

JOURNAL OF THE NEW ZEALAND
INSTITUTE OF CHEMISTRY

Vol. 25 No. 6
December, 1961



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CONTENTS

	<i>Page</i>
Editorial: About this Issue	201
Council Officers and Committees, 1961-1962	202
Branch Committees, 1961-1962	203
Papers read before Branches, 1961	204
Institute Prizes	206
Conference 1962	206
List of Members, 1961	207
Council Minutes	243
General Meeting Minutes	245
Book Review	247

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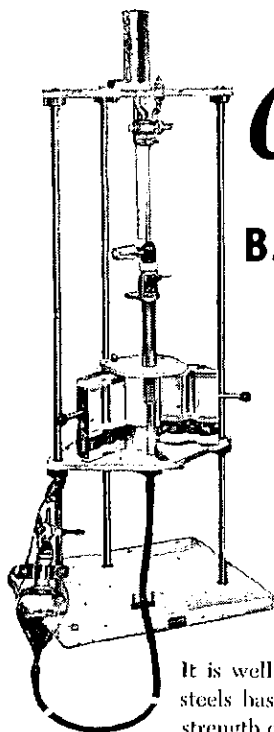
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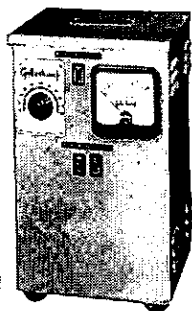
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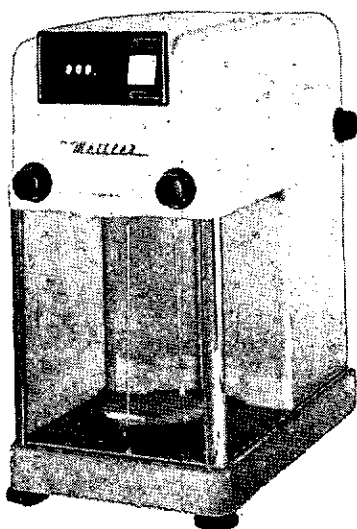
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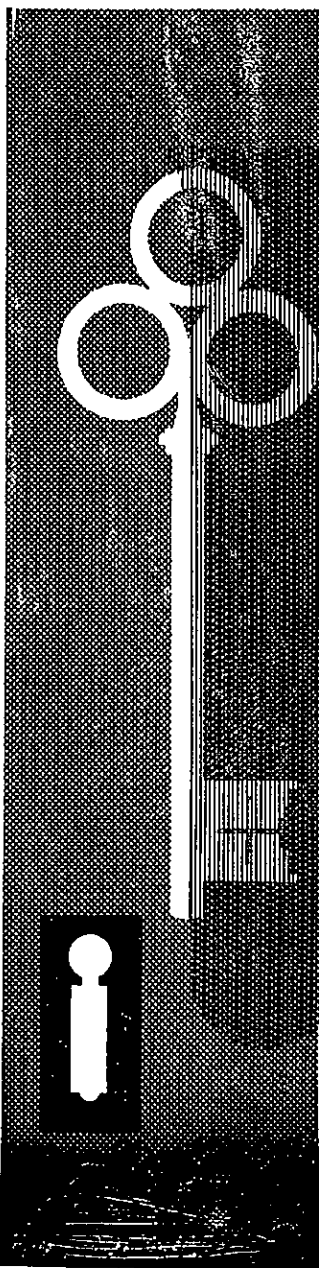
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JOURNAL OF THE NEW ZEALAND INSTITUTE OF CHEMISTRY

Vol. 25, No. 6

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ABOUT THIS ISSUE

With this issue the Institute puts into practice a proposal made by a previous Editor—the publication of a sixth issue devoted primarily to Institute business, especially the *List of Members* which has hitherto been published separately. This *List* is a service frequently consulted by members, particularly those involved in the running of the Institute. The need for frequent revision of the *List* is indicated by the fact that over 200 additions or alterations have been made to the 600 entries in the last year. The inclusion in this issue of the Council and Branch Officers for the new year and the lists of papers read at Branch meetings during 1961 will simplify reference to such information. It will also make more space available in the February issue for technical material.

A further service, suggested by the Librarian, is the publication in the sixth issue of a list of papers published by members or from New Zealand chemical laboratories. An attempt to assemble such a list will be made during the coming year. Members can assist greatly by sending titles and references of their published papers to the Editor for inclusion in this list.

The *List of Members* has been compiled by a Canterbury committee under the Chairmanship of Mr J. S. Pollard. Every member of the Institute has been given an opportunity to see that the entry in the *List* concerning him is correct but changes will undoubtedly have occurred during the period immediately preceding publication. In 1962 the Committee does not intend to send the current listing to each member for correction. Revision will be confined to changes or corrections notified to the Registrar by members. **They are urged to do this promptly to avoid delay and annoyance through inaccurate records.** In 1963 all members will again be asked to confirm their current listing.

Once again the names of members of the New Zealand Section of the R.I.C. who are not also members of the New Zealand Institute of Chemistry are recorded in a separate list.

COUNCIL OFFICERS AND COMMITTEES

1961-1962

President: Dr F. B. Shorland

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Registrar: Mr D. J. Hogan, (P.O. Box 1926, Christchurch)

Editor: Mr N. T. Clare, (109 Cambridge Road, Hamilton)

Hon. Librarian: Mr S. G. Brooker

Conference Committee: Mr M. S. Carrie—Chairman; Dr R. D. Topson—Secretary, (P.O. Box 1471, Christchurch); Dr W. S. Metcalf; Mr A. F. R. Adams; Dr A. P. Mulcock; Dr B. R. Penfold.

Employment Officer: E. S. Borthwick

Examinations Committee: Dr J. M. Thorpe—Chairman; Mr G. R. White—Secretary (Box 2175, Auckland); Professor A. L. Odell, Professor D. R. Llewellyn, Mr D. H. Keys.

Representative on Science Committee of Technicians Certification Authority: Professor A. L. Odell (alternate Mr W. E. Dasent)

Membership Committee: Mr S. G. Brooker, Dr W. A. McGillivray, Prof. S. R. Siemon

Professional Status Committee: Dr R. B. Miller, Miss J. M. Mattingley, Mr J. R. Beck

List of Members Committee: Mr J. S. Pollard (Chairman)

UNESCO Representative: Mr J. A. D. Nash

Standards Institute: Representative on N.Z. Standards Institute Council, Mr G. A. Lawrence; Chief Representative for all Standards Institute Affairs, Mr C. L. H. Stonyer; Chemical, Insecticides, Refrigeration etc., Mr C. L. H. Stonyer; Electroplating etc., Dr R. Gardner; Metal Containers etc., Mr J. M. Tingey; Textiles, Dr L. F. Storey.

Standing Committee of Council: Dr F. B. Shorland, Dr W. E. Harvey, Dr A. J. Ellis

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1961-1962

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Chairman: Prof. D. R. Llewellyn

Secretary: Miss C. J. Bishop, (*Chemistry Dept., University of Auckland, Box 2175, Auckland*)

Treasurer: Mr R. W. Olliff

Committee: Mr C. W. Harland, Mr L. W. Jagger, Mr G. R. White, Dr G. N. Nicholls

Branch Editor: Miss C. J. Bishop

Waikato

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Committee: Mr J. E. Allan, Mr F. R. Leighton, Dr R. H. Locker, Dr E. B. Davies

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Committee: Dr R. E. Corbett, Dr A. G. Williamson, Mr D. W. Lockhart, Mr C. W. Thomson, Dr J. Rogers, Prof. R. D. Batt

Branch Editor: Dr A. G. Williamson

PAPERS READ BEFORE BRANCHES, 1961

AUCKLAND BRANCH

- Glimpses beyond trees (*Dr G. Nichols*).
 The Chester Beatty Institute of Cancer Research (*Professor F. Bergel*).
 Alcohol and driving (*Dr L. Brown, Mr H. F. Murphy, Dr T. J. Spratt*).
 Phytochemistry of the Compositae (*Professor Soerenson*).
 Some features of Auckland basalts (*Dr E. J. Searle*).
 Second-hand water (*Dr Caldwell*).
 A technologist in the ceramic industry (*Mr K. E. Secl*).
 Industrial research (*Dr K. L. Sutherland*).
 Polymer chemistry and molecular architecture (*Professor C. E. H. Bawn*).
 Some aspects of wood chemistry (*Dr Anderson*).

WAIKATO BRANCH

- Some problems in plant analysis as an index of nutrient status (*Mr K. J. McNaught*).
 Protein structure (*Dr R. H. Locker*).
 Fact and theory in modern chemistry (*Professor H. N. Parton*).
 Wood extractives (*Dr J. M. Uprichard*).
 The biochemistry of viruses (*Dr R. H. F. Matthes*).
 Some chemical weedkillers (*Dr O. K. Sewell*).
 New horizons in polymer chemistry (*Professor C. E. H. Bawn*).
 Some surface phenomena (*Professor R. C. L. Bosworth*).
 Some recent developments in chemistry and technology of fats (*Mr S. G. Brooker*).
 The chemistry of flame photometry (*Mr J. E. Allan*).
 Polyphenol constituents of plants (*Dr E. C. Bate-Smith*).

MANAWATU BRANCH

- The chemist and modern food packaging (*Mr E. Fielding*).
 Biochemistry and heredity (*Dr G. Peterson*).
 Grassland development in the future (*Dr P. Sears*).
 Fluorine compounds in biochemistry (*Sir Rudolph Peters*).
 The biosynthesis of cholesterol (*Dr W. E. Harvey*).
 Advances with sporidesmin (*Dr E. P. White*).
 Determination of trace elements in minerals (*Dr R. Brooks*).
 New horizons in polymer chemistry (*Professor C. E. H. Bawn*).
 The stereospecificity of enzyme action (*Professor N. L. Edson*).
 The structure of monolayers and the butterfat globule membrane (*Mr G. M. Wallace*).
 Muscle contraction (*Dr C. L. Davey*).

WELLINGTON BRANCH

- Equipment demonstration, Dominion Laboratory, Gracefield.
 Chemical applications of electron paramagnetic resonance (*Dr W. A. Anderson*).
 Biosynthesis of cholesterol (*Dr W. E. Harvey*).
 Mellor Lecture: Molecular disorder in crystals (*Dr D. W. Hall*).
 Isotope geology in New Zealand hydrothermal areas (*Mr J. R. Hulston*).
 Science in crime detection (*Mr P. J. C. Clark*).

Current research in Chemistry Department, V.U.W.:

- The rates of bimolecular elimination reactions in alcohol-water mixtures (Mr P. D. Buckley).
- Aliphatic Schiff base compounds of nickel (Mr H. K. J. Powell).
- Chemistry of the early phases of germination (Mr D. J. Spedding).
- Polymer chemistry and molecular architecture (Professor C. E. H. Bawn).
- The structure-action relationship of drugs (Dr G. S. Cox).

CANTERBURY BRANCH

- Production planning in field and factory (Mr E. W. Hullett).
- Physical methods in chemistry (Dr I. K. Walker).
- Educating the chemist (Mr E. R. Hounsell).
- Some radio-chemical research at Victoria University (Dr A. T. Wilson).
- Chemistry in the N.Z. hydrothermal areas (Dr A. J. Ellis).
- Computers and chemistry (Dr B. R. Penfold).
- Recent theories of protein synthesis (Dr J. W. Lyttleton).
- Recent advances in radio-therapy (Dr A. J. Campbell, Dr A. M. Goldstein, Mr J. J. Tait).
- Some aspects of the nitrogen nutrition and metabolism of plants (Dr D. E. C. Sheat).
- Facts and theories in modern chemistry (Professor H. N. Parton).
- Coupling between the shear and bulk stress in highly viscous liquids (Professor R. C. L. Bosworth).

OTAGO BRANCH

- Legal problems in food manufacture (Mr A. H. Lewin).
- Adsorption on porous solids (Dr M. H. Panckhurst).
- Principles and application of ion exchange (Dr A. M. Kennedy).
- Radiochemical research at Victoria University (Dr A. T. Wilson).
- Research at Invermay (Mr C. A. Holmes).
- What we have lost and what we have gained in the nuclear age (Mr T. A. Rafter).
- Recent theories on protein synthesis (Dr J. W. Lyttleton).
- Polymer chemistry and molecular architecture (Professor C. E. H. Bawn).
- Recent developments in terpene chemistry (Dr R. E. Corbett).
- India through a watchglass (Dr W. C. Somerville).

N.Z.I.C. LIBRARY

The following journals in addition to those listed in the April, 1960, *Journal* are now being received.

- Ciencia y Naturaleza*, Quito, Ecuador.
- Monatsberichte de Deutschen Academie der Wissenschaften zu Berlin*.
- N.Z. Patent Office Journal*, Wellington.
- Reports of the Academy of Sciences of the Kazak Socialist Republic*, Alma Ata, Kazakstan.

A number of atlases of spectral lines of the elements have also been received from Kazakstan.

The Institute's journals are now kept in the library of the Auckland Institute and Museum and may be borrowed by members on application to the Librarian, Auckland Institute and Museum, Box 9027, Auckland, S.E.1.

INSTITUTE PRIZES

The closing date for entries for the three prizes awarded annually by the Institute is April 30. The Regulation governing the award of these prizes was published in full in the *Journal* for April 1959 (Vol. 24, page 47) and should be consulted by any member wishing to make an entry. The following descriptions indicate the main requirements.

THE CHEMICAL ESSAY PRIZE: Offered for an essay or review paper, preferably restricted to a length of six to ten thousand words, on any aspect of chemical science. The prize is open to all members and local members. The value of the prize in recent years has been £25.

THE I.C.I. PRIZE: This prize of twenty-five guineas and a medallion has been donated by Imperial Chemical Industries (N.Z.) Ltd. It is awarded for "some major contribution to some branch of chemical science, this contribution to be judged by research work published or accepted for publication during the five years immediately preceding April 30 in the year of the award". Members may apply for the award or they may be nominated by Branch Committees or by individual members.

THE MORCOM GREEN, EDWARDS PRIZE: The prize is of the value of £25 and is donated by Messrs H. H. Edwards and Morcom Green. It is offered "for the encouragement of original work by young chemists in pure and applied chemistry, with emphasis on applied chemistry." Applicants must be below the age of 35 years on June 1 in the year of the award. The candidate is assessed on published work or on a process he has designed or developed, or the product he produces.

CONFERENCE 1962

The 1962 N.Z.I.C. Conference will be held from Wednesday to Friday, August 15-17, at Lincoln College of the University of Canterbury. It will coincide with the Science Congress of the Royal Society of New Zealand to be held in Christchurch August 13-17, of which the Chemistry Section will be held on August 13-14 to allow chemists to attend both. The N.Z.I.C. Conference Committee is: Mr M. S. Carrie (Chairman), Dr R. D. Topsom (Secretary, *Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch*), Dr W. S. Metcalf (Programme, *same address*), Mr A. F. R. Adams (Lincoln Subcommittee convener), Dr A. P. Mulcock (Accommodation), Dr B. R. Penfold (convener, Chemistry Section of the Royal Society Congress). Dr Metcalf would be glad to receive offers of or suggestions for papers and lectures, with an indication of the presentation time desired and the audience to be addressed—*e.g.*, specialist groups, chemists, physical scientists, natural scientists, undergraduates and sixth formers, or the public. The closing date for applications to present a paper will be May 1, 1962. Your Committee will appreciate any suggestions concerning the planning of the conference.

LIST OF MEMBERS 1961

ABBREVIATIONS USED

- A.Aust.I.M.M.—Associate, Australasian Institute of Mining and Metallurgy.
A.C.G.I.—Associate, City and Guilds Institute, London.
A.G.I.T.—Associate, Gordon Institute of Technology, Geelong, Victoria
Australia.
Agr. L.—Licentiate of Agriculture.
A.I.B.—Associate, Institute of Brewing.
A.I.M.—Associate, Institution of Metallurgists.
A.I.M.L.T.—Associate, Institute Medical Laboratory Technology.
A.I.M.M.—Associate, Institution of Mining and Metallurgy.
A.M.I.Chem.E.—Associate Member, Institution of Chemical Engineers.
A.M.I.Mech.E.—Associate Member, Institution of Mechanical Engineers.
A.M.Inst.F.—Associate Member, Institute of Fuel.
A.M.Inst.Gas E.—Associate Member, Institution of Gas Engineers.
A.M.N.Z.I.E.—Associate Member, New Zealand Institution of Engineers.
A.M.T.C.—Associate, Melbourne Technical College.
A.N.Z.E.I.—Associate, New Zealand Electronics Institute.
A.N.Z.I.M.—Associate, New Zealand Institute of Management.
A.N.Z.I.R.E.—Associate, New Zealand Institute of Refrigeration Engineers.
A.N.Z.I.W.—Associate, New Zealand Institute of Welding.
A.N.Z.L.A.—Associate, New Zealand Library Association.
A.O.S.M.—Associate, Otago School of Mines.
A.R.A.C.I.—Associate, Royal Australian Chemical Institute.
A.R.A.N.Z.—Associate, Registered Accountant, New Zealand.
A.R.C.S.—Associate, Royal College of Science.
A.R.I.C.—Associate, Royal Institute of Chemistry.
A.S.T.C.—Associate, Sydney Technical College.
A.T.I.—Associate, Textile Institute.
- B.A.—Bachelor of Arts.
B.Agr.Sc.—Bachelor of Agricultural Science.
B.Agr.Sc.(Dairy Tech.).—Bachelor of Agricultural Science, Dairy Tech-
nology Option.
B.Chem.E.—Bachelor of Chemical Engineering.
B.Com.—Bachelor of Commerce.
B.E.—Bachelor of Engineering.
B.E.(Chem.).—Bachelor of Chemical Engineering.
B.H.Sc.—Bachelor of Home Science.
B.Med.Sc.—Bachelor of Medical Science.
B.Sc. Bachelor of Science.
- Cand. and Doct. Exam.—Candidaats and Doctoraal Examination (Am-
sterdam).
C.B.E.—Commander of the Order of the British Empire.
Ch.B.—Bachelor of Surgery.
C.O.P.—Certificate of Proficiency.
C.O.P.H.L.P.—Certificate of Proficiency, Hospital Laboratory Practice.

