerjea.
 Leonard Munday.
 George Murfitt.
 Harry Charles Murfitt.
 Moshé M. Neeman.
 Anthony Armin Newman.
 Arthur Frederick Bernard Norwood.
 Graham Oldham.
 Arthur Glynne Owen.
 John Anthony Campbell Parke.
 Robert Lewis Pawson.
 Norman Berry Peake.
 Edwin Charles Pearce.
 Jack Pearson.
 Ernest Frank Pellowe.
 David Sheldon Penny.
 Nathaniel Percy.
 Norman Gray Perkins.
 Peter Hardolf Plesch.
 Michael Charles Pool.
 John Edward Prue.
 Ian Durham Rattee.
 Robert Raw.
 Vincent Richard Mansel Rees.
 David John Roberts.
 Peter Alan Robins.
 Norman Henry Rowe.
 Derek Peter Rowlands.
- Dezider Rozsnyai.
 James Rushworth.
 William Alexander Rutherford.
 Leo Edward Ryan.
 Henry Leslie Salter.
 Kenneth Henry Sargent.
 Sidney Walter Saunders.
 Mary Scott.
 Victor Leslie Shatwell.
 Jack Smart.
 George Ransom Smith.
 Kenneth Arnott Smith.
 Andrew Robertson Somerville.
 August Stadler.
 Thomas Stenhouse.
 Horace Clifford Stone.
 John Francis Swallow.
 Peter Sykes.
 Alun Thomas.
 John Tindale.
 John M. Tinker.
 John Martin Tweedy.
 Alfred Harold Varcoe.
 Joseph Ward.
 James Waywell.
 Beryl Westmoreland-White.
 Eric Newman White.
 Frank Edward Whitmore.
 James Whittaker.
 Kenneth Christopher Willson.
 George Edward Wilson.
 Robert Lawrence Wilson.
 William Wilson.
 John Arthur Wrenn.
 William Elkington Wright.
 Edward Donald Yardley.
 Henry Yellin.

LIST OF APPLICATIONS FOR FELLOWSHIP

(*Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than June 12th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.*)

- † **Abbott, Leslie Stephen**, B.Sc. (Hons. (Bristol), A.R.I.C. British. c/o Brabyn's House, Station Road, Marple. Research Chemist with Imperial Chemical Industries, Ltd. *Signed by* : H. D. Springall, E. B. Maxted, E. L. Hirst.
- † **Adams, Henry**, A.R.I.C. British. 112, Sutton Passey's Crescent, Wollaton Park, Nottingham. Analytical Chemist. *Signed by* : D. O. Jordan, G. R. Barker, John C. Roberts, E. B. R. Prideaux.
- † **Atherley, Samuel Walter**, B.Sc. (Lond.), F.R.I.C. British. 49, Kingsway Road, Leicester, Works Director. *Signed by* : C. Whitworth, J. M. Connolly, G. Malcolm Dyson.
- (b) **Attenburrow, John**, B.Sc. (Lond.), A.R.C.S. British. c/o Glaxo Laboratories Ltd., Greenford. Research chemist at Glaxo Laboratories, Ltd. *Signed by* : F. A. Robinson, B. Arthur Hems, A. L. Bacharach.
- (d) **Bach, Brian Boughton**, Inter. B.Sc. (Lond.). British. 47, Mossfield Road, King's Heath, Birmingham, 14. Chemical analyst. *Signed by* : K. Strauss, J. Cooper Duff, J. N. Friend.
- (d) **Banks, Alan Marshall**, Inter. B.Sc. (Lond.), 1939, H.S.C. Physics and Chemistry main Subjects, 1937 and 1938. British. Clifton Villa, 93, Junction Road, Andover. Formerly a Chemist (Asst. III) in the Chemical Inspection Dept., Ministry of Supply, now a Sick Berth Attendant, R.N. (4 years service). *Signed by* : Arthur I. Vogel, G. H. Jeffery, C. A. Perry.
- † **Begley, Laurence Jordan**, B.Sc. (Leeds). British. Ditton, Widnes. Head Chemist with a firm of glue, gelatine and animal fats manufacturers. *Signed by* : G. J. Pritchard, J. G. Cockburn, K. T. Chapman.
- † **Boot, Harold Laurence Gascoigne**, B.Sc. (Lond.), A.R.I.C., Assoc. M.Inst. Gas.E. British. 3, Westfield Park South, Bath. Chief Chemist, Bath Gas Company. *Signed by* : Arthur Marsden, Allan C. Monkhouse, Harold F. Barke.
- † **Breaden, Thomas William** (M.Sc. Dublin), A.R.I.C. Irish. Wynberg, Stradbroke, Monkstown, Dublin. General Manager, E. McCormack & Co., Soap Manufacturers. *Signed by* : Thomas J. Nolan, A. G. G. Leonard, T. S. Wheeler.
- (d) **Crofts, John Bruce**, B.Sc. (Lond.), A.R.I.C. British. 180, St. Leonard's Road, East Sheen, S.W. 14. Chemist for Ministry of Supply. *Signed by* : W. C. J. Ross, F. J. Kettel, W. A. Waters.
- † **Cumberland, Frank Charles**, Ph.C., A.R.I.C., M.P.S. British. Edenholme, 10, Willow Trees Drive, Lammack, Blackburn. Works Chemist (supervising manufacture of medicinal preparations). *Signed by* : W. Taylor, G. Watson, J. E. Wynfield Rhodes.

- †**Dalley, Paul**, B.Sc.Hons. (Leeds), A.R.I.C. British. 20, Woodyear Road, Bromborough, Wirral. Plant Control and Research Chemist. *Signed by* : George Brearley, Arnold T. Peters, J. W. Baker, Frederick M. Rowe, W. A. Wightman.
- †**Davies, Rees Haydn**, B.Sc. (Wales). British. Derwen House, Rhyd-y-Fro, Pontardawe. Assistant Lecturer at University College of Swansea. *Signed by* : J. E. Coates, L. E. Hinkel, E. E. Ayling.
- †**Fairbrother, Thomas Harold**, M.Sc. (Manc.), F.R.I.C. British. 17, Liskeard Gardens, Blackheath, S.E. 3. Director and Chief Chemist, McDougalls, Ltd. *Signed by* : E. H. Rodd, P. Chorley, A. Shepherdson.
- (c)**Freestone, Philip Harry**, B.Sc.Hons. (Lond.), A.R.I.C. British. Daisy Bank, Hadfield Road, Hadfield, Manchester. Industrial Chemist. *Signed by* : John P. Allchin, Malcolm Crawford, H. L. Long.
- (d)**French, Keith Harold Vernon**, A.R.I.C. British. 69, Queens Avenue, Finchley, N. 3. Research Chemist. *Signed by* : W. H. Hoffert, J. D. Davies, D. H. Richardson.
- †**Gervis, Thomas Proctor**, B.Sc. (Lond.), A.R.I.C. British. 21, The View, Roundhay, Leeds, 8. Analytical Chemist. *Signed by* : Joseph M. J. Estevez, Ronald Wood, J. W. Baker.
- ***Glaser, George**, B.Sc.Hons. (L'pool). 93, Mulgrave Street, Liverpool, 8. Research for the degree of Ph.D. at the Department of Organic Chemistry, University of Liverpool. *Signed by* : F. Haworth, A. McGookin, Francis W. Kay.
- †**Graesser-Thomas, Frank Robert**, M.Sc. (L'pool). British. Curzon Park, Chester. Managing Director of Graesser Salicylates, Ltd. *Signed by* : Harold I. Price, A. McGookin, Frances W. Kay.
- Hart, Horace Beament James**, 1st Class Certificate Higher Grade Gas Engineering (Institution of Gas Engineers). British. 17, Netherhall Road, Baildon. Deputy Gas-Engineer and Manager to the Shipley Urban District Council Gas Department. *Signed by* : Thos. E. Hubbard, Thos. Haworth, S. Tomlinson Jones.
- †**Hartwell, Edward John**, Reading for the Final Honour School of Chemistry, Oxford. British. St. John's College, Oxford. Student. *Signed by* : H. W. Thompson, Ronald P. Bell, L. E. Sutton.
- Haward, Robert Nobbs**, B.A., Ph.D. (Cantab.). British. Colmore Adhesives, Ltd., Team Valley Trading Estate, Gateshead-on-Tyne. Research Chemist. *Signed by* : Joseph Weiss, Richard Raper, G. R. Clemo.
- Heymann, Eric**, Ph.D. (Frankfurt), D.Sc. (Melbourne). British. 478, St. Kilda Road, Melbourne, S.C. 2. Senior Lecturer in Physical Chemistry at the University of Melbourne. *Signed by* : J. S. Anderson, W. Davies, E. J. Hartung.
- †**Holland, Hubert Ernest**, 5 yrs. Parke Davis & Co., 4 yrs. B.D.H., 25 yrs. present position. Member, Society of Chemical Industry, Member, British Association of Chemists. British. 51, Lynwood Road, Ealing, W.5. Chief Chemist, Hayes Cocoa Co., Ltd. *Signed by* : E. C. C. Baly, A. E. Dunstan, D. M. Freeland.
- (c)**Hollis, Gordon Latham**, B.Sc. (Sheffield). British. 12, Westbourne Grove, Barnsley. Research Chemist. *Signed by* : G. B. Pickering, E. B. Johnson, C. M. C. Dorkin.
- †**Houghton, John Venables**, B.Sc.Hons. (Lond.). British. 8, Harman Drive, N.W. 2. Pilot Officer, R.A.F., formerly works chemist in a Royal Gunpowder Factory for 7 years. *Signed by* : Henry Terrey, H. G. Poole, C. K. Ingold.
- ***Jagger, Doreen May**, B.Sc.Hons. (Leeds). British. Mervale, Blairsville Gardens, Bramley, Leeds. Studying for Diploma in Education. *Signed by* : W. A. Wightman, J. W. Baker, Frederick Challenger.
- †**Johnson, Alfred Henry Osborne**, B.Sc. (Lond.), A.R.I.C., A.M.I.Chem.E. British. 26a Hervey Road, Blackheath, S.E. 3. Experimental Officer, Ministry of Supply. *Signed by* : J. W. Roe, Fred Hudswell, Frank Holden.
- †**Kay, Arthur William**, B.Sc.Hons. (Lond.). British. 23, The Riding, Kenton, Newcastle-on-Tyne, 3. Director and Works Manager of Scott & Turner, Ltd., Pharmaceutical & Food Manufacturers. *Signed by* : B. C. L. Summers, W. Gordon Carey, J. H. Robson.
- King, Harold Campbell**, B.Sc. (Lond.), A.R.I.C. British. 32, Phroso Road, Worthing. Research Chemist. *Signed by* : J. N. Agar, G. E. Watts, T. J. Morrison.
- †**Kroch, Falk Heinz**, Ph.D. (Berlin). German (Refugee from Nazi oppression). Burford, Broad Oak Road, Worsley. Research Chemist and Company Director. *Signed by* : Kenneth Tomlinson, E. Marshall Meade, A. Wolf.
- ***Lerrigo, Roy William**, B.Sc. (Lond.), A.R.C.S. British. The Homestead, Hooton, Wirral. Organic Research Chemist. *Signed by* : Denis H. Marrian, Philip J. Garner, P. A. Winsor.
- (a)**Mallows, Leslie Albert Stanley**. General and Higher School Certs. (University of London). British. 47, Sketty Park Road, Sketty, Swansea. Student (proceeding to Honours Degree in Chemistry). *Signed by* : J. E. Coates, L. E. Hinkel, E. E. Ayling.
- †**Marmoy, Frank Bentley Ridgen**, A.R.I.C. British. 1, Ray Drive, Maidenhead. Research Chemist (Analytical) employed by Ashe Laboratories, Limited. *Signed by* : Wm. E. Gaunt, S. J. Watson, R. Leslie Collett.
- †**Martin, Clifford**, B.Sc.Hons. (Sheffield). British. 2, The Crescent, Ketton, Stamford. Analytical Chemist with a Cement Company. *Signed by* : Brynmor Jones, J. C. Speakman, E. Gertrude Turner.
- (d)**Menzies, John**, B.Sc. (Glas.), A.R.T.C. British. The Garden Lodge, Seamill Home, West Kilbride. Works Chemist. *Signed by* : Henry G. A. Anderson, A. B. Crawford, Ezra Golombok.
- Messinger, Charles Samuel**, B.A. (Lafayette). U.S.A. Cosmic Crayon Co., Ltd., Bedford. Company Director. *Signed by* : W. M. Seaber, L. A. Jordan, A. C. Davall, S. H. Bell.
- (d)**Mitchell, Ralph Edward**, B.Sc. (Lond.), A.R.I.C. British. 4, Radley Road, N. 17. Chemist with W. J. Bush & Co., Ltd. *Signed by* : Percy C. C. Isherwood, H. W. Vernon, A. J. M. Bailey.
- (d)**Moses, Bernard Cecil**, B.Sc. (Lond.), A.R.I.C. British. 67, Sanghall Massie Road, Upton, Wirral. Analytical Chemist at Messrs. Lever Bros., Ltd. *Signed by* : A. E. Findley, R. R. Butler, Frank W. Mitchell.
- ***Moy, John Arthur Edgar**, B.A. and B.Sc. (Oxon), A.R.I.C. British. Mindaroo, Garrad's Road, Streatham, S.W. 16. Assistant Chemist, Anglo-Iranian Oil Co., Ltd. *Signed by* : Ronald P. Bell, Richard Barrow, R. M. Lodge.
- Nicholls, James Harold**, B.A. (Oxon), applicant for B.Sc. British. 38, Tewkesbury Avenue, Davyhulme, Manchester. Research Chemist. *Signed by* : R. M. Lodge, A. G. Catchpole, J. O. Cutter.
- †**Peerman, Harold Leslie**, B.Sc.Hons. (Manc.). British. 115, Heaton Road, Heaton Norris, Stockport. Research and Process Chemist at Chas. Lowe & Co. *Signed by* : Colin Campbell, J. B. M. Herbert, H. T. Openshaw.
- †**Platt, Benjamin Stanley**, B.Sc.Hons., M.Sc., Ph.D., M.B., Ch.B.Hons. (Leeds). British. National Hospital, Queen Square, W.C. 1. Member of Scientific Staff of the Medical Research Council. *Signed by* : H. Raistrick, A. L. Bacharach, J. H. Birkinshaw.

- †**Pugh, Clifford**, B.Sc.Hons. (Lond.), A.R.I.C. British. Flanders House, Panfield Lane, Braintree. Research Chemist for Messrs. Courtaulds, Ltd. *Signed by* : Jas. H. McGregor, T. J. Drakeley, F. Courtney Harwood, R. F. West.
- Rabnott, Ronald Alfred**, Subsidiary subject (Physics) for a special degree in Chemistry (not yet taken owing to war conditions), 13 years experience in analytical Chemistry. British. 25, Grafton Road, Worcester Park. Partner in Salamon & Seaber (Consulting-and Analytical Chemists). *Signed by* : W. M. Seaber, A. C. Davall, Percy Edgerton.
- Reed, Ronald Arthur**, B.Sc. (Lond.), F.R.I.C. British. 34, The Woodlands, Hither Green, S.E. 13. Research Chemist. *Signed by* : W. Johnson, E. de Barry Barnett, R. Leslie Collett.
- (d)**Roberts, Fred**, B.Sc.Hons. (Leeds), A.R.I.C. Post Graduate Dip. in Fuel Tech. (Leeds). British. 28, St. Clements Road, Harrogate, Junior Fuel and Combustion Engineer to the Ministry of Fuel and Power. *Signed by* : J. W. Baker, Frederick Challenger, W. A. Wightman.
- †**Ronca, James Francis**, A.R.C.S., A.R.I.C., Assoc. Member Instn. Automobile Engineers, Fellow Inst. Fuel. English. 22, The Downs, Wimbledon, S.W. 20. Retired (late Director of Gas Administration, Board of Trade). *Signed by* : F. H. Garner, H. Hollings, E. W. Smith.
- (c)**Ross, Douglas Macintosh**, B.Sc.Hons. (Glas.). British. 12, Glamis Avenue, Broom Estate, Newton Mearns. Research Chemist. *Signed by* : J. W. Cook, S. Horwood Tucker, C. Buchanan.
- Salamé, Lawrie William Frederick**, B.Sc. (Lond.), A.R.C.S. British. Research Chemist. *Signed by* : Alan A. Goldberg, H. S. Turner, W. Kelly.
- †**Scoffam, Charles Edward**, A.R.I.C. British. 185, Aubrey Road, Small Heath, Birmingham, 10. Research Chemist. *Signed by* : T. T. Jones, J. Sheridan, E. G. K. Pritchett..
- †**Service, William Leith**, B.Sc. (Lond.). British. 19, Hope Street, Blackhill. Analytical Chemist to Consett Iron Co., Ltd. *Signed by* : E. A. Bowes, Michael Staples, J. Stewart Cook.
- †**Shawarbi, Mahmoud Yousef**, B.Sc. (Wales), Ph.D. (Lond.), D.I.C. Egyptian. 50, Alexandra Court, Wembley Park. Lecturer, Cairo University, on leave, Research Worker at the Imperial College. *Signed by* : A. G. Pollard, A. A. Eldridge, H. J. T. Ellingham.
- Smith, Stanley Walter**, B.Sc. (Bristol). British. The Lodge, 10, Priory Street, Cheltenham. Chemist. *Signed by* : E. B. Maxted, T. Malkin, H. D. Springall, J. K. N. Jones.
- †**Stanton, Ronald Ernest**. English. 63, Maybank Avenue, Elm Park, Romford. Analytical Chemist. *Signed by* : W. R. Burnham, R. F. Bromley, F. L. Allen.
- (b)**Stewart, George Alexander**, Inter. B.Sc. (Lond.). British. 16, Irving Place, Blackburn. Student, Blackburn Municipal Technical College. *Signed by* : W. Taylor, J. E. Wynfield Rhodes, K. A. Williams.
- (c)**Stewart, William Gray**, B.Sc. (Glas.), A.R.I.C. British. Willdene, 4, Dunchurch Road, Oldhall, Paisley. *Signed by* : J. W. Cook, F. R. Storrie, James Bell.
- (b)**Stokes, John Huntley George**. British. 260, Moor Green Lane, Moseley, Birmingham, 13. Technician, Ministry of Health. *Signed by* : John P. Allchin, J. Newton Friend, J. Cooper Duff.
- Stubbs, Alan**, A.M.Tech.I. (Gt. Brit.). British. 20, Davenport Street, Tunstall, Stoke-on-Trent. Royal Navy. Previous occupation, Control chemist, assistant chemical engineer. *Signed by* : F. J. Bolton, E. G. V. Percival, W. L. Glen.
- Turnbull, Nicholas Hume**, M.Sc. (Melbourne). 10, St. Georges Road, Toorak, S.E. 2, Melbourne, Victoria. Research Chemist, Nicholas Pty., Ltd., pharmaceutical manufacturers. *Signed by* : Adrien Albert, W. Davies, H. H. Hatt.
- ***Vernon, Charles Albert**, B.Sc.Hons. (Lond.), A.R.I.C. British. Experimental Officer, Ministry of Supply. *Signed by* : W. M. Wolf, A. Audsley, D. E. Hughes.
- †**Walker, John**, A.R.I.C. British. Castledene, 16, Lynwood Grove, Audenshaw, Manchester. Chemist, The Clayton Aniline Co. *Signed by* : G. Spencer, J. Lockett, D. S. Stephens.
- (a)**Waller, John George**. British. 10, Mereworth Drive, Plumstead, S.E. 18. Student, completing final year for degrees. *Signed by* : L. N. Owen, E. R. H. Jones, A. H. Cook.
- †**Ward, Frank**, A.R.I.C. English. 2, Bowland Avenue, Gorton, Manchester, 18. Analytical Chemist. *Signed by* : G. Spencer, D. S. Stephens, C. G. Childs.
- Ward, Robert Vincent**, Registered Dentist. Passed 1st and 2nd L.D.S. exams. of Liverpool University, Scholarship in Mechanical Dentistry, 1927, Prizeman in operative Dental Surgery, 1927, passed in Chemistry and Physics in 1st Dental at Liverpool University, also Member of the Society of Dental Anaesthetists, 1943. British. Main Street, Ballymoney, Co. Antrim. Dentist. *Signed by* : Thomas J. Nolan, A. G. G. Leonard, A. O'Farrelly.
- †**Weir, Walter Jackson**, A.R.I.C. British. Hermiston, 16, West Doura Avenue, Saltcoats. Managing Chemist. *Signed by* : D. Routledge, Peter F. Ward, R. Leslie Collett.
- (b)**Whalley, Edward**. British. Claremonte, Oldfield Avenue, Darwen. Student. *Signed by* : A. A. Eldridge, L. S. Theobald, H. J. T. Ellingham.
- ***White, Alan Gilbert**, B.Sc.Hons. (Bristol). British. 48, Fanshawe Crescent, Ware. Assistant Research Chemist to Messrs. Allen & Hanburys, Ltd. *Signed by* : J. Kenyon, N. Jones, L. A. Wiseman, T. Malkin, N. H. Woodbury, H. D. Springall.
- †**White, Edmund Dennis**, B.Sc.Hons. (Manc.). British. 67, Thursby Road, Burnley. Research Chemist to I.C.I. *Signed by* : F. S. Spring, A. R. Todd, Colin Campbell.
- †**Wishart, George**, A.R.I.C., A.H.W.C., Diploma of The Heriot Watt College, Edinburgh. British. Winfield, Bathgate, West Lothian. Work's Manager, Pressure Lubricants, Ltd. *Signed by* : Robert G. M. Dakers, Hugh B. Nisbet, James Sandilands.
- †**Wolff, Arthur**, Ph.D. (Berlin). German (Refugee from Nazi oppression). 11, Granville Avenue, Broughton Park, Salford, 7. Research Chemist. *Signed by* : E. Marshall Meade, Kenneth Tomlinson, A. Wolf.
- †**Wraight, Norman Baldwin**, B.Sc. (Lond.), A.R.I.C. British. 9, Darlington Road, Hartburn, Stockton-on-Tees. Assistant Research Chemist. *Signed by* : Donald McNeil, A. J. Prince, M.P., Applebey.

