



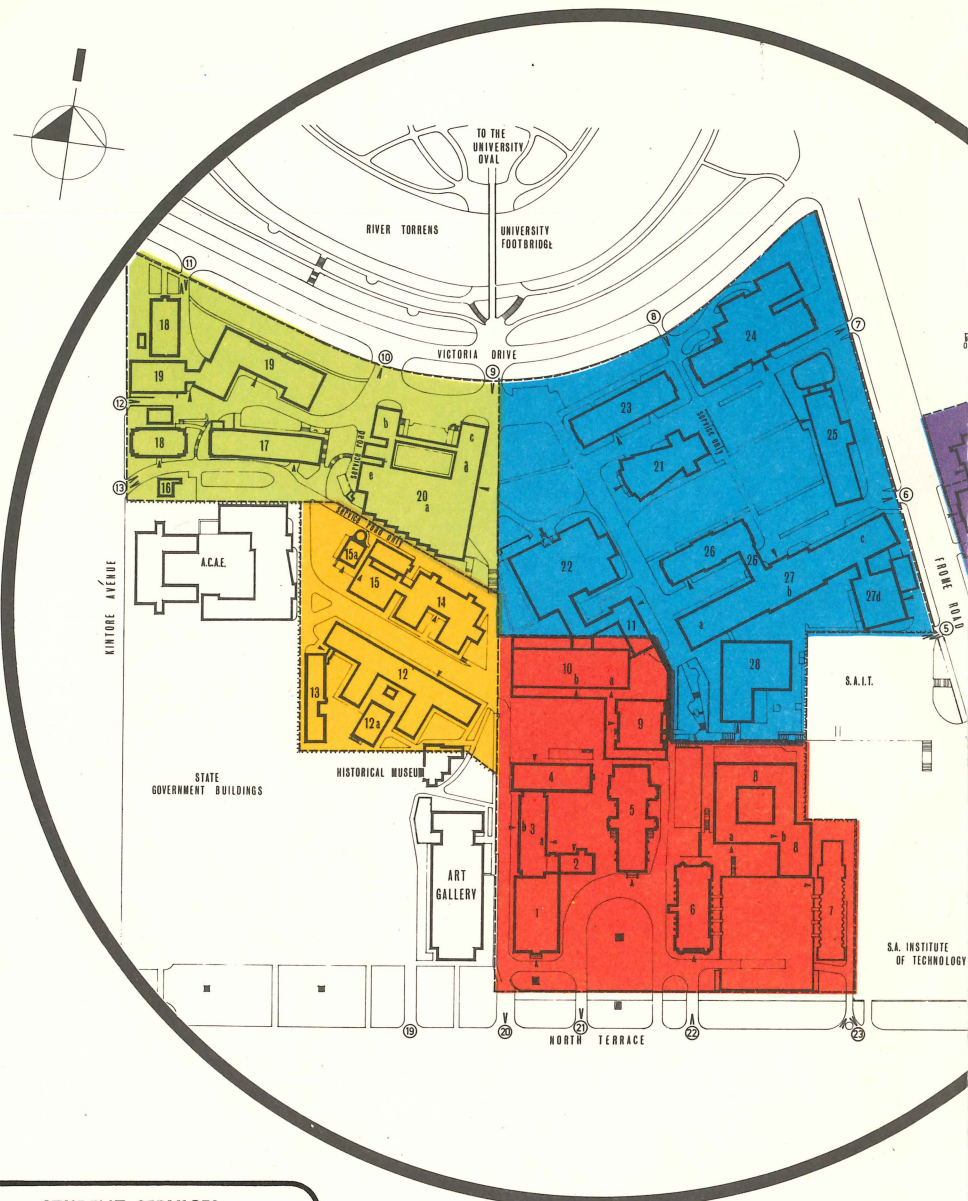
THE UNIVERSITY OF ADELAIDE
SOUTH AUSTRALIA

1979

CALENDAR

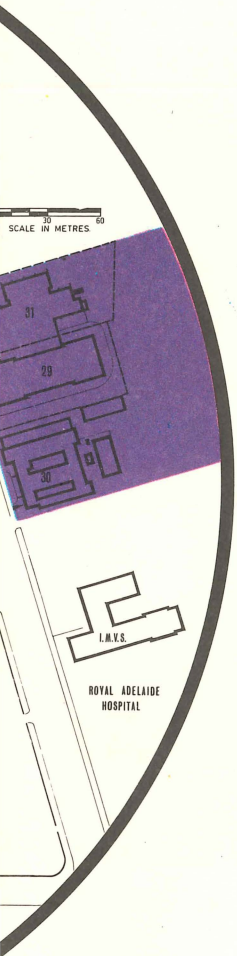
VOLUME III

Annual Report 1978; Financial Statements 1978;
Bibliography 1978.



- STUDENT SERVICES**
- Academic Registrar**, Academic Section, Faculty Secretaries, Mitchell Bldg., First Floor - 1
 - Careers Advisory Service**, Old Classics Wing, Top Floor - 2
 - Counselling Service**, University Union, George Murray Bldg., First Floor - - - - - 20C
 - Health Service**, Horace Lamb Bldg., Ground Floor - - - 11
 - Welfare Service**, University Union, Ground Level, opposite Little Theatre - - - - - 20E

THE UNIVERSITY OF ADELAIDE



- Mitchell Building** - - - - 1
Administration.
Office of
Academic Registrar.
Bursar.
- Old Classics Wing** - - - - 2
Administration.
Architectural Services
Department.
Parking Office.
- Kenneth Wills Building** - - - 3
a. Administration.
Office of
Vice-Chancellor.
Registrar.
Academic Registrar.
b. Adult Education.
b. Post Office.
- Hughes Building** - - - - 4
Advisory Centre for
University Education.
Anthropology.
Bank of Adelaide.
Multilith Centre.
Music.
Psychology.
W.E.A.
- Elder Conservatorium** - - - 5
- Bonython Hall** - - - - 6
- Ligertwood Building** - - - 7
Classics.
Law.
Philosophy.
- Napier Building** - - - - 8
a. Commerce.
a. Economics.
b. Education.
b. English.
b. French.
b. Geography.
b. German.
b. History.
b. Politics.
- University Club** - - - - 9
- Library Complex** - - - - 10
a. Architecture.
a. Computing Centre.
a. Computing Science.
a. Health Service.
a. Radio VL5UV.
b. Research Library.

- Physics Building** - - - - 12
Physics.
a. Workshops.
- Oliphant Wing** - - - - 13
Physics.
Mathematical Physics.
Mawson Institute.
Environmental Studies.
- Darling Building** - - - - 14
Biochemistry.
- Bragg Laboratories** - - - 15
Physics.
- Observatory** - - - - 15a

- Services Supt.'s Residence** - 16
- Organic Chemistry** - - - 17
- C.S.I.R.O.** - - - - - 18
- Johnson Laboratories** - - 19
Physical and Inorganic
Chemistry.
- University Union** - - - - 20
a. Refectory and
Amenities.
b. Lady Symon Building.
c. George Murray Building.
d. Union Bookshop.
e. Little Theatre.

- Horace Lamb Building** - - 11
Architecture.
Mathematics.
Library.
Asian Studies.
- Union Hall** - - - - - 21
- Barr Smith Library** - - - 22
- Benham Laboratories** - - 23
Botany.
- Mawson Laboratories** - - 24
Economic Geology.
Geology.
- R. A. Fisher Laboratories** - 25
Biology.
Genetics.
Zoology.
- Mathematics Building** - - 26
Mathematics.
Statistics.
- Engineering Building** - - - 27
a. Civil
b. Electrical
c. Chemical
d. Engineering Depts.
- Mech. Engineering Building** - 28

- Medical School** - - - - 29
Anatomy.
Microbiology.
Pathology.
Physiology.
- Medical Sciences** - - - 31
Anatomy.
Pathology.
Physiology & Pharmacology
Electron-Microscopy.
- Dental School** - - - - 30
Dental Health.
Oral Biology.
Oral Pathology and
Oral Surgery.
Restorative Dentistry.

THE FOLLOWING ARE AT NORTH ADELAIDE

- | | |
|---|--------------------|
| Mark Mitchell Centre
Physical Education Administration.
Gymnasium.
Squash Courts. | Mackinnon Parade |
| Child Care Centre | Mackinnon Parade |
| Aquinas College | Palmer Place |
| Lincoln College | Brougham Place |
| Kathleen Lumley College | Finnis Street |
| St. Ann's College | Brougham Place |
| St. Mark's College | Pennington Terrace |

CALENDAR
OF
THE UNIVERSITY OF ADELAIDE
FOR THE YEAR
1979
VOLUME III

ADELAIDE:
GRIFFIN PRESS LIMITED, MARION ROAD, NETLEY
1979

ADDRESS FOR CORRESPONDENCE

Correspondence should be addressed as follows:

About courses (and related matters such as admission, examinations, scholarships and prizes), and educational matters generally: *to*

The Academic Registrar.

About financial matters: *to*

The Bursar.

About other matters, including staff appointments of all kinds and matters relating to the buildings and grounds: *to*

The Registrar.

Address:

The University's postal address is:

The University of Adelaide,
Box 498 G.P.O.,
ADELAIDE,
South Australia 5001.

The University's telephone number is 223 4333 (Area Code: 08) and the Telex number is UNIVAD AA89141.

The University of Adelaide

F O R E W O R D

The Calendar of the University is published annually in three Volumes, as follows:

VOLUME I

General information, including—

- The University Act
- Staff
- Statutes
- Standing Orders of the Senate
- The Elder Conservatorium of Music
- Institutions, Foundations and Colleges of the University
- Public Lectures and Courses
- Service Departments and Divisions of the University
- Scholarships and Prizes
- Societies Associated with the University

VOLUME II

“Details of Courses”, being—

- Regulations, Schedules and Syllabuses of degree and diploma Courses
- Rules
- Timetables

VOLUME III

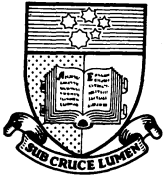
Annual Report, including—

- Financial Statements
- Bibliography

The Commemoration Addresses and the List of Graduates and Diploma Holders of the University have not been published in Volume III of the Calendar for 1978. An up-to-date list of graduates and diploma holders is maintained by the Academic Registrar and may, on application, be consulted in his Office.

These Volumes are normally published as follows:

- VOLUME I: In May: price \$2.
 - VOLUME II: In December: price \$1.
 - VOLUME III: In August: price \$1.
- Postage extra.



THE ARMS OF THE UNIVERSITY

The heraldic description of the Coat of Arms is as follows:

Per pale Or and Argent an Open Book proper edged Gold on a Chief Azure five Mullets, one of eight, two of seven, one of six and one of five points of the second, representing the Constellation of the Southern Cross;

and the Motto associated with the Arms is—

Sub cruce lumen

“The light (of learning) under the (Southern) Cross”

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ANNUAL REPORT FOR THE YEAR 1978

I. INTRODUCTION

The past year has been a difficult period for the University, but one in which scholarship and research have proved that they cannot be stifled by financial restrictions. Government funding cuts have forced the University to make some difficult decisions to reduce or eliminate courses and have prevented it from developing in other areas.

The difficulties associated with steadily shrinking funding continued to overshadow all other aspects of the internal management of the University. The University has been able to meet these funding cuts only by disestablishing posts, freezing other posts, and delaying appointments to almost all other posts as they fall vacant. This form of achieving economies is highly undesirable as it is randomly distributed throughout the University and its impact does not necessarily fall in the most appropriate places. Development is almost impossible as it can only be achieved by contraction elsewhere. The funding restrictions have robbed the University of most of its flexibility in the short and medium term and made it most difficult to cope with the various pressure points as they have developed.

The Committee of Enquiry into Post-Secondary Education in South Australia (the "Anderson Committee") published its Report during the year. The Report was issued in two parts: Chapters 9 and 10 dealing with the Future Pattern of Higher Education and the Co-ordination of Post-Secondary Education in South Australia were released in April 1978, and the remaining chapters were released in September. The recommendation of most concern to the University was that the South Australian Government should establish a statutory co-ordinating authority for tertiary education in this State to be named the Tertiary Education Authority of South Australia. This body would be empowered, *inter alia*, to make recommendations to the Minister of Education and to the Tertiary Education Commission on the allocation of funds (both capital and recurrent) to tertiary institutions, to approve any proposed new course in a tertiary institution, to request any tertiary institution to introduce a course or discontinue an existing course, and (through a permanent standing committee) to accredit courses in tertiary institutions. The University was quick to express its total opposition (as it had already done in its earlier submission to the Committee) to those aspects of the recommendation which would deny direct access by the University to the TEC and would give the proposed TEASA power to approve or accredit University courses, and it observed in particular that the discussion in the Report was cast almost entirely in terms of the teaching functions of institutions, research (of vital importance to the Universities) hardly being considered at all. In October the Minister of Education announced that the Government had decided to introduce into Parliament legislation to establish a TEASA as recommended, though not necessarily on the lines set out in the Anderson Report. The Minister consulted the University very fully during the drafting of this legislation, and at the end of the year was still considering the representations made by the University and other interested bodies.

During the year the Council, as well as individual members of staff, continued to express growing concern at what appeared to be increasing threats from outside sources to the autonomy of the University. Among such threats were the reduction in real terms of the University's funding, the restrictions on study leave, and the growing number of government and semi-government regulating and co-ordinating bodies in the field of tertiary education. This concern culminated in the organisation by the University in October 1978 of a seminar entitled "The Defence of Excellence in Australian Universities". More than 200 people, including 30 from interstate, heard five main speakers present papers which led the Vice-Chancellor to observe in his concluding remarks that the seminar had undoubtedly shown that universities were under attack. He said the seminar had exposed some of the problems facing universities and had indicated the enormous amount of work that had to be undertaken before positive action could be achieved.

2. THE CHANCELLOR AND THE DEPUTY CHANCELLORS

In November, the term of office of the Chancellor, the Hon. Dr. J. J. Bray, expired and he was re-elected for a further term of five years as from 1 November 1978.

In July, under the authority of the newly-amended University Act, the Council conducted an election to appoint an additional Deputy Chancellor. Dr. E. H. Medlin was elected to this position for a period of 3 years as from 14 July 1978. The Council also agreed that Justice R. F. Mitchell would in future be known as the Senior Deputy Chancellor.

3. THE COUNCIL AND THE SENATE

In October, in accordance with the provisions of the University of Adelaide Act 1971-78, Mr. D. S. Johnston and Mr. J. Malbon retired as members of Council elected by the undergraduates. As a result of the election by the undergraduates Ms. S. McCoy and Mr. J. Sandeman were elected to fill the two vacancies.

At the November election by the Convocation of Electors, five normally occurring vacancies and one casual vacancy were filled. In accordance with the amended University Act the number of persons elected by the Convocation was increased to twenty-four from twenty-two. These two additional members were elected this year, one as an additional member not engaged in the employment of the University and one as a member engaged in the full-time employment of the University as a member of the ancillary staff.

In November, Professor C. A. Hurst and Professor D. Rowley retired as members of the academic staff elected to the Council and Professor J. H. Carver resigned, thus causing a casual vacancy. Dr. G. M. E. Mayo and Professor J. P. Quirk were elected to the normal vacancies and Professor F. G. Jarrett was elected to fill the casual vacancy. Mr. C. W. Bonython, Dr. J. R. Melville and Justice R. F. Mitchell retired as members of the Council not engaged in the employment of the University. Mr. Bonython and Justice Mitchell were re-elected; Dr. Melville, who did not stand for re-election, was replaced by Mr. T. R. N. Lothian; and Mr. I. S. D. Hayward was elected to the additional vacancy created by the amended Act. Mr. I. R. Goodwins was elected as a member of the full-time ancillary staff to the other vacancy created by the amended Act.

In February the Council was saddened by the death of the Hon. F. J. Potter, who was a Parliamentary Member of the Council and who had served in that capacity since 1962. The Parliament subsequently appointed the Hon. C. M. Hill to the vacancy.

At the end of the year, the Hon. J. C. Bannon resigned as a Parliamentary Member of the Council, on account of the pressure of his ministerial duties.

At its meeting in November, the Senate re-elected Mr. W. M. Rogers as its Warden and Mr. T. J. Somerville as its Clerk. Mr. T. A. Culshaw, Mrs. J. S. Kerby, Mr. G. W. McGargill, Mr. D. R. Orchard, Mr. J. R. Patterson, Ms. J. A. Pearce and Ms. J. A. Philip were elected as members of the Senate Standing Committee.

4. ACADEMIC STAFF

(1) Deaths

The Council has recorded with sorrow the deaths of the following former members of staff:

Miss C. M. Eardley, who retired as Senior Lecturer in Botany in 1971, after about 40 years' service in various capacities.

Mr. G. R. Fuller, who retired in 1963 as Senior Lecturer in Physics, after about 40 years' service in all.

Mr. K. T. Hamilton, who had been the first full-time Secretary of the Union and the Sports Association from 1934 to 1957.

Emeritus Professor T. G. H. Strehlow, who retired as Professor of Australian Linguistics in 1973, after about 27 years' service in all.

Mr. J. T. Whelan, who retired in 1975 as Senior Administrative Assistant in the Bursar's Office, after about 20 years' service in all.

Mr. J. Whitehead, who retired in 1977 as Senior Lecturer in Music, after about 18 years' service in all.

(2) Resignations

The resignations of the following members of staff took effect during the year:

Dr. G. L. Brown, Reader in Mechanical Engineering, to take up a professorial appointment at the California Institute of Technology; Professor J. H. Carver, Elder Professor of Physics, to take up an appointment as Director, Research

School of Physical Sciences, Australian National University; Dr. C. R. Evans, Lecturer in Electrical Engineering; Dr. R. C. Hall, Senior Lecturer in Human Physiology and Pharmacology, to take up an appointment with the Department of Health, Canberra; Dr. T. J. Heins, Lecturer in Psychiatry, to take up an appointment in the Department of Psychiatry, Adelaide Childrens' Hospital; Dr. S. G. Hutton, Senior Lecturer in Civil Engineering, to take up an appointment at the University of British Columbia, Canada; Mr. P. J. Madden, Lecturer in Economics, to take up an appointment at the University of Manchester; Mr. W. Meiklejohn, Bursar; Dr. H. C. Quackenbush, Lecturer in Asian Studies, to take up an appointment at the Australian National University; Dr. I. W. Reid, Senior Lecturer in English, to take up a professorial appointment at Deakin University; Dr. J. Robertson-Rintoul, Reader in Anatomy and Histology, to take up an appointment as Reader in Clinical Anatomy at the University of St. Andrews; Professor A. Rogerson, Bonython Professor of Law, to take up an appointment as Judge of the Local and District Criminal Court and Chairman of the Credit Tribunal; Dr. G. J. Thurley, Reader in English, to take up an appointment at the University of Essex; Dr. S. Y. Ying, Senior Lecturer in Anatomy and Histology, to return to the U.S.A.

(3) *Retirements*

The following members of staff retired during or at the end of the year:

Mr. E. R. Corney, who was appointed Lecturer in Classics in 1938 and promoted to Senior Lecturer in 1950; Mr. K. M. Doull, who was appointed Lecturer in Entomology in 1955 and promoted to Senior Lecturer in 1963; Mr. D. G. A. Munro, who was appointed Teacher of Singing with the status of Senior Lecturer in 1967; Professor W. V. MacFarlane, who was appointed Professor of Animal Physiology in 1964; Professor L. F. Neal, who was appointed Professor of Education in 1959; and on invalidity, Mr. D. H. Tyler, who was appointed Lecturer in Civil Engineering in 1953 and promoted to Senior Lecturer in 1960.

(4) *New Appointments*

The appointments of the following members of staff took effect during the year:

Professors: Dr. G. Fay Gale, who was previously Reader in Geography, to the Chair of Geography; Dr. A. D. McCredie, who was previously a Reader in the Department of Music, to a personal Chair; Dr. G. E. Rogers, who was previously a Reader in the Department of Biochemistry, to a personal Chair. Dr. Gale is the first woman to be appointed to a Chair in the University.

Readers: Dr. P. G. Gill, Surgery; Dr. D. E. Pinnock, Entomology.

Senior Lecturers: Dr. D. F. Wilson, Oral Pathology and Oral Surgery.

Lecturers: Mr. R. J. Fowler, Law; Dr. J. N. Gray, Anthropology; Mr. K. Hess, Music; Dr. N. D. McEachern, Politics; Dr. J. M. McIntyre, Restorative Dentistry; Dr. G. Singh, Anatomy and Histology; Dr. G. C. Townsend, Oral Biology.

Bursar: Mr. D. R. Beecher, formerly Accountant of The University College of Wales, Aberystwyth.

(5) *Distinctions*

Professor J. P. Quirk (Director, Waite Institute) was awarded a doctorate *honoris causa* by the Catholic University of Louvain, Belgium, on the occasion of the Centenary of the University's Faculty of Agricultural Science.

The University of Uppsala, Sweden, conferred on Emeritus Professor T. G. H. Strehlow the degree of Doctor of Philosophy *honoris causa*.

Dr. A. Kerr (Plant Pathology) was elected a Fellow of the Australian Academy of Science in recognition of his work on crown gall (a cancerous disease of plants caused by bacteria), and also was awarded the Walter Burfitt Prize.

Professor C. Manwell (Zoology) was elected a Fellow of the American Association for the Advancement of Science, for his research in biochemical and physiological evolution, especially of the respiratory transport proteins and individual variation of enzymes.

Dr. A. R. Stephens (German) and Professor G. C. Nerlich (Philosophy) were elected to Fellowships of the Australian Academy of the Humanities.

Emeritus Professor G. M. Badger (Organic Chemistry) was elected a Fellow of the Academy of Technological Sciences in Australia.

Dr. G. Fay Gale (Geography) was elected a Fellow of the Academy of Social Sciences in Australia.

Dr. D. R. Hainsworth (History) was elected a Fellow of the Royal Historical Society, London.

Dr. D. I. Newble (Medicine) was elected President of the Australasian and New Zealand Association for Medical Education and Associate of the Centre for Medical Education Research and Development and the W.H.O. Western Pacific Regional Teacher Centre for Health Personnel.

Professor P. J. Ypma (Economic Geology) was elected a foreign member of the Royal Netherlands Academy of Science.

Miss B. M. Kimber and Mr. C. T. Leske (Music) were jointly given the Music Award of the National Critics' Circle for outstanding services to music.

Professor T. Brown (Restorative Dentistry) received the Alan Docking Award for his contributions to research in dental anthropology.

(6) *Conditions of Service*

Salary scales were adjusted in accordance with National Wage increases that occurred in the course of the year.

Provisions for contribution by the University towards the removal expenses of new academic staff from interstate and overseas were increased to take account of increased shipping costs in recent years. A lengthy review of principles and procedures relating to the promotion of academic staff concluded with the adoption by Council in October of new provisions to be implemented in 1979.

In April the Council approved in principle a proposal to change the superannuation scheme for academic and related staff from one based on endowment life assurance policies to an expression of benefits based on final or near final salary. During the remainder of the year work continued on the details of the proposed new scheme with a view to implementing the new provisions by the end of 1979.

Following extensive consideration, it was decided to adopt, with effect from May, new conditions of service for tutoring grade staff, i.e. tutors, senior teaching fellows, senior tutors, and a new promotional grade of principal tutor. Subsequently many existing staff members transferred to the new conditions.

(7) *Staff Establishment*

Once again, much time was devoted by the Departmental Staffing Committee to reviewing every academic post which became vacant, and because of the overall reduction in funds, it was forced to continue its policy of disestablishment, delay in replacement, and lowering of the level of appointments. Only three academic posts were formally disestablished, but a number of others have been held frozen pending further investigation. One of the difficulties faced by the Departmental Staffing Committee in disestablishing posts is the random nature of the vacancies that arise; many vacancies occur in departments which have a strong academic case for retaining the posts. As a result, the Committee is being forced increasingly to hold posts vacant for varying periods in order to reduce expenditure; the average delay period is now about six months.

Over the two years 1976-78, the number of equivalent full-time teaching and research staff in the University has decreased from 752 to 732, and the total number of equivalent full-time staff has decreased from 1,953 to 1,878.

(8) *Study Leave*

1978 was the second year of operation of the revised study leave scheme introduced in 1977. Of 120 staff who were granted study leave commencing in 1978, only 115 actually took leave.

The Tertiary Education Commission presented its report on Study Leave in Universities and Colleges of Advanced Education to the Minister for Education in August 1978. The stated purpose of the Commission's recommendations was to achieve a more effective use of the resources of universities and colleges by recommending major changes in the availability of study leave and its administration. While the University was pleased to note that the TEC and the Government recognise the substantial benefits that accrue from study leave, it was very much concerned at the Government's decision to restrict total study leave time to an arbitrary 7% of available staff time. This would have the effect of reducing by almost half the amount of study leave taken by staff of this University. Moreover, the University felt that any savings that might result from the new restrictions would be largely consumed by the cost of administering the new arrangements.

The Council affirmed its support for the existing carefully constructed study leave scheme, and, in October 1978, asserted the right of the University to administer the study leave scheme in the best interests of effecting the wisest balance between teaching and research. A meeting in November of the academic staff supported this view.

At the end of the year, the Study Leave Committee was asked to review the existing study leave scheme with a view to proposing modifications that would take account of the TEC's Report, the Council having agreed that applications for study leave should be scrutinised more closely in an attempt to reduce absences outside Adelaide on study leave by the end of the triennium, but not necessarily as far as the 7% of available staff time envisaged by the TEC.

(9) *Industrial Relations*

The Staff Association has informed the University of its intention to be associated with an application to seek registration as an association of employees under the provisions of the Australian Conciliation and Arbitration Act in relation to academic, professional and other staff. This is seen as part of an emerging tendency for academic staff in Australian Tertiary Educational Institutions to seek to invoke industrial processes. This tendency if applied within the University will have significant implications for the relationships between the University and its academic staff.

5. NON-ACADEMIC STAFF

The conditions of service of the non-academic staff continued during 1978 to be largely governed by the provisions of the two industrial agreements registered in the Industrial Commission of South Australia, one with the Staff Association in respect of professional staff and one with the Ancillary Staff Association in respect of ancillary staff. During the year the Professional Officers Industrial Agreement was amended to provide for revised criteria for promotion of professional officers. At the same time, at the insistence of the South Australian Industrial Commission, an amendment was also included to provide that the salaries of professional staff may not be varied in any way contrary to the National Wage Guideline Principles. In effect, this means that changes in professional staff salaries may not automatically follow changes in academic staff salaries, as has been the case until now, but will need to be justified by some form of work value appraisal.

In 1974, the South Australian Industrial Court ruled that because of the provisions of The University of Adelaide Act, the Industrial Commission had no jurisdiction to deal with industrial disputes between the University and its staff, except in regard to matters covered by the two industrial agreements. During 1978, The University of Adelaide Act was amended at the request of the University to confer jurisdiction upon the Industrial Commission of South Australia in relation to non-academic staff of the University.

Immediately following the amendment of The University of Adelaide Act, both the Ancillary Staff Association and the Federated Clerks' Union of Australia lodged applications in the State Commission for awards for the former to cover all ancillary staff, and for the latter to cover ancillary and professional staff in clerical, administrative and computer related functions. Thirteen unions, including the Staff Association, sought and were granted leave to intervene in the proceedings.

The Ancillary Staff Association challenged the legal capacity of the Federated Clerks' Union to seek an award. That challenge has involved officers of the University giving evidence as to the nature and circumstances of work of administrative professional officers and computer related staff both ancillary and professional. The University informed the Commission that it would remain neutral in this dispute between the Ancillary Staff Association, the Staff Association and the Federated Clerks' Union. At the end of the year the matter was still before the Commission.

The University informed the Industrial Commission of South Australia that it intended, in conjunction with other Universities, to submit that the South Australian Commission should not proceed to the making of an award whilst there were similar award proceedings pending before the Australian Conciliation and Arbitration Commission.

During the year the Staff Association informed the University that it intended to seek an award of the Industrial Commission of South Australia for professional officers.