- Dip.Bact.—Diploma in Bacteriology.
Dip.Chem.Eng.—Diploma in Chemical Engineering.
D.D.S.—Doctor of Dental Surgery.
Dip.Ed.—Diploma in Education.
Dip.Ind.Chem.—Diploma in Industrial Chemistry (University of Canterbury).
Dip.Ing.Chem.—Diploma in Chemical Engineering.
Dip.N.Z.Lib.Sch.—Diploma, New Zealand Library School.
D.I.C.—Diploma, Imperial College of Science and Technology.
D.Phil.—Doctor of Philosophy.
D.Sc.—Doctor of Science.
E.D.—Efficiency Decoration.
Fil.dr.—Doctor of Philosophy.
F.I.M.—Fellow, Institution of Metallurgists.
F.I.P.H.E.—Fellow, Institute of Public Health Engineers.
F.Inst.F.—Fellow, Institute of Fuel.
F.Inst.S.P.—Fellow, Institute of Sewage Purification.
F.N.Z.I.M.—Fellow, New Zealand Institute of Management.
F.R.A.S.—Fellow, Royal Astronomical Society.
F.R.I.C.—Fellow, Royal Institute of Chemistry.
F.R.S.A.—Fellow, Royal Society of Arts.
F.R.S.N.Z.—Fellow, Royal Society of New Zealand.
Ing.—Ingenieur. i.e. a University Practical Diploma at the Masterate level.
K.B.E.—Knight Commander of the Order of the British Empire.
LL.M.—Master of Laws.
M.A.—Master of Arts.
M.A.I.M.E.—Member, American Institute of Mining and Metallurgical Engineers.
M.App.Sc.—Master of Applied Science.
M.Aust.I.M.M.—Member, Australian Institute of Mining and Metallurgy.
M.B.—Bachelor of Medicine.
M.D.—Doctor of Medicine.
M.H.Sc.—Master of Home Science.
M.I.Chem.E.—Member, Institution of Chemical Engineers.
M.I.Min.E.—Member, Institution of Mining Engineers
M.Chem.Eng.—Master of Chemical Engineering.
M.Inst.F.—Member, Institute of Fuel.
M.P.S.—Member, Pharmaceutical Society.
M.S.A.Chem.I.—Member, South African Chemical Institute.
M.Sc.—Master of Science.
Mus.B.—Bachelor of Music.
O.B.E.—Officer of the Order of the British Empire.
Ph.D.—Doctor of Philosophy.

- ADAM, Miss Marjorie June, B.H.Sc., Karitane Products Society, Melrose, Wellington. (*Chemist*). A.'58.
- ADAMS, Arthur Francis Reginald, M.Sc., Lincoln College, Christchurch. (*Senior Lecturer in Soil Science*). A.'39.
- ADAMS, Dennis Beaumont, B.Sc., A.N.Z.I.M., BALM Paints (N.Z.) Ltd., Box 1009, Auckland. (*Works Manager*). A.'51.
- ADAMS, Dudley Erne, M.Sc., Auckland Grammar School, P.O. Box 9046, Newmarket, Auckland. (*Senior Chemistry Master*). A.'35.
- ADCOCK, David Smith, M.Sc., Ph.D., Standard-Vacuum Oil Co. (N.Z.) Ltd., P.O. Box 2497, Wellington. (*Industrial Sales Representative*). A.'55.
- ADDIS-SMITH, Laurence Frederick, M.Sc.(Lond.), A.R.C.S., F.R.I.C., D.I.C., M.S.A.Chem.I., H. W. Lawrence and Son Ltd., Chemical Service Laboratory, Johnsonville, Wellington (*Managing Director*). F.'55.
- AGGETT, Frederic John Bernard, M.Sc., A.A.E.C., Private Bag, Sutherland, N.S.W., Australia. A.'60.
- ALCORN, Norman Patrick, M.Sc., A.R.I.C., Dominion Laboratory, P.O. Box 2112, Christchurch. (*Government Analyst*). A.'39.
- ALLAN, James Eric, M.Sc., Rukuhia Soil Research Station, Box 490, Hamilton. (*Senior Principal Scientific Officer*). A.'51.
- ALLISON, Russell Morris, M.Sc., Ph.D.(Wis.), Crop Research Division D.S.I.R., Private Bag, Christchurch. (*Principal Scientific Officer*). A.'45.
- ANDERSON, Miss Roberta May, B.Sc., B.H.Sc., Dip.Ed., 20 Hamilton Avenue, Christchurch. (*Head of Science Department, Christchurch Girls' High School*). A.'47.
- ANDERSON, William Edwin, B.Sc., 74 Grange St., Opawa, Christchurch. (*Chemist, G. L. Bowron & Co. Ltd.*). A.'52.
- ANDREW, Robert Leslie, F.R.I.C., 30 Fairview Crescent, Wellington, W.I. (*Retired, formerly Director and Dominion Analyst, Dominion Laboratory, Wellington*). A.'31; F.'34; ;Hon. Fellow '61.
- ANDREWS, Ernest David, M.Sc., Wallaceville Animal Research Station, Private Bag, Wellington. (*Senior Principal Scientific Officer*). A.'46.
- ANDREWS, John Clark, M.Sc., Ph.D., F.R.I.C., A.M.I.Chem.E., 403A Devon Street West, New Plymouth. (*Works Director, Ivon Watkins Ltd.; Director, Gardinol Chemicals Ltd.*). A.'31; F.'36.
- ANNETT, Harold Edward, O.B.E., B.Sc., Agric.(Lond.), D.Sc.(Lond.), F.R.I.C., 18 Windsor Rd., Beerescourt, Hamilton. (*Retired. Formerly Indian Agricultural Service*). A.'31; F.'43.
- ANSLEY, Desmond Reginald, B.Sc., Taniwha Products Ltd., Bell Ave., Westfield, Auckland. (*Chief Chemist*). A.'59.

- APPLEYARD, Robert Ian, B.Sc., A.N.Z.I.M., National Carbon Pty. Ltd., Vivian Street, Wellington. (*Works Chemist*). A.'54.
- ARMSTRONG, Alan George, B.Sc., Ngata Memorial College, Ruatoria, via Gisborne. (*Teacher*).
- ASKEW, Henry Oscar, O.B.E., M.A., Ph.D. (Lond.), D.I.C., F.R.I.C., F.R.S.N.Z., New Zealand Breweries Ltd., Box 211, Wellington. (*Research Chemist*). A.'36; F.'37.
- AUSTIN, John Maurice, M.Sc., Ph.D., Chemistry Department, University of Canterbury, Box 1471, Christchurch. (*Senior Lecturer*). A.'53.
- AYLING, Herbert Sydney, M.Sc., Industrial Chemicals (N.Z.) Ltd., Panmure, Auckland. (*Chemist*). A.'46.
-
- BAILEY, Maurice Ross, B.Sc., 133 Salford Street, Invercargill. (*Science Teacher, James Hargest High School*). A.'58.
- BAILEY, Raymond Wellesley, M.Sc., Ph.D. (Birm.), Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Principal Scientific Officer*). A.'46.
- BAKER, Lewis Charles, M.Sc., W. Gregg & Co. Ltd., Box 956, Dunedin. (*Works Manager*). A.'46.
- BARCLAY, John Bernard, B.Sc., 77 Taylors Road, Mt. Albert, Auckland. (*Production Chemist, A. C. Hatrick (N.Z.) Ltd.*). A.'53.
- BARKER, Geoffrey Herbert, M.Sc., Reid (N.Z.) Rubber Mills Ltd., Private Bag, Auckland. (*Chemist*). A.'48.
- BARNES, Fred, M.Sc., The Fletcher Industries Ltd., Plywood Division, Mandeville Street, Riccarton, Christchurch. (*Chief Chemist*). A.'55.
- BARNES, James Francis, B.Sc., Alliance Freezing Co., P.O. Box 845, Invercargill (*Chief Chemist*). A.'60.
- BARNICOAT, Cuthbert Richmond, D.Sc., Ph.D. (Minnesota); F.R.I.C., F.R.S.N.Z., Cawthron Institute, P.O. Box 175, Nelson. (*Director*). A.'31; F.'43.
- BARR, William Lyall, B.A., M.Sc., F.R.I.C., N.Z. Forest Products Ltd., Private Bag, Auckland, C.I. (*Research Chemist*). A.'31; F.'49.
- BARRACK, Bruce Graburn, B.Sc., Organic Research Laboratory, Aspro Nicholas Ltd., Slough, Bucks., England. A.'57.
- BARTRUM, Miss Margaret Patricia, M.Sc., Dominion Laboratory, D.S.I.R., P.O. Box 2224, Auckland, (*Scientific Officer*). A.'41.
- BATHURST, Noel Onslow, M.Sc., Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Chemist*). A.'45.
- BATT, Richard Dean, M.Sc., Ph.D., M.A. (Oxon), D.Phil. (Oxon), Biochemistry Department, Medical School, University of Otago, Dunedin. (*Senior Lecturer*). A.'55; F.'61.
- BAYLISS, Stuart Patrick, B.Sc., Ocean Beach Freezing Co. Ltd., Invercargill. (*Chemist*). A.'60.

- BEACHEN, John Frederick, M.Sc., Samson Paints Ltd., Patiki Street, Avondale, Auckland. (*Head Chemist*). A.'56.
- BEATH, George Bentley, M.A., Dip.Ed., A.I.Ed.(Lond.), Dunedin Teachers' College, Dunedin. (*Principal*). A.'33.
- BECK, John Richard, B.Sc., N.Z. Breweries Ltd., Box 211, Wellington. (*Assistant Technical Manager*). A.'50.
- BELL, Muriel Emma, C.B.E., M.D., F.R.A.C.P., F.R.S.N.Z., Medical School, University of Otago, Dunedin. (*Nutritionist, Department of Health*). F.'41.
- BETTY, Stewart Morris, B.Sc., Dip.Ind.Chem., Empire Rubber Mills Ltd., c/o Woulston P.O., Christchurch. (*Manager*). A.'52.
- BIELSCHOWSKY, Marianne, Ph.D.(Freiburg), Medical School, University of Otago, Dunedin. (*Chemist to Cancer Research Department*). A.'51.
- BIGGS, Arthur Ian, M.Sc., F.R.I.C., Federation of British Industries, London. A.'43.
- BIRRELL, Kenneth Stewart, M.Sc., A.R.I.C., Soil Bureau, D.S.I.R., Box 8001, Wellington. (*Senior Soil Physicist*). A.'41.
- BISHOP, Charmian Jocelyn, M.Sc., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Lecturer*). A.'60.
- BLACKIE, William John, M.Sc., F.R.I.C., United Nations Mission, D.I.T. Building, Dacca 2, East Pakistan (*F.A.O. Leader*). A.'33; F.'35.
- BLACKMAN, John Gary, M.Sc., Ph.D., Department of Pharmacology, University New Buildings, Teviot Place, Edinburgh 8, Scotland. (*I.C.I. Research Fellow*). A.'56.
- BLANC, Albert Damer Gibson, B.Sc., M.B., Ch.B., P.O. Box 91, Wanaka. (*Medical Practitioner*). A.'39.
- BLOOM, Harry, D.Sc.(Melb.), Ph.D.(Lond.), D.I.C., F.R.A.C.I., Chemistry Department, University of Tasmania, Box 252C, Hobart, Australia. (*Professor*). A.'48; F.'60.
- BOLLARD, Edward George, B.Sc., Ph.D.(Cantab.), Fruit Research Station, D.S.I.R., Auckland. (*Plant Physiologist*). A.'53.
- BORTHWICK, Edwin Sloan, M.Sc., A.R.I.C., Shell Oil N.Z. Ltd., Box 2091, Wellington. (*Assistant Technical Adviser*). A.'36.
- BOUSTRIDGE, William, B.Sc., British Imperial Paints Ltd., Auckland. (*Chemist*). A.'61.
- BOWYER, Stephen Bernard, Mill Road, Otaki. (*Retired*). A.'31. Hon.M.
- BRASCH, Donald James, M.Sc., Ph.D.(Queen's), Dominion Laboratory, P.B. Petone. (*Scientific Officer*). A.'59.
- BREEN, John Newman, Stratford Dairy Co. Ltd., P.O. Box 97, Stratford. (*Chemist*). A.'61.

- BRIDGMAN, Michael John, B.Sc., A.N.Z.I.M., N.Z. Wallboards Ltd., Christchurch. (*Manager*). A.'60
- BRIGGS, Lindsay Heathcote, D.Sc., D.Phil.(Oxon.), F.R.S.N.Z., F.A.N.Z.A.A.S., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Professor of Chemistry*). A.'33; F.'36.
- BRIGGS, Michael Harvey, B.Sc.(Liverpool), M.S.(Cornell), Chemistry Department, Victoria University of Wellington, P.O. Box 196, Wellington (*Lecturer in Biochemistry*). A.'61.
- BROOKER, Edgar George, M.Sc., Ph.D., Ivon Watkins Ltd., New Plymouth. A.'48.
- BROOKER, Stanley George, M.Sc., Abels Ltd., Box 9012, Newmarket, Auckland. (*Chief Chemist*). A.'42; F.'48.
- BROOKS, Robert Richard, B.Sc.,(Hons.)(Bristol), Ph.D.(Capetown).A.R.I.C., Biochemistry Department, Massey College, Palmerston North. (*Lecturer*). A.'61.
- BROUGHTON, George Wilfred, B.Sc., McLeod Bros. Ltd., P.O. Box 908, Dunedin. (*Factory Manager*). A.'46.
- BROWN, Desmond Goble, M.Sc., Kempthorne Prosser & Co.'s, New Zealand Drug Company Ltd., P.O. Box 319, Dunedin, (*Chief Chemist, Pharmaceutical Laboratories*). A.'57.
- BROWN, Mrs. Kathleen Elizabeth, B.Sc., M.H.Sc., Hill Street South, Richmond, Nelson. (*Nelson Girls' College*). A.'49.
- BROWNIE, Gavin Fair, M.Sc., Standard-Vacuum Oil Co. Ltd., P.O. Box 93, Petone. (*Industrial Chemist*). A.'61.
- BROWNE, William Edward, B.Sc., Box 1367, Auckland. (*Chemist, Hardie Trading Co.*). A.'49.
- BROWNING, Allen Ransome, B.Sc., Fijian Ore Co. Ltd., P.O. Box 143, Lautoko, Fiji. (*Company Manager*). A.'51.
- BRUCE, James Arthur, "Montrose," Kimpton Road, Papatoetoe, Auckland, P.O. Box 31, Papatoetoe. (*Technical Consultant, Fertilisers and Farmers' Raw Materials etc.*). A.'32.
- BRUCE, Leonard Wainwright, B.Sc., Dominion Laboratory, D.S.I.R., P.B. Petone. (*Senior Scientific Officer*). A.'51.
- BRUECKNER, Joseph. M.D.(Budapest), Department of Health and Social Services, Regional Laboratory, Monkton, New Brunswick, Canada. A.'53.
- BRUNDELL, James Evans, M.Sc., Auckland Grammar School. (*Science Master*). A.'41.
- BURNETT, Kenneth Robert, B.Agr.Sc.(Dairy Tech.), Kaipara Dairy Co. Ltd., P.O. Box 20, Helensville. (*Chief Chemist and Assistant Manager*). A.'59.
- BURNS, Malcolm McRae, C.B.E., M.Sc., Ph.D.(Aberd.), Lincoln College, Christchurch. (*Principal*). A.'37; F.'43.