UNDER SPECIAL PROVISION APPEARING TO CANDIDATES RESIDENT ABROAD.

- †**Krumm, Harold Evershed**, A.R.I.C., F.R.A.S. National of the Union of South Africa. Sonnenschein, Leeuwendal Crescent, Cape Town. Chief Chemist, African Metals Corporation, Ltd. *Signed by* : Louis P. Bosman.

Sorg, Leonard V., M.A. (Kansas City). American. 5811, Wayne Avenue, Kansas City, 4, Missouri. Supervisor of Research, Standard Oil Co., Sugar Creek, Mo. Lecturer in Chemistry, The University of Kansas City. Signed by : James A. Austin.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Student Membership two-body.

(b) Student Membership three-body.

(c) Junior Membership two-body.

(d) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between April 20th and May 18th, 1944. (This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.)

- "Note on vitamin A aldehyde (axerophthal)." By E. G. E. HAWKINS and R. F. HUNTER.
- "Pyrrole trimethin cyanines." By A. H. COOK and J. R. MAJER.
- "The preparation of some indole trimethin cyanines." By A. H. COOK and J. R. MAJER.
- "An extension of the Ehrlich reaction." By A. H. COOK and J. R. MAJER.
- "Quinoxaline cyanines. Part IV. Some halogenated styryl derivatives." By R. M. ANKER and A. H. COOK.
- "The structure of monomethylene *d*-glucosaccharolactone." By W. G. M. JONES and L. F. WIGGINS.
- "The synthesis of dimethylene dimethyl *l*-idosaccharate." By W. G. M. JONES and L. F. WIGGINS.
- "Colchicine and related compounds. Part III." By J. W. COOK, W. GRAHAM, (in part) A. COHEN, R. W. LAPSLEY, and (the late) C. A. LAWRENCE.
- "Colchicine and related compounds. Part IV. Synthesis of 2:3:4:5-, 2:3:4:6-, and 2:3:4:7-tetramethoxy-9-methylphenanthrenes." By G. L. BUCHANAN, J. W. COOK, and J. D. LOUDON.
- "The condensation of chrysene with succinic anhydride." By J. W. COOK, and W. GRAHAM.
- "The influence of alkyl groups upon reaction velocities in solution. Part V. The formation of phenyl-trialkylammonium iodides in methyl alcohol." By D. P. EVANS.
- "Hydroacridones. Synthesis and dehydrogenation." By R. A. REED.
- "The preparation of some halogenonaphthylamines, dihalogenonaphthalenes, 2-bromo-1-naphthol, and related derivatives." By H. H. HODGSON and D. E. HATHWAY.
- "Note. Re-resolution from interfacial adsorbed layers." By C. C. ADDISON.
- "Some observations on the photochemistry of fluorescent substances. Part I. The quenching of fluorescence by nitric oxide and the photochemical formation of nitroxides." By H. WEIL-MALHERBE and J. WEISS.
- "Some observations on the photochemistry of fluorescent substances. Part II. Concentration quenching (self-quenching) of fluorescence." By J. WEISS and H. WEIL-MALHERBE.
- "The properties of freshly formed surfaces. Part III. The mechanism of adsorption, with particular reference to the *sec*-octyl alcohol-water system." By C. C. ADDISON.
- "The reaction between amines and unsaturated compounds containing halogen attached to one of the ethylenic carbon atoms. Part III. The influence of a *gem*-dimethyl group." By H. C. MURFIT and J. C. ROBERTS.
- "The reduction of quinaldinic acid at the dropping mercury cathode." By J. T. STOCK.
- "The metal-catalysed reaction between acetylene and hydrogen. Part I. Nickel catalysts." By J. SHERIDAN.
- "The kinetics of anionotropic rearrangement. Part II. Medium effects in the oxotropy of propenyl-ethynylcarbinol. The determination of isodielectric energies of activation." By E. A. BRAUDE.
- "The alkaloids of *Duboisia leichhardtii*." By W. MITCHELL.
- "The sterols of *Calycanthus floridus*." By J. W. COOK and M. F. C. PAIGE.

PROCEEDINGS

OF THE

CHEMICAL SOCIETY.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
Herbert Dearman Bell	1920	March 2nd, 1944
George Stallard	1879	April 5th, 1944

MEETING OF SOVIET SCIENTISTS.

In reply to a cable received from the Soviet Scientists Antifascist Committee :

“ THIRD ANTI-FASCIST MEETING SOVIET SCIENTISTS WILL BE HELD SUNDAY JUNE EIGHTEENTH SEVENTEEN-THIRTY P.M. MOSCOW TIME. AIM MEETING IS DISCUSS CRIMES GERMAN FASCIST INVADERS AGAINST SCIENCE AND WORK RESTORATION SCIENTIFIC RESEARCH AND CULTURAL INSTITUTIONS LIBERATED AREAS. PROCEEDINGS MEETING WILL BE BROADCAST.

“ SOVIET SCIENTISTS ANTI-FASCIST COMMITTEE TAKES THIS OPPORTUNITY CONVEY GREETINGS SCIENTISTS YOUR COUNTRY FROM SCIENTISTS SOVIET UNION. WE HOPE COLLABORATION AND SOLIDARITY MEN SCIENCE WILL SPEED VICTORY UNITED NATIONS OVER GERMAN INVADERS—MOST VICIOUS ENEMIES MANKIND AND PERSECUTORS SCIENCE AND CULTURE.

“ SIGNED ON BEHALF SOVIET SCIENTISTS ANTI-FASCIST COMMITTEE ACADEMICIANS N DERZHAVIN P KAPITSA MOSCOW.”

the following message has been sent :

“ On behalf of the Chemical Society we, the President, Officers, and Council, send from Great Britain hearty thanks to our colleagues in U.S.S.R. for greetings received, and best wishes for meeting on June 18th.

“ We hail your message with sympathy, and trust that full restitution will be demanded from the aggressors. We echo your hopes that collaboration between men of science may hasten victory of Allies and the complete deliverance of all countries from the invader.

“ With cordial greetings, W. N. HAWORTH, *President*.”

CONGRATULATIONS.

The congratulations of the Council have been sent to Messrs. George Dixon, Arthur Hadley, and Ernest Brooke Pike, who completed 50 years of Fellowship on June 7th, 1944.

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to Messrs. E. J. Leeming and P. A. Winsor for gifts of publications of the Society.

RESEARCH GRANT.

The Council have made a grant of £15 to Dr. E. M. Meade for a research on “ Asymmetry of tervalent nitrogen.”

COMMITTEES.

The Council have conveyed their thanks to the retiring members of Committees for the services they have rendered to the Society.

The following Committee have been appointed for 1944–1945 :

Finance and General Purposes Committee.

F. H. Carr, A. E. Dunstan, Sir Alfred Egerton, G. I. Finch, W. H. Mills, R. G. W. Norrish, Sir Robert Pickard, R. E. Slade, together with the Officers, the Chairman of the Publication Committee and the representative of the Joint Library Committee on the Council of the Chemical Society. The President as Chairman, Treasurer as Vice-Chairman, and the General Secretary as Secretary.

Publication Committee.

T. S. Moore as Chairman, N. K. Adam, A. J. Allmand, M. P. Applebey, R. P. Bell, E. J. Bowen, J. E. Coates, J. W. Cook, E. G. Cox, H. J. Emel us, C. R. Harington, R. D. Haworth, T. A. Henry, D. H. Hey, E. L. Hirst, C. K. Ingold, D. J. G. Ives, E. R. H. Jones, J. Kenyon, F. G. Mann, H. W. Melville, H. Raistrick, A. Robertson, J. L. Simonsen, J. C. Smith, H. W. Thompson, A. R. Todd, together with the Officers, and the Editor as Secretary.

Research Fund Committee.

N. K. Adam, A. J. Allmand, J. E. Coates, J. W. Cook, I. M. Heilbron, H. McCombie, J. Kenyon, Sir Robert Robinson, A. R. Todd, together with the Officers. The President as Chairman, and the General Secretary as Secretary.

Publications Exchange Committee.

A. J. Allmand, H. Bassett, J. Kenyon, G. A. R. Kon, together with Dr. T. A. Henry (ex-officio representative of the Joint Library Committee on the Council) and the Officers, with the Librarian as Secretary.

APPOINTMENT OF LIBRARIAN.

The Council have appointed Mr. A. E. Cummins as Librarian of the Chemical Society.

FELLOWSHIP.

The following 74 candidates were elected Fellows on June 15th :

Leslie Stephen Abbott.	John Venables Houghton.	Lawrie William Frederick Salame.
Henry Adams.	Doreen May Jagger.	Charles Edward Scoffam.
Samuel Walter Atherley.	Alfred Henry Osborne Johnson.	William Leith Service.
John Attenburrow.	Arthur William Kay.	Mahmoud Yousef Shawarbi.
Brian Boughton Bach.	Harold Campbell King.	Stanley Walter Smith.
Alan Marshall Banks.	Falk Heinz Kroch.	Leonard V. Sorg.
Laurence Jordan Begley.	Harold Evershed Krumm.	Ronald Ernest Stanton.
Harold Laurence Gascoigne Boot.	Roy William Lerrigo.	George Alexander Stewart.
Thomas William Breden.	Leslie Albert Stanley Mallows.	William Gray Stewart.
John Bruce Crofts.	Frank Bentley Ridgen Marmoy.	John Huntley George Stokes.
Frank Charles Cumberland.	Clifford Martin.	Alan Stubbs.
Paul Dalley.	John Menzies.	Ninicholas Hume Turnbull.
Rees Haydn Davies.	Charles Samuel Messinger.	Charles Albert Vernon.
Thomas Harold Fairbrother.	Ralph Edward Mitchell.	John Walker.
Philip Harry Freestone.	Bernard Cecil Moses.	John George Waller.
Keith Harold Vernon French.	John Arthur Edgar Moy.	Frank Ward.
Thomas Proctor Geravis.	James Harold Nicholls.	Robert Vincent Ward.
George Glaser.	Harold Leslie Peerman.	Walter Jackson Weir.
Frank Robert Graesser-Thomas.	Benjamin Stanley Platt.	Edward Whalley.
Horace Beament James Hart.	Clifford Pugh.	Alan Gilbert White.
Edward John Hartwell.	Ronald Alfred Rabnott.	Edmund Dennis White.
Robert Nobbs Haward.	Ronald Arthur Reed.	George Wishart.
Eric Heymann.	Fred Roberts.	Arthur Wolff.
Hubert Ernest Holland.	James Francis Ronca.	Norman Baldwin Wraight.
Gordon Latham Hollis.	Douglas Macintosh Ross.	

GENERAL ANNOUNCEMENT**COLONIAL RESEARCH FELLOWSHIPS.**

The Secretary of State for the Colonies has been considering ways and means of encouraging scientists to give special attention to problems of Colonial interest. On the advice of the Colonial Research Committee he has now decided to institute a number of "Colonial Research Fellowships," which will be open to qualified scientists, whether in the natural or in the social sciences, to enable them to pursue research work in the Colonial Empire. The Fellowships will normally be for two years, and the Secretary of State hopes that Universities and other research institutions will be willing to grant applicants, if already members of their staffs, leave of absence for this period in order to enable them to take up the Fellowships. Provision has been made for 25 such Fellowships within the next five years. It is recognized that war-time shortages of personnel will restrict the immediate applicability of the scheme; it is, however, being brought into force immediately, in case there are suitable candidates in any part of the Empire who are not at present required for urgent war-time work.

2. The award of these Fellowships will be made by the Secretary of State, on the advice of the Colonial Research Committee.

QUALIFICATIONS OF APPLICANTS.

3. The Fellowships will normally be reserved for University graduates under 35 years of age from any part of the British Commonwealth and Empire. Candidates must already have had some experience of research, and must have given evidence that they have the ability to plan and prosecute investigations of a high quality without close and constant supervision.

TERMS OF AWARD.

4. The Fellowships will be tenable normally for a period of two years provided that the Fellow's report from his supervisor at the end of the first year is satisfactory, and may be extended for a third year at the discretion of the Secretary of State.

5. The Fellowships carry a basic allowance of £400 per annum, which may be increased to a sum not exceeding £600 per annum if the Fellow is married, or in other appropriate circumstances. Travelling expenses and the cost of any special apparatus or material required for the Fellow's research will also be provided. Where a Fellow is a member of a superannuation scheme in which his employer pays part of the contributions, the Secretary of State will, if necessary, also take over the employer's contributions for the duration of the Fellowship.

6. Fellowships will be tenable in any part of the British Colonial Empire. Where practicable, Fellows will be attached to centres of higher education in the Colonies and may be required to give occasional lectures of general interest on their subject for the benefit of the students attending courses at such centres.

7. During his tenure a Fellow shall be responsible to a supervisor selected by the Secretary of State. If the supervisor is not resident in the territory visited, the Secretary of State may appoint, in consultation with him, a deputy supervisor in that territory or in a neighbouring territory.

8. The Fellow shall submit through his supervisor a concise progress report at the end of each year of his tenure, and a full report of his researches within a reasonable time on the completion of his tenure.

9. The award will be conditional upon the candidate being certified as medically fit for the type of work to be undertaken.

APPLICATIONS.

10. Applications should be addressed in the first instance to

The Secretary,
The Colonial Research Committee,
Colonial Office,
Downing Street,
London, S.W. 1.

and they should state the applicant's age, nationality, educational history, occupational history, and experience of research, and should indicate the precise nature of the problem on which the candidate wishes to do research. They should bear the endorsement of the Head of the College or research institute to which the candidate is attached, or of some other responsible person.

LIST OF APPLICATIONS FOR FELLOWSHIP

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than July 17th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

- (b) **Andrew, Thomas Ralph**, Inter. B.Sc. (Lond.), Higher National Certificate in Chemistry. British. 37, Harefield Road, Coventry. Laboratory Assistant. Signed by: J. H. Burton, J. L. Borthwick, Beryl Westmoreland-White.
- † **Baker, Leslie Charles**, M.Sc. (Lond.), A.R.I.C. British. 11, Greystokes Court, Hanger Lane, Ealing, W.5. Chemist to J. Lyons and Co. Signed by: Leslie H. Lampitt, E. B. Hughes, T. L. Parkinson.
- Barnes, Stanley Bernard Philpott**, M.P.S. British. 12a, Kingsdown Park, Tankerton. Managing Director and Chief Chemist of Rybar Laboratories, Ltd., Tankerton. Engaged in supervision of manufacture and analytical control of pharmaceutical products. Research in improved methods of preparation and standardisation of endocrine products. Study of preparation for relief of asthma in collaboration with medical colleague. Signed by: Chas. H. Maile, R. V. Fenn, F. H. Webb.
- † **Barraclough, Charles Edmund**, B.Sc.Hons. (Lond.), A.R.C.S., A.R.I.C. British. c/o 193, Hook Road, Epsom. Research Chemist to the Distillers Co., Ltd. Signed by: H. B. Hutchinson, J. G. Maltby, E. Horton.
- † **Bate, Reginald Noel**, B.Sc.Hons. (Manc.), A.R.I.C. British. 27, Granary Lane, Worsley, Nr. Manchester. Senior Science Master at Farnworth Grammar School. Signed by: E. Moor, A. Topham, R. Hull.