The hearings in the Australian Conciliation and Arbitration Commission of the logs of claims filed by five Unions against various Universities, and of the counterlog filed by seventeen Universities against the same Unions continued throughout the year. The University of Adelaide was under some pressure from the Staff Association to exclude members of the professional staff from the counterlog of claims, but after long consideration, the Council decided against any such action.

During the year the Queensland Government challenged the jurisdiction of the Federal Commission to make an award in relation to the Queensland Universities. Pending the resolution of that challenge the Federal Award proceedings remained in abeyance; however, negotiations were conducted between representatives of the Universities and the Unions to determine whether some matters could be agreed for subsequent inclusion in an award.

A consolidated industrial relations policy was adopted by the Council and that policy was widely publicised throughout the University in order that the non-academic staff would know the University's general intentions. Aspects of the policy were the subject of explanations and specific undertakings by Council in regard to the guarantees to be given to existing staff during the transition period following the implementation of new awards.

As in the case of academic staff, fairly drastic measures have had to be taken to control and reduce the University's expenditure on non-academic staff, both in the departments and in the service areas. In regard to departmental staff, the Departmental Staffing Committee imposed an average of five months' delay on the filling of non-academic posts that fell vacant. This period was calculated on an actuarial basis, savings accruing from such delay being intended to offset the "incremental creep" (i.e. the inevitable increase in costs resulting from the fact that academic salaries rise annually through a fixed salary scale). While the delay procedures caused difficulties in departments, they at least allowed planning, as it was known when a post would become available. During the year the Departmental Staffing Committee abolished seven support staff posts.

The areas operating under the control of the Services Staffing Committee, namely the Central Administration and service areas such as the Library, Computing Centre, etc., continued to operate in 1978 according to a budget allocation. The overall allocation to these areas was again reduced in 1978. However, section heads were granted the maximum flexibility within their budget allocation provided that not more than 95% of their budget was committed on a permanent basis. The general policy for the control of expenditure was outlined by the Committee but the day-to-day management was left to the section head to be carried out within the guidelines provided. Much of the savings in this area was achieved through a further reduction in the costs of cleaning services. The Services Staffing Committee expressed concern that the position in a number of areas under its jurisdiction had deteriorated to the extent that staff resources were inadequate to meet the work loads. As a matter of principle it was proposed that additional commitments should not be undertaken by the University without a careful prior assessment of the administrative implications and of the ability of the staff to perform their existing tasks efficiently.

For some time now it has been clear that the system used by the University to classify and categorise the non-academic staff of the University, particularly the workshop and laboratory staff, is very defective. The deficiencies have been highlighted in the negotiations with the Ancillary Staff Association over their industrial agreement. The University Council therefore, in 1977, commissioned a report from a firm of consultants (Hay Associates Ltd.) on the possibility of using job analysis and job evaluation techniques in the University to classify posts according to their work value. After a pilot study had been carried out, the Council directed that the study should be extended to all non-academic posts. Difficulties have, however, been experienced in applying the Hay techniques to certain types of post, especially those of professional officer, and the two Staff Associations are not entirely convinced of their applicability in all cases. The most difficult part of the study—that relating to job evaluation, and the development of a new classification system based on it—has not yet been embarked on, and discussions with the Staff Association were still in progress at the end of the year.

6. ACADEMIC MATTERS

(a) *General*

Notwithstanding the difficulties outlined elsewhere in this Report, the University's teaching and research activities have in general been maintained at the same high level as in the past. However, the critical financial situation has placed severe pressure on the major University committees to make difficult academic decisions—particularly the Planning Committee and the Staffing Committees. The Planning Committee has been asked to examine a number of areas in the University to determine the cost of their future needs against the overall needs of the University. These investigations have already resulted in the decision, reported last year, to discontinue the successful postgraduate Library Studies course, and during 1978 the financial implications of the Centre for Environmental Studies, the Advisory Centre for University Education and the Mawson Institute for Antarctic Research were all under investigation.

(b) *Diploma in Business Management*

The Diploma in Business Management was introduced in 1973 to provide a formal qualification for candidates who successfully completed the coursework for the degree of Master of Business Management but who did not proceed to the submission of a dissertation for the Master's degree. In 1975 it was noted that no student had ever enrolled specifically for the Diploma and a regulation was made to provide that no enrolments for the Diploma should be accepted after 31 December 1975; and candidates undertaking coursework for the degree of Master, who did not intend to submit the necessary dissertation, were given until 31 March 1977 to complete the requirements for the Diploma. Following the expiration of this time limit, the regulations were repealed at the end of 1978, and the Diploma was discontinued.

(c) *Library Rules*

Authority to impose fines for offences against the Library Rules was included in the amendments to the University Act, but the Library Committee was not in favour of fines and doubted whether they would succeed in securing the return of property. Accordingly it recommended against the prescription of fines recoverable summarily for contravention of any by-law made to regulate the use of the University Library and of library books or other materials. The University has agreed that, in a serious case where measures already available to the Library prove inadequate to secure the return of an item which a borrower (whether student, member of staff, or other borrower) had on loan, (i) the University solicitors will be asked to send a warning letter to the borrower; and (ii) if further action is necessary, action will be initiated in the small claims jurisdiction of the Local Court to recover the borrowed item.

(d) *Admission of students from other Australian States*

The University has reviewed its policy concerning the eligibility of applicants, whose permanent home is in another Australian State, to be considered for selection for admission to courses. It has been decided that, except for the Faculties of Dentistry, Law and Medicine, no restriction save that of academic merit will be placed on the eligibility of candidates from other Australian States to be considered for selection and admission to first-degree courses but that the University's present policy will continue to apply for admission to first-degree courses in Dentistry, Law and Medicine, i.e. an applicant for one of these courses, other than an overseas student temporarily resident in Australia, who has completed his secondary education in any State or Territory will be declared eligible to be considered for selection subject to certain residential conditions.

(e) *General Development Grants*

The report of the Tertiary Education Committee for the triennium 1979-81 provided *inter alia* for a General Development Grant of \$250,000 for the University of Adelaide in 1979 and in each subsequent year of the triennium. The grants were to be applied (a) to new longer-term developments which, within a relatively short time, may be financed either from recurrent funds released by reductions in existing activities or from other sources; or (b) to permit projects to be undertaken which would terminate in two or three years.

Proposals submitted by various sectors of the University were considered and placed in order of priority by the Committee of Deans and the Co-ordinating Committee and the following projects were approved for introduction in 1979:

- (1) provision of interactive computing facilities (terminals and extra staff) for the undergraduate and postgraduate teaching programs (the purchase of a second computer for this purpose was approved in 1977);
- (2) development of Clinical Pharmacology into a separate department with a new Chair in the subject;
- (3) introduction of a new Master's degree in Legal Studies;
- (4) introduction of courses in Remedial English for students (both local and foreign) whose studies are adversely affected by their lack of competence in English.

(f) *University Titles*

The Council has approved a set of regulations to allow the conferment of a University title on new members of staff of the Teaching Hospitals and the Institute of Medical and Veterinary Science who in return will be expected to provide a considerable (unpaid) contribution to teaching in the University.

The first such title conferred under these regulations was that of Clinical Professor, on Dr. B. Marmion, Director of Virology at the Institute of Medical and Veterinary Science.

(g) *Special Courses*

The Department of Electrical Engineering has organised nine successful courses on Microprocessors over the past two years. These courses are intended to introduce practising engineers and others to this increasingly important aspect of computer technology. In addition, a more advanced course on Microprocessors was given for the first time in 1978.

The Department of Mechanical Engineering has organised several short courses intended to acquaint groups in industry with the fundamental requirements of noise control.

The Department of Agronomy in 1978 conducted a Cereal Breeding Course, designed at postgraduate level for practical cereal breeders and lasting 3-4 months.

(h) *Use of Animals for Experimental and Teaching Purposes*

A Committee on the Ethical Use of Animals has been formed to examine and approve all projects involving the use of animals. The Council has approved guidelines and rules to be followed by all persons using animals for experimental and teaching purposes in the University.

This initiative followed the Council's decision, referred to in last year's Report, to establish a Biological Hazards Committee to regulate research on recombinant DNA (known colloquially as "genetic engineering"). The introduction of these two sets of regulations reflects the University's awareness of its responsibility to the community in areas which could affect the public's safety or codes of behaviour.

7. THE ACT, STATUTES AND REGULATIONS

The long-sought amendments to the University's Act were at last approved by the South Australian Parliament on 22 March 1978, after a last minute flurry of controversy over one particular clause. The principal changes effected by the University of Adelaide Act Amendment Act 1978 are:

- (1) The University has now, for the first time, the power to award an honorary degree. This degree will be called "Doctor of the University" (D.Univ.) and may be awarded to persons who have rendered distinguished service to the University and who are not members of the University staff, and also to members of staff after their resignation or retirement, in appreciation of long and meritorious service to the University.
- (2) The University may now appoint more than one Deputy Chancellor. This power has already been used to appoint a second Deputy Chancellor.
- (3) The membership of the University Council has been increased from 33 to 35. To bring about this increase it is provided that there shall be one member of Council elected from each of the two main groups of non-academic staff (i.e. the professional and the ancillary staff) instead of

- one member elected from the whole of the non-academic staff; and to balance this additional staff member of Council, an additional "outside" member has been provided for.
- (4) To remove a prolific source of argument in the recent past, a formal definition of "undergraduate" has been included, with consequential other amendments.
 - (5) The University Union has been formally incorporated under the University Act (as in the case of the corresponding bodies in the University of Western Australia and James Cook University).
 - (6) The possible doubt previously existing about the University's authority to prescribe and collect membership fees on behalf of the Union has been removed (it was this provision that gave rise to some discussion in the Parliament).
 - (7) Until now, all Statutes and Regulations, and changes therein, have had to be approved by the Senate before they could take effect. The Senate is a large body, consisting of all graduates of the University, all post-graduate students, and all full-time members of staff who are graduates of another University. It meets only once a year and sometimes has difficulty in achieving a quorum; hence there is a possibility that approval of important University legislation may be unacceptably delayed. An amendment to the Act now makes it possible for the Senate to provide in standing orders for non-controversial legislation to be approved on behalf of the Senate by an appropriate Committee. The Senate has already taken action on these lines.
 - (8) The South Australian Industrial Court in 1974 ruled that the Industrial Commission of South Australia had no jurisdiction to make awards binding on the University of Adelaide. The University Council, however, has taken the view that it does not wish to be treated differently from other employers, as far as the jurisdiction of the Industrial Commission is concerned, except in regard to the academic staff who, it is considered, are adequately covered by the Academic Salaries Tribunal. Accordingly, one of the amendments to the University Act brings the University fully under the jurisdiction of the Industrial Commission, except in relation to the academic staff.

Other changes effected by the Amending Act are:

- (1) decisions of the returning officer in regard to Council elections will be final;
- (2) the Council may make by-laws governing the use of the University Library;
- (3) fines levied for contravention of the by-laws are payable to the University.

Changes were made to the following Statutes and Regulations:

(1) *Statutes:*

- (i) *Chapter X—Of the Faculties* (to conform with changes in title of offices incorporated in the South Australian Health Commission Act 1978).
- (ii) *Chapter XVIII—Of Academic Dress* (to provide for the academic dress of the new degree of D.Univ.).
- (iii) *Chapter XXV—Miscellaneous* (to provide statutory authority to language departments and to faculties in which a student is enrolled to direct students to the course most appropriate to their qualifications and training in the language concerned).
- (iv) *Chapter XXVIII—Of the Joseph Fisher Medal for Commerce and the Joseph Fisher Lecture for Commerce* (consequential upon changes in subjects in the schedules of the degree of Bachelor of Economics).
- (v) The following Statutes were repealed and were replaced by Rules; where appropriate the donors of prizes were consulted and agreed to the proposed changes:
 - (a) Chapter XL—Of the Dr. Chas. Gosse Lectureship and Medal in Ophthalmology.
 - (b) Chapter LXIII—Of the William Gardner Scholarship and William Gardner Prize.
 - (c) Chapter LXIV—Of the Shorney Medal and the Shorney Prize.

(2) *Regulations:*

- (i) *Of the degree of Master of Dental Surgery* (to require all candidates proceeding under Regulation 2(b) to undertake an approved course of postgraduate study within the University, while retaining the provision for external candidates to proceed to the degree by thesis only).
- (ii) *Of the degree of Master of Engineering Science and of the degree of Master of Applied Science* (in order to enable the Faculty to appoint external supervisors in special circumstances and to permit project work to be undertaken outside the University, subject to academic safeguards retained in the regulations).
- (iii) *Of the degree of Doctor of Medicine* (to specify the responsibility of the Faculty of Medicine for administration of the degree).
- (iv) *Of the degree of Master of Science* (to define the maximum period a candidate may be granted, in which to complete the qualifying examination in the Faculty of Science).
- (v) *Of the degree of Doctor of the University* (to define the procedures for the award of the new degree).
- (vi) *Of the Diploma in Business Management*; the regulations were repealed because time for completion of the requirements for the Diploma had expired.

8. RESEARCH

139 grants were made to members of staff of the University by the Australian Research Grants Commission. These were distributed as follows:

	\$
17 projects in the Humanities and Social Sciences	133,498
17 projects in the Physical Sciences	131,609
26 projects in the Chemical Sciences	288,095
50 projects in the Biological Sciences	457,644
15 projects in the Earth Sciences	146,153
14 projects in the Engineering and Applied Sciences	144,913

The total sum involved in ARGC grants to the University of Adelaide was \$1,301,912. This represents some 12.2% of the ARGC grants awarded to all universities, although this University's staff represents only 7% of all university staff in Australia. The University has been able to attract more ARGC support per staff member than any other established University.

The National Health and Medical Research Council awarded 17 grants, totalling \$277,281, for projects concerned with medical research, and scholarships for 5 medical and dental postgraduate research scholars.

In the areas of research specifically concerned with primary industry, grants awarded included eight grants from the Wheat Industry Research Council (\$140,869); three grants from the Reserve Bank under the auspices of the Rural Credits Development Fund (\$73,804); and two grants from the South Australian Barley Improvement Advisory Committee (\$150,170); the Australian Wool Corporation supported four projects with grants and one postgraduate scholarship totalling \$59,089. The Australian Meat Research Committee gave renewed support of \$53,475 for two research projects being undertaken in the Department of Agronomy.

The Australia Council gave renewed support of \$60,000 for the year for administrative and operating expenses in connection with the Centre for Aboriginal Studies in Music.

The Commonwealth Department of Environment, Housing and Community Development awarded a grant of \$75,000 to two members of staff of the Department of Zoology who will supervise a study of amphibians and macro-invertebrates in the Alligator Rivers Region.

The Research and Publications Committee had at its disposal a budget of \$1,255,000 which it allocated to various categories of general research support of staff members and to the training of postgraduate students.

40 new postgraduate scholarships were offered in 1978, as compared with 30 in 1977. The University increased the number in an attempt to offset a further reduction in Commonwealth Postgraduate Awards, but it was unable to make up entirely for a major reduction in Commonwealth Awards that had

occurred in two successive years: 42 new Awards were available in 1978 as against 53 in 1977 and 64 in 1976.

In 1978, including the 40 new awards, 128 students received U.R.G. support for all or part of the year.

The Committee gave limited support to twenty University staff members proceeding on short overseas conference leave and also assisted with funding of visits to the University by three distinguished scholars from overseas.

The University was pleased to be recognised as one of six universities to receive a substantial increase in its Special Research Grant to bring it to \$500,000 for 1979. The Universities Council, in making the grants, said that these funds were concentrated "within those universities with high levels of activity both in terms of research and research training".

The following are some examples of specific research projects being conducted in certain departments of the University. They are mentioned in order to indicate the range of research projects being undertaken by members of staff of the University, and are, of course only a small sample of the total research effort:

- (1) A research team from the relatively new Department of Anthropology has been awarded an ARGC grant for a four-year study of the Colombo region of Sri Lanka. The study is one of the most intensive conducted in any urban region in South or South-East Asia.
- (2) The release of yet another new hard wheat variety (Warigal)—the second in two years to be released by Dr. A. J. Rathjen (Agronomy).
- (3) Development of an electrically-driven wheelchair by Mr. A. Downing (Electrical Engineering). A new control device allows smooth, continuous control of speed and direction.
- (4) The use of cartography techniques by Mr. T. L. C. Griffin (Geography) to make tactile maps for blind persons.
- (5) Dr. K. Brown, a part-time Tutor in Dental Anatomy, and Mr. L. Reynolds, Dental School Laboratory Manager, have combined with Police technical services officers to develop a new technique which reduces the time to identify bodies and the remains of bodies by superimposing a photo of a skull over a photo of a known missing person.
- (6) Mr. E. D. Carter (Agronomy) has just completed his fifth visit to the Near East and North African region on the invitation of such bodies as Centro Internacional de Mejoramiento de Maiz y Trigo, the United Nations Food and Agriculture Organisation and the World Bank. His most recent consultancy has been with the International Centre for Agricultural Research in Dry Areas which reviews the state of research in the pasture—rangelands—livestock sectors in nine countries of North Africa and the Near East.
- (7) Dr. F. B. Sear (Classics) is one of three Australian archaeologists conducting a study of Pompeian architecture under an ARGC grant.
- (8) Professor A. C. Castles (Law) is co-ordinating a pioneering project aimed at providing, for the first time, an annotated bibliography of primary and secondary source materials on Australian legal history which will enable effective development of the discipline of Australian Legal History.
- (9) The Zoology Department has been awarded a grant by the Australian Government which will enable it to play a major role in providing information for the monitoring of the environmental impacts of uranium mining operations in the Alligator Rivers Region in the Northern Territory.
- (10) Mrs. M. Braddock (Architecture) has developed a method of assessing changing needs for services and facilities in local areas.
- (11) Dr. T. J. Nettlebeck and Dr. N. H. Kirby (Psychology) have developed training techniques which have significantly improved the vocational training of mildly retarded young adults.

The nature and overall extent of the research work carried on in the University is well illustrated by the Bibliography of Publications for 1978 by members of the University staff and research workers, a copy of which is annexed to this Report.

9. THE WAITE AGRICULTURAL RESEARCH INSTITUTE

Reference was made in last year's Report to the special financial difficulties faced by the Waite Institute as a Research Institute within a University, and the problem of funding its work adequately still continues—and seems likely to do so for some time. This problem is seen as an increasingly important aspect of the overall relationship between the two bodies, which has never been accurately and satisfactorily defined. During the year the Council appointed a committee to investigate this relationship in regard to all its aspects—constitutional, administrative and financial.

The research capabilities of the Waite Institute have been strengthened during 1978 by the purchase of a 112-hectare property near Strathalbyn, made possible largely by a generous gift some years ago by the late Mr. C. S. Charlick. The land was sought because of an increase in plant breeding research, a diversification of cropping work in grain legumes and an intensification of cereal breeding programs in wheat and barley, the promising new wheat-rye cross triticale, and wheat-barley crosses.

The Waite Institute publishes biennially a full report on its activities, and a copy of the latest issue of the report (for 1976-77) can be supplied to anyone interested.

10. THE BARR SMITH LIBRARY

During 1978 the University Library made 255,943 extramural loans to personal borrowers, a decrease of 1.1% compared with the figure for 1977. Additional items lent for use only within the Library included 99,652 from the Undergraduate Reserve, 16,239 from the Medical Library Reserve, and 7,017 from the Special Collections Section. The Library satisfied 35,708 requests for interlibrary loans, an increase of 6.6% over the figure for 1977 which had been the highest recorded to that time. The items lent included 29,716 to libraries within South Australia, and 5,992 to libraries in other States and countries. The Library received 4,005 loans from other libraries, an increase of 28.6% over the figure for 1977.

As part of its teaching function the Library presented 43 seminars which catered for 312 advanced students, and conducted 290 tours and seminars which catered for 2,488 undergraduates. This activity, a responsibility of the Subject Librarians' Group, showed a notable advance over the achievements of previous years both in the range of subjects covered in the seminars and the number of students catered for, the latter being double that recorded for 1977.

Holdings at the end of 1978 were as follows: Central Library 793,414 volumes; Law Library 58,512; Medical Library 88,089; Music Library 2,603 bound volumes of scores and 14,457 pieces of music in sheets; and the Waite Agricultural Research Institute Library 34,582 volumes; making total holdings equivalent to 991,657 volumes. This total includes items in microform equivalent to 84,435 volumes.

Accessions of catalogued items in 1978 were 10.7% above those recorded in 1977. Inroads into accumulated arrears of books awaiting cataloguing (rather than a higher rate of acquisition) and improved productivity in cataloguing following the reorganisation of the Library in 1977 are reflected in the result. The accessions included 40,532 volumes, the equivalent of a further 11,792 volumes in microform, and 478 pieces of music in sheets. Some 19,847 serial titles were being regularly received, compared with 20,054 in 1977 and 19,911 in 1976. This reduction in vital serial acquisition, the first such reduction according to available records, was brought about by cancellation of subscriptions and other economy measures taken by the Library, its exchange partners and publishers. With inadequate funding available to the University to support the Library's acquisition program in the face of continuing inflation, and with subscriptions consuming an increasing proportion of the library grant to the detriment of book purchases, the Library Committee with great regret found it necessary late in the year to introduce measures aimed at reducing subscriptions to serials by a further 5% or about \$25,000. Such a reduction will seriously affect the Library's capacity to offer adequate service to the University and to other institutions with which it co-operates.

The Library's acquisition program was greatly assisted, as in other recent years, by a substantial allocation (\$130,000 in 1978) from the University's grant for

equipment. The Library also drew heavily on its endowed funds and was helped by grants from the G. M. Badger Research Fund. It received several important gifts and bequests of books and papers.

Expenditure on salaries, books, serials, binding, computing services and other library requirements, from all sources, amounted to \$3,148,958.

The Library maintained its traditional hours of service and all other established services, and in some cases was able to offer improved service. The Library's salary budget was cut by about \$40,000, and further voluntary measures brought savings to about \$55,000. There was clear evidence, however, that further reductions in staffing would quickly lead to some deterioration in service, and perhaps make withdrawal of some services necessary.

The Medical Library conducted 70 MEDLINE searches for research workers of the University and other institutions, compared with 29 in 1977. In the second half of the year the Barr Smith Library introduced a service drawing on the DIALOG data bases of the Lockheed Corporation of Palo Alto, California, and by the end of the year had carried out 24 on-line searches. A training program was initiated to familiarise all Subject Librarians with the principles and procedures of the system. The CIRCON computerised loan system, devised and developed by the Library, was introduced in the Medical Library in July, and in December became operational in the Barr Smith Library.

The Library greatly increased its emphasis on exploiting the content of the collection through regular exhibitions, with maximum involvement of the Special Collections Section and the Subject Librarians' Group.

To help cope with an increasingly serious accommodation problem more than 600,000 volumes were relocated and reshelved early in the year. In the process floor space formerly occupied by 200 reading places was taken over for shelving. It has become apparent that, as a result of the inevitable and essential growth of the collection and the unavailability of adequate space for expansion on the present site, readers soon will be subjected to increasing delays and inconvenience.

11. GROUNDS, BUILDINGS AND ACCOMMODATION

The only major building work in progress in the University during 1978 was the new Medical Sciences Building, work on which proceeded on schedule and was due to be completed in May 1979. There was still some doubt at the end of the year as to whether the building could be completed as originally planned, in view of the Universities Commission's changed policy regarding cost supplementation of capital projects as a result of inflation.

No new major capital grants are now expected by the University before 1982, and only the Universities Commission's grant for Minor Works is now available to meet the still heavy needs of several departments for additional space. When the old Medical School Building is partially vacated, after the completion of the new building, space will become available in it for other purposes, including the expansion of the Library, but in the absence of any capital grants for the necessary building alterations, it seems that the work can only be carried out in instalments spread over several years. The hard-pressed Departments, such as the Library, Anthropology, Computing Science, Law and Music, may therefore have to wait for some time for complete relief.

The major Site Development Study commissioned in 1973 has at last been completed and the resulting Report has been approved by the University Council. It provides a blue-print for the future development of the University's extremely congested site in the heart of the City of Adelaide, but sadly its approval comes just when it appears that the provision of funds to carry out many of the developments envisaged in the Report will be indefinitely delayed. Nevertheless, one of the projects arising out of the Study has already been put into effect and has proved its worth. This is the Energy Conservation Program, for which the University is raising a bank loan of \$1 million over a three-year period. This loan will cover the expense of a program of works designed to modernise and improve the University's site services, and the resulting savings are expected to be more than sufficient to service the loan. The work is being carried out under the supervision of the Engineering Services Management Group which, with the co-operation of the whole University community, has already achieved significant savings in energy costs.

The Engineering Services Management Group has drawn attention to some difficult problems the University will face in the next few years in regard to

the replacement of mechanical plant and equipment. Because of lack of money, several vital pieces of equipment purchased many years ago have not been properly maintained and as a result will require replacement earlier than would otherwise have been necessary. The problem has been compounded by the introduction of upgraded safety requirements, which are being enforced by the State Government as opportunity arises. In addition, the University will require new PABX equipment shortly. All these requirements are expected to involve the University in capital expenditure of the order of \$4m over the next few years, and it is not at all clear at present how this can be funded.

Over the last two or three years, increasing attention has been paid to safety matters in the University. A Safety Committee was established for the first time in 1975 and a full-time University Safety Officer was appointed. Since then, improvements to safety standards have progressed steadily, primarily with the object of complying with the requirements of the Industrial Safety Code regulations in all parts of the University, but also to make improvements over and above these minimum requirements. Most of the improvements have been in relation to fire hazards. A Safety Handbook has been produced and was almost ready for publication at the end of the year. The Council approved a policy statement on safety and health for the University, as required by the Industrial Safety, Health and Welfare Act, for inclusion in the Handbook. One of the problems experienced by the University in the field of safety is that many of the University buildings were constructed at a time when safety regulations were somewhat primitive, and large amounts of money are needed to bring them up to a standard acceptable today.

During the year the Council decided to encourage greater use of its facilities (lecture theatres, halls, etc.) by outside bodies, and to lay down an economic scale of charges for such use, based on charges levied for the use of similar accommodation in the City of Adelaide. However, the University's own requirements will always receive priority, and the use of the facilities for educational purposes will be permitted at reduced charges, or without charge, in appropriate cases.

At the beginning of the year, the refurbished Elder Hall, work on which had been completed at the end of 1977, was reopened. A festival concert was held on 24 February, when a capacity audience of more than 700 enjoyed the amenities of the rejuvenated Hall with its enlarged and more flexible stage and new balcony. The \$1 million project included the provision of air conditioning, improved acoustics, upholstered seating throughout and a new foyer. A new organ, costing \$225,000, has been ordered and was due to be installed early in 1979. The project was funded from the 1974 Centenary Appeal and has provided the University with first-class concert facilities while still preserving the historic exterior of the building and the prized hammer beam ceiling.

12. FINANCIAL MATTERS

The recurrent grant made available to the University for 1978 was marginally less in real terms than that available in 1977, but when account was taken of the costs of promotions, including incremental creep, and the overhead costs associated with such increases (i.e. superannuation, payroll tax, and workmen's compensation insurance), the University had to reduce its expenditure by approximately \$600,000. Since staff costs in the University account for some 85% of total recurrent expenditure, it was inevitable that, as usual, most of the economies had to be made in that area.

1978 was the first year that no additional grants were made to compensate the University for inflation losses in the non-salary budget. However, the Government maintained its support of salary costs by adjusting grants—albeit on a delayed and reduced basis—for changes caused by National Wage movements on a quarterly basis. Overall the outcome of the University's budgeting and cost cutting exercise in 1978 was satisfactory in that it was able to reduce the accumulated deficit by nearly \$40,000 to \$168,569, after increasing the Flexibility Fund to \$100,000 and allowing the Departmental Staffing Committee to carry forward \$100,000 to support its reduced 1979 allocation. These transfers to future years are only possible because the University has a source of income largely derived from past benefactors who left money to the University to augment its scholarly and research activities.

