THE AUSTRALIAN NATIONAL UNIVERSITY

news

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PLATES

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NEWS AND NOTES

THE CHANCELLORSHIP

At the Ceremony for the Conferring of Degrees the Pro-Chancellor (Dr. H. C. Coombs) announced the retirement from office of the first Chancellor of the University Viscount Bruce of Melbourne, and the acceptance of the Council's invitation to succeed Lord Bruce by Sir John Cockcroft, Master of Churchill College, Cambridge. Dr. Coombs said:

"Lord Bruce, who became Chancellor in 1951, has given the University invaluable service during the years of its establishment and early growth. Resident in England he has been able to keep the University in close and helpful touch with the academic community abroad while visiting the University from time to time to participate effectively in the various stages of its development. Lord Bruce will continue his active interest in the University's progress.

Sir John Cockcroft is one of the world's most eminent scientists who has visited Australia twice at the invitation of the University. In 1952 he opened the main buildings of the Research School of Physical Sciences, which now bear his name. His work in developing methods of accelerating charged particles to high energies by artificial means led to an enormous development of nuclear physics, all over the world, and won for him the Nobel Prize and the Jacksonian Professorship of Physics in Cambridge.

Towards the end of the war Sir John moved to Canada to take charge of the joint British-Canadian project for the development of nuclear reactors using heavy-water as a moderator. Here, he was so successful that he became the natural person to take charge of the great British research establishment at Harwell. Sir John made this the Mecca of all who worked in the peaceful applications of atomic energy. It was his driving force, his genius for selection of worthwhile projects, and his ability as an administrator, which made Britain the first to install large scale atomic electricity generating stations which were economically successful.

Sir John Cockcroft resigned from the Atomic Energy Research Establishment in 1959 to become the first Master of Churchill College, Cambridge. He is a Fellow of the Royal Society, a Knight Commander of the Bath, and a member of that select group of distinguished men who hold the Order of Merit. Australia owes him a special debt of gratitude for his unfailing interest in science in this country, and for the very practical aid he has always given to Australian scholars in Cambridge and at Harwell."

NEW APPOINTMENTS

Dr. R. E. Edwards has recently been appointed Reader in Mathematics in the Research School of Physical Sciences. He was born and educated in England, is married and has two children. Dr. Edwards took a first in Mathematics at Manchester and was Assistant Lecturer and then Lecturer from 1947 to 1959 at Birkbeck College, London. Since August, 1959, Dr. Edwards has been Lecturer in the University of Reading: he was awarded a Ph.D. of London University in 1950. Dr. Edwards will arrive in Canberra in October.

Dr. R. F. E. Van der Borght has been appointed Associate Professor in Mathematics in the School of General Studies.

Born and educated in Belgium, Dr. Van der Borght graduated from the University of Louvain in 1943 and was awarded the degree of Doctor of Science of that university in 1950. Dr. Van der Borght at present holds a professorship in mathematics at the University of Natal where he was first appointed to a lectureship in 1949. From 1952 to 1954 he held a visiting professorship at the University of Indonesia, Djakarta, and in 1960 he was Visiting Fellow at the Australian National University, where he was engaged on research at the Mount Stromlo Observatory. His special interests in recent years have been the theory of non-stationary stellar systems and cosmology, and he

has published a number of papers in these fields.

It is expected that Dr. Van der Borght, who is 40 and married with one child, will take up his new appointment in September.

Dr. T. H. R. Rigby has been promoted to Associate Professor in Russian with effect from 1st January, 1961. Dr. Rigby, who is a graduate of the Universities of Melbourne and London, was appointed to a senior lectureship in Russian at the former Canberra University College in 1954, and since that time he has had the main responsibility for the development of Russian Studies within the Department of Modern Languages. Dr. Rigby was granted leave of absence in 1956 to enable him to take part in a research project at the University of London on the history of the Soviet Communist Party, and this leave was later extended for a further eighteen months so that he might accept a temporary appointment as Second Secretary at the British Embassy in Moscow. Author of several articles on Soviet Government, Dr. Rigby also assisted Mr. Leonard Schapiro with his book *The Communist Party of the Soviet Union,* which was published in 1959.

A NEW COMPUTER

The University is to install one of the world's most modern computers, the transistorised IBM Type 1620 machine, in the Research School of Physical Sciences. One major research use will be in long mathematical calculations concerning nuclear scattering, nuclear stability, stellar atmospheres, physical chemistry and other complex problems. A second main research application will be reduction and statistical analysis of experimental results, particularly in astronomy, seismology, nuclear physics and microbiology. The installation of the computer will make it possible to supplement the teaching of statistics to Third Year students by including practical computer work. Research students will now be able to acquire first hand experience of computer applications in scientific and technical problems. The University will now be able to provide graduate and undergraduate students with advanced computer experience that will be invaluable to Australian science, industry and commerce and government organisations.

The IBM 1620 computer itself can read up to 41,700 characters per second from magnetic tape. Its memory holds 20,000 facts. Because it is fully transistorised it is little more than desk size. Previously computers of similar power filled a whole room.

BRUCE HALL

The University's first hall of residence in the School of General Studies is to be known as Bruce Hall. The first Chancellor, Lord Bruce, gave his consent to the use of his name on his retirement from the Chancellorship.

An article, written by the Warden about the Hall, appears on another page.

THE ALMANAC

Copies of the Almanac are still available and may be bought for 2/6 per copy.

THE LIBRARY

On the afternoon of Thursday, 11th May, the Prime Minister laid the foundation stone of the first permanent library building. The Pro-Chancellor announced at the ceremony that the Prime Minister had graciously agreed that the building be named The R. G. Menzies Building of the University Library.

The University has the unenviable reputation for holding its more important ceremonies in wet weather and on this occasion the precaution was taken of holding the major part of the ceremony including speeches in the Academy of Science Building: the laying of the stone itself was a short formality which took place after the proceedings in the Academy. The day was fine.

THE TANDEM ACCELERATOR LABORATORY

The opening of the New Tandem Accelerator Laboratory took place on the same afternoon and the Prime Minister performed the dual ceremony of unlocking the laboratory door and of pressing a switch to start the Accelerator. Professor Titterton said "with the completion of the machine and an array of complex apparatus around it, the Australian National University will be as well equipped as any comparable institute anywhere in the world."

STUDENT NUMBERS

The following figures show the number of students who were at the University at the beginning of March, 1961, compared with those who were attending at the same time in 1960:

	1960	1961
Ph.D. Students:—		
John Curtin School of Medical Research	32	44
Research School of Physical Studies	28	32
Research School of Social Sciences	32	36
Research School of Pacific Studies	32	37
School of General Studies	—	3
	124	*152
Master's Degree Students:—		
Full time	7	8
Part-time	35	47
	42	55
Undergraduates:—		
Full-time	207	300
Part-time	670	527
	677	827

* Includes 5 research students not proceeding to a degree.

In addition there were, in 1961, 85 students in the School of General Studies working for diplomas or taking courses not leading to a degree.

HONOURS AND AWARDS

Professor F. P. Dwyer, Professor in Biological Inorganic Chemistry, has been elected a Fellow of the Australian Academy of Science.

Professor Sir John Eccles has been elected an Academician of the Pontifical Academy of Science. Sir John is the first Australian to be elected to the Academy.

Sir Howard Florey, who served on the Academic Advisory Committee of the University, and who is Professor of Pathology at Oxford University, has been elected President of the Royal Society.

Professor Sir Keith Hancock and Professor A. D. Trendall have both been awarded the Order of Merit of the Republic of Italy for their contributions to Italian scholarship, both in Italy and Australia.

Professor Sir Mark Oliphant was awarded the Flinders Medal of the Australian Academy of Science and delivered the 1961 Flinders Lecture.

Professor F. J. Fenner has been invited to deliver the Leeuwenhock Lecture of the Royal Society.

Professor T. W. Swan has been invited to give the Marshall Lectures in Economics at Cambridge in November, 1962.

A MEMORIAL TO LADY HANCOCK

The Theaden Hancock Fountain was inaugurated by the Pro-Chancellor on 24th April. The fountain, which represents a flight of swans rising from the water, was designed by Mr. Gerald Lewers as a memorial to Lady Hancock, who died in May of last year.

The fountain, a photograph of which appears on another page, is a notable addition to the lawn outside the Drawing Room of University House.

CONVOCATION

The Convocation Group in Sydney held a buffet supper on Friday, 9th June. The Vice-Chancellor was the guest speaker on this very pleasant occasion at which fifty people were present.

UNIVERSITY HOUSE

The extension to the Eastern Annexe has already proved more than worthwhile. Not only has it enabled the House to provide suitable accommodation for a heavy influx of new scholars, but also for a number of casual visitors and for delegates to conferences. A noteworthy result has been a substantial improvement in the revenue for the first quarter of this year, a period during which income is normally much lower than during the rest of the year.

The new Meetings Room is proving very popular both for social functions and for the meetings of various learned or cultural societies.

The parking area beside the East Wing is in the process of reconstruction, with a view to making it more attractive by the planting of flowering trees and shrubs, and by the installation of a small rock-garden near to the new Meetings Room. It is also hoped that funds may be available during the coming year to erect another row of garages along the east side of the parking area, adjoining the present row. The garden in front of the house beside the Porter's Lodge has been replanted with rosebushes and annuals in order to give a brighter aspect to the main approach to the House.

SCANDINAVIAN CULTURAL FUNDS

The University has awarded the following grants from the Scandinavian Cultural Funds for 1961:—

Mr. D. B. Galloway, Temporary Lecturer in Veterinary Surgery and Obstetrics, University of Sydney, to investigate work in the field of infertility in the male bovine: £25 from the Danish Fund and £25 from the Swedish Fund.

Dr. C. A. Hurst, Senior Lecturer in Mathematical Physics, University of Adelaide, to discuss work in theoretical physics: £50 from Danish Fund.

Dr. H. S. K. Kent, Senior Lecturer in History, University of Adelaide, to continue his work on Anglo-Scandinavian history: £33 from the Danish Fund and £55 from the Norwegian Fund.

Dr. W. W. Krysko, Senior Lecturer and Head of the Department of Material Science, University of New South Wales, to visit major lead smelting centres: £50 from the Swedish Fund.

Mr. A. M. Snoswell, Research Officer, Department of Biochemistry, University of Adelaide, to discuss work in the field of enzymology: £50 from the Norwegian Fund.

The Scandinavian Cultural Funds were raised in 1952, Australia's Jubilee Year, by the Danish, Norwegian and Swedish communities in Australia for the encouragement of close and friendly scientific, educational and cultural relations between their countries and Australia. Sums totalling nearly £6,000 were handed to the University in which the administration of the funds was vested, and the University is using the income of the funds to provide assistance towards meeting the expenses of Australians visiting Scandinavia and in assisting visitors to Australia from Scandinavia.

NUCLEAR PHYSICS CONFERENCE

A major nuclear physics conference embracing all work currently in progress in Australia was held at the University from 28th February to 3rd March inclusive.

Organised by Professor E. W. Titterton, Head of the Department of Nuclear Physics, and Professor K. J. Le Couteur, Head of the Department of Theoretical Physics, over 70 workers from the Australian universities, the Atomic Energy Commission and from overseas attended. The overseas visitors, who came to Canberra especially for the Conference, included two leading British physicists, Professor D. H. Wilkinson, F.R.S., of Oxford, and Dr. K. W. Allen, Head of the Nuclear Physics group at Aldermaston, England; Dr. Louis Rosen, of the Los Alamos Scientific Laboratory, University of California, New Mexico; and three visitors from New Zealand — Professor D. Brown of the University of Auckland, and Dr. D. J. Hooton and Mr. R. W. Humphrey of the University of Wellington.

A total of 62 papers was given at the meeting describing work in the various laboratories in nuclear physics. They included 28 from the Australian National University, 11 from Melbourne University, 6 from Sydney University, 4 from Adelaide University and one each from the Universities of Tasmania and Western Australia, as well as papers from the English, American and New Zealand visitors.

Professor Titterton said that the Conference was organised in connection with the installation of the new tandem accelerator which was at that time approaching completion in his Department. It would provide an opportunity for a complete exchange of information amongst workers in the field.

A similar Conference held in 1958 in Canberra had proved to have a stimulating effect on the work in Australia. The visitors from the U.K., both of whom are intimately connected with work on the recently commissioned U.K. accelerators, reported on current work in their laboratories and elsewhere in the country, and Dr. Rosen reported on work in the U.S.A.

ARCHIVES

The University's old records have now been organised into a system of archives. Unfortunately this has not been extended to the records of the Schools, or to those documents concerning the affairs and development of the University. In order that the historical record may be complete, we appeal to members of staff not to destroy anything that may be of value in this respect, but to submit it to the archives officer in Central Administration for him to store or destroy as he may think fit.

This University is a unique institution and records of its development and associations, especially in the early days, are of great interest and importance. The co-operation of all members of the University is requested.

*THE DEPARTMENT OF LAW IN THE INSTITUTE OF ADVANCED STUDIES

The Department of Law in the Research School of Social Sciences reached approximately the level of staff and range of activities planned for the current triennium when in April Mr. J. G. Starke took up his appointment as Senior Fellow, and Mr. G. Doeker his appointment as a visiting Research Fellow. Mr. Starke, a former Western Australian Rhodes Scholar and author of a standard treatise on international law and many papers on legal problems, has for some years been in practice as a barrister in Sydney. His special field is international law, but his interests range over many fields of technical law. He is at present working on a history of Australia's international relations. Mr. Doeker is a West German student who has just spent two years of postgraduate study in the U.S.A., working principally in the mixed field of international law and constitutional law which concerns the execution and carrying out of treaties in federal countries; he will spend two years with us investigating the history of this question in the Australian system, where the constitutional implications of the 'external affairs power' are in some respects more significant than in any other federal country.

Professor Sawer, whose main interests are in public law, and particularly in constitutional law, hopes by the end of this year to complete the second volume of his history of federal politics and law in Australia, covering the period 1929-49; the volume covering 1901-29 has already been published by Melbourne University Press. Dr. Stoljar recently returned from study leave, spent mainly in England, where he saw through the press his book on agency, due to be published in a few weeks time. He has now commenced work on a volume dealing with quasi-contract, and is also continuing the long series of detailed papers on problems in the law of contract which have been appearing in leading law journals for seven years past.

The central points of work in the Department are therefore located at key points in the range of technical law studies, and the staff members concerned also have interests in many adjacent areas of the discipline. For example, Mr. Starke's concern with international law leads him into problems of constitutional law and the conflict of laws; Professor Sawer's constitutional work involves a good deal of administrative law, the law of labour relations and even such apparently unrelated topics as copyrights, patents and monopolies; Dr. Stoljar is much concerned with logical and axiological problems in the theory of law, and Mr. Doeker's familiarity with the German system is very convenient for the purpose of comparative law studies.

The emphasis in this account so far refers to the work of these lawyers as lawyers. In that connection, it should also be said that the staff of the Department maintain close and cordial relations with their professional brothers in the School of General Studies, where Dr. Stoljar will this year be taking some classes on the law of agency, and Professor Sawer some classes on company law, and where Mr. Starke will be giving some assistance with the teaching of the peculiar pleading system which the lawyers of New South Wales insist on maintaining long after it has been abandoned in more civilised parts of the British Commonwealth and the U.S.A.

However, it is characteristic of the place of the Department in the social science research schools that its members are one and all much involved with studies not primarily legal, or with absorbing the consequences of non-legal studies where relevant to legal questions. Mr. Starke's work in international law has a close and obvious relationship to the work of the Department of International Relations in the Research School of Pacific Studies. In view of Dr. Stoljar's interests in general jurisprudence, it is not surprising that he is often to be seen in vehement discussion with sundry philosophers and political scientists. Professor Sawer was recently found lurking around the Department of Economics, endeavouring to find out whether the legislation on banking and monetary affairs proposed in 1831 by the late Mr. Theodore would now have the blessing of the theoreticians in those subjects. This kind of integration between legal and other studies is not unknown in other universities, but there are very few where, as here, such integration is easily achieved and systematically practised.