- † **Callow, Raphael Heber**, M.Sc. (L'pool), A.R.I.C. British. Tweedside, Ashley Road, Hale. Works Manager. *Signed by* : W. P. Ford, Hugh C. Freeman, G. W. Martin.
- † **Clay, Herbert Frank**, A.R.I.C., A.M.I.Chem.E. British. c/o Cromford Colour Co., Ltd., Matlock. Chemist. *Signed by* : Eric S. Gyngell, J. Markland, D. T. Sarfas.
- Colville, John Foggan**, B.Sc.Hons. (Dun.). British. c/o Miss Rankine, 5, Comely Park Terrace, Falkirk. *Signed by* : G. R. Clemo, R. Raper, G. A. Swan.
- † **Duddington, Jack Ernest**, A.M.C.T., A.R.I.C. British. 241, Bury Road, Rawtenstall, Rossendale. Assistant Chemist, *Signed by* : T. L. Houghton, T. K. Walker, J. Ronald Hinchley.
- † **Edwards, George Esau**, B.Sc. (Glas.), A.R.I.C. British. Post Office, Cleland, Lanarkshire. *Signed by* : W. M. Cumming, F. Rumford, W. A. Alexander.
- (b) **Ellis, Drummond**, B.Sc.Hons. (Glas.). British. 47, Battlefield Avenue, Glasgow, S. 2. Research Student. *Signed by* : J. W. Cook, James Bell, T. S. Stevens.
- † **Epworth, Frederick William**, B.Sc.Hons. (Lond.), A.R.I.C. British. 19, Park Grove, Shipley. Chemical Inspection Dept., Ministry of Supply. *Signed by* : W. Siddall, A. Wexler, D. Plews.
- ‡ **Green, Leonard Henry Grantly**. British. 37, Witchell Road, Redfield, Bristol, 5. Analytical Chemist. *Signed by* : E. B. Maxted, E. L. Hirst, T. Malkin, J. K. N. Jones, Arthur Marsden.
- † **Houghton, Albert Aubrey**, B.Sc. and Ph.D. (Lond.), D.I.C., F.R.I.C. British. Rowanhurst, Grove Road, Beaconsfield. Chief Chemist to Fredk. Boehm, Ltd. *Signed by* : D. C. Mandeville, H. E. Cox, R. Leslie Collett.
- * **Huang, Rayson**, B.Sc. (Hongkong). Chinese. Magdalen College, Oxford. Student. *Signed by* : Ronald P. Bell, R. Robinson, J. T. L. Loo.
- (a) **Hyland, John Graham**, B.Sc. (Lond.), A.R.C.S. British. Cove Down, Cove, Tiverton. Post graduate course in chemical engineering for chemists at Imperial College. *Signed by* : L. N. Owen, A. C. Egerton, M. B. Donald.
- (a) **Immerwahr, Werner Adolf Martin**, B.Sc. (Lond.). Stateless, formerly German. 21, Collingwood Avenue, Muswell Hill, N. 10. Research Chemist. *Signed by* : D. J. G. Ives, F. J. Llewellyn, F. Barrow.
- * **Knight, Raymond Dennis**, Matriculation (Lond.). British. 23, Thirstane Road, Far Cotton, Northampton. Student. *Signed by* : D. Plews, W. Siddall, A. Wexler.
- * **Langdon, Brian James**. Reading for honours degree in Chemistry at Oxford. British. Magdalen College, Oxford. Student. *Signed by* : Ronald P. Bell, F. E. King, L. E. Sutton.
- † **Lewis, Arnold Herbert**, B.Sc. and Ph.D. (Lond.), F.R.I.C. British. Elmwood, Boulters Lane, Maidenhead. Research Chemist. *Signed by* : Wm. Cullen, A. G. Pollard, S. J. Watson.
- McCoubrey, Arthur**, B.Sc. (Lond.), M.P.S. British. 50, Southview Drive, Upminster. Junior Research Chemist. *Signed by* : Julius N. Ashley, Geo. L. Buchanan, A. Campbell.
- Mills, Leonard Walter**, M.P.S., M.R.San.I., M.R.I.P.H.H. British. 16, Badminton Road, Downend, Bristol. Chemist and Druggist. *Signed by* : David J. Williams, Arthur Marsden, H. T. S. Britton.
- † **Muddiman, Ernest Walter**, B.Sc. (Lond.), F.R.I.C. British. 2, Fellside Terrace, Stanley, Co. Durham. Chief Chemist, Holmside and South Moor Collieries, Ltd. *Signed by* : Richard Raper, H. L. Riley, A. Crawford.
- † **Nicol, Hugh**, B.Sc.Hons., M.Sc. and Ph.D. (Lond.), F.R.I.C. British. 35, Tennyson Road, Harpenden. Senior Scientific Assistant, Imperial Bureau of Soil Science. *Signed by* : F. Tattersfield, George W. Cooke, H. M. Davies.
- * **Peacocke, Arthur Robert**. Studying for Honours Degree in Chemistry. British. 74a, Queens Avenue, Watford. Student at Exeter College, Oxford. *Signed by* : Ronald P. Bell, Richard Barrow, L. E. Sutton.
- Pickholz, Siegfried**, Ph.D. (Vienna). Austrian. 4, Woodland Road (off Wood Road), Halewood, Nr. Liverpool. Research Chemist, Messrs. Ward, Blenkinsop & Co., Ltd. *Signed by* : G. J. Pritchard, J. G. Cockburn, K. T. Chapman.
- * **Poll, Alan**, B.Sc. (Dun.), A.R.I.C. British. c/o Mrs. Spillman, Soko Pero, Westover Road, Fleet. Junior Scientific Officer to the Royal Aircraft Establishment. *Signed by* : G. H. Christie, J. C. E. Simpson, C. W. Gibby.
- Roberts, Walter Leslie**, B.Sc.Hons. (Lond.), British. 28, Alice Street, Newport. Research Chemist, John Lysaght, Ltd. *Signed by* : David D. Howat, W. D. Williams, H. B. Watson.
- (b) **Senior, Norman**, B.Sc.Hons. (Lond.), Ph.C., F.R.I.C. British. 150, Keighley Road, Colne. Research Chemist. *Signed by* : D. H. R. Barton, E. R. S. Winter, W. H. Linnell.
- ‡ **Smith, Alfred Cowling**. British. Lyncroft, Blackwell, Nr. Bromsgrove. I have been with W. & J. George, Ltd. during the past 23 years, and for many years have held the position of Technical Supervisor in control of the Scientific Instrument and Chemical Departments; in this capacity I am accessible to, and regularly approached by Industrial and Research Chemists, to discuss their processes and for advice on their requirements; also, my application for Fellowship is with the object of keeping informed of recent and future methods of Scientific Research. *Signed by* : J. Cooper Duff, Geo. King, W. E. Ballard.
- (b) **Toone, Brian**, B.Sc. (Lond.). British. 44, Normanton Lane, Littleover, Derby. Chemist—Research on foundry core compounds and sands at Rolls Royce. *Signed by* : R. S. Kahan, Eric S. Gyngell, W. B. Chapman.
- † **Wainwright, Charles**, B.Sc. (Lond.), F.R.I.C. English. 216, St. Bernard's Road, Olton. Chief Technical Officer. *Signed by* : George Dring, H. V. Potter, J. W. Hewitt, Chas. A. Robb.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Junior Membership two-body.

(b) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between May 18th and June 15th, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

- "The verification of the molecular structure of organic liquids by refractive index measurements." By K. H. PAUSACKER.
- "Reduction by dissolving metals. Part I. Naphthalene derivatives." By A. J. BIRCH.
- "Reduction by dissolving metals. Part II. Methoxybenzene derivatives." By A. J. BIRCH.
- "The diazotisation of 1-amino-2-hydroxy-4-cyanonaphthalene and the preparation of 4-cyano-2-naphthol." By H. H. HODGSON and S. BIRTWELL.
- "Reduction by dissolving metals. Part III. Alkylbenzenes." By A. J. BIRCH.
- "The infra-red spectrum of phenylacetylene." By H. W. THOMPSON and P. TORKINGTON.
- "Molecular volume and structure. Parts VII and VIII." By T. W. GIBLING.
- "Experiments on the synthesis of purine nucleosides. Part VII. Some further observations on the synthesis of pyrimidines from esters and malondiamidine." By G. A. HOWARD, B. Lythgoe, and A. R. TODD.
- "Lactones of glucosaccharic acid. Part I. 2:5-dimethyl Δ^4 -glucosaccharo-3:6-lactone 1-methyl ester, an analogue of ascorbic acid." By F. SMITH.
- "The constitution of trimethylene sorbitol." By E. J. BOURNE and L. F. WIGGINS.
- "The conversion of galactose into derivatives of *d*-idose." By L. F. WIGGINS.
- "Formation and structure of some organic molecular compounds. Part III. The dielectric polarisation of some solid crystalline molecular compounds." By H. KRONBERGER and J. WEISS.
- "The preparation of *m*-nitrobenzenesulphonyl chloride." H. H. HODGSON and J. S. WHITEHURST.
- "Sugar nitrates. Part I. Syntheses of 2:4-dimethyl β -methylglucoside and 2:4:6-trimethyl β -methylglucoside." By J. DEWAR and G. FORT.
- "Sugar nitrates. Part II. Synthesis of 3:4-dimethyl glucose: 3-methyl β -methylglucoside." By J. DEWAR and G. FORT.
- "Sugar nitrates. Part III. 2:4-Dimethyl β -methylglucoside and 3:4-dimethyl β -methylglucoside from β -methylglucoside 2:3:4:6-tetranitrate." By J. DEWAR, G. FORT, and N. MCARTHUR.

PROCEEDINGS
OF THE
CHEMICAL SOCIETY.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following :

Honorary Fellow.

	Elected.	Died.
Sir Prafulla Chandra Rây	1933	June 16th, 1944.

The following cable was sent to the Indian Chemical Society on June 20th :

“ Council of Chemical Society deeply deplore loss of their distinguished Honorary Fellow, Sir Prafulla Rây, and send sincere sympathy. Haworth, President.”

Fellows.

	Elected.	Died.
Horace Edward Brothers	1886	July 3rd, 1944
Walter Brown	1908	April 28th, 1944
Gordon Crewe Chambres	1883	June 23rd, 1944
John Gibson Duncan	1941	May 1st, 1944
James Netherwood Sugden (killed by enemy action)	1917	July 11th, 1944

MEETING OF SOVIET SCIENTISTS.

The following cable was received by the President from Soviet Scientists in Moscow on July 14th :

“ Behalf Soviet Scientists thank you for your greetings to our antifascist meeting. These days Red Army and Anglo-American troops are advancing confidently to victory over Hitlerite Germany. Scientists our Countries have full justification for saying they too are friends under arms since by their labours they contribute to Hitlerite Germany's military defeat. Cordial greetings best wishes you personally, Council and all Members Chemical Society. Nikolai Derzhavin, Peter Kapitsa.”

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to the Biochemical Society for a contribution towards the maintenance of the Library for 1944, to Colonel R. B. Turbutt for a contribution to the Publications Fund; also to Dr. C. W. Davies, Mr. H. H. Hughes, Dr. V. E. Parke and Mr. W. A. Silvester, for gifts of publications of the Society.

REPRESENTATION ON OTHER BODIES.

Professor C. S. Gibson has agreed to represent the Society on the Safeguarding of Key Industries Committee and Dr. J. T. Hewitt on the Joint Chemical Committee on Patents of the Association of British Chemical Manufacturers.

WAR HONOURS AND DECORATIONS.

The Council will be glad to receive particulars of Honours and Decorations conferred on Fellows.

FELLOWSHIP.

The following 32 candidates were elected Fellows of the Chemical Society on July 20th :

Thomas Ralph Andrew.	Frederick William Epworth.	Ernest Walter Muddiman.
Leslie Charles Baker.	Leonard Henry Grantly Green.	Hugh Nicol.
Stanley Bernard Philpott Barnes.	Albert Aubrey Houghton.	Arthur Robert Peacocke.
Charles Edmund Barraclough.	Rayson Huang.	Siegfried Pickholz.
Reginald Noel Bate.	John Graham Hyland.	Alan Poll.
Raphael Heber Callow.	Werner Adolf Martin Immerwahr.	Walter Leslie Roberts.
Herbert Frank Clay.	Raymond Dennis Knight.	Norman Senior.
John Foggan Colville.	Brian James Langdon.	Alfred Cowling Smith.
Jack Ernest Duddington.	Arnold Herbert Lewis.	Brian Toone.
George Esau Edwards.	Arthur McCoubrey.	Charles Wainwright.
Drummond Ellis.	Leonard Walter Mills.	

ERRATUM

Proceedings, May, 1944.

Page.	Line.	
33	7 from bottom	For " H. M. Davies " read " H. W. Paines."

LIST OF APPLICATIONS FOR FELLOWSHIP

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than August 28th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

- †**Briscoe, Peter Alick**, B.Sc. (Bristol), A.R.I.C. British. Broadway Lodge, Chilcompton, Nr. Bath. Experimental Officer. *Signed by* : E. B. Maxted, E. L. Hirst, J. K. N. Jones.
- †**Brooks, John**, B.A.Hons. (Oxon). British. Elsinore, 139, Acre Lane, Bramhall, Stockport. Plant Chemist and Superintendent, I.C.I., Ltd. *Signed by* : Ronald P. Bell, F. E. King, M. J. S. Dewar.
- †**Brown, Andrew Charles**, Ph.D. (Glas.), A.R.T.C., A.R.I.C. British. 63, Abergeldie Road, Lee, S.E. 12. Chief Chemist, Messrs. Venesta, Ltd. *Signed by* : G. H. Jeffery, D. M. Cowan, F. Mathie.
- Cheetham, Robert Clifford**, A.R.I.C., A.M.C.T. British. 115, Coleshill Road, Atherstone. Chemist in charge of process for application of colloidal preparations to roofing materials. *Signed by* : Reginald G. Durrant, John K. Wood, A. E. Gillam.
- Collis, Clarence Barnes**, B.A., B.Sc. (Oxon). British. Chertsey Road, Sunbury-on-Thames. Research Chemist. *Signed by* : Wilson Baker, E. J. Bowen, S. F. Birch.
- Craig, David Parker**, M.Sc. (Sydney). British. 62, Springdale Road, Killara, N.S.W. Assistant Lecturer, Chemistry Department, University of Sydney. *Signed by* : Thomas Iredale, Adrien Albert, Desmond J. Brown.
- †**Cullen, James Henry**, Hons. Certificate in Chemistry. Irish. Hill Top, Olive Lane, Wavertree, Liverpool, 15. Production Manager, Wm. Crawford & Sons. Responsible for the development of the technique of biscuit-making and the direction of the Works Laboratory. *Signed by* : Thomas J. Nolan, A. G. G. Leonard, A. O'Farrelly.
- Dabby, Reuben Ephraim**, B.Sc. and Teacher's Diploma (Lond.). Iraqi. Whitgift Middle School, North End, Croydon. Chemistry Master. *Signed by* : G. R. Shutt, C. W. Davies, M. P. Balfe.
- ***Daniels, Hilda**, B.Sc.Hons. (Birm.). British. 11, Marion Road, Smethwick, 41. Research Chemist. *Signed by* : L. F. Wiggins, Stanley Peat, W. N. Haworth.
- †**Draper, Charles Robert**, Inter. B.Sc. City and Guilds Hons. in Paint Technology. English. 83, Udney Park Road, Teddington. Chief Inspector and Chemist. *Signed by* : S. H. Bell, D. R. Duncan, C. H. Young.
- †**Elphick, Frederick Charles**, A.R.I.C. English. 8 Elers Road, Ealing, W. 13. Retired (Chemist and Works Manager). *Signed by* : J. Davidson Pratt, C. Montague Smith, J. G. King.
- Fagan, Christopher Phillip**, B.Sc.Hons. (N.U.I.), A.R.I.C. British. Four Steps, The Avenue, Danbury, Chelmsford. Research Chemist, Marconi's Wireless Telegraph Co., Ltd. *Signed by* : Thos. Dillon, Francis Coll, Vincent C. Barry.
- ***Firth, Denis Arthur**, B.A.Hons. (Oxon). British. 43, North Road, West Bridgford, Nottingham. Research Chemist. Have just completed Part II of the Final Honours School of Chemistry, Oxford. *Signed by* : D. Ll. Hammick, S. G. P. Plant, J. C. Smith, Ronald P. Bell.
- ***Franklin, Rosalind Elsie**, B.A. (Cantab). British. 5, Pembridge Place, W. 2. Research Chemist, British Coal Utilisation Research Association. *Signed by* : M. Vahrman, Ian G. C. Dryden, Ronald H. Smith.
- Gluck, Bruno**, Ing. Chem. (Technical High School, Vienna). Polish. 25, Canfield Gardens, N.W. 6. Research Chemist to Dufay-Chromex, Ltd. *Signed by* : B. Ellis, A. H. Cook, H. Surfleet.
- Hindley, Nathan Chadwick**, M.Sc. and Ph.D. (Manc.). British. 34, Elmwood, Welwyn Garden City. Research Chemist. *Signed by* : A. Cohen, F. Bergel, A. W. D. Avison.
- †**Hoather, Roy Colin**, B.Sc. and Ph.D. (Lond.), F.R.I.C. British. 40, Falconer Road, Bushey. Chemist (assistant analytical, research, etc.) to the Colne Valley Water Co. *Signed by* : E. G. Whittle, Gordon Miles, Henry Terrey.
- †**Holland, Geoffrey**, B.Sc. (Lond.), A.R.I.C. English. 16, Ash Road, Bebington. Chemist and Director of the Crest Laboratories, Ltd., Manufacturing Chemists. *Signed by* : B. D. W. Luff, P. N. Williams, G. P. Gibson.
- (b)**Jackson, Harold**, A.R.I.C., Assoc.M.C.T. British. 47, Stetchworth Road, Lower Walton, Warrington. Research Analytical Chemist, British Aluminium Co., Ltd. *Signed by* : A. C. Coates, T. G. Pearson, Frank Pitts.