- BURTON, Hugh Stephen Nicholas Hay, B.Sc., A.N.Z.L.A., 120 Nicholson Road, Khandallah, Wellington. (*Head, Bibliographical Section, N.L.S.*). A.'44.
- BUTCHERS, John Barnard, M.Sc., Hutt Valley High School, Woburn Road, Lower Hutt. (*Head of Science Department*). A.'51.
- BUTKUS, Antanas, D.Agr.Sc.(Bonn), Southland Frozen Meat Co. Ltd., Invercargill. (*Chief Chemist*). A.'60.
- BUTLER, Graham Wesley, M.Sc., Fil.dr.(Lund.), Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Principal Scientific Officer*). A.'54.
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- CAIN, Bruce Frank, M.Sc., Ph.D., D.Phil.(Oxon.), British Empire Cancer Research Laboratory, Cornwall Geriatric Hospital, Auckland. (*Senior Cancer Research Fellow*). A.'53.
- CAMBIE, Richard Conrad, M.Sc., Ph.D., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Lecturer, temporarily overseas*). A.'57.
- CAMPBELL, Arthur Derek, M.Sc., Ph.D., A.R.I.C., Chemistry Department, University of Otago, Dunedin. (*Senior Lecturer and Micro-analyst*). A.'49.
- CAMPBELL, Alistair Shand, M.Sc., P.O. Box 52, Lincoln College, Christchurch. (*Lecturer in Chemistry*). A.'59.
- CANDY, Bruce James, M.Sc., Kelston High School, New Lynn, Auckland. (*Science Master*). A.'60.
- CARNEGIE, Patrick Robert, B.Sc.(Hon.)(St. Andrews), University of Malaya, Singapore. (*Lecturer*). A.'59.
- CARR, Robert Melville, M.Sc., Chemistry Department, University of Otago. (*Assistant Lecturer*). (*Temporarily overseas*). A.'58.
- CARRIE, Maxwell Stuart, M.Sc., F.R.I.C., A.M.I.Chem.E., The Canterbury Frozen Meat Co., Ltd., P.O. Box 2, Belfast, Christchurch. (*Chemist*). A.'36; F.'58.
- CARTER, Charles Lyons, M.Sc., A.R.I.C., 134 Queen Street, Dunedin. (*Reader in Chemistry University of Otago—Retired*). A.'31; F.'43; Hon.M.
- CARTER, David Michael, M.Sc., B.A.L.M. Paints (N.Z.) Ltd., Hutt Road, Lower Hutt. (*Development Chemist*). A.'57.
- CARTER, Denver Milton, B.Sc., Rangitoto College, Mairangi Bay, Auckland. (*Assistant Master*). A.'60.
- CAUGHLEY, Frank Gordon, B.A., M.Sc., N.Z. Leather and Shoe Research Association, Private Bag, Lower Hutt. (*Research Officer*). A.'32.
- CAWLEY, Robert William, M.Sc., Wheat Research Institute, P.O. Box 1489, Christchurch. (*Assistant Director*). A.'49.

- CHAMBERLAIN, George, B.Sc., Dominion Laboratory, D.S.I.R., P.B. Petone. (*Chemist*). A.'44
- CHAPMAN, Lewis Peter James, M.Sc., A.R.A.N.Z., Oamaru Worsted and Woollen Mills Ltd., Oamaru. (*Chemist*). A.'48.
- CHAPPELL, Peter Lyndsey, M.Sc., A.R.I.C., Glaxo Laboratories (N.Z.) Ltd., P.O. Box 624, Palmerston North. (*Pharmaceutical Production Manager*). A.'51.
- CHARLTON, Philip Lewis Raymond, B.Sc., Department of Agriculture, Suva, Fiji. (*Senior Chemist*). A.'39.
- CHILDS, William Edward, B.Sc., B.A.L.M. Paints Pty. Ltd., P.O. Box 60, Clayton, Victoria, Australia. (*Chemist*). A.'50.
- CHRISTENSEN, Max Theodore, M.Sc., Ph.D., Department of Chemistry, University of Canterbury, P.O. Box 1471, Christchurch. (*Senior Lecturer*). A.'50.
- CLARE, Norman Trevor, M.Sc., Ruakura Animal Research Station, Private Bag, Hamilton. (*Chief Biochemist*). A.'35; F.'47.
- CLARK, Percival James Comfort, M.Sc., Dominion Laboratory, D.S.I.R., P.B. Petone. (*Deputy Director and Dominion Analyst*). A.'32; F.'61.
- CLEVERLEY, Barry, M.Sc., Ph.D., Dominion Laboratory, D.S.I.R., P.B. Petone. (*Senior Scientific Officer*). A.'52.
- CLIMO, John Matheson, B.Sc., Swift and Co. Ltd., P.O. Box 2301, Auckland. (*Sales Representative*). A.'48.
- COCKBURN, Bruce Lindsey, M.Sc., Wellington College, Wellington, C.4. (*Assistant Master*). A.'58.
- COLEBROOK, Lawrence David, M.Sc., Ph.D., Chemistry Department, University of Rochester, Roch. 20, New York, U.S.A. A.'59.
- COLLINS, Alfred Drew, M.Sc.(Manc.), Trimol Laboratories Ltd., 71 Melrose Road, Mt. Roskill, Auckland, S.E.3. (*Chief Chemist*), A.'36.
- CONE, Edgar, M.Sc.(Lond.), A.R.C.S., D.I.C., A.R.I.C., H. W. Lawrence and Son Ltd., Chemical Service Laboratory, Johnsonville, Wellington. (*Chemist*). A.'39.
- COOKE, Miss Alison Peevor, B.Sc., c/o A.N.Z. Bank, The Strand, London. A.'48.
- COOP, Ian Edward, M.Sc., D.Phil.(Oxon.), Lincoln College, Christchurch. (*Professor of Animal Husbandry and Vice-Principal*). A.'46; F.'60.
- COOPER, David Edward, M.Sc., 7 Crescent Road, Epsom, Auckland. (*Chemist, A.F.F. Co.*). A.'56.
- CORBAN, George Annis, B.Sc., R. & W. Hollaby Ltd., Auckland. (*Chemist*). A.'60.
- CORBETT, Robert Edward, M.Sc., Ph.D.(Cantab.), Chemistry Department, University of Otago, Dunedin. (*Reader*). A.'53; F.'60.

- CORNES, John Julian Stephen, B.A., B.Sc., Waitomo Portland Cement Co., Box 274, Te Kuiti. (*Senior Chemist*). A.'40; F.'49.
- COTTON, Stephen Richard James, Laboratory, Auckland City Council, Town Hall, Auckland. (*Chief Analyst and Filtration Supervisor*). A.'53.
- COUP, Mostyn Robert, B.Sc., Ruakura Animal Research Station, Private Bag, Hamilton. (*Biochemist*). A.'45.
- COX, Gerald Stanley, B.Pharm., Ph.D., N.Z. School of Pharmacy, Petone. (*Director*). A.'60.
- CRAIGHEAD, Pat Wylie, M.Sc., N.Z. Plywood (S.I.) Ltd., Mandeville Road, Riccarton. (*Manager, Particle Board Factory*). A.'59.
- CROWLEY, Bernard John, B.Sc., Glaxo Laboratories Ltd., Palmerston North. (*Development Chemist*). A.'60.
- CROZIER, Henry William, M.Sc., Marathon Rubber Footwear Ltd., Christchurch. (*Chief Chemist*). A.'31.
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- DACRE, Jack Craven, M.Sc., Ph.D.(Lond.), Pathology Research Unit, Medical School, University of Otago, Dunedin. (*Senior Research Officer, M.R.C.*). A.'45; F.'58.
- DASENT, Wilfred Effingham, M.Sc., Chemistry Department, Victoria University of Wellington, Box 196, Wellington. (*Senior Lecturer*). A.'51.
- DAVIES, Edwin Braithwaite, M.Sc., Ph.D.(Aberd.), A.R.I.C., Rukuhia Soil Research Station, P.O. Box 490, Hamilton. (*Senior Principal Scientific Officer*). A.'31; F.'52.
- DAVIS, Brian Reeve, M.Sc., Ph.D., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Lecturer*). A.'55.
- DAVIS, Graeme Frear, M.Sc., C.O.P. (Hospital Laboratory Practice), Drs. Brown and Lusk, Pathologists, 4A Symonds Street, Auckland. (*Biochemist*). A.'55.
- DAVIS, Leslie Harold, M.Sc., Dominion Laboratory, D.S.I.R., P.B. Petone. (*Principal Scientific Officer, Toxicology*). A.'31.
- DAWES, Stuart Neil, B.Sc., Dominion Laboratory, P.B. Petone. (*Scientific Officer*). A.'54.
- DEARSLEY, William Leonard Melville, M.A.(Cantab.), Dominion Compressed Yeast Co. Ltd., Box 2106, Christchurch. (*Chief Chemist and Works Manager*). A.'31; F.'46.
- De BOER, Pieter Johannes, M.Chem.Eng.(Delft), International Paints of N.Z. Ltd., 4 Seatoun Heights Road, Wellington, E.5. (*Senior Chemist*). A.'54.
- DEMCHENKO, Mrs. Zinaida, Ing. Chemist (Kharkov), N.Z. Pottery & Ceramics Research Assn., Private Bag, Lower Hutt. (*Scientific Officer*). A.'53.
- DEMCHENKO, Zosim, Ing. Chemist (Kharkov), Lever Bros. (N.Z.) Ltd., Private Bag, Petone. (*Laboratory Superintendent*). A.'53.

- DENMEAD, Colin Frank, B.Sc., Health Department, P.O. Box 5442, Auckland. (*Chemical Inspector*). A.'43.
- DENNIS, Rodney Arthur, B.Agr.Sc.(Dairy Tech.), Albertland Co-op Dairy Co., Private Bag, Wellsford. (*Manager*). A.'57.
- DENNISON, John Scott, M.A., B.Sc., Dip.Ed., Otago Boys' High School. (*Science Teacher*). A.'60.
- DICK, David Andrew, M.Sc., 40 Gladstone Road, Dunedin, N.E.1. (*Chemist and Brewer, Wilson's Malt Extract Co., Willowbank, Dunedin*). A.'32.
- DINGLEY, George, M.Sc., Dominion Compressed Yeast Co., Ltd., Box 10, Auckland. (*Chief Chemist*). A.'40.
- DIXON, Joseph Keith, M.Sc., Ph.D.(Lond.), D.I.C., F.R.I.C., F.R.S.N.Z., Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington. (*Assistant Director*). A.'36; F.'41.
- DOAK, Brian Wilfred, D.Sc., N.Z. Fertiliser Manufacturer's Research Association, Otara Research Station, Otahuhu, Auckland. (*Director*). F.'44.
- DOBSON, Alexander, B.Sc., A.R.A.N.Z., N.Z. Wallboards Ltd., 153A Ballmoral Road, Auckland. (*Chief Chemist*). A.'49.
- DOLBY, Richard Malcolm, M.Sc., Ph.D.(Lond.), The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Chemist*) A.'48.
- DONE, James, M.Sc., Ph.D.(Lond.), Department of Biochemistry, Sydney University, Sydney, N.S.W., Australia. A.'60.
- DONOVAN, Christine Lesley, B.Sc., City Council Laboratory, P.O. Box 2199, Wellington. (*Chemist*). A.'59.
- DOROFÆFF, Francis Desmond, B.Sc., Rukuhia Soil Research Station, P.O. Box 490, Hamilton. (*Senior Scientific Officer*). A.'47.
- DRYDEN, John Willoughby, B.Sc., M.I.Chem.E., The Lactose Company of N.Z. Ltd., Kaponga R.D., Taranaki (*Factory Manager*). A.'46.
- DUNCKLEY, James Vivian, B.Sc., Medical School, Pathology Department, University of Otago, Dunedin. (*Biochemist*). A.'51.
- DURHAM, Reginald Alexander, M.Sc., R. A. Durham Ltd., Box 9210, Newmarket, Auckland. (*Manufacturing and Consulting Chemist*). A.'48.
- EDMOND, Charles Ross, M.Sc., A.R.I.C., Australian Mineral Development Laboratories, Conyngham Street, Parkside, South Australia. A.'49.
- EDSON, Norman Lowther, B.Med.Sc., M.B., Ch.B., Ph.D. (Cantab.), F.R.S.N.Z., Medical School, University of Otago, Dunedin, C.I. (*Professor of Biochemistry*). A.'37; F.'43.
- EDWARDS, Henry Hanbury, Morcom Green & Edwards Ltd., Onehunga, Auckland. (*Technical Director*). A.'32; F.'49.
- ELDER, William Ross, M.Sc., Linwood High School, Aldwins Road, Christchurch. (*Head of Department of Biology*). A.'44.

- ELLIS, Albert James, M.Sc., Ph.D., Dominion Laboratory, D.S.I.R., P.B. Petone. (*Principal Scientific Officer*). A.'54.
- ELLISON, Miss Dorothy Jean, M.Sc., A.R.A.C.I., Abbotsleigh School, Whareroonga, Sydney, N.S.W. (*Senior Chemistry Mistress*). A.'32.
- ELPHICK, John Oliver, B.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Fuel Chemist*). A.'43.
- ENGLAND, Brian Daysh, M.Sc., Ph.D.(Lond.), Chemistry Department, Victoria University of Wellington, P.O. Box 196, Wellington. (*Senior Lecturer*). A.'60.
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- FASTIER, Frederick Noel, M.Sc., D.Phil.(Oxon.), F.R.J.C., Medical School, University of Otago, Dunedin, C.I. (*Associate Professor in Pharmacology*). A.'44; F.'61.
- FERGUSON, Jack Eric, M.Sc., Ph.D.(Lond.), Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Lecturer*). A.'60.
- FERGUSON, John Alexander, M.A., Dip.Ed., Boys' High School, Gisborne. (*Head of Science Department*). A.'32.
- FIELDES, Morice, D.Sc., Soil Bureau, D.S.I.R., Box 8001, Wellington, (*Senior Principal Scientific Officer*). A.'37.
- FIFE, Clifford Valmont, M.Sc., Soil Science Department, Massey College, Palmerston North. (*Senior Lecturer and Head of Department*). A.'33.
- FISCHER, Alfred, M.Sc., Ph.D., Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch, (*Lecturer*). A.'55.
- FITZGERALD, David Gerard, B.Sc., Imperial Chemical Industries (N.Z.) Ltd., P.O. Box 275, Lower Hutt. (*Production Supervisor*). A.'55.
- FORRESTER, Alan McCallum, B.Sc., N.Z. Refrigerating Co. Ltd., Islington, Christchurch. (*Assistant Chemist*). A.'53.
- FORSYTH, John Charles, N.Z. Refrigerating Co. Ltd., Islington, Christchurch. (*Chief Chemist*). A.'31.
- FOSTER, Peter Kinnear, M.Sc., Ph.D., D.I.C., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Scientific Officer*). A.'59.
- FRANCE, John Terence, M.Sc., Central Laboratory, Auckland Public Hospital. (*Biochemist*). A.'61.
- FRANCIS, Graeme Cecil, B.Sc., Standard-Vacuum Oil Co., P.O. Box 73, Petone. (*Manufacturing Chemist*). A.'59.
- FRASER, John Gareth, Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Technical Officer*). A.'58.
- FREITAG, Walter, M.Sc., B.P. (New Zealand) Ltd. Laboratory, P.O. Box 892, Wellington. (*Chemist*). A.'60.
- FREYBERG, Ernest, B.Sc., Dip.Chem.Eng.(Vienna), 9 Kebbll Grove, Lower Hutt. (*Technical Manager, Batavian Rubber Co. Ltd., Brown Street, Upper Hutt*). A.'44.

- FRIEBERG, Alan George, M.Sc., A.R.I.C., 42 Nottingham Street, Westmere, Auckland, W.2. (*Chief Chemist, Dairy Laboratory, Department of Agriculture*). A.'39.
- FRIEBERG, George Frederick, A.R.A.C.I., 81 West End Road, Westmere, Auckland, W.2. (*Retired*). A.'31, Hon.M.
- FUTTER, John Herbert, M.Sc., H. W. Lawrence & Son Ltd., P.O. Box 33, Johnsonville. (*Chemist*). A.'59.
- FYFE, William Sefton, M.Sc., Ph.D., University of California (*Professor of Geochemistry*). A.'52.
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- GALLAHER, Philip James, B.Sc., Fertiliser Manufacturers' Research Association, Otara Research Station, Otahuhu, Auckland. (*Chemist*). A.'48.
- GAMBLE, Thomas Palmer Jackson, B.Sc.(Hons.)(Belfast), Pinchin, Johnson & Co. Ltd., Miramar, Wellington. (*Research Chemist*). A.'59.
- GAPPER, Harry Richmond, M.Sc., Peach Products Ltd., Otahuhu, Auckland, S.E.7. (*Chief Chemist*). A.'49.
- GARDNER, Roy, D.Sc., M.I.Chem.E., F.R.I.C., Dr. R. Gardner and Partners Ltd., 41 Dowling Street, Dunedin. (*Consulting Industrial Chemist*). A.'31; F.'35.
- GARLICK, Raymond Kevin, B.Sc., Fletcher Industries Ltd., Box 1168, Christchurch. (*Chemist*). A.'52.
- GAY, Selwyn Roy, Southland Co-op Phosphate Co., Box 849, Invercargill. (*General Manager*). A.'31.
- GEDDES, Mrs. June Moyra, M.Sc., 113 Donald Street, Karori, Wellington. A.'54.
- GEE, Roy, M.Sc., Glaxo Laboratories (N.Z.) Ltd., P.O. Box 624, Palmerston North. (*Assistant Pharmaceutical Production Manager*). A.'55.
- GEORGE, John Seddon, B.Sc., B.A.L.M. Paints (N.Z.) Ltd., Hutt Road, Lower Hutt. (*Developmental Chemist*). A.'57.
- GERSON, Thomas, M.Sc., Fats Research Laboratory, D.S.I.R., Wellington. (*Chemist*). A.'50.
- GIBBONS, Ronald Clifton, M.Sc., B.A.L.M. Paints (N.Z.) Ltd., Hutt Park Road, Lower Hutt. (*Technical Officer*). A.'39.
- GIBSON, Milton George Charles, M.Sc., Dominion Laboratory, P.O. Box 2224, Auckland, C.1. (*Chemist*). A.'57.
- GILLING, William Osric Robert, M.A., B.Sc., 8 Derrett Place, Christchurch. (*Retired*). A.'31; F.'37; Hon.M.