*This, the first description in general terms of the work of a department, is the forerunner of other articles of a similar nature which will appear from time to time.

RUGBY UNION

With the formation of a Rugby Union Club last year, the Australian National University began to take on more of the characteristics of a normal university. 1960 marked, in this respect, its coming of age. The Club distinguished itself in the local competition, and on this basis it was decided to send a team to Perth this year to contest the inter-varsity championship. It was the first time the Australian National University had been represented in inter-university sport of any description, and it would have been pleasant to relate a tale of continuous victory. Fairy-tales, alas, are confined to the world of fantasy. Owing to the high cost of the journey west, many players could not afford to go, despite the Club's fund-raising efforts. In addition, Forestry School players were ineligible and in some departments of play these are mainstays of the Club. The happy band who did make the trip was composed of a mixture of first and second grade players, with two from the under-eighteen team. For a first appearance, they acquitted themselves creditably, despite a disastrous first match against a strong Sydney team which left the team with several of its all-too slender numbers on the injured list. For the record, Sydney—the eventual winners of the tournament—won this match 42-0. The host team, Western Australia, beat us 26-6 the following day, and we had to wait until meeting Adelaide before notching our first victory, by 12-6. Special mention should be made of the labours of Ian McDougall, Club Secretary, without whose long hours of organisation the Perth journey would not have been possible.

It was a memorable debut in many respects, and those who went will remember the hospitality of our Perth hosts. Next year the tournament will be held at Armidale, and we should be able to send a team which will make its pressure really felt. Plans for this trip are already in hand.

A promising postscript was added to this story on June 21st, when, in a curtain-raiser to the Southern New South Wales-Fiji game a full strength Australian National University team held Sydney University in the first half, only to be beaten by superior condition in the second. The score on this occasion, Sydney 20 — Australian National University 9, is a better indication of the strength of the two universities than the previous meeting.

A COMMUNITY COMES INTO BEING

Initiated and planned by the former Canberra University College to be its first Hall of Residence, Bruce Hall opened on 25th February this year, in time for one hundred and fifty members to participate in the Orientation Week activities of The School of General Studies. The first term of the Hall's existence has been one of great adjustment, for not only have all members been faced with the new demands of community existence, they have also had to compete with a host of builders for their home. The bulk of the work force did not disappear from inside the buildings until the end of March, and even at the time of writing, some equipment and finishings have still to be supplied. The sound of hammers, cold chisels, bulldozers and concrete mixers long liable to be a feature of this University campus now arises from our C.S.I.R.O. and Physics Building neighbours. All in all, the first term has been hectic. Co-operation, patience and understanding have been needed, but they have been supplied in plenty. Steady, even if belated arrivals of furniture and furnishings meant that living conditions in the Hall have continuously improved. Wet weather and a quagmire access never managed to conquer spirits, even if the construction camp atmosphere did not vanish until the end of the term. With the announcement on 15th June that the anonymous title "Hall of Residence" was replaced by the name of the University's first Chancellor, the Hall in the eyes of its members at least was said to be complete. "Bruce Hall" is an appropriate and graceful tribute to one who has been so closely associated with the growth of the Australian National University. It is a name to which generations of students will add honour and dignity.

Despite the lack of distinctive name, however, patterns and traditions of collegiate existence have rapidly become established. A Junior Common Room Committee has been elected from the members, and is currently absorbed in the traditional problem of constitution making, as well as less fascinating work such as the provision of canteen, organizing debates, dances and a host of other community activities. Due to the makeshift nature of our occupation of the kitchens it was not possible to mark the beginning of the First Term, and the first Commencement Dinner of the Hall was at the beginning of the Second Term. After Dinner, Professor A. D. Hope, Dean of the Arts Faculty in the School of General Studies spoke to members on "Censorship and the University". The lively discussion which followed augured well for the future.

Work on the grounds about the Hall is near completion for the season. The full effect of the architects' design shows up to advantage: their utilitarian use of brick and reinforced concrete both internally and externally is restrained and pleasing. Newly sown grass and clumped plantings of deciduous trees give a clear indication of the future attractiveness of the two quadrangles on either side of the central block. The Dining Hall itself is rightly the most notable portion of the Hall, and with common rooms commands the view down University Avenue. One hundred and eighty can be seated, and while the first two meals of the day are informal self-service, it is at night at formal dinner when gowns are worn that the Hall looks its best. Since the Senior and Junior Common Rooms, music and gramophone rooms, library, games room and administrative offices are grouped about the Dining Hall, this central block is a very real focus for the activities of members. The North and South Quadrangles are enclosed by the North (women's) and East, South and West (men's) wings respectively. Each undergraduate has a single study-bedroom, fully equipped to meet a student's needs. The quality of furniture and furnishings, designed by the University Design Section has won praise from all. A welcome and fought-for amenity are the wash basins in the rooms, and Bruce Hall, like a number of the other university halls represents a considerable advance on the facilities provided in the older colleges of the metropolitan centres.

Each room is basically one of four designs, but clever use of colour helps to destroy the

feeling of uniformity which could otherwise arise Sixteen open on to balconies: these rooms are prized, naturally enough. Washing machines, drying and ironing rooms, a sewing room are further facilities which all welcome and use. Five small sets of rooms, as well as a larger flat for the Deputy Warden have been provided to allow for members of the academic staff of the University to live in the Hall. These rooms are scattered in each wing. When the house for the Warden is built, it will complete the Hall buildings. The range of academic interests is as great in the Senior Common Room as in the Junior and diversity of activity and interests is one of the cardinal features of the Hall.

So great has been the demand for accommodation by students that there are at present only two vacant rooms in the men's wings, and women students have spilled over into those domestic staff rooms which are not being used by women domestic staff. In all there are fifty-one women and one hundred and six men students in residence, as well as nine senior members. Eighteen students, four of them women, come from outside Australia, from as widely scattered places as Korea, Pakistan, Thailand, Western Samoa and North America. Every Australian State is represented, and while just over half its members come from New South Wales, the Hall like the University shows a welcome Commonwealth-wide characteristic. If the University is to continue to offer the bulk of its full-time students whose homes are outside Canberra a place in a hall of residence, then a further hall will need to be built by 1963. It has already become clear that next year a number of full-time students at The School of General Studies desirous of entering Bruce Hall will be unable to do so solely because no place will be available for them.

Bruce Hall is under the immediate control of the Warden, but my general regulations for the Hall are such, I trust, as to permit the maximum of individual liberty and expression. A large number of students, many of whom away from their family circle for the first time in their lives, cannot live, work and play in one community without there being certain restrictions on each individual's actions. On the other hand, any university hall which does not expect adult behaviour from its members is less than likely to obtain them. The fact that Bruce Hall is a "mixed" hall, in which women make up one-third of the community is something which has attracted a great deal of outside comment. To the members it has rapidly ceased to be any cause for comment. Bruce Hall is a community where membership derives from membership of a mixed University. Collegiate existence, if it fulfills its potential is marked by a broadening of the mind through closer contact with one's fellows, both men and women, graduate and undergraduate, than is possible in the larger unit of the University. Much of the spirit of the hall grows from its members—but not all. Bruce Hall has been well endowed with attractive buildings: its members already show every sign of developing a spirit equal to this endowment.

W. P. PACKARD

MATHEMATICS IN THE INSTITUTE

Mathematicians are becoming an increasingly scarce commodity, the demand for them far outstripping the supply. This is so in schools, in universities, in industry, in government; in Australia, in New Zealand, in the United Kingdom, Canada, the United States, and, so far to a lesser degree, in most European countries. The alarm that is widely felt finds expression in numerous articles and letters in journals and newspapers, in meetings and resolutions of responsible bodies. The position is undoubtedly serious.

Is this then the time to build a new ivory tower for some dreamers of mathematical dreams to shut themselves away, to give up the teaching of undergraduates, the production of urgently needed mathematical graduates, in order to administer to the sacred cow, Research? — Self-interest demands that I treat this question as merely rhetorical, and answer it firmly in the affirmative; but fortunately self-interest here is supported by honest conviction.

Australia cannot hope to import all the mathematicians she needs; she has to try to produce them herself. This requires the creation and maintenance of facilities for teaching and training mathematicians at all levels and for all mathematical activities, including research. Mathematics divorced from new thought stagnates. In most branches of mathematics, research requires no elaborate or expensive apparatus, and it can be carried out at the State universities; and much excellent research is, in fact, going on there. But it is natural that in a teaching university the first priority should be undergraduate teaching, and there is room and demand for a new department that can concentrate on the training of young researchers. This is not to say that the research students who now work at the State universities should be lrawn to the A.N.U.; nor that others should not have gone to Cambridge or Oxford, Manchester or Harvard, for their initial training in research: I hope they will continue to go to Britain and America and wherever else they can find inspiration—but I also hope that in future they will be readier to return to Australia after a few years abroad; and in this the Department in the Institute can play an important role. I have heard a young Australian mathematician in Britain say that now that there is a Department of Mathematics at the Institute of the A.N.U., he is more seriously than before thinking of return to Australia. He may have intended to join this department and no other; but my impression was rather that he was thinking of opportunities in Australia as a whole, and that he felt that the existence of a vigorous research department added something lively and worth-while to Australian mathematics: and if this is so, then the new department is already beginning to do some good.

In fact one of its most important functions will be to attract mathematicians from all over the world to Australia, many of them for visits of varying length, but some of them to settle down permanently. In this it has already been successful: all the initial appointments are bringing non-Australians to Australia, and thus are adding something to the mathematical life of Australia that would not otherwise have been added. The first Research Scholar to be elected in Mathematics comes from England, too. The fear expressed by some colleagues in State unisities that "the A.N.U. will draw the best students from State university departments and further contribute to their disintegration by weakening their research potential"* is, I hope, unfounded. The Department is not there for the greater glory of the A.N.U., but to strengthen mathematics in the whole of Australia, and it should eventually help towards staffing the departments in the State universities, rather than entice their best mathematicians away.

I have no pre-conceived detailed plans for the development of the Department; so much depends on the individuals who can be persuaded

*J. Gani, "Trends in Mathematics at Australian Universities", **Vestes** (Aust Univ. Rev.) 4 (1961) p. 12-23.

to come. One guiding principle is that the comprehensive cover of all special branches of mathematical research is neither desirable nor possible, but that instead a few lines should be well represented and forcefully pursued. One of them will, I trust, be my own special field, the Theory of Groups; if I can collect enough bright young theorists together in a small space, a chain reaction will start, and interesting things should happen. The same goes for other lines: Dr. Edwards, who is an analyst, will I hope, attract more analysts, so that they can spark ideas off each other.

The original plan was to have initially Pure Mathematics in the Department; but as a unique opportunity has arisen of securing an eminent Applied Mathematician for the Department, one Chair has been set aside for him, and so we start off straight away on having both Pure and applied Mathematics in the Institute. I hope that Professor Miles will also attract, or create, more like-minded Applied Mathematicians. Eventually, in the not too distant future, a Department of Applied Mathematics should hive off to live its own life side by side with the present Department.

Finally, a word about the tools we need: it is said that all that a mathematician requires is a pencil and a waste paper basket. There is much truth is this: expensive equipment will not be needed. A special typewriter with mathematical symbols, possibly an electric desk computor or two—all this is fairly modest. The one elaborate and expensive item that is required is the library; and the most important (and expensive) part of that will be the periodicals. There should be somewhere in Australia—and where better than the A.N.U.? — a really comprehensive collection of mathematical periodicals; though this falls within the province of the Librarian, I know from past experience that most librarians welcome a departmental interest in their work, and that departmental collaboration can make their efforts more effective.

B. H. NEUMANN

CONFERRING OF DEGREES

On 12th May, 1961, the eighth annual Conferring of Degrees ceremony was held. On this occasion for the first and last time the ceremony was a joint one with the University of Melbourne participating. Degrees of that university were conferred by Sir George Paton on those who had completed their studies through the former Canberra University College. On all future occasions the degrees conferred will all be of the Australian National University.

The Pro-Chancellor (Dr. Coombs) conferred the degree of Doctor of Philosophy on twenty-seven graduates, of whom twelve were present, and the degree of Master of Arts on two graduates: Dr. S. T. Butler, Professor of Theoretical Physics in the University of Sydney, was awarded the degree of Doctor of Science.

The Vice-Chancellor of the University of Melbourne conferred degrees on thirty-three graduates.

HONORARY DEGREES

Honorary degrees were awarded to Sir Rudolph Peters, M.C., F.R.S., the distinguished English biochemist, and to Dr. J. L. Pawsey, F.A.A., F.R.S., the eminent Australian radio-astronomer.

In presenting Sir Rudolph, the Dean of the John Curtin School of Medical Research, Professor A. H. Ennor, said:—

"Rudolph Albert Peters is one of Britain's most distinguished biochemists. His contributions to the subject are many and varied and have been made over the past forty years. As a young man Sir Rudolph won distinction with the British Expeditionary Forces in France in World War I and before that War ended had became associated with the problems of defence against poisonous gases. This association kindled an interest in the toxic manifestations of gas warfare agents and it was fortunate indeed that this interest remained alive for the period between World War I and World War II. It was in 1940 that Sir Rudolph and his colleagues in Oxford provided the Allied Armies with the complete antidote to the arsenical poison gas — Lewisite. The answer came as a result of many years' systematic work on the carbohydrate metabolism of the brain from which the actual mechanism of poisoning by arsenicals was accurately deduced. This led to the synthesis of a compound which gave complete protection against Lewisite. The compound is known as dimercaptopropanal and is extensively used today as an antidote to the poisoning by many heavy metals.

'Sir Rudolph began his biochemical career in Cambridge and in 1925 was appointed to the Chair of Biochemistry in Oxford. Here he set up and developed an internationally-known School of Biochemistry. His keen interest in the manner in which carbohydrates are utilised in the brain led to a detailed study of the underlying effects of vitamin B1 deficiency. Sir Rudolph pointed out that pigeons developing signs of beri-beri accumulated abnormally large amounts of lactic acid in the brain. Moreover when he conducted experiments on a minced section of such a pigeon brain in a test-tube he found that it had lost many of the vital functions. These he found could be restored by adding some vitamin B1 to the test-tube and so came about the first demonstration of the *in vitro* action of a vitamin.

Much of Sir Rudolph's energies in the subsequent years were devoted towards an understanding of the way in which carbohydrate is burned in the body. I have referred to the war years and to the unravelling of the problems posed by the arsenicals. From this work Sir Rudolph evolved the theory of a 'biochemical lesion'. In its crudest interpretation this theory may be taken to mean that many forms of poisoning and many pathological conditions have as their prime cause a derangement or complete blocking of some specific biochemical reaction. Examples were then few but with the passage of a few years the concept of a biochemical lesion was generally accepted and soon biochemical research was to uncover many examples. Perhaps the most striking of these was one recently discovered by Sir Rudolph himself as a result of work on the poisonous nature of a South African plant which had long been

known as poisonous to cattle. These experiments showed that the compound was fluoroacetic acid and, with great elegance, they pointed to the precise point at which this compound interfered with the delicately integrated chemical reactions which go to make up the living organism. The compound is known in Australia at 1080 and is a well known rabbit poison.

'Sir Rudolph's associations with Australian biochemists extend back over the past 30 years and there are many Australians both here and abroad who owe much to the opportunities which he created for them in Oxford. But it is not only Australians who are indebted to him — indeed all those who had the good fortune to work in his laboratory are indebted to him for it has always been one of his characteristics to promote the progress and well-being of his students and younger colleagues.