- †**Mortlock, Frank**, B.Sc. (Birm.), A.R.I.C. British. 38, Higher Fence Road, Macclesfield. Works Manager, John W. White & Sons, Ltd. *Signed by* : Wm. Wardlaw, R. Leslie Collett, F. P. Dunn.
- Mukerji, Jogesh**, Doctor of Chemistry (Hon., Lincoln-Jafferson University), State of California; Diploma in Applied Chemistry in Leather Manufacture, Leeds University. British Indian. 224, Woodhouse Street, Hyde Park Corner, Leeds, 6. Works Chemist, Messrs. Keiner & Co., Ltd., Chemical Manufacturers. *Signed by* : Norman Walker, F. R. Goss, W. Lowson.
- †**Murdock, Eric Thomas**, M.A., B.Sc.Hons. and Ph.D. (Dublin), A.R.I.C. Member of the Biochemical Society and Nutrition Society, Fellow of the Royal Society of Arts. British. 242, Tottenham Court Road, W. 1. Scientific Adviser to Dept. of Nutritional and Cookery Research, Easiwork, Ltd. Research Chemist. *Signed by* : Wm. E. Gaunt, F. B. Marmoy, R. Leslie Collett.
- †**Powell, Walter James**, M.Sc. (Lond.), A.R.C.S., D.I.C. British. 19, Elm Grove, Orpington. Research Chemist. *Signed by* : W. W. Jones, Elwyn Roberts, T. M. Walters.
- †**Reid, Kenneth Cathro**, B.Sc.Hons. (St. Andrews). British. 107, Strathern Road, Broughty Ferry, Dundee. Plant Superintendent (Shift Chemist). *Signed by* : Robert Roger, John D. M. Ross, Isobel A. Smith.
- †**Ryan, Herbert Alan**, B.Sc.Hons. (Lond.), A.R.I.C. British. Brynawel, Grantham Road, Bracebridge Heath, Lincoln. Chemist. *Signed by* : Robert H. Pickard, R. Leslie Collett, Alex. Findlay.
- (a)**Shapiro, Solomon**, B.Sc. (Lond.). British. Analytical Chemist. *Signed by* : John C. Dine, J. M. C. Thompson, E. N. White.
- †**Snow, Walter Alfred**. 30 years in analytical work. British. 82, Downton Avenue, Streatham Hill, S.W. 2. Chemist. *Signed by* : E. S. F. Rogans, Thomas McLachlan, A. Krajceman.
- ***Tyman, John Henry Paul**, B.Sc. (Lond.). British. 16, Eastwood Road, Goodmayes. Chemist, May and Baker, Ltd. *Signed by* : Desmond G. O'Sullivan, Keith G. A. Hammer, D. H. O. John.
- †**Urquhart, Alexander Robert**, D.Sc. (Edin.), F.R.I.C., F.T.I. British. Fulwood, Hall Park, Lancaster. Research Superintendent, Lansil, Ltd. *Signed by* : Ralph J. B. Marsden, F. Howlett, F. S. H. Head.
- Williams, John**, B.Sc.Hons. and Ph.D. (L'pool), F.R.I.C. British. 71, Melrose Road, Norwich. Technical Manager. *Signed by* : Alex. Findlay, John W. Corran, L. H. G. Barton.
- Wilson, William Charles**, B.A. (Oxon). British. South Lea, Marple Bridge, Nr. Stockport. Research Manager of I.C.I. (Leathercloth Division). *Signed by* : R. G. Fargher, Douglas W. Hill, J. C. Withers.
- ***Winsor, Geoffrey William**, B.Sc.Hons. (Bristol). British. Durweston, 30, New Road, Broxbourne. Chemistry Research Assistant to Professor H. T. S. Britton, University College, Exeter. *Signed by* : H. T. S. Britton, S. J. Gregg, R. King.

UNDER SPECIAL PROVISION APPOINTING TO CANDIDATES RESIDENT ABROAD.

- †**Gardner, Roy**, D.Sc. (N.Z.), F.R.I.C. British. 41, Dowling Street, Dunedin, New Zealand. Consulting Industrial Chemist. *Signed by* : F. G. Soper, L. H. James.
- †**Kohnstamm, Lothair S.**, B.S. (Columbia). American. 87, Park Place, Zone 7, New York, N.Y. President, H. Kohnstamm & Co., Inc. *Signed by* : Foster Dee Snell.
- †**Mackenzie, Harold Albert Erroll**, M.Sc. (S. Africa). British (Union National). 23, Anti Gas Laboratory, S.A.E.C., P/B 164, Pretoria, South Africa. Lieutenant in the Union Defence Forces. *Signed by* : F. L. Warren.
- Marsal, Alberto**, Chemist-pharmacist and M.D. (Cordoba). Argentine Rep. Calle Jujuy 337, Cordoba, F.C.C.A., Argentine Rep., S.A. Full Professor of Biochemistry and Director of Biochemical Research, Medical School of the University of Cordoba. *Signed by* : J. C. Drummond.
- (a)**Misra, Jagdish Saran**. Appearing for the B.Sc. examination of the University of Allahabad. Indian. Amrit Building, 18, Dariyagunj, Delhi. Studying in the University of Allahabad. *Signed by* : K. P. Chatterjee.
- Rao, Kotagal Subba Rao Krishna**, B.Sc.Agr. (Nagpur). After graduation in 1941, I was awarded a scholarship by the Government of C.P. & Berar for two years to study Biochemistry at the Indian Institute of Science, Bangalore. I am shortly submitting the work done by me during that period for the M.Sc.Agr. of the Nagpur University. Indian. Imperial Council of Agricultural Research, Victoria Technical Buildings, Nagpur, C.P., India. Analytical Chemist employed under the Chief Biochemist to the Imperial Council of Agricultural Research (India) and in charge of analytical and other allied research Work in the Laboratory. *Signed by* : C. C. Shah.
- †**Thompson, Elwood J.**, B.Sc. (Queen's), 10 years of varied experience. Canadian. A. Wander, Ltd., Elmwood Park, Peterborough, Ontario. Works Chemist. *Signed by* : L. F. Goodwin.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Junior Membership two-body.

(b) Junior Membership three-body.

PAPERS RECEIVED.

List of papers received between June 15th and July 27th, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

"The chemical composition of the fat of the puma or American lion (*Felis concolor*)."
By F. GIRAL.

"The mechanism of the cleavage of ethers of the anisole type by Grignard mixtures. The action of Grignard solutions on α -bromo-ketones."
By A. SCHÖNBERG and R. MOBASHER.

"The preparation of some stilbene derivatives. Part III."
By H. J. BARBER and R. SLACK.

"Polycyclic aromatic hydrocarbons. Part XXIX. Derivatives of 1:2:5:6-dibenzfluorene."
By J. W. COOK and R. W. G. PRESTON.

- “The preparation, resolution and optical properties of 2-amino-*n*-octane.” By F. G. MANN and J. W. G. PORTER.
- “The structure of polyisoprenes. Part III. Ultra-violet absorption spectra.” By L. BATEMAN and H. P. KOCH.
- “Triterpene resinols and related acids. Part XVII. A. The conversion of β -amyradienonyl acetate into *allo*- β -amyrenonyl acetate. B. The conversion of β -amyrin into *iso*- β -amyradienonol.” By J. GREEN, (the late) N. MOWER, C. W. PICARD, and F. S. SPRING.
- “Triterpene resinols and related acids. Part XVIII. The conversion of β -amyratrienyl acetate into β -amyradiendionyl acetate.” By G. T. NEWBOLD and F. S. SPRING.
- “The influence of inert gases on the photodecomposition of gaseous acetone.” By T. IREDALE and L. E. LYONS.
- “The kinetics of aromatic sulphonation reactions: The sulphonation of *p*-nitrotoluene and of chlorobenzene by sulphur trioxide.” By K. D. WADSWORTH and C. N. HINSHELWOOD.
- “Analysis of mixtures of 2 : 3 : 4 : 6-tetramethyl glucose with 2 : 3 : 6-trimethyl and dimethyl glucoses by partition on a silica-water column. A small-scale method for investigating the structures of glucopolysaccharides.” By D. J. BELL.
- “The magnetic susceptibility of certain organic compounds. Part I. The constitution of *p*-benzoquinone, quinol, and quinhydrone system.” By H. MIKHAIL and F. G. BADDAR.
- “Migration of acid hydrogen as complex to the anode. A modified method for the determination of transport number.” By R. WRIGHT.

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, October 19th, 1944, at 2.30 p.m.

Tilden Lecture on "Non-benzenoid Aromatic Hydrocarbons," by Dr. Wilson Baker.

Thursday, November 16th, 1944, at 2.30 p.m.

Meeting for the reading of papers. (Further announcement to be made.)

OUTSIDE LONDON.

EDINBURGH.

Tuesday, October 17th, 1944, at 7 p.m.

Lecture on "Some Aspects of Heroid Metabolism," by Professor G. F. Marrian, D.Sc., F.R.S. Joint meeting with the Edinburgh University Chemical Society and the Local Sections of the Royal Institute of Chemistry and the Society of Chemical Industry. To be held in the Medical Chemistry Lecture Theatre of the University at Teviot Place.

LEEDS.

Monday, October 9th, 1944, at 6.30 p.m.

Lecture on "Some Trends in Chemical Spectroscopy and the Study of Large Molecules," by Dr. H. W. Thompson. To be held in the Chemistry Lecture Theatre of the University.

LIVERPOOL.

Friday, September 15th, 1944, at 6.30 p.m.

Lecture on "Corrosion of Metals in Chemical Plant," by Dr. S. J. Kennett. Joint meeting with the British Association of Chemists. To be held in the Chemistry Lecture Theatre of the University, Brownlow Street.

NOTTINGHAM.

Monday, November 20th, 1944, at 4 p.m.

Lecture on "The Usefulness of the Concept of Resonance in Chemistry," by Mr. R. P. Bell, M.A., F.R.S. To be held in the Lecture Theatre, Chemistry Department, University College, University Park.

SHEFFIELD.

Friday, September 1st, 1944, at 5.30 p.m.

Lecture on "The Chemistry of Glass Formation," by Professor W. E. S. Turner, D.Sc., F.R.S.

Friday, November 10th, 1944, at 5.30 p.m.

Tilden Lecture on "Non-Benzenoid Aromatic Systems," by Dr. Wilson Baker, M.A., M.Sc. Both joint meetings with the University Chemical Society. To be held in the Chemistry Lecture Theatre of the University, Western Bank.

PROCEEDINGS

OF THE

CHEMICAL SOCIETY.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
Matthewman Henry Donald	1920	August 4th, 1944.
Harold Harris	1893	15th July, 1944.
John McVie Hill	1920	August 28th, 1942.

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed :

(a) To the Royal Society for a grant of £200 from the Government Grant towards the cost of the Society's publications for 1944;

(b) To the Society of Chemical Industry for a contribution of £315 8s. towards the cost of the maintenance of the Library for 1943;

(c) To Mr. T. McLachlan for a contribution of £2 to the Publications Fund for 1944;

(d) To Messrs. J. Elks and J. C. McGowan for presenting publications of the Society.

LOCAL REPRESENTATIVES.

The Council have accepted with regret the resignation of Dr. R. Fraser Thomson as one of the Local Representatives for Manchester and of Dr. G. R. Ramage as Local Representative for North Wales; the sincere thanks of the Council have been conveyed to them for the valuable services they have rendered to the Society. Dr. J. C. Withers and Dr. W. R. Angus have accepted invitations of the Council to fill these respective offices.

FELLOWSHIP.

The following 39 candidates were elected Fellows of the Chemical Society on August 17th, 1944 :

Peter Alick Briscoe.	Rosalind Elsie Franklin.	Eric Thomas Murdock.
John Brooks.	Roy Gardner.	Walter James Powell.
Andrew Charles Brown.	Bruno Gluck.	Kotagal Subba Rao Krishna Rao.
Robert Clifford Cheetham.	Nathan Chadwick Hindley.	Kenneth Cathro Reid.
Clarence Barnes Collis.	Roy Colin Hoather.	Herbert Alan Ryan.
David Parker Craig.	Geoffrey Holland.	Solomon Shapiro.
James Henry Cullen.	Harold Jackson.	Walter Alfred Snow.
Reuben Ephraim Dabby.	Lothair S. Kohnstamm.	Elwood J. Thompson.
Hilda Daniels.	Harold Albert Erroll Mackenzie.	John Henry Paul Tyman.
Charles Robert Draper.	Alberta Marsal.	Alexander Robert Urquhart.
Frederick Charles Elphick.	Jagdish Saran Misra.	John Williams.
Christopher Phillip Fagan.	Frank Mortlock.	William Charles Wilson.
Denis Arthur Firth.	Jogesh Mukerji.	Geoffrey William Winsor.

LIST OF APPLICATIONS FOR FELLOWSHIP

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than September 25th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

(a) **Ader, George**, B.Sc. (Wales). Czechoslovakian. 28, Pier Street, Aberystwyth. Student. Signed by : Kurt Heller, H. G. Poole, E. S. Halberstadt.

(b) **Broatch, John Donald**, B.Sc.Hons. (St. Andrews). British. 290, Blackness Road, Dundee. Chemical investigations connected with aircraft. Signed by : Robert Roger, John D. M. Ross, G. A. Earwicker.

- (a) **Brownlie, Isaac Allan**, B.Sc.Hons. (Glas), A.R.I.C. Scottish. Heather View, 438, Cambusnethan Street, Wishaw. Research Chemist. *Signed by* : A. B. Crawford, F. Rufford, W. M. Cumming.
- Carter, Herbert Donald**, B.A.(Cantab.). British. 103, Bull's Head Lane, Coventry. Analytical Chemist. *Signed by* : F. Wild, F. B. Kipping, G. A. H. Bosley.
- ***Dean, Francis Edward**, B.Sc. (Lond.), A.R.C.S. British. Nirvana, 34, Penderel Road, Hounslow. Fuel Engineer on staff of the Ministry of Fuel and Power. *Signed by* : J. F. Herringshaw, E. R. H. Jones, L. J. Haynes.
- ***Dunstan, William John**. Doing final year for B.Sc.(Honours) degree. British. 16, Dudley Street, Haberfield, N.S.W., Australia. 4th-Year Honours student in Organic Chemistry at the University of Sydney. *Signed by* : J. C. Earl, C. E. Fawsitt, Thomas Iredale.
- †**Everett, Alfred George**. Member of the Institute of the Plastics Industry. Civilian employment, Cashier and Accountant with May and Baker, Ltd., and being re-employed after the War by M. and B. Plastics, Ltd. Member of the Society of Chemical Industry. British. St. Mary's School, Church Street, Luton. Army Paymaster, Royal Army Pay Corps, since October 11th, 1939. *Signed by* : A. B. Bradley, A. N. C. Bennett, V. W. Slater.
- (a) **Ginzburg, Stuart Wilford**, B.Sc. (Lond.), A.R.C.S. British. 513, Green Lanes, Harringay, N. 4. Chemist at Messrs. Macleans, Ltd. *Signed by* : F. H. Milner, W. McGeorge, A. C. Rich.
- ***Hampton, Alexander**. Doing final year for B.Sc.(Honours) degree. British. 227, Rainbow Street, Coogee, N.S.W., Australia. 4th-Year Honours student, Organic Chemistry, University of Sydney. *Signed by* : C. E. Fawsitt, J. C. Earl, Thomas Iredale.
- Harris, Charles Edward**, A.R.I.C. British. Waterworks Pumping Station, North Mimms. Chief Chemist and Bacteriologist, The Barnet District Gas and Water Company. *Signed by* : C. E. Corfield, T. E. Wallis, W. H. Linnell.
- Holden, Eric Kenyon**, A.I.Chem.A., A.M.Tech.I., F.F.Sc. Has been working as personal Assistant to Dr. W. Ignatius S. Rawson, Sc.M., Ph.D., F.C.S., for more than three years, and the past twelve months as Assistant Research Chemist at the Chegwyn-Rawson Research Laboratories, Ltd., 50-52, Boston Place, London, N.W. 1. Australian. 26, Seymour Street, W. 1. Bacteriologist and Chemist Analyst, engaged at the moment upon Medical Research. *Signed by* : W. Ignatius S. Rawson, O. Silberrad, Pierce A. Arnold.
- ***Howard, George Alfred**, B.Sc.Hons., M.Sc. (Manc.). British. 947, Middleton Road West, Chadderton, Oldham. Research Student. *Signed by* : F. S. Spring, J. Baddiley, B. Lythgoe.
- (a) **Ibison, Gerard Francis**, B.Sc.Hons. (L'pool). British. 11, Lindow Square, Lancaster. Chemist. *Signed by* : John Royston Moore, Leslie Davies, S. Hornsby.
- †**Kennedy, Eric**, B.Sc. (Lond.), A.R.I.C. British. 37, Hallams Lane, Chilwell, Nottingham. Analytical Chemist. *Signed by* : F. Clermont Scott, W. F. Elvidge, A. D. Powell.
- (a) **Kidder, Douglas Edwin**, B.Sc. (Lond.), A.R.I.C. British. 260, Derby Road, Chaddesden, Derby. Chemist. *Signed by* : G. B. Pickering, G. L. Hollis, C. M. C. Dorkin.
- †**Lock, Ritchie Hart**, B.Sc. (Lond.), A.R.I.C. British. Lynford, Grange Crescent, Chigwell. Research Chemist, Technical Manager (Research) Messrs. Howards & Sons, Ltd. *Signed by* : W. E. Huggett, George Clark, J. M. C. Fox.
- Lord, John Kenneth**, A.M.I.Gas.E., Graduate, Institution of Chemical Engineers. British. Rushville, 2, St. Andrew Road, Bridlington. Chemical Engineering Assistant with the United Kingdom Gas Corporation, Ltd. (Central Administration), Swettenham, Nr. Congleton. *Signed by* : C. P. Finn, W. Hodgkinson, Thos. Haworth.
- †**Parkin, George**, Assoc.Met. (Sheffield), F.R.I.C., Assoc.Inst. Industrial Administration. British. Research Department, Messrs. Brown, Bayley's Steel Works, Ltd., Leeds Road, Sheffield, 9. Metallurgist. *Signed by* : Alex. Findlay, H. W. Cremer, R. Leslie Collett.
- †**Paterson, John Paterson**, B.Sc. (Lond.), A.R.I.C. British. 6, Oswald Drive, Prestwick. Chemist. *Signed by* : I. Vance Hopper, W. M. Cumming, F. J. Wilson.
- (b) **Raybould, Ralph Douglas**, B.Sc.Hons. (L'pool). English. 2, Station Terrace, Bishopton Lane, Stockton-on-Tees. Assistant Chemist to I.C.I., Ltd. *Signed by* : M. P. Applebey, A. J. Prince, J. G. M. Bremner.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Junior Membership two-body

(b) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between July 27th and August 21st, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

"Synthesis of substances possibly obtainable as degradation products of thebaine." By R. GHOSH and SIR ROBERT ROBINSON.

"Attempts to find new antimalarials. Part XXI." By M. J. S. DEWAR.

"Attempts to find new antimalarials. Part XXII." By M. J. S. DEWAR.

"Some derivatives of diphenylguanidine." By M. J. S. DEWAR.

"The direct introduction of angular methyl groups." By A. J. BIRCH and SIR ROBERT ROBINSON.

"Experiments on the synthesis of substances related to the sterols. Part XLIII." By A. J. BIRCH and SIR ROBERT ROBINSON.

"Experiments on the synthesis of purine nucleosides. Part VIII. The determination of the lactol ring-structures of purine glycosides by periodate oxidation." By B. LYTHGOE and A. R. TODD.

"Lactones of glucosaccharic acid. Part II. 2 : 3 : 5-Trimethyl- and 2 : 4 : 5-trimethyl glucosaccharo-lactone." By F. SMITH.