- GILMORE, Owen Lawry, B.A., B.Sc., Senior Lecturer, Post Primary Dept., Auckland Teachers' College, Epsom Avenue, Auckland. (*Lecturer in Science*). A.'53.
- GLENDINNING, Tom Aldrich, M.Sc., F.R.I.C., 14 Alton Street, Nelson, (*Retired*). A.'31.
- GLOVER, Richard Brian, B.Sc.(Hons.), Ph.D.(Bristol), Dominion Laboratory, c/o Ministry of Works, Wairakei. (*Scientific Officer*). A.'61.
- GOLDING, Raymund Marshall, M.Sc., Department of Theoretical Chemistry, Cambridge. (*Temporarily overseas*). A.'59.
- GOODEY, John Hill, M.Sc., The Laboratory, Auckland Gas Co. Ltd., P.O. Box 34, Auckland. (*Chief Chemist*). A.'53.
- GORGENYI, George Zoltan, Davis Gelatine (N.Z.) Ltd., Christchurch. (*Works Chemist*). A.'61.
- GRAHAM, Joseph Ivon, M.A.(Cantab.), M.Sc.(Lond.), F.R.C.Sc.I., F.Inst.F., Hon.M.I.Min.E., F.R.I.C., "The Hill", Anakiwa, Picton, R.D., Marlborough. (*Retired*). F.'49.
- GRAHAM, Peter John, M.Sc., C.I.S., Department of Industries and Commerce, Wellington. (*Clerk*). A.'59.
- GREENWOOD, Roger Michael, M.Sc., Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North (*Scientific Officer*). A.'45.
- GREGORY, Elizabeth, M.H.Sc., Ph.D.(Lond.), Home Science School, University of Otago, Dunedin. (*Retired; formerly Professor of Home Science*). A.'39; F.'43.
- GREGORY, Lloyd Patrick, Dominion X-Ray & Radium Laboratory, P.O. Box 1456, Christchurch. (*Chemist*). A.'50.
- GRIFFIN, Donald John, M.Sc., Central Technical College, Petone. (*Assistant Master*). A.'59.
- GRIFFIN, Kenneth Massy, M.Sc., F.R.I.C., 29 Ridings Road, Remuera, Auckland, S.E.2. (*Retired, formerly Government Analyst, Auckland*). A.'31; F.'43.
- GRIGG, Felix John Theodore, M.Sc., F.R.I.C., 61 Friend Street, Wellington, W.3. (*Retired, formerly Director, Dominion Laboratory, and Dominion Analyst*). F.'43.
- GRIGG, John Lawrence, M.Sc., S.I. Soil Testing Station, Taieri Agriculture Centre, Private Bag, Mosgiel. (*Officer-in-Charge*). A.'44.
- GRIMMETT, Murray, Ross, M.Sc., Biochemistry Department, Massey College, Palmerston North. (*Assistant Lecturer*). A.'61.
- GRIMMETT, Robert Edmund Richard, M.Sc., 55 Cashmere Avenue, Wellington, N.5. (*Retired*). A.'31; F.'34.
- GROOM, Philip Stanley, B.Sc., Dominion Laboratory, Private Bag, Petone. (*Scientific Officer*). A.'60.

- HAGYARD, Thomas, B.Sc., Ph.D.(Lond.), M.I.Chem.E., University of Canterbury, P.O. Box 1471, Christchurch. (*Senior Lecturer in Chemical Engineering*). A.'50.
- HALL, David, M.Sc., Ph.D., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Senior Lecturer, temporarily overseas*). A.'51.
- HALL, Ronald Berners, M.Sc., c/o N.Z. Forest Products Ltd., Private Bag, Auckland. (*Works Chemist, Penrose*). A.'59.
- HALLIBURTON, Gavin Jack, M.Sc., A.N.Z.I.M., Commercial Cleaners Co., Ltd., 112 Wordsworth Street, Christchurch. (*Chemist and Factory Manager*). A.'50.
- HANGER, William George, M.Sc., Ph.D.(Cantab.), Pathology Research Department, Medical School, University of Otago. (*Senior Research Officer*). A.'59.
- HANSEN, Roy Penrose, B.Sc., Fats Research Laboratory, D.S.I.R., Sydney Street, Wellington. (*Principal Scientific Officer*). A.'46.
- HARLAND, Charles William, M.Sc., N.Z. Farmers' Fertiliser Co., 106 Mays Road, Onehunga, Auckland. (*Chief Chemist and Acid Plant Supervisor*). A.'53.
- HARRALL, Edward Douglas, Christchurch Milk Co. Ltd., P.O. Box 351, Christchurch. (*Assistant Chemist*). A.'59.
- HARTMAN, Leopold, M.Sc., B.Chem.E.(Lwow), Fats Research Laboratory, D.S.I.R., Wellington. (*Principal Scientific Officer*). A.'49.
- HARTSHORN, Michael Philip, B.Sc.(Hons.), D.Phil.(Oxon.), University of Canterbury, P.O. Box 1471, Christchurch. (*Lecturer*). A.'61.
- HARVEY, Mrs. Helen Elizabeth, M.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Senior Scientific Officer*). A.'51.
- HARVEY, William Edward, M.Sc., Ph.D.(Cantab.), Chemistry Department, Victoria University of Wellington, Box 196, Wellington. (*Senior Lecturer*). A.'53.
- HAWKE, John Clement, M.Sc., Ph.D.(Cantab.), Massey Agricultural College, Palmerston North. (*Senior Lecturer in Biochemistry*). A.'59.
- HAWTHORN, John Crawford, M.Sc., Formica (N.Z.) Ltd., Papakura, Auckland. (*Works Chemist*). A.'60.
- HAYWARD, John Elliott, B.Sc., Colonial Ammunition Co. Ltd., Box 8511, Upper Symonds Street P.O., Auckland. (*Chief Chemist*). A.'45.
- HEALY, William Bernard, M.Sc., Ph.D.(Rutgers), Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington. (*Soil Chemist*). A.'50.
- HEBDEN, William Herbert, B.Sc., A.N.Z.I.R.E., Lever Bros. (N.Z.) Ltd., Petone. (*Chief Chemist*). A.'50.
- HERRMANN, Mrs. Romana, M.Phil. in Chem. (Warsaw), Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Scientific Officer*). A.'51.

- HICKS, Ronald, A.R.I.C., F.I.P.H.E., F.Inst.S.P. Auckland Metropolitan Drainage Board, P.O. Box 208, Auckland, C.I. (*Chief Chemist*). A.'52.
- HIGGINS, Desmond James, B.Sc., A.M.I.Chem.E., Kempthorne Prosser and Co.'s N.Z. Drug Co., Hornby, Christchurch. (*Chief Production Officer, All Works*). A.'50.
- HILLS, Dennis Ashley, B.Sc., Empire Rubber Mills, Woolston, P.O., Christchurch. (*Chemist*). A.'60.
- HINDMARSH, William Ewan, B.Sc., Mair & Co. Importers Ltd., Box 1152, Auckland. (*Technical Representative*). A.'60.
- HITCHINGS, Terence Richard, M.Sc., Riccarton High School, Curletts Road, Christchurch. (*Senior Science Master*). A.'60.
- HOARE, John Leonard, M.Sc., Department of Textile Chemistry, The University, Leeds 2, England. A.'60.
- HODDER, Ivan George, B.Sc., N.Z. Forest Products Ltd., Private Bag, Tokoroa. (*Works Chemist*). A.'50.
- HOE, Yuan Liang, B.E.(Chem.), B.Sc., Arthur Lowe Ltd., P.O. Box 13011, Auckland, S.E.5. (*Chemical Engineer*). A.'57.
- HOGAN, Denis James, B.Sc., C.O.P.(Dairy Chem. and Bact.), Dominion Laboratory, D.S.I.R., P.O. Box 2112, Christchurch. (*Scientific Officer*). A.'52.
- HOGG, Donald Elvery, B.Sc., Rukuhia Soil Research Station, P.O. Box 490, Hamilton. (*Senior Scientific Officer*). A.'46.
- HOLLAND, Harold Cecil, M.Sc., Ph.D.(Leeds), F.R.I.C., W. Sutherland & Co. Ltd., P.O. Box 5026, Auckland. (*Managing Director*). F.'61.
- HOLLOWAY, John Thorpe, M.Sc., F.R.S.N.Z., Forest and Range Expt. Station, N.Z. Forest Service, Rangiora. (*Senior Principal Scientific Officer*). A.'44.
- HOLMES, Alexander Colin, B.Sc., M.I.Chem.E., The Lactose Company of N.Z. Ltd., P.O. Box 83, Hawera. (*General Manager*). A.'39.
- HOLMES, George Stevenson, M.Sc., 44 Litten Road, Howick, Auckland. (*Fletcher Industries Ltd.*). A.'44.
- HOOKER, Colin Newton, M.Sc., Fats Research Laboratory, D.S.I.R., Box 8021, Government Buildings, Wellington. (*Scientific Officer*). A.'57.
- HOOKER, Ronald Owen, B.Sc., N.Z. Foods Ltd., Box 583, Hastings. (*Industrial Chemist*). A.'59.
- HOPGOOD, Raymond Henry, B.Sc., Fletcher Industries Ltd., Mandeville Street, Christchurch. (*Chemist*). A.'58.
- HORN, Alexander Huntly, M.Sc., Lincoln College, Christchurch. (*Officer-in-charge, Chemical Services*). A.'52.
- HORNE, Philip Desmond, B.Sc., N.Z. Farmers' Fertiliser Co. Ltd., P.O. Box 41, New Plymouth. (*Chief Chemist and Acid Plant Superintendent*). A.'42.

- HOUNSELL, Eric Russell, M.Sc., University of Canterbury, Box 1471, Christchurch. (*Liaison Officer*). A.'41.
- HOUSE, Donald Alexander, M.Sc., Chemistry Department, Victoria University, P.O. Box 196, Wellington. (*Junior Lecturer*). A.'61.
- HOWARD, Dene Grenville, M.Sc., Shell Oil N.Z. Ltd., P.O. Box 1084, Auckland. (*Sales Technical Advisor*). A.'46.
- HOY, Kenneth Frederick, B.Sc., Rukuhia Soil Research Station, P.O. Box 490, Hamilton. (*Agricultural Chemist*). A.'47.
- HUBBARD, Edmund Francis, Laboratory, N.Z. Railways, Hutt Shops, Woburn. (*Chief Chemist*). A.'54.
- HUGHSON, Walter Gordon Mackenzie, M.Sc., M.Inst.F., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Senior Fuel Chemist*). A.'31; F.'43.
- HUGILL, Archie James, B.Sc., Ph.D.(Birm.), Scott & Bowne Asia Ltd., P.O. Box 124, Otahuhu, Auckland. (*Production Manager*). A.'61.
- HULLETT, Ernest William, M.Sc., Wheat Research Institute, P.O. Box 1489, Christchurch. (*Director*). A.'31; F.'43.
- HUNGERFORD, John Sealy, B.Sc., M.Inst.F., A.M.Inst.Gas.E., Wellington Gas Company Ltd., P.O. Box 6070, Wellington (*Production Engineer*). A.'55.
- HUNT, Austen Hubert, M.Sc., c/o Perfection Ice Cream Co., 300 Manchester Street, Christchurch. (*Consulting Industrial Chemist*). A.'53.
- HUNT, Ian Sinclair, M.Sc., A.R.I.C., A.I.M., A.N.Z.I.W., Chief of Division of Wood Preservation, National Forest Products Laboratory, Faculty of Forestry, University of the Andes, Apartado 231, Merida, Venezuela. A.'41; F.'61.
- HUNTER, George John Ernest, M.Sc., F.R.I.C., Medical School, University of Otago, Dunedin. (*Senior Lecturer in Biochemistry*). A.'40.
- HUNTER, Maurice, B.Sc., Canterbury Dairy Farmers' Ltd., P.O. Box 274, Christchurch. (*Chief Chemist*). A.'56.
- HUNTER, Maxwell Thomas, B.Sc., Christchurch Gas Co. Ltd., Moorhouse Avenue, Christchurch. (*Analyst*). A.'59.
- HURST, Frank, M.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Principal Scientific Officer, Organic*). A.'43.
- HUSHEER, Godfrey Asbjorn, B.Sc., Scientific Service Laboratories, P.O. Box 301, Napier. A.'59.
- HUTCHINSON, Robert Lewis, M.Sc., Lane, Walker and Rudkin Ltd., P.O. Box 992, Christchurch. (*Chief Chemist*). A.'48.
- HYATT, John Buchan, B.Sc.Agric.(Lond.), (*Retired*). A.'31.
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- IVORY, Hugh Gordon, M.Sc., Lever Bros. (N.Z.) Ltd., Private Bag, Petone. (*Production Development Officer*). A.'53.

- JACKMAN, Richard Harry, B.Sc., Ph.D.(Iowa), Grasslands Division, D.S.I.R., Private Bag, Palmerston North. (*Principal Scientific Officer*). A.'51.
- JACKSON, Barrie Edward, B.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Senior Scientific Officer, Petroleum Products*). A.'37.
- JACKSON, Douglas Wright, B.Sc., Challenge Phosphate Co., Otahuhu, Auckland. (*Chief Chemist*). A.'57.
- JACKSON, Miss Phyllis Rosalind, M.H.Sc., Dip.Ed., Home Science School, University of Otago, Dunedin. (*Senior Lecturer*). A.'40.
- JACOBSON, Paul Robert, M.Sc., Chemical Products (N.Z.) Ltd., G.P.O. Box 1955, Wellington. (*Director*). A.'52.
- JAGGER, Lewis Woodhead, M.Sc., Westfield Freezing Co. Ltd., Private Bag, Auckland, C.I. (*Chemist*). A.'41.
- JAKOBSSON, Bjorn Frithiof, B.E.(Chem.), B.Sc., Lever Brothers (N.Z.) Ltd., Private Bag, Petone. (*Production Manager*). A.'55.
- JAMES, Lionel Harry, M.Sc., 121 Remuera Road, Remuera, Auckland, S.E.2. (*Retired*). A.'31; F.'36.
- JAMIESON, Norman Danford, M.Sc., N.Z. School of Pharmacy, Central Institute of Technology, Petone. (*Tutor in Chemistry*). A.'45.
- JEBSON, Richard Selwyn, B.E.(Chem.), B.Sc., Dairy Research Institute, Massey College P.O., Palmerston North. (*Chemical Engineer*). A.'57.
- JESSOP, Edwin Charles, A.R.I.C., Glaxo Laboratories (N.Z.) Ltd., P.O. Box 624, Palmerston North. (*Chief Analyst*). A.'51.
- JOHNS, Alan Tutton, M.Sc., Ph.D.(Cantab.), A.R.I.C., Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Director*). A.'49; F.'60.
- JOHNSON, Archibald Frederick, B.Sc., Christchurch Boys' High School, Straven Road, Christchurch, W.I. (*Science Master*). A.'31.
- JOHNSON, Alexander Lawrence, M.Sc., Chemistry Department, University of Rochester, U.S.A. A.'58
- JOHNSTONE, Francis Henry George, M.B.T. Products (N.Z.) Ltd., C.P.O. Box 2106, Christchurch. (*Company Manager*). A.'31.
- JOINER, William Alexander, M.Sc., F.R.I.C., M.I.Chem.E., Head Office, D.S.I.R., P.O. Box 8018, Wellington. (*Deputy Secretary*). A.'31; F.'43.
- JONES, Brian Ogilvie, B.Sc., N.Z. Forest Products, Private Bag, Tokoroa. (*Chemist, Production*). A.'51.
- JONES, Clarence Desmond Burson, B.Sc., Onewhero District High School, Onewhero. (*Teacher*). A.'53.
- JONES, Ronald Sydney, M.Sc., 32 Douglas Street, Timaru. (*Science Master, Timaru Boys' High School*). A.'44.
- JUSTICE, Edmond Alexander, Dip.Ing.Chem.(Zurich), Guild Rubber Co., P.O. Box 5008, Papanui, Christchurch. (*Company Manager*). A.'39.

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- KENNEDY, Alistair Miles, B.Sc., B.E.(Chem.), Ph.D.(Cantab.), A.M.I. Chem.E., Chemistry Department, University of Otago, Dunedin. (*Senior Lecturer in Applied Chem.*) A.'57.
- KENNEDY, John Wallace, A.G.Inst.Tech., A.R.A.C.I., N.Z. Farmers' Fertilizer Co Ltd., P.O. Box 759, Auckland. (*Works Manager*). A.'57.
- KENNEDY, Thomas Henry, M.Sc., Thyroid Research Department, Medical School, University of Otago, Dunedin. (*Chemist*). A.'39.
- KENNERLEY, Rowland Alfred, M.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Principal Scientific Officer*). A.'50.
- KEYES, Alfred William, B.Sc., Government Transport Department, Civic Chambers, Cuba Street, Wellington. (*Engineer*). A.'31.
- KEYS, Oswald Hilton, M.Sc., A.R.I.C., Dominion Laboratory, P.O. Box 2224, Auckland. (*Government Analyst*). A.'32.
- KIDDLE, Kenneth Walter, M.Sc., M. and K. Kiddle, Orchardists, Box 14, Havelock North. A.'46.
- KIDSON, Elsa Beatrice, D.Sc., F.R.I.C., Cawthron Institute, P.O. Box 175, Nelson. (*Senior Chemist, Soil Bureau, D.S.I.R., Seconded to Cawthron Institute*). A.'31; F.'43.
- KIDSON, John Oxley, M.Sc., Dip.Ed., Christchurch Boys' High School, Straven Road, Christchurch. (*Assistant Science Master*). A.'39.
- KING, Donald Wilford, B.E.(Chem.), B.Sc., Dairy Research Institute, Massey College P.O., Palmerston North. (*Chemical Engineer*). A.'61.
- KING, The Rev. Meyrick Vincent Bryan, M.Sc., 6 Etrick Street, Oamaru. (*Assistant Curate, Oamaru*). A.'36.
- KINGSFORD, Michael, M.Sc., N.Z. School of Pharmacy, Petone. (*Lecturer*). A.'59.
- KITT, Watson, B.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Scientific Officer*). A.'51.
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- LAMBERT, George Stanley, M.Sc., F.I.M., Hayes Metal Refineries Ltd., P.O. Box 9029, Newmarket, Auckland, S.E.I. (*Metallurgist and Works Manager*). A.'34; F.'60.
- LAMBOURNE, Sydney James, M.Sc., Dip.Ed., Department of Education, Box 4001, Hamilton. (*District Senior Inspector of Post Primary Schools*). A.'39; F.'59.
- LANCASTER, Robert Julian, M.Sc., Ruakura Animal Research Station, Private Bag, Hamilton. (*Senior Biochemist*). A.'39.
- LATIMER, Graeme Bruce, B.E.(Chem.), B.Sc., Dairy Research Institute, Massey College P.O., Palmerston North. (*Chemical Engineer*). A.'61.