'It was typical of Sir Rudolph's zeal for biochemistry that following his retirement from the Chair of Biochemistry in Oxford in 1955 he did not hesitate to accept the responsibility of building up a biochemical unit in the Agricultural Research Council Laboratories in Babraham, near Cambridge. He has now retired from this position but not from active laboratory work, which he now enjoys in the School of Biochemistry in Cambridge from which he graduated.

'Sir Rudolph's achievements have been recognised by the British Government, by the Royal Society and by numerous universities and scientific societies. His eminence as a world figure was recently recognised by his election to the Presidency of the International Council of Scientific Unions.

'The events I have outlined represent but a brief summary of his achievements which have distinguished him as a scientist eminent in learning."

In presenting Dr. Pawsey, the Director of the Research School of Physical Sciences, Sir Mark Oliphant, said:—

"Dr. Pawsey is a very distinguished Australian, who has made great and numerous contributions to the examination of the heavens by means of the radiofrequency emitted by stars, by gases in space between the stars, and by objects so far removed in space, that the radiation coming from them has been travelling for hundreds of millions of years before it reaches the earth.

'Australians have made notable contributions to exploration of the earth, and we are justly proud of the achievements of Sir Douglas Mawson and those who have followed in his footsteps in the Antarctic. Other native men of science have explored the upper atmosphere, the moon, and the sun, using ingenious methods which they have devised. Dr. Pawsey and his colleagues in the Radiophysics Laboratory of C.S.I.R.O., have ranged far further afield by means which are sensitive beyond imagination. They have been pioneers in a new and fascinating region of enquiry which has yielded results of great importance and incredible beauty. Their radio waves pass freely through matters too dense to be transparent to light, revealing the wonders of the spiral structure of our own galaxy of stars, the Milky Way, and penetrating to the very centre. The music of spheres infinitely further away than the planets, is known to them. Even the tenuous clouds of primordial hydrogen-gas in space, the mother substance of all our universe, which is invisible to our eyes, whisper softly, but with a remarkably pure note, to their discriminating ears. Still further away, in regions unreached by the world's most powerful telescopes, they find colliding galaxies whose torment becomes intelligible tracings on their records.

Dr. Pawsey developed television in the laboratories of Electric and Musical Industries, in England, after a distinguished career in Melbourne and Cambridge. During the war, he was the leader of a most successful group of workers on radar. When the war ended, it was natural, perhaps, for his talents to be turned to the mysterious signals from space which had been observed overseas. In this field he rapidly made Australia one of the foremost of the few countries which developed this new and powerful branch of astronomy, showing the existence in space of discrete sources of radiation. His work was recognised by his election to the Royal Society of London in 1954, and he became a Foundation Fellow of the Australian Academy of Science.

Joseph Pawsey has brought honour to this country through his imaginative researches. It is fitting that today we should honour him, and through him the Commonwealth Scientific and Industrial Research Organisation which, through the leadership of our past Councillor, the late

Sir David Rivett, gave him the opportunity to work in his chosen field. In honouring him, and his achievements, we shall indeed be honouring this University."

REPLY BY SIR RUDOLPH PETERS

Sir Rudolph Peters, in replying on behalf of the Honorary Graduates, said:—

"It is a great pleasure to offer on behalf of Dr. Pawsey and myself our very warm thanks to this University for the signal honour bestowed upon us. It is a privilege indeed; we are proud to be members of these new Schools, now developing in Canberra with the highest ideals. The remarks made by Professor Ennor were overkind, though heart-warming for me. It has been an enlightening experience to be a visitor in his Department of Biochemistry, and to become acquainted at first hand not only with a well-planned laboratory, but also with the good work in progress and the enthusiasm of the personnel. The distinction of the Heads of Departments and their colleagues in the John Curtin School of Medical Research has given the School already international fame, and its future status is assured. Professor Ennor has made a large contribution to the present position.

'In regard to my relation with Dr. Pawsey, it is a thrill to be associated, even distantly, with the exciting development of radioastronomy, a science which may decide the "age-old" problem of the origin of our earth and solar system. The distinguished botanist, Professor Blackman, once told me that when he came to Cambridge in the 1890's, the view then held was that physics was finished as a science — only a few 't's' left to cross. Then came X-rays—radioactivity; even in my own subject, this is used in research, so wide is its impact. At the turn of the century a scientist could know most of the essential facts in the scientific field — he could be a real natural philosopher. What would an Aristotle or a Plato think of the spread of specialisation at the present day? Can you picture Socrates in Athens discussing the meaning of experiments bearing upon (shall we say) the stereochemistry of a sugar? Yet this detail is all-important — and why worry so much about its extent — we are told that much of it is still unused. (As teachers, we are sometimes worried by this.) About 1911, I was asked to lunch by Dr. Gaskell, who made the classical discovery on the heart beat, that it is of myogenic origin. Gaskell pointed to his volumes of the Journal of Physiology and said what a burden — the growth of scientific literature. From our present point of view, the growth of the literature had hardly begun 50 years ago. Gaskell was the public's idea of a scientist, a 'savant' of the old type. With his flowing beard, and blackboard pointer held like a trident, he could have posed for the god, Neptune. Scientists and scholars are still absent-minded, but have they come to look too ordinary? Sir Charles Sherrington once pointed out to me that the long beard was formerly 'de rigueur'. You will see it in the pictures of great chemists of the past. Perhaps we ought to have a kind of uniform for natural philosophers — then the public might see us less as magicians — they might understand that science and the humanities are complementary. It may be that long beards would help. I once heard of an artist who used his very long beard to keep others out of his railway carriage. He tucked the beard over his face into his hat. His strange appearance certainly achieved the desired isolation! Many scholars are also creative artists and are apt to be isolated in their work. A historian studies a few years, microscopically. He may find something crucial. Biologists study some outlandish animal — and this may illuminate the physiology of man. I once had someone in my laboratory whose interest was the nutrition of the American cockroach (and he did not let even one out). Such are examples of specialisation; they are often criticised: they are not really dangerous, so long as they represent a dedicated devotion to truth. Even with our modern technical comforts, the struggle needed for the best is still with us. It has never been more beautifully expressed than in the Book of Ecclesiasticus, in words which stand in the Hall of my laboratory in Oxford: "For at the first 'wisdom' will walk with him by crooked ways and bring fear and dread upon him, and torment him with her discipline, until she may trust him and try him by her laws. Then will she return the straight way unto him and comfort him and show him her secrets". Many research workers have told me how much comfort they derived from these words, when passing through the valley of doubt.

Again, we thank you."

ADDRESS BY THE VICE-CHANCELLOR

The Vice-Chancellor, Professor L. G. H. Huxley, in his address said (in part):

"It is fitting and indeed customary, that we should note, at an annual ceremony such as this, some significant events of the past academic year and the first to claim our attention must be the association of the former Canberra University College with the Australian National University.

Upon this disappearance of the Canberra University College as a separate institution it is appropriate that we should acknowledge the faith and foresight of those whose efforts led to the provision of university courses within the Australian Capital Territory and also the generous spirit of co-operation shown by the University of Melbourne.

The thanks of the community are especially due to Professor Herbert Burton under whose wise guidance as Principal the College grew to maturity.

The appearance of the first report of The Australian Universities Commission in November, 1960, was an event of special interest for all Australian universities.

In its report the Commission recognises the special nature of the Australian National University and quotes as follows from a second reading speech on the Australian National University Bill 1946:—

'The Government is particularly anxious that the National University shall be established in such a manner that it will bring credit to Australia, advance the cause of learning and research in general and take its rightful place among the great universities of the world'.

As these aspirations were already in a large measure achieved within a decade of the foundation of the University, the financial recommendations of the Commission for this University are intended to confirm and foster the established pattern of research within the Institute of Advanced Studies and to provide for the healthy growth of the School of General Studies.

A more immediate meaning is given to these figures by noting the chief buildings that it is hoped to erect or complete in the next three years.

For the Institute these are: the completion of the Library building; a single large building for the two Research Schools of Social Sciences and Pacific Studies; and a Mathematics building. Smaller buildings are: an Animal Breeding Unit; Geophysics Workshops; a Rock Mechanics Laboratory; the Time Service Workshop and Laboratory and an Isotope Laboratory.

For the School of General Studies the completion of the Physics building and new buildings for Chemistry, Zoology and Geology. Other buildings to be planned are a Botany building, Library, a Students' Union, a building for Oriental Studies and a second Hall of Residence, and beyond these categories a building for the Central Administration and works for site development.

The University is grateful to the Commission for its proposals and to the Commonwealth Government who have accepted them in principle for they will go far to ensure the healthy development of the University.

In the School of General Studies enrolments, well distributed over all four Faculties, now exceed 1,000, of which about one-third the full-time students A satisfactory feature of the trend in enrolments in recent years is the increasing proportion of full-time students and it is probable that in a few years the majority will be full-time students.

In addition, in part as a result of the opening of the Hall of Residence, there is a marked increase in enrolments from States other than New South Wales and the Australian Capital Territory; the School of General Studies is therefore acquiring a national rather than a regional character, as befits the name of this University.

In this context the opening of the first Hall of Residence under its Warden, Mr. W. P. Packard, must be regarded as of great importance for the future of the School of General Studies. The need, not only for the first hall, but also for additional halls in the near future, is evident from the fact that the 100 places in the Hall are almost all filled.

Although this brief report is manifestly incomplete it serves to indicate the range and depth of scholarship within the University and its vigorous development. The unusual, if not unique, structure of the Australian National University, formed as it has been by the association of a group of fully established and distinguished schools of research with a well developed university for undergraduates, qualifies it to contribute in a specially broad and

important manner to the cultural and economic life of the nation. Original research pursued in the Institute of Advanced Studies and also in the School of General Studies advances the frontiers of knowledge of the world of nature and of man and in so doing both adds to the stock of socially useful information and contributes significantly the international reputation of Australia as an active centre of scholarship. Evidence for this may be seen in the presence among us of students from many countries. We especially welcome them. The steady flow of graduates with higher degrees who have been trained in methods of research under the supervision of distinguished scholars contributes to the recruitment of academic staff for the universities of Australia. In the near future, when the problem of academic recruitment will have become acute, the post-graduate schools in Australian universities in general and of this university in particular will assume increased importance.

Above all, this University is able still to offer its undergraduates and post-graduate students a liberal education in the humanities and the sciences. In seeking a meaning for the word 'liberal' in this context we may with profit return, in this as in many other matters, to classical antiquity, where a liberal education was an education appropriate for free men as contrasted with a vocational or "useful" education of slaves. In our modern society where machines have replaced slaves, we regard a liberal education as one that fosters habits of independent thought and objective judgment, enhances comprehension of society and the world and enriches the intellectual life. Such an education, while important for all, especially befits those whose abilities qualify them to fill positions of responsibility in the community where the proper exercise of judgment is demanded, whether in the professions, industry, research or scholarship. "But" (as Bertrand Russell tells us) "learning to think independently is not an ability that comes all of a piece. It must be acquired by dint of personal effort and with the help of a mentor who can direct those efforts. This is the method of research under supervision as we know it today in our universities. It may be said that an academic institution fulfills its proper function to the extent that it fosters an independent habit of mind and a spirit of enquiry free from the bias and prejudice of the moment. Insofar as a university fails in this task it sinks to the level of indoctrination."

One of the problems facing modern universities is how to preserve the liberal quality of the education offered, as the element of personal contact between mentor and student becomes weakened by the flood of student numbers. In this respect the smaller universities possess a decided advantage over the larger.

In this University, an able student entering from school can pursue his studies, if he so desires, to an advanced level and receive a liberal education in the process through close intellectual contact with his mentors, many of whom are scholars of great distinction.

In addition to the training of his mind through his formal studies is the broadening of his interests through his contacts with students and staff whose academic and other interests are different from his own. For this reason also, it would be impossible to stress too greatly the civilising influence of University House, and I regard it as one of our greatest assets. For the same reason, the opening of our first Hall of Residence for undergraduates must be regarded as an important event.

The University faces the future with confidence, secure in the knowledge of the immediate and distant value of its work for the nation and the world."

DEGREES AWARDED

JOHN CURTIN SCHOOL OF MEDICAL RESEARCH

Doctor of Philosophy

Brian Maxwell Comben, M.Sc. (Melb.). Thesis: "Recombination between two strains of Vaccinia Virus."

Ian Hamilton Holmes, B.Sc. (Melb.). Thesis: "Reactivation of Pox Viruses."

David William Howes, M.Sc. (Adel.). Thesis "The growth cycle of poliovirus in cultured cells

John Ingram Hubbard, B.Med.Sc. (N.Z.), B.M., B.Ch., M.A. (Oxon.). Thesis: "Factors involved in the release of transmitter substances at junctional regions."

Roderick Alan Westerman, M.B., B.S., (Adel.). Thesis: "Plastic changes of the simplest responses of the Mammalian central nervous system."

Geoffrey Coleman, B.Sc. (Manc.) (in absentia). Thesis: "Studies of A-Amylase synthesis by Bacillus Subtilis."

Mary Delma Doherty, M.Sc. (Q'land.) (in absentia). Thesis: "Studies of enzymic phosphoryl group transfer: transphosphorylation reactions involving N-phosphorylcreatine and adenine nucleotides."

Kevin John Lafferty, B.Sc. (Melb.) (in absentia). Thesis: "The kinetics of virus neutralisation."

Sadao Matsuura, Master (Nagoya) (in absentia). Thesis: "Reduction in Pteridines."

John Whitfield Phillis, B.V.Sc. (Syd.) (in absentia). Thesis: "Assay methods for transmitter substances."

Vivian Kenneth Leslie Whittaker, M.B., B.S. (Q'land) (in absentia). Thesis: "The enzymic methylation of uracildeoxyribotide."

RESEARCH SCHOOL OF PHYSICAL SCIENCES

Doctor of Philosophy

Reginald Green, B.Sc. (Q'land.). Thesis: "The study of the Paleomagnetism of some Kainozoic and Palaeozoic rocks."

Raymond Booth Taylor, B.Sc. (Tas.). Thesis: "Photoprotons from heavy elements."

Donald Wilson Lang, M.Sc. (N.Z.) (in absentia). Thesis: "Some aspects of statistical theory in nuclear reactions."

Ian McDougall, B.Sc. (Tas.) (in absentia). Thesis: "A study of the Tasmanian Dolerites with particular reference to the differentiation of the Red Hill Dolerite-Granophyre Association."

Bruce Mainsbridge, B.Sc. (Tas.) (in absentia). "The Li^7 (p,y) BE^8 Reaction and studies in photo-disintegration."

Donald William Smellie, B.Sc. (Queen's, Canada), M.A.Sc. (Br. Col.) (in absentia). Thesis: "Quantitative interpretation of aeromagnetic data."

RESEARCH SCHOOL OF SOCIAL SCIENCES

Master of Arts

Derek Leonard Carrington, B.A. (Birm.). Thesis: "The gold rushes of New South Wales, 1851-74."

John Rodway Robertson, M.A. (W.A.). Thesis: "Warrah: The genesis of a pastoral property."

Doctor of Philosophy

Patrick James O'Farrell, M.A. (N.Z.). Thesis: "H.E. Holland and the Labour Movement in Australia and New Zealand."

Owen Michael Roe, M.A. (Melb.), B.A. (Cantab). Thesis: "Society and thought in Eastern Australia, 1835-50."

Christopher Robin Heathcote, M.A. (W.A.) (in absentia). Thesis: "Some aspects of the theory of queues."

Geoffrey Anton Watterson, B.A. (Melb.) (in absentia). Thesis: "Probability theory applied to genetic populations."

