

MONASH UNIVERSITY



Report  
of the  
Council

1972

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# REPORT OF THE COUNCIL FOR 1972

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In accordance with section 41 of the *Monash University Act 1958*, I submit the annual Report of the Council of the University for 1972.

## 1. THE COUNCIL

The Council held ten meetings during the year.

At graduation ceremonies in 1972, the following honorary degrees were conferred:

Doctor of Laws: Leonard William French

Doctor of Laws: Alice Hoy

Doctor of Medicine: Ella Annie Noble Macknight

Doctor of Laws: William Cropley Radford

Only one change in the membership of Council took place. At an election by the graduates of the University, Mr A. H. May was elected for four years in place of the retiring member, Mr L. M. Schafe.

Government decision is still awaited on the University's proposals for amendment of the Act to provide for slightly increased academic and student representation on the Council.

The death on 17 March 1972 of Sir Michael Chamberlin, the first Deputy Chancellor of the University, brought to an end a much valued association. Sir Michael was Deputy Chancellor from October 1961 until his resignation in September 1968 and the Council has an abiding gratitude for all he did for Monash.

Council noted with pleasure the conferring of the following honours upon its members in the New Year honours list:

Dr J. A. L. Matheson      C.M.G.

Mr J. C. McNeill          C.B.E.

Mr J. G. Wilson            C.B.E.

## 2. DEVELOPMENT OF SITE AND BUILDINGS

The following buildings were completed and taken into use during 1972: Hargrave library stage 2; Richardson Hall, the second of the

new halls of residence; the behavioural-environmental laboratory in the Jock Marshall Zoological Reserve; and the extension to the audio-visual services building.

Under construction with anticipated completion dates in 1973 are: engineering building 6; physics, chemistry, and squash court extensions.

Tenders for science north stage 2 are due to close in March 1973, and for science-biology-zoology buildings extension in March 1973. Education stage 2 will be at tender stage by October 1973.

Stage 1 and stage 2 of the extension to the Robert Menzies School of Humanities have been combined as one project, and work will commence early in 1973 with a completion target date of April 1974.

Working drawings are proceeding for extension to 'E' block medical school and central animal house stage 2.

Site works continued. Major works undertaken were the north-west car park and areas surrounding the new halls of residence and west of Medicine. A further five acres of planting have been developed.

### 3. ADMINISTRATIVE MATTERS

#### *Legislation*

In 1972 Council made eight amending statutes and forty-three new and amending regulations pursuant to the University's statutes. Amendments to statutes included an alteration to the maturity provisions of the statutory superannuation scheme and provision for casual vacancies for faculty boards.

#### *University Publishing*

The official publications of the University again appeared at the appropriate times during the year. Following a decision of the Professorial Board, the 1972 Calendar appeared in one volume bound in soft covers. Publication date was advanced to 28 February. It is now intended to publish at that time each year, thus making the Calendar available prior to the commencement of the academic year.

The Publications Committee, responsible for the University's academic publishing, met four times in 1972. It has continued to subsidize publications by Monash academics and to help them find publishers. As a result a number of books by staff members appeared during 1972. The publications section designed and produced the first in a series of monographs to be published by the Centre of Southeast Asian Studies. Two more in the series are already contemplated.

During the year the University decided to undertake a major publishing venture which will result in a book entitled "The Banksias of Australia". When completed it will be the definitive work on a famous genus. The committee has been actively engaged in a number of aspects connected with this undertaking. The services of Mrs C. Rosser, a very talented botanical artist on the University's staff, are to be used for the paintings and a taxonomist is to be selected to prepare the scientific commentary which is to accompany the paintings. Completion of the paintings and text will take about eight years, at which stage actual publication of the book will be carried out.

#### *