This independent source of income was indeed vital in 1978, as the budget could not have been reduced to the level of the recurrent grant alone without serious academic consequences. The States Grants (Tertiary Education Act) 1977—under which Universities received their recurrent income for 1978—required that all grants for 1978 be actually expended in 1978. This incentive to inefficiency was recognised later in 1978, and the 1978 Act provided a much sounder basis for operation in that a variation of up to 1% in expenditure may now be carried forward from one year to another at least within a triennium. This does allow sensible money management and avoids the pressures brought on managements faced with the alternatives of “spend it or lose it”.

Another welcome change that occurred during 1978 was the Government's restoration of triennial recurrent budgeting. The University of Adelaide spends nearly \$40 million in a year, and to have no knowledge of the income for next year until the preceding August is a certain way to ensure that no future planning is undertaken. The University now knows the figures of the recurrent grant for 1980 and 1981, and whilst both years will see a continuation in the reduction of the grant in real terms, the University can plan ahead in order to optimise the resources that have been allocated to it. It would be desirable for the remaining annually announced grants—those for equipment (some \$2 million in 1979) and minor works (some \$300,000 in 1979)—also to have a longer time scale. The immediate future prospects are dismal, in that during the triennium 1979-81, the University will have to achieve cost reductions of the order of \$1,750,000, or nearly 5% of its recurrent budget.

It seems clear that the Universities Commission has reduced the University's recurrent grant because of a shortfall in both undergraduate and postgraduate enrolments. (See Section 13.) The financial penalty is, however, less than would be expected if funds were directly proportional to student enrolments.

Satisfactory features about the grants for 1979 are an increase in the Special Research grant (see section 8 above) and in the Minor Works grant (although this is still only one-sixth of the total cost of outstanding works), and the provision for the first time of a General Development grant (see section 6(3) above). It seems, however, that the General Development grant may be a mixed blessing since, although it will initiate new developments, it will effectively reduce the recurrent grant for existing activities. The commitment to three years only will increase the tendency to adopt projects which can be completed within the time period.

13. STATISTICS

Number of Students:

The total number of students was 9,176 (including 192 single-studies students at the Elder Conservatorium of Music), which is 379 less than the enrolment in 1977.

The composition of the student body is shown in the following table:

	Males	Females	Total	%
Full-time	4,036	2,113	6,149	67.0
Part-time	1,584	1,002	2,586	28.2
External	121	27	148	1.6
Staff	74	27	101	1.1
Elder Conservatorium	89	103	192	2.1
Total Students	5,904	3,272	9,176	100%

Distribution into Courses:

Each student is counted once only—in the category appropriate to his principal course. The figures in brackets refer to the number of females included in the totals.

A. Higher Degree Candidates:

	Higher Doctor				Ph.D.				Master				Total				
	F/T	P/T	Staff	Ext.	F/T	P/T	Staff	Ext.	F/T	P/T	Staff	Ext.	F/T	P/T	Staff	Ext.	Total
Agricultural Science ..	—	—	—	—	62(10)	7(-)	1(-)	2(-)	11(3)	5(-)	1(-)	19(3)	73(13)	12(-)	2(-)	21(3)	108(16)
Architecture	—	—	—	—	1(-)	—	3(-)	—	5(-)	1(-)	—	—	6(-)	1(-)	3(-)	—	10(-)
Town Planning	—	—	—	—	—	—	—	—	—	—	—	—	—	62(11)	—	—	62(11)
Arts	—	—	—	—	44(17)	21(6)	18(11)	8(2)	58(31)	46(20)	6(3)	5(-)	102(48)	67(26)	24(14)	13(2)	206(90)
Education	—	—	—	—	—	—	—	—	8(3)	51(17)	2(1)	3(1)	8(3)	51(17)	2(1)	3(1)	64(22)
Dentistry	1(1)	—	—	—	1(-)	—	2(-)	1(-)	11	1(-)	2(1)	—	13(1)	1(-)	4(1)	1(-)	19(2)
Economics	—	—	—	—	7(1)	1(-)	3(-)	1(-)	6(3)	9(1)	3(2)	3(-)	13(4)	10(1)	6(2)	4(-)	33(7)
Business Management	—	—	—	—	—	—	—	—	27(1)	45(2)	1(1)	4(1)	27(1)	45(2)	1(1)	4(1)	77(5)
Engineering	—	—	—	1(-)	33(2)	1(-)	3(-)	2(-)	19(-)	35(-)	—	6(-)	52(2)	36(-)	3(-)	9(-)	100(2)
Applied Science	—	—	—	—	—	—	—	—	3(-)	6(-)	1(-)	1(-)	3(-)	6(-)	1(-)	1(-)	11(-)
Law	—	—	—	1(-)	—	—	1(-)	—	—	1(-)	1(-)	1(-)	—	1(-)	2(-)	2(-)	5(-)
Medicine	4(-)	4(1)	14(1)	17(1)	9(-)	4(1)	7(1)	—	—	—	1(-)	1(-)	13(-)	8(2)	22(2)	18(1)	61(5)
Music	—	—	—	—	5(4)	1(1)	—	1(-)	13(8)	8(2)	2(1)	2(1)	18(12)	9(3)	2(1)	3(1)	32(17)
Science	—	—	—	3(-)	155(23)	7(-)	9(-)	10(1)	34(10)	17(1)	7(4)	23(2)	189(33)	24(1)	16(4)	36(3)	265(41)
Mathematical Sciences	—	—	—	—	38(5)	2(2)	12(1)	1(-)	6(1)	5(-)	1(-)	2(1)	44(6)	7(2)	13(1)	3(1)	67(10)
Environmental Studies	—	—	—	—	—	—	—	—	29(7)	12(-)	—	—	29(7)	12(-)	—	—	41(7)
Total	5(1)	4(1)	14(1)	22(1)	355(62)	44(10)	59(13)	26(3)	230(67)	304(54)	28(13)	70(9)	590(130)	352(65)	101(27)	118(13)	1,161(235)

B. Candidates for Bachelor Degrees:

	Honours (a)			Ordinary			Total			
	F/T	P/T	Ext.	F/T	P/T	Ext.	F/T	P/T	Ext.	Total
Agricultural Science ..	6(3)	—	—	172(50)	29(13)	—	178(53)	29(13)	—	207(66)
Architecture	9(1)	1(-)	—	172(28)	7(1)	—	181(29)	8(1)	—	189(30)
Arts	103(56)	1(1)	—	1,152(712)	651(363)	24(11)	1,255(768)	652(364)	24(11)	1,931(1,143)
Dentistry	5(-)	—	—	249(46)	33(7)	—	254(46)	33(7)	—	287(53)
Economics	15(2)	—	—	369(81)	300(39)	—	384(83)	300(39)	—	684(122)
Engineering	80(6)	—	—	473(17)	63(-)	—	553(23)	63(-)	—	616(23)
Law	12(4)	2(1)	—	547(202)	77(19)	—	559(206)	79(20)	—	638(226)
Mathematical Sciences	31(8)	—	—	309(90)	73(19)	—	340(98)	73(19)	—	413(117)
Medical Science ..	—	—	—	—	—	—	—	—	—	—
Medicine	—	—	—	720(221)	13(5)	—	720(221)	13(5)	—	733(226)
Music	10(8)	2(1)	—	126(79)	10(6)	—	136(87)	12(7)	—	148(94)
Science	78(21)	—	—	733(250)	178(65)	—	811(271)	178(65)	—	989(336)
Total	349(109)	6(3)	—	5,022(1,776)	1,434(537)	24(11)	5,371(1,885)	1,440(540)	24(11)	6,835(2,436)

(a) Final year honours only.

C. Candidates for Postgraduate Diplomas:

	Full-time	Part-time	External	Total
Education (Dip.Ed.)	149(83)	180(81)	6(3)	335(167)
Education (Adv.Dip.Ed.)	—	25(14)	—	25(14)
Computing Science	13(1)	23(3)	—	36(4)
Applied Psychology	13(8)	37(23)	—	50(31)
Psychotherapy	—	8(3)	—	8(3)
Library Studies	1(1)	8(7)	—	9(8)
Total	176(93)	281(131)	6(3)	463(227)

D. Students taking Miscellaneous Subjects:

	Full-time	Part-time	External	Total
Masters' Qualifying	1(-)	2(2)	—	3(2)
Arts	4(2)	61(38)	—	65(40)
Agricultural Science	—	1(-)	—	1(-)
Economics	1(-)	76(18)	—	77(18)
Music	—	1(1)	—	1(1)
Law	—	4(-)	—	4(-)
Mathematical Sciences	1(-)	6(1)	—	7(1)
Science	2(1)	13(2)	—	15(3)
Music (Elder Conservatorium)	—	192(103)	—	192(103)
Miscellaneous Work SAIT (a)	—	160(116)	—	160(116)
Visiting Students (b)	3(2)	189(88)	—	192(90)
Total	12(5)	705(369)	—	717(374)

(a) Students taking university subjects as part of a diploma course at the S.A. Institute of Technology.

(b) Students enrolled at another university, who will subsequently qualify for a degree of that university, but who are undertaking part of their degree work at the University of Adelaide.

Comparison with preceding years: The following figures of total enrolments in the various faculties and courses are provided to show changes in University enrolments over the last five years:

Course (a)	1974	1975	1976	1977	1978
Undergraduate, diploma and miscellaneous students:					
Agricultural Science	212	217	224	199	208
Applied Science	10	3	—	—	—
Architecture	172	179	176	188	189
Arts	2,816	2,904	2,887	2,692	2,415
Dentistry	301	292	313	309	287
Economics	655	709	752	770	761
Engineering	605	620	617	621	616
Law	566	610	609	639	642
Mathematical Sciences	262	326	414	418	457
Medicine	723	745	810	781	741
Music	159	170	166	138	148
Pharmacy (degree)	2	—	—	—	—
Science	1,331	1,255	1,109	1,082	1,004
Technology	29	14	2	—	—
Miscellaneous (SAIT) (c)	96	115	123	141	160
Elder Conservatorium (d)	210	224	210	210	192
Visiting Students (e)	51	73	150	149	192
	8,200	8,456	8,562	8,337	8,012
Higher degree candidates (b)	1,101	1,170	1,243	1,218	1,164
Total	9,301	9,626	9,805	9,555	9,176

- (a) Each student is counted once only, in the category appropriate to his principal course.
 (b) Includes Masters' qualifying candidates.
 (c) Students enrolled in subjects as part of a diploma course at the S.A. Institute of Technology.
 (d) Students not also enrolled for degree or diploma subjects.
 (e) Students enrolled at another university, who may subsequently qualify for a degree at that other university, but who are undertaking part of their degree work at the University of Adelaide.

It will be seen that since 1976, when the number of students at the University was at its maximum, the student population has been steadily decreasing. A more detailed study of the figures indicates that this decline is not due to a reduction in the number of students new to the University; the quota for new admissions has been filled every year, with the exception of a small shortfall in the Faculty of Agricultural Science. The reduction is primarily due to an increase in the number of students who fail to re-enrol after completing their first year. For instance, in 1978, 24% of all students who commenced a bachelor's degree course in 1977 failed to re-enrol. Studies are continuing with a view to ascertaining the reasons for this phenomenon. It is interesting to note that the number of failures to re-enrol was very small in the Faculties of Medicine and Dentistry.

Overseas Students: There were 326 overseas students (including 90 women) enrolled at the University. They were distributed amongst the Faculties and Boards of Studies as follows: Engineering 64, Agricultural Science 48, Science and Medicine 40, Arts 38, Economics 36, Mathematical Sciences 23, Architecture 14, Dentistry 13, Law 5, Miscellaneous 4, Music 3.

Of the overseas students 118 came from Malaysia, 31 from Singapore, 18 from India, 14 from Hong Kong, 13 from Indonesia, 12 from British Isles, 10 from Vietnam, 9 from Japan, 8 from New Zealand, 7 each from Fiji, Thailand, Canada and Bangladesh, 5 each from Pakistan and Sri Lanka, 4 each from Taiwan and South America, 3 each from Korea, Nigeria, United States, Belgium, Germany, Italy, Greece and Ghana, 2 each from Philippines, Uganda, Tonga and Egypt/U.A.R., Switzerland, Rhodesia, Norfolk Is., Tanzania, France, Ethiopia, Tunisia, and Papua New Guinea.

14. ADMISSION TO DEGREES

Degrees were conferred and diplomas granted as follows:

At the Commemoration Ceremonies on 3 May, 1978 (11.00 a.m. and 3.00 p.m.).

<i>First Ceremony</i>										
								<i>Male</i>	<i>Female</i>	<i>Total</i>
<i>Architecture and Planning</i>										
M.T.P.	-	-	-	-	-	-	-	4	—	4
M.U.R.P.	-	-	-	-	-	-	-	6	—	6
B.Arch. (Honours)	-	-	-	-	-	-	-	11	1	12
B.Arch.	-	-	-	-	-	-	-	18	2	20
<i>Arts</i>										
B.A.	-	-	-	-	-	-	-	173	224	397
<i>Technology and Applied Science</i>										
B.Tech.	-	-	-	-	-	-	-	1	—	1
<i>Diplomas Granted</i>										
Advanced Dip.Ed.	-	-	-	-	-	-	-	7	3	10
Dip.App.Psych.	-	-	-	-	-	-	-	1	3	4
Dip.Lib.Stud.	-	-	-	-	-	-	-	13	14	27
Dip.Ed.	-	-	-	-	-	-	-	157	103	260
<i>Second Ceremony</i>										
<i>Arts</i>										
Ph.D.	-	-	-	-	-	-	-	2	1	3
M.A.	-	-	-	-	-	-	-	3	5	8
M.Ed.	-	-	-	-	-	-	-	3	—	3
B.A. (Honours)	-	-	-	-	-	-	-	21	39	60
<i>Engineering</i>										
Ph.D.	-	-	-	-	-	-	-	4	—	4
M.E.	-	-	-	-	-	-	-	5	—	5
M.Eng.Sc.	-	-	-	-	-	-	-	4	—	4
B.E. (Honours)	-	-	-	-	-	-	-	47	—	47
B.E.	-	-	-	-	-	-	-	59	1	60
<i>Medicine</i>										
M.D.	-	-	-	-	-	-	-	2	1	3
Ph.D.	-	-	-	-	-	-	-	1	—	1
M.B., B.S. (Honours)	-	-	-	-	-	-	-	1	—	1
M.B., B.S.	-	-	-	-	-	-	-	103	16	119
B.Med.Sc. (Honours)	-	-	-	-	-	-	-	1	—	1
<i>Music</i>										
M.Mus.	-	-	-	-	-	-	-	2	1	3
B.Mus. (Honours)	-	-	-	-	-	-	-	6	9	15
B.Mus.	-	-	-	-	-	-	-	9	22	31
<i>Diplomas Granted</i>										
Dip.Clin.Sc.	-	-	-	-	-	-	-	3	1	4
Total								667	446	1,113

The Speakers at these Ceremonies were respectively, His Excellency the Governor of South Australia, Mr. Keith Seaman, and the Chancellor, The Honourable Dr. J. J. Bray.

At the Commemoration Ceremonies on 10 May, 1978 (11.00 a.m. and 3.00 p.m.).

Third Ceremony

	Male	Female	Total
<i>Dentistry</i>			
D.D.Sc. - - - - -	1	—	1
M.D.S. - - - - -	—	1	1
B.Sc.Dent. (Honours) - - - - -	1	—	1
B.D.S. - - - - -	40	4	44
<i>Economics</i>			
Ph.D. - - - - -	1	—	1
M.Ec. - - - - -	1	—	1
M.B.M. - - - - -	2	—	2
B.Ec. (Honours) - - - - -	7	2	9
B.Ec. - - - - -	108	13	121
<i>Science</i>			
B.Sc. - - - - -	135	54	189

Fourth Ceremony

<i>Agricultural Science</i>			
Ph.D. - - - - -	10	—	10
M.Ag.Sc. - - - - -	4	—	4
B.Ag.Sc. (Honours) - - - - -	3	—	3
B.Ag.Sc. - - - - -	22	9	31
<i>Law</i>			
LL.M. - - - - -	1	—	1
LL.B. (Honours) - - - - -	5	5	10
LL.B. - - - - -	77	32	109
<i>Mathematical Sciences</i>			
Ph.D. - - - - -	6	—	6
B.Sc. (Honours) - - - - -	36	7	43
B.Sc. - - - - -	57	12	69
<i>Science</i>			
D.Sc. - - - - -	2	—	2
Ph.D. - - - - -	30	2	32
M.Sc. - - - - -	3	1	4
B.Sc. (Honours) - - - - -	44	6	50
<i>Diplomas Granted</i>			
Dip.Comp.Sc. - - - - -	18	2	20
Total	614	150	764

The Speakers at these Ceremonies were respectively, Mr. G. J. Adam, a former President of the Students' Association, and the Deputy Vice-Chancellor, Professor E. S. Barnes.

At a meeting of the Council on 14 July, 1978.

	<i>Male</i>	<i>Female</i>	<i>Total</i>
<i>Agricultural Science</i>			
M.Ag.Sc. - - - - -	2	—	2
<i>Architecture and Planning</i>			
M.U.R.P. - - - - -	3	1	4
<i>Arts</i>			
B.A. (Honours) - - - - -	—	2	2
B.A. - - - - -	4	1	5
<i>Engineering</i>			
M.E. - - - - -	2	—	2
M.App.Sc. - - - - -	2	—	2
<i>Law</i>			
LL.B. - - - - -	1	—	1
<i>Mathematical Sciences</i>			
B.Sc. - - - - -	3	—	3
<i>Medicine</i>			
M.D. - - - - -	—	1	1
Ph.D. - - - - -	1	—	1
M.B., B.S. - - - - -	1	—	1
<i>Music</i>			
B.Mus. - - - - -	—	1	1
<i>Science</i>			
B.Sc. - - - - -	1	1	2
<i>Diplomas Granted</i>			
Dip.App.Psych. - - - - -	1	2	3
Dip.Lib.Stud. - - - - -	—	3	3
Adv.Dip.Ed. - - - - -	2	—	2
Dip.Ed. - - - - -	3	2	5
Total	26	14	40

At a meeting of the Council on 20 December, 1978.

	Male	Female	Total
<i>Agricultural Science</i>			
Ph.D. - - - - -	6	—	6
<i>Architecture and Planning</i>			
M.T.P. - - - - -	1	—	1
M.U.R.P. - - - - -	2	—	2
<i>Arts</i>			
B.A. (Honours) - - - - -	—	1	1
B.A. - - - - -	1	—	1
<i>Dentistry</i>			
Ph.D. - - - - -	1	—	1
M.D.S. - - - - -	2	—	2
B.D.S. - - - - -	8	—	8
<i>Economics</i>			
Ph.D. - - - - -	2	—	2
<i>Engineering</i>			
Ph.D. - - - - -	1	—	1
<i>Environmental Studies</i>			
M.Env.Stud. - - - - -	—	1	1
<i>Law</i>			
LL.B. - - - - -	1	—	1
<i>Medicine</i>			
Ph.D. - - - - -	1	—	1
M.B., B.S. - - - - -	3	1	4
<i>Science</i>			
Ph.D. - - - - -	6	—	6
B.Dc. (Honours) - - - - -	1	—	1
<i>Diplomas Granted</i>			
Dip.Prim.Ed. - - - - -	1	—	1
Dip.Ed. - - - - -	2	1	3
Total	39	4	43

Totals: 143 candidates were admitted to higher degrees by examination or thesis; 1,475 bachelor degrees were conferred by examination; and 342 diplomas were awarded.

A summary by faculty of degrees conferred and diplomas granted during 1978 is as follows:

	Higher Doctorate	Ph.D.	Master	Bach. (Hons.)	Bach. (Ord.)	Postgrad. Diploma
Agricultural Science	—	16	6	3	31	—
Architecture ..	—	—	17	12	20	—
Arts	—	3	11	63	403	318
Dentistry	1	1	3	1	52	—
Economics	—	3	3	9	121	—
Engineering .. .	—	5	13	47	60	—
Law	—	—	1	10	111	—
Mathematical Scs.	—	6	—	46	69	20
Medicine	4	2	—	2	125	4
Music	—	—	3	15	32	—
Science	2	38	4	51	191	—
Tech./Appl. Sc. . .	—	—	—	—	1	—
Environmental St.	—	—	1	—	—	—
Total	7	74	62	259	1,216	342

15. UNIVERSITY HEALTH SERVICE

(1) *General*

At the beginning of the year, the Health Service assumed responsibility for the Mark Mitchell Centre for Physical Health (formerly the University's Department of Physical Education). This has meant more administrative work for the Director of the Health Service, but has enabled very close liaison between the Health Service and the Centre, leading in its turn to the use of the concept of Preventive Medicine in teaching students and staff good habits of physical exercise, and to an improvement in mental health. This was shown at the November examinations, when there was a marked decrease in applications for supplementary examinations from 180 in the previous year to 111. A system has been devised under which students who take no exercise and can find no way of exercising are referred directly to the Centre and placed in suitable exercise classes. The Centre, with a staff of two professional officers, has been at full capacity for almost the whole year. The major contribution it offers is the rehabilitative, supportive and preventive care of students and staff of the University.

Grants made available by the University Union and also by the Workmen's Compensation Fund have enabled the Health Service to appoint two additional medical officers for one half day per week each.

(2) *Statistics*

The total number of individual services rendered during the year was 12,781, including 1,793 routine medical examinations of students and staff, 4,459 casualties, 3,880 return visits from casualty service, 1,264 poliomyelitis immunisations, 461 tetanus injections, and 1,741 Mantoux tests. The total does not include Chest X-rays arranged by the Service at the City X-ray Unit. Of the 4,459 casualties, 3,638 were illnesses, 680 accidents, and 141 sports injuries.

In the Centre for Physical Health, there were 76,000 attendances, compared with 52,000 in 1976 and 59,000 in 1977 (these figures exclude squash court usage of approximately 15,000). The Centre is open from 7.30 a.m. to 11.30 p.m. from Monday to Friday, and from 8.00 a.m. to 6.00 p.m. on Saturday and Sunday.

16. STUDENT COUNSELLING SERVICE

The appointment of a full-time female counsellor has led to a slight increase in the number of female students coming to the Service for assistance compared to previous years. Recorded individual counselling sessions, typically of one hour duration on each occasion, were conducted with 536 students of all faculties and years, both undergraduate and postgraduate. The difficulties for which assistance was sought ranged widely throughout educational, vocational and personal matters, often in combination, but always in uniquely individual circumstances. As in previous years there was a proportion of students whose problems were serious and who required long term psychotherapy. There seems to be growing apprehension among students regarding employment prospects and this has resulted in more students attending the Service for study skills support. One other trend is the greater openness among students to discuss sexual identification and interpersonal problems with counsellors. Counselling was also provided to a number of members of academic staff throughout the year. During the year the Service invited all university tutors to attend small group sessions to enhance the liaison between tutors and counsellors. The program was well received and achieved its purpose. Group activities were conducted on a regular basis and included films on social issues, assertiveness training, socialisation, a women's issues group and personal development programs.

17. DEPARTMENT OF CONTINUING EDUCATION

The following is a summary of the activities of the Department during the year.

Seminars on issues of moment were either of four hours on a single evening, or took place over two or three days. 260 people attended an evening seminar on the South Australian Matriculation Examination; 110 attended a two-day seminar on the Study and Writing of Local History; while 255 attended a one-day seminar on the Exploitation of Persons. In all about 1,000 students attended eleven seminars. Thirteen schools, some residential, offered educational opportunities for 609 students. The Summer School of Music presented four public concerts, one being the first to be held in the reconstructed Elder Hall. It attracted a capacity audience of 700.

Focus on our Southern Heritage, conducted in association with the S.A. Conservation Council, ran for a week and attracted an enrolment of 110, many from interstate. The papers delivered by twenty-two lecturers will be incorporated into a substantial publication.

Courses for the general public in Languages, the Natural and Social Sciences and Humanities attracted an enrolment of 1,111, while 120 students enrolled in thirteen discussion groups which used packages of notes, tapes and books.

Courses for professional occupational groups attracted an enrolment of 382 in face-to-face meetings, while over 700 enrolled in radio courses—almost 1,100 in all.

Radio 5UV, the University of Adelaide's educational station, successfully applied for a full category E licence to operate an AM public broadcasting station. Since 1972 it had operated with an experimental licence. The area to be served by 5UV is defined by the Adelaide metropolitan region from Munno Para in the north to Noarlunga in the south, from Tea Tree Gully in the east to the Gulf of St. Vincent in the west. The station continues to operate for over 90 hours per week with almost half these hours taken up by Ethnic Access users. As Ethnic Broadcasters Incorporated were successful in their application to operate an FM broadcasting station, it is likely that the use of the station by ethnic communities will decline in future. Over 1,000 students purchased the notes which are used to back up the spoken word in structured radio courses and series and, in addition, over 700 individuals have paid \$25 each to become Friends of 5UV. There are also over 100 corporate Friends—schools, CAEs, etc. The annual Radiothon raised about \$10,000 from the general public and from business houses. A professional survey of the whole of the Adelaide metropolitan area showed that, on average, 7.5% of the population listen regularly to 5UV but a departmental survey, currently in progress, reveals that in some middle-class suburbs, as many as 35% of the population listen on a regular basis.

Publications—Seven new publications were issued during the year, innovations being two books based on radio courses, *Visual Thinking* and *Planning Issues in Adelaide*, as well as the first of what will become an annual or twice-yearly publication, viz. *Studies in Continuing Education*.

18. CAREERS ADVISORY BOARD

As anticipated, the reduction in the opportunities for teachers made a major impact during the year. This was reflected in the number of Diplomates in Education who were unsuccessful in finding employment, in the reduced number of Arts and Science students undertaking teacher training courses, and in the increased proportion of graduates who had not found work by the 30th April. There is no evidence that the demand for teachers will increase in Australia, and because both Commonwealth and State governments have imposed strict ceilings upon their staff levels, it is clear that it is to the private sector that graduates have to look for employment. Both industry and graduates must be constantly reminded of the advantages they have to offer one another. In this context it has been noticeable throughout the year that more and more employers in the private sector have emphasised the desirability for graduates to have good communication skills, and for this reason Faculties have been encouraged to consider their courses from this point of view, to see whether there could be increased opportunities to develop such communication skills, without in any way reducing academic standards.

Because of the difficulty which graduates completing the Diploma in Education course were likely to encounter in finding teaching positions, special attention was paid to helping these students and encouraging them to look at alternative areas of employment. At the beginning of the year a Liaison Officer from the South Australian Education Department was made available to all students who wanted to discuss their particular employment prospects with the Department.

Campus interviews were held during second term and during this program 52 employers were represented on campus and 3,360 interviews were arranged. In the previous year there were 45 employers and 2,920 interviews. Included among employers seeking Electrical Engineers have been two companies from the United Kingdom where there is an acute shortage in this field.

The annual survey of the first destination of graduates showed that 8.1% of those responding were unemployed as at 30 April 1978 with 48 (10.8%) Arts graduates, 28 (8.1%) Science graduates, 14 (13.3%) Engineering graduates and 26 (20.3%) of the full-time Diplomates in Education unemployed or casually employed and seeking full-time employment. (The corresponding figures for the 1977 graduates were 6.6% unemployed; 38 (8.6%) Arts graduates, 30 (8.4%) Science graduates, 18 (19%) Engineering graduates and 19 (14.9%) full-time Diplomates in Education.)

19. STUDENT WELFARE SERVICES

The University Student Loan Fund is designed to provide financial assistance to needy students who might otherwise be unable successfully to continue with their academic work. During the year there were 90 (62) applications for assistance from the Fund, in response to which \$30,840 (\$15,280) was made available in repayable loans and \$150 (\$50) in non-repayable grants. In addition, a Short-term Loan Fund assisted 69 (66) students for whom repayable loans totalling \$3,700 (\$3,222) were approved. (The figures in brackets are for 1977.) Almost all students to whom loans have been given have proved diligent in repaying them, and very few loans have had to be written off as irrecoverable.