RESEARCH SCHOOL OF PACIFIC STUDIES

Doctor of Philosophy

Igor de Rachewiltz, Dip.Or.Inst. (Naples). Thesis: "Sino-Mongol culture contacts in the Thirteenth Century — A study of Yeh-Lu Ch'u-Ts'ai."

Emma Sadka, B.A. (Oxon.). Thesis: "The residential system in the protected Malay States, 1874-95."

Donald John Tugby, B.A. (Melb.), B.Sc. (Syd.). Thesis: "Modern social structure and social organisation in Upper Mandailing, Sumatra."

Kripa Shanker Mathur, B.Com., M.A. (Luck.) (in absentia). Thesis: "Caste and ritual in a Malwa Village."

Nancy Dorothy Munn, B.A. (Oklahoma), M.A. (Indiana) (in absentia). Thesis: "Walbiri graphic art and sand drawing: A preliminary study in iconology and symbolism."

Dagfinn Arnulf Sivertsen, M.A. (Oslo) (in absentia). Thesis: "Political development and organisational change in a South Indian village."

THE SCHOOL OF GENERAL STUDIES

(Degrees of the University of Melbourne)

Bachelor of Arts (Ordinary Degree)

Marion Jean Beveridge.
Marie Therese Brennan.
Richard Rafe Champion de Crespigny, M.A. (Cantab.).
Mary Rose Eccles.
Antonino Grassia, Dr. (Catania).
Judith Gabrielle Howard-Smith.
Veronica Mary Littleton.
Colin Patrick Mackerras.
Geoffrey Ernest Mannall.
Nora Philomena O'Hara.
Donald Wallace Shields.
Irmagard Brunswick (in absentia).
Skaidrite Laima Skriveris.
Malka Perla Harari (in absentia).

Master of Arts

Ann Carol Bolton, B.A. (Oxon.).

Bachelor of Laws

Geoffrey Royce Howard.
Brian Edmund Worth.

Bachelor of Commerce (Ordinary Degree)

John Patrick Carney.
Thomas Henry Cranston.
Peter Thomas Frawley.
Rolf Otto Hoppe.
Keith Lionel Le Rossignol, Dip. Com. (Melb.).
Aaron James Miller.
Garret Michael Quigley.
William James Ricketts, B.Sc. (Syd.).
Beryl Ailsa Seawright.
Austin Joseph Selleck.
Frances Robert Somes.
John Casey Taylor.
Kevin Charles Veness.
James Piesse Watson, B.Sc. (W.A.).
Prasit Tansuvan (in absentia).

Doctor of Philosophy

Francis Nicol Cox, M.A. (Melb.), M.S. (Yale).

Diploma of Public Administration

Garrett Michael Quigley.

The following Prizewinners were announced:—

The Tillyard Prize:
Colin Patrick Mackerras.

The George Knowles Memorial Prize:
Walter Stephen Palmer.

The Economic Society Prize:
Clifford George Headford.

The Marie Halford Memorial Prize:
Lucy Davey.

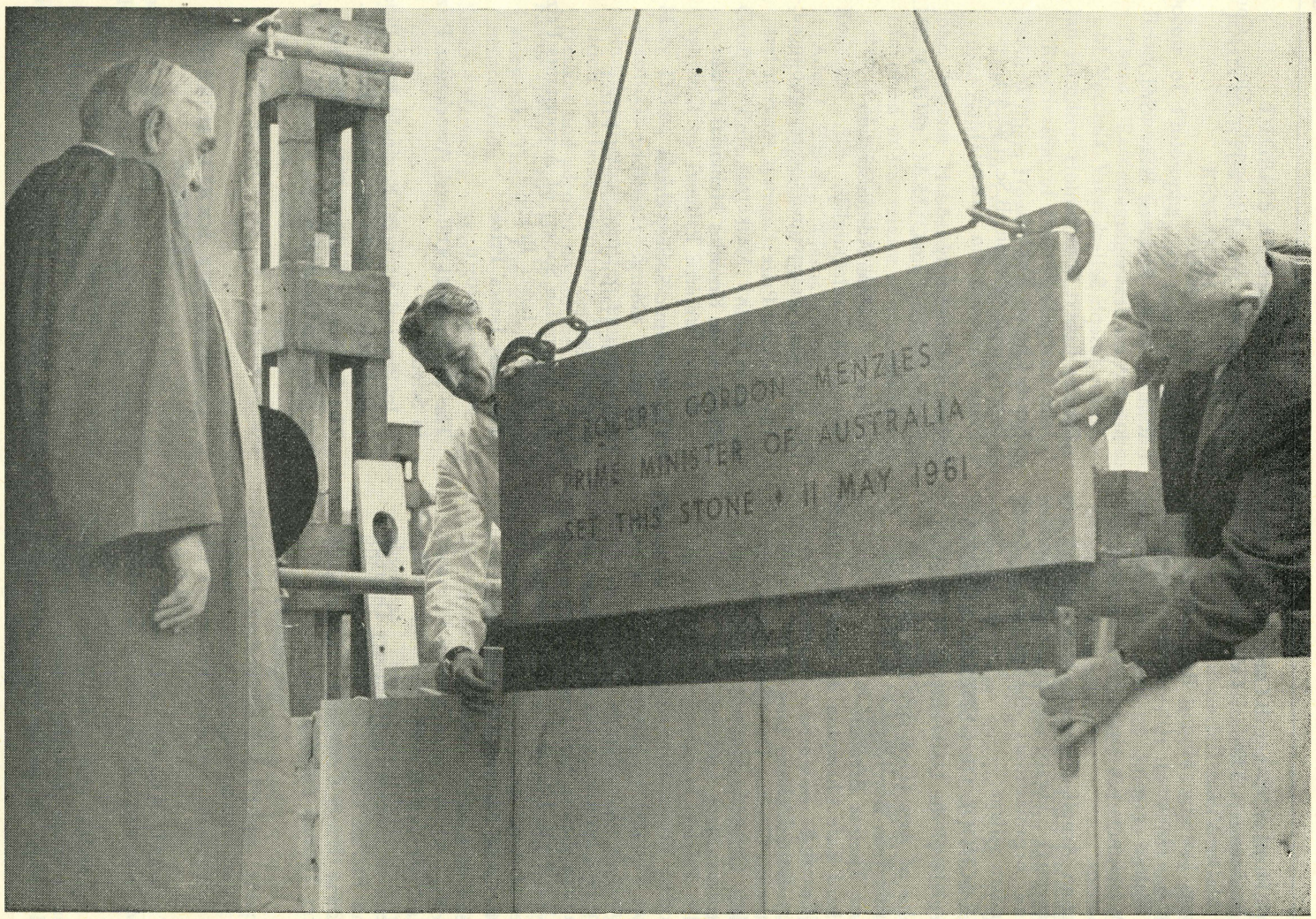
The Australian Society of Accountants Prize:
Michael James Peacock.

The Lady Isaacs' Prize:
Margaret Brown

The Professional Officers' Association Prizes in Science:

In Physical Sciences: Reginald John Piper.
In Biological Sciences: Judith Eckersley.

The Geological Society of Australia Prize:
John Rashleigh Cleary.



The Prime Minister setting the foundation stone of the first permanent building of the University Library on 11th May, 1961.

THE RESEARCH SCHOOLS

THE JOHN CURTIN SCHOOL OF MEDICAL RESEARCH

(From the Annual Report, 1960).

A significant addition to the academic structure of the Institute of Advanced Studies was made by Council towards the close of the present year by the approval of Personal Professorships. Reference to these positions is made in the last "News", but it is extremely satisfying to note that two members of this School — Dr. F. P. Dwyer, Reader in Biological Inorganic Chemistry, and Dr. S. Fazekas de St. Groth, Reader in Virology—have been elected to the first two of these posts.

As a result of a decision by the United States Public Health Service to extend its post-doctoral fellowship plan, a "limited number of fellowships to highly qualified scientists" has been awarded to research workers resident outside the U.S. Only four such fellowships have been awarded to Australians since this decision was made in 1958 and each of these has gone to a member of this School—awards in 1959 were made to Drs. Mackaness and Joklik from the Departments of Experimental Pathology and Microbiology, respectively. In 1960 Dr. Cairns of the Department of Microbiology and Dr. Morrison of the Department of Biochemistry were awarded similar fellowships.

The amalgamation of the Australian National University with the Canberra University College, and the projected development of additional biological departments on the campus, indicated the desirability of some revision of the earlier plan to permit the supply of experimental animals to departments on the campus, other than those in this School. The new design will allow of all necessary expansions for the future and capital moneys for this and a small radioactive isotopes laboratory have been approved by the Australian Universities Commission. It is likely that a start will be made on the first stage of the animal breeding annexe in the forthcoming year.

THE RESEARCH SCHOOL OF PHYSICAL SCIENCES

(From the Annual Report, 1960).

The past year has been a difficult period for the School. Problems arising from the union of the University with Canberra University College, the appointment of a new Vice-Chancellor and the establishment of a Department of Mathematics in the School, occupied a great part of the time of some senior staff. The situation was aggravated by a disastrous fire in the laboratories and by the difficulties of recruitment while salaries in the National University remain below those in some State universities.

The decision to create a Department of Mathematics, to be concerned principally with research training in pure mathematics, was made three years ago. This was largely a result of the unanimous decision of a representative meeting of Australian mathematicians, convened by this School, urging that a research department of mathematics was a necessity for the development of the subject in this country. At the present time, there is a serious shortage of mathematicians of standing and it is only now that a mathematician of high rank has been persuaded to come to Canberra. The University is very fortunate to have been able to appoint Dr. B. H. Neumann, F.R.S., now Reader in Mathematics in Manchester, to be Head of the Department. He will visit the University in 1961 and will take up his duties in 1962. His wife, also a distinguished mathematician, will be appointed to a Readership at a later date when she is able to leave her children in England. Meanwhile, Professor Neumann will assemble the staff of his department which promises to be one of outstanding importance and achievement. Dr. Neumann plans to attract many of the world's leading mathematicians as visiting professors, each spending up to a year in the University. He wishes also to organise regular Australia-wide seminars in mathematics. In this way, it is believed that many of the problems of the relative isolation of mathematicians

in Australia can be solved. This summer the University is providing working space for a gathering of about sixteen mathematicians from all over Australia, who are spending a period working together and attending specialised colloquia as a mathematical institute. Unfortunately, funds were not available to enable the University to assist financially with this important project in the revivifying of Australian mathematics.

The work of the School continues to improve in quantity. Highlights of development have been the arrival and installation of the 10,000,000 electron-volt tandem accelerator from the United States, which came into operation early in 1961; the remarkable quality of the first stellar spectra obtained with the Coude spectrograph which Dr. Dunham has designed for use with the 74-inch telescope at the Observatory; the successful operation of the experimental field-station of the Observatory on Mount Bingar, near Griffith, New South Wales; and the rapid progress made in the determination and understanding of rock ages and rock magnetism. Disappointments were the extremely slow progress with the various small building extensions and alterations which have been authorised, especially the restoration of fire damage; the necessity to send the 74-inch mirror back to Britain for refiguring; and the second failure of the bearings of the homopolar generator.

The two top floors of the Cockcroft Building were destroyed by fire during the night of 5th July. The loss of equipment was serious but the complete destruction of the drawing office, with the records and drawings of the homopolar generator and the proton-synchrotron, was the most important item of physical loss. More far-reaching individual losses were the destruction of many years of research results and valuable collections of minerals and papers by Dr. Joplin, and the serious set-back to the work of many research students. The cause of the fire was not determined, but immediate action was taken to replace the building in a more fireproof form. Serious damage and inconvenience was caused subsequently through ingress of water into the lower floors due to lack of a proper roof during heavy rains. The roof has now been replaced. Part of the departments of Geophysics, Nuclear Physics and Particle Physics, which have been crowded into already over-filled laboratories and offices, have suffered severely as a result. There have been continual delays in rebuilding and it now appears that the accommodation will not be available for re-occupation until August, 1961.

THE RESEARCH SCHOOL OF SOCIAL SCIENCES

(From the Annual Report, 1960)

Because of personal circumstances, Sir Keith Hancock was granted leave of absence from the office of Director in March. In September, Sir Keith submitted to the Council his resignation from the Directorship. He will continue as Professor and Head of the Department of History, but he expressed a strong wish to be relieved of the duties of the Director to allow him more time for writing and research and for cultivating closer relations with the other Australian universities. The Council accepted his resignation, which will take effect upon his return to the University from study leave, with very great regret. Professor Partridge has been acting Director of the School since March.

Sir Keith's decision is regretted by all members of the School. His period of office has been one of great progress: all Departments and activities of the School have profited from his interest and leadership; and he has succeeded in moulding a School which has steadily become more sure of itself, more productive, and in which morale is particularly high. Although he has resigned from the Directorship, his intellectual influence will continue to be felt strongly within the School and throughout the University.

There were 33 members of the staff at the end of 1960. Although some new senior appointments were made, some Departments (e.g., Statistics, Law, Social Philosophy) have found it difficult to make appointments at the Fellow/Senior Fellow level. This is partly due to the keen competition for able research men of this status amongst all the Universities, including those of Britain and the United States. During this year, problems of recruitment have not been made easier by the prolonged delay in announcing a decision concerning the revision of university salaries.

The planning of the permanent building for the Schools of Pacific Studies and Social Sciences made good progress during the year, and it is hoped that building will commence well before

the end of 1961. In general, plans have come out very satisfactorily, except that some types of accommodation may be barely adequate by the time the building is ready for occupation. Problems of accommodation are now becoming very acute in the existing temporary building, and if all appointments which have been budgeted for in the 1960-61 financial year are made, the School will have trouble in housing all its staff under reasonably satisfactory conditions. Accommodation for students is also inadequate; it is therefore to be hoped that the completion of the permanent building will not be delayed.

The Council in September accepted a proposal from the School for establishment of a Chair and Department of Sociology, and for enlarging research work in the History of Ideas. These developments had both been foreshadowed in plans for 1961-63 triennium which were submitted to the Universities Commission. Steps have been taken to advertise the first position in Sociology. It is not expected that it will be possible to make an early appointment to the Chair (although an appointment will be made immediately should a suitable occupant be found); but it may prove more practicable for the School to begin by appointing more junior staff who may be attached for administration purposes to the Department of Demography until the Chair is filled and the separate Department is set up. The new Department should play a very important part in the work of the School, partly by providing for students and staff of other Departments continuous training in methods and techniques of empirical social research, and more especially by promoting research into aspects of social structure and change in Australia and elsewhere which are at present somewhat neglected in this and in other Australian universities. If the Department is successful in training a body of graduate students in Sociology, it will make an important contribution to the belated growth of sociology teaching and research in all the Australian universities.

Work in the History of Ideas will not necessarily lead to the creation of another Department; it may be more convenient to attach specialists in this field to other Departments where some study of intellectual history is already in progress. This also is an important step in rounding out the School's programme. A Research School of Social Sciences necessarily concentrates heavily upon recent or contemporary social problems and developments, and upon comparatively recent theories and ways of thinking. It therefore benefits from the presence of a group of scholars who have a sense of depth in time, and who can help to correct tendencies towards provincialism both of place and time. However, in this field as in Sociology, the School expects to find some difficulty in making suitable appointments.

Thirty-eight students were enrolled at the end of the year. The number of applications for scholarships was very gratifying, and there is reason to believe that the number of students reading for the Ph.D. degree will rise appreciably during the next few years.

During the 1960 discussions between corresponding Departments of the School and of the School of General Studies have been held to explore ways of co-operating in the teaching and supervision of M.A. and Ph.D. students. Most Departments have made arrangements to collaborate in courses for graduate students and in supervision. To some extent, these discussions superseded those which commenced in the School in 1959, and which are concerned with the desirability of providing more formal teaching than has been the practice in the past. The decision taken by the School in 1959 to establish a "teaching M.A. degree course" has had to be abandoned as a result of the amalgamation.