- LAW, Brunel Robert, A.R.A.C.I., c/o P.O. Box 2503, Wellington. (*Retired formerly Managing Director and Deputy Chairman, I.C.I. (N.Z.) Ltd.*). A.'53.
- LAW, Norman Heyworth, M.Sc., F.R.I.C., Meat Industry Research Institute of N.Z. (Inc.), P.O. Box 617, Hamilton. (*Director*). A.'47; F.'50.
- LAWRENCE, Gilbert Alexander, B.Sc., F.R.I.C., Chemical Service Laboratory, Johnsonville. (*Chairman Directors, H. W. Lawrence and Son Ltd.*). A.'31; F.'35.
- LAWRENCE, Robert Charles, B.Sc., (Hons.) (Lond.), Dairy Research Institute, Massey College P.O., Palmerston North. (*Biochemist*). A.'58.
- LAWRY, Robert Courtney, M.Sc., Brightwater, Nelson. (*Managing Director, W. L. Lawry Ltd., Lime Manufacturers*). A.'44.
- LEESE, Ernest, 27 Mains Avenue, Whangarei. (*Consultant Cement-Concrete and Allied Products*). A.'33; F.'34.
- LEIGHTON, Francis Royden, B.Sc. (Pretoria), N.Z. Co-operative Dairy Co., Box 459, Hamilton. (*Senior Assistant Chemist*). A.'59.
- LEONARD, John Henry, M.Sc., N.Z. Forest Products Ltd., Private Bag, Auckland. (*Research Chemist*). A.'60.
- LEVER-NAYLOR, Peter, B.Sc., The Nestle Company (Australia) Ltd., 17 Foveaux Street, Sydney, N.S.W. A.'49.
- LEVIEN, Miss Barbara Joan, M.Sc., Chemistry Department, University of Western Australia, Perth, W.A. A.'46.
- LEWIN, Arthur Harry, B.Sc., Cadbury Fry Hudson Ltd., Castle Street, Dunedin. (*Chemist*). A.'53.
- LINZEY, John Trevillian, B.Sc., McSkimming Industries Ltd., P.O. Box 2001, Dunedin. (*Chief Chemist*). A.'44.
- LLEWELLYN, Donald Rees, D.Sc., D.Phil. F.R.I.C., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Professor of Chemistry and Director of Chemical Laboratories*). F.'58.
- LLEWELLYN, Frederick John, B.Sc., Ph.D., D.Sc., F.R.I.C., F.R.S.A., Chairman, University Grants Committee, Box 8035, Wellington. F.'47.
- LOCKER, Ronald Harry, M.Sc., Ph.D., Meat Industry Research Institute of N.Z. (Inc.), Box 617, Hamilton. (*Biochemist*). A.'50.
- LOCKHART, Douglas Watson, M.Sc., King's High School, Bay View Road, Dunedin. (*Science Teacher*). A.'54.
- LOE, John Anthony, M.Sc., N.Z. Forest Products Ltd., Private Bag, Tokoroa. (*Chlorine and Bleach Plant Manager*). A.'55.
- LONG, Miss Anwyn Margaret, M.Sc., I.C.I.A.N.Z., Central Research Laboratories, Newson Street, Ascot Vale, Victoria, Australia. (*Research Officer*). A.'58.

- LONGBOTTOM, Herbert Leslie, B.Sc.(Melb.), B.Sc., Glendermid Ltd., P.O. Box 40, Dunedin. (Tanners and Leather Merchants). (*Managing Director*). A.'38.
- LONSKA, Mrs. Maria, Ph.D.(Kharkov), S. W. Peterson and Co. Ltd., 165 Vivian Street, Wellington, C.2. (*Chemist*). A.'52.
- LYTTLETON, John Westcoate, M.Sc., Ph.D.(Lond.), Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Senior Chemist*). A.'54.
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- McANELLY, Francis Patrick, B.Sc., Shell Co. of N.Z. Ltd., Hutt Road Laboratory, Wellington. (*Chemist in Charge*). A.'58.
- McCABE, William James, B.Sc., Institute of Nuclear Sciences, Private Bag, Lower Hutt. (*Scientific Officer*). A.'57.
- McCHESNEY, John William, M.Sc., 8 Alison Crescent, Dunedin, N.W.I. (*Head of Science Dept., Otago Boys' High School*). A.'51.
- McCLURE, Denis, M.P.S.(Hon.), F.N.Z.I.M., D. McClure and Associates, P.O. Box 36, New Lynn, Auckland. (*Principal*). A.'49.
- McCOMBS, Terence Henderson, M.Sc., A.R.I.C., Cashmere High School, Rose Street, Christchurch, S.W.I. (*Headmaster*). A.'31; F.'59.
- McCONNON, Peter Alan, M.Sc., Mainland Products Ltd., P.O. Box 397, Dunedin. (*Manager*). A.'54.
- McCRAW, Ralph Henry, M.Sc., The Lactose Co. of N.Z. Ltd., Kaponga, R.D., Taranaki. (*Assistant Chemist*). A.'58.
- McCURDY, Alan Underwood, B.A., B.Sc., Aranui High School, Shortland Street, Christchurch. (*Head of Science Department*). A.'61.
- McDONALD, Ian Robert Clark, M.Sc., A.R.I.C., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Principal Scientific Officer*). A.'50.
- McDOWALL, Frederick Henry, O.B.E., M.Sc., D.Sc.(Lond.), The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Chief Chemist and Deputy Director*). F.'45.
- McDOWALL, Ian Campbell, M.Sc., School of Architecture, University of Melbourne (*Research Fellow in Ceramics*). A.'45.
- McDOWELL, Arthur Keith Ralph, M.Sc., A.R.I.C., The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Chemist*). A.'31; F.'50.
- McGILLIVRAY, William Anderson, M.Sc., Ph.D., The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Chief Bacteriologist*). A.'44; F.'52.
- McGIMPSEY, James Raymond, M.Sc., A.M.I.Chem.E., A.R.I.C., Davis Gelatine (N.Z.) Ltd., Connal Street, Woolston, Christchurch. (*Production Manager*). A.'51.
- McINTOSH, Ian Gordon, B.Sc., Wallaceville Animal Research Station, Private Bag, Wellington. (*Senior Principal Scientific Officer*). A.'36.

- McKEE, Tasman Joseph, B.Sc., M.Aust.I.M.M., Fruitgrowers' Chemical Co. Ltd., Lime and Marble Ltd., and Buller Uranium Ltd., Port Mapua, Nelson. (*Managing Director*). A.'46.
- McKEEGAN, William Relf, M.Sc., Dip.Ind.Chem., Aulsebrooks Ltd., P.O. Box 357, Christchurch. (*Chemist*). A.'51.
- McKENZIE, Graham Smith, B.Sc., Southland Cement Co., Orawia. (*Chief Chemist*). A.'58.
- MACKNEY, Alan William, M.Sc., (Sydney), F.R.A.C.I., N.Z. Forest Products Ltd., Private Bag, Auckland. (*General Manager (Penrose) and Chief Chemist*). A.'44.
- McLEAN, Donald Hugh, M.Sc., Ross & Glendinning Ltd., Roslyn Woollen Mills, P.O. Box 606, Dunedin. (*Chemist*). A.'45.
- MACLEAN, Dorothy Margaret, B.Sc., Pathology Department, Public Hospital, Wellington. (*Biochemist*). A.'59.
- McMILLAN, Roger Maxwell, B.Sc., Buckley and Young Ltd., Box 2411, Wellington. (*Chemist*). A.'60.
- McNAUGHT, Kenneth John, M.Sc., Rukuhia Soil Research Station, P.O. Box 490, Hamilton, (*Principal Scientific Officer*). A.'35.
- McNAUGHTON, Gracme Stuart, M.Sc., Ph.D., Institute of Nuclear Sciences, Private Bag, Lower Hutt. (*Scientific Officer*). A.'60.
- MALCOLM, Geoffrey Norman, M.Sc., Ph.D.(Manc.), Chemistry Department, University of Otago, P.O. Box 56, Dunedin. (*Lecturer*). A.'60.
- MALCOLM, Miss Marion Eveline, B.Sc., Dip.Ed., 6 Kenya Street, Wellington, N.4. (*Examiner, Patent Office, Wellington (Chemistry)*). A.'46.
- MALTHUS, Rex Sydenham, B.Sc., Nutrition Research Department, M.R.C., Medical School, University of Otago, Dunedin. (*Research Chemist*). A.'51.
- MANDENO, John Leighton, M.Sc., A.R.I.C., G. H. Jackson & Co. Ltd., Box 1772, Wellington. (*Chief Chemist*). A.'34.
- MANSELL, James Lindsay, M.Sc., Standard Vacuum Oil Co. (N.Z.) Ltd., P.O. Box 2497, Wellington. (*Chief Chemist*). A.'59.
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- MARTIN, Charles George, M.Sc., A.M.I.Chem.E., A.M.N.Z.I.E., A.M. Inst.F., 223 Mt. Pleasant Road, Christchurch. (*Consulting Chemical Engineer*). A.'49.
- MARTIN, Gerald Francois Louis, B.Sc., Wellington Meat Export Co. Ltd., Box 190, Wellington. (*Works Manager*). A.'44.

- MARTIN, Gordon Calder, M.Sc., Southland Boys' High School, Invercargill. (*Head of Science Department*). A.'42.
- MARTIN, James Keith, M.Sc., Ph.D., Soil Bureau, D.S.I.R., P.O. Box 5001, Wellington. A.'55.
- MASKILL-SMITH, Gordon, M.Sc., A.R.I.C., M.I.Chem.E., A.M.N.Z.I.E., N.Z. Wallboards Ltd., 153A Balmoral Road, Auckland, S.2. (*General Manager*). A.'38.
- MASLEN, Hugh Stafford, M.Sc., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Senior Lecturer*). A.'50.
- MASON, Cecil George Wilmott, A.R.I.C., A.M.I.Chem.E., N.Z. Forest Service, P.O. Box 894, Wellington (*Chemical Engineer*). A.'31; F.'59.
- MASTERS, Colin John, M.Sc., C.O.P.H.L.P., University of Queensland, Brisbane. (*Lecturer in Biochemistry*). A.'53.
- MATHESON, Robert Archibald, M.Sc., Ph.D., Chemistry Department, Victoria University of Wellington, P.O. Box 196, Wellington. (*Lecturer*). A.'53.
- MATHIESON, Cecil John, M.Sc., N.Z. Forest Products Ltd., Private Bag, Auckland. (*Assistant Chief Chemist*). A.'52.
- MATTHEWS, Richard Ellis Ford, M.Sc., Ph.D., Microbiology Department, University of Auckland, P.O. Box 2175, Auckland. (*Professor of Microbiology*). A.'60.
- MATTINGLEY, Miss Joan Muriel, B.Sc., C.O.P.H.L.P., Pathology Department, Public Hospital, Wellington. (*Biochemist*). A.'58.
- MEREDITH, Peter, M.Sc., Ph.D.(Birmingham), Grain Research Laboratory, Winnipeg, Canada (*Post-Doctoral Research Fellow*). A.'60.
- MERRICK, Miss Sheila, B.Sc.(Lond.), 8 Cherry Orchard, New Road, Amersham, Bucks, England. A.'52.
- METCALF, Walter Sidney, Mus.B., M.Sc., D.Phil.(Oxon.), Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Senior Lecturer*). A.'41.
- METSON, Alan James, M.Sc., Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington. (*Principal Scientific Officer*). A.'40.
- MILBURN, Ronald McRae, M.Sc., Ph.D., Dept. of Chemistry, Boston University, Boston 15, Massachusetts, U.S.A. (*Assistant Professor*). A.'55.
- MILLER, Ronald Bruce, B.A., M.Sc., Agr.L.(Sweden), Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington. (*Senior Soil Chemist*). A.'46.
- MITCHELL, Colin Donald, M.Sc., N.Z. Forest Products Ltd., Private Bag, Tokoroa. (*Chemist*). A.'58.
- MITCHELL, Thomas Alexander, M.Sc., Wheat Research Institute, P.O. Box 1489, Christchurch. (*Scientific Officer*). A.'52.
- MOFFAT, Duncan Ernest, M.Sc., 6 Sheehy Grove, Waitiutimata. (*Chemist, Standard Vacuum Oil Co. Ltd., Wellington*). A.'47.

- MOFFAT, Johnstone Flucker, B.A., M.Sc., Rangiora High School, Rangiora. (*Principal*). A.'31.
- MOIR, George Morrison, M.Sc., Ph.D.(Reading), F.R.I.C., Dairy Laboratory, Wallaceville, Private Bag, Wellington. (*Dairy Chemist*). A.'50.
- MOLLOY, James Joseph, M.Sc., East Coast Farmers' Fertiliser Co., P.O. Box 392, Napier, (*Production Superintendent and Chief Chemist*). A.'53.
- MONIGATTI, John David William, M.Sc., A.R.I.C., King's College, Box 12, Otahuhu, Auckland, S.E.7. (*Senior Chemistry Master*). A.'48.
- MONK, Robert Joseph, B.Sc., Nelson City Council Gasworks, Nelson. (*Chemist*). A.'50.
- MONRO, Alexander Donald, M.Sc., A.R.I.C., Seaview Road, Paremata, (*Formerly Associate Professor, Chemistry Department, Victoria University of Wellington*). A.'31; F.'34; Hon. Fellow '61.
- MOONEY, Eric Allan, B.Sc., Hayes Metal Refineries Ltd., P.O. Box 9029, Newmarket, Auckland. (*Assistant Chemist*). A.'52.
- MOORE, Francis Hugh, M.Sc., A.E.R.E. Harwell, England. (*Research Fellow*). A.'60.
- MOORE, John Brian, B.Agr.Sc., Canterbury Frozen Meat Co. Ltd., P.O. Box 2, Belfast. (*Chemist*). A.'60.
- MORGAN, Bernard Ramon, B.Sc., Caltex Oil (N.Z.) Ltd., P.O. Box 2591, Wellington. (*Chief Chemist*). A.'55.
- MORGAN, Francis, M.P.S., Wellington Drug Co. Ltd., Box 6023, Wellington. (*Managing Director*). A.'40.
- MORICE, Isobel Murray, M.Sc., Ph.D.(Lond.), Fats Research Laboratory, D.S.I.R., Wellington. (*Senior Scientific Officer*). A.'42.
- MORRIS, Harley Alton Lyal, B.Sc., Dept. of Food Technology, Massey College, Palmerston North. (*Senior Lecturer*). A.'49.
- MORRISON, Dan Alexander, M.Sc., Dominion Laboratory, D.S.I.R., P.O. Box 2224, Auckland. (*Scientific Officer*). A.'60.
- MORTON, Ian Douglas, M.Sc., Ph.D.(Cantab), F.R.I.C. 77 Chaucer Road, Bedford, England. A.'44; F.'55.
- MOUSTAFA, Esam, M.Sc., Ph.D.(Cantab.), Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Senior Scientific Officer*). A.'61.
- MUIR, George Robert, B.Sc., A.R.A.C.I., Young Street, Mooropna, Victoria, Australia. (*General Manager, Ardmona Fruit Products Co-op Ltd.*). A.'46.
- MUMMERY, William Rest, F.R.I.C., The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Chemist*). A.'52.