A Student Services Committee has been set up to help promote awareness within the University community of the types of services that are available to students and to assist in co-ordination between the services. The 15-member committee comprises three distinct groups—practitioners of the services, students, and other University members. The Committee is responsible to the University Council, and has access to the relevant major University Committees and Union Council. The Committee will review existing services and the need for new services and make reports and recommendations on the provision of these. As well as encouraging liaison between student services it will publicise the availability of the services.

20. MISCELLANEOUS

(1) The University has been most concerned about the impact that the light-rail-transit system proposed under the North-East Area Public Transport Review will have on the north parklands and the University properties in Mackinnon Parade.

The University has built up a very significant landholding in the Mackinnon Parade area over many years. However, recent changes in the Adelaide City

Council's zoning regulations and the proposed LRT route have meant that the University has had to commence a very careful review of its plans for the area.

The University conducted a poll of University staff to discover their views on the alternative LRT routes originally proposed. The staff overwhelmingly supported the proposal that the route should run along Hackney Road, but if this was unacceptable, then the most popular alternative was the Mackinnon Parade route rather than one in Victoria Drive. However, the University is still concerned about the disruption to the environment of the area that might be caused by the LRT system and has made several representations to the State Government and the Adelaide City Council.

(2) Forty-six departments and organisations participated in Open Days held on 7-8 June. The theme chosen for this year, "The University and the Community", aptly described the intention behind Open Days. The University is part of the community and depends on that community to fund its \$40 million annual budget. In their displays, departments emphasized those of their activities which had the greatest impact on the community. During the Open Days some 15,000 visitors came to the University. They included 950 school students from 35 schools, some as far away as Lameroo and Port Pirie. This year particular stress was laid on the needs of the physically handicapped in the community. Special routes were arranged for persons in wheelchairs and a special tactile exhibition for the blind and partially blind was held in the Bonython Hall.

(3) The University's assistance to Universities in Indonesia, through the Australian-Asian Universities Scheme of the Australian Vice-Chancellors' Committee, took a very tangible step forward with the visits to Adelaide of two biologists and two physicists. The Indonesian visitors studied mainly research and teaching techniques during their visits.

In addition, Dr. R. Knight of the Agronomy Department, carried out a three-month plant breeding advisory assignment in Indonesia under the same Scheme.

(4) The University of Adelaide Theatre Guild celebrated its 40th Anniversary in 1978. The Guild was established in 1938 with the major objective of stimulating interest in "good theatre", both in the University and in the community. The Guild presented a 12-night season of "A Midsummer Night's Dream" in August to mark the anniversary. The Guild activities were given a significant boost by the 12-week appointment of an Artist-in-Residence, Mr. Ray Omodei.

(5) The University appointed two Artists-in-Residence during the year. They were Mr. Ray Omodei, a leading Australian Theatrical producer, and Mr. Robert Pope, a Riverland artist.

Mr. Omodei's appointment was made possible by financial contributions from the University, the University Theatre Guild, and the Artists-in-Residence Scheme of the South Australian Government. His work encompassed teaching students of the University in tutorials and workshops; participating in workshops for the University of Adelaide Theatre Guild on the skills and practice of acting, and directing the Guild's October production for the Italian Festival, "Mirandola"; and conducting public seminars on the development of theatre in contemporary Australia and on the place of Australian playwrights in Australian theatre.

Mr. Pope's appointment was funded by the University and the District Council of Berri. He was particularly interested in the relationship between the Arts and Science and during his residency at the Waite Institute gave seminars and held discussions on this subject. The visit gave him the opportunity to meet and interact not only with staff and students at the Waite Institute, but also with the artistic and cultural community of Adelaide.

21. FINANCIAL STATEMENTS

An abstract of the income and expenditure of the University during 1978 is annexed to this Report, together with a further statement showing the actual position of the University with respect to its property, funds and liabilities at the close of 1978.

Signed on behalf of the Council,

Adelaide,
14 September, 1979.

J. J. BRAY,
Chancellor.

Financial Statements

1978

THE UNIVERSITY
Income and Expenditure Account for the

INCOME					1978	1977
NORTH TERRACE					\$	\$
					\$	\$
<i>Government Grant for</i>						
Recurrent Expenditure	.....	.....	.....	34,116,172		32,288,044
Research	.....	.....	.....	313,567		305,324
					34,429,739	32,593,368
<i>Private Income</i>						
<i>Interest:</i>						
Treasury of South Australia	.....	.....	.....	114,443		161,872
Agent General	.....	.....	.....	540		886
Short Term Deposit	.....	.....	.....	418,307		216,489
Electricity Trust of S.A.	.....	.....	.....	44,895		42,460
S.A. Gas Co.	.....	.....	.....	11,561		13,025
Mortgage Advances	.....	.....	.....	—		16
Composite Fund—						
Dividends and Interest	.....	.....	.....	249,213		241,969
Investments of Endowments and other funds	.....	.....	.....	291,350		224,767
Student Conservatorium Fees	.....	.....	.....	18,624		17,683
Other Income	.....	.....	.....	F 254,129		251,079
					1,403,062	1,170,246
TOTAL INCOME					35,832,801	33,763,614
<i>Deduct:</i>						
Credits to Special Funds	.....	.....	.....		374,602	361,886
					35,458,199	33,401,728
<i>Deduct:</i>						
Appropriations towards meeting deficits of prior years:						
Adjustments to Recurrent Grants	.....	.....	.....	3,000		22,000
Part Deficits—prior years (Schedule 7)	.....	.....	.....	39,893		296,106
					42,893	
*Appropriations towards future Expenditure	.....	.....	.....	296,555		132,548
Repayment of A.M.P. Loan for Union Building	.....	.....	.....	44,672		—
					384,120	450,654
					\$35,074,079	\$32,951,074

* For itemised appropriations see page 1242.

OF ADELAIDE

year ended 31 December, 1978

EXPENDITURE

NORTH TERRACE

	Schedule		1978	1977
		\$	\$	\$
<i>Departmental:</i>				
Salaries and Wages	A	21,905,367		20,800,271
Travelling Expenses—				
New Appointments		44,398		40,066
Laboratory Maintenance	A	1,394,694		1,087,097
Furniture	A	23,401		18,362
			23,367,860	21,945,796
<i>Library:</i>				
Salaries and Wages		1,658,118		1,502,197
Books and Binding		891,890		746,013
			2,550,008	2,248,210
<i>Administrative Salaries:</i>			2,435,940	2,226,126
<i>Research:</i>				
Salaries and Wages	A	39,921		50,139
Maintenance	A	381,406		337,009
Travel and Setting Up	A	177,558		156,112
Scholars	A	357,638		369,691
			956,523	912,951
<i>Maintenance of Property:</i>				
Caretaking and Cleaning		1,162,099		1,229,070
Building Repairs		533,751		372,879
Maintenance of Site and Gardeners' Wages		113,156		98,714
Sports Grounds		130,205		120,200
			1,939,211	1,820,863
<i>Sundry:</i>				
Payroll Tax		1,300,672		1,229,256
Examinations		98,663		92,072
General Expenses	B	622,350		551,467
Engineering Services	C	841,577		829,258
Insurance	D	207,139		241,575
Special Grants	E	40,038		48,095
Supplementary Superannuation		130,514		237,655
Supplementary Pensions		90,234		73,349
Other Pensions		62,909		21,445
Long Service Leave		157,441		214,956
Study Leave		273,000		258,000
			3,824,537	3,797,128
			<u>\$35,074,079</u>	<u>\$32,951,074</u>

THE UNIVERSITY
Income and Expenditure Account for the

INCOME					
WAITE AGRICULTURAL RESEARCH INSTITUTE					
<i>Schedule</i>					
\$					
1978					
1977					
\$					
<i>Government Grant for</i>					
Recurrent Expenditure	.....	.....	.....	3,936,828	3,640,956
Research	.....	.....	.....	68,433	55,676
				4,005,261	3,696,632
<i>Interest</i>	32,971	33,817
<i>Other Income</i>	1,733	1,132
				34,704	34,949

\$4,039,965	\$3,731,581
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OF ADELAIDE

year ended 31 December, 1978

EXPENDITURE

WAITE AGRICULTURAL RESEARCH INSTITUTE

	<i>Schedule</i>		1978	1977
		\$	\$	\$
<i>Departmental:</i>				
Salaries and Wages	..... A	2,111,009		1,971,785
Travelling Expenses—				
New Appointments	.....	4,504		—
Laboratory Maintenance	..... A	148,694		116,460
Furniture	..... A	1,771		3,507
			2,265,978	2,091,752
<i>Library:</i>				
Salaries and Wages	.....	53,865		49,348
Books and Binding	.....	65,948		56,288
			119,813	105,636
<i>Administrative Salaries:</i>	.....		401,409	380,860
<i>Research:</i>				
Salaries and Wages	..... A	28,819		36,135
Maintenance	..... A	38,729		27,521
Travelling Expenses	..... A	1,478		1,443
Scholars	..... A	78,591		55,331
			147,617	120,430
<i>Maintenance of Property:</i>				
Caretaking and Cleaning	..... B	119,961		114,762
Building Repairs	.....	83,506		74,287
Maintenance of Site and Gardeners' Wages	.....	45,622		33,818
			249,089	222,867
<i>Sundry:</i>				
Payroll Tax	.....	143,115		134,259
General Expenses	..... C	78,814		74,457
Engineering Services	..... D	187,374		197,250
Insurance	.....	26,508		34,209
Supplementary Superannuation	.....	39,810		52,405
Supplementary Pensions	.....	12,157		8,927
Other Pensions	.....	24		—
Long Service Leave	.....	50,948		14,215
			538,750	515,722
<i>Farm:</i>				
Wages	.....	190,072		179,694
Maintenance	.....	18,027		14,565
			208,099	194,259
<i>Mortlock Experiment Station:</i>				
Salaries and Wages	.....	91,210		83,555
Maintenance and Travel	.....	18,000		16,500
			109,210	100,055
			<u>\$4,039,965</u>	<u>\$3,731,581</u>

THE UNIVERSITY

Combined Income and Expenditure Account—North Terrace

INCOME					
1977		1978	1977	Total	
\$		\$	North Tce. \$	Waite \$	
				\$	
	<i>Government Grant For</i>				
35,929,000	Recurrent Expenditure	38,053,000	20,800,271	1,971,785	22,772,056
361,000	Research	382,000	40,066	—	40,066
	<i>Private Income</i>		1,087,097	116,460	1,203,557
	<i>Interest—</i>		18,362	3,507	21,869
161,872	Treasury of S.A.	114,443			
886	Agent General	540			
216,489	Short Term Deposits	418,307	1,502,197	49,348	1,551,545
42,460	E.T.S.A.	44,895	746,013	56,288	802,301
13,025	S.A. Gas Co.	11,561			
16	Mortgage Advances ...	—	2,226,126	380,860	2,606,986
	<i>Composite Fund</i>				
241,969	Dividends and Interest	249,213	50,139	36,135	86,274
	<i>Investments—</i>		337,009	27,521	364,530
	Endowments and		156,112	1,443	157,555
258,584	Other Funds	324,321	369,691	55,331	425,022
17,683	Conservatorium Fees ...	18,624	1,229,070	114,762	1,343,832
			372,879	74,287	447,166
252,211	Other Income	255,862	98,714	33,818	132,532
			120,200	—	120,200
<u>\$37,495,195</u>	TOTAL INCOME	<u>\$39,872,766</u>			
	<i>Deduct—</i>		1,229,256	134,259	1,363,515
361,886	Credits to Special Funds	374,602	92,072	—	92,072
			551,467	74,457	625,924
<u>\$37,133,309</u>		<u>\$39,498,164</u>	829,258	197,250	1,026,508
	<i>Deduct—</i>		241,575	34,209	275,784
	Appropriations to		48,095	—	48,095
	deficits of prior years		237,655	52,405	290,060
	Adjustment:—		73,349	8,927	82,276
22,000	Recurrent Grant	3,000	21,445	—	21,445
			214,956	14,215	229,171
	Part deficit—		258,000	—	258,000
296,106	prior years (Sch. 7)	39,893			
	Appropriations towards		—	179,694	179,694
132,548	future expenditure ...	296,555	—	14,565	14,565
—	Repayment A.M.P. Loan				
	for Union Building ...	44,672	—	83,555	83,555
			—	16,500	16,500
<u>\$36,682,655</u>		<u>\$39,114,044</u>			

OF ADELAIDE

and Waite Institute for the year ended 31 December 1978

EXPENDITURE

		1978			
		North Tce.	Waite	Total	
		\$	\$	\$	\$
<i>Departmental</i>					
	Salaries and Wages	21,905,367	2,111,009	24,016,376	
	Travelling Expenses—				
	New Appointments ...	44,398	4,504	48,902	
	Laboratory Maintenance	1,394,694	148,694	1,543,388	
24,037,548	Furniture	23,401	1,771	25,172	25,633,838
<i>Library</i>					
	Salaries and Wages	1,658,118	53,865	1,711,983	
2,353,846	Books and Binding	891,890	65,948	957,838	2,669,821
2,606,986	<i>Administrative Salaries</i>	2,435,940	401,409	2,837,349	2,837,349
<i>Research</i>					
	Salaries and Wages	39,921	28,819	68,740	
	Maintenance	381,406	38,729	420,135	
	Travelling Expenses ...	177,558	1,478	179,036	
1,033,381	Scholars	357,638	78,591	436,229	1,104,140
<i>Maintenance of Property</i>					
	Caretaking-Cleaning ...	1,162,099	119,961	1,282,060	
	Building Repairs ...	533,751	83,506	617,257	
	Maintenance of Site				
	and Gardeners' Wages	113,156	45,622	158,778	
2,043,730	Sports Grounds ...	130,205	—	130,205	2,188,300
<i>Sundry</i>					
	Payroll Tax ...	1,300,672	143,115	1,443,787	
	Examinations	98,663	—	98,663	
	General Expenses	622,350	78,814	701,164	
	Engineering Services ...	841,577	187,374	1,028,951	
	Insurance	207,139	26,508	233,647	
	Special Grants ...	40,038	—	40,038	
	Supplementary				
	Superannuation	130,514	39,810	170,324	
	Supplementary Pensions	90,234	12,157	102,391	
	Other Pensions ...	62,909	24	62,933	
	Long Service Leave	157,441	50,948	208,389	
4,312,850	Study Leave	273,000	—	273,000	4,363,287
<i>Farm</i>					
	Wages ...	—	190,072	190,072	
194,259	Maintenance	—	18,027	18,027	208,099
<i>Mortlock</i>					
	Salaries and Wages	—	91,210	91,210	
100,055	Maintenance and Travel	—	18,000	18,000	109,210
<u>\$36,682,655</u>				<u>\$39,114,044</u>	

General Notes on the Accounts

1. Appropriations towards future expenditure

	\$
(a) Income Carried Forward	100,000
(b) Flexibility Fund	29,612
(c) Engineering Services Savings (North Tce.)	146,543
(d) Engineering Services Savings (Waite)	20,400
	\$296,555

2. The above expenditure does not include expenditure for research and educational purposes of Grants received from Outside Sources totalling \$3,011,498 detailed on pages 1265-1291 inclusive of these accounts.
3. An initial re-grouping of Income and Expenditure Accounts and Balance Sheet figures has been made, and to ensure proper comparability with the previous year those figures have been adjusted similarly.

D. R. BEECHER,
Bursar.

We report that we have audited the various Books of Account and other records relating to the Income and Expenditure of The University of Adelaide in respect of the year which ended 31 December 1978, and we certify the above statement to be a correct abstract of such Income and Expenditure during the above period.

We further certify that in terms of sections 6 and 7 of the States Grants (Tertiary Education Assistance) Act 1977 and subsequent amendments, in relation to the year 1978, the above financial statement correctly sets out the Commonwealth Grants received by the University of Adelaide, that the Commonwealth Grant for recurrent purposes paid to the University in that year has been applied for expenditure (other than for the purposes of land, buildings and equipment expenditure as defined in the Act) on University purposes and that the Commonwealth Grant of \$382,000 has been applied for expenditure on special research purposes.

YARWOOD VANE & CO., Chartered Accountants.

TOUCHE ROSS & CO., Chartered Accountants.

Adelaide, 8 May 1979.

1978—INCOME AND EXPENDITURE ACCOUNT—SUPPORTING SCHEDULES
DEPARTMENTAL FUNDS EXPENDED—1978

SCHEDULE A
NORTH TERRACE

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture	Salaries and Wages	Maintenance	Travel and Setting Up	Scholars	
<i>ARCHITECTURE</i>	455,099	15,213	1,258	2,783	4,382	1,394	3,390	483,519
<i>ARTS</i>								
Anthropology	277,660	17,748	688	2,024	1,380	5,045	18,714	323,259
Centre for Asian Studies	109,511	1,175	103	—	661	300	—	111,750
Classics	254,188	2,308	—	—	609	—	—	257,105
Education	505,667	9,077	—	1,586	3,185	2,808	—	522,323
English	597,388	6,209	208	237	4,809	3,445	21,454	633,750
French	202,621	2,190	—	—	457	519	—	205,787
Geography	330,669	29,128	—	5,122	3,164	5,222	2,333	375,638
German	217,326	2,660	456	32	1,511	250	4,050	226,285
History	719,542	5,795	610	2,776	8,798	3,313	22,793	763,627
Language Laboratory	74,227	4,426	—	169	83	—	—	78,905
Library Studies	45,673	1,193	—	36	340	534	—	47,776
Philosophy	209,811	784	—	640	588	1,820	6,853	220,496
Politics	371,742	6,754	326	1,654	2,000	2,988	15,472	400,936
Psychology	674,633	33,648	639	5,062	18,283	1,618	12,125	746,008
Napier Building Management Committee	—	208	—	—	—	—	—	208
<i>DENTISTRY</i>								
Dental Health	267,394	3,872	—	—	4,250	—	—	275,516
Oral Biology	172,836	6,527	—	834	1,585	154	—	181,936
Oral Pathology—								
Oral Surgery	154,615	4,733	—	—	3,688	2,591	—	165,627
Restorative Dentistry	486,945	7,441	—	—	3,496	158	—	498,040
<i>ECONOMICS</i>								
Commerce	276,659	6,143	2,370	—	812	244	—	286,228
Economics	754,477	9,946	1,969	255	4,330	5,814	14,168	790,959

(Continued next page)

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture	Salaries and Wages	Maintenance	Travel and Setting Up	Scholars	
<i>ENGINEERING</i>								
Chemical	411,013	27,917	939	—	12,998	—	4,050	456,917
Civil	576,085	36,046	103	—	10,751	3,156	10,924	637,065
Electrical	515,773	36,062	763	—	18,916	1,062	16,538	589,114
Mechanical	575,390	42,766	300	—	14,031	—	18,770	651,257
Workshop	—	13,540	—	—	—	—	—	13,540
<i>LAW</i>	777,392	9,980	1,869	1,913	1,452	609	—	793,215
<i>MATHEMATICAL SCIENCES</i>								
Applied Mathematics	413,216	8,156	115	2,904	1,901	5,301	8,917	440,510
Computing Science	322,964	15,788	659	226	18,499	2,698	150	360,984
Mathematical Physics	139,941	3,680	—	—	1,097	1,356	10,303	156,377
Pure Mathematics	331,080	3,251	147	1,847	1,327	1,465	17,214	356,331
Statistics	195,624	1,780	—	142	2,491	—	—	200,037
<i>MEDICINE</i>								
Anatomy	445,706	15,721	1,501	43	5,907	708	150	469,736
Community Medicine	138,250	9,618	225	—	1,011	295	—	149,399
Medicine	470,923	13,196	—	2,510	4,800	42	—	491,471
Medical Workshop	65,499	2,364	—	—	—	—	—	67,863
Medical Animal House	20,798	15,515	—	—	—	—	—	36,313
Obstetrics and Gynaecology	317,878	9,543	—	—	10,440	—	5,053	342,914
Paediatrics	329,503	7,045	—	—	5,640	—	—	342,188
Pathology	295,464	11,346	—	—	3,602	—	—	310,412
Psychiatry	328,348	9,378	—	2,077	2,022	366	—	342,191
Surgery	355,016	9,132	—	—	8,472	—	4,050	376,670
Surgery—Hospital Animal House	—	4,868	—	—	—	—	—	4,868
<i>MUSIC</i>								
Elder Conservatorium	339,245	—	—	—	—	—	—	339,245
Music	355,124	21,343	1,503	36	2,550	1,451	10,517	392,524
Performing Arts	37,193	940	—	—	—	—	—	38,133

(Continued next page)

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture	Salaries and Wages	Maintenance	Travel and Setting Up	Scholars	
<i>SCIENCE</i>								
Biochemistry	460,144	65,881	1,021	—	18,082	2,763	33,208	581,099
Botany	446,525	30,308	369	296	9,552	3,948	16,402	507,400
Chemistry, Organic	562,407	48,322	—	—	13,956	98	4,200	628,983
Chemistry, Physical and Inorganic	810,999	86,493	197	1,319	11,748	1,043	12,081	923,880
Genetics	312,471	21,630	—	—	7,199	17	3,214	344,531
Geology and Mineralogy	516,428	31,063	—	—	13,916	6,964	13,276	581,647
Geology, Economic	194,250	9,157	200	82	1,885	4,699	4,050	214,323
Mawson Institute	99,612	9,654	—	—	1,394	—	—	110,660
Microbiology	342,062	27,893	—	1,094	9,804	1,745	31,740	414,338
Physics	979,805	89,291	—	1,960	22,129	637	5,007	1,098,829
Physiology	469,888	34,883	904	—	12,690	—	2,932	521,297
Zoology	582,611	37,057	161	—	7,311	6,563	3,540	637,243
Social Biology	—	297	—	—	—	—	—	297
<i>OTHER DEPARTMENTAL SERVICES</i>								
Advisory Centre for University Education	87,154	6,595	—	—	293	90	—	94,132
Central Animal House	92,881	34,245	—	—	—	—	—	127,126
Centre for Physical Health	51,502	1,540	—	—	—	—	—	53,042
Computing Centre	419,301	204,890	—	—	—	—	—	624,191
Health Service	86,459	2,181	162	—	778	—	—	89,580
Medical School Administration	63,210	4,347	—	—	—	—	—	67,557
Student Counselling Service	72,793	2,277	—	—	—	—	—	75,070
Dean's Office—								
Arts	—	195	—	—	—	—	—	195
Dentistry	—	897	—	—	—	—	—	897
Engineering	—	98	—	—	—	—	—	98
Science	—	71	—	—	—	—	—	71

(Continued next page)

SCHEDULE A (Continued)

DEPARTMENTAL FUNDS EXPENDED—1978—NORTH TERRACE

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture	Salaries and Wages	Maintenance	Travel and Setting Up	Scholars	
<i>MISCELLANEOUS</i>								
Administration	—	9,817	844	—	—	—	—	10,661
Continuing Education (including Radio Station)	241,206	28,680	227	—	—	—	—	270,113
Compulsory Excursions	—	17,454	—	—	—	—	—	17,454
Electron Microscope	—	4,517	—	—	1,452	—	—	5,969
Electron Optical Centre	—	2,991	165	—	11	—	—	3,167
Environmental Studies	57,124	4,501	400	262	2,654	1,970	—	66,911
Library	—	67,653	2,000	—	—	—	—	69,653
Library Books for Research Purposes	—	—	—	—	44,094	—	—	44,094
Library Complex Management Committee	—	184	—	—	—	—	—	184
Maternity Leave	16,932	—	—	—	—	—	—	16,932
Radiation Safety	—	897	—	—	—	—	—	897
Vice Chancellor's Emergency Fund	23,495	2,582	—	—	—	—	—	26,077
Research Type Conferences	—	—	—	—	—	26,703	—	26,703
Visiting Lecturers	—	—	—	—	—	18,002	—	18,002
Short Overseas Conference Leave	—	—	—	—	—	13,838	—	13,838
Overseas Travel—Miscellaneous	—	—	—	—	—	2,000	—	2,000
Visiting Professors	—	—	—	—	6,140	4,900	—	11,040
Publications	—	—	—	—	—	24,852	—	24,852
	\$21,905,367	\$1,394,694	\$23,401	\$39,921	\$381,406	\$177,558	\$357,638	\$24,279,985

FINANCIAL STATEMENTS

1978—INCOME AND EXPENDITURE ACCOUNT—SUPPORTING SCHEDULES
DEPARTMENTAL FUNDS EXPENDED—1978

SCHEDULE A
WAITE INSTITUTE

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture	Salaries and Wages	Maintenance	Travel and Setting Up	Scholars	
<i>AGRICULTURAL SCIENCE</i>								
Agricultural Biochemistry	388,778	14,652	404	—	5,004	100	7,537	416,475
Agronomy and Plant Breeding	416,023	26,075	153	3,728	7,277	257	5,045	458,558
Animal Physiology	171,793	11,183	392	—	3,723	475	—	187,566
Biometry	191	3,302	—	25,010	15	—	—	28,518
Entomology	329,759	23,632	152	—	8,576	528	25,535	388,182
Plant Pathology	392,380	18,006	116	—	5,800	72	14,192	430,566
Plant Physiology	239,898	11,528	120	20	4,671	30	26,282	282,549
Soil Science	172,187	13,096	—	61	3,112	16	—	188,472
<i>MISCELLANEOUS</i>								
Animal Facilities	—	5,068	—	—	—	—	—	5,068
Electron Microscope	—	548	—	—	—	—	—	548
Engineering Workshop	—	98	—	—	—	—	—	98
Faculty Laboratory	—	11,319	190	—	—	—	—	11,509
Glasshouses	—	4,812	—	—	—	—	—	4,812
Meteorology Station	—	104	—	—	—	—	—	104
Laboratory Photocopying	—	2,290	—	—	—	—	—	2,290
Radiation Hazards Committee	—	94	—	—	—	—	—	94
South Wing Basement	—	1,267	—	—	—	—	—	1,267
Director's Laboratory	—	993	—	—	551	—	—	1,544
Laboratory Library	—	627	—	—	—	—	—	627
Administration	—	—	244	—	—	—	—	244
TOTAL WAITE INSTITUTE	\$2,111,009	\$148,694	\$1,771	\$28,819	\$38,729	\$1,478	\$78,591	\$2,409,091
TOTAL NORTH TERRACE	\$21,905,367	\$1,394,694	\$23,401	\$39,921	\$381,406	\$177,558	\$357,638	\$24,279,985
TOTAL	\$24,016,376	\$1,543,388	\$25,172	\$68,740	\$420,135	\$179,036	\$436,229	\$26,689,076

General Expenses

Total	1977			1978		
	Waite	North Tce.		North Tce.	Waite	Total
2,000	—	2,000	Overseas Study Awards	4,200	—	4,200
45,798	23,277	22,521	Miscellaneous Charges	18,774	22,710	41,484
181,450	25,068	156,382	Printing and Stationery	167,932	33,938	201,870
41,749	—	41,749	Advertising	41,766	—	41,766
7,564	—	7,564	Bank Charges, Duty Stamps and Exchange	9,277	—	9,277
109,481	14,340	95,141	Postages	108,699	12,703	121,402
11,930	—	11,930	Maintenance of Office Machines	8,742	—	8,742
4,257	—	4,257	Senate and Other Elections	5,050	—	5,050
64,950	—	64,950	Calendar	72,480	—	72,480
14,419	2,192	12,227	Laundry Services	14,164	2,928	17,092
10,983	6,046	4,937	Travelling Expenses	16,528	2,564	19,092
23,480	—	23,480	Australian Vice-Chancellors' Committee Expenses	25,024	—	25,024
4,049	—	4,049	Administration Car Expenses	19,639	—	19,639
—	—	—	Defence of Excellence Seminar	785	—	785
—	—	—	Open Day Expenses	11,620	—	11,620
21,000	—	21,000	Job Evaluation Study	5,280	—	5,280
20,920	—	20,920	Entertainment Expenses	23,015	—	23,015
9,273	—	9,273	Rent of Premises	4,493	—	4,493
8,897	—	8,897	Rubbish Collection	8,853	—	8,853
7,503	—	7,503	Teaching Hospital Fees	7,257	—	7,257
11,377	—	11,377	Dental Hospital Fees	11,180	—	11,180
2,844	—	2,844	Dental Equipment and Microscope Hire	2,640	—	2,640
5,000	—	5,000	Superannuation Consultant's Fees	12,633	—	12,633
15,807	—	15,807	Auditors' Fees and Legal Expenses	24,776	—	24,776
2,229	2,229	—	Photography	—	2,645	2,645
1,305	1,305	—	Workshops' Overhead	—	1,326	1,326
<u>628,265</u>	<u>74,457</u>	<u>553,808</u>		<u>624,807</u>	<u>78,814</u>	<u>703,621</u>
2,341	—	2,341	<i>Deduct</i> Discount Received	2,457	—	2,457
<u>\$625,924</u>	<u>\$74,457</u>	<u>\$551,467</u>		<u>\$622,350</u>	<u>\$78,814</u>	<u>\$701,164</u>

1978 Income and Expenditure Account — Supporting Schedules

SCHEDULE C.