- "Lactones of mannosaccharic acid. Part II. Synthesis of 2:3:5-trimethyl mannosaccharic acid diamide." By (Miss) D. HESLOP and F. SMITH.
- "Glucurone." By F. SMITH.
- "Studies in the indole Series. Part I. Attempted preparation of tryptophan from tricyclic compounds." By J. ELKS, D. F. ELLIOTT, and B. A. HEMS.
- "Studies in the indole Series. Part II. Attempted synthesis of tryptophan from substituted malonic esters." By J. ELKS, D. F. ELLIOTT, and B. A. HEMS.
- "Studies in the indole Series. Part III. Improved synthesis of tryptophan." By J. ELKS, D. F. ELLIOTT, and B. A. HEMS.
- "Studies in the indole Series. Part IV. Sulphonamides derived from indole." By D. F. ELLIOTT and F. A. ROBINSON.
- "The chemistry of esters of aminobenzoic acid." Part I. By H. SHAPIRO.
- "Lactones of mannosaccharic acid. Part III. Isomerisation of mannosaccharodilactone with alkali." By (Miss) D. HESLOP and F. SMITH.
- "Synthesis of uronic acids. III. *d*-Mannuronic acid." By M. STACEY and P. I. WILSON.

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, October 19th, 1944, at 2.30 p.m.

Tilden Lecture on "Non-benzenoid Aromatic Hydrocarbons," by Professor Wilson Baker.

Thursday, November 16th, 1944, at 2.30 p.m.

Meeting for the reading of papers. (Further announcement to be made.)

OUTSIDE LONDON.

EDINBURGH.

Tuesday, October 17th, 1944, at 7 p.m.

Lecture on "Some Aspects of Steroid Metabolism," by Professor G. F. Marrian, D.Sc., F.R.S. Joint meeting with the Edinburgh University Chemical Society and the Local Sections of the Royal Institute of Chemistry and the Society of Chemical Industry. To be held in the Medical Chemistry Lecture Theatre of the University at Teviot Place.

GLASGOW.

Friday, November 17th, 1944, at 7.15 p.m.

Lecture on "The Value of the Resonance Concept in Chemistry," by Mr. R. P. Bell, M.A., F.R.S. To be held at the Royal Technical College.

Monday, November 27th, 1944, at 4 p.m.

Lecture on "Some Recent Studies in Diazo-Chemistry," by Dr. H. H. Hodgson, M.A., B.Sc. Joint meeting with the Glasgow University Alchemists Club and the Andersonian Chemical Society. To be held at the Royal Technical College.

LEEDS.

Monday, October 9th, 1944, at 6.30 p.m.

Lecture on "Some Trends in Chemical Spectroscopy and the Study of Large Molecules," by Dr. H. W. Thompson. To be held in the Chemistry Lecture Theatre of the University.

LIVERPOOL.

Thursday, October 12th, 1944, at 6 p.m.

Lecture on "Sulphur Dioxide—Retrospect and Prospect," by Mr. G. Brearley, B.Sc., F.R.I.C. Joint meeting with the Royal Institute of Chemistry. To be held in the Chemistry Lecture Theatre of the University.

MANCHESTER.

Wednesday, November 8th, 1944, at 5 p.m.

Lecture on "Chemistry in relation to National Prosperity," by Professor I. M. Heilbron, D.S.O., D.Sc., F.R.S. Joint meeting with the Manchester University Chemical Society and the Royal Institute of Chemistry. To be held in the Chemistry Lecture Theatre of the University.

NORTH WALES.

Thursday, November 16th, 1944, at 5.30 p.m.

Lecture on "Oxidation of Phenols," by Professor R. D. Haworth, D.Sc., Ph.D., F.R.S. To be held in the Department of Chemistry, University College of North Wales, Bangor.

NOTTINGHAM.

Monday, November 20th, 1944, at 4 p.m.

Lecture on "The Usefulness of the Concept of Resonance in Chemistry," by Mr. R. P. Bell, M.A., F.R.S. To be held in the Lecture Theatre, Chemistry Department, University College, University Park.

SHEFFIELD.

Friday, November 10th, 1944, at 5.30 p.m.

Lecture on "Co-ordination Compounds," by Professor W. Wardlaw, D.Sc., F.R.I.C.

Joint meeting with the University Chemical Society. To be held in the Chemistry Lecture Theatre of the University, Western Bank.

PROCEEDINGS
OF THE
CHEMICAL SOCIETY.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
Leo Frank Goodwin	1904	August 15th, 1944.
Sir John Jarmay, K.B.E.	1882	August 22nd, 1944.
Ronald William Hamilton O'Donnell	1937	July 16th, 1944.
Alexander Sanders	1941	July 24th, 1944.
Charles Harold Wright	1908	July 31st, 1944.
William Norman Stewart Wright	1910	April 20th, 1944.

ACKNOWLEDGMENT.

The thanks of the Council have been conveyed to Mr. T. A. Simmons for presenting publications of the Society.

RESEARCH FUND.

The Council are prepared to consider applications for grants from the Research Fund. Applications should be made on forms to be obtained from the General Secretary. Fellows who have received grants, the accounts of which have not been closed, are reminded that reports should be received by *November 1st, 1944.*

HARRISON MEMORIAL PRIZE, 1944.

In accordance with the Trust Deed governing the Harrison Memorial Fund, the Selection Committee consisting of the Presidents of the Chemical Society, the Royal Institute of Chemistry, the Society of Chemical Industry and the Pharmaceutical Society, will proceed to make an award of the Harrison Memorial Prize in December 1944, subject to the condition that the Selection Committee shall be of opinion that there is a candidate of sufficient distinction to warrant an award of the Prize.

The Prize, not exceeding £150, will be awarded to the chemist of either sex, being a natural born British subject and not at the time over thirty years of age, who, in the opinion of the Selection Committee, shall, during the previous five years, have conducted the most meritorious and promising original investigations in Chemistry and published the results of those investigations in a scientific periodical or periodicals.

Applications, five copies of which must be submitted, should contain the following information :

- (a) Name (in full).
- (b) Age (Birth certificate must accompany application).
- (c) Degrees (name of University where obtained).
- (d) Other qualifications.
- (e) Experience.
- (f) Titles of published papers, with authors' names, including full references to publications.
- (g) Where research was carried out.
- (h) Testimonials and references.
- (i) Any other particulars bearing on the application.

The Selection Committee is prepared to consider applications, nominations, or information as to candidates eligible for the Prize. Any such communication must be received by :

The President,
The Chemical Society,
Burlington House,
Piccadilly,
London, W. 1.

not later than Friday, December 1st, 1944. Candidates must not be more than 30 years of age at this date.

FELLOWSHIP.

The following 20 candidates were elected Fellows of the Chemical Society on September 21st, 1944 :

George Ader.	Stuart Wilford Ginzburg.	Douglas Edwin Kidder.
John Donald Broatch.	Alexander Hampton.	Ritchie Hart Lock.
Isaac Allan Brownlie.	Charles Edward Harris.	John Kenneth Lord.
Herbert Donald Carter.	Eric Kenyon Holden.	George Parkin.
Francis Edward Dean.	George Alfred Howard.	John Paterson Paterson.
William John Dunstan.	Gerard Francis Ibison.	Ralph Douglas Raybould.
Alfred George Everett.	Eric Kennedy.	

LIST OF APPLICATIONS FOR FELLOWSHIP

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than October 23rd, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

- (b) **Bridger, George Walter**, B.Sc.Hons. (Lond.). British. Holston House, Fairfield, Stockton-on-Tees. Chemist at present on Research, employed by I.C.I. (F. and S.P.), Ltd. Signed by : A. J. Prince, J. G. M. Bremner, M. P. Applebey.
- (b) **Buckle, Felix James**, B.A.Hons. (Cantab.). British. Magdalene College, Cambridge. Research Chemist (extra mural) for Ministry of Supply. Signed by : B. C. Saunders, N. B. Chapman, J. D. Ilett.
- † **Burrows, Maxwell Guy Thomas**, B.A., B.Sc., and D.Phil. (Oxon). British. 45, Broad Road, Sale, Manchester. Divisional Plant Manager, Manchester Oxide Co. Signed by : Geoffrey Ogden, Denis E. Wheeler, Donald McNeil.
- Cookson, Richard Clive**, B.A. (Cantab.). English. Trinity College, Cambridge. Research Student. Signed by : F. G. Mann, H. McCombie, B. C. Saunders.
- ‡ **Cunningham, George Eric**, B.Sc.Hons. (Leeds), A.R.I.C. British. c/o Messrs. Clark, Son & Morland, Ltd. Research Chemist. Signed by : David A. Hall, G. H. Elliott, J. L. Stoves.
- ‡ **Dixon, Theodore Frederic**, B.Sc. and Ph.D. (Lond.), F.R.I.C. British. Trianon, 132, Longland Drive, Totteridge, N. 20. Biochemist at British Drug Houses, Ltd. Signed by : Francis H. Carr, P. G. Marshall, T. H. Mead.
- ‡ **Donaldson, James Whyte**, B.Sc. (St. Andrews). British. c/o Tylee, 19, Hambleton Square, Billingham. Assistant Chemist to I.C.I., Ltd. Signed by : D. Summers, K. W. Gee, D. M. Grudgings.
- ‡ **Goodall, Allen James**, B.Sc. (Lond.). British. 21, Phrosso Road, Worthing. Chemist, Messrs. J. Lyons & Co., Ltd. Signed by : Leslie H. Lampitt, E. B. Hughes, C. G. Barlow.
- Graham, John Charles James**, B.Sc.Hons. (Lond.). British. 49, Chequers Lane, Walton-on-the-Hill, Tadworth. Chemist. Signed by : Edward Horton, J. G. Maltby, Cyril A. Brighton.
- * **Green, James**, B.Sc.Hons. and M.Sc. (Manc.), A.R.I.C. British. 312, Blackburn Road, Egerton, Bolton. Research Chemist. Signed by : F. S. Spring, H. T. Openshaw, A. E. Gillam.
- (b) **Jobling, Alan**, Passed B.Sc.Hons. (Lond.) (not yet awarded), A.R.C.S. British. 50, Wentworth Avenue, Finchley, N. 3. 2nd Lt. Royal Engineers. Signed by : William A. Bates, L. N. Owen, J. F. Herringshaw.
- ‡ **Latter, Ralph William**, B.Sc. (Lond.). British. 6, Manor Court, Gunnersbury Avenue, Acton, W. 3. Analytical Chemist. Signed by : W. E. Scott, H. Egan, W. Davey.
- (a) **Levy, Heinz**, B.Sc. (Lond.), A.R.C.S. German. 46, Belsize Square, N.W. 3. Research Chemist (Organic) at Jenson and Nicholson, Ltd., E. 15. Signed by : A. A. Eldridge, J. A. Kitchener, H. J. T. Ellingham.
- * **Marriott, Jack Victor Ralph**, B.Sc.Hons. (Birm.). British. Chemistry Department, The University, Edgbaston, Birmingham, 15. Research. Signed by : Stanley Peat, L. F. Wiggins, M. Stacey.
- † **Martin, Arnold Edward**, B.Sc.Hons. (Reading), F.R.I.C. British. The University, Reading. Assistant to the Advisory Chemist, Southern Provincial Area. Signed by : Thomas H. Goodwin, D. Roy Maxted, F. A. Lyne.
- * **Molloy, Eileen Lorna**, B.Sc.Hons. (Lond.). British. 16, Helder Grove, Lee, S.E. 12. Industrial Research. Signed by : T. S. Moore, M. M. T. Plant, J. W. E. Brading.
- * **Newbold, Geoffrey Tattersall**, B.Sc.Hons. and M.Sc. (Manc.). British. 6, Granby Road, Stretford, nr. Manchester. Research Student working for Ph.D. degree in Organic Chemistry at Manchester University. Signed by : F. S. Spring, J. Baddiley, J. Wardleworth.
- ‡ **Paterson, Thomas**, B.Sc.Hons. (Glas.). British. 23, Hillside, Little Thurrock, near Grays. Works Chemist. Signed by : H. R. Galleymore, T. S. Stevens, C. Buchanan.
- * **Phillips, Frederick William**. Matriculation in Chemistry. 4 Years' experience of analytical chemistry. British. 32, Ashton Gardens, Chadwell Heath, Romford. Assistant Biochemist, May & Baker, Ltd., Dagenham. Signed by : Arthur J. Ewins, Julius N. Ashley, G. Newbery.
- Razouk, Rashad Ilias**, Ph.D. (Fouad I University, Cairo). Egyptian. Faculty of Science, Fouad I University, Abbassia, Cairo. Lecturer in Physical Chemistry. Signed by : Gabra Soliman, Alexander Schönberg, F. G. Baddar.
- ‡ **Robson, Thomas David**, B.Sc. (Glas.), Ph.D. (St. Andrews). British. Woodside, Langholm, Dumfriesshire. Research Chemist. Signed by : C. I. Brodrick, R. Michaelis, J. W. Minnis.
- ‡ **Salomon, Max**, Ingenieur-Chemiker (Bonn). Analytical and Consulting Chemist. Foodstuff Chemist., Late German. 4, Calvin Street, Belfast. Chief-Chemist of Wheta, Ltd., Belfast. Signed by : J. M. Tucker, D. W. Kent-Jones, A. J. Amos.
- ‡ **Saunderson, John Edward Frederick**. National Certificate in Chemistry. 12 years' experience in chemical industry comprising pigments, metallurgical analysis, photographic developer, plastics, explosives, metallic soaps. British. Newcastle-on-Tyne Zinc Oxide Co., Ltd., Birtley. Research Chemist. Signed by : H. L. Riley, W. M. Madgin, H. E. Blayden, K. H. Jack.
- * **Sicher, George Paul**. Czechoslovak. 88, Rivermead Court, Ranelagh Gardens, S.W. 6. Student. Signed by : J. R. Partington, V. A. Petrow, J. Saper.

- ***Snook, Gordon Frank**, Inter B.Sc. (Lond.). British. Greenways, Olivers Battery, Winchester. Student (Special B.Sc.) University College, Southampton. *Signed by* : Ishbel G. M. Campbell, S. H. Harper, N. K. Adam, K. R. Webb.
- Taylor, Lance Neville**. Educated at the Sheffield University. Articled to the Sheffield Testing and Experimenting Works. British. 52, Bowshaw, Dronfield, Nr. Sheffield. Chief Chemist (for over 24 years), Messrs. Samuel Osborn & Co., Ltd. *Signed by* : N. D. Ridsdale, R. D. Haworth, Edwin Gregory.
- †**Thorburn, Samuel**, B.Sc.Hons. (Glas.), A.R.I.C. Scottish. 111, Beacon Road, Loughborough. Research Chemist, Genatosan Research Laboratories. *Signed by* : G. Malcolm Dyson, E. Vero, H. Coates.
- †**Thorpe, William Frederick Albert**, A.R.I.C., A.C.T.C. (Birm.). British. 10, Douglas Road, Blackheath, Birmingham. Chief Chemist at Arthur Holden and Sons, Ltd. *Signed by* : J. Sheridan, T. T. Jones, A. A. K. Whitehouse.
- †**Tinsley, Joseph**, B.Sc.Hons. (Reading), F.R.I.C. British. Agricultural Chemistry Department, The University, Reading. Assistant Lecturer in Agricultural Chemistry. *Signed by* : Thomas H. Goodwin, D. Roy Maxted, H. Bassett.
- †**Turnbull, Anthony John**, 10 years' experience in the analysis of Foods, Drugs and Chemicals. British. 19, Palace Gardens, Enfield. Analytical Chemist, Marshall's Food Products, Ltd. *Signed by* : Norman Evers, J. Hubert Hamence, J. M. Jones.
- †**Wellburn, Edgar Robert**, B.A., B.Sc. (Oxon), A.R.I.C. British. 18, Squirrels Heath Avenue, Gidea Park, Romford. Chief Metallurgist. *Signed by* : Philip S. Allam, R. S. Cahn, N. C. Brown.
- †**Whittaker, James**, B.Sc.Hons., M.Sc. (Manc.), Teacher's Diploma. British. Craigmonie, Bishopton. Chemist-in-Charge, R.O.F. *Signed by* : B. Lythgoe, G. N. Burkhardt, Colin Campbell.

UNDER SPECIAL PROVISION APPERTAINING TO CANDIDATES RESIDENT ABROAD.

- †**Frosst, John B.**, Ph.G. (Maryland). British (Canadian). P.O. Box 247, Montreal. Vice-President, Charles E. Frosst & Co., Manufacturers of Pharmaceuticals. *Signed by* : W. D. McFarlane, Léon Lortie.
- Gupta, Govind Saran**, B.Sc. (Agra). Chemical Engineer, Designer and Constructor of Distillery Plants. Indian. The Central Distillery and Chemical Works, Ltd., P.B. No. 19, Meerut (U.P.), India. Works Manager and Distiller. *Signed by* : S. S. Bhatnagar.
- Husain, Mian Mohammed Siddiq**, M.B., B.S. (Punjab), L.R.C.P. (Lond.), M.R.C.S. (Eng.), D.P.H. (Lond.). Indian. Vaccine Depot, H.E.H. The Nizam's Government, Hyderabad, Deccan. Chemical Examiner, Bacteriologist, Superintendent Vaccine (Small pox and Cholera), Professor of Hygiene, Medical College, Hyderabad. *Signed by* : J. N. Mukherjee.
- †**Ogburn, Sihon Cicero, Jr.**, B.S. and Ph.D. (North Carolina), M.S. (Washington & Lee Univ.), Professor of Chemistry and Chemical Engineering, Educational Administrator, Industrial Chemical Consultant and Chemical Research Executive. U.S.A. Pennsylvania Salt Manufacturing Company, 1000, Widener Buildings, Philadelphia, Pa., Manager, Research and Development Department, Pennsylvania Salt Manufacturing Company. *Signed by* : Foster Dee Snell.
- Riebsomer, Jesse LeRoy**, A.B. (DePauw), A.B. and Ph.D. (Cornell). Fifteen publications in various journals, Industrial Chemistry one year, Teacher of Chemistry 12 years, Consulting Chemist 2 years. American. 316, Arlington Road, Greencastle, Indiana. Professor of Chemistry and Head of the Department of Chemistry, DePauw University. *Signed by* : Roger Adams.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Junior Membership two-body.