- NASH, James Archibald Delacourt, M.Sc., Head Office, D.S.I.R., P.O. Box 8018, Wellington. (*Principal Scientific Officer*). A.'35.
- NAUEN, Oskar Max Fritz, Dr.Ing.(Munich). (*Retired, Overseas*). A.'44.
- NELSON, Donald Frederick, M.Sc., C.O.P. (Dairy Bact., Dairy Chem., Dairy Pract.), Dominion Laboratory, P.O. Box 562, Dunedin. (*Temporarily overseas, c/o School of Criminology, University of California, Berkeley 4, California. (Scientific Officer)*). A.'46.
- NEVIN, Ronald Bruce, B.Sc., D.D.S., Department of Health, Christchurch. (*Principal Dental Officer*). A.'51.
- NICHOLLS, Gordon Alfred, M.Sc., Ph.D., N.Z. Forest Products Ltd., Private Bag, Auckland. (*Chief Research Chemist*). A.'48.
- NOBLE-CAMPBELL, Vincent Cedric, B.Sc., National Carbon Pty. Ltd., Wellington. (*Industrial Chemist*). A.'60.
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- OAKLEY, Henry Brazenor, B.Sc.(Lond.), 30 Palmerston Street, Hamilton. (*Chief Chemist, Waikato Breweries, Hamilton*). A.'45.
- OATS, Owen John, B.Sc., New Plymouth Boys' High School, New Plymouth. (*Science Teacher*). A.'59.
- OCCLESHAW, Frederick Ernest, c/o British Phosphate Commission, Nauru, Central Pacific. (*Analyst*). A.'33.
- O'CONNOR, Rev. Father Kevin Augustine, B.Sc., St. Bede's College, Christchurch. (*Senior Chemistry Master*). A.'59.
- ODELL, Allan Lloyd, M.Sc., Ph.D.(Lond.), Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Associate Professor*). A.'43.
- O'KANE, John McDonald, M.Sc., Wellington City Council Laboratory, P.O. Box 2199, Wellington. (*Chemist*). A.'54.
- OLDFIELD, Samuel Langdon, B.Sc., Auckland Farmers' Freezing Co. Ltd., Southdown, Auckland. (*Chemist*). A.'53.
- OLIVER, Arthur Pleasant, M.Sc., N.Z. Breweries Ltd., Box 211, Wellington. (*Chief Chemist*). A.'45.
- OLIVER, William Haldane, M.Sc., M.P.S., Pharmacy College, 59 Cambridge Terrace, Wellington. (*Principal*). A.'50.
- OLLIFF, Raymond Walter, M.Sc., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Lecturer*). A.'56.
- ORCHISTON, Hector Douglas, M.Sc., Chilean Nitrate Sales Corporation Pty. Ltd., Caltex House, Kent Street, Sydney, N.S.W., Australia. (*Managing Director*). A.'44.
- OSGERBY, Leonard, 62 Campbell Street, Palmerston North. (*Chemist, Kiwi Bacon Co., Ltd.*). A.'42.
- OXLEY, Frank William, B.Sc., Reekitt, Colman, Nuggett (N.Z.) Ltd., Forth Street, Dunedin. (*Works Chemist*). A.'53.

- PACKER, John, M.Sc.(Melb.), D.I.C., F.R.I.C., Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Professor of Chemistry*). A.'31; F.'34.
- PACKER, John Edward, M.Sc., Ph.D.(Lond.), Chemistry Dept., University of Auckland, P.O. Box 2175, Auckland. (*Lecturer*). From April, 1961. A.'61.
- PAGE, Beryl Edith Winifred, B.Sc.(Hons.), Medical Unit, Wellington Public Hospital. (*Biochemist*). A.61.
- PAGE, Roland Burnard, B.Sc., A.R.I.C., Dairy Division, Department of Agriculture, Auckland. (*Chemist*). A.'58.
- PAGE, Sally Grace, M.Sc., c/o Department of Biophysics, University College, London. A.'59.
- PAIN, Eric Douglas, B.Sc., 19 Clark Street, Khandallah, Wellington. (*Science Master, Education Department, Correspondence School*). A.'35.
- PANCKHURST, Max Humphrey, M.Sc., Ph.D., D.Phil., Chemistry Department, University of Otago, P.O. Box 56, Dunedin. (*Lecturer*). A.'52.
- PARKER, Mrs. Rani Estelle, B.Sc., Pathology Department, Public Hospital, Wellington (*Biochemist*). A.'60.
- PARR, Percy Reginald, M.Sc., W. & R. Fletcher (N.Z.) Ltd., Private Bag, Auckland, C.I. (*Chief Chemist*). A.'31; F.'41.
- PARTON, Hugh Noble, M.Sc., Ph.D.(Lond.), Chemistry Department, University of Otago, Dunedin. (*Professor of Chemistry*). A.'31; F.'39.
- PASTELIDIS, Demetre, B.Sc.(Athens), Shell Company of N.Z. Ltd., P.O. Box 2091, Wellington (*Chemist*). A.'58.
- PATCHETT, Graham Andrew, B.Sc., Standard-Vacuum Oil Co. (N.Z.) Ltd., P.O. Box 391, Wellington. (*Sales Chemist*). A.'56.
- PATERSON, Richard Maunsell Logan, M.Sc., 101 June Drive, Syracuse 9, New York, U.S.A. A.'50.
- PATTINSON, Mervyn Edward, Thos. Borthwick & Sons (A'Asia.) Ltd., P.O. Box 9, Feilding. (*Chief Chemist*). A.'46.
- PAULIN, William Thomas Holmes, B.Sc., Milburn Lime & Cement Co., Ltd., Burnside, Dunedin. S.W.2. (*Works Manager*). A.'43.
- PENFOLD, Bruce Russell, M.Sc., Ph.D.(Cantab.), Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Senior Lecturer*). A.'53.
- PENHALE, Hugh Russell, M.Sc., Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington, (*Chemist*). A.'49.
- PERRIN, Mrs. Dawn Roberta, M.Sc., A.R.I.C., Division of Plant Industry, C.S.I.R.O., Box 109, Canberra, A.C.T., Australia. (*Chemist, Microbiology Section*). A.'45.
- PETERS, George William, B.Sc., Felt and Textiles of N.Z. Ltd. P.O. Box 848, Wellington. (*Manager, Product Development*). A.'57.

- PETERSEN, George Bouet, M.Sc., D.Phil.(Oxon.), Dept. of Biochemistry, Oxford University, England). A.'60.
- PITCAITHLY, Ngata Prosser, M.A., Dip.Ed., Selwyn College, Kohimarama Road, Auckland, E.I. (*Principal*). A.'31.
- POLLARD, John Scott, B.Sc., Dip.Ind.Chem., A.M.I.Chem.E., British Pavements (Canty.) Ltd., P.O. Box 5524, Hornby, Christchurch. (*Chemical Engineer*). A.'48.
- POPPELBAUM, Adalbertus Henricus, Westfield Freezing Co. Ltd., Private Bag, Auckland. (*Chemist*). A.'59.
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- RADCLIFFE, Cedric Burton, M.Sc., A.R.I.C., Curo Laboratories (N.Z.) Ltd., P.O. Box 624, Palmerston North. (*Development Manager*). A.'31.
- RADFORD, Peter John, B.Sc., 3 Coverdale Avenue, Coburg, Ontario, Canada. (*Project Leader, General Foodstuff*). A.'56.
- RAFTER, Thomas Athol, O.B.E., M.Sc. A.R.I.C., F.R.S.N.Z., Institute of Nuclear Sciences, D.S.I.R., Private Bag, Lower Hutt. (*Director*). A.'43.
- RAMAGE, Bruce Bower, B.Sc., Teacher's College, P.O. Box 615, Palmerston North. (*Lecturer in Mathematics*). A.'57.
- RAMMELL, Colin George, B.Sc.(Hons.)(Birmingham), Dairy Laboratory, Wallaceville. (*Bacteriologist*). A.'61.
- RANDS, Henry, M.A., B.Sc., 382 Karori Road, Wellington, W.3. (*Retired*). A.'31; F.'34; Hon.M.
- RANDS, Maxwell Barrett, M.Sc., Southdown Laboratory, Auckland Farmers' Freezing Co. Ellerslie, Auckland, S.E.6. (*Chief Chemist*). A.'37; F.'57.
- RANKIN, Hugh McDougall, A.S.T.C., Dip.Ind.Chem. and Chem.Engrn., N.Z. Breweries, P.O. Box 23, Auckland. (*Brewer*). A.'54.
- REID, Mrs. Mary Ruth, M.Sc., 117 Wafford Street, Papanui, Christchurch. (*Stage 1 Demonstrator, Chemistry Department, University of Canterbury*). A.'59.
- RICHARDS, Edward Leonard, M.Sc., Ph.D.(Bristol), Biochemistry Department, Massey College P.O., Palmerston North. (*Senior Lecturer*). A.'56.
- RICHARDS, Nolan Earle, M.Sc., Ph.D., Reduction Research Laboratory, Reynolds Metal Co., P.O. Box 191, Sheffield, Alabama, U.S.A. (*Research Physical Chemist*). A.'54.
- RICHARDSON, George Maxwell, M.Sc., D.Sc.(Lond.), Ph.D.(Lond.), D.I.C., National Health Institute, 52-62 Riddiford Street, Wellington, S.I. (*Research Officer*). A.'49.
- RICKARD, Donald Stuart, M.Sc., Winchmore Irrigation Research Station, Private Bag, Ashburton. (*Officer-in-charge, Laboratory*). A.'50.
- RICKETTS, James, M.Sc., A.R.I.C., 27 Mahoe Avenue, Remuera, Auckland. (*Chief Chemist, Dominion Breweries Ltd., Otahuhu*). A.'36.

- RIGG, Sir Theodore, K.B.E., M.Sc., M.A.(Cantab.), Hon.D.Sc.(W.A. and N.Z.), F.R.S.N.Z., F.R.I.C., 5 Taupata Street, Stoke, Nelson. (*Retired, formerly Director, Cawthron Institute*). A.'31; F.'41; Hon.F.'56.
- RITCHIE, John Adolph, B.Sc.(Edin.), Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Principal Scientific Officer, Minerals*). A.'50.
- ROBB, Alexander John Donaldson, M.Sc., Fletcher Industries Ltd., P.O. Box 67, Dunedin. (*Works Manager*). A.'51.
- ROBB, James, M.Sc., Glendernid Tannery Ltd., Sawyers Bay, Dunedin. (*Works Chemist*). A.'49.
- ROBERTS, Charles Clarence, M.Sc., Department of Education, Private Bag, Auckland. (*Senior Inspector of Post-primary Schools*). A.'36.
- ROBERTSON, Peter Struan, M.Sc., Ph.D.(Reading), The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Microbiologist*). A.'53.
- ROBINSON, Michael Alan, M.A., B.Sc.(Oxon). A.R.I.C., International Paints, P.O. Box 7520, Kilbirnie, Wellington. (*Chief Chemist*). A.'59.
- ROBINSON, Robert Anthony, O.B.E., D.Sc.(Birm.), Ph.D.(Birm.), F.R.I.C., National Bureau of Standards, Washington 25, D.C., U.S.A. F.'45.
- ROGERS, John, M.Sc., M.A.I.M.E., A.Aust.I.M.M., Ph.D.(Cantab.), c/o Chemistry Department, University of Otago, Dunedin. (*Senior Principal Scientific Officer, Geological Survey*). A.'46.
- ROLT, William Frederick, B.Sc.(Lond). Rukuhia Soil Research Station, P.O. Box 490, Hamilton. (*Chemist*). A.'47.
- RONALDSON, John William, M.Sc., Ruakura Animal Research Station, Private Bag, Hamilton. (*Senior Scientific Officer*). A.'47.
- ROSS, Desmond Joseph, M.Sc., Ph.D.(Lond.), Dip.Bact.(Lond.), Soil Bureau, Eastern Hutt Road, L. Hutt. (*Senior Principal Scientific Officer*). A.'48.
- ROSS, Miss Joan Barnard, M.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Fuel Chemist*). A.'45.
- ROTHBAUM, Henry Peter, B.A., M.Sc., Ph.D.(Liverpool), Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Principal Scientific Officer*). A.'48.
- RUDDLE, Leslie William, c/o H. F. Stevens Ltd., Wholesale Druggists, 103 Worcester Street, Christchurch, C.I. A.'33; F.'41.
- RUSHWORTH, George Edward, M.Sc.(Leeds), 88 Kauri Street, Wellington, E.4. (*Chief Chemist, B.P. (New Zealand) Ltd.*). A.'48.
- RUSSELL, Douglas William, B.Pharm., Ph.D.(London), Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Facial Eczema Research Fellow*). A.'59.
- RUSSELL, Gordon Richard, Ruakura Animal Research Station, Private Bag, Hamilton. (*Scientific Officer*). A.'61.

- RUSSELL, William Ernest, M.Sc., A.R.I.C., M.I.Chem.E., N.Z. Farmers' Fertiliser Co. Ltd., Te Papapa, Auckland. (*Works Superintendent*). A.'43.
- RUTLEDGE, Peter Stewart, M.Sc., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Research Student*). A.'60.
- RYBURN, Graham Middleton, B.Sc., Lever Bros., Private Bag, Petone. (*Industrial Chemist*). A.'60.
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- SAMPEY, Miss Elizabeth Margaret, B.Sc., Commonwealth Health Laboratory, P.O. Box 36, Toowoomba, Queensland, Australia. (*Biochemist*). A.'58.
- SANDLE, Henry William, B.Sc., McSkimming Industries, P.O. Box 2001, Dunedin. (*Assistant Chemist*). A.'49.
- SARGENT, John Driessen, M.Sc., Massey College P.O., Palmerston North. (*Head, Microbiology Department*). A.'61.
- SAUNDERS, William Munro Hutchison, M.Sc., Ph.D. (Aberd.), Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington. (*Soil Chemist*). A.'50.
- SCHMIDT, Richard Otto, B.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Chemist*). A.'58.
- SCOTT, Gordon Randall, M.Sc., Dominion Laboratory, D.S.I.R., Box 562, Dunedin, C.I. (*Government Analyst*). A.'47.
- SCOTT, Raymond Annesley, M.Sc., Dip.Ed., Takapuna Grammar School, Auckland. (*First Assistant*). A.'51.
- SCRYMGEOUR, Alastair Neil, B.Sc., A.I.B., Irvine & Stevenson St. George Co. Ltd., P.O. Box 113, Dunedin. (*Factory Manager*). A.'57.
- SEAL, Kenneth Edmund, M.Sc.(Lond.), Amalgamated Brick and Pipe Co. Ltd., Box 4, New Lynn, Auckland, S.W.4. (*Chief Technical Officer*). A.'52.
- SEARLE, Ernest Johnstone, M.Sc., D.Sc., 26 Waiohua Road, Auckland, S.E.4. (*Senior Lecturer in Geology, University of Auckland*). A.'48.
- SEELYE, Frederick Thomas, A.O.S.M., F.R.S.N.Z., 87 Onepu Road, Lyall Bay, Wellington, E.3. (*Retired*). A.'31; F.'43; Hon.M.
- SEELYE, Ralph Nicholson, M.Sc., Chemistry Department, University of Auckland, Box 2175, Auckland. (*Senior Lecturer in Chemistry*). A.'45.
- SEGAL, Wolfe, M.Sc., Ph.D.(Melb.), Chemistry Department, Victoria University of Wellington, P.O. Box 196, Wellington. (*Lecturer*). A.'61.
- SELFE, Geoffrey Reginald, Bay of Plenty Co-op Fertilizer Co. Ltd., Private Bag, Mount Maunganui. (*General Manager*). A.'53.

- SELKIRK, Ronald Charles, M.Sc., A.R.I.C., Dominion Breweries, Otahuhu, Auckland. (*Chemist*). A.'49.
- SEWELL, Owen Keith, M.Sc., Ph.D.(Birm.), A.R.I.C., Ivon Watkins Ltd., Buller Street, New Plymouth. (*Chief Chemist*). A.'48.
- SHAND, Allan Douglas, B.Sc., B.Agr.Sc., A.N.Z.I.M., D. H. Brown and Son, Christchurch. (*Technical Manager*). A.'54.
- SHEAT, David Edwin Gordon, M.Sc., Ph.D.(Manc.), Botany Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Senior Lecturer*). A.'60.
- SHEPHERD, Ronald Henry, M.Sc., A.M.N.Z.E.I., Imperial Chemical Industries (N.Z.) Ltd., P.O. Box 1592, Wellington. (*Technical Officer*). A.'46.
- SHORLAND, Francis Brian, O.B.E., M.Sc., Ph.D.(Liv.), D.Sc.(Liv.), F.R.S.N.Z., Fats Research Laboratory, D.S.I.R., Wellington. (*Director*). A.'33; F.'43.
- SIEMON, Stanley Robert, B.Sc.(Queensland), M.App.Sc.(Queensland), M.I.Chem.E., A.R.A.C.I., University of Canterbury, P.O. Box 1471, Christchurch. (*Professor of Chemical Engineering*). A.'44; F.'58.
- SIMPSON, William Stanley, M.Sc., Ph.D.(Leeds), Dominion Laboratory, Private Bag, Petone. (*Defence Science Corps*). A.'61.
- SINCLAIR, Robert Malcolm, M.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Principal Scientific Officer*). A.'47.
- SINHA, Anandi Prasad, M.Sc.(India), Massey College, Palmerston North. (*Student*). A.'61.
- SIRETT, Nancy Elliot, B.Sc., Endocrinology Research Unit, Medical School, P.O. Box 913, Dunedin. (*Research Officer*).
- SKELTON, Charles Derek, M.Sc., Auckland Public Hospital (*Assistant Manager, Intravenous Solutions*). A.'60.
- SLATER, Stanley Nelson, M.Sc., D.Phil.(Oxon.), F.R.I.C., Chemistry Department, Victoria University of Wellington, P.O. Box 196, Wellington. (*Professor of Chemistry*). A.'38; F.'49.
- SLEEMAN, Geoffrey Russel, M.Sc., Chemistry Department, Victoria University of Wellington, Box 196, Wellington. (*Lecturer*). A.'60.
- SMITH, Michael Francis, M.Sc., Shell Oil N.Z. Ltd., P.O. Box 2091, Wellington. (*Industrial Chemist*). A.'58.
- SNELL, Wynne Arbuthnot, B.Sc., N.Z. Co-op Rennet Co. Ltd., P.O. Box 57, Eltham. (*Chief Chemist*). A.'57.
- SOMERVILLE, William Campbell, B.Sc.(Hons)(Edin.), Ph.D.(Edin.), Chemistry Department, University of Otago, P.O. Box 56, Dunedin. (*Part-time Lecturer*). A.'61.