Engineering Services

Total	1977			1978		Total
	Waite	North Tce.		North Tce.	Waite	
452,214	124,073	328,141	Electricity	320,226	116,860	437,086
12,709	1,584	11,125	Gas	16,418	1,618	18,036
22,090	2,891	19,199	Heating Oil	17,660	2,814	20,474
127,498	31,752	95,746	Water	120,469	36,757	157,226
63,189	—	63,189	Air Conditioning and Ventilation	58,073	—	58,073
48,332	—	48,332	Maintenance of Lifts	50,958	—	50,958
11,103	—	11,103	Fire Protection Charges	14,302	—	14,302
288,968	36,545	252,423	Telephones	243,471	29,176	272,647
405	405	—	Safety Committee	—	149	149
<u>\$1,026,508</u>	<u>\$197,250</u>	<u>\$829,258</u>		<u>\$841,577</u>	<u>\$187,374</u>	<u>\$1,028,951</u>

SCHEDULE D.

Insurance

Total	1977			1978		Total
	Waite	North Tce.		North Tce.	Waite	
168,360	15,198	153,162	General	75,728	6,804	82,532
107,424	19,011	88,413	Workmen's Compensation	131,411	19,704	151,115
<u>\$275,784</u>	<u>\$34,209</u>	<u>\$241,575</u>		<u>\$207,139</u>	<u>\$26,508</u>	<u>\$233,647</u>

THE UNIVERSITY OF ADELAIDE

1978 *Income and Expenditure Account – Supporting Schedules*

SCHEDULE E.

Special Grants

1977		1978
1,500	The University of Adelaide Club	1,000
1,000	Theatre Guild	1,000
12,600	S.A. Postgraduate Medical Assoc. Inc.	12,600
20,580	Planning	12,276
6,000	Australian Institute of Nuclear Science and Engineering	6,000
100	Adelaide University Regimental Band	100
6,215	Waite Institute Cafeteria	6,962
100	University of Adelaide Womens' Club	100
<u>\$48,095</u>		<u>\$40,038</u>

SCHEDULE F.

Other Income

1977		1978
2,126	Calendar Sales	4,300
3,027	Hire of Rooms	1,320
3,396	Statements of Academic Record	3,909
1,000	W.E.A. Office Rent	1,000
9,309	Commission	10,209
5,860	Late Fees	4,807
157,548	Computing Centre	156,259
64,555	Anatomy (S.A.I.T.) Special Subsidy	65,909
4,258	Administration Charge P.E.M.	5,061
—	Sundry	283
—	Special Subsidy—S.Y.E.T.P.	1,072
<u>\$251,079</u>		<u>\$254,129</u>

LIABILITIES AND TRUSTS

NORTH TERRACE

	<i>Schedule</i>	1978	1977
	\$	\$	\$
<i>Endowments and Grants</i>			
General	4,626,366		4,151,410
Contributions to Buildings and Fittings:			
Government of South Australia	8,298,477		8,312,323
Commonwealth Government	12,621,393		12,632,363
Accumulated Funds	1,492,163		1,345,800
Sundry Donations	1,073,042		80,159
E. W. Benham Estate for Henry Moore Sculpture	21,019		21,019
Union Contribution—Union Complex	1,268,881		1,199,378
	<u> </u>	29,401,341	<u>27,742,452</u>
 <i>Reserves and Special Funds</i>			
Invalidity Scheme Fund	265,103		234,088
Personal Superannuation Accounts	6,627,101		5,418,191
Ancillary Staff Superannuation	1,186,625		1,172,248
Fund for Replacement of Major Plant	29,206		64,860
Surplus Proceeds Sale of Shares	—		94,894
Provision for Realization of Investment Properties	194,825		160,456
Motor Vehicle Replacement Fund	—		805
Commonwealth Government Grants for Buildings, Fittings and Major Equipment	6,748,750		3,595,511
Accumulated Funds for Building Projects	194,816		75,301
Bank of Adelaide—Current Account	1,451,810		1,367,841
Scholarship Funds	(1) 305,505		261,243
Library Funds	(2) 72,321		46,596
Special Funds	(3) 4,639,566		4,488,087
	<u> </u>	21,715,628	<u>16,980,121</u>
Carried forward		<u>51,116,969</u>	<u>44,722,573</u>

OF ADELAIDE

Accounts at 31 December, 1978

ASSETS

NORTH TERRACE

Schedule

		1978	1977
	\$	\$	\$
<i>Investment of Endowments and Grants</i>			
Commonwealth Inscribed Stock	1,000		1,000
Share and Stock Investments	4,127,531		3,419,608
University Site	223,652		223,652
University Buildings	24,660,050		23,612,138
Other Land and Buildings	389,108		365,673
Funds held by Trustees	—		120,381
		29,401,341	27,742,452
 <i>Investment of Reserves and Special Funds</i>			
S.A. Gas Company Bonds	6,587,000		6,278,000
S.A. Housing Trust Debentures	250,000		250,000
Commonwealth Stock	410,288		—
Composite Fund Investments	5,206,603		3,853,465
Current Balances:			
Irving Trust Company, N.Y.	23,304		1,584
Agent General for S.A., London	30,078		7,517
Cash Debtors and Stocks	(5) 1,278,266		1,550,772
Buildings in Progress	(6) 7,761,520		4,883,815
Income and Expenditure			
Appropriation Account	(7) 168,569		154,968
		21,715,628	16,980,121
Carried forward		51,116,969	44,722,573

THE UNIVERSITY
Statement of Balances of Capital

LIABILITIES AND TRUSTS

NORTH TERRACE

	<i>Schedule</i>	1978	1977
	\$	\$	\$
Brought forward		51,116,969	44,722,573
<i>Funds Expended on Equipment</i>			
Contributed from Accumulated Income	483,686		485,070
Donations for Equipment	4,690,658		4,419,877
Donations for Library	278,394		234,445
<i>Funds Provided by Government of S.A.</i>			
Library	3,440,043		3,440,043
Equipment (minor) and Furniture	4,496,897		4,572,668
Equipment (major)	462,295		462,295
<i>Funds Provided by Commonwealth Government</i>			
Library Books	3,840,243		3,009,131
Equipment (minor) and Furniture	6,836,372		5,072,254
Equipment (major)	815,586		815,586
		25,344,174	22,511,369
WAITE AGRICULTURAL RESEARCH INSTITUTE			
Endowments—General	1,139,520		1,159,606
Endowments for Laboratories	64,000		64,000
Funds provided for Buildings			
Government of South Australia	641,945		641,945
Commonwealth Government	894,999		845,132
Grants and Donations	559,816		464,292
Accumulated Income	185,708		211,101
<i>Funds Provided for Equipment and Furniture</i>			
Government of South Australia	996,374		1,023,859
Commonwealth Government	895,188		734,529
Grants and Donations	1,354,911		1,272,697
Accumulated Income	74,780		14,341
<i>Funds Provided for Library</i>			
Government of South Australia	290,017		290,017
Commonwealth Government	255,167		189,219
Accumulated Income	22,246		3,997
Unexpected Funds	(4)	264,902	439,216
		7,639,573	7,353,951
		\$84,100,716	\$74,587,893

OF ADELAIDE

Accounts at 31 December, 1978

		ASSETS	
NORTH TERRACE		<i>Schedule</i>	
		1978	1977
		\$	\$
Brought forward	.....	51,116,969	44,722,573
<i>Equipment</i>			
Equipment and Furniture	.....	17,612,743	15,654,999
Library Books and Binding	.....	7,731,431	6,856,370
		25,344,174	22,511,369
WAITE AGRICULTURAL RESEARCH INSTITUTE			
Composite Fund Investments	.....	643,952	734,941
Share and Stock Investments	.....	1,835	1,885
Funds held by Trustees	.....	230,207	230,207
Land	.....	204,133	204,133
Buildings	.....	2,305,349	2,255,483
Buildings in Progress	..... (8)	305,778	76,016
Equipment and Furniture	.....	3,321,253	3,081,083
Library	.....	567,430	501,482
Current Balances:			
Cash, Debtors and Stocks	..... (9)	59,636	268,721
		7,639,573	7,353,951
		\$84,100,716	\$74,587,893

LIABILITIES AND TRUSTS

Contingent Liabilities

In respect of guarantees given by the University for Staff Housing.

Liability for Long Service, Holiday and Sick Leave, and Entitlements under the Supplementary Superannuation Scheme

The Commonwealth Government provides from recurrent grants the funds for Long Service, Holiday and Sick Leave, and Entitlements under the Supplementary Superannuation Scheme in the year the expenditure is incurred. No provision therefore has been made in the accounts by way of contingency funds for these liabilities.

Contingency

Bequests in Deceased Estates, subject to Life and Other Interests:

C. Phillipson
 G. M. Dowling
 L. A. Shanasy
 R. A. M. McConnochie
 E. C. E. Munton
 G. E. I. Borthwick
 M. F. Simms
 F. Beeching
 P. S. Hossfeld
 R. M. Laffer
 J. S. Davies
 C. T. K. Turner
 W. H. Essex
 C. T. Fisher
 H. Hughes (Balance)
 E. MacMeikan (Balance)
 R. F. Mortlock (Balance)
 P. Waite (Balance)
 R. T. Melrose (Balance)
 W. H. Sandland (Balance)

We report that we have examined the above statement showing the financial position of The University of Adelaide in respect of Capital Funds as on 31 December 1978, and have compared same with the entries in the various Books of Account and other records relating to the affairs of the University, and as a result of our examina-

OF ADELAIDE

Accounts at 31 December, 1978

ASSETS

*Contingency**Bequests in Deceased Estates, subject to Life and Other Interests:
"as listed opposite"*

D. R. BEECHER,
Bursar.

tion and audit we do certify that the above statement is a correct abstract of the Books of Account. We further report that the securities, etcetera, representing the investments shown in the above statement, as well as the Land Grants and Certificates of Title belonging to the University, have been verified by us.

YARWOOD VANE & CO., Chartered Accountants.

TOUCHE ROSS & CO., Chartered Accountants.

Adelaide, 8 May 1979.

THE UNIVERSITY OF ADELAIDE

NORTH TERRACE

Schedules—Capital Accounts

SCHEDULE 1

Prizes and Scholarships

Name	Opening Balance 1/1/78	Income	Expenditure	Closing Balance 31/12/78
(Prizes unless indicated)	\$	\$	\$	\$
Barr Smith	134	37	25	146
Andrew Scott	47	23	32	38
James Gartrell	221	360	72	509
John Howard Clark	1,189	184	50	1,323
The Tormore	138	32	48	122
Byard	443	70	120	393
Sir Archibald Strong Memorial	1,193	178	130	1,241
Edith Hubbe and Harriet Cook	773	144	200	717
Bunday	441	68	100	409
M. Rees George Memorial	316	60	40	336
Hope Crampton	32	14	28	18
Violet de Mole Scholarship	1,456	191	1,647	—
Weimar-Ohlstrom	81	43	90	34
A. J. Schulz	2,700	1,091	3,791	—
Fred Johns Scholarship	11,455	1,246	—	12,701
Tinline Scholarship	968	252	120	1,100
Natalia Davies	9	55	80	16 Dr.
Roby Fletcher	6	28	40	6 Dr.
Jefferis Memorial Medals	—	9	—	9
The Australian Psychological Society	100	100	200	—
Anna Florence Booth	1,875	271	400	1,746
John Lewis	10 Dr.	20	10	—
Charles Fenner	33	13	20	26
Sir Archibald Grenfell Price	62	17	21	58
Edith A. Puddy	52	26	36	42
Gavin David Young Lectureship Fund	4,638	822	—	5,460
John F. Kennedy Memorial Scholarship	1,172	442	—	1,614
E. W. Benham Prizes and Medal	589	740	—	1,329
J. G. Cornell	469	200	150	519
P. W. Rice Scholarship	23,901	7,561	4,000	27,462
Lynda Tapp—History	577	312	650	239
Pauline Price	145	153	—	298
Shell Prize in Applied Psychology	—	75	75	—
Mountford Award	1,061	1,544	—	2,605
Ernest Ayers Scholarship	1,971	508	150	2,329
John Bagot Scholarship and Medal	2,409	291	195	2,505
Elsie Marion Cornish	597	93	80	610
J. G. Wood Memorial Scholarship	572	100	145	527
The Rennie Scholarship	118	68	35	151
Tate Memorial Medal Fund	159	24	—	183
James Barrans Scholarship	2,156	749	150	2,755
J. R. Wilton	44	22	45	21
Union Carbide	—	100	100	—
Sir Ronald Fisher—Genetics	481	65	100	446
Sir Ronald Fisher Memorial Scholarship	1,139	327	110	1,356
C.S.R. Chemicals	100	100	200	—
R. K. Morton Scholarship	330	252	—	582
Ena Orrock Lewcock Award	49	48	50	47
Lynda Tapp—Physiology	578	330	325	583
E. A. Cornish Memorial	139	106	75	170
Michael Smyth Memorial	—	400	400	—
Aman Hasan Abdi	119	66	80	105
G. M. Badger Prize in Organic Chemistry	—	259	200	59
Sir Kerr Grant Memorial	—	25	50	25 Dr.
D. B. Adam Memorial	316	78	60	334
T. E. Barr Smith Travelling Scholarship	2,695	1,694	4,379	10
R. K. Morton Scholarship	240	228	250	218
Australian Institute of Agric. Science, S.A. Board	—	—	20	20 Dr.
C. J. Everard Scholarship	20,589	15,154	15,592	20,151
K. P. J. Barley Memorial Award	276	1,150	1,000	426
Angas Engineering Exhibition	3,947	1,029	—	4,976
Sir Robert Chapman	282	76	298	60

(Continued next page)

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

Prizes and Scholarships

Name	Opening Balance 1/1/78	Income	Expenditure	Closing Balance 31/12/78
Schedule 1 (continued) (Prizes unless indicated)	\$	\$	\$	\$
Humes	—	100	200	100 Dr.
Australian Welding Institute	—	40	80	40 Dr.
James Hardie	—	150	300	150 Dr.
The Lokan	118	28	18	128
E. V. Clark	197	16	30	183
Gerard Industries	—	50	150	100 Dr.
E.T.S.A.	—	21	42	21 Dr.
E.T.S.A.—Electrical Power Engineering	—	121	221	100 Dr.
The Cable Makers Association	21	21	42	—
Chamber of Commerce and Industry	—	20	220	200 Dr.
Philips Electrical Industries	—	200	400	200 Dr.
Sir William Goodman Scholarship	3,905	740	667	3,978
The Johns-Perry	—	42	84	42 Dr.
Rutter Jewell-Thomas Medal and Prize	766	119	90	795
Albright and Wilson	—	—	63	63 Dr.
Petroleum Refineries	—	100	300	200 Dr.
Esso Standard Oil	60	40	140	40 Dr.
Shell	—	263	463	200 Dr.
Tubemakers of Aust. Ltd.	—	88	138	50 Dr.
Western Mining Corporation	—	—	300	300 Dr.
Frank Perry Scholarship—Engineering	7,717	3,769	4,875	6,611
Frank Bull	—	—	600	600 Dr.
Dow Chemical (Aust.) Scholarship	—	500	500	—
Institute of Engineers Australian Award	—	100	200	100 Dr.
Stow Prize and Scholarships	11	199	210	—
R. W. Bennett Prizes and Medal	433	148	150	431
Angas Parsons	904	225	100	1,029
Justin Skipper	379	57	30	406
Thomas Gepp	452	71	70	453
Roy Frisby Smith	373	195	240	328
Baker Scholarship	11,543	1,857	—	13,400
Taxation Institute of Australia	—	100	200	100 Dr.
Elder Prize	—	40	40	—
Sir Hughes Cairns Memorial	1,049	342	90	1,301
Christopher and John Campbell	307	110	150	267
Herbert John Wilkinson Memorial	4,557	1,076	350	5,283
Smith Kline and French	—	200	200	—
Dr. Davies-Thomas Scholarship	230	120	110	240
J. B. Cleland	68	27	20	75
T. L. Borthwick Memorial	85	23	26	82
The Archibald Watson	119	38	32	125
Dr. Chas. Gosse Lectureship	4,621	592	—	5,213
Everard Scholarship	539	207	250	496
The Lister	146	30	12	164
A.M.A.	—	—	52	52 Dr.
William Gardner Scholarship	294	353	627	20
Mead Johnson Paediatric	52	53	105	—
Carnation Company Award	50	50	100	—
The Shorney	581	223	—	804
Ruth Heighway Memorial	150	204	160	194
Bertha H. Sudholz Scholarship	2,827	588	—	3,415
T. G. Wilson Travelling Scholarship	1,157	531	—	1,688
Roche Products	20	20	60	20 Dr.
John Barker Scholarship	5,842	1,021	—	6,863
Keith Sheridan	2,027	560	400	2,187
W. A. Dibden	—	100	100	—
Eugene Abraham Matison	607	139	—	746
H. K. Fry	132	55	100	87
Wood Jones Scalpel	159	30	66	123
Ian Furler	225	271	225	271
Barbara Meyler Memorial	—	172	172	—

(Continued next page)

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

Prizes and Scholarships

Name	Opening Balance 1/1/78	Income	Expenditure	Closing Balance 31/12/78
Schedule 1 (continued) (Prizes unless indicated)	\$	\$	\$	\$
Frank Hone Memorial	—	32	32	—
Sir Trent de Crespigny Memorial	—	50	50	—
Thomas D. Hannon	284	45	60	269
Dental Board of S.A.	341	208	330	219
General Practice Study Group	—	—	40	40 Dr.
Malcolm Joyner	—	50	100	50 Dr.
Austin Bazely	109	52	35	126
G. O. Lawrence—Scholarship or Fellowship	9,891	4,713	5,158	9,446
Australian Society of Orthodontists	40 Dr.	100	50	10
Australian Dental Association	—	50	50	—
Herbert Gill-Williams Scholarship	—	18,318	7,088	11,230
R. G. Willoughby Award	981	399	290	1,090
Oliver Rutherford Turner Award	14,122	3,768	—	17,890
J. L. Eustace Scholarship and Award	7,847	3,396	514	10,729
Professor J. H. B. Tew	72	23	20	75
Chamber of Commerce and Industry	—	21	21	—
Economic Society	—	42	84	42 Dr.
John Lorenzo Young Scholarship	929	129	60	998
John Creswell Scholarship	3,427	519	—	3,946
George Thompson Bursary	507	69	—	576
Archibald Mackie Bursary	226	37	—	263
Joseph Fisher Medal and Lecture	1,716	1,218	253	2,681
Australian Society of Accountants	—	150	300	150 Dr.
Shell	—	150	250	100 Dr.
Institute of Chartered Accountants	—	21	71	50 Dr.
The I.B.M.—Economic Statistics	40 Dr.	80	80	40 Dr.
E. A. Russell Memorial	—	386	350	36
Kenneth and Hazel Milne Travelling Scholarship	11,694	1,440	777	12,357
The James Hardie—Architecture	—	300	300	—
S.A. Gas Co.	100	400	400	100
Clive E. Boyce Scholarship	2,726	1,097	—	3,823
Royal Australian Institute of Architects (S.A. Chapter)	—	175	325	150 Dr.
Wormald Bros.	200 Dr.	300	200	100 Dr.
Australian Gypsum Plaster Award	—	300	600	300 Dr.
Royal Australian Planning Institute	20	—	—	20
Dean W. Berry	—	50	100	50 Dr.
Alexander Clark Memorial	328	109	50	387
Eugene Alderman Scholarship	538	197	99	636
Selborne Moutray Russell Scholarship	1,366	371	90	1,647
Lucy Josephine Bagot	102	99	66	135
J. Varley Scholarship	1,080	346	148	1,278
Anders and Reimers Scholarship	1,117	304	165	1,256
Robert Whinham	104	33	—	137
Gladys Lloyd Thomas Scholarship	280	135	36	379
E. Harold Davies Fund	436	159	—	595
Florence Cooke Violin	74	24	—	98
Dr. Ruby Davy Scholarship	339	116	—	455
Guli Magarey Scholarship	202	112	—	314
Frederick Bevan Memorial Scholarship	398	181	99	480
Elder Overseas Scholarship	—	13,857	2,100	11,757
Maude Puddy Scholarship	411	160	81	490
Athol Lykke Award	665	266	—	931
Lienau	172	123	—	295
Clement Q. Williams	191	107	70	228
William Silver Scholarship	1,192	380	148	1,424
Mrs. Arno Pontt (May Gepp) Scholarship	156	99	—	255
Norman Chinner Scholarship	52	122	—	174
Frederick E. Baxendale Scholarship	367	199	120	446
Daisy Burmeister Salotti Scholarships	2,373	503	279	2,597
Angela Lakin Memorial Scholarship	833	261	—	1,094
Alex Burnard Scholarship	634	163	150	647

(Continued next page)

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

Prizes and Scholarships

Name	Opening Balance 1/1/78	Income	Expenditure	Closing Balance 31/12/78
Schedule 1 (continued) (Prizes unless indicated)	\$	\$	\$	\$
Josephine Christiansen Organ Bursary	352	30	—	382
H. Brewster-Jones	75	49	—	124
Iris M. Colly	—	1,174	200	974
Allans Music Scholarship	—	400	349	51
E. W. Stevens Scholarship	—	129	—	129
George Murray Scholarships	9,986	37,000	35,660	11,326
Chapman Memorial Scholarship	1,640	476	200	1,916
W. Donnithorne Award	7,359	1,197	—	8,556
Baillieu Research Scholarship	10,079	2,248	—	12,327
David Murray Scholarship	828	782	400	1,210
John L. Young Scholarship	552	349	290	611
St. Alban Scholarship	406	61	—	467
United Nations	962	101	—	1,063
Hartley Studentship	437	139	35	541
William Culross	—	43	—	43
Thornber Bursary	303	102	45	360
J. E. Jenkins Scholarship	2,316	1,680	825	3,171
Eva Lines Memorial Scholarship	989	171	—	1,160
Eric Smith Scholarship	437	150	—	587
Mabel Tapp—Matric. Maths	231	237	234	234
J. R. Barker Estate	3,907	1,478	5,385	—
George Fraser Scholarship	3,677	4,160	4,250	3,587
	\$260,953	\$164,948	\$120,396	\$305,505

SCHEDULE 2.

Library Funds

	\$
T. E. Barr Smith Endowment Income	16,905
Sir William Mitchell Endowment Income	6,308
Elizabeth Jackson Fund Income	2,238
A.M.A.	10,025
A. M. Simpson Income	2,091
Bedford Industries	342
Australian Dental Association	2,455
Herbert Shorney Memorial	210
Library Deposits	8,439
Sir Henry Newland Bequest	741
Sir Mark Mitchell—Periodicals Income	359
General Donations	122
G. M. Badger	16,241
Violet de Mole	1,331
A. J. Schulz	4,514
	<u>\$72,321</u>

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

SCHEDULE 3.

Special Funds

	\$
A.M.P. Loan for Union Building	692,418
Flexibility Fund (private income)	100,000
Income Carried Forward	100,000
Engineering Services Programme Fund	490,776
Consulting and Research	188,606
Endocrinology	366,812
Board for Aboriginal Studies	20,887
Medical Research Foundation	212,351
N.H.M.R.C. Grants	19,483
Anonymous Donation—Medical School	94,899
Australian Journal	24,767
E. W. Benham Bequest—Income	22,680
Elder Hall Organ Fund	136,432
J. S. Davies Bequest—Income	229,382
J. N. Konig Estate	31,769
Other Special Purpose	317,096
Centenary Appeal	20,649
Realization of Surplus and Obsolete Equipment	28,542
Long Service Leave Provisions (Outside Grants)	58,399
Outside Grants	386,192
A.R.G.C. Grants	55,484
Anti Cancer Foundation	148,196
December National Wage paid in 1979	29,264
Provision for 27th Fortnight	67,116
Workmen's Compensation Reimbursement	47,154
Xerox Copying—Accumulated Nett Income	45,455
Professor John Bishop Memorial Fund	12,485
Government Grant, Teaching Hospital 1978	210,000
Commonwealth Grant for Students	129,437
Sundry Balances	239,005
Postgraduate Foundation in Medicine	113,830
	<u>\$4,639,566</u>

WAITE INSTITUTE

SCHEDULE 4.

Unexpended Funds

	\$
Mortlock Sheep Operating Account	45,495
Mortlock Cattle Operating Account	170
Mortlock Crop Account	18,583
Anonymous Donation for Animal Science	14,686
Engineering Services Savings	20,400
A. Hannaford Estate—Income	29,639
Outside Grants	104,010
Consulting Funds	1,914
Motor Vehicle Replacement Fund	9,478
Realization Surplus and Obsolete Equipment	2,855
Sundry Balances	17,672
	<u>\$264,902</u>

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

SCHEDULE 5.

<i>Cash, Debtors and Stocks</i>	\$
Petty Cash	4,434
Stores and Uniforms	12,846
Petrol and Pump	2,306
Investment Interest accrued	51,338
Superannuation Investment Interest accrued ..	83,456
Short Term Investment Interest accrued	42,258
Commonwealth Government 1978 Recurrent Grant—Balance due	17,000
Sundry debtors ..	124,077
Prepayment—C.D.A.—Computer	422,168
Advance Salaries	57,543
Elder Hall Organ	96,496
Outside Grants	170,206
Sundry Balances	57,921
Postgraduate Foundation in Medicine	83,500
Commonwealth Student Loans	52,717
	<u>\$1,278,266</u>

NORTH TERRACE

SCHEDULE 6.

<i>Buildings in Progress</i>	\$
34-36 Park Terrace	53,381
33 Park Terrace	100,025
Union Complex Additions	692,418
101 Finnis Street	61,989
123 Mackinnon Parade ..	44,240
65 Finnis Street	29,742
Medical Sciences Building	6,404,774
148-159 Mackinnon Parade	238,384
Non Collegiate Housing Renovations ..	11,097
Biochemistry Research Facilities	31,982
Architecture Modifications	28,709
Computing Accommodation	33,826
Refurbish Aquarium Room—Zoology	30,953
	<u>\$7,761,520</u>

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

SCHEDULE 7.

<i>Income and Expenditure Appropriation Account</i>		\$
Accumulated Deficit 31/12/77	.....	154,968
<i>Add</i>		
Expenditure on Library Books (1956)		17,837
Expenditure on Equipment and Furniture (not brought to account)		35,657
		<u>53,494</u>
		208,462
<i>Less</i>		
Transferred from Private Income	.....	39,893
Accumulated Deficit 31/12/78	.....	<u>\$168,569</u>

WAITE INSTITUTE

SCHEDULE 8.

<i>Buildings in Progress</i>		\$
Alterations to Claremont House	.....	5,101
Cattle Research Unit	.....	128,967
Renovations	.....	32,908
Minor Work	.....	17,860
Charlick Experiment Land—Strathalbyn	.....	120,942
		<u>\$305,778</u>

WAITE INSTITUTE

SCHEDULE 9.