(b) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between August 21st and September 21st, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

- "The synthesis of some unsaturated γ -lactones." By G. SWAIN, A. R. TODD, and W. S. WARING.
- "The preparation of 1 : 2 : 3-trinitronaphthalene." By H. H. HODGSON and D. E. HATHWAY.
- "The condensation products of the 1 : 2-disubstituted-3-nitrosoindoles. A new type of cyanine dye." By F. G. MANN and R. C. HAWORTH.
- "The preparation of 1-aminophthalaz-4-one." By (MISS) E. F. M. STEPHENSON.
- "The synthesis of α -amino-acids. Part I. *dl*-Methionine." By E. BOOTH, V. C. E. BURNOP, and W. E. JONES.
- "Lactones of glucosaccharic acid. Part III. Mono- and di-lactones." By S. SMITH.
- "Lactones of glucosaccharic acid. Part IV. The enol of 5-keto-4-deoxy glucosaccharo-3 : 6-lactone, an analogue of ascorbic acid." By (MISS) D. HESLOP and F. SMITH.
- "The condensation of fluorene with acetone. Part III. Formation of fluoranthene derivatives." By H. FRANCE, S. H. TUCKER, and (in part) J. FORREST.
- "The Friedel-Crafts reaction and the preparation of α - and β -naphthylketones." By G. BADDELEY.
- "Experiments on the synthesis of purine nucleosides. Part IX. A synthesis of 9-*d*-xylopyranosidoadenine." By G. W. KENNER, B. LYTHGOE, and A. R. TODD.
- "Experiments on the synthesis of purine nucleosides. Part X. A synthesis of 9-*d*-ribopyranosidoadenine." By J. BADDILEY, G. W. KENNER, B. LYTHGOE, and A. R. TODD.

- “The structure of pyrethrolone and related compounds. Part III.” By T. F. WEST.
- “Sulphanilamides of some aminopyrazoles and a note on the application of phthalylsulphanilyl chloride to the synthesis of sulphanilamides.” By M. J. S. DEWAR and F. E. KING.
- “Pyrazoline ring formation. Part I. The action of phenylhydrazine on some saturated and unsaturated β -amino-ketones.” By H. B. NISBET.
- “Pyrazoline ring formation. Part II. Ring-chain tautomerism between α -unsaturated phenylhydrazones and 1-phenylpyrazolines. Some evidence of reversibility.” By H. B. NISBET.
- “Reactions of furan compounds. Part II. Fission of the tetrahydrofuran and tetrahydropyran rings.” By C. L. WILSON.
- “Reactions of furan compounds. Part III. Formation of tetrahydrofuran, 2:3-dihydrofuran and other substances by passage of tetrahydrofurfuryl alcohol vapour over a nickel catalyst.” By C. L. WILSON.
- “Reactions of furan compounds. Part IV. High-temperature decomposition of the vapours of tetrahydrofuroic nitrile and methyl tetrahydrofuroate to give 2:3-dihydrofuran and *cycloprop*-aldehyde.” By C. L. WILSON.
- “Reactions of furan compounds. Part V. Formation of furan from furfural by the action of nickel or cobalt catalysts. Importance of added hydrogen.” By C. L. WILSON.
- “Reactions of furan compounds. Part VI. Formation of indole, pyrrocolin, and carbazole during the catalytic conversion of furan into pyrrole.” By C. L. WILSON.
- “Syntheses of 1:4-telluroxan and related cyclic tellurides.” By W. V. FARRAR and J. M. GULLAND.
- “The reaction between sulphonyl chlorides and dimethoxybenzenes in the presence of zinc chloride.” By H. BURTON and E. HOGGARTH.
- “The conversion of sucrose into furan compounds. Part I. 5-Hydroxymethyl furfural and some derivatives.” By W. N. HAWORTH and W. G. M. JONES.
- “The conversion of sucrose into furan compounds. Part II. Some 2:5-disubstituted tetrahydrofurans and their products of ring scission.” By W. N. HAWORTH, W. G. M. JONES, and L. F. WIGGINS.
- “The anhydrides of polyhydric alcohols. Part I. The constitution of isomannide.” By L. F. WIGGINS.
- “The condensation of glucose and β -diketones.” By J. K. N. JONES.
- “16-*iso*-Propylidene-androstene derivatives.” By W. C. J. ROSS.

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, November 16th, 1944, at 2.30 p.m.

The following papers will be read and discussed :

“Investigation of the occurrence of the co-ordinate or dative link by electric dipole moment measurements.” By G. M. Phillips, J. S. Hunter, and L. E. Sutton.

“A constitutional synthesis of cellobiose and gentiobiose.” By Mrs. G. A. Gilbert, F. Smith, and M. Stacey.

OUTSIDE LONDON.

GLASGOW.

Friday, November 17th, 1944, at 7.15 p.m.

Lecture on “The Value of the Resonance Concept in Chemistry,” by Mr. R. P. Bell, M.A., F.R.S. To be held at the Royal Technical College.

Monday, November 27th, 1944, at 4 p.m.

Lecture on “Some Recent Studies in Diazo-Chemistry,” by Dr. H. H. Hodgson, M.A., B.Sc. Joint meeting with the Glasgow University Alchemists Club and the Andersonian Chemical Society. To be held at the Royal Technical College.

MANCHESTER.

Wednesday, November 8th, 1944, at 5 p.m.

Lecture on “Chemistry in relation to National Prosperity,” by Professor I. M. Heilbron, D.S.O., D.Sc., F.R.S. Joint meeting with the Manchester University Chemical Society and the Royal Institute of Chemistry. To be held in the Chemistry Lecture Theatre of the University.

NORTH WALES.

Thursday, November 16th, 1944, at 5.30 p.m.

Lecture on “Oxidation of Phenols,” by Professor R. D. Haworth, D.Sc., Ph.D., F.R.S. To be held in the Department of Chemistry, University College of North Wales, Bangor.

NOTTINGHAM.

Monday, November 20th, 1944, at 4 p.m.

Lecture on “The Value of the Resonance Concept in Chemistry,” by Mr. R. P. Bell, M.A., F.R.S. To be held in the Lecture Theatre, Chemistry Department, University College, University Park.

SHEFFIELD.

Friday, November 10th, 1944, at 5.30 p.m.

Lecture on “Co-ordination Compounds,” by Professor W. Wardlaw, D.Sc., F.R.I.C. Joint meeting with the University Chemical Society. To be held in the Chemistry Lecture Theatre of the University, Western Bank.

PROCEEDINGS

OF THE

CHEMICAL SOCIETY.

Minutes of a SCIENTIFIC MEETING

held at Burlington House, Piccadilly, W. 1, on Thursday, October 19th, 1944, at 2.30 p.m.

The President, Professor W. N. HAWORTH, D.Sc., F.R.S., was in the Chair, and in opening the proceedings of the meeting, referred to the visit of Indian Scientists to this country. He stated that the Council had entertained Dr. N. Ahmad, Sir Shanti Bhatnagar, Sir Jnanendra Ghosh, Professor S. K. Mitra and Professor J. N. Mukherjee at luncheon that day; that on behalf of the Society he had accorded them a hearty welcome and expressed great pleasure at their visit and of the opportunity it gave of renewing the bonds of fellowship between Indian and British men of science.

MINUTES.

The Minutes of the Scientific Meetings of May 12th in Sheffield and of May 18th in London, which had been circulated, were taken as read and were confirmed and signed.

FORMAL ADMISSION OF FELLOWS.

The following were formally admitted Fellows of the Chemical Society: H. Egan, M. K. Hargreaves, J. Donald Broatch, John F. W. McOmie, Gordon H. Thomson, R. L. Lacey, G. J. Minkoff, R. D. Wadsworth, F. W. Daniel, K. Parvin, W. G. Leeds, S. J. Holt, Clifford Pugh, Roy W. Goodrich, G. Baldit, K. F. Coles, David W. Mathieson, Geo. L. Buchanan, H. W. B. Reed, B. H. Kingston, A. R. Graham, J. B. Fraser, D. S. Payne, Hugh B. Nisbet, Arthur A. Banks, H. L. Salter, P. A. Robins, R. H. Smith, John Attenburrow, J. Elks, H. R. V. Arnstein, R. Frohnsdorff, John A. White, A. Stadler, D. Rozsnyai.

TILDEN LECTURE.

After a brief introduction, the PRESIDENT called on Dr. W. Baker to deliver his Tilden Lecture, entitled: "Non-Benzenoid Aromatic Hydrocarbons."

At the conclusion of the lecture, a vote of thanks to the Lecturer, proposed by Professor J. W. Cook, was carried with acclamation.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows:

	Elected.	Died.
Ernest Barrett	1906	September 19th, 1944.
Charles Henry Corbett	1891	February 24th, 1944.
Cyril John Fairlam	1943	September 20th, 1944.

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to Mr. H. Ingham, Dr. E. B. Ludlam, and Messrs. Chance Bros., Ltd., for gifts of publications of the Society.

FELLOWSHIP.

The following 37 candidates were elected Fellows on October 19th:

George Walter Bridger.	Alan Jobling.	Thomas Paterson.
Felix James Buckle.	Ralph William Latter.	Frederick William Phillips.
Maxwell Guy Thomas Burrows.	Lance Neville Taylor.	Rashad Ilias Razouk.
Richard Clive Cookson.	Samuel Thorburn.	Jesse LeRoy Riebsomer.
George Eric Cunningham.	William Frederick Albert	Thomas David Robson.
Theodore Frederic Dixon.	Thorpe.	Max Salomon.
James Whyte Donaldson.	Joseph Tinsley.	John Edward Frederick
John B. Frosst.	Heinz Levy.	Saunderson.
Allen James Goodall.	Jack Victor Ralph Marriott.	George Paul Sicher.
John Charles James Graham.	Arnold Edward Martin.	Gordon Frank Snook.
James Green.	Eileen Lorna Molloy.	Anthony John Turnbull.
Govind Saran Gupta.	Geoffrey Tattersall Newbold.	Edgar Robert Wellburn.
Mian Mohammed Siddiq Husain.	Sihon Cicero Ogburn.	James Whittaker.

INTER-ALLIED BOOK CENTRE.

The Council have received with sympathy an appeal from the Inter-Allied Book Centre Committee for books to replenish in each of the Allied Countries those libraries which have suffered destruction owing to the War.

The need is urgent for modern technical, scientific and commercial works of every kind, and also for complete sets of the more important periodicals, particularly for back numbers of scientific journals.

For the sake of economy, donors are asked to submit lists of books available to the Director of the Inter-Allied Book Centre, 3-5, Salisbury Square, E.C. 4, from whom copies of the appeal can be obtained.

LIST OF APPLICATIONS FOR FELLOWSHIP

(*Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than November 20th, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.*)

- Arnold, Maurice Alec**, A.R.I.P.H. British. 43, Pollard Road, Morden. Engaged upon research into the chemotherapeutical action of diallyl sulphide compounds in fowls. *Signed by* : Pierce A. Arnold, W. Ignatius S. Rawson, H. J. Strausz.
- ***Benfey, Otto Theodor**, B.Sc.Hons. (Lond.). German. 57, Cassiobury Drive, Watford. Chemical Research at University College, London. *Signed by* : H. G. Poole, C. K. Ingold, J. N. E. Day.
- †**Dickinson, Denis Ridgwell**, B.Sc.Hons. (Lond.). British. 56, Osborne Road, Forest Gate, E. 7. Research Chemist, Tate and Lyle, Ltd. *Signed by* : Lawrence S. Bull, H. C. S. de Whalley, J. Barrett.
- ***Dodd, Robert Edward**. Scholar of Trinity College, Oxford. British. Trinity College, Oxford. Student. *Signed by* : F. M. Brewer, C. N. Hinshelwood, G. V. Raynor.
- †**Eddowes, Derek Ellis**, B.Sc. (Lond.). Five years experience with the Research Association of British Paint Colour and Varnish Manufacturers. British. 3, King's Road, Wimbledon, S.W. 19. Research Chemist. *Signed by* : J. Kenyon, J. W. Smith, L. A. Jordan.
- (b)**Gardner, Kenneth**. Passed Pure Maths. subsidiary to Special Chemistry, B.Sc. (Lond.) to be taken 1945, Higher National Cert. in Chemistry. British. 13, Dronfield Road, Stoke, Coventry. Metallurgical Analyst in the Laboratory of A. C. Wickman, Ltd., Coventry. *Signed by* : F. W. Haywood, Charles F. Watts, H. D. Carter.
- †**Greensmith, Denis Eric Bosworth**, B.Sc.Hons. (Lond.), A.R.I.C. British. 42, Handen Road, Lee, S.E. 12. Research Chemist. *Signed by* : James G. Fife, H. G. Emblem, J. E. Hackford.
- †**Hawkins, Dennis Ernest**, B.Sc. Hons. (Lond.), A.R.C.S., A.R.I.C. English. 9, Arran Road, Catford, S.E. 6. Chemist to R. White & Sons. *Signed by* : K. Parvin, R. W. Pearman, Maurice G. Charlton.
- ***Jakobowski, Hanns Peter**, Inter.B.Sc., Subsid. (Physics), taking final B.Sc. (Chemistry) June, 1945, at Birkbeck College, London University. German (refugee). 16, Meadow Road, Berkhamsted. Engaged in Chemical and technological plastics research at Cavendish Laboratories, W. 1. *Signed by* : H. G. Emblem, F. Barrow, J. E. Hackford.
- †**Jones, Owen Richard**, Member, the Institute of Fuel. British. Delfryn, 11, Pen-y-Bryn Road, Holyhead. Engineer and Deputy General Manager to the Holyhead and North Wales Gas and Water Co., Ltd. *Signed by* : W. Rogie Angus, J. R. Lewis, O. P. Cronshaw, Richard Jones.
- †**Keyser, James William**, M.Sc. (Lond.), A.R.I.C. British. 18, Coniston Avenue, Perivale. Manufacturing laboratory chemist since 14th August (temporarily). *Signed by* : Noel L. Allport, F. J. Bellringer, E. D. Yardley.
- (b)**Monks, John Matthew**, B.Sc. (L'pool). British. 26, Lilac Grove, Whitby, Wirral. Laboratory Assistant (skilled). *Signed by* : J. H. Beynon, L. Belchetz, Harold W. Jones.
- †**Palethorpe, Louis George Whybrow**, F.R.I.C. British. 4, Austhorpe Avenue, Halton, Leeds. Metallurgical Chemist. *Signed by* : Robert Gawler, J. W. Baker, F. R. Goss.
- (a)**Parry, Joan Mary**, B.Sc. (Lond.). British. 4, Park Terrace, Cambridge. Post-graduate Student, Department of Medicine, Addenbrookes Hospital, Cambridge. *Signed by* : D. J. Bell, A. C. Chibnall, G. D. Greville.
- Perutz, Max**, Ph.D. (Cantab.). British. Cavendish Laboratory, Cambridge. Lecturing and research in X-ray Crystallography at Cambridge University. *Signed by* : Fredk. S. Dainton, A. E. Alexander, P. Johnson.
- †**Phillips, William Pearse**, B.Sc.Hons. (Lond.), A.R.C.S., A.R.I.C. British. The Distillers Co., Ltd., 21, St. James's Square, S.W. 1. Chemist. *Signed by* : J. Vargas Eyre, W. H. Langwell, John F. Short.
- †**Pisker, Jan**, B.Sc. (Lond.), 3 years at Vienna University; Assistant to Dr. F. Feigl from 1938—39. Czechoslovak. 39, Westbourne Court, Orsett Terrace, W. 2. Works Manager at Hemingway & Co., Ltd. *Signed by* : D. J. G. Ives, Wm. Wardlaw, F. J. Llewellyn.
- †**Prot, Jan**, Ph.D. (Lwow) Graduated in Industrial Chemistry, Technical University of Lwow. Polish. Experimental Officer with Chemical Inspection Department of Ministry of Supply. *Signed by* : G. G. Jones, M. Le Pla, D. J. Campbell.
- ***Rigby, Henry Ashley**. British. Exeter College, Oxford. Undergraduate in Honours School of Chemistry. *Signed by* : Ronald P. Bell, C. N. Hinshelwood, W. Baker.
- (a)**Truter, Eric Vernon**, B.Sc. (Lond.), A.R.C.S. British. 35, Bath Road, Bedford Park, W. 4. Research Assistant, Imperial College, S.W. 7. *Signed by* : A. A. Eldridge, H. J. T. Ellingham, H. V. A. Briscoe.
- (b)**Wadelin, Frank Arthur**. Higher National Certificate in Chemistry (R.I.C.). British. Beverley, Windsor Drive, Whitby, Ellesmere Port. Laboratory Assistant (skilled). *Signed by* : Harold W. Jones, J. H. Beynon, L. Belchetz.
- Wilson, Maurice James**. Eight years industrial experience. British. 137, Forest Road, Coalville, Nr. Leicester. Assistant to Dr. G. H. Lunge in the Central and Research Laboratories of Messrs. Clutson and Kemp, Ltd., manufacturers of elastic and rigid webbings. *Signed by* : G. H. Lunge, S. Leadley, G. Oldham.

UNDER SPECIAL PROVISION APPERTAINING TO CANDIDATES RESIDENT ABROAD.

‡Korman, Jerome, B.S.(Michigan). Two years research on natural products. American. A.P.O. 134, U.S.Army Officer, United States Army. Signed by : H. B. Watson.

* Reduced annual subscription.

† Three-body.

(a) Junior Membership two-body.

(‡) Two-body.