There are still a number of problems concerning the teaching and training of Ph.D. students which have not been settled to the satisfaction of all members of the School, and more consideration will have to be given to this this year.

THE RESEARCH SCHOOL OF PACIFIC STUDIES

(From the Annual Report, 1960)

Professor Crawford spent the last quarter of 1960 visiting cenres in which research is being undertaken into the economics of underdeveloped areas. He has also sought likely recruits both to the Department of Economics and to other Departments in the School. Professor Davidson has been able to undertake a few academic duties while engaged on Western Samoan business: in the United States, he had discussions with Sir John Crawford and with

American scholars concerned with Pacific research; in New Zealand, he informally represented the University at the official opening of the Palmerston North University College; and in Fiji, he had discussions — of particular importance to the Department of Pacific History — at the Central Archives of Fiji and the Western Pacific High Commission. Professor Spate was absent on study leave in the United States from March till the end of December.

Apart from the many short-term visitors, several Visiting Fellows spent a longer period in the School and contributed substantially to its work. Dr. C. Hartley Grattan, who has been working for some time on a comprehensive study of the history of Australia, New Zealand and the Pacific, held a Visiting Fellowship in the Department of Pacific History. Professor Douglas Oliver, of Harvard University and Professor Max Gluckman, of the University of Manchester, held similar appointments in the Department of Anthropology and Sociology. Dr. John Burton, formerly Secretary of the Department of External Affairs, took up an appointment as Visiting Fellow in the Department of International Relations in the latter part of the year and will remain in the School for part of 1961. During November-December he obtained leave of absence in order to attend the Pugwash Conference in Moscow and to make contact with scholars in the field of international relations in India, Britain, and the United States.

The considerable growth of the School, together with expanding numbers in the Research School of Social Sciences, has placed acute pressure upon accommodation in the Old Hospital Buildings. Laboratories have had to be provided for both the Reader in Biogeography and the Fellow in Archaeology. The space originally allocated to the Department of Economics will become inadequate early in the new year; and arrangements have been made, with some reluctance to sub-divide the theatrette (formerly occupied by the Film Division of the National Library) into additional offices for the Department. The Department of International Relations has been forced to move into a house in Balmain Crescent. The School, therefore, had good reason for welcoming Council's final approval of Messrs. Mockridge, Stahle, and Mitchell's sketch plans for the permanent building for the Research Schools of Social Sciences and Pacific Studies. The building itself promises to be both pleasing and convenient. The accommodation problem will not be solved till it is ready for occupation.

FRANCIS MURRAY TODD

The recent untimely death of Professor Francis Murray Todd has been a loss felt equally in the academic life of this country and by his many friends, especially those in Canberra and Tasmania where he spent most of his years of university service. Professor Todd was born and educated in New Zealand and after a brilliant undergraduate career at Victoria University College, Wellington, in which he distinguished himself equally in English and French studies, followed by a brief period of lecturing and of service with the New Zealand armed forces, he went to University College, London, on a Shortcliffe Fellowship. After taking his Ph.D. at London he returned to New Zealand and entered the New Zealand Diplomatic Service. In 1949 he was appointed Assistant Lecturer in English at the Canberra University College and was promoted to Lecturer in 1950 and Senior Lecturer in 1955. In 1954 he was awarded a Nuffield Fellowship and spent a year studying Early English Language and Literature at the University of Cambridge, and in visiting English and American universities on behalf of the College. During this period abroad he arranged for publication of his book on Wordsworth, *Politics and The Poet*. In 1956 he was appointed to the Chair of English in the University of Tasmania, where his energy and organising ability soon led to his taking a leading part in university affairs. My own acquaintance with Murray Todd began in Melbourne and continued during the years of our association in Canberra. Apart from our personal friendship, I learned to admire his immense energy and ability, the gusto with which he entered into every part of university life, the part he played in the theatre, on the Staff Association, in student affairs and in the social life of the university. He won the warmest respect and liking of his colleagues as a scholar, a teacher, and a man. It was with great regret that we relinquished him to the University of Tasmania and the news of his sudden death early this year has been a personal and bitter shock to all his former colleagues in this university. Added to this feeling of personal loss, is the tragic sense of an able and brilliant scholar cut off at the beginning of his career, and the feeling of deepest sympathy with his wife and family in their bereavement.

A. D. HOPE

ROSS ANDERSON

Most readers of the 'News' will have read of the death last February, at the age of 44, of Professor Ross Anderson.

Professor Anderson spent ten months at the University in the Department of Law of the Institute of Advanced Studies.

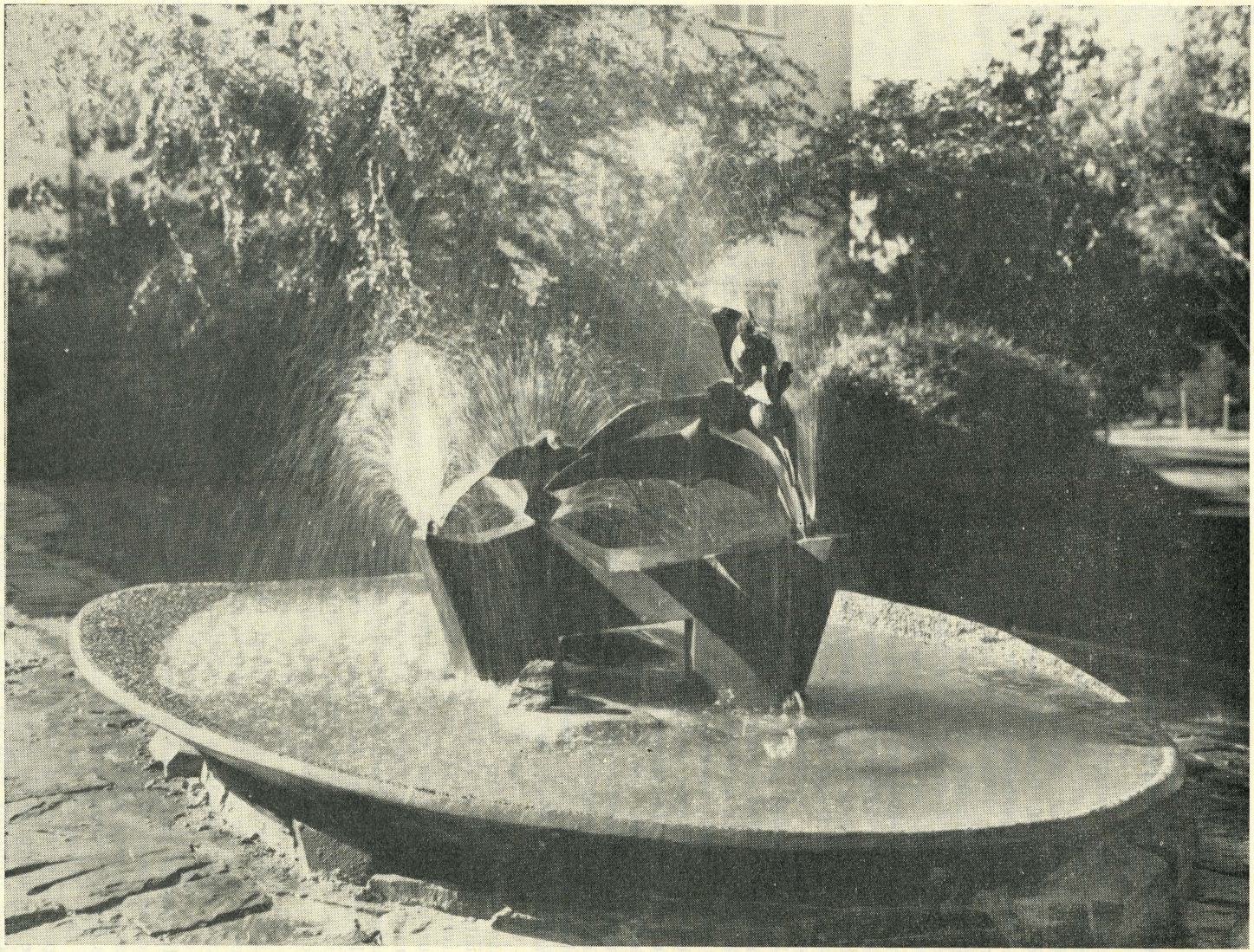
His many friends at the University will feel his loss most keenly.

UNIVERSITY OF TASMANIA STAFF ASSOCIATION

THE MURRAY TODD PRIZE FUND

The University of Tasmania Staff Association has decided to sponsor a subscription fund towards the endowment of a prize in honour of the late Professor Murray Todd. To commemorate appropriately Professor Todd's wide interests within the University, and in Honours studies especially, it is intended that the prize be awarded annually for the best Honours degree within the Faculty of Arts.

In sponsoring the fund, the Staff Association does not intend to be confined to members of the University. Rather it is felt that Professor Todd's many friends in the wider community, and all indeed who value his work for that community, may well wish to mark their appreciation by contributing. Such contributions (which will be deductible against tax) will be deeply welcome; they should be made by cheque or money order, payable to "The University of Tasmania", crossed "The Murray Todd Prize Fund", and sent to: The Bursar, University of Tasmania, Box 252C, G.P.O., Hobart.



The Theaden Hancock Fountain

STAFF

INSTITUTE OF ADVANCED STUDIES

THE JOHN CURTIN SCHOOL OF MEDICAL RESEARCH

New Appointments

Dr. E. Spinner has been appointed Senior Fellow in Medical Chemistry. Dr. Spinner has been a Senior Research Fellow in the Department since December 1957.

Dr. J. I. Hubbard and Dr. M. Ito have been appointed Research Fellows in Physiology from last March. Dr. Hubbard is a graduate of the Universities of New Zealand, Oxford and the Australian National University, and is married with three children. Dr. Ito is a graduate of Tokyo University and was a Research Fellow in the Physiology Department there. He is married and has one child.

An appointment which should have been reported earlier is that of Dr. H. A. McKenzie, who was appointed Senior Fellow in Physical Biochemistry in May, 1959. Dr. McKenzie, who is married with one child, was, before coming to Canberra, Officer in Charge, Physical Chemistry Section, C.S.I.R.O., and Physico-Chemistry Unit, Biochemistry Department, University of Sydney. Dr. McKenzie is a graduate of Sydney and has worked previously in C.S.I.R.O. and as a Visiting Fellow at Princeton University.

Visiting Staff

Dr. Mary McLain of the University of California has been appointed Honorary Fellow in Microbiology from last February for one year.

Dr. R. C. Bray, Columbia University, has been appointed to a United States National Science Foundation Fellowship in the Department of Biochemistry for eighteen months from last March.

Dr. T. A. Sears, National Hospital for Nervous Diseases, London, and Dr. C. N. Shealy of the Massachusetts General Hospital, have joined the Department of Physiology as Honorary Fellows for one year from last February and for eight months from last April respectively.

Dr. Maria Seraydarian, University of California, was appointed a United States Public Health Service Fellow in Biochemistry during her stay here in March.

Dr. I. A. Boyd, University of Glasgow, will take up his appointment as Visiting Fellow in Physiology next October for three months.

Dr. D. D. Hagerman, Harvard University, takes up his appointment as Fulbright Visitor in Biochemistry next August for nine months.

Dr. P. G. Kostyuk has been appointed Visiting Fellow in Physiology for six months from last January. Dr. Kostyuk is a member of the Ukranian Academy of Sciences, Kiev.

Dr. P. O. Anderson, University of Norway, is visiting the School as a Rockefeller Foundation Fellow in Physiology for a year from November.

Visitors

Dr. Evan Morgan, University of Western Australia, visited the Department of Experimental Pathology from 5th to 17th June.

Sir Rudolph Peters, Institute of Animal Physiology, Cambridge, visited the School in April and May.

News and Movements

Appointments of former members of staff and students of the Department of Physiology: Dr. Anders Lundberg has been appointed as Professor of Physiology, University of Goteborg, Sweden; Dr. A. J. Buller has been appointed Reader in Physiology, King's College, University of London; Dr. R. Westerman was awarded a U.S. Public Health Fellowship; and Dr. J. Phillis was awarded a Wellcome Foundation Fellowship.

Dr. D. J. Brown, Senior Fellow in Medical Chemistry is spending six months' study leave with Professor F. Bergel, F.R.S., in the Chester Beatty Institute for Cancer Research London. Dr. Brown is carrying on his pyrimidine and purine research there, and also correcting the page-proofs of his book *The Pyrimidines* (London: Interscience), which runs to 600 printed pages.

Professor M. Carmack of the University of Indiana, spent two days in the Department of Medical Chemistry in May.

In March and April, Professor A. Albert, Professor of Medical Chemistry, the Chemical Society of London's travelling lecturer for 1961, visited the Universities of Adelaide, Melbourne, Tasmania, Sydney, New South Wales, Brisbane and New England, and the University College of Newcastle, giving two lectures entitled: "A new approach to Heterocyclic Chemistry".

A review of *"Selective Toxicity"* by A. Albert is given on another page. It is from *Journal of the American Chemical Society,* 1961, **83,** 508.

THE RESEARCH SCHOOL OF PHYSICAL SCIENCES

New Appointments

Dr. J. A. Rees has been appointed Research Fellow in the Electron and Ion Diffusion Unit from 5th June. Dr. Rees, who is married, is a graduate of the University of Wales and has lately been a Research Fellow in Applied Mathematics at Queen's University, Belfast.

Dr. R. W. Crompton took up his duties as Senior Fellow in the Electron and Ion Diffusion Unit in March. Dr. Crompton is a graduate of Adelaide and has lately been a Senior Lecturer in Physics at that University. He is married and has three children.

Dr. M. T. Elford was appointed Research Fellow in the Electron and Ion Diffusion Unit from 9th March. Dr. Elford was until lately Research Fellow in Physics at Adelaide, where he had graduated, and before that was in Canada with the National Research Council.

Dr. I. D. MacDonald has been appointed Research Fellow in Mathematics, Institute of Advanced Studies. Born in England, Dr. MacDonald is a graduate of Aberdeen and Manchester. He is unmarried and hopes to arrive in Canberra in October.

Visiting Staff

Dr. A. R. Quinton, Assistant Professor, Yale University, has been appointed Visiting Fellow in Nuclear Physics for one year from August this year.

Visitors

Dr. A. von Engel, Fellow of Keble College, Oxford University, visited the school for a week in June.

Dr. E. Bretscher, A.E.R.E., Harwell, visited the Department of Nuclear Physics in March and April.

News and Movements

The second edition of *Spectrochemical Analysis,* written by Dr. S. R. Taylor, Senior Fellow, Geophysics, in collaboration with Professor L. H. Ahrens (University of Cape Town), has just been published by Addison-Wesley Publishing Co., Reading, Mass. Pergamon Press, London.

Dr. J. H. Carver, Senior Fellow in Nuclear Physics since last year, has been appointed Elder Professor of Physics in the University of Adelaide. Dr. Carver was a scholar in this University in 1949 and then became, successively, Research Fellow and Fellow.

A grant of £300 has been made to Dr. H. G. Wilshire, Department of Geophysics, by the Nuffield Foundation, for his study of the Prospect basalt intrusion near Sydney.

The purpose of the study is to determine the mechanisms by which an intrusion of basalt differentiated into several distinct rock types. The internal structure is unusually well exposed by extensive quarry operations and exploratory diamond drilling, and is of major importance in deciphering the history of the intrusion. This aspect of the study is combined with detailed analyses of rocks and minerals to illustrate the trends of chemical change in the differentiation processes.