- SOPER, Frederick George, C.B.E., Ph.D., D.Sc.(Wales), F.R.I.C., F.R.S. N.Z., University of Otago, Dunedin. (*Vice-Chancellor*). F.'36.
- SPACKMAN, Leonard Storkey, 501 R.S.A. Buildings, High Street, Auckland, C.I. (*Public Analyst and Consulting Chemist*). A.'31.
- SPROTT, Thomas James, M.Sc., Ph.D., 53 King George Avenue, Auckland, S.E.3. (*Consultant*). A.'48.
- SPROTT, William, M.Sc., M.B., Ch.B., 210A Queen Street, Onehunga, Auckland, S.E.5. (*Medical Practitioner*). A.'45.
- STACE, Gordon Walter, Dominion Laboratory, D.S.I.R., P.O. Box 2224, Auckland, C.I. (*Senior Scientific Officer*). A.'41;
- STACEY, Donald Louis, B.Sc., N.Z. Forest Products Ltd., Kinleith, P.O. Box 14, Tokoroa. (*Pulp Mill Manager*). A.'45.
- STANLEY, Bernard George, M.Sc., A. C. Hatrick (N.Z.) Ltd., P.O. Box 5, Tawa, Wellington. (*Assistant General Manager (Sales)*). A.'59.
- STANSFIELD, Roger Henry John, 56 Buckland Road, Mt. Roskill, Auckland, S.2. A.'31.
- STAPLES, Kenneth William, B.Sc., N.Z. Forest Products Ltd., Private Bag, Tokoroa. (*Chemist*). A.'57.
- STEDMAN, Brian Maurice, M.Sc., N.Z. Refrigerating Co. Ltd., Islington, Private Bag, Christchurch. (*Assistant Chemist*). A.'49.
- STERN, Rosa, Ph.D.(Vienna), T. J. Edmonds Ltd., 375 Ferry Road, Christchurch. A.'44.
- STEWART, Martin Louis Haerpfner, M.Sc., F.R.I.C., Shell Oil (N.Z.) Ltd., P.O. Box 2091, Wellington. (*Manager, Industrial Chemicals Division*). A.'31; F.'39.
- STEWART, Rex George, M.Sc., A.R.I.C., Wool Industries Research Institute, 444 George Street, Dunedin. (*Research Officer*). A.'61.
- STONE, Harry McEwen, M.Sc., C.O.P. Dairy Chemistry and Dairy Bacteriology, Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Senior Scientific Officer*). A.'52.
- STONYER, Cyril Lester Haste, B.Sc., Premier Products Ltd., Waikanae. (*Factory Manager*). A.'46.
- STOTT, James Boothroyd, Ph.D.(Leeds), Coal Mining Research Department, University of Otago, Dunedin, N.1. (*Senior Lecturer*). A.'54.
- SUMMERVILLE, Oscar, B.Sc., c/o B.A.L.M. Paints (N.Z.) Ltd., P.O. Box 610, Auckland. (*Technical Officer*). A.'59.
- SUTHERLAND, Arthur John, A.M.T.C., Hutt Valley Memorial Technical College, Buick Street, Petone. (*Head of Science Department*). A.'58.
- SUTHERLAND, James Nelson, M.Sc., C.O.P. (Bact. and Clin. Path.), King Edward Technical College, Dunedin. (*Science Master*). A.'40.

- SUURING, Mrs. Dora, Cand. and Doct. Exam.(Amsterdam), A.R.I.C.,
Ouslow College, Johnsonville. (*Science Teacher*). A.'54.
- SWANEY, Alan Harding, B.Sc., Inca Ltd., P.O. Box 1038, Christchurch.
(*Assistant to Managing Director*). A.'47.
- SWEDLUND, Bernard Eskil, M.Sc., Ph.D.(Lond.), Chemistry Department,
University of Auckland. (*Lecturer*). A.'47.
- SWEETMAN, Brian Jack, M.Sc., Chemistry Department, University of
Otago, P.O. Box 56, Dunedin. (*Research Fellow*). A.'61.
- SWINDALE, Leslie Denis, M.Sc., Ph.D.(Wisconsin), N.Z. Pottery and
Ceramics Research Association, Private Bag, Lower Hutt. (*Director*).
A.'51.
- SYMES, Langford Park, Canterbury Frozen Meat Co. Ltd., Box 2, Belfast,
Christchurch. (*Retired, former Chief Chemist*). A.'31; Hon.F.'59.
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- THOMAS, Alfred John, B.Sc., 21 West Road, Northland, Wellington. A.'46.
- THOMAS, Brian Russell, M.Sc., Ph.D.(Lond.), Dominion Laboratory, Pri-
vate Bag, Petone. (*Senior Scientific Officer*). A.'61.
- THOMPSON, Frank Burnhope, M.Sc., Rukuhia Soil Research Station, P.O.
Box 490, Hamilton. (*Principal Scientific Officer*). A.'33.
- THOMPSON, Mrs. Megan, M.Sc., Chemistry Department, University of
Auckland, P.O. Box 2175, Auckland. (*Temporary Junior Lecturer*).
A.'61.
- THOMPSON, Robert Leslie, M.Sc., Standard-Vacuum Oil Co. (N.Z.) Ltd.,
P.O. Box 1709, Auckland. (*Sales Chemist*). A.'50.
- THOMSON, Alexander Lewis, M.Sc., Ph.D., Polymers (N.Z.) Ltd., Sale-
yards Road, Otahuhu, Auckland. (*Factory Manager*). A.'53.
- THOMSON, Cullen William, B.Sc., Fletcher Industries Ltd., P.O. Box
67, Dunedin. (*Works Chemist*). A.'60.
- THOMSON, Mrs. Eileen Mera, B.A., B.Sc., B.H.Sc., 163 Carroll Street,
Dunedin, C.2. A.'39.
- THOMSON, Helen Marion Sheila, M.H.Sc., Ph.D.(Leeds), 32 Wai iti
Terrace, Christchurch. (*Retired; formerly Senior Lecturer in Textile
Chemistry, University of Otago*). A.'39.
- THOMSON, Thomas Alexander, B.Sc., 163 Carroll Street, Dunedin, C.2.
(*Director, Thomson's Ltd., Bond Street, Dunedin*). A.'39.
- THORP, John Martin, B.Sc.(Hons.), Ph.D.(Lond.), Chemistry Department,
Auckland University, P.O. Box 2175, Auckland. (*Lecturer, Physical
Chemistry*). A.'60.
- TILLER, Leslie Walter, B.Sc., Head Office, D.S.I.R., Box 8018, Wellington.
(*Assistant Secretary*). A.'45.

- TILLY, Clifton Roberts, B.A., B.Sc., Huntly College, Huntly. (*Head of Science Department*). A.'54.
- TINGEY, John Murray Campbell, B.Sc., 20 Cavenish Square, Wellington, E.5. (*Technical Director, Messrs. R. & E. Tingey Ltd., P.O. Box 545, Wellington; Oil and Colour Merchants*). A.'44.
- TODD, Harry Jackson, B.Sc.(Lond.), Dominion Laboratory, D.S.I.R., P.B., Petone. (*Principal Scientific Officer, Spectrography*). A.'51.
- TOPSOM, Ronald David, M.Sc., Ph.D.(London), Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Lecturer in Organic Chemistry*). A.'59.
- TOTHILL, Thomas Webb Compton, B.Sc., Kennedy's Bush Road, Halswell, Christchurch. (*Retired*). A.'31.
- TURNER, Alan Arthur, B.Sc., Shell Oil (N.Z.) Ltd., P.O. Box 2091, Wellington. (*Senior Chemist*). A.'61.
- TURNER, Mrs. Iwi-Rect, M.Sc., Chemistry Department, Victoria University of Wellington, P.O. Box 196, Wellington. (*Junior Lecturer*). A.'61.
- TURNEY, Thomas Albert, M.Sc., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Senior Lecturer*). A.'57.
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- UNDERHILL, Roger, B.Sc.(Bristol), 109 Greenhill Road, Blackheath, Birmingham, England. A.'53.
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- VAUGHAN, John, M.Sc.(Wales), Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Reader*). A.'50; F.'59.
- VERE-JONES, Noel Waterman, B.Sc.(Lond.), M.I.Chem.E., Dip.Chem.Eng., (*Retired*). A.'49.
- VIVIAN, Gerald Wilfred, M.Sc., Ph.D.(Leeds), N.Z. Leather and Shoe Research Association, Private Bag, Lower Hutt. (*Deputy Director*). A.'49.
- VOSE, Wilfred, B.Sc.(Lond.), A.R.I.C., A.C.G.I., Winstone Ltd., P.O. Box 2, Plimmerton. (*Ceramic Consultant and General Manager*). A.'48.
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- WALKER, Ian Kenneth, M.Sc., Dominion Laboratory, D.S.I.R., P.B., Petone. (*Director*). A.'39.
- WALKER, John Richard Laurence, B.Sc., Ph.D.(Leeds), Cawthron Institute, P.O. Box 175, Nelson. (*Biochemist*). A.'57.
- WALKER, Thomas William, B.Sc.(Hons.), Ph.D., D.Sc.(Lond.), A.R.C.S., D.I.C., Lincoln College P.O., Christchurch. (*Professor of Soil Science*). F.'61.

- WALLACE, Garth Morton, B.Sc., C.O.P. (Bact. and Dairy Chem.), Food Technology Department, Massey College, Palmerston North. (*Senior Lecturer*). A.'49; F.'57.
- WALPOLE, David Hugh Paget, M.Sc., 33 Duthie Street, Karori, Wellington. A.'59.
- WARD, Miss Margaret Annic, B.Sc.(Lond.), A.R.I.C., S. W. Peterson & Co. Ltd., 165 Vivian Street, Wellington, C.2. (*Chief Chemist*). A.'52.
- WATERS, Desmond Frederick, M.Sc., Rukuhia Soil Research Station, P.O. Box 490, Hamilton. (*Principal Scientific Officer*). A.'31.
- WATERS, Mrs. Joyce Mary, M.Sc., Ph.D., University of Auckland, P.O. Box 2175, Auckland. (*Lecturer*). A.'60.
- WATERS, Thomas Neil Morris, M.Sc., Ph.D., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Lecturer*). A.'56.
- WATSON, Charles Colin, M.Sc., N.Z. Breweries Ltd., P.O. Box 211, Wellington. (*Senior Chemist*). A.'54.
- WATSON, Miss Joyce, M.Sc., A.R.I.C., Cawthron Institute, P.O. Box 175, Nelson. (*Research Chemist*). A.'43.
- WEIR, Alan James, J.P., B.Sc., A.R.A.N.Z., Massey Agricultural College, Palmerston North. (*Registrar*). A.'59.
- WELCH, Barry John, M.Sc., Reduction Research Laboratory, Reynolds Metals Co., Box 191 Sheffield, Alabama, U.S.A. A.'59.
- WELLS, Norman, B.Sc., Soil Bureau, D.S.I.R., P.O. Box 8001, Wellington. (*Chemist*). A.'57.
- WERRY, Chace Chenoweth, E.D., B.A., B.Sc., c/o 411 Southland Road, Hastings. (*Retired, temporarily overseas*). A.'34.
- WEST, William Harold, M.Sc., Emoleum (N.Z.) Ltd., Penrose, Auckland. A.'52.
- WESTON, Claude Warwick, B.Sc., Imperial Chemical Industries (A.N.Z.) Ltd., Botany Factory, Matraville, N.S.W., Australia. A.'47.
- WHILLANS, Douglas, B.Sc., C.O.P. (Bact. and Clin. Path.), Central Laboratory, Public Hospital, Park Road, Auckland, C.3. (*Bacteriologist*). A.'42.
- WHITE, Edwin Percy, M.Sc., D.Sc., Ruakura Animal Research Station, Private Bag, Hamilton. (*Senior Principal Scientific Officer*). A.'38; F.'61.
- WHITE, Graham Richard, M.Sc., Chemistry Department, University of Auckland, P.O. Box 2175, Auckland. (*Junior Lecturer*). A.'61.
- WHITE, Mrs. Gwenda Frances, M.Sc., Dept. of Medical Chemistry, Australian National University, Canberra, A.C.T., Australia. A.'58.
- WHITE, John Charles Bereford, M.Sc., Department of Medical Chemistry, Australian National University, Canberra, A.C.T., Australia. (*Scientific Officer*). A.'58.

- WHITE, Ralph Richard, B.Sc., A.I.M.L.T., University of New England, Armidale, N.S.W., Australia. (*Chemist*). A.'52.
- WHITE, Stanley Weston, B.Sc., Christchurch Technical College. (*Assistant Science Master*). A.'54.
- WHITEHEAD, Hugh Robinson, D.Sc.(Leeds), F.R.S.N.Z., The Dairy Research Institute (N.Z.), Massey College P.O., Palmerston North. (*Director*). A.'52.
- WHITTON, William Ivo, M.Sc., Ph.D., F.R.A.C.I., I.C.I. (N.Z.) Ltd. (*Technical Manager*). F.'61.
- WICK, William Samuel Henry, B.Sc., Ranfurly Street, Rumanga, via Greymouth. (*Head of Science Department, Technical High School, Greymouth*). A.'44.
- WIGGINS, Mrs. Philippa Marion, M.Sc., Ph.D.(Lond.), c/o X-Ray Dept., Public Hospital, Dunedin. A.'59.
- WILKINS, Brian Joseph, M.Sc., c/o Naenae College, Lower Hutt. (*Science Teacher*). A.'59.
- WILKINS, Cuthbert John, M.Sc., Ph.D.(Lond.), D.I.C., Chemistry Department, University of Canterbury, P.O. Box 1471, Christchurch. (*Reader*). A.'44.
- WILKINSON, Leslie, M.Sc., Dominion Laboratory, P.O. Box 2112, Christchurch. (*Principal Scientific Officer*). A.'39.
- WILKS, Clyde Baumister, M.Sc., A. M. Satterthwaite & Co. Ltd., P.O. Box 1166, Wellington. (*Chemical Sales Representative*). A.'59.
- WILL, Graham Melville, M.Sc., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua. (*Chemist*). A.'51.
- WILLIAMS, Mrs. Allette Louise, M.Sc., D.I.C., Dominion Laboratory, D.S.I.R., P.O. Box 8023, Wellington. (*Scientific Officer*). A.'55.
- WILLIAMS, Mrs. Mary Patricia, B.Sc., Laboratory, Wellington Public Hospital, Wellington. (*Biochemist, temporarily overseas*). A.'58.
- WILLIAMS, Peter Prior, M.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Scientific Officer, temporarily overseas*). A.'56.
- WILLIAMS, William, c/o R. & W. Hellaby Ltd., Quay Street, Auckland. (*Chief Chemist*). A.'33; F.'34.
- WILLIAMSON, Arthur Gordon, M.Sc., Ph.D.(Reading), Chemistry Department, University of Otago, P.O. Box 56, Dunedin. (*Lecturer*). A.'61.
- WILLIAMSON, Hudson Miles, B.Sc., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Chemist, Highway Materials*). A.'45.
- WILSON, Alexander Thomas, M.Sc., Ph.D.(California), Victoria University of Wellington, P.O. Box 196, Wellington. (*Senior Lecturer in Applied Chemistry*). A.'59.
- WILSON, Arthur David, M.Sc., A.M.I.Chem.E., The Lactose Company of New Zealand Ltd., Box 20, Edendale, Southland. (*Branch Manager*). A.'52.

- WILSON, Ashley Francis, M.Sc., Ph.D., c/o Research Department, Canadian Chemical Co. Ltd., Edmonton, Alberta, Canada. A.'55.
- WILSON, Kenneth William, B.Sc., Compressed Yeast (Q'ld.) Pty. Ltd., Stephen Street, Toowoomba, Queensland, Australia. A.'56.
- WILSON, Margaret Nellie, B.Sc., B.H.Sc., Home Science School, University of Otago, P.O. Box 56, Dunedin. (*Lecturer in the Chemistry of Foods*). A.'61.
- WILSON, Stuart Henry John, M.Sc., Kaitawa Road, York Bay, Eastbourne. (*Retired*). F.'58.
- WILSON, Thomas Henry, Chemistry Department, University of Auckland, P.O. Box 2175, Auckland, C.I. (*Technical Officer*). A.'53.
- WILSON, William Joseph, M.Sc., Research Laboratories, Fraser Companies Ltd., Atholville, New Brunswick, Canada. (*Chemist*). A.'49.
- WONG, Edmon, M.Sc., Ph.D., Plant Chemistry Division, D.S.I.R., Private Bag, Palmerston North. (*Scientific Officer*). A.'56.
- WONG, Leslie Chiu-Kai, M.Sc., 120(a) Gordon Road Mosgiel. (*Research Officer, N.Z.M.R.C.*). A.'57.
- WOOD, Herbert, John, B.Sc., F.R.I.C., Dominion Laboratory, D.S.I.R., Private Bag, Petone. (*Senior Scientific Officer, Food*). A.'33.
- WOOD, John Milton, M.Sc., The Lactose Co. of N.Z. Ltd., Kaponga R.D., Taranaki. (*Industrial Chemist*). A.'51.
- WOODS, Miss Nesta Madeline, M.Sc., 23 Orbell Street, Dalmore, Dunedin. (*Retired*). A.'39.
- WOODWARD, Ronald Newall, A.M.C.T., F.R.I.C., Institute of Nuclear Sciences, Private Bag, Lower Hutt. (*Scientific Officer*). F.'53.
- WOOFF, Alan Herbert, B.Sc., Dip.Ind.Chem., Christchurch Boys' High School, Straven Road, Christchurch. (*Science Master*). A.'61.
- WOOLMAN, Harold George, B.Sc.(Manc.), Dip.Ed.(Belfast), A.M.I.Chem.E., A.R.I.C., P.O. Box 905, Dunedin. (*Director, Reckitt, Coleman, Nuggett (N.Z.) Ltd.*). A.'40.
- WRATISLAV, Arnost, Ing.(Prag.), Ivon Watkins Ltd., P.O. Box 144, New Plymouth. (*Technical Production Manager*). A.'56.
- WRIGHT, Douglas Elliot, M.Sc., Ph.D., Lincoln College P.O., Christchurch. (*Senior Lecturer in Biochemistry*). A.'59.
- WRIGHT, Evan Wilfrid, M.Sc., Wallaceville Animal Research Station, Private Bag, Wellington. (*Biochemist, temporarily overseas*). A.'46.
- WRIGHT, Nevill Lushanus, F.R.I.C., D.I.C., P.O. Box 191, Takapuna, Auckland. (*Technical Consultant*). F.'45.
- WUNSCH, Donald Frederick Sandys, O.B.E., M.A. (Oxon.), B.Sc.(McGill), M.I.Chem.E., A.I.M.M., 3 Barton Street, New Plymouth. F.'44.