(b) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between September 21st and October 19th, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

- "Studies on hydrogen cyanide. Part XIV. Formamido-dichloride." By L. E. HINKEL and T. I. WATKINS, with K. M. JONES.
- "Intramolecular ring closures with *cis*- and *trans*- γ -phenyl- γ -(2-furyl)itaconic acid." By E. B. KNOTT.
- "Note on 5-nitro-4 : 6-diamino-2-methylpyrimidine, and on a modified procedure for the preparation of chloropyrimidines." By J. BADDILEY and A. TOPHAM.
- "Experiments relating to the synthesis of patulin. Part I. A study of hydrogenated γ -pyrones." By J. ELKS, D. F. ELLIOTT, B. A. HEMS, J. O. HARRIS, and C. I. BRODRICK.
- "Experiments relating to the synthesis of patulin. Part II. Derivatives of pimelic acid." By J. ATTENBURROW, D. F. ELLIOTT, and B. A. HEMS.
- "Experiments relating to the synthesis of patulin. Part III. Derivatives of 2 : 3-diketo-4-acetyltetrahydrofuran." By E. T. BORROWS and B. A. HEMS.
- "Experiments relating to the synthesis of patulin. Part IV. Degradation products of patulin." By E. M. GIBBS and F. A. ROBINSON.
- "Delphinium alkaloids. Part III. Delpheline." By J. A. GOODSON.
- "Carbohydrate sulphuric esters. Part III. The hydrolysis of *isopropylidene* gluco-furanose sulphates and methylgluco-furanoside sulphates." By E. G. V. PERCIVAL.
- "Optical rotatory power and structure in triterpenoid compounds. Application of the method of molecular rotation differences." By D. H. R. BARTON and E. R. H. JONES.
- "An investigation of the occurrence of the co-ordinate or dative link by electric dipole moment measurements." By G. M. PHILLIPS, J. S. HUNTER, and L. E. SUTTON.
- "The metal-catalysed reaction between acetylene and hydrogen. Part II. Further experiments with nickel catalysts." By J. SHERIDAN.
- "Reactions of 3-nitro-1-naphthylamine. Part II. Chlorination, mercuration, coupling with diazo-compounds, and the preparation of some arsenicals." By H. H. HODGSON and D. E. HATHWAY.
- "Synthetic experiments in the B group of vitamins. Part I. Riboflavin." By F. BERGEL, A. COHEN, and J. W. HAWORTH.
- "The kinetics of the sulphonation of some aromatic compounds by sulphur trioxide." By (Miss) E. DRESEL and C. N. HINSHELWOOD.
- "Benzylamine-4-carboxylic acid." By A. ALBERT and D. MAGRATH.
- "Evidence for the structural isomerism of Hantzsch's aryl *syn*- and *anti*-diazotates." By H. H. HODGSON and E. MARSDEN.
- "Some sulphonamides derived from substituted anilines." By A. H. COOK, I. M. HEILBRON, and K. J. REED.
- "Hydroacridones : synthesis and dehydrogenation. Part II." By R. A. REED.
- "Hydroacridones : synthesis and dehydrogenation. Part III." By R. A. REED.
- "Studies in the polyene series. Part XVII. Replacement halogenation and simultaneous anionotropic rearrangements of acetylenylcarbinols and glycols derived from $\alpha\beta$ -unsaturated aldehydes." By I. M. HEILBRON, E. R. H. JONES, R. N. LACEY, J. T. MCCOMBIE, and R. RAPHAEL.
- "Studies in the polyene series. Part XVIII. The formation of ethers from propenylethynylcarbinol and related compounds." By I. M. HEILBRON, E. R. H. JONES, B. C. L. WEEDON.
- "Studies in the polyene series. Part XIX. The semihydrogenation of ethynylcarbinols derived from $\alpha\beta$ -unsaturated aldehydes and the anionotropic rearrangements of the resulting vinylcarbinols." By I. M. HEILBRON, E. R. H. JONES, J. T. MCCOMBIE, and B. C. L. WEEDON.
- "Studies in the polyene series. Part XX. The formation of ethers and esters from propenylvinylcarbinol and related compounds and the simultaneous rearrangements." By I. M. HEILBRON, E. R. H. JONES, J. T. MCCOMBIE, and B. C. L. WEEDON.
- "Studies in the polyene series. Part XXI. Ethynylcarbinols from $\alpha\beta$ -unsaturated ketones, their anionotropic rearrangements and other reactions." By J. CYMERMAN, I. M. HEILBRON, and E. R. H. JONES.

November, 1944

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, January 18th, 1945, at 2.30 p.m.

Tilden Lecture on "Diffraction Methods in Modern Structural Chemistry," by Professor J. M. Robertson, M.A., D.Sc.

OUTSIDE LONDON.

EDINBURGH.

Friday, January 26th, 1945, at 7.30 p.m.

Lecture on "The Use of Radioactive Tracer Atoms in Chemical and Biological Research," by Dr. F. Fairbrother. Joint meeting with the Local Sections of the Royal Institute of Chemistry and the Society of Chemical Industry. To be held in the North British Station Hotel.

LIVERPOOL.

Thursday, January 18th, 1945, at 4 p.m.

Lecture on "Malaria," by Dr. J. D. Fulton, M.A., M.B., Ch.B. To be held in the Muspratt Lecture Theatre of the University.

SOUTH WALES.

At Swansea.

Thursday, January 18th, 1945, at 6 p.m.

Lecture on "Some Consequences of Hydrogen Bond Formation," by Professor W. Baker, M.A., D.Sc. To be held at University College.

EIRE.

Wednesday, January 24th, 1945, at 7.30 p.m.

Lecture on "Recent Investigations on the Chemistry of Seaweed," by Dr. Vincent Barry. Joint meeting with the Royal Institute of Chemistry. To be held in the Chemistry Department, Trinity College, Dublin.

PROCEEDINGS OF THE CHEMICAL SOCIETY.

Minutes of a SCIENTIFIC MEETING

held at Burlington House, Piccadilly, W. 1, on Thursday, November 16th, 1944, at 2.30 p.m.

The PRESIDENT, PROFESSOR W. N. HAWORTH, D.Sc., F.R.S., was in the Chair, and welcomed the visitors present.

MINUTES.

The minutes of the Scientific Meeting on October 19th, which had been circulated, were taken as read and were confirmed and signed.

FORMAL ADMISSION OF FELLOWS.

Douglas C. Harrod was formally admitted a Fellow of the Chemical Society.

SCIENTIFIC COMMUNICATIONS.

The following papers were read :

“ Investigation of the occurrence of the co-ordinate or dative link by electric dipole moment measurements,” by G. M. Phillips, J. S. Hunter, and L. E. Sutton.

“ A constitutional synthesis of cellobiose and gentiobiose,” by (Mrs.) G. A. Gilbert, F. Smith, and M. Stacey.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
Mary Boyle	1921	October 19th, 1944.
Martin E. Fyleman	1906	November 4th, 1944.
Henry Ormsby Hale	1893	September 21st, 1944.
Clarence A. Hall	1927	July 20th, 1942.
Henry J. S. Sand	1898	October 18th, 1944.
Forsyth J. Wilson	1912	October 18th, 1944.

CONGRATULATIONS.

The congratulations of the Council have been sent to Professor G. von Hevesy on his receiving the Nobel Prize for 1943; also to Sir Robert Robertson, K.B.E., on his receiving the Davy Medal and to Professor G. I. Finch on his receiving the Hughes Medal, awarded by the Royal Society.

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to the Chemical Council for a contribution of £1000 towards the cost of the Society's publications for 1944, and to Mr. A. P. Mieras for presenting publications to the Society.

LIBRARY.

This year the Library will be closed on Saturday December 23rd to Tuesday 26th, 1944 (inclusive).

HONORARY SECRETARYSHIP.

Professor H. V. A. Briscoe has been appointed by the Council to fill the office of Honorary Secretary, caused by the retirement of Professor C. W. Davies, until the next Annual General Meeting.

RESEARCH GRANTS.

The Council have made the following grants from the Research Fund :

	£	s.	d.
The reduction of organic compounds of nitrogen with special reference to electrolytic reduction using electrodes of rarer metals (W. Davey)	10	0	0
The polarography of quinoline derivatives (J. T. Stock)	5	0	0

LIST OF APPLICATIONS FOR FELLOWSHIP

(Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than December 21st, 1944. Such objections will be treated as confidential. The forms of application are displayed in the Library.)

- †**Arnold, Dennis Victor**, B.Sc. (Lond.), A.L.A. British. 53, Eaton Rise, Ealing, W. 5. Research Chemist (Paint and Varnish Manufacturers). *Signed by* : H. Houlston Morgan, Henry Brunner, E. G. Noble.
- (a) **Atkinson, Bernard**, B.Sc. (Lond.), A.R.C.S. British. Imperial College Hostel, Prince Consort Road, S.W. 7. Demonstrator in Physical and Inorganic Chemistry at Royal College of Science, S.W. 7. *Signed by* : D. J. G. Ives, J. A. Kitchener, A. A. Eldridge.
- ***Bailey, Arthur Sydney**. English. Oriol College, Oxford. Undergraduate, reading for Honours Chemistry Degree. *Signed by* : Ronald P. Bell, J. C. Smith, E. Hope.
- †**Beeston, George**, B.Sc. (Lond.), F.R.I.C., A.M.I.Chem.E. British. 20, Downham Road, Tranmere, Birkenhead. Chemist, Brotherton & Co. *Signed by* : Dick Emsley, Paul Dalley, George Brearley.
- (b) **Birch, Mary Alice**. Higher National Certificate in Chemistry. British. 201, Bedford Road, Rock Ferry, Birkenhead. Laboratory Assistant. *Signed by* : Harold W. Jones, J. H. Beynon, A. French.
- (a) **Boyle, Margaret Cecilia Jackson**, B.Sc. (Lond.). British. 57, Walmington Fold, Woodside Park, N. 12. Research Chemist. *Signed by* : D. H. Richardson, W. Davey, C. A. Redfarn.
- ***Buckell, Helen Monamy Bayldon**, B.Sc. (Lond.). British. 10, Vicarage Gate, Kensington, W. 8. Research Chemist, Department for Research in Industrial Medicine, Medical Research Council. *Signed by* : C. K. Ingold, Henry Terrey, H. G. Poole.
- †**Butcher, Herbert Charles**, B.Sc.Hons. (Lond.), A.R.I.C. English. c/o 15, Caxton Avenue, Coombelands, Addlestone. Naval Officer and erstwhile Senior Chemist, Straits Trading Company, Ltd., Singapore. *Signed by* : Alex. Findlay, R. Leslie Collett, Robert H. Pickard.
- †**Butcher, Kenneth Leopold**, B.Sc.Hons. (Lond.), A.R.I.C., A.M.I.Chem.E. British. 22, Deeside, Whitby, Wirral. Technologist conducting Research and Development (Pilot Plant Scale) of Processes allied to the Petroleum Industry, and employed by Shell Refining and Marketing Co., Ltd. *Signed by* : M. Buis, J. H. Beynon, Philip J. Garner.
- †**Coates, Marie Evelyn**, Ph.C. (Lond.). British. National Institute for Research in Dairying, Shinfield, Nr. Reading. Biochemist. *Signed by* : A. L. Bacharach, F. A. Robinson, James E. Page.
- ***Coldrick, William Percival**, Eligible for B.Sc. (Bristol) after 9 months National Service. British. 52, The Crescent, Sea Mills, Bristol, 9. Research Chemist, Anglo Iranian Oil Co., Ltd. *Signed by* : E. L. Hirst, J. K. N. Jones, T. Malkin.
- †**Cooke, Edmund Allaway**, M.A. (Oxon). First Class Honours, School of Natural Science (Chemistry), Oxford. English. Bridgemans, Kelsall, Chester. Research Chemist, Deputy Research Manager, I.C.I. (Alkali), Ltd. *Signed by* : L. M. Clark, S. W. Hawkins, J. Haslam, J. Ferguson.
- Cowburn, Brian Milner**. Studied Chemistry until the outbreak of the present War at the Manchester College of Technology. British. Booths Hall, Knutsford. Chemical Works Manager to W. H. Cowburn & Cowpar, Ltd., Manchester, and assistant to A. W. Cowburn, Manager of Messrs. Courtaulds, Ltd. *Signed by* : James Porter Shenton, Derek Spence, Harold E. J. Cory.
- †**Dashwood, John Stuart Michael**, B.A.Hons. (Oxon), A.R.I.C., Grad. Inst. Chem. E. British. c/o Messrs. Barclay's Bank, Ltd., The Old Bank, High Street, Oxford. Lieut., Royal Engineers. *Signed by* : F. C. Laxton, John C. Roberts, D. O. Jordan.
- ***Denyer, Ronald Leonard**. British. 3, Kingswood Place, Lewisham, S.E. 13. Student at Magdalen College, Oxford, reading for Honours Degree in Chemistry. *Signed by* : L. E. Sutton, Brian J. Langdon, J. Smith.
- (a) **Garton, George Alan**, B.Sc. (L'pool). British. 4, Livingstone Road, Scarborough. *Signed by* : Ronald Wood, Thomas P. Gervis, Cecil Denton.
- ***Gold, Victor**, B.Sc. (Lond.). Austrian. 12, Hillside Avenue, Wembley. Demonstrator in Chemistry, King's College, London. *Signed by* : G. M. Bennett, Gwyn Williams, C. K. Ingold.
- ***Grove, Dorothea Mona**, B.A., B.Sc. (Oxon). British. 32, Grove Gardens, Park Road, N.W. 8. Demonstrator in Inorganic and Physical Chemistry at Bedford College for Women, Regent's Park, N.W. 1. *Signed by* : James F. Spencer, Margaret M. Jamison, Mary S. Lesslie, C. M. French, C. G. Trew, E. E. Turner.
- †**Grover, Donald William**, B.Sc. (Lond.), F.R.I.C. English. 92, Westpole Avenue, Cockfosters, Barnet. Research Chemist with the British Association of Research for the Cocoa, Chocolate, Sugar, Confectionery and Jam Trades. *Signed by* : T. Macara, L. E. Campbell, C. L. Hinton.
- †**Harries, Cledwyn Ronald Stephen**, B.Sc.Hons. (Wales), A.R.I.C. British. Stirmac, High Road, Saltcoats. Research Chemist with I.C.I., Ltd. *Signed by* : David Traill, Andrew McLean, F. D. Miles.

- †**Heppenstall, Thomas Arthur**, M.Sc. (L'pool), F.R.I.C. British. 45, Derby Road, Beeston, Nottingham. Chemist in Charge, Department of Research and Technical Development, Stanton Ironworks Co., Ltd. *Signed by* : J. D. Goldsworthy, W. A. Caro, D. O. Jordan.
- †**Hetherington, Philip Sidney**, B.Sc.Hons. (Manc.), A.R.I.C. British. 78, Preston Road, Chorley. *Signed by* : Alex. Findlay, R. Leslie Collett, Robert H. Pickard.
- Holt, Geoffrey**, M.Sc.Tech. (Manc.), A.R.I.C. British. 72, Mill Lane, Heatley Heath, Nr. Warrington. Demonstrator in Chemical Technology, College of Technology, Manchester. *Signed by* : J. Kenner, G. Baddeley, R. F. Garwood.
- †**Hopkins, Gordon**, M.Sc. (Lond.), A.R.I.C. British. 65, Parkside, Jedburgh. Research Chemist, Messrs. North British Rayon, Ltd. *Signed by* : Allard H. Johnson, G. A. Baxandall, L. Hunter.
- ***Ivin, Kenneth John**. Part II Chemistry (Nat. Sciences Tripos) Second Class (Div. 1) Honours, Cambridge (B.A. not conferred till June, 1945). British. Christ's College, Cambridge. Research Chemist. *Signed by* : F. S. Dainton, A. D. Walsh, T. M. Sugden.
- ***Jopling, Douglas William**. British. 44, Risca Road, Newport. Student reading for B.Sc. (Lond.). *Signed by* : H. B. Watson, J. Ormston, Marion Peeling.
- †**Judd, Albert Ernest**, B.Sc. (Lond.), A.R.I.C. British. 54, Beech Hall Road, Highams Park, E. 4. Chemist at B.X. Plastics, Ltd. *Signed by* : P. G. T. Hand, F. L. Allen, E. A. Rudge.
- †**Levitsky, Boris Nicholas**, B.Sc.Hons. (Lond.), A.R.I.C. British (by naturalisation). 33, Broom Lane, Salford, 7. Chemist in the employ of Imperial Chemical Industries, Ltd., Dyestuffs Division. *Signed by* : J. Kenyon, W. J. S. Naunton, A. F. Crowther.
- ***Oldham, Wilfred John**, B.A. (Cantab.). British. 3, Sandycombe Road, Feltham. Assistant Chemist, Anglo-Iranian Oil Co., Ltd. *Signed by* : A. J. Berry, S. F. Birch, A. E. Dunstan.
- (a)**Pickles, Sydney**, Inter B.Sc. (Lond.). Experience as analyst with manufacturing chemist. British. 270, Rooley Lane, Bradford. Student reading for London University B.Sc. (Special) Examination in Chemistry. Temporarily in R.A.F. *Signed by* : Ronald Gill, H. I. Stonehill, S. Wilkinson.
- (b)**Rees, Kenneth Reginald**, B.Sc. (Wales). British. 30a, Earl's Court Square, S.W. 15. Chemist, Lyons Laboratories, Hammersmith. *Signed by* : Leslie H. Lampitt, G. E. Forstner, R. J. M. Pollitt.
- (a)**Smith, Ronald Herbert**, Subsid. Physics for B.Sc. (Special) Chemistry, London, degree not taken owing to war interruption. British. Y.M.C.A. Hostel, Lifton Place, Leeds, 2. Employed as an Analytical Chemist engaged in the examination of Government Stores. *Signed by* : Ronald Wood, Thomas P. Gervis, Cecil Denton.
- †**Stafford, Fred Raymond**, M.Sc.Tech. (Manc.), A.R.I.C., A.T.I. British. 315, Colne Road, Burnley. Lecturer at Burnley Technical College. *Signed by* : Frederick M. Rowe, J. E. Myers, B. Mouat Jones.
- Steadman, Alfred Thomas**, M.I.Chem.E., Member Institute of Fuel. British. Calstead, Highfields, North Wingfield, Chesterfield. Senior Chemist, The Hardwick Colliery Co., Ltd., and Hardwick By-Product Co., Ltd. *Signed by* : L. W. Needham, H. K. Suttle, G. A. Bartram.
- †**Thornley, Tom**, B.Sc. (Lond.), M.I.Chem.E., A.R.I.C. British. c/o N. Kilvert & Sons, Ltd., Trafford Park, Manchester. Managing Director. *Signed by* : H. J. T. Ellingham, F. P. Dunn, Eric K. Rideal.
- (b)**Turner, John Lucas**, Cambridge University, 1942-44, reading Chemistry in Nat. Sci. Tripos. English. 37, Straker Avenue, Overpool, Ellesmere Port, Wirral. Research Chemist, B.P.M. Laboratories. *Signed by* : F. G. Mann, H. McCombie, F. G. Holliman.
- ***Usher, Dorothy Mary**, B.Sc.Hons. (Lond.) (to be awarded in January, 1945). British. c/o 16, Frognaal, N.W. 3. Research Student at University College, London. *Signed by* : C. K. Ingold, H. G. Poole, Henry Terrey.
- Ward, Leonard Eric**, 14 years' experience in Petroleum Chemistry. British. The Laboratory, Vicarage Road, Gloucester. Director of Research Laboratory engaged upon chemical problems in connection with the Petroleum Industry. *Signed by* : Derrick Rowley, M. Sulzbacher, Ernst Bergmann.
- Watson, Horace Edward**, B.Sc. (Birm.). British. Prince of Wales School, Nairobi, Kenya. Chemistry Master and part-time Colonial Research appointment. *Signed by* : W. N. Haworth, Stanley Peat, L. F. Wiggins.
- †**Wells, Ernest Edmund**, F.R.I.C. British. c/o Messrs. Rowntree & Co., Ltd., Technical Library, The Cocoa Works, York. Director. *Signed by* : J. C. MacKeand, Alfred D. Norris, R. Leslie Collett.
- †**West, Peter John**, B.A. (Oxon), A.R.I.C. British. 199, Woodstock Road, Oxford. Industrial Chemist. *Signed by* : Ian McK. Barclay, W. R. Maxwell, R. F. Wilkinson.
- Westlake, Vincent Henry**, B.Sc. (Lond.). British. 110, South View Terrace, St. Judes, Plymouth. Assistant Chemist at Research Laboratories in Stewarts and Lloyds, Ltd. *Signed by* : H. Price, Frank Royle, John A. Jenkinson.
- Whitehurst, John Stanley**, B.Sc.Hons. (Lond.). British. 8, Centenary Buildings, Cheadle, Stoke-on-Trent. Lecturer in Chemistry at the University College, Leicester. *Signed by* : L. Hunter, A. Jackman, C. K. Tinkler.
- †**Wickens, Rober Louis**, A.R.I.C. British. 64, Stoke Poges Lane, Slough. Assistant Chief Chemist, Horlicks, Ltd. *Signed by* : Richard H. Settle, Alex. Findlay, R. Leslie Collett.
- (a)**Wood, John Francis**, B.Sc. (Lond.), A.R.C.S. British. Balros, Stoneyfield Road, Coulsdon. Research Chemist, I.C.I., Ltd., Dyestuffs Division. *Signed by* : L. J. Haynes, J. F. Herringshaw, B. C. L. Weedon.
- †**Wright, Arthur Desmond**, B.Sc.Hons. (Leeds). British. 20, Court Yard, Eltham, S.E. 9. *Signed by* : W. R. Maxwell, D. C. Murray, G. H. Jeffery.
- †**Young, John Paterson**, B.Sc.Hons. (Glas.), A.R.I.C., M.Inst.Pet. British. 37, Forth Street, Grangemouth. Research Chemist with Scottish Oils, Ltd. *Signed by* : Charles Buchanan, S. Horwood Tucker, James D. Loudon.