Professor J. C. Jaeger, Professor of Geophysics, went on study leave in May until next April: he will be in the U.S.A., England and South Africa.

An Atlas of H-alpha emission in the Southern Milky Way (A. W. Rodgers, C. T. Campbell, J. B. Whiteoak, H. T. Bailey and V. O. Hunt) has been prepared at the Mount Stromlo Observatory. It covers a longitude interval of 182^0 along the old galactic circle, extending from 190^0 to 12^0, and is a miximum of 30^0 wide.

The Atlas consists of photographic prints on double weight paper of five mosaics, each of eighteen prints of plates taken with an 8-inch f/1 Meinel-Pearson Schmidt camera. Each

original plate has a coma-free field of $11\frac{1}{2}^0$ and a scale of 17 minutes of arc/mm. Each mosaic covers six centres along the galactic circle, 7^0 apart, and three centres, 9^0 apart, perpendicular to it. The plate-emulsion-filter combination used gives an effective wavelength of 6560 A and an equivalent width of 326 A. The limiting stellar magnitude is almost 15. Each mosaic has a size of $19\frac{1}{2}''$ x $12\frac{1}{2}''$.

Accompanying each mosaic is a chart on which are marked the regions containing emission, detected by comparing the above plates with plates taken with an emulsion-filter combination giving an effective wavelength of 6070 A and only transmitting a little H-alpha. Co-ordinate grids marked on these charts are equatorial co-ordinates for the epoch 1950, new and old galactic co-ordinates.

The Atlas has a one page foreword and stiff covers. It is planned to have 800 copies printed and available by the middle of 1961. To defray reproduction costs a charge will be made of £4 sterling (£5 Australian) or 11 dollars per copy.

Dr. H. Gollnow, Fellow in Astronomy, went on study leave in July for twelve months to the Mount Wilson and Palomar Observatories in California.

Mr. E. Irving, Senior Fellow in Geophysics, went to England in April for ten months' study leave.

THE RESEARCH SCHOOL OF SOCIAL SCIENCES

New Appointments

Mr. J. G. Starke has been appointed Senior Fellow in Law from April, 1961. Mr. Starke is married with one child and has until lately been a practising barrister-at-law in Sydney: he is a graduate of Western Australia and Oxford where he was a Rhodes Scholar. Mr. Starke became a member of the Bar in England and New South Wales before joining the R.A.A.F. for the war period. The author of many publications, Mr. Starke has to his credit a leading textbook on International Law which is the subject to which he will devote himself.

Dr. G. E. Carden has been appointed Research Fellow in Political Science from March, 1961. Dr. Carden, who is married, was educated in England and graduated from London University (B.Sc. (Econ) and Ph.D.). Before coming to Canberra, Dr. Carden held a Canada Council Fellowship and was a Faculty Member of Carleton University, Ottawa.

Dr. R. R. Brown has been appointed Fellow in Social Philosophy from last March. Dr. Brown has been a Research Fellow in the Department since August, 1956.

Dr. C. A. Hughes has been appointed Fellow in Political Science from some time later this year. Dr. Hughes is married with two children and will come to Canberra from a law practice in the Bahamas. Prior to that he was first, Lecturer in Political Science and then in Public Administration at the University of Queensland. Dr. Hughes is a graduate of Columbia University and of London (London School of Economics).

Mr. J. Zubrzycki has been appointed Senior fellow in Sociology. Until an appointment to the Chair is made Professor Borrie will be Acting Head of the Department of Sociology. Mr. Zubrzycki has been a Fellow in Demography since March, 1959, and before that, from December, 1955, he was a Research Fellow.

Visiting Staff

Mr. G. Doeker, Tulane University, has been appointed Visiting Fellow in Law for two years from April, 1961.

Professor F. E. Jones, McMaster University, has been appointed Visiting Fellow in Demography from June, 1961, for six months.

Visitors

Professor T. Kitagawa, Kyushu University, visited the Department of Statistics in May and June.

News and Movements

In May Dr. Norma McArthur's book *Introducing Population Statistics* was published jointly by the University and Oxford University Press. This work was prepared essentially as a handbook for administrative offices in the Pacific Island teritories.

Dr. Norma McArthur will leave in August on study leave which will be spent at the Office of Population Research at Princeton University and in London.

Miss K. Jupp visited the University in March after completing two years as an Officer of the U.N. Technical Assistance Board in Manila. She has now been appointed to a further post under the control of the Statistical Office of the U.N.

in Addis Ababa. Her mission will include demographical work in a number of areas in Africa.

Dr. John MacDonald, a former scholar of the Department and now with the Population Branch of the U.N., visited Canberra with his wife in February while spending his leave in Australia.

Dr. H. Y. T'ien, Associate Professor in Sociology at the University of Wisconsin, has received a grant from the Social Science Research Council of America to investigate population movements in mainland China and is leaving shortly with his wife and family to spend a year in Hong Kong.

Professor L. C. Webb, Political Science, left in March for a year's study leave in Italy and England.

Dr. I. F. Pearce, Economics, has gone to Oxford for a year's study leave.

Professor P. H. Partridge attended the A.N.Z.A.A.S. Conference in Brisbane, from 29th May to 2nd June, 1961, inclusive. He presented a paper on "Politics and Ideology".

Dr. John C. Harsanyi, Senior Fellow, Department of Social Philosophy, was invited to read an Address before the Social Science Methodology Section of the International Congress for Logic, Methodology and Philosophy of Science, at Stanford, California, in August, 1960. His address was entitled "Models for the Analysis of the Balance of Power in Society" and will be published in the Proceedings of the Congress. Dr. Harsanyi also read a paper at the Stanford meeting of the Econometric Society, on "A Simplified Bargaining Model for n-Person Co-operative Game".

Dr. Harsanyi has resigned from the University as from 30th August, 1961, to take up an appointment as Professor of Economics at Wayne State University, Detroit, Michigan, U.S.A.

Dr. Robert Brown, Fellow, Department of Social Philosophy, has been appointed Organising Secretary of the Annual Conference of the Australasian Association of Philosophy, to be held in Canberra from 21st to 25th August, 1961, inclusive.

Dr. H. O. Pappe, having completed his term as Research Fellow in the Department of Social Philosophy, left Australia with Mrs. Pappe in April of this year, to take up work in the United Kingdom.

Dr. R. D. Bradley, a former Research Student of the Department of Social Philosophy, is further pursuing his studies in philosophy at Oxford, under an A.N.U. Travelling Scholarship.

Mr. D. B. Heron, also a former Research Student in the Department of Social Philosophy, has taken up an appointment as Lecturer in Philosophy at the University of New South Wales.

Professor Sir Keith Hancock returned to Canberra on 23rd March from study leave spent in the United Kingdom. Before leaving England, he completed the first volume of his Biography of General Smuts, and edited, together with Dr. Jean van der Poel of South Africa, the two volumes of Smuts Papers to accompany the Biography. Professor Hancock has been elected an Honorary Member of the American Historical Association. This, the highest professional award of that body to non-American historians, is a very high distinction, currently held by only fifteen historians representing twelve countries.

Dr. D. A. Low, Mr. P. Reeves and Mr. J. Broomfield all returned to Canberra towards the end of March after spending six months in India on reasearch work.

The Royal Australian Historical Society has published, through Angus and Robertson of Sydney, *Sydney's First Four Years*: being a reprint of *A Narrative of the Expedition to Botany Bay* and *A Complete Account of the Settlement at Port Jackson* by Captain Watkin Tench, of the Marines, with an introduction and annotations by L. F. Fitzhardinge, Reader in History.

Reviews have appeared in *The Bulletin,* 15th March, 1961; *Nation,* 25th March, and *Sydney Morning Herald,* 20th March.

Dr. K. A. MacKirdy, former Research Fellow (1952) in History, who has been for the last few years in the Department of History in the University of Washington, Seattle, has been appointed to an associate professorship in the new University of Waterloo, Waterloo, Ontario, Canada, from 1st September, 1961.

THE RESEARCH SCHOOL OF PACIFIC STUDIES

New Appointments

Mr. D. C. S. Sissons has been appointed Research Fellow in International Relations from March, 1961. Mr. Sissons is a graduate of Melbourne and has recently been Visiting Research Fellow, Institute of Social Sciences, Tokyo University.

Dr. Paul van der Veur has been appointed Senior Research Fellow in Pacific History from next September. Dr. van der Veur, who is married with two children, is at present Associate Professor in the Department of Government in the University of Hawaii: he served in the war with the Royal Netherlands Indies Army and was a prisoner of war from 1942-45. Dr. van de Veur is a graduate of Cornell, Minnisota and Swathmore and his special interest is in International Relations, Colonial Policy and History in the Indonesian area.

Dr. R. G. Robbins has been appointed Research Fellow in Geography from June of this year. Until lately Dr. Robbins has been a Research Officer in the Division of Land Research and Regional Survey, C.S.I.R.O., Canberra. Dr. Robbins is a New Zealander and is a graduate of Auckland University. He is married with four children.

Dr. G. B. Hainsworth has been appointed Research Fellow in Economics from next November. Dr. Hainsworth, who was born in England and who holds degrees of the Universities of London and California, has lately been Resident Tutor in Economics in Lowell House, Harvard.

Visitors

Professor L. Palmier, of the University of New Zealand, visited the Department of Anthropology and Sociology in January.

Dr. R. F. Salisbury, a former scholar in the Department of Anthropology and Sociology, and now a member of the Department of Anthropology, University of California, visited Canberra in February and March on his way to Rabaul, T.P.N.G., to carry out field research.

Mr. D. Fenbury, of the Department of the Administrator, Port Moresby, visited the Department of Anthropology and Sociology in March, and presented a seminar paper on the working of Native Local Government Councils in New Guinea.

News and Movements

Professor J. A. Barnes, Head of the Department of Anthropology, will leave Canberra in July and will be away for a year on study leave. Professor Barnes will spend most of this time in the United Kingdom, but will visit Honolulu in September to attend the Tenth Pacific Science Congress.

Dr. A. L. Epstein, Research Fellow in Anthropology, made a second trip to Rabaul in April to complete his field study. He will return to Canberra in July, and will leave in August to return to the United Kingdom where he will take up an appointment as Senior Lecturer in the Department of Social Anthropology, University of Manchester.

Mr. M. A. Jaspan, who took up his Research Fellowship in Anthropology in December,1960, left Canberra in April to carry out fieldwork in Indonesia; he expects to return to Canberra in December, 1961.

Dr. Marie Reay, Research Fellow in Anthropology, expects to return to the Northern Territory in June to complete her field study of aboriginal women.

Mr. J . Golson is expected to arrive in Canberra in June to take up his appointment as Fellow in Prehistory in the Department of Anthropology and Sociology.

Mr. L. R. Hiatt, a student in Anthropology, returned from Arnhem Land in January and is now engaged in writing his Ph.D. thesis.

Mr. J. R. Beckett, a student in Anthropology, returned from the Torres Strait in June to start writing his thesis.

Mr. A. Ploeg, who spent a year at Bokondini, Netherlands New Guinea, and Mr. B. L. Verma, who is studying social change among the Mailu of Eastern Papua, returned to Canberra in March to write interim reports on their field research.

Mr. Martin Silverman, a Fulbright student in Anthropology, has left Canberra on a field study of displaced populations in the Pacific, based on the island of Rambi.

Mr. Harold Scheffler, a Fulbright student in Anthropology, spent three months on Choiseul, B.S.I.P., completing his field research. He returned to Canberra in April.

A meeting of the Australian Branch of the Association of Social Anthropologists was held at University House on the 22nd and 23rd May. Visitors from Sydney, Perth, Adelaide and

Brisbane, as well as members of the Department of Anthropology and Sociology, attended the meeting.

A Conference on Aboriginal Studies, sponsored by the Social Science Research Council, was held at the University from 15th to 21st May. Dr. W. E. H. Stanner convened and was chairman of the Conference, which was attended by representatives of all sections of aboriginal studies throughout Australia.

In the course of a private visit to England recently, Sybille van der Sprenkel gave four lectures on "China in the nineteenth and twentieth centuries" as part of the course on Asian History in the University of Leeds. On her return journey she visited the Indian School of International Studies in New Delhi and read a paper at a seminar in the Department of East Asian History and Institutions on "Traditional Chinese Law and its consequences for modern China".

Dr. E. S. Crawcour, Research Fellow in Far Eastern History, left in May for Japan for a year's study leave.

Mr. T. W. Eckersley, Senior Research Fellow in Far Eastern History, has left the University at the end of his appointment.

Dr. H. C. Brookfield, Geography, will leave for England in August for a year's study leave.

Professor Sir John Crawford, Director of the School, recently addressed the Institute of Agricultural Science ("Agricultural Policy in its Economic Setting") and the Economic Society ("Britain and the Common Market").

On 31st May, Professor Crawford delivered the Presidential Address to Section G of A.N.Z.A.A.S. ("The Significance of Recent Developments in Asia to the Economic Future of Australia"). At the conclusion of A.N.Z.A.A.S. Professor Crawford left for three weeks in New Guinea with Dr. Bettison, Executive Officer of the New Guinea Unit. Research in New Guinea is a large element in the School's activities but particularly so for the New Guinea Project and the Economics Department. The visit is designed to gain a better appreciation of the country.

SCHOOL OF GENERAL STUDIES

New Appointments

Dr. K. V. Sinclair was promoted to a senior lectureship in French with effect from 1st January, 1961. A graduate of the Universities of New Zealand, Paris and Oxford, Dr. Sinclair was appointed Lecturer in French at the former Canberra University College in 1955.

Dr. L. J. Hume has been appointed to a new senior lectureship in Political Science. A graduate of the Universities of Sydney and London, Dr. Hume was previously acting Assistant Director of the Bureau of Agricultural Economics, Canberra. He was also a part-time Lecturer in both Economics and Political Science at the former Canberra University College.

Mr. Soebardi, a Master of Arts of the University of Indonesia, has been appointed Senior Lecturer in Indonesian and Javanese. Widely experienced as a teacher of Indonesian language and cultural history, and Arabic, Mr. Soebardi was formerly head of the language department in Padjadjaran State University, Bandung, and a director of the Language Teaching Research Institute of Indonesia.

Mr. K. L. McKay, a graduate of the University of Sydney and of Cambridge, has been appointed to a new senior lectureship in Classics. Mr. McKay, who has held university teaching appointments in Nigeria and New Zealand, was formerly Senior Lecturer in Classics at the Victoria University of Wellington.

Mr. G. W. Clarke, a graduate of the University of New Zealand and of Oxford, has been appointed Lecturer in Classics. Mr. Clarke held a temporary lectureship in Classics at the former Canberra University College in 1957, and later took up a postgraduate scholarship at Balliol College, Oxford, where he obtained a first class honours degree in Greats in 1959.

Mr. G. F. Fairbairn, a Cambridge graduate and a specialist in the history and politics of Southeast Asia, has been appointed to a lectureship in History. In the past ten years Mr. Fairbairn has made several extensive visits to the countries of Southeast Asia in order to study political, cultural and racial problems.

Mr. K. L. Williams has been appointed to a new lectureship in Geology. A Master of Science of the University of New England, Mr. Williams held a Rotary Foundation Fellowship at Queen's University, Kingston, Ontario, in 1955. On his return to Australia he was appointed research officer in the mineragraphic investigations section of C.S.I.R.O., Melbourne.

Dr. R. F. C. Brown, a graduate of the Universities of Sydney and Cambridge, has been appointed Lecturer in Chemistry. After a year spent at the Massachusetts Institute of Technology on a post-doctoral fellowship, Dr. Brown worked at the University Chemical Laboratory, Cambridge, and from 1957 until he left for Australia he was a Research Fellow of Christ's College, Cambridge.