<i>Cash, Debtors and Stocks</i>		\$
Petty Cash	.....	100
Advance Account	.....	600
Imprest for Casual Wages	.....	3,600
Sheep	.....	8,797
Bulk Maintenance—Chemical Items	.....	3,587
Mortlock Sheep	.....	13,229
Mortlock Cattle	.....	3,580
Outside Grants	.....	20,810
Sundry Balances	.....	5,333
		<u>\$59,636</u>

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>ARCHITECTURE and TOWN PLANNING</i>	Director-General of Transport South Australian Housing Trust	Postgraduate Scholarships Research into aspects of low/medium density metropolitan housing	— 166	270 20
	Premier's Department	S.A. Urban & Regional Planning Register	551	720
	Australian Housing Research Council	Population dynamics and social infrastructure	7,212	140
	Department of Transport	N.E.A.P.T.R. Severance Study	6,899	4,600
	Department of Environment Australia Council	National Estates Grants Visit of Architectural Review Editors	5,722 2,500	6,690 —
<i>ARTS</i> Anthropology	Australian Research Grants Committee	Urbanization processes in a regional context	14,332	11,140
	Australian Research Grants Committee	A study of Bugis trade	300	3,690
	Australian Research Grants Committee	The Indian urban informal economy	4,250	—
	Central Adelaide Regional Council for Social Development	Grant for Research	80	960
Education	Education Research & Development Committee	The modern Australian oral tradition and its educational significance	48	100
	Education Research & Development Committee	The Hindmarsh Project	3,027	—
	Curriculum Development Centre	Rationale for Education of a multi-cultural Society	6,982	3,620
English	Australian Research Grants Committee	Studies in Australian culture: a series of books on aspects of Australian culture and society from the 1890's	12,725	—
	Australian Research Grants Committee	William Blake's use of the Bible: an annotated check-list of his biblical references, in his writings, conversation and graphic work	6,396	7,000
	Australian Research Grants Committee	Early imprint project South Australia	—	12,860
	Australian Research Grants Committee	Aspects of Australian culture and society	—	13,400
	Prime Minister's Department Ian Potter Foundation	Studies of Australian Literature Support for overseas study—Dr. A. Brissenden	— —	40 500

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
Geography	Australian Research Grants Committee	Origin of recently developed landforms	17,181	—
	Australian Research Grants Committee	Regional variations in weathering and landform development on granitic rocks	1,000	9,280
	Australian Research Grants Committee	Past and future agricultural development on Eyre Peninsula	6,757	—
	Australian Research Grants Committee	The changing farm structure of South Australia	6,768	—
	Department of Housing and Urban Affairs	Low rent board and lodging in Adelaide	1,951	4,830
History	Australian Research Grants Committee	A social study of New Zealand soldiers in the 1914-18 war, relating their wartime experiences to New Zealand society	1,158	—
	Australian Research Grants Committee	A study of the Court of Charles VI of France (1380-1422)	500	—
Politics	Australian Research Grants Committee	Thomas Playford (1837-1915): A biography of a Colonial and Federal politician	5,565	5,730
Psychology	Australian Research Grants Committee	Choice, preference, and control as motivational determinants in the context of sensory reinforcement behaviour	11,043	12,070
	Australian Research Grants Committee	Attention, strategy and reaction time, with special reference to the effects of fatigue, age, and mental handicap	13,156	13,030
	Bedford Industries Inc.	Research Fellowship	15,245	15,795
	Education Research & Development Committee	Grant for Research	32,584	2,210
	The Nuffield Foundation	Origins and Nature of Hyperkinetic Impulse Disorder	—	39,700
	Department of Transport	Postgraduate Scholarship	9,990	—
Office of Aboriginal Affairs	Grant for Research	—	550	

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>DENTISTRY</i> Dental Health	N.H. & M.R.C.	The effect of experimental tooth movement upon the oxytalan fibre and capillary fenestrae in the periodontal ligament of the mouse	6,662	—
	Colgate Palmolive Pty. Ltd. Australian Dental Research & Educational Trust	Research in Dental Health Epidemiology of clefts of the primary and secondary palate in South Australia	53,208	32,900
Oral Biology	Australian Research Grants Committee	A comparative study of storage and release of neurohypophysial hormones in the laboratory rat and some Xeric nature rodents e.g. [<i>notomys alexis</i>] and [<i>pseudomys australis</i>]	—	6,200
	N.H. & M.R.C.	Investigations of the pathways for the control of release of oxytocin and vasopressin from the posterior pituitary and median	9,805	—
	N.H. & M.R.C.	Microenvironmental effects on epithelial cell responses relative to tissue integrity	18,488	17,760
	N.H. & M.R.C.	Studies on the cariogenic microorganism, <i>streptococcus mutans</i>	3,100	1,650
	N.H. & M.R.C.	Genetic studies of cranifacial morphology and growth	—	12,605
	Australian Dental Research & Education Trust	Microbiological studies on the epidemiology of dental caries	2,270	—
	National Heart Foundation	The Role of Hyaluric acid and maintenance of arterial integrity	—	10,390
Restorative Dentistry	N.H. & M.R.C.	Long-term clinical success and failure rates of newer dental materials	—	400
	N.H. & M.R.C.	Postgraduate Scholarships	—	10,745

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
ECONOMICS Economics	Australian Research Grants Committee	Technological change in Australian agriculture development	3,770	4,140
	Australian Research Grants Committee	Industrial relations under Prime Minister Chifley (1945-9)	6,444	6,430
	Australian Research Grants Committee	A study of innovative behaviour in the diffusion of trace element technology	—	4,260
	Director-General of Transport	Postgraduate Scholarship	505	—
	Reserve Bank—Economic and Financial Research Fund	The structure of the market for Australian Wool	763	6,600
	Reserve Bank—Economic and Financial Research Fund	Merger and Take-over Activity in Australia	958	2,700
	Reserve Bank—Economic and Financial Research Fund	Australian Manufacturing Industry	—	400
	Reserve Bank—Economic and Financial Research Fund	Investigation into Australian Transport Industry	—	460
	Reserve Bank—Economic and Financial Research Fund	Impacts on Monetary Policy	—	6,680
	Reserve Bank—Economic and Financial Research Fund	The effects of Concentration and Tariffs on Manufacturing Industry	486	510
	Wool Research Trust Fund	Postgraduate programme in Wool Economics	30,829	26,000
	Wool Research Trust Fund	Fellowship	3,730	4,570
	Department of Transport	Scholarship	3,486	8,510
Department of Transport	Survey of bicycle usage	806	3,640	
ENGINEERING Chemical Engineering	Australian Research Grants Committee	The microstructure and properties of steels	13,971	—
	Australian Research Grants Committee	Very low-pressure pyrolysis of unsaturated hydrocarbons	12,778	18,090
	Australian Research Grants Committee	Heat and mass transfer in gas-liquid fluidized beds	150	—
	Australian Research Grants Committee	Dependence of bulk properties of polymers on their molecular properties	7,243	—

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>ENGINEERING</i> (Ctd) Chemical Engineering (Ctd)	Esso Standard Oil (Aust.) Ltd.	General support for research in Chemical Engineering	237	1,380
	State Energy Research Advisory Committee N.H. & M.R.C.	Alternative Sources of Energy Postgraduate Scholarships	14,706 27,548	17,360 23,668
Civil Engineering	Australian Research Grants Committee	A method for field measurement of strength and settlement parameters for stiff clays	5,570	14,000
	Australian Road Research Board	Shrinkage and creep of high strength concrete	1,365	2,220
	Australian Road Research Board	Design charts for large span Metal Arch Structures	7,043	4,000
	Esso Standard Oil (Aust.) Ltd.	The advancement of engineering studies	—	750
	South Australian Salt Damp Research Committee	Salt Damp Research	1,190	18,810
	Australian Welding Research Association	The effect of Root Gaps on Static and Cyclic Strengths of Cruciform Welded Joints	1,539	640
	Department of Transport Victorian Railways	Scholarship Design of corrugated metal conduits	3,587 1,289	2,120 15,800
Electrical Engineering	Australian Research Grants Committee	Passive code responding devices	6,473	5,850
	Australian Research Grants Committee	Signal processing for predictive coding of speech wave forms	271	—
	General Motors-Holden's Pty. Ltd.	Fellowship	4,819	—
	Esso Standard Oil (Aust.) Ltd.	General support for research	500	450
	Electrical Research Board	Control of Variable Speed Drives	1,467	—
	Electrical Research Board	System voltage and Damping control	14,170	2,200
	Electrical Research Board	Controllers for multi-machine Power Systems	—	14,200
	Radio Research Board	Fast Real Time Digital Processor Hardware	5,718	—
	Radio Research Board	Integration of the Passive Subharmonic Transponder	464	200
	Radio Research Board Telecom	Computer Aided Design Mobile Radio Systems for Research Laboratories	577 605	— —

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>ENGINEERING</i> (Ctd) Mechanical Engineering	Australian Research Grants Committee	Gravitational stability and atmospheric turbulence	6,930	17,670
	Australian Research Grants Committee	Reactive acoustic attenuators for duct flow	5,841	—
	Australian Research Grants Committee	Effects of flow disturbances on noise radiation from pipes	5,164	19,480
	Australian Research Grants Committee	Study of sound radiation by holography	18,828	8,500
	Australian Research Grants Committee	Turbulent mixing (I) structure (II) noise (III) chemical reaction	22,782	—
	Australian Research Grants Committee	Natural-convective heat transfer in an inclined channel with flow restrictions at inlet and exit	4,317	300
	Australian Research Grants Committee	Flow control in wide angle diffusers	17,843	11,000
	Australian Institute of Nuclear Science and Engineering	Development of laminar natural-convective flow in a vertical duct heated in a prescribed manner	120	680
	Australian Institute of Nuclear Science and Engineering	Development of Laminar Natural Convective Flow through Ducts	—	450
	National Coal Research Committee	Research on a coal-fired rotating fluidised bed Combuster	4,667	7,780
	Esso Standard Oil (Aust.) Ltd.	General support for the advancement of engineering	—	1,470
	Department Labour and Industry Grant, Spence & Associates Pty. Ltd.	Noise control	39,247	29,040
	State Energy Advisory Committee	General support for the advancement of engineering	4,541	6,260
		Mixing mechanisms and their enhancement for combustion of fuels	—	32,500
<i>LAW</i>	Australian Research Grants Committee	An annotated bibliography of primary and secondary source materials on Australian legal history	10,756	13,600
	Government of South Australia	Royal Commission into the non-medical use of drugs	3,467	857
	Department of Environment	Environmental Impact Procedures Project	6,608	7,390

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$	
MATHEMATICAL SCIENCES Applied Mathematics	Australian Research Grants Committee	Development of three dimensional spatial model of tide propagation in shallow water	10,860	4,000	
	Australian Research Grants Committee	Mathematical models for performance and congestion control in overloaded telecommunications networks.	7,137	7,500	
	Australian Research Grants Committee	A new analytical method for the calculation of body-induced free-surface water waves and its experimental verification	10,905	18,330	
	Australian Research Grants Committee	Behaviour of ships in restricted water	17,205	—	
	Australian Research Grants Committee	A study of fracture in fibre reinforced material	—	5,510	
	Australian Research Grants Committee	Boundary integral equation method for the numerical solution of problems in engineering	—	11,030	
	Australian Research Grants Committee	Application of the Mathematical Analysis to the non-invasive study of the <i>in vivo</i> mitral valve tissue	—	6,510	
	General Motors-Holden's Pty. Ltd.	Postgraduate studentship in traffic theory	—	470	
	Mathematical Physics	Australian Research Grants Committee	Massless fields and C.C.R's	732	15,180
		Department of Science Department of Science	Queen Elizabeth II Fellowship—Lohe Queen Elizabeth II Fellowship—Carey	6,821 18,848	19,700 19,640
Mathematics, Pure	Australian Research Grants Committee	An investigation of parametric minimal surfaces, capillary surfaces and related surfaces, with emphasis on topological properties and boundary behaviour	8,523	—	
	Australian Research Grants Committee	Measures on groups—mathematical monograph	925	—	
Statistics	N.H. & M.R.C.	Preparation of Age Specific Life Tables	600	—	

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>MEDICINE</i> Anatomy	N.H. & M.R.C.	Immuno-labelling studies on transplantation antigens	11,466	—
	N.H. & M.R.C.	Effect of lactation on ovarian follicular activity in the mouse	—	1,000
Community Medicine	Australian Research Grants Committee	A biography of Timothy Augustine Coghlan	8,766	600
	Australian Research Grants Committee	A practice of obstetrics and gynaecology in Australia 1850-1975	—	8,130
	Commonwealth Department of Health Education Research & Development Committee	Evaluation of home help services Teachers, their context and how they cope with it	29,175 17,152	4,620 12,500
Medicine	N.H. & M.R.C.	Studies on the specific local and systemic anti-body responses to enteric bacteria in ulcerative colitis	22,753	16,260
	N.H. & M.R.C.	Postgraduate Scholarship	13,165	12,198
	Smith, Kline & French Laboratories Ltd. Clive & Vera Ramaciotti Foundation	Research studies on cimetidine An investigation into the problem of the supply of patients for clinical teaching in an Australian Medical School	28,004	34,900
	Pharmaceutical Industry Donors	General support for research in clinical pharmacology	—	3,800
	Australian Tobacco Foundation	The effects of smoking on colostral and milk antibody preparation	6,915	6,500
	Department of Public Health	The effects of smoking on colostral and milk antibody preparation	14,769	4,140
	Department of Public Health	Measurement of mercury levels in people who are large eaters of fish	162	—
	Education Research & Development Committee	Grants for Research	11,027	—
Fishing Industry Research Committee	Study of Mercury Compounds in Fish	409	2,740	

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
MEDICINE (Ctd) Obstetrics and Gynaecology	N.H. & M.R.C.	The pineal gland, its role in reproduction development and during pregnancy	12,992	12,900
	N.H. & M.R.C.	Intra ovarian factors in the regulation of ovarian function	13,101	12,900
	N.H. & M.R.C.	Specific versus non-specific treatment of pelvic congestion	—	4,000
	N.H. & M.R.C.	Development and use of an <i>in vitro</i> placental perfusion model for the study of the endocrinology on parturition in the human	—	13,850
	N.H. & M.R.C.	Neonatal body water turnover as an index of perinatal morbidity	—	9,850
	Sandoz Aust. Pty. Ltd.	General support for the advancement of medical science in the field of obstetrics	—	410
	Hospitals & Health Services Commission	Assessment of Efficiency and Effectiveness of Obstetrics	27,587	13,700
Paediatrics	Australian Kidney Foundation	General support for research in the Department of Paediatrics	—	47
	Ciba-Geigy Aust. Ltd.	Travel	—	1,230
	Adelaide Children's Hospital Research Trust	Research in Paediatrics	24,595	28,040
	The Life Insurance Medical Research Fund	The biochemical basis of mode of action of various coronary vasodilators	—	1,140
Pathology	Boehringer Ingelheim Pty. Ltd.	Travel	—	880
	National Heart Foundation	Study of vascular smooth-muscle cells in culture	2,377	—
	N.H. & M.R.C.	Postgraduate Scholarships	—	10,745
Psychiatry	N.H. & M.R.C.	Depression and Chronic Pain	10,955	13,460
	Roche Products Pty. Ltd.	General support for research in psychiatry	—	3,800
	Wyeth Pharmaceuticals Pty. Ltd.	General support for research in psychiatry	483	230

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>MEDICINE</i> (Ctd) Surgery	N.H. & M.R.C.	Haemorrhage and the open-loop sinus baroreceptor reflex in the unanaesthetized rabbit	19,817	13,030
	N.H. & M.R.C.	Carotis baroreceptor reflexes in the conscious rabbit during exercise	—	2,000
	National Heart Foundation	Baroflexes in hypovolaemia and shock states	659	—
<i>MUSIC</i>	Australian Research Grants Committee	The life and work of Jean-Nicolas Bouilly (1763-1842)	4,435	6,080
	Australian Research Grants Committee	Karl Amadeus Hartmann and the symphonic and music theatrical heritage of German expressionism	5,108	4,000
	Australia Council	Programme in Music—Education for Aborigines in South Australia	51,092	60,000
	Premier's Department	Programme in Music—Education for Aborigines in South Australia	5,241	23,320
	Department of Aboriginal Affairs	Special work project—interpreter for Aboriginal music programme	963	—
	Premier's Department	Composition Fellowship	14,988	15,000
	S.A. Churches of Christ Youth Choir	Aboriginal Music Programme	585	420
	Premier's Department Aboriginal Arts Board The Myer Foundation	Evaluation of the History of the Centre for Aboriginal studies in music	1,717 2,773 6,000	2,030 980 —
<i>SCIENCE</i> Biochemistry	N.H. & M.R.C.	A study of the cause of acute intermittent porphria with a view to rational therapy	16,120	29,270
	Australian Research Grants Committee	The virus-host relationship as studied with temperate coliphage	9,170	14,300
	Australian Research Grants Committee	Vectorial transport of proteins across membranes with special interest in the messenger RNA for extracellular proteins	39,808	42,280
	Australian Research Grants Committee	The mechanism of action of pyruvate carboxylase in sheep	13,521	—

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Biochemistry (Ctd)	Australian Research Grants Committee	Molecular mechanism in the control of keratin synthesis in the developing feather	8,081	—
	Australian Research Grants Committee	Biochemistry of infection of the multi-component cucumber mosaic virus	12,542	11,530
	Australian Research Grants Committee	Nucleotide sequences and the co-ordinated control of specific eukaryotic genes	36,979	4,000
	Australian Research Grants Committee	Organisation and possible dosage compensation mechanisms of ribosomal genes in marsupial species	1,575	1,500
	Australian Research Grants Committee	Mechanism of exopenicillinase synthesis in staphylococcus aureus—is a leader peptide encoded in the exopenicillinase gene?	—	1,500
	Australian Research Grants Committee	Comparative study of the kinetic properties of the biotin-containing carboxylases	—	12,190
	Australian Research Grants Committee	Organisation of avian keratin genes	—	14,000
	Australian Research Grants Committee	Evolutionary relationships in the structure of the biotin enzymes	—	7,790
	Australian Wool Board	Structure of biochemical aspects of keratinization	10,977	6,700
	Prime Minister's Department	Queen Elizabeth II Fellowships	3,750	2,220
	Reserve Bank—Rural Credits Development Fund	Virus Biochemistry and Molecular Biology	150	1,230
	Ian Potter Foundation	Fellowship	2,900	100
	Utah Foundation	Enzyme secretion through cell membrane	2,470	430
	Department of Science	Queen Elizabeth II Fellowship—Molloy	5,155	19,640
Clive & Vera Ramaciotti Foundation	Investigations into the mechanism of Hair Growth	—	10,000	
Botany	Australian Research Grants Committee	Biostratigraphy and palaeobotany of three southern Australian tertiary Megafossil Floras	2,301	3,200
	Australian Research Grants Committee	An analysis of petrified coniferous remains from the Winton area of Queensland	1,439	4,300

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Botany (Ctd)	Australian Research Grants Committee	Limnology of Adelaide water supply reservoirs	919	2,150
	Australian Research Grants Committee	Cuticular analysis of eocene vegetation	8,279	7,910
	Australian Research Grants Committee	Amino acid sequences of plant proteins	1,825	9,180
	Australian Research Grants Committee	Links between metabolism and ion uptake in plant cells	1,400	7,020
	Australian Research Grants Committee	Ion movements and phosphorylation in plant mitochondria and chloroplasts	52,352	11,770
	Australian Research Grants Committee	The comparative morphology, taxonomy and relationships of the marine algae of southern Australia. (a) An algal flora (b) Critical survey of the <i>rhodophyta</i> (c) Completion of certain generic revisions	20,940	17,480
	Wool Research Trust Fund Department of Environment	Postgraduate research scholarship	1,300	-
	Australian Water Resources Council	Investigation of the factors controlling phytoplankton growth in selected South Australian water bodies.	242	120
	Australian Water Resources Council	Natural Populations of phytoplankton and inorganic particles	1,198	350
	Wool Research Trust Fund Wool Research Trust Fund	Trend analysis in sheep station vegetation The grazing of vegetation in arid areas	- 3,416	7,730 300
Genetics	Australian Research Grants Committee	Genetics of somatic cell hybrids II. Detailed cytogenetic and biochemical characterization of marsupial X eutherian hybrids	8,022	16,810
	Australian Research Grants Committee	Nature and structure of genes controlling obligate parasitism	8,775	22,910
	Australian Research Grants Committee	Scientific correspondence of R. A. Fisher	-	19,170
	Australian Research Grants Committee	Genetics of the marsupial <i>sminthopsis crassicaudata</i>	-	7,940

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Geology	Australian Research Grants Committee	Australian late precambrian glaciations in southern and central Australia	3,371	2,910
	Australian Research Grants Committee	Biostratigraphy and palaeontology across the precambrian-cambrian boundary in Australia	5,038	—
	Australian Research Grants Committee	Comparative investigation of the structure and magnetic fabrics of the basement inliers of the Adelaidean Fold Belt	1,336	—
	Australian Research Grants Committee	Nature of Archaean Crustal development: a geo-chemical-petrological investigation of silicic volcanic and plutonic complexes	15,339	17,580
	Australian Research Grants Committee	Study of reactions involving aluminosilicates and related phases in pelitic metamorphites of the Adelaide and Olary regions	950	590
	Australian Research Grants Committee	Tectonic significance of the Halls Creek and King Leopold orogenic domains	2,093	6,920
	Australian Research Grants Committee	U/Pb mineral dating of the Wootana volcanics	—	12,270
	Australian Research Grants Committee	Uranium/lead isotope budget in an uranium mineralised province	—	3,100
	Australian Research Grants Committee	Geochemical and isotopic investigations of chilled margins of mafic intrusions	—	1,230
	Australian Research Grants Committee	Structure and petrology of Enderby Land, Australian Antarctic Territory	—	250
	Australian Research Grants Committee	Genesis of microcrystalline silica deposits in South Australia and adjacent Central Australia	—	1,700
	Australian Research Grants Committee	Geological investigations of the high grade precambrian gneisses of the vestfold hills, Australian Antarctic Territory	—	250

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Geology (Ctd)	Australian Research Grants Committee	Nature of the Archaean Crust: Granite-Sediment relationships in the Yilgarn and Pilbara Greenstone Belts of Western Australia	448	—
	Esso Exploration (Aust.) Ltd.	General support for research in Geology	2,000	2,200
	Western Mining Exploration Ltd. Various Grantors	General support for research in Geology Support for Pre-Cambrian Research	— 604	670 2,580
Geology, Economic	Australian Research Grants Committee	Primary and metamorphic features and alteration zones of deformed massive sulphide deposits	6,780	—
	Australian Research Grants Committee	Remote sensing of geological targets using vector analysis of LANDSAT band ratios based on airborne spectroradiometer data	14,143	26,320
	Esso Exploration (Aust.) Ltd.	General support for research in Economic Geology	—	1,000
	Broken Hill Mining Managers' Association	General support for research in Economic Geology	200	2,170
Human Physiology and Pharmacology	N.H. & M.R.C.	Extraneuronal uptake and inactivation of biogenic amines	32,209	—
	N.H. & M.R.C.	Angiotensin and brainstem vasomotor mechanisms	1,250	—
	N.H. & M.R.C.	Drug toxicology in isolated hepatocytes	8,312	10,652
	N.H. & M.R.C.	The role of the renin-angiotensin aldosterone system in foetal and neonatal life	—	18,109
	Australian Kidney Foundation	The role of reno-renal reflexes in the control of renin secretion	52	—
	Life Insurance Medical Research Fund	Angiotensin and brainstem vasomotor mechanisms	12,288	10
	Australian Tobacco Foundation	The interaction of nicotine and renin-Angiotensin System	5,412	460

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>SCIENCE</i> (Ctd) Human Physiology and Pharmacology (Ctd)	Australian Kidney Foundation	Evolution of the renin angiotensin aldosterone system	697	2,550
	National Heart Foundation	Evolution of the renin angiotensin aldosterone system	5,000	—
Mawson Institute	National Heart Foundation	Grant in aid	—	10,000
	Australian Research Grants Committee	High latitude thermospheric winds, temperatures and electric fields	26,733	26,680
Microbiology	Australian Research Grants Committee	Upper atmosphere gravity waves and winds	—	1,580
	N.H. & M.R.C.	Induction of immunity to a metazoan parasite	21,954	23,916
Organic Chemistry	N.H. & M.R.C.	Immunity to enteric infections	42,180	—
	N.H. & M.R.C.	Induction of immunity to tumours	23,857	21,943
	N.H. & M.R.C.	Immune control mechanisms at mucous surfaces	—	17,405
	N.H. & M.R.C.	Postgraduate Research Scholarships	23,452	11,470
	Australian Research Grants Committee	The biochemical steps in the immune response of invertebrates	9,244	8,690
	Australian Research Grants Committee	Outer membrane protein function with emphasis on their role in recipient functions during conjugation	17,210	31,220
	Clive & Vera Ramaciotti Foundation	Grant for Research	1,400	5,180
	World Health Organisation	Gut associated immunity to cholera	2,055	1,040
Organic Chemistry	Australian Research Grants Committee	Reactions of organic compounds in close-packed monolayers	16,170	12,500
	Australian Research Grants Committee	Intramolecular radical reactions	16,140	15,750
	Australian Research Grants Committee	Gas chromatography/mass spectrometric studies	13,425	5,770
	Australian Research Grants Committee	Ion cyclotron resonance studies	12,267	16,720
	Australian Research Grants Committee	Electron impact studies	9,157	5,800
	Australian Research Grants Committee	Some aspects of cyclooctatetraene chemistry	14,810	12,530

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Organic Chemistry (Ctd)	Australian Research Grants Committee	The synthesis of terpenoids from eremophila species	1,182	1,500
	Australian Research Grants Committee	Synthesis of analogues of the alkaloid, bicuculline	633	1,000
	Australian Research Grants Committee	Synthesis of CNS active caprolactam derivatives	13,327	13,025
	Australian Research Grants Committee	NMR studies of reactions, interactions and structures in solution	23,402	19,150
	Australian Research Grants Committee	Synthetic routes to germacranes and germacranolides. Study on model systems	—	11,700
	Australian Research Grants Committee	Structure determination and synthesis in the terpenoid field	571	—
	C.S.I.R.O. & I.C.I.	Oxidation of polyallylamines—Sirotherm Project	9,138	3,820
Physical & Inorganic Chemistry	Australian Research Grants Committee	The role of complexing in polymerization and related reactions	4,614	2,400
	Australian Research Grants Committee	New Group IB metal chemistry	18,016	12,300
	Australian Research Grants Committee	Organometallic mass spectrometry	16,263	2,500
	Australian Research Grants Committee	Reactions of dinitrogen complexes of molybdenum and tungsten	1,790	—
	Australian Research Grants Committee	Transport properties of gases and liquids	29,955	26,630
	Australian Research Grants Committee	The anti-tumour activity of platinum metal complexes	17,272	16,160
	Australian Research Grants Committee	The interaction of biological macromolecules, particularly DNA, polynucleotides and self associating proteins, with organic and inorganic ions.	5,398	1,800
	Australian Research Grants Committee	Mechanism in crystal structure transformations	6,829	—
	Australian Research Grants Committee	Interaction of DNA with reporter molecules and with platinum complexes	15,793	—