UNDER SPECIAL PROVISION APPERTAINING TO CANDIDATES RESIDENT ABROAD.

Marszak, Israel, D.Phil. (Basel). French. 1, Carlton Gardens, S.W. 1. Member of French Scientific Mission in England. *Signed by* : Ernst Bergmann.

* Reduced annual subscription.

† Three-body.

‡ Two-body.

(a) Junior Membership two-body.

(b) Junior Membership three-body.

PAPERS RECEIVED

List of papers received from October 19th to November 18th, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

- "Novel types of styrylquinolinium compounds." By V. A. PETROW.
- "Photo-reactions. Part IX. The action of aldehydes on phenanthraquinoneimine in sunlight." By A. SCHÖNBERG and W. I. AWAD.
- "Organic sulphur compounds. Part XXVIII. Thiono-thiol tautomerism manifested by sulphur analogues of cyclic acid anhydrides." By A. SCHÖNBERG and (MISS) W. ASKER.
- "Preparation of $\alpha\zeta$ -diphenylhexatriene and 1:4-diphenylbenzene from cinnamaldehyde." By A. SCHÖNBERG and A. F. A. ISMAIL.
- "Experiments on the interaction of hydroxy-compounds and phosphorus and thionyl halides in the absence and in the presence of tertiary bases. Part II." By W. GERRARD.
- "The preparation of 1:5- and 1:8-naphthylenediamines and of some related compounds." By H. H. HODGSON and J. S. WHITEHURST.
- "Anthraquinone series. Part I. 2-Alkylanthraquinones." By A. T. PETERS and F. M. ROWE.
- "The configuration of naturally occurring mixed glycerides. I. The configuration of oleodistearin from various natural sources." By M. L. MEARA.
- "The configuration of naturally occurring mixed glycerides. II. The configuration of some monopalmito-glycerides from various natural sources." By M. L. MEARA.
- "Observations on the absorption spectra of terpenoid compounds. Part V. Umbellulone." By A. E. GILLAM and T. F. WEST.
- "Organic sulphur compounds. Part XXIX. The stereochemistry of trimeric thioaldehydes." By A. SCHÖNBERG and M. Z. BARAKAT.
- "The action of sodium on *o*-xylylene dibromide." By W. BAKER, R. BANKS, D. R. LYON, and F. G. MANN.
- "The preparation and properties of 2-substituted *-isoarsindolines*. The synthesis of *spiro*-arsonium salts." By D. R. LYON and F. G. MANN.
- "Thymoxyethyldiethylamine." By C. E. DALGLIESH.
- "The infra-red spectra of cresols and xylenols and the analysis of cresylic acid." By D. H. WHIFFEN and H. W. THOMPSON.
- "Purification of colchicine by chromatography." By J. N. ASHLEY and J. O. HARRIS.
- "The conversion of acridones into acridines." By R. A. REED.
- "The structure of adenosine di- and tri-phosphates." By J. M. GULLAND and E. O'FARRELL WALSH.
- "The properties of freshly formed surfaces. Part IV. The influence of chain length and structure on the static and dynamic surface tensions of aqueous alcohol solutions." By C. C. ADDISON.
- "The constitution of yeast ribonucleic acid. Part IX. Alkali-labile linkages." By J. M. GULLAND and E. O'FARRELL WALSH.
- "The synthetic application of *o*- β -bromoethylbenzyl bromide. Part IV. The preparation of 2-substituted 1:2:3:4-tetrahydroisoquinolines." By F. G. HOLLIMAN and F. G. MANN.
- "The synthetic application of *o*- β -bromoethylbenzyl bromide. Part V. The preparation and properties of thioisochroman, selenoisochroman, telluroisochroman, and of their optically active derivatives." By F. G. HOLLIMAN and F. G. MANN.
- "The synthetic application of *o*- β -bromoethylbenzyl bromide. Part VI. The preparation and optical resolution of a spirocyclic arsonium salt possessing molecular dissymmetry." By F. G. HOLLIMAN and F. G. MANN.
- "The direct hydroxylation of 1':2':3':4'-tetrahydro-3:4-benzpyrene." By G. A. R. KON and EDNA M. F. ROWE.
- "Studies in the anthracene series. Part II. The action of Grignard reagents on dianthraquinone. Some new derivatives of 9:9'-dianthranlyl." By A. SCHÖNBERG and A. F. A. ISMAIL.
- "The structure of polyisoprenes. Part IV. Double bond interaction in certain carbalkoxyl-substituted 1:5-dienes." By L. BATEMAN and G. A. JEFFREY.
- "The structure of polyisoprenes. Part V. Ultra-violet absorption spectra of certain carbalkoxyl-substituted 1:5-dienes, and the charge-resonance spectra of glutaconic ester enolate ions." By L. BATEMAN and H. P. KOCH.
- "The preparation of phenanthrene-3:6-diamidine." By H. J. BARBER and C. E. STICKINGS.
- "Absorption spectra of acridines. Part I. Some aminoacridines." By D. P. CRAIG and L. N. SHORT.
- "Thiazinocyanines. Part IV. Simple cyanines containing the 2:4-benzthiazine nucleus." By B. BEILSON, FRANCES M. HAMER, and R. J. RATHBONE.

- “The structure of pyrethrolone and related compounds. Part IV.” By T. F. WEST.
- “The kinetics of halogen addition to unsaturated compounds. Part V. The $\alpha\beta$ -unsaturated acids and hydrogen bromide catalysis.” By I. D. MORTON and P. W. ROBERTSON.
- “The kinetics of halogen addition to unsaturated compounds. Part VI. The allyl halides: lithium chloride and hydrogen bromide.” By B. E. SWEDLUND and P. W. ROBERTSON.
- “Quantitative determination of methylglyoxal and the mechanism of its reaction with hypiodite solution.” By SHO-CHOW WOO and SZE-TSENG CHANG.
- “Delphinium alkaloids. Part IV. The alkaloids of the seeds of *Delphinium ajacis*.” By J. A. GOODSON.

THE CHEMICAL SOCIETY

NOTICE OF FORTHCOMING SCIENTIFIC MEETINGS

IN LONDON (Burlington House).

Thursday, January 18th, 1945, at 2.30 p.m.

Tilden Lecture on "Diffraction Methods in Modern Structural Chemistry," by Professor J. M. Robertson, M.A., D.Sc.

Thursday, February 15th, 1945, at 2.30 p.m.

Meeting for the reading of papers. (Further announcement to be made.)

OUTSIDE LONDON.

EDINBURGH

Friday, January 26th, 1945, at 7.30 p.m.

Lecture on "The Use of Radioactive Tracer Atoms in Chemical and Biological Research," by Dr. F. Fairbrother. Joint meeting with the Local Sections of the Royal Institute of Chemistry and the Society of Chemical Industry. To be held in the North British Station Hotel.

Friday, February 23rd, 1945, at 7.30 p.m.

Tilden Lecture on "Non-Benzenoid Aromatic Hydrocarbons," by Professor W. Baker, M.A., D.Sc. To be held in the North British Station Hotel.

GLASGOW.

Friday, February 16th, 1945, at 7.30 p.m.

Lecture on "Some Aspects of the Metabolism of the Steroid Hormones," by Professor G. F. Marrian, D.Sc., F.R.S. To be held at the Royal Technical College, and to be preceded at 7 p.m. by the Annual General Meeting of local Fellows.

LIVERPOOL.

Thursday, January 18th, 1945, at 4 p.m.

Lecture on "Malaria," by Dr. J. D. Fulton, M.A., M.B., Ch.B. To be held in the Muspratt Lecture Theatre of the University.

MANCHESTER.

Friday, January 26th, 1945, at 6 p.m.

Lecture on "Some Observations on the Nature of Bacterial and Tissue Antigens," by Dr. W. T. J. Morgan, M.Sc., F.R.I.C. To be held in the Chemistry Lecture Theatre of the University. Joint meeting with the local Section of the Royal Institute of Chemistry.

Thursday, February 15th, 1945, at 6 p.m.

Meeting for the reading of original communications. To be held in the Chemistry Lecture Theatre of the University.

NORTH WALES.

Thursday, February 8th, 1945, at 5.30 p.m.

Lecture on "The Strength of Carbon Bonds," by Professor M. Polanyi, Ph.D., M.D., F.R.S. To be held in the Department of Chemistry, University College of North Wales, Bangor. Joint meeting with the University College of North Wales Chemical Society.

NOTTINGHAM.

Thursday, February 22nd, 1945, at 6.30 p.m.

Lecture on "Pyrethrum and the Pyrethrins," by Dr. A. E. Gillam, F.R.I.C. To be held in the Lecture Theatre, Chemistry Department, University College, Shakespeare Street.

SHEFFIELD.

Friday, February 9th, 1945, at 5.30 p.m.

Lecture on "Non-Benzenoid Aromatic Systems," by Professor W. Baker, M.A., D.Sc. To be held in the Lecture Theatre of the Chemistry Department of the University, Western Bank. Joint meeting with the University Chemical Society.

SOUTH WALES.

Thursday, January 18th, 1945, at 6 p.m.

Lecture on "Some Consequences of Hydrogen Bond Formation," by Professor W. Baker, M.A., D.Sc. To be held at University College, Swansea.

EIRE.

Wednesday, January 24th, 1945, at 7.30 p.m.

Lecture on "Recent Investigations on the Chemistry of Seaweed," by Dr. Vincent Barry. Joint meeting with the Royal Institute of Chemistry. To be held in the Chemistry Department, Trinity College, Dublin.

PROCEEDINGS

OF THE

CHEMICAL SOCIETY.

OFFICIAL ANNOUNCEMENTS

DEATHS.

The Council regret to announce the deaths of the following Fellows :

	Elected.	Died.
Sir John Jacob Fox	1907	November 28th, 1944.
Andrew Laidlaw Scott	1908	November 15th, 1944.

CONGRATULATIONS.

The congratulations of the Council have been conveyed to the following Fellows who have completed 60 and 50 years of Fellowship :

60 Years of Fellowship.

	Elected.
Jason Hall Worrall	December 18th, 1884.

50 Years of Fellowship.

Frederick John Allen	December 6th, 1894.
David Runciman Boyd	"
John Samuel Strafford Brame.....	"
James Bruce	"
Arthur Herbert Coote	"
Cecil Cooke Duncan	"
George Cecil Jones	"
Bevan Lean	"
William Henry Lewis	"
Gerald Grattan Quinn	"
William George Wagner	"

ACKNOWLEDGMENTS.

The thanks of the Council have been conveyed to Professor D. H. Peacock and Mr. F. C. Smith for contributions to the Publications Fund.

LOCAL REPRESENTATIVE FOR BIRMINGHAM.

Dr. L. L. Bircumshaw has accepted the invitation of the Council to serve as Local Representative for Birmingham, in the place of Dr. S. Peat, to whom the Council have conveyed their cordial thanks for the valuable services he has rendered to the Society during his term of office.

FELLOWSHIP.

The following 23 candidates were elected Fellows of the Chemical Society on November 16th, 1944 :

Maurice Alec Arnold.	Hanns Peter Jakobowski.	Max Perutz.
Otto Theodor Benfey.	Owen Richard Jones.	William Pearse Phillips.
Denis Ridgwell Dickinson.	James William Keyser.	Jan Pisker.
Robert Edward Dodd.	Jerome Korman.	Jan Prot.
Derek Ellis Eddowes.	John Matthew Monks.	Henry Ashley Rigby.
Kenneth Gardner.	Louis George Whybrow Pale-	Eric Vernon Truter.
Denis Eric Bosworth Greensmith.	thorpe.	Frank Arthur Wadelin.
Dennis Ernest Hawkins.	Joan Mary Parry.	Maurice James Wilson.

GENERAL ANNOUNCEMENTS

PUBLICATIONS OF THE AMERICAN CHEMICAL SOCIETY.

	Price to Public.	Postage.
(1) <i>Journal of the American Chemical Society</i>	\$8.50	\$1.50
(2) <i>Chemical Abstracts</i>	\$12.00	\$2.40
(3) <i>Industrial and Engineering Chemistry</i> :		
(a) Industrial Edition (monthly) and Analytical Edition (monthly), sold only as a unit	\$4.00	\$2.25
(b) Chemical and Engineering News (semi-monthly)	\$2.00	\$0.60
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LIST OF APPLICATIONS FOR FELLOWSHIP

(*Fellows wishing to lodge objections to the election of these candidates should communicate with the Honorary Secretaries not later than Monday, January 22nd, 1945. Such objections will be treated as confidential. The forms of application are displayed in the Library.*)

- ***Abrahams, Sidney Cyril.** British. MacBrayne Hall, 11, Park Circus Place, Glasgow, C. 3. Student, in the Department of Chemistry, University of Glasgow. *Signed by* : J. Monteath Robertson, J. W. Cook, David T. Gibson.
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- Bayliss, William Alfred.** British. 45, Cranbrook Road, E. Barnet. Chemist, Gloy and Empire Adhesives, Ltd. *Signed by* : C. F. Goodeve, F. G. Donnan, R. J. W. Le Fèvre.
- †**Bennett, William Gordon,** D.Sc. (Leeds), F.I.R.C. British. Glenochil House, Menstrie, Clackmannanshire. Works Manager to a Yeast Factory, Chief Chemist (Scotland) to the Distillers Co., Ltd. *Signed by* : H. B. Hutchinson, J. G. Maltby, E. Horton.
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- ‡ **Wetherell, Walter Cecil**. Full Member British Association of Chemists. 24 years in Industry. Member, Society of Chemical Industry. British. 11, Dulverton Road, New Eltham, S.E. 9. Chief Chemist, British Disinfectant Co., Ltd. *Signed by* : C. S. Garland, E. C. C. Baly, Thomas McLachlan.

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* Reduced annual subscription.

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(a) Junior Membership two-body.

(‡) Two-body.

(b) Junior Membership three-body.

PAPERS RECEIVED

List of papers received between November 18th and December 20th, 1944. This list does not include the titles of papers which have been read at a Scientific Meeting or which have appeared in the *Journal*.

- "The resolution of propenylethynylcarbinol." By J. KENYON and R. POPLETT.
- "The chlorination of β -naphthol and ethyl 2 : 3-hydroxynaphthoate in the presence of sodium acetate. 4-Chloro- β -naphthol and its derivatives." By H. BURTON.
- "Rubber, polyisoprenes, and allied compounds. Part VIII. The formation of dialkyl sulphide dihalides and its bearing on the problem of determining the unsaturation of olefinic sulphides." By G. F. BLOOMFIELD.
- "The reactivity of keten towards olefins and olefinic peroxides." By R. F. NAYLOR.
- "A note. Reactivity of isoprenic and analogous hydrocarbons towards thiocyanic acid and dithiocyanogen." By R. F. NAYLOR.
- "The reactions of Grignard reagents with some zinc chloride double salts of diazonium compounds." By H. H. HODGSON and E. MARSDEN.
- "The application of the Hofmann reaction to the synthesis of heterocyclic compounds. Part I. Synthesis of alloxazine from quinoxaline-2 : 3-dicarboxylic acid." By R. A. BAXTER and F. S. SPRING.
- "The application of the Hofmann reaction to the synthesis of heterocyclic compounds. Part II. Synthesis of xanthine from glyoxaline-4 : 5-dicarboxamide and of 9-methylxanthine from 1-methylglyoxaline-4 : 5-dicarboxamide." By R. A. BAXTER and F. S. SPRING.
- "The oxidation of 1 : 1-diphenylethylene with perbenzoic acid." By G. T. NEWBOLD and F. S. SPRING.
- "The preparation and properties of sulphonacetamides : A method for the separation of sulphonamides from *N*-alkylsulphonamides." By H. T. OPENSHAW and F. S. SPRING.
- "*p*-Sulphonamidobenzylaniline and related compounds of pharmacological interest." By W. KELLY, T. D. ROBSON, and W. F. SHORT.

- "A novel pyrimidine synthesis. Part I. 4-Amino-5-phenylpyrimidine." By W. H. DAVIES and H. A. PIGGOTT.
- "A novel pyrimidine synthesis. Part II. 4-Amino-5-substituted phenylpyrimidines." By W. H. DAVIES, A. W. JOHNSON, and H. A. PIGGOTT.
- "A new method for the preparation of *p*-dialkylaminobenzaldehydes." By J. C. DUFF.
- "Syntheses in the thiazole series. Part I. The condensation of α -halogenketones with dithioamides." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part II. Attempted synthesis of 1':2':4:5-indothiazoles." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part III. 2-Alkylthio- and 2-benzylthio-thiazoles." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part IV. 4-Phenylthiazole-5-acetic acid and derivatives; cyclisation of 4'-hydroxynaphtha-1'2':4:5-thiazoles." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part V. The by-product from the cyclisation of 4-phenyl-2-methylthiazole-5-acetic acid." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part VI. α -(4-Phenyl-5-thiazole) propionic acids and their cyclisation to 4'-hydroxy-3'-methylnaphtha-1':2':4:5-thiazoles." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part VII. Phenanthra-1':2':4:5-thiazoles and phenanthra-4':3':4:5-thiazoles." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part VIII. β -Bromo- β -2-thienoylpropionic acid and its conversion into 4'-hydroxythionaphtheno-7':6':4:5-thiazoles." By E. B. KNOTT.
- "Syntheses in the thiazole series. Part IX. Bromo- β -benzylpyruvic acid and its condensation with thioamides." By E. B. KNOTT.
- "Transport numbers of zinc halides." By (MISS) D. M. EGAN and J. R. PARTINGTON.
- "Absorption spectra of acridines. Part II. Monoaminoacridines." By N. H. TURNBULL.
- "A preliminary study of the polyuronide hemicellulose of *Phormium tenax* (N.Z. flax)." By R. J. McILROY, G. S. HOLMES, and (MISS) R. P. MAUGER.