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- BAKER, Alfred Francis, M.Sc., A.R.I.C., Hillmorton High School, Tankerville Road, Christchurch. (*Senior Science Master*).
- BICKERTON, A. L., A.R.I.C., N.Z. Electricity Department, Mercer. (*Station Chemist*).
- BREWERTON, Hugh Victor, M.Sc., A.R.I.C., Dominion Laboratory, Private Bag, Petone. (*Senior Scientific Officer*).
- BROGAN, Francis Joseph, M.Sc., A.R.I.C., Saint Patrick's College, Silverstream, Heretaunga.
- COSTER, David Gordon, M.Sc., A.R.I.C., 8 Rochford Place, Christchurch, N.W.1. (*District Manager, Standard Vacuum Oil Co. (N.Z.) Ltd.*)
- ENTWHISTLE, (Mrs.) E. R., B.Sc., Ph.D., A.R.I.C., Manor House, 60 Hawthorn Avenue, Mornington, Dunedin.
- HOLMES, George Andrew, B.Agric., M.Sc., A.R.I.C., Invermay Agriculture Research Station, Taieri. (*Station Superintendent*).
- HOOK, Rexford George, B.Sc.(Sydney), A.R.I.C., 23 Bingley Avenue, Epsom, Auckland.
- RAESIDE, James Dickie, M.Sc., A.R.I.C., Soil Bureau, D.S.I.R., P.O. Box 733, Dunedin. (*Pedologist*).
- RATCLIFFE, Norman, F.R.I.C., 45 Stanley Avenue, Palmerston North. (*Retired*).
- SANDERS, J. D., B.Sc., A.R.I.C., 6 Ngaio Street, Auckland.
- SCOTT, John Arthur Roy, M.Sc., B.D.S., A.R.I.C., King Street, Pukekohe. (*Dental Surgeon*).
- SHEPHEARDSON, Frederick George, B.Sc.(Lond.), D.Sc.(N.U.I.), F.R.I.C., A.R.C.S., Munroe Road, Henderson, R.D.1., Auckland. (*Retired Industrial Research Chemist*).
- STEVENSON, Miss Audrey Elizabeth Gribb, B.Sc.(St. Andrews), A.R.I.C., Ruakura Animal Research Station, Private Bag, Hamilton. (*Scientific Officer*).
- STORY, Leonard Frederick, B.Sc., Ph.D.(Lond.), A.R.I.C., N.Z. Wool Industries Research Institute, George Street, Dunedin. (*Director of Research*).
- TILLER, Mrs. Mavis, B.Sc.(Lond.), A.R.I.C., 7 Thorby Street, Wellington.
- UDY, Ward Howard, B.Sc.(Lond.), A.R.I.C., 8 Union Street, Hamilton. (*Retired, formerly Laboratory Superintendent, N.Z. Co-op Dairy Co. Ltd.*)
- WALKER, Claud Lawless, A.R.I.C., Pinel in Johnson Ltd., Miramar, Wellington. (*Chemist*).

COUNCIL MINUTES

ABRIDGED MINUTES OF A MEETING OF THE COUNCIL HELD IN AUCKLAND, ON TUESDAY, AUGUST 29, 1961.

PRESENT:

Professor H. N. Parton (President, in the chair), Dr F. B. Shorland (Vice-President), Prof. D. R. Llewellyn (Auckland), Dr E. P. White (Waikato), G. M. Wallace (Manawatu), W. E. Dasent (Wellington), D. J. Hogan (Canterbury, Registrar), Dr W. G. Hanger (Otago), N. T. Clare (Editor), Dr W. E. Harvey (General Secretary), Dr W. A. McGillivray and S. G. Brooker (Membership Committee).

CONFERENCE 1962:

The Royal Society is organizing a Science Congress in Christchurch in August, 1962. Although the N.Z.I.C. Conference had been planned for Palmerston North, it was agreed that we should co-operate with the Royal Society and hold the N.Z.I.C. Conference in Christchurch. Manawatu was agreeable to this change of venue. Council felt that the N.Z.I.C. Conference should not be submerged in the Royal Society one, but that the two bodies should co-operate as far as possible.

Resolved that the Canterbury Branch be invited to organize the 1962 Conference in close association with the Royal Society Congress.

It is expected that the N.Z.I.C. Conference will be held at Lincoln College.

A.N.Z.A.A.S. 1962:

Press reports have indicated that there is some support for the idea that New Zealand should be dropped from A.N.Z.A.A.S., because of the alleged lack of support in this country.

Resolved that the Secretary write to the Secretary of the A.N.Z.A.A.S. pointing out that the N.Z.I.C. values its association with A.N.Z.A.A.S. and would be interested in supporting that organization by becoming a corporate member, if such a course is possible.

SALARY SURVEY:

The questionnaire for the Salary Survey has been finalized and will be distributed to members shortly.

ANNUAL REPORT:

The Annual Report for the year ending July 31, 1961, was taken as read and approved.

BALANCE SHEET:

The Balance Sheet and Statement of Accounts for the year ending April 30, 1961, was approved. In a letter the Auditor had made a number of suggestions.

Resolved that the provisions for printing and for the essay prizes as listed in the Balance Sheet as at April 30, 1961, be transferred to the credit of Accumulated Funds.

Resolved that the Secretary write to the Trustees pointing out that the balance of the Trust Fund account held in the P.O.S.B. exceeds £200 and suggesting that this might be invested in Government or Local Body securities which would return a higher rate of interest.

Resolved that the Institute Funds in a National Savings Account be left in that account in the meantime.

TRUSTEES:

Council approved the proposal that the three Trustees should all be Past Presidents, and steps will be taken to have the Rules modified accordingly.

USE OF TRUST FUNDS:

Resolved that all Past Presidents and foundation members be written to, asking for suggestions or comments on possible uses of the Trust Funds.

OFFICE EQUIPMENT:

Resolved that the Registrar be authorized to spend up to £35 for the purchase of office files, filing cabinets etc.

CHANGE OF RULES:

Resolved that Rules 10.4.1 and 10.4.2 be deleted.

HONORARY FELLOWS AND LIFE MEMBERS:

Resolved that the Membership Committee be asked to prepare a report dealing with the election of Honorary Fellows and Honorary Life Members.

FELLOWS:

There has been for several years a feeling that the number of Fellows should be increased, and considerable discussion took place concerned with this general topic.

Resolved that this Council recommends to the incoming Council that the difference in subscriptions payable by Associates and by Fellows be abolished.

Resolved that Branches be asked to consider the suggestion that subscriptions for Associates and Fellows be as follows:

Fellows and Associates who have not attained the age of 40	£2 0s. 0d.
Fellows and Associates who have attained the age of 40....	£3 0s. 0d.

Branches are to be informed that Council is considering methods by which the number of Fellows may be increased.

CHANGES IN RULES:

Resolved that Mr S. G. Brooker, with power to co-opt, be appointed a subcommittee to investigate revision of the Rules.

W. E. HARVEY, *Hon. General Secretary.*

RULES REVISION COMMITTEE

The Council recently set up a committee, with Mr S. G. Brooker as convener, to investigate revision of the Institute Rules. Such revision is inevitable as the Institute grows in membership and responsibility and assumes new functions. The Rules Revision Committee requests suggestions from members and committees who have encountered any rules or regulations which they consider outmoded or inadequate and difficult to interpret. Suggestions should be sent to Mr Brooker (*P.O. Box 9012, Newmarket, Auckland*) or be made to the Branch Committee during the next few months, so that proposed alterations can be fully considered by Branches before the August General Meeting.

GENERAL MEETING MINUTES

ABRIDGED MINUTES OF A GENERAL MEETING OF MEMBERS HELD IN AUCKLAND, ON FRIDAY, SEPTEMBER 1, 1961.

PRESENT:

Professor H. N. Parton (President, in the chair) and approximately 70 members. Apologies were received from Dr C. R. Barnicoat, Miss M. P. Bartrum, N. T. Clare, Dr W. A. McGillivray, Sir Theodore Rigg, R. G. Stewart, and Miss J. Watson.

PRESIDENTIAL REMARKS:

The President referred to the death during the year of Professor F. P. Worley, an Honorary Fellow and foundation member of the Institute.

Resolved that the Institute place on record its appreciation of the service rendered to the profession of chemistry by the late Professor F. P. Worley.

Mr K. M. Griffin referred briefly to Professor Worley's association with the Auckland Chemical Society.

HONORARY FELLOWS:

The President outlined the changes that had been made in the Rules relating to Honorary Fellows and announced that Council had elected two new Honorary Fellows: Mr R. L. Andrew and Mr A. D. Monro.

Resolved that telegrams of congratulation be sent from the meeting to the new Honorary Fellows.

INSTITUTE PRIZES:

The President announced that Prizes for 1961 had been awarded by Council as follows:

I.C.I.—Dr W. A. McGillivray
Morcom Green, Edwards—Dr J. R. L. Walker
Chemical Essay—Dr P. Edwards

ELECTION OF OFFICERS:

The President announced that Mr W. G. Hughson had been elected to the office of Vice-President. Drs F. B. Shorland and W. E. Harvey were unopposed for the offices of President and Hon. General Secretary. Dr A. T. Johns, in congratulating Mr Hughson on his election, spoke of the contribution Mr Hughson had made to the Institute in earlier years.

ANNUAL REPORT:

The President, referring to the Annual Report, mentioned the new Editorial Committee for the *Journal* and the members of the Otago Branch, who for a lengthy period have acted on the Examinations Committee.

Professor L. H. Briggs referred to the number of overseas visitors who had come to New Zealand in 1960.

Resolved that a letter be sent to Professor S. N. Slater thanking him for his work in arranging for the visits of the chemists from overseas during 1960.

BALANCE SHEET:

The President spoke briefly about the Trust Funds and outlined Council's plans for deciding what should be done with these funds. He referred also to Council's suggestions for possible change in the subscriptions.

CONFERENCE 1962:

The President announced that Council had decided to ask the Canterbury Branch to arrange Conference for 1962 at Lincoln College in association with, but separate from the Royal Society Congress.

CHEMIST TO MINISTRY OF WORKS:

Mr O. H. Keys stated that the Ministry of Works had advertised for a chemist with superior qualifications who would be appointed to the General Division of the Public Service.

Resolved that the Secretary be instructed to write to the Public Service Commission protesting about the appointment of a chemist with superior qualifications to the General Division.

CONFERENCE 1952:

The President, on behalf of all present, expressed thanks to the Conference Committee. Professor Llewellyn in replying referred especially to the work of the Conference Secretary, Mrs J. Waters.

W. E. HARVEY, *Hon. General Secretary*

A NEW JOURNAL FOR SCIENTISTS AND ENGINEERS**International Science and Technology**

Conover-Mast Publications Inc., New York, announce the publication of a new technical magazine to provide scientists and engineers with scientific information in fields outside their own speciality. It will cover all aspects of science and engineering that apply to industry and will review and interpret new developments to broaden the knowledge of specialists. This publication will be mailed free of charge to scientists and engineers primarily engaged in research, development and advanced engineering. The first issue will be published in August and regular monthly issues will start in January 1962.

Members who wish to receive this new magazine, which will be titled *International Science and Technology*, should write to Conover-Mast Publications Inc., 205 East 42nd Street, New York 17, N.Y., giving their name, title, company or institute and address.

INTERNATIONAL NUTRITION CONGRESS

The 6th International Congress on Nutrition will meet in Edinburgh from August 9 to August 15, 1963. The programme will include 11 symposia covering a very wide range of topics and these symposia will be addressed by invited speakers. In addition, members are invited to submit ten-minute papers reporting original research.

Further details concerning this Congress can be obtained from The Secretary, 6th International Congress on Nutrition, Dept. of Clinical Chemistry, Royal Infirmary, Edinburgh, Scotland.

BOOK REVIEW

BIOCHEMISTS' HANDBOOK, edited by Cyril Long with consultant editors E. J. King and W. M. Sperry. Published by E. & F. N. Spon Ltd., London, 1961. 1,192 pages. Price, 168 shillings.

This handbook is an immense compilation of information of everyday use to biochemists and to all concerned with the chemistry of biological material. There are 6 sections: Chemical data (203 pages of compact discussion of techniques with many useful physical tables); data on individual enzymes (330 pages of properties, preparations, uses and estimations); metabolic pathways (107 pages); chemical composition of animal tissues (300 pages); plant tissues (125 pages); physiological and nutritional data (166 pages). The index of 60 pages covers all sections. As most of the "composition" sections are in small print on 6 in. \times 9½ in. pages these alone provide a lot of laboriously collected facts for the money.

The value of such tables depends on the width of coverage and discrimination in selecting the material. These in turn depend to some degree on the compilers' interests—and criticism very much on the reader's. The various subsections are very uneven in scope and treatment. For example, there are only 5 pages on the amino acids and proteins of plants, and of the 8 tables one, on the newer non-protein amino acids, occupies a whole page, half of it being extended formulae which are unnecessary when the name is given. Apart from a rather low figure for N content this section gives no data for pasture grasses and the 16 references do not include Chibnall or Lugg (although the reference attributed to Tristram is in fact to Lugg's review). In contrast the article on non-volatile carboxylic acids has 18 pages with an informative 9-page table covering 60 plants and 192 references. Tests of coverage in a few fields familiar to the reviewer indicated some gaps but provided the reader does not (unjustifiably) expect a complete guide to the literature these were mostly unimportant. The compiler of the section on milk and colostrum quotes Barnicoat's results for sheep but appears to have missed Mrs Perrin's later and more complete analyses although her work on pig milk has been chosen. The main criticism of the "composition" sections is the great variety of treatment and layout. The subsection on blood pleases because its 63 tables adhere to a pattern giving number of observations, mean, S.D. or range, and references. Some other sections, however, show only single values with no indication of how, when or by whom they were obtained. With so many possibilities of variability in age, breed, sex, nutrition and so on (including chemical methods), references to original sources are most important. One pattern of treatment would not suit all purposes but in a book of regimented results one feels the editors could profitably have regimented their contributors more rigorously.

The section on chemical data contains much physico-chemical material not found in most chemistry handbooks and the articles on techniques, such as "counter-current distribution" (by Craig) are practical accounts. Having offered some criticism as points for attention in a subsequent edition, this reviewer adds that, if he had to restrict his laboratory bookshelf to the "desert island" 10 books, this would be one of them. A familiar title for it might well be "the Biochem. Bible".

—N.T.C.

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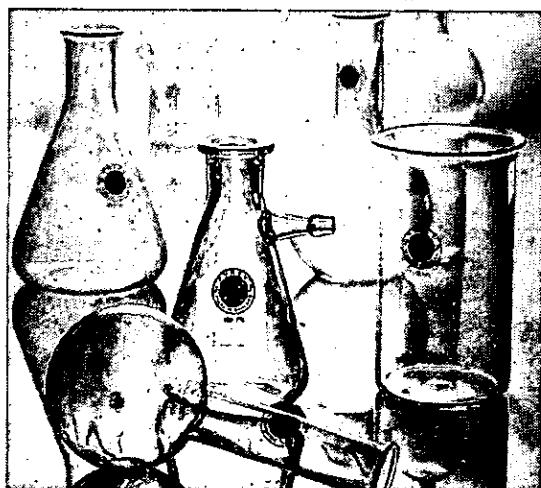
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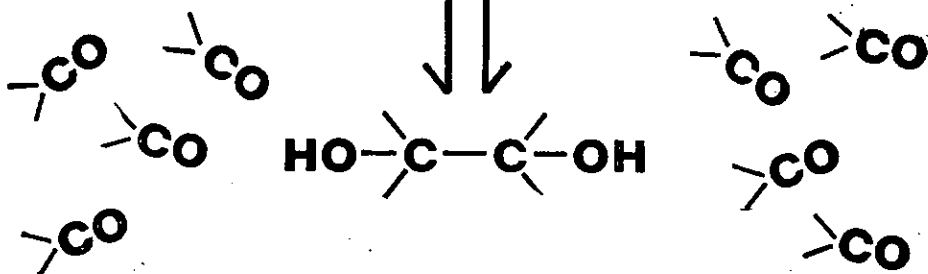
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