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Physical and Inorganic Chemistry (Ctd)	Australian Research Grants Committee	Electron transfer reactions of CT excited states of transition metal complexes	17,489	21,510
	Australian Research Grants Committee	A comparative study of some metal complexes containing a single labile site with the enzyme carbonic anhydrase	3,578	—
	Australian Research Grants Committee	Isomeric hexamine-type cobalt (III) complexes with polyethyleneamine ligands: Specific synthesis of isomers, and study of isomerisation reactions	4,241	980
	Australian Research Grants Committee	Fluoride complexes of organometallics	13,571	26,940
	Australian Research Grants Committee	A comparative study of the behaviour of block copolymers in solution by osmometry	1,384	—
	Australian Research Grants Committee	Dependence of the bulk properties of polymers on their molecular properties	—	7,700
	Australian Research Grants Committee	Reactions of unsaturated molecules with electron-rich transition metal complexes	—	12,800
	Australian Research Grants Committee	Six co-ordinate complexes of vanadium	—	2,000
	Australian Research Grants Committee	Polyelectrolyte systems and the production of contractile work	—	7,500
	Australian Research Grants Committee	Ion transport in mixed solvents at high pressure	193	—
	Australian Research Grants Committee	Thermodynamic properties of normal-alkane and cyclo-alkane mixtures	527	—
	State Energy Research Advisory Committee	Alternative sources of energy	5,002	7,440
	C.S.I.R.O.	Research Grant	598	450
Australian Institute of Nuclear Science & Engineering	Reactions of inorganic radicals in solution	1,298	—	
Australian Institute of Nuclear Science & Engineering	Intra-molecular electron transfer processes in metal complexes	—	300	

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Physics	Australian Research Grants Committee	Medium frequency ionospheric and meteor investigations using a large antenna array	16,374	14,860
	Australian Research Grants Committee	Photodisintegration of atmospheric gases	6,115	3,000
	Australian Research Grants Committee	Trace constituents of the lower atmosphere	6,466	2,000
	Australian Research Grants Committee	Remote sensing of winds and density fluctuations in the lower atmosphere using optical methods	5,503	4,760
	Australian Research Grants Committee	Upper atmosphere winds from radio observations of meteors	4,689	3,500
	Australian Research Grants Committee	Cosmic ray anisotropy at 10^{16} eV	718	3,120
	Australian Research Grants Committee	Cosmic ray intensity variations since the Pleistocene	23,693	20,600
	Australian Research Grants Committee	Thermoluminescent dating for archaeology	10,710	3,300
	Australian Research Grants Committee	Studies of cosmic ray air showers	20,623	12,900
	Australian Research Grants Committee	Seismicity and crustal structure in South Australia	5,041	5,200
	Australian Research Grants Committee	Microearthquake activity associated with geological faults	700	1,300
	Australian Research Grants Committee	Determination of the optical constants of thin films and bulk specimens of semiconductors and metals	2,783	2,240
	Australian Research Grants Committee	Observations of upper atmosphere winds at low latitudes and during a total eclipse of the sun	5,071	5,000
	Australian Research Grants Committee	The day to day variability of ionospheric currents	—	1,500
	Australian Research Grants Committee	Atomic lifetimes by delayed correlation of photomultiplier noise signals	—	600
	Australian Research Grants Committee	Anatomical investigations of limbic connections with posterior olfactory cortex	—	2,200
	Australian Research Grants Committee	Interplanetary scintillation of radio sources	95	—
Australian Research Grants Committee	Atmospheric absorption of solar ultraviolet radiation	57	—	

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
SCIENCE (Ctd) Physics (Ctd)	C.S.I.R.O.	New wide band method for the study of radio noise	2,706	—
	C.S.I.R.O.	Remote sensing of the refractive index microstructure	3,248	2,500
	C.S.I.R.O.	Study of the stability of ionospherically propagated transmissions	459	—
	C.S.I.R.O.	Acoustic studies of atmospheric irregularities	3,087	—
	Prime Minister's Department Department of National Resources	Queen Elizabeth II Fellowships Operation of world wide seismograph system	—	907
	Department of Mines, S.A.	Seismic recording programme in the South East of South Australia	18,689	23,120
	Department of Mines, S.A.	Seismic recording in the Red Cliff Area	13,540	29,300
	U.S. Air Force	Absorption of ultra-violet radiation by molecular oxygen	13,520	11,280
Zoology			—	8,530
	Australian Research Grants Committee	Biochemistry of elasmobranch erythrocytes	1,019	3,040
	Australian Research Grants Committee	Cardiovascular physiology of snakes	1,946	—
	Australian Research Grants Committee	The evolution and phylogenetic relationships of Australian frogs	1,776	2,300
	Australian Research Grants Committee	Ecology and life history of mussels in the River Murray	1,113	—
	Australian Research Grants Committee	Taxonomic and ecological studies of Australian freshwater <i>Amphipoda</i> and <i>Atyidae</i>	5,861	5,800
	Australian Research Grants Committee	Ecology of the fan-shell pinna bicolor in South Australia	—	7,000
	Australian Research Grants Committee	Physiology of avian embryos	—	10,850
	Australian Research Grants Committee	Physiology of growth and moulting in nematodes, particularly parasitic species	—	7,000
	Utah Foundation	Survey of frogs of the north of Western Australia	4,381	—

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
<i>SCIENCE</i> (Ctd) <i>Zoology</i> (Ctd)	Australian Biological Resources Study	Taxonomic studies of the Australian anostraca	195	10
	National Parks & Wildlife Service	Telementary Equipment—K.I. Wallabies	—	160
	Australia Water Resources Council	Ecology of fresh water mussels in the River Murray, S.A.	7,665	13,530
	M. A. Ingram Trust Department of Environment	Kangaroo Island wallaby project Study of amphibians and macro-invertebrates	436	30
<i>MISCELLANEOUS</i>				
Electron Microscope Unit	Australian Research Grants Committee	The permeabilities of vessels and interstitial tissues	11,096	42,000
<i>ROAD ACCIDENT RESEARCH UNIT</i>	Australian Department of Transport & Australian Road Research Board	In depth study of accidents in Adelaide urban area	12,290	12,000
	Australian Department of Transport	Study of passenger car side impact protection	82,577	—
	Australian Department of Transport	Survey of drink driving in Adelaide to establish levels of accident risk related to blood alcohol content	12,500	117,500
	Australian Department of Transport	Comparison of data on police accident reports with in-depth study data		
	State Road Safety Council	Evaluation of the automotive apprentices road safety programme	10,701	12,000
Centre for Asian Studies	The Japan Foundation	Tutorship in Asian Studies	10,101	10,000
	Australian Research Grants Committee	Rural development planning in China	—	6,700
Centre for Performing Arts	Premier's Department	Artist in Residence	3,000	—
Continuing Education	Australian Department of Aboriginal Affairs	Publication of "Alice in Wonderland" in Pitjantjatjara	285	5,690
	Arts Advisory Council	Summer Music School	750	—

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
Centre for Physical Health	National Fitness Council of South Australia	Research project concerning aerobic fitness of school children	63	—
Environmental Studies	Australian Research Grants Committee	Submarine geology, sediment transport, hydrodynamics and quaternary history of the upper Spencer Gulf, South Australia	47,921	38,580
Radio Station 5UV	Australian Department of Education	Radio innovation programme	763	1,930
	Arts Advisory Council	"So you want to put on a play?"	2,531	2,970
	Arts Advisory Council	Schools programmes	324	—
	Arts Advisory Council	Band movement in South Australia	—	2,790
	Australia Council	Community Arts Programme—"Writer's Radio"	2,997	10
	Australia Council	Ethnic group programmes	332	720
	Australia Council	Jazz, rock and blues	3,543	10
	Australia Council	Seminar on Australian literary magazine	3,906	90
	Australia Council	Literature Board—In Print	2,902	860
	Australia Council	Music Board—Early Australian Music	—	2,000
	Australian Schools Commission	"A Class of Your Own"—project	984	820
	Australian Schools Commission	Social work for teachers	20	5,970
	Australian Schools Commission	Local ethnic music	835	280
	Australian Schools Commission	Socio linguistics	1,513	880
	South Australian Government	Local fine music	550	—
South Australian Government	Matriculation music	1,760	380	
	Education Research and Development Committee	Audience survey of listeners to educational Radio and evaluation of Radio programmes	700	350
	Arts Grants Advisory Committee	S.A. writers on Radio	997	3,000
	Arts Grants Advisory Committee	S.A. folk music	—	1,000
	Arts Grants Advisory Committee	S.A. jazz	—	1,000
	Arts Grants Advisory Committee	S.A. local fine music	—	1,500
	Arts Grants Advisory Committee	Young S.A. writers	—	2,000
			\$2,335,096	\$2,447,817

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
WAITE INSTITUTE Agricultural Biochemistry	Australian Research Grants Committee	The role of boron in plant cells	950	—
	Australian Research Grants Committee	A study of enzymic processes of hydroxylation in plants	1,500	—
	Australian Research Grants Committee	Oxidase and reductase enzyme systems in nitrifying bacteria	4,221	—
	Australian Research Grants Committee	Metabolism of inorganic sulphur compounds in micro-organisms and plants	6,268	—
	Australian Research Grants Committee	Soil fractions with biological significance	1,700	—
	Australian Research Grants Committee	Endogenous acetate production and ketogenesis in sheep liver	3,079	1,500
	Australian Research Grants Committee	Cation dependent inositol polyphosphate conformations	1,000	—
	Australian Research Grants Committee	Regulation of the level of nitrate reductase in the maize seedling (zea mays)	1,045	—
	Australian Research Grants Committee	Regulation of nitrate reduction by light, ATP and mitochondrial respiration in green plants	—	6,500
	Australian Research Grants Committee	Biochemistry of nitrification in nitrosomonas	—	20,580
	Reserve Bank—Rural Credits Development Fund	Interactions between nitrogen and phosphorus assimilation	11,894	4,795
	College of Agriculture, Malaya	Support of postgraduate student	—	162
	International Atomic Energy Agency	Research on bacterial leaching of uranium ores	—	1,263
	Australian Wool Corporation	Interactions between nitrogen and phosphorus assimilation in the symbiotic association between legumes, rhizobium and mycorrhizal fungi	1,870	12,440
Agronomy	Charles John Everard Scholarship	Grand in aid	—	1,000
	Australian Research Grants Committee	The application of the ideotype concept to a barley breeding programme	7,121	7,700
	Australian Research Grants Committee	Metabolism of seleno methionine in sheep	2,000	2,500

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
WAITE INSTITUTE (Ctd) Agricultural Biochemistry (Ctd)	Australian Research Grants Committee	Field studies of photosynthesis and water use by wheat and alternative grain crops	600	—
	Australian Research Grants Committee	Growth and maintenance respiration of subterranean clover	3,700	2,420
	Australian Research Grants Committee	Metabolism of threonine and isoleucine in sheep	—	2,510
	Australian Research Grants Committee	Genetic control of nutritional characters in wheat, rye and triticale	—	5,300
	Australian Research Grants Committee	Quantitative analysis of the genetic and environmental variation in populations of crop plants	—	5,600
	Barley Improvement Advisory Committee	Research into barley	67,425	80,948
	Reserve Bank—Rural Credits Development Fund	Grain legumes	13	—
	” ”	Breeding of a barley ideotype	828	1,025
	” ”	Enzyme assays cereal grain quality improvement	369	130
	” ”	Illustrations to revision of genus <i>Solanum</i>	150	50
	” ”	Animal nutritional aspects of triticale grain	—	19,677
	Wheat Industry Research Council	Wheat improvement research	92,278	105,641
	Australian Meat Research Committee	Research	29,154	53,475
	CIMMYT (International Maize and Wheat Improvement Centre)	Grants in aid	60	35
	Department of Science	Australian biological survey	5,935	13,163
	Victorian Department of Agriculture	Grant in aid	84	—
	Food and Agricultural Organization of U.N.	Grant in aid	321	516
C.S.I.R.O.	Extra-mural grant for research chromosome transfer and wheat improvement	13,566	16,192	
International Atomic Energy Agency	Grant in aid	23	622	
Department of Economic Development	Ridgway resilient cone thresher	3,714	12,525	
Chamber of Commerce and Industry	Triticale breeding research	—	500	
S.A. Inc., Stock Feed Manufacturers' Association of S.A.				

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
WAITE INSTITUTE (Ctd) Agricultural Biochemistry (Ctd)	Department of Primary Industry	Commonwealth special research grant	—	4,550
Animal Physiology	Australian Research Grants Committee	Carbohydrate metabolism in the epididymis	16,096	—
	Australian Research Grants Committee	Thyroid function in ruminants: relation to food intake and growth	11,173	10,200
	Australian Research Grants Committee	Avian ecophysiology and protein synthesis rates	9,381	12,300
	Australian Research Grants Committee	Defective control of cholesterol metabolism in cancerous and pre-cancerous liver	10,011	9,060
	Australian Research Grants Committee	Metabolism in the epididymis	—	9,430
	Australian Research Grants Committee	Physiological relationship between plasma cholesterol and the composition and function of cellular and sub-cellular membranes	—	7,000
	Australian Research Grants Committee	Mechanisms linking diverse settings of metabolic rate with water and electrolyte turnover in mammals	159	—
	N.H. & M.R.C.	Does an elevated level of blood cholesterol have a role in the management of leukemia?	—	13,750
	Reserve Bank—Rural Credits Development Fund	Hormones and inheritance prod. meat and milk	—	1,434
	U.S. Department of the Army Surgeon-General	Water and electrolyte economy of desert Aborigines and New Guinea Melanesians	—	786
	Australian Chicken Meat Research Committee	Earthworms research	6,803	—
	Department of Environment, Housing and Community Development	Hairy-nosed wombat research	376	733
	Australian Pig Industry Research Committee	Project earthworms	651	2,600
	National Parks and Wildlife	Wombat research	388	—

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$
WAITE INSTITUTE (Ctd) Entomology	Australian Research Grants Committee	Diapause in <i>Heliopsis</i>	10,532	11,330
	Australian Research Grants Committee	Integrated control of insect pests of citrus and peaches	17,719	8,600
	Australian Research Grants Committee	The effect of physiological changes in stressed plants on populations of phytophagous insects	7,373	8,000
	Australian Research Grants Committee	Basic features on parasitism in nematodes; moulting and hatching in infective stages	11,559	12,500
	Australian Research Grants Committee	Identification and epizootiology of non-occluded viruses of insects	—	2,000
	Nuffield Foundation	Research in entomology	—	1,358
	Australian Wool Corporation	Wool scholarship	8,329	156
	Department of Public Health	Research	4,207	6,500
	Western Australian Department of Agriculture	Grant in aid	—	115
	UTAH Grant for Bridging Finance	Readership in insect pathology	11,742	19,667
	C.A.P.E.S.	Grant in aid	779	293
	S.A. Department of Environment—Coast Protection Board	Yorke coast survey	1,345	—
	Department of Labour and Industry, State Unemployment Relief Scheme	Aphid monitoring	5,771	—
	George Aitken Pastoral Research Trust	Aphid migration research	3,383	—
	Citrus Organization Committee	Red scale parasites	745	605
	International Congress of Apiculture	Bee research	200	300
	Department of Labour and Industry, State Unemployment Relief Scheme	Potato pest research	4,284	—
Criminology Research Council	Forensic implications of the development of maggots in cadavers	1,864	2,235	
Australian Honey Board	Epizootiology and management of European Foul Brood disease of honeybees in Australia	1,410	1,589	
Plant Pathology	Australian Research Grants Committee	Resistance of barley to leaf scald disease and pathogenicity of <i>Rhynchosporium secalis</i>	1,000	5,200

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$	
WAITE INSTITUTE (Ctd) Plant Pathology (Ctd)	Australian Research Grants Committee	Molecular biology of plant viruses with multi-partite RNA genomes	9,761	7,500	
	Australian Research Grants Committee	Structure and composition of complex plant viruses	14,159	13,700	
	Australian Research Grants Committee	The basis of pathogenicity in <i>Agrobacterium</i>	21,662	20,960	
	Australian Research Grants Committee	The structure, and location, <i>in vivo</i> , of plant virus RNA	1,070	1,200	
	Reserve Bank—Rural Credits Development Fund	Leaf scald	—	289	
	”	”	Biological Control of soil borne plant pathogens	13,843	230
	”	”	Development and testing prototype applicator for delivery protective aerosol mixtures to pruned apricot trees and grape vines	791	159
	”	”	Relationship Fiji disease virus with its leaf-hopper vector	16,514	—
	Wheat Industry Research Council	Wheat improvement research	389	161	
	Commonwealth Department of Health	Quarantine investigations	1,967	8,589	
	Department of Agriculture	Research	8,155	14,736	
	Food and Agricultural Organization of U.N.	Cadang Cadang disease in coconuts	568	1,500	
	Bureau of Sugar Experiment Stations	Grant in aid	586	14	
	C.S.I.R.O.	Grant in aid	785	20	
	Plant Physiology	Australian Research Grants Committee	Plant virus identification and assay	—	17,854
		Australian Research Grants Committee	Accumulation of solutes by grape pericarp cells	8,001	7,600
		Australian Research Grants Committee	Interaction between hormones and membrane components	15,439	—
		Australian Research Grants Committee	Physiology of water deficit and grain growth in wheat	—	4,800
Australian Research Grants Committee	Aqueous interactions between plant hormones and phospholipid membrane components	—	19,180		

Faculty and Department	Source of Grant	Research Project	Expenditure for 1978 \$	Estimated 1979 \$	
WAITE INSTITUTE (Ctd) Plant Physiology (Ctd)	Barley Improvement Advisory Committee	Research into barley	61,545	69,985	
	Wheat Industry Research Council	Wheat improvement research	1,830	17,863	
	U.N.E.S.C.O.	Grant in aid	465	14	
	German Academic Student Exchange	Grant in aid	1,042	—	
	University of Adelaide and District Council of Berri	Artist in residence	3,962	29	
	Australian Development Assistance Bureau	Grant in aid	588	162	
	Soil Science	Australian Research Grants Committee	Surface properties of aluminous goethites	—	1,160
		Australian Research Grants Committee	Soil organic fractions with biological significance	—	2,000
		Australian Research Grants Committee	Manipulation of surface charges and soil structure	—	7,350
		Wheat Industry Research Council	Wheat improvement research	17,465	17,365
		Wheat Industry Research Committee of S.A.	Wheat improvement research	22,058	25,006
		International Soil Congress	9th International soil science	—	23
		Victorian Department of Agriculture	Grant in aid	380	120
		Oilseeds Research Committee	Tillage requirements for oilseed crops	—	4,000
Reserve Bank—Rural Credits Development Fund		Use of low grade phosphate rock and sulphuric acid to improve phosphate availability	—	17,287	
E. & W.S. Department		Effects of alum sludge on soil structure and fertility	—	5,653	
Biometry	International Rice Research Institute	Grant in aid	—	434	
	Reserve Bank—Rural Credits Development Fund	Biometry data acquisition system	—	720	
Director	Australian Research Grants Committee	Mechanism of soil swelling	23,663	40,340	
	Reserve Bank	Research Fellowship (Agriculture)	21,566	—	
Total — Waite Institute			\$676,402	\$859,063	
Total — North Terrace			2,335,096	2,447,817	
			\$3,011,498	\$3,306,880	

THE UNIVERSITY
STATEMENT OF SEPARATE

INCOME	\$	\$
ANTI-CANCER FOUNDATION—		
Government of S.A.—Annual Grant		112,667
Government of S.A.—Hospital Service Reimbursement		99,837
Income from Investments		98,984
Donations from the Public	91,532	
<i>Less: Transferred to Capital Account</i>	91,532	
Physics Section Income		656
Lord Mayor's Cancer Appeal (Balance)	14,531	
<i>Less: Expenditure (Balance)</i>	13,141	
DEFICIT for the year ended 31/12/78		1,390
		25,821
		\$339,355

OF ADELAIDE

ACCOUNTS FOR THE YEAR 1978

EXPENDITURE

	\$
ANTI-CANCER FOUNDATION—	
Salaries and Insurance	177,399
Equipment	4,363
Physics Section	2,142
Library	2,928
Sundries	7,281
Patients' Care and Transport	916
Car Expenses	741
Travelling Expenses	558
Hostel Maintenance	427
Adelaide Meeting—Australian Cancer Society	74
Public Education	4,932
Subscription to Australian Cancer Society	11,086
Computing	1,778
Professional Education	3,365
Stationery	2,308
Provision for Long Service Leave	7,000
Mastectomy Rehabilitation Service	1,365
Visiting Lecturers	262
Mobile Education Unit	147
Alison McLachlan Readership in Clinical Oncology	28,547
Grant to Flinders University	42,988
Grant to Departments of Genetics and Obstetrics, University of Adelaide	15
Grant to Department of Microbiology, University of Adelaide	7,876
Grant to Department of Surgery, University of Adelaide	1,351
Grant to Department of Oral Biology, University of Adelaide	2,156
Cytology Services—Net Loss	27,350
	<u>\$339,355</u>

THE UNIVERSITY
STATEMENT OF SEPARATE

LIABILITIES AND TRUSTS

	\$
ANTI-CANCER FOUNDATION—	
Endowments	832,642
Alison McLachlan Readership in Clinical Oncology	32,500
Peter Nelson Leukaemia Research Fund	171,232
Donations	351,400
Long Service Leave Provision	57,808
Equipment Fund	49,386
Cytology Service—Accumulated Balance	50,839

\$1,545,807

OF ADELAIDE

ACCOUNTS FOR THE YEAR 1978

ASSETS		\$
ANTI-CANCER FOUNDATION—		
S.A. Gas Co. Bonds		3,674
Blue Metal Industries Ltd.—Debentures		40,000
Telecom Australia—Debentures		60,000
Finance Corporation of Australia—Debentures		50,000
Cowells Ltd.—Debentures		13,700
Standard Chartered Aust. Ltd.—Deposit		43,000
Industrial Acceptance Corporation—Debentures		20,000
Executor Trustee—Deposit at Call		27,000
Mutual Acceptance Ltd.		10,000
Elders Trustee Common Fund No. 1		100,000
Bank of Adelaide (Peter Nelson Leukaemia Fund)		100,000
Executor Trustee Co. (Peter Nelson Leukaemia Fund)		6,000
E.T.S.A.—Debentures		6,927
Inscribed Stock		110,882
Funds held by Trustees		10,172
General Investments		638,771
Current Account		148,196
Linear Accelerator		12,000
Fire Protection System		3,000
Hostel (Building and Furniture)		29,108
Equipment		49,386
Capital Account		43,991
Lombard Australia Ltd.—Debentures		20,000
		<u>\$1,545,807</u>

THE UNIVERSITY
STATEMENT OF SEPARATE

	INCOME	\$	\$
UNION FEES			
Fees received for the year 1978			814,994
			<u>814,994</u>
 CONTINUING EDUCATION (EXCLUDING RADIO STATION 5UV)			
<i>Surplus at 1/1/78 brought forward</i>			3,943
Allocation by University—			
Special Grant		18,470	
Staff Salaries		<u>241,206</u>	
			259,676
Fees:			
Tutorial Classes			38,639
Schools and Special Programmes			33,680
Extension Courses			14,233
Publications			3,324
			<u>353,495</u>

NOTE: The allocation by the University of \$259,676 in 1978 for staff salaries and running expenses is shown in the University Income and Expenditure Account under the headings "Departmental Salaries and Wages" \$241,206 and "Departmental Maintenance" \$18,470.

OF ADELAIDE

ACCOUNTS FOR THE YEAR 1978

		EXPENDITURE	
		\$	\$
UNION FEES			
Paid to Union Council	.....		800,712
Refunded to Students	.....		14,282
			<u>814,994</u>
CONTINUING EDUCATION (EXCLUDING RADIO STATION 5UV)			
Staff Salaries	.....		241,206
Honoraria—			
Tutors and Lecturers	.....	30,283	
Schools and Special Programmes	.....	8,144	
			<u>38,427</u>
Payroll Tax and Insurance	.....		3,929
Motor Vehicle Expenses	.....	2,292	
Motor Vehicle Depreciation	.....	1,000	
			<u>3,292</u>
Travelling Expenses—Staff	.....		145
Library	.....		543
Administrative Expenses	.....		4,855
Schools and Special Programmes	.....		23,968
Tutorial Classes	.....		12,173
Advertising	.....		66
Extension Courses—			
Lecturers' Fees	.....	10,975	
Miscellaneous	.....	2,952	
			<u>13,927</u>
Furniture and Equipment	.....		282
Seminar Production Costs	.....		3,050
SURPLUS as at 31/12/78 carried forward	.....		7,632
			<u>\$353,495</u>

THE UNIVERSITY
STATEMENT OF SEPARATE

INCOME	\$	\$
UNIVERSITY RADIO STATION 5UV		
Allocated by University—		
Special Grant	10,210	
Furniture	227	
	10,437	10,437
Fees:		
General Courses	3,807	
Extension Courses	6,065	
Tape Correspondence	3,683	
Subscriptions	14,424	
	27,979	27,979
Studio Hire and Technical Services		33,899
Other Broadcast Users		42,340
Administration Charges—Outside Grants		3,476
D.C.E. Seminar Production		3,050
Book Bounty		777
Radiothon		11,712
DEFICIT as at 31/12/78		5,921

NOTE: The allocation by the University of \$10,437 in 1978 is shown in the University Income and Expenditure Account under the headings "Departmental Maintenance" \$10,210 and "Departmental Furniture" \$227.

\$139,591

BOARD OF PUBLIC EXAMINATIONS IN MUSIC

Fees received for year 1978	50,609
Other Income	1,906
Joint Universities Operation—Surplus	1,653
DEFICIT for the year ended 31/12/78	1,820
(transferred to Accumulated Fund)	

\$55,988

OF ADELAIDE

ACCOUNTS FOR THE YEAR 1978

EXPENDITURE		\$	\$
UNIVERSITY RADIO STATION 5UV			
Deficit at 1/1/78 brought forward	.....		5,921
General Courses:			
Honoraria	.....	692	
Notes and Distribution	.....	1,066	
		-----	1,758
Extension Courses:			
Honoraria	.....	453	
Notes and Distribution	.....	685	
		-----	1,138
Cassette Studies	.....		297
Publications	.....		844
Subscription Costs	.....		4,303
Studio Hire and Technical Services Purchase	.....		17,016
Outside Programmes	.....		903
Advertising	.....		7,962
Office Staff	.....		35,836
Administration Expenses	.....		8,403
Studio Technical Maintenance	.....		7,560
Part-time Technical Staff	.....		9,890
Transmitter Technical Maintenance	.....		2,550
Landline and Telephone Charges	.....		2,195
Payroll Tax and Insurance	.....		5,499
Part-time Operators and Producers	.....		27,232
Cassette Duplicator Maintenance	.....		57
Furniture	.....		227

			<u>\$139,591</u>
BOARD OF PUBLIC EXAMINATIONS IN MUSIC			
Salaries, Payroll Tax and Insurance	.....		26,470
Printing and Stationery	.....		1,843
Travelling	.....		2,393
Sundries	.....		1,299
Postages	.....		963
Examiners and Supervisors	.....		16,130
Scholarships and Prizes	.....		579
Administration Charges	.....		5,061
Rent	.....		1,250

			<u>\$55,988</u>

The University of Adelaide

D. R. BEECHER,
Bursar.

We report that we have audited the above statements of the Separate Accounts of The University of Adelaide for the year which ended 31 December 1978 and certify this statement to be a correct abstract of Income and Expenditure during this period.

YARWOOD VANE & CO., Chartered Accountants.
TOUCHE ROSS & CO., Chartered Accountants.

Adelaide, 9 May, 1979.

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ANTI-CANCER FOUNDATION

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ROAD ACCIDENT RESEARCH UNIT

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BARR SMITH LIBRARY

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- LOW, SEOK CHEE, B.Sc., Dip.Lib.St., Subject Librarian.
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COMPUTING CENTRE

- BURKE, PHILIP DAMIAN, B.Sc., B.A., Dip.Comp.Sc., Principal Programmer.
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- FLAVEL, SALLY ELEANOR, B.Sc., Programmer.
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HEALTH SERVICE

- HEDDLE, ROBERT CHARLES, M.D., F.R.A.C.G.P., Director.
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VICE-CHANCELLOR'S OFFICE

- BARNES, ERIC STEPHEN, B.A. (Syd.), Ph.D. (Camb.), F.A.A., Deputy Vice-Chancellor.
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RETIRED MEMBERS OF STAFF

- EDGELOE, VICTOR ALLEN, B.A., Registrar Emeritus.
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- PRESCOTT, JAMES ARTHUR, C.B.E., D.Sc., F.R.A.C.I., F.R.S., F.A.A., Emeritus Professor of Agricultural Chemistry.
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LIST OF HIGHER DEGREE THESES LODGED IN
THE BARR SMITH LIBRARY DURING 1978

FACULTY OF AGRICULTURAL SCIENCE

Agricultural Biochemistry

COSTA, NICK DIMITRI, B.Ag.Sc.