Mr. W. S. Ramson, a Master of Arts of the Victoria University of Wellington, has been appointed Lecturer in English. Mr. Ramson was appointed to a teaching fellowship in the English Language Department of the University of Sydney in 1955. He later held a British Council Scholarship at University College, London, returning to a teaching appointment at Sydney University in 1960.

Dr. H. H. Loofs has been appointed to a new lectureship in Oriental Civilization. He holds the degree of Doctor of Philosophy of the International University of Fribourg, Switzerland and the Diploma of the School of Oriental Languages, Paris. Dr. Loofs' particular field of interest is Southeast Asian history and ethnology, and his languages include Cambodian, Vietnamese, Classical Malay, Bahasa Indonesia and Sanskrit.

Miss Tatjana Cizova, who has been appointed Lecturer in Russian, is a graduate of the Univversities of Sydney and London, and also holds the Oxford Postgraduate Diploma in Slavonic Studies. From 1955 to 1956 she taught in the School of Slavonic and East European Studies in the University of London and subsequently at the Universities of Birmingham, Oxford and Leeds.

Dr. Naida S. Gill, a graduate of the University of Sydney where she was awarded her doctorate in 1952, has been appointed to a new lectureship in Chemistry. Dr. Gill spent three years at University College, London, as a Turner and Newall Research Fellow and since 1958 she has held a lectureship in Inorganic Chemistry at the Imperial College of Science and Technology, London.

Mr. C. H. Tyndale-Biscoe, has been appointed Lecturer in Zoology. A Master of Science of the University of New Zealand, Mr. Tyndale-Biscoe Was Lecturer in Biology at Edwardes College, Peshawar, from 1955 to 1958 and since that time he has held a C.S.I.R.O. Senior Postgraduate Studentship at the University of Western Australia.

Dr. M. F. Newman has been appointed to a lectureship in Mathematics. He is a Master of Science of the University of Sydney and a Doctor of Philosophy of the University of Manchester where he held a Gowrie Postgraduate Scholarship. Dr. Newman was previously Assistant Lecturer in Mathematics at the University College of North Staffordshire.

Dr. A. J. Fabens, who has been appointed Lecturer in Mathematics, is a graduate of Harvard College and Stanford University where he was awarded his Ph.D. degree in 1959. Dr. Fabens is at present a research instructor at Dartmouth College, Hanover, New Hampshire, and it is expected that he will arrive in Canberra in September.

Mr. I. F. H. Wilson, a graduate of the University of Melbourne, has been appointed to a new lectureship in Political Science. Mr. Wilson was awarded a Fulbright Travel Grant in 1958 for study at Columbia University where he is working towards a Master's degree in international affairs.

Dr. E. Gauba, a graduate of the University of Vienna, has been appointed to a temporary lectureship in Botany.

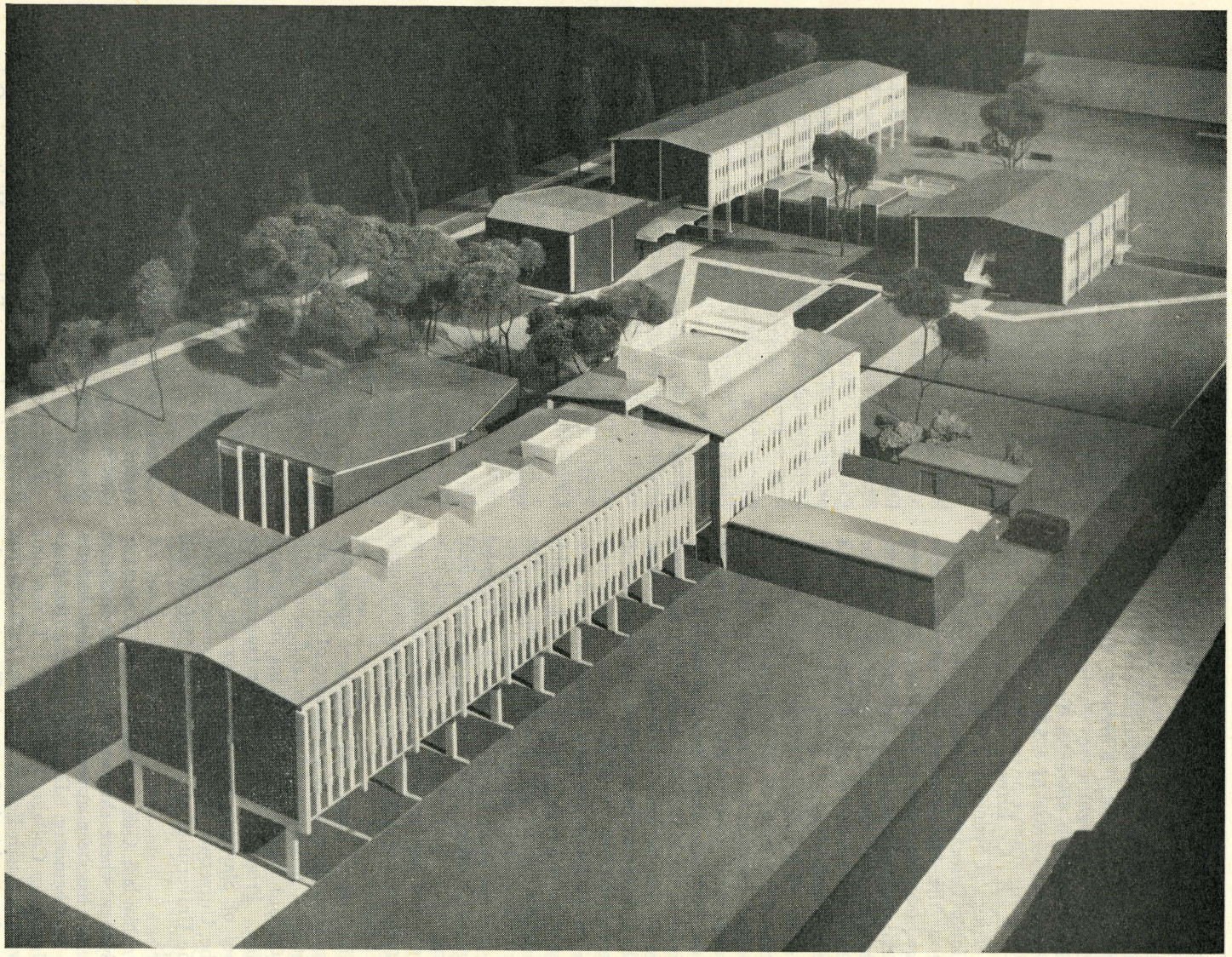
Mrs. Patricia A. Woolley, a graduate of the University of Western Australia, has been appointed temporary Lecturer in Zoology.

Mrs. Myra M. Graneek, a Master of Arts of the University of Birmingham, has been appointed to a temporary lectureship in German.

Visiting Staff

Professor M. Hiramatsu, Professor of English in the Faculty of Engineering and Adviser to the International Department at Keio University, was appointed Visiting Professor in Oriental Studies for two terms from last March.

Professor L. Carrington Goodrich, Dean Lung Professor Emeritus of Chinese, Columbia University, has been a Fulbright Visitor in Orien-



Models of the Physics Building, nearing completion, and the Chemistry Building (foreground), now under construction in the School of General Studies

tal Studies for two terms from the beginning of the academic year.

Departure

Dr. C. E. V. Leser, Senior Lecturer in Statistics, has resigned in order to accept an appointment as Senior Research Officer at the Economic Research Institute, Dublin. Dr. Leser, who joined the staff of the former Canberra University College in April, 1956, will take up his new appointment on 1st September, 1961.

Visitors

Professor E. T. Salmon of McMaster University, visited the Department of Classics in July.

Professor M. Erik Wright, University of Kansas, visited the Department of Psychology in March.

Sir Frank Adcock, King's College, Cambridge, was a visitor to the Classics Department in May. On Thursday, 4th May, Sir Frank gave a public lecture, "Some Aspects of Philhellenism in Antiquity".

Professor Russell Niles visited the Department of Law in the Institute of Advanced Studies and the Faculty of Law in the School of General Studies on the 5th of April. Professor Niles is Dean of the Law School of New York University. His visit was made in the course of a detailed study of legal education in Australia so that he can make suggestions for improvements in the American system of legal education.

Professor A. Carey Taylor, Birkbeck College, University of London, visited the University from 27th June to 2nd July. He met staff and students of the French Department and gave a public lecture entitled "Balzac and the English Novel" on 27th June. Professor Taylor, who is a member of the Executive of the Association of University Teachers, also had talks with members of the Staff Association.

Dr. W. G. Moore of St. John's College, Oxford, and a Commonwealth University Interchange Visitor for 1961, will visit the University from 26th to 30th July. Dr. Moore will lecture to students in the French Department and will also give a public lecture entitled "Why Universities?" on Thursday, 27th July.

News and Movements

The University has recently received a grant of £1,200 from the Rockefeller Foundation to assist a research project being undertaken by Dr. Solomon Encel, Senior Lecturer in Political Science. The grant has made possible the appointment of a research assistant to enable Dr. Encel to complete a book on "Elite Groups in Australia". Earlier this year Dr. Encel returned from a year of study leave abroad, for which he was granted a Rockefeller Travelling Fellowship, and which was spent at the London School of Economics and Political Science and at Harvard University.

Associate Professor Q. B. Gibson's recent book, *"The Logic of Social Enquiry"* (Routledge), was favourably reviewed in a full length *"Critical Notice"* in the May issue of the Australasian Journal of Philosophy.

Dr. George Schlesinger, recently appointed to a senior lectureship in the Department of Philosophy, has accepted an invitation to give a series of seminars on Philosophy of Science at the University of Melbourne.

Mr. Bruce Benjamin, on study leave during 1961, has been touring the United States during March and April and is at present at Oxford, completing a research project on "Sensations".

Dr. J. H. Tisch-Wackernagel's study of Milton's concepts of literary and religious immortality and their European (especially English and German) background is to be published by Francke A. G., Berne, Switzerland, in a recently inaugurated series of modern monographs.

The Department of Geology has moved into its new quarters in the Physics Building, where it now occupies portion of the west wing. The teaching and research facilities of the Geology Department will be housed in the Physics Building pending the construction of a Geology building, which will also be sited near University Avenue.

UNIVERSITY HOUSE, ADMINISTRATION AND LIBRARY

New Appointments

Mr. D. W. Smith has been appointed Assistant Registrar from 18th January. Mr. Smith is a graduate of the University of Melbourne and is married with two children. From April, 1958, Mr. Smith was senior lecturer in Industrial Relations and Industrial Law in the Canberra University College and then the School of General Studies: he had previously held appointments in the University of Melbourne.

Mr. Noel Stockdale and Miss C. Campbell-

Smith have been appointed Associate Librarians in the Institute of Advanced Studies and in the School of General Studies, respectively. Mr. Stockdale was formerly Deputy Librarian of the University before association with the College, and Miss Campbell-Smith was Librarian of the Canberra University College.

The University has appointed a Translator, Mr. Constantine Kiriloff, who will be attached to the staff of the University Library. Mr. Kiriloff has had considerable experience of translating scientific and other material from Russian and Chinese and can also undertake translation from other East European and Slavonic languages.

Visitors

Among the visitors to the University and University House since the last issue of the 'News' have been: Professor R. L. Mathews, University of Adelaide; Rev. Dr. W. T. R. Flemington, President, Mt. Allison University, and Mrs. Flemington; Mr. J. E. H. Steegman, the distinguished art critic; Professor Huston Smith, Massachusetts Institute of Technology; Mr. W. D. Craig, Registrar of the University of Hull; and Professor Hedley Atkins, Professor of Surgery in the University of London.

RESEARCH STUDENTS

RESEARCH STUDENTS IN THE INSTITUTE OF ADVANCED STUDIES

JOHN CURTIN SCHOOL OF MEDICAL RESEARCH

The following students have been admitted (the name, department, age, academic background and date of arrival of each student is litsed below):—

*David Selwyn Nelson (Experimental Pathology) 24. B.Sc. (Med.). M.B., B.S. (Syd.). 13th January, 1961.

*Tomokazu Oshima (Physiology) 26. M.D. (Tokyo). 17th February, 1961.

*Max William Simpson-Morgan (Experimental Pathology) 24. B.V.Sc (Syd.). 13th January, 1961.

*Ronald Colin Baglin Weir (Microbiology) 23. B.Sc. (Adel.). 6th March, 1961.

*Valentine Peter Ackerman (Microbiology) 34. B.A., M.B., B.S. (Syd.). 30th January, 1961.

Thomas Duncan Campbell Grace (Microbiology) 32. B.Sc. (Syd.). 6th March, 1961.

*Brian Richard McAuslan (Microbiology) 28. 21st April, 1961.

*Brian Leslie Hillcoat (Biochemistry) 28. M.B., B.S. (Qld). (Working at University of Queensland during 1961.).

*Peter Schiff (Biochemistry) 26. B.Sc. (Med.), M.B., B.S. (Syd.). (Working at University of Sydney during 1961.)

Margaret Martin-Smith (Biochemistry) 22. M.Sc. (N.Z.). 13th June, 1961.

†Thomas Anthony Sears (Physiology) 33. B.Sc. (Lond.). 24th February, 1961.

‡William James O'Sullivan (Biochemistry) B.Sc. (W.A.). 1st January, 1961.

‡Thomas Edward MacDermott (Biological Inorganic Chemistry) B.Sc. (Syd.). 1st January, 1961.

The following scholarship awards have been announced but the students have not arrived at time of going to press.—

*Horst Amling (Biological Inorganic Chemistry) 25. Diplom (Munich).

*Joseph Gustave Hall (Experimental Pathology) 27. M.B., B.S. (Lond.), M.R.C.S., L.R.C.P.

RESEARCH SCHOOL OF PHYSICAL SCIENCES

The following students have been admitted (the name, department, age, academic background and date of arrival of each student is listed below):—

*John Archibald Graham (Astronomy) 21. 1st January, 1961.

*Mihir Kumar Roy (Theoretical Physics) 28. M.Sc. (Calc.). 3rd March, 1961.

*John Grenfell Jenkins (Nuclear Physics) 23. B.Sc. (Adel.). 20th February, 1961.

*Arthur Graham Pulford (Particle Physics) 32. M.Sc. (Syd.). 4th April, 1961.

*Robert Samuel Boeson (Geophysics) 23. B.Sc. (N.E.). 16th January, 1961.

*Edwin Albert Manwaring (Geophysics) 21. 16th January, 1961.

*Rodney Leonard Jory (Ion Diffusion Unit) 22. B.Sc. (Adel.). 10th March, 1961.

‡John Bartlett Whiteoak (Astronomy) B.Sc. (Melb.). 1st January, 1961.

¶Lindsay Gordon Earwaker (Nuclear Physics) 23. B.Sc. (N.Z.). 18th March, 1961.

¶Eric Weigold (Nuclear Physics). Award renewed.

The following scholarship awards have been announced but the students have not arrived at time of going to press:—

*Martin John Dunwoody (Mathematics) 22. B.Sc.

Rodney James Baxter (Theoretical Physics) 21. B.A. (Cantab.).

*Kurt Nixdorff (Particle Physics) 26 Diplom-Vorprufung (Munich).

*Ian Douglas Martin (Geophysics) 23. B.Sc. (W.A.).

*Robert Thomas Pidgeon (Geophysics) 23. B.Sc. (W.A.).

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*Commonwealth Postgraduate Scholar.
†Wellcome Postgraduate Research Fellow.
‡General Motors-Holden's Postgraduate Research Fellow.
¶A.I.N.S. & E. Student.