Aspects of the metabolic role and biosynthesis of carnitine. (Ph.D.)

HENDERSON, GRAHAM DEAN, B.Ag.Sc.

Metabolic inter-relationships between carnitine, choline and creatine in sheep liver. (Ph.D.)

KELLEY, BRUCE CHARLES, B.Ag.Sc.

Some aspects of inorganic sulphur metabolism. (Ph.D.)

SAWHNEY, VEENA, M.Sc. (Punj.).

Biochemical aspects of denitrification in *Thiobacillus denitrificans*. (Ph.D.)

Agronomy

ADEM, LAKHDAR, Ing.Agron. (Algiers).

Studies on the ecology and agronomy of annual *Medicago* species. (M.Ag.Sc.)

GIBSON, PETER RIDLEY, B.Ag.Sc.

Effects of stocking rate and botanical composition on animal production from sown pastures in a Mediterranean-type environment. (M.Ag.Sc.)

HARE, BRIAN WILLIAM, B.Ag.Sc. (Syd.).

The interaction of heterosis and environment in wheat. (Ph.D.)

KAEHNE, IAN DAVID, B.Ag.Sc.

Studies on waterlogging tolerance in lucerne, *Medicago sativa*, L. (M.Ag.Sc.)

MEYER, WAYNE STEWART, B.Ag.Sc.

Seminal roots of wheat: manipulation of their geometry to increase the availability of soil water and to improve the efficiency of water use. (Ph.D.)

PARAMESWARAN, KALATHOOR VELAYDUNA MENON, M.Sc.Ag. (Kerala Agric. Univ.).

Studies on the nitrogen and water relations of wheat (*Triticum aestivum*, L.). (Ph.D.)

REDDY, GOGU DAMODAR, M.Sc.(Ag.) (Andhra Pradesh Agric. Univ.).

Factors affecting the concentrations of copper molybdenum and sulphur in pasture plants. (M.Ag.Sc.)

SIONG, LIM ENG, M.Sc. (Louisiana State Univ.).

Variation in seed set ability in *Vicia faba* L. (Ph.D.)

SUTEDJO, M.Sc.(Agric.) (Univ. of North Sumatra).

Mass selection in a cross-pollinated species, Wimmera ryegrass (*Lolium rigidum*. Gaud). (M.Ag.Sc.)

WILLIAMS, CHRISTOPHER MAXWELL JOHN, B.Ag.Sc. (Syd.).

Studies of herbage availability and plant density in relation to animal performance. (Ph.D.)

Animal Physiology

DAVIES, BRENDA, B.Sc. (Lond.).

Studies on the hormone control of salt and water metabolism in the sheep. (M.Sc.)

JAMES, MICHAEL JOHN, B.Ag.Sc.

Regulatory processes in the control of cholesterol synthesis in rat liver. (Ph.D.)

SAVVAS, ROSS SAMUEL, B.Sc. (Flin.).

Developmental antigens in cancer and immune suppression. (Ph.D.)

SCHLINK, ANTHONY CHARLES, B.Ag.Sc.

A study of the mode of action of cyclophosphamide and its physiological effects on merino sheep. (Ph.D.)

Entomology

KHAN, MUHAMMAD ZAINUL ABEDIN, M.Sc. (Dacca).

The behaviour of grain-infesting beetles with reference to the effects of gamma-irradiation upon development of populations and intra-specific communication. (Ph.D.)

CORDINGLEY, CHARLMA LILIANE, B.Sc. (La T.).

The ecology of the grape vine moth *Phalaenoides glycine* Lewin. (Ph.D.)

Plant Pathology

BUMBIERIS, MIERVALDIS, B.Ag.Sc.

Phytophthora cryptogea in pine forests in South Australia. (M.Ag.Sc.)

DENNIS, ROGER DIGBY WILKINS, B.Sc. (Hull), M.Sc. (Lond.), D.I.C.

Studies on endocrine development of nematodes. (Ph.D.)

Plant Physiology

KUMAR, DYANAND RAJ, B.Sc. (Lond.), M.Sc. (W.I.).

The control of vegetative shoot growth in citrus. (Ph.D.)

WILLIAMS, RICHARD RANDOLPH, B.Ag.Sc.

Physiology of pruning effects on bud dormancy in apple. (Ph.D.)

Biometry Section

HANCOCK, TREVOR WILLIAM, B.Ag.Sc.

Use of biometrical techniques in quantitative genetics. (M.Ag.Sc.)

FACULTY OF ARCHITECTURE AND PLANNING

BLACK, GREGORY JOHN, B.Com. (N.S.W.).

The decentralization programme of the People's Republic of China 1949-76: urban, rural and regional planning in a developing socialist nation. (M.U.R.P.)

CALDICOTT, RONALD CYRIL.

The evolution of the company town. (M.U.R.P.)

DIXON, HUGH WOODYATT, B.Sc.

Social justice, mobility, access and planning policies. (M.U.R.P.)

GENIMAHALIOTIS, JOHN, B.Arch.

Strategic planning and development of the Adelaide metropolitan coast. (M.T.P.)

HUME, DAVID EDWARD, B.A. (Leic.).

Problems of the fossil-energy economy and the possible implications of alternative energy sources for planning future Australian settlements. (M.U.R.P.)

JARROTT, GWYN.

Corporate planning: a management approach to planning. (M.U.R.P.)

LAMBERT, RAYMOND DEAN, B.A.

Social mix: a worthwhile planning concept? (M.T.P.)

MALINAUSKAS, PETER STEFAN, B.Ec.

Vacancy chains and public housing: a study of vacancy chains and their applicability to public housing policy in metropolitan Adelaide. (M.U.R.P.)

MARTIN, ROBYN MARIE, B.A., LL.B.

The relationship between the law of nuisance and residential planning law. (M.U.R.P.)

MATALISI, FRANCIS TIBWITA, B.A.(Soc.) (Dar.).

Housing problems and policies in a rapidly expanding community, with particular reference to Dar es Salaam, Tanzania. (M.U.R.P.)

MATHEWS, DAVID ROBERT, B.A. (A.N.U.), Dip.Ed. (Canberra C.A.E.).

Planning for recreational needs in established residential suburbs with special reference to Seaton, South Australia. (M.U.R.P.)

SAW, SENG EE, B.A.(Geog.) (Malaya).

Off-street parking relating to zoning ordinances (with specific reference to metropolitan Adelaide). (M.T.P.)

STEELE, PETER JAMES.

Urban planning and the retail system. (M.U.R.P.)

WELFORD, CHRISTOPHER DONALD, B.Ec.

Planning for people in the National Parks of South Australia, with particular reference to Innes National Park. (M.U.R.P.)

WHIMPRESS, ANDREW WILLIAM PETER, B.Ec.

Strata corporations in South Australia: social planning implications. (M.U.R.P.)

FACULTY OF ARTS

Education

CAWTHRON, EDWARD ROBERT, Ph.D. (A.N.U.), B.Sc., Adv.Dip.Ed., Dip.Lib.St.

An empirical investigation of microfiche in educational settings. (M.Ed.)

DUNN, JOHN GILDING, B.A., Dip.Ed.

An investigation into criteria considered by supervisory teachers and lecturers when assessing students' teaching practice in a teacher education programme. (M.Ed.)

ROBERTS, SYBIL MARJORIE, B.A., Dip.Ed.

The educational thought of F. R. Leavis. (M.Ed.)

WATSON, IAN MORSE, B.A., Dip.Ed.

Encoding in visual and auditory sequential memory tasks and its relationship to reading disabilities in young children. (M.Ed.)

English Language and Literature

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The function of story in the novel, with special reference to Fielding and Sterne. (Ph.D.)

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Christian nature mysticism in the poetry of Vaughan, Traherne, Hopkins and Francis Thompson. (M.A.)

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GLOYNE, JILL, B.A.

L'emploi du temps, ou, Le roman comme recherche. (M.A.)

Geography

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The denudation chronology of the southern Gawler Ranges and adjacent areas. (M.A.)

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Modernization amongst peasants: a case study of village life in Bali, Indonesia. (M.A.)

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European transculturists in Polynesia 1789-ca.1840. (Ph.D.)

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Philosophy

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The logical connection argument. (M.A.)

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GAME, ANN AYLWARD, B.A.

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The psychological correlates associated with cognitive development in children with specific learning difficulties: a longitudinal study. (M.A.)

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A scanning electron microscopic study of orthodontic root resorption in human premolar teeth. (M.D.S.)

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Tooth size variability in Australian Aboriginals: a descriptive and genetic study. (Ph.D.)

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An investigation in oral surgery services and training with particular reference to South Australia. (M.D.S.)

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A study of the jaw opening reflex as an index of pain and its suppression by electro-acupuncture in the rabbit. (M.D.S.)

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Factors influencing the diffusion of noradrenaline across the wall of an artery. (Ph.D.)

FACULTY OF ECONOMICS**Economics**

LIM, GUAY CHENG, B.Ec.

The location of wool warehouses in Australia. (M.Ec.)

SMITH, PETER ROBERT, B.Ec. (W. Aust.).

Keynes' finance motive: some theory and evidence. (Ph.D.)

FACULTY OF ENGINEERING**Chemical Engineering**

BARTESCH, HELMUT ROBERT, Diplom Ingenieur (Stuttgart).

The continuous measurement of the damping and fatigue properties with a controlled amplitude torsion pendulum. (M.E.)

GODDARD, RICHARD DREW, B.E.

Kinetics and thermochemistry of homogeneous gas reactions of organic cyanides. (Ph.D.)

Civil Engineering

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The initial effects of water jet cleaning on superheater tubes. (M.Eng.Sc.)

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The design of an electronic music synthesizer. (M.App.Sc.)

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ESHRAGHIAN, KAMRAN, B.Tech.

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LE, NGUYEN HUU, B.E.

Quasi-optimum receivers for Analog FM signals over Rayleigh fading channels. (Ph.D.)

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The analysis and control of a divided-winding-rotor machine. (M.Eng.Sc.)

THUY, JOHN NGUYEN THANH, B.E. (Q'ld).

Virtual memory techniques for small computers. (M.Eng.Sc.)

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The vibrational response of and the acoustic radiation from thin-walled pipes excited by random fluctuating pressure fields. (Ph.D.)

SWIFT, PETER BEVAN, B.E.

The vibrational energy transmission through connected structures. (Ph.D.)

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The development of a high performance laser doppler velocimeter for fluid mechanics and acoustics research applications. (M.App.Sc.)

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University enrolment planning. (Ph.D.)

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MAY, ROBERT LEONARD, M.Sc. (Flin.), B.Sc.

A numerical solution of the Navier-Stokes equation in a rectangular basin. (Ph.D.)

TEUBNER, MICHAEL DAVID, B.Sc.

Tidal and thermal propagation in the Port River estuary. (Ph.D.)

VANDEN-BROECK, JEAN-MARC, Ingénieur physicien, Licencié en océanologie (Liège).

Two-dimensional nonlinear free-surface flows past semi-infinite bodies. (Ph.D.)

WILKINS, CHRISTOPHER, B.Sc.

A stochastic analysis of the effect of fire on remote vegetation. (Ph.D.)

WILLIAMS, DAVID PRIOR, M.A. (N.Z.).

A study of the vortex sheet behind a lifting wing. (M.Sc.)

WILSON, KYM GRAHAM, B.Sc.

An investigation into the behaviour of teletraffic networks in which several streams are offered to a common link, with particular attention to partitioning of the overflow stream. (Ph.D.)

Computing Science

COOPER, DALE FRANCIS, B.Sc.

An experimental investigation of some heuristics for scheduling resource-constrained projects. (Ph.D.)

Pure Mathematics

MACLEOD, BARBARA, B.Sc. (N.S.W.).

A basic operational calculus for q-functional equations. (Ph.D.)

WILLIAMS, GRAHAM HALE, B.Sc.

The existence of solutions for non-linear obstacle problems. (Ph.D.)

Statistics

CHESSON, PETER LEITH, B.Sc.

Models for animal movements. (Ph.D.)

MCLAREN, MARA LEE, M.Math. (Wat.).

Groups, Lie groups, and multivariate statistics. (Ph.D.)

FACULTY OF MEDICINE**Community Medicine**

LINN, JEANETTE THRUSH BRETNALL, M.B., B.S.

Chronic illness in the elderly: the role of the nurse. (M.D.)

Obstetrics and Gynaecology

KERIN, JOHN FRANCIS PAUL, M.B., B.S.

On the endocrine function of the human Graafian follicle. (M.D.)

PUDNEY, BRIAN JOHN, B.Sc.

Kidney function in the ovine foetus. (Ph.D.)

Pathology

FANNING, JOSEPH CHARLES, M.B., B.S.

The submicroscopic structure of the dolphin lung. (Ph.D.)

Surgery

CANT, ELIZABETH LAWRENCE MCKINNON, B.Sc., M.B., B.S.

"Superstaging" in carcinoma of the breast. (M.D.)

FACULTY OF MUSIC

ANDERSON, GORDON ATHOL, B.A., M.Mus.

History of the development of the motet in the thirteenth century. (D.Mus.)

HOWARD, BRIAN ROBERT, B.Mus. (Syd.).

Ferns, and Spring snow: two compositions. (M.Mus.)

MULLINS, MARGARET, B.Mus.

The correlation between music and dance in the Baroque era: a study of musical elements in French Baroque dance c.1688-c.1725 as found in the dance notation of the period. (M.Mus.)

FACULTY OF SCIENCE**Biochemistry and General Physiology**

DUC, JENNY ANITA, B.Sc.

Pyruvate carboxylase: aspects of the reaction mechanism. (M.Sc.)

EASTERBOOK-SMITH, SIMON BARNETT, B.Sc. (Well.).

The reaction mechanism of pyruvate carboxylase. (Ph.D.)

ECKERMAN, DAVID JOHN, B.Sc.

Studies on ribosomal peptidyl transferase. (Ph.D.)

GIBBS, PETER EDWARD MORREN, B.Sc.

The biosynthesis of chick feather keratin messenger RNA. (Ph.D.)

GOURLAY, GEOFFREY KEITH, B.Pharm.

Pyridine nucleotide involvement in rat hepatic microsomal drug metabolism. (Ph.D.)

McMURCHIE, EDWARD JOHN, B.A. (Macq.).

Studies in the cell membrane of *Bacillus amyloliquefaciens* in relation to extracellular enzyme secretion. (Ph.D.)

RYLATT, DENNIS BRIAN, M.Sc.

The structure and mode of action of the biotinyl prosthetic group and its covalent attachment site in pyruvate carboxylase. (Ph.D.)

SCHWINGHAMER, MARK WAYNE, B.Sc. (A.N.U.).

Separation and *in vitro* translation of the four major species of virion RNA of cucumber mosaic virus. (Ph.D.)

VANIN, ELIO FAUSTO, B.Sc.

The active centre of peptidyl transferase. (Ph.D.)

Botany

ANDREW, MARTIN HOWARD, B.Sc.

The initial impact of depasturing sheep on arid Chenopod shrublands. (Ph.D.)

ROBINSON, SIMON PIERS, B.Sc.

Photosynthesis by isolated chloroplasts. (Ph.D.)

WATTS, CLIVE GRAHAM, B.Sc.

Photosynthetic metabolism and leaf anatomy of *Portulaca grandiflora* (Hook.). (M.Sc.)

Economic Geology

DREW, GREGORY JOHN, B.Sc.

A study of the Ediacara mineral field and a comparison with some other mineral deposits in Lower Cambrian carbonates of the Adelaide geosyncline. (M.Sc.)

TUCKER, DAVID HAMILTON, B.Sc.

Magnetic and gravity interpretation of an area of Precambrian sediments in Australia. (Ph.D.)

Genetics

CALLEN, DAVID FREDERICK, B.Sc.

Mitochondrial genetics of yeast. (Ph.D.)

SCHMITT, LINCOLN HEINZE, B.Sc.

A genetical study of isolated populations of the Australian bush-rat, *Rattus fuscipes*. (Ph.D.)

Geology and Mineralogy

THORNTON, ROGER CHARLES NOEL, B.Sc. (Edin.).

Regional stratigraphic analysis of the Gidgealpa Group, Southern Cooper Basin, Australia. (M.Sc.)

Human Physiology and Pharmacology

HEAD, RICHARD JOHN, B.Sc.

Metabolism and catecholamines in the rabbit ear artery. (Ph.D.)

Mawson Institute for Antarctic Research

BASEDOW, ROBERT WILLIAM, B.Sc.

High time resolution studies of the hydroxyl airglow. (Ph.D.)

CHAMBERLAIN, MALCOLM TREVOR, B.Sc.

Precipitation of charged particles into the mid-latitude upper atmosphere. (Ph.D.)

Microbiology and Immunology

DAVIES, JOHN KEITH, B.Sc.

Resistance to colicins in *Escherichia coli* K12. (Ph.D.)

HEDDLE, ROBERT JOHN, M.B., B.S.

The source and action of immuno-globulins in the dog intestine. (Ph.D.)

- HORSFALL, DAVID JAMES, B.Sc.
Antibody synthesis to *Vibrio cholerae* in the mouse intestine. (Ph.D.)
- MANNING, PAUL ALEXANDER, B.Sc. (Flin.).
Characterization of conjugation defective mutants of *Escherichia coli* K12. (Ph.D.)
- WOODROFFE, ANDREW JOHN, M.B., B.S.
The detection and characterization of immune complexes in glomerulonephritis. (M.D.)

Organic Chemistry

- MOAD, GRAEME, B.Sc.
The mechanism of cycloalkylcarbonyl β -scission. (Ph.D.)
- STAPLETON, BARBARA JANE, B.Sc. (N.S.W.).
Some mass spectrometric studies of negative ions in the gas phase. (Ph.D.)
- TIPPETT, JAMES MORTON, B.Sc.
Synthesis of Phthalideisoquinoline alkaloids and of other antagonists of γ -aminobutyric acid. (Ph.D.)

Physical and Inorganic Chemistry

- BOTT, CLIFTON CHARLES, B.Sc.
The orientation of solutes in stretched polymer films: its mechanism and application in studying the electronic transition moment directions of some pyrimidines and purines. (Ph.D.)
- DOBINSON, LYNNE, B.Sc.
An investigation of the excess volume of mixing of n-alkanes with cycloalkanes. (M.Sc.)
- DUBRAWSKI, JULIUS VICTOR, B.Sc.
The preparation and study of ethylenediaminetetraacetato complexes of ruthenium. (Ph.D.)
- JOYCE, DESMOND EDGAR, B.Sc.
Hydrogen ion equilibria in aqueous solutions of hydrophobic polyelectrolytes. (Ph.D.)
- MURRAY, ROBERT STEPHEN, B.Sc.
The continuous dilution method excess thermodynamic properties of binary liquid mixtures containing hexafluorobenzene and ethers. (Ph.D.)
- STAKER, GRAHAM ROBERT, B.Sc.
The pressure dependence of mutual diffusion in binary gas mixtures. (Ph.D.)
- WHITBURN, KEITH DOUGLAS, B.Sc.
Tervalent nickel and copper in aqueous solution. (Ph.D.)

Physics

- BEDNARZ, BERNARD, B.Sc.
Anharmonicity in alkali metals: an x-ray approach with particular reference to potassium and lithium. (Ph.D.)
- BIBBO, GIOVANNI, Ph.D. (Rome).
Rocket studies of the lower thermosphere. (Ph.D.)
- HARWOOD, KEITH, B.Sc.
A balloon-borne interferometer for infra-red aeronomy. (Ph.D.)

Zoology

- HOST, WILLIAM MUIR, B.Sc.
Marine biological studies in relation to the operation of the Torrens Island Power Station. (M.Sc.)

KING, RICHARD DENNIS, M.Sc. (Br. Col.).

Temperature regulation in the sand goanna *Varanus gouldii* (Gray). (Ph.D.)

MARCHANT, RICHARD DE MONTMORENCY, B.Sc. (A.N.U.).

The ecological energetics of *Parartemia zietziana* Sayce (Crustacea: Anostraca) in two saline lakes in western Victoria. (Ph.D.)

NEVERAUSKAS, VYTAUTAS PAUL, B.Sc. (Flin.).

Some biological effects from warm effluent water discharged from the Torrens Island Power Station. (M.Sc.)

ROBERTS, JOHN DALE, B.Sc.

Call differentiation in the *Limnodynastes tasmaniensis* complex (Anura: Leptodactylidae). (Ph.D.)

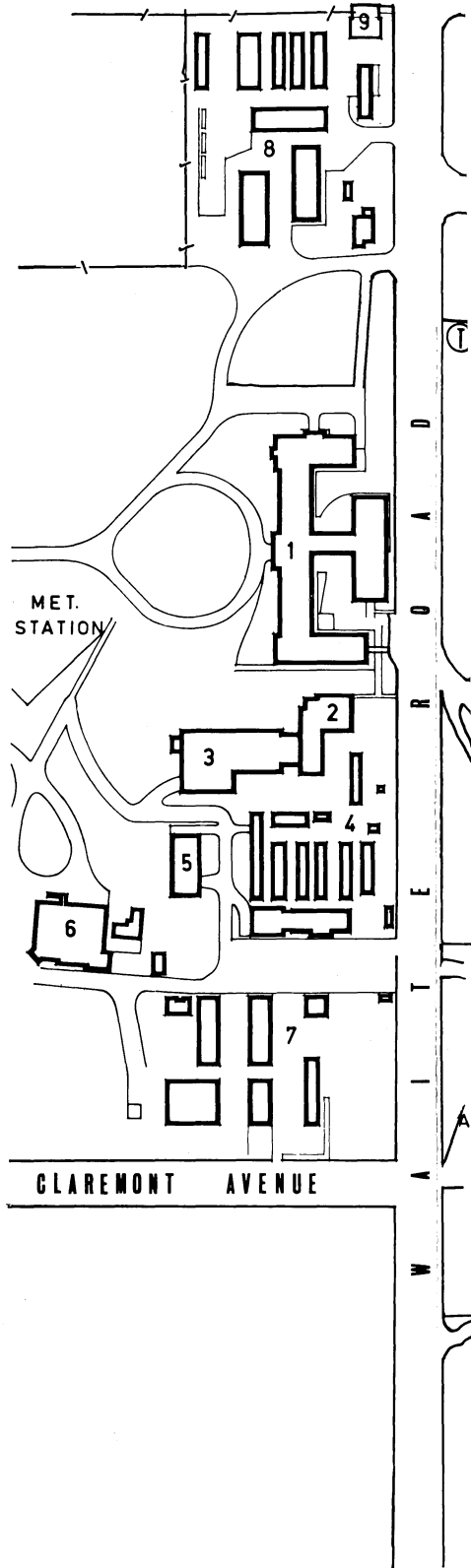
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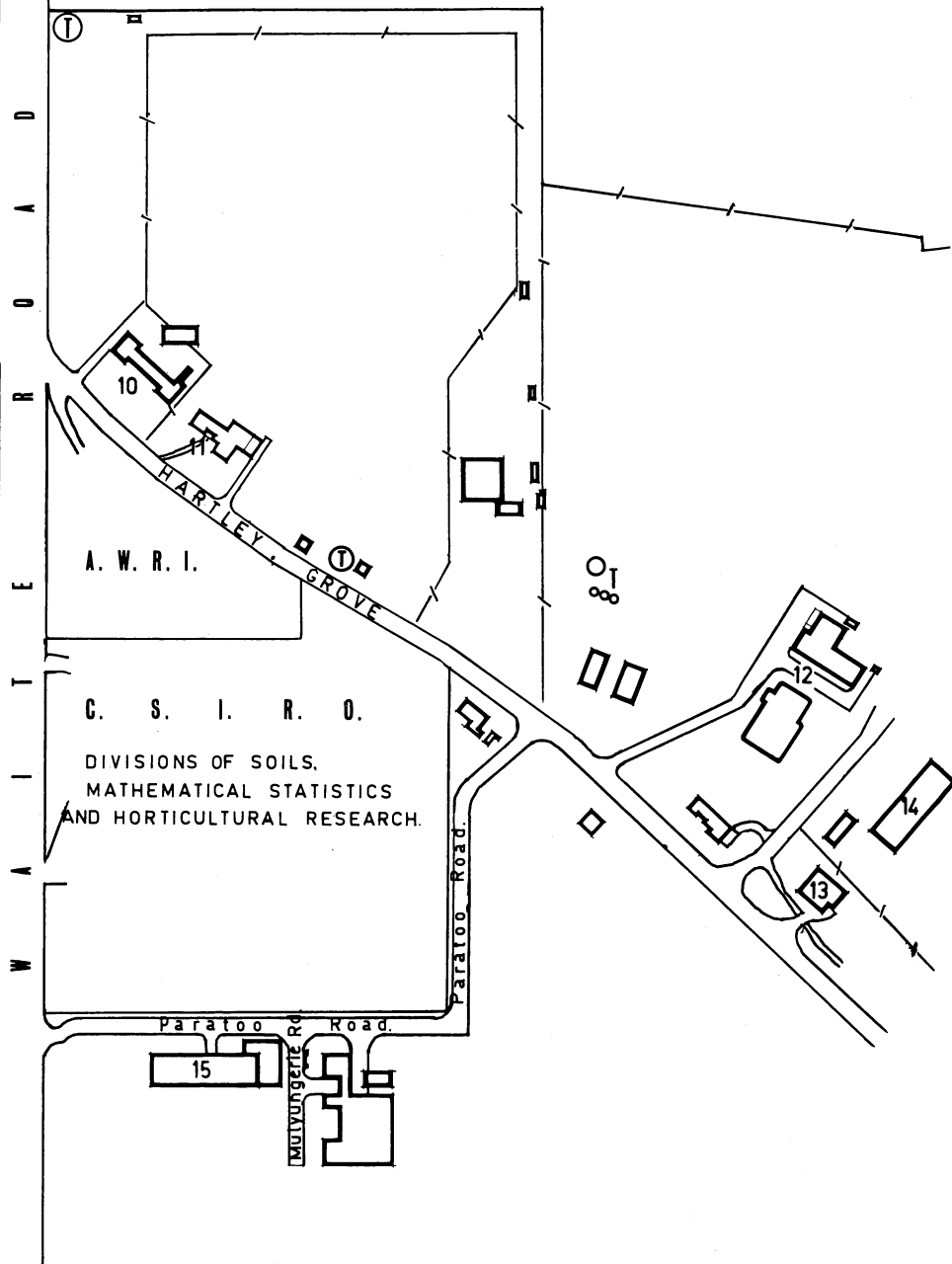
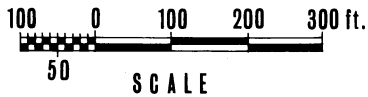
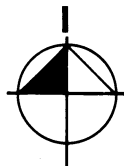
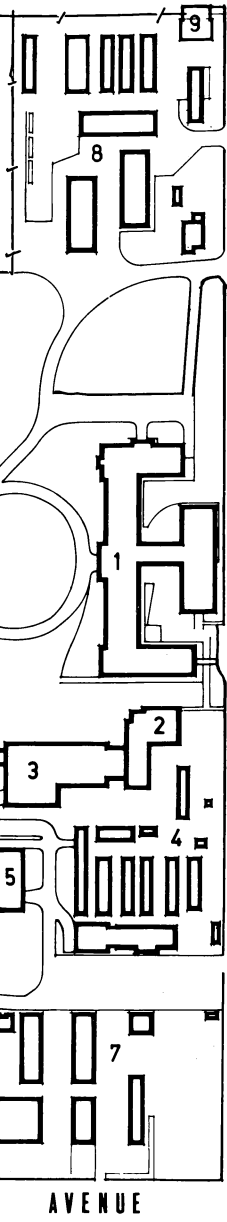


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