RESEARCH SCHOOL OF SOCIAL SCIENCES

The following students have been admitted (the name, department, age, academic background and date of arrival of each student is listed below):—

*Harold John Barrett (History) 29. B.A. (Adel.). 31st January, 1961.

*Peter Noel Lamb (Economics) 33. B.Ec. (Syd.). 16th January, 1961.

*Jagat Narain (Law) 28. M. Com., LL.M. (Rajasthan). 28th February, 1961.

*Colin Martin Tatz (Political Science) 26. B.A. (Natal). 11th January, 1961.

*Geoffrey Francis Waldie Yeo (Statistics) 22. B.Sc. (W.A.). 1st February, 1961.

*Donald Alexander Aitkin (Political Science) 23. B.A. (N.E.). 13th February, 1961.

*Duncan Bruce Waterson (History) 26. B.A. (N.Z.). 8th February, 1961.

*Clement Allan Tisdell (Economics) 21. B.Com. (N.S.W.). 13th March, 1961.

*Dora Burgess (Social Philosophy). M.A. (Qld.). 6th March, 1961.

*Brian Sinclair Jardine (Social Philosophy) 21. B.A. (Syd.). 27th March, 1961.

*Ian Downing Potter (Social Philosophy) 25. B.A. (Adel.). 18th May, 1961.

*Kogalur Gowdar Basavarajappa (Demography) 30. M.Sc. (Karnatak). 23rd April, 1961.

*David Ian Pool (Demography) 24. M.A. (N.Z.).

*Ravinder Kumar (History) 28. B.Sc., M.A. (Delhi). 21st May, 1961.

**Isabel Mary Lawson Scott (History) B.A. (Lond.), M.A. (Wyoming). 26th April, 1961.

**Param Ajeet Singh Bal (Economic History) 24. B.A. (Malaya). 1961.

The following scholarship awards have been announced but the students have not arrived at time of going to press:—

*Raj Krishna (Law) 28. B.Sc. LL.M. (Lucknow).

*Phyllis Grace Peter (History) 22. B.A. (Adel.).

*Charles Lambert Maria Cornelis Beltz (Demography) 31. B.Pol. and Soc.Sc. (Nijmegen).

RESEARCH SCHOOL OF PACIFIC STUDIES

The following students have been admitted (the name, department, age, academic background and date of arrival of each student is listed below):—

*David Alexander Madine Lea (Geography) 26. B.A. (Adel.). 18th January, 1961.

*Alaric Mervyn Maude (Geography) 22. B.A. (Syd.). 31st January, 1961.

*Poh Seng Png (Far Eastern History) 31. B.A. (Malaya). 18th April, 1961.

*Sumer Singh (Economics) 26. M.Com. (N.Z.). 22nd February, 1961.

*Gerald Patrick Walsh (Geography) 25. M.A. (Syd.). 3rd February, 1961.

*Christopher Hugh Hereward Wake (Pacific History) 23. M.A. (N.Z.). 15th February, 1961.

*Margaret Tudor Spry South (Far Eastern History). B.A. (Syd.). 2nd February, 1961.

*Jitendra Pal Singh (Anthropology) 26. B.A. (Panjab), B.Sc. (Eng.) (Lond.), M.A. (Econ.) (Manc.). 9th December, 1961.

*John Michael Matthews (Anthropology) 28. M.A. (Cantab.). 2nd June, 1961.

**John Thomas Purcal (Economics) 29. B.Sc. (Econ.) (Hull), M.A. (Econ.) (Malaya). 9th March, 1961.

The following scholarship awards have been announced but the students have not arrived at time of going to press:—

*Lalita Prasad Singh (International Relations) 25. M.A. (Alld.).

*Jean-Luc Vellut (International Relations 24. Cand. Phil. et Lettres (Brussels), Lic. en Histoire (Louvain).

*Tadahiko Hara (Anthropology) 27. M.A., (Tokyo).

*Gerard Francillon (Anthropology) 29. B.Litt., Dip.Soc. Anthropology (Oxon.).

SCHOOL OF GENERAL STUDIES

The Board of the Institute of Advanced Studies has also approved the enrolment for the Ph.D. Degree of three students under the supervision of departments of the School of General Studies. Details of these enrolments appear under the Faculty of Science.

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*A.N.U. or Commonwealth Postgraduate Scholar

**British Commonwealth Scholarship and Fellowship Plan.

RESEARCH STUDENTS IN THE SCHOOL OF GENERAL STUDIES†

FACULTY OF ARTS

The following students have been admitted as candidates for the degree of Master of Arts (the name, department, academic background and year of commencement of each student is listed below) :—

Charles James Ashman (English). B.A., (W.A.). 1961.

*Rosemary Sybil Babbage (Philosophy). B.A. (N.E.). 1961.

Peter Bian Lin Cheah (Political Science). B. Com. (Melb.). 1961.

Bernard Henry Crew (History). B.A., Dip.Ed. (Q'ld.). 1961.

Ian Thomas Cummins (Russian). B.A. Dip.Ed. (Melb.). 1961.

Eugene Forrest Herbert (Economics). B.A. (W.A.). 1961.

Garth Lawrence Mansfield (Economics). B.A., Dip.Ed. (Syd.). 1961.

John Gerald McMahon (Economics). B.A. (W.A.). 1960.

*Christianus Lambertus Maria Penders (History). B.A. (Melb.). 1961.

Barbara Elizabeth Thorn (History). B.A. (Syd.). 1960.

*Wendy Anne Fairfax Thorn (Psychology). B.A. (Syd.). 1961.

FACULTY OF ECONOMICS

The following students have been admitted as candidates for the degree of Master of Economics (the name, department, academic background and year of commencement of each student is listed below) :—

Paul Douglas Abbott (Economics). B.Sc. (Lond.), LL.B. (Melb.). 1959.

John Laurence Carroll (Economics). B.A. B.Sc., B.Com. (Melb). 1961.

Kevin John Cosgrove (Political Science). B.Ec. (Syd.). 1960.

†A further 26 students are enrolled as candidates for the Master's degree in both Art and Economics Faculties, but are required to take a preliminary examination before undertaking research for the Master's degree.

Ferenc Juhasz (Economics). B.Ec. (Adel.). 1961.

Raymond Francis O'Donohue (Economics). B.Ec. (Adel.). 1960

James Carson Pomroy (Economics). B.Com. (Q'ld). 1960.

Mailvaganam Raja Ratnam (Economics). B.A. (Melb.). 1960.

Bruce David Shields (Economic History). B.Com. (Melb.). 1961.

William Darbyshire Thorn (Economic History). B.Com. (Melb.). 1960.

Mendel Weisser (Economics). B.A., B.Com. (Melb.). 1960.

John James Wilson (Economics). B.Com. (Melb). 1961.

FACULTY OF SCIENCE

The following students have been admitted as candidates for the degrees of Doctor of Philosophy or Master of Science (the name, department, academic background and year of commencement of each student is listed below) :—

For the Degree of Doctor of Philosophy

*David Keith Gibson (Physics). B.Sc. (Melb.). 6th March, 1961.

‡Barbara Jean Gillam (Psychology). B.Sc. (Syd.). 20th February, 1961. (Q'ld.). 28th June, 1961.

*William Finton Ridley (Botany). M.Sc. (Q'ld). 28th June, 1961.

For the Degree of Master of Science

Vivian Maxwell Bofinger (Geology). B.Sc. (N.E.). 1961.

Arthur Ralph Jensen (Geology). B.Sc. (Syd.). 1960.

Nigel Edwin Alexander Johnson (Geology). B.Sc. (W.A.). 1960.

George Orlando Mackinnon (Zoology). B.A. (San Francisco State College). 1961.

Barry Vince O'Grady (Chemistry). B.Sc. (W.A.). 1960.

John Wallis Smith (Geology). B.A. (Oxon.). 1961.

Marina Von Hein (Geology). B.Sc. (N.E.) 1961.

Ernest Gilbert Wilson (Geology). B.Sc. (Q'ld.). 1960.

*A.N.U. or Commonwealth Postgraduate Scholar.
‡General Motors-Holden's Postgraduate Research Fellow.

PUBLICATIONS

Two books have so far this year been published on behalf of the Publications Committee: Dr. Norma McArthur, *Introducing Population Statistics* and Dr. Alan Barnard, *Visions and Profits: Studies in the Business History of T.S. Mort.* The first was published by Oxford University Press, in association with the South Pacific Commission; the second, by Melbourne University Press. By the time this 'News' is published, a third book will have been published—Dr. Noel Barnard, *Bronze Casting and Bronze Alloys in Ancient China.* Two other books are expected to be published about October of this year — Dr. D. W. Rawson's *Australia Votes* and Dr. R. N. Rosecrance's *Australian Diplomacy and Japan,* 1945-1951.

Two further works are in course of publication: Dr. R. F. Salisbury, *From Stone to Steel* and Dr. Alan Barnard (ed.) *The Simple Fleece: Studies in the Australian Wool Industry.* Publication is expected late in 1961 or early in 1962.

Two of the works published on behalf of Publications Committee by Melbourne University Press — Dr. H. O. Pappe's *John Stuart Mill and the Harriet Taylor Myth* and Dr. J. Zubrzycki's *Immigrants in Australia*—were selected among the Twelve Best Books of the Year 1960-61 (for technical excellence) by a committee consisting of Mr. W. G. Anderson, Mr. Robin Byrd and Dr. Ursula Hoff.

BOOK REVIEW

(From the Journal of the American Chemical Society, 1961, **83**, 508).

SELECTIVE TOXICITY

Selective Toxicity. By Adrien Albert, D.Sc. (Lond.), Ph.D. Medicine (Lond.), F.R.I.C., Fellow of the Australian Academy of Science, Professor of Medical Chemistry in the Australian National University. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N.Y. 1960. x + 233 pp. 14.5 x 22 cm. Price, $5.50.

The relationship of chemical structure to biological activity is one of the most elusive subjects in medicinal chemistry. Difficult as it is, it is slowly being untangled, with amazing commercial results ranging from new and specialised weed killers to increasingly efficient chemotherapeutic materials.

Professor Albert has made this book a milestone in the reporting of information on this subject. The original edition, first published in 1951, has been revised and enlarged. Starting out as a course of postgraduate lectures, the subject matter has been expanded from eight chapters to thirteen. Part I, containing the first four chapters of general interest, is intended for undergraduates. This may be slightly optimistic since this part takes for granted certain chemical and biographical information not usually attained at the undergraduate level. This part covers a description of selective toxicity, a bird's-eye view of the mechanisms of absorption, distribution and excretion with a discussion on receptors, a background of chemotherapy with an account of the contributions of Paul Ehrlich and a chapter on pharmacodynamics. Part II, with nine chapters of a more advanced character, is clearly written. It contains information of a fundamental nature covering many of the numerous theories on the subject. In this part, Professor Albert takes the opportunity to describe several of his own experiments and findings, particularly his work on the acridine series. This part of the book covers theories involving metabolites, enzymes, ionization, metal-binding agents, various chemical bonds, surface chemistry and steric factors.

The book is well organised, containing an adequate index and also a reference bibliography. The latter, as is common with Commonwealth authors, prefers British to American references. However, this is not overdone. The chapter headings contain informative summaries which are useful. The subject matter is presented in logical manner, although in several instances somewhat repetitiously. This has the effect of over-emphasizing certain subjects.

In general, this book is another step forward in the structure-biological activity relationship field. It should be read by all scientists interested in the subject.

ADVERTISEMENTS

SOCIAL SCIENCE RESEARCH COUNCIL OF AUSTRALIA

Application for Research Grants in the Social Sciences

The Social Science Research Council of Australia again invites applications for research grants in the social sciences.

Applications for research grants should be made on the prescribed forms and should be in the hands of the Secretary of the Social Science Research Council of Australia, Academy of Science Building, Gordon Street, Canberra City, A.C.T., by the 15th September, 1961. Application forms will be forwarded by the Secretary on request.

Grants will normally be made for one year. Money will not be given as "training grants", e.g. for an M.A. degree, but this does not preclude a grant to a project in which some of the research workers may be proceeding towards an M.A. degree. Preference will be given to projects not assisted from other sources.

The nature and extent of the assistance to be given to any particular project will depend upon its method of organisation and the number of workers involved, but research assistance and travelling and other expenses directly associated with the research may be taken as examples of matters considered appropriate to the purposes of the grant.

Applications for grants may be made by heads of departments in universities or other similar institutions, or directly by the individuals who intend to conduct the research.

R. S. PARKER,
Honorary Secretary

Academy of Science Building,
Gordon Street,
Canberra City, A.C.T.

THE COMMITTEE OF VICE-CHANCELLORS AND PRINCIPALS OF THE UNIVERSITIES OF THE UNITED KINGDOM

VERBATIM REPORT

OF THE

1960 HOME UNIVERSITIES CONFERENCE

Topics of Discussion and Principal Speakers:

The Future of the General Degree

MR. D. W. REECE (Aberdeen)

PROFESSOR F. C. FRANK (Bristol)

New Universities

MR. J. S. FULTON (Sussex)

PROFESSOR L. C. SYKES (Leicester)

The verbatim Reports of the Home Universities Conferences held in the following years may be obtained from the Secretary, A.U.BC.., 36 Gordon Square, London, W.C.1: 1949 (1/6 post free); 1952 and 1954 (2/6 each; 1955 and 1956 (3/6 each); 1957, 1958 and 1959 (5/- each). Allother Reports in this series are now out of print.

Librarians and others who wish to have a copy of the Report of each future Home Universities Conference sent to them immediately on publication, without further re-ordering on their part, are invited to place a Standing Order.

Subjects and Opening Speakers, 1955-59:

1955

From the Sixth Form to the University (Mr. H. D. P. Lee, Dr. K. Anderson, Professor N. F. Mott).

The Financing of Research in Universities by Outside Bodies (Dr. V. E. Cosslett, Sir Harry Melville, Sir Harold Himsworth).

The Age-Group Bulge and its Possible Effects on University Policy (Dr. G. E. F. Chilver, Professor R. G. D. Allen).

1956

Overloading Curricula and the Length of Undergraduate Courses (Mr. R. B. McCallum, Professor C. Bruce Perry, Professor D. G. Christopherson).

Organisation of Postgraduate Studies (Sir James Mountford, Dr. D. A. Bell, Professor F. S. Dainton, Professor E. R. H. Jones).

Impact on the Universities of the Government's Policy for the Expansion of Technological Education (Sir Eric Ashby, Sir Harry Pilkington, Sir Willis Jackson).

1957

Residential Life in the University of Today (Professor W. R. Niblett, Professor D. R. Seaborne Davies, Dr. W. Neil, Sir James Duff).

Procedure for the Selection of Undergraduate Students (Sir James Mountford, Mr. W. Hamilton, Miss M. Joyce Bishop, Dr. C. L. G. Pratt).

Academic Mobility (Dr. C. M. Rigby, Professor A. G. N. Flew, Sir Robert Aitken).

1958

Can the General Certificate of Education Examination be made more useful in relation to the Admission Problem? (Professor R. A. C. Oliver, Professor L. Howarth, Dr. K. Urwin).

Teaching Standards and Techniques, and the Supervision of Students in Universities, with special reference to the Forthcoming Expansion (Professor S. T. Bindoff, Professor R. J. Pumphrey, Professor B. Bleaney).

The size of Universities and University Departments and the Need for New University Institutions (Sir Patrick Linstead, Professor E. Devons, Dr. R. Pedley).

1959

University Co-operation in the Commonwealth (Dean G. F. Curtis, Dr. E. J. Bowen, Professor W. M. Arnott).

University Libraries (Mr. K. W. Humphreys, Professor J. M. R. Cormack).

Administrative Problems in Expanding Universities (Professor O. A. Saunders, Dr. G. N. Burkhardt).

National Printers Pty. Ltd., A.C.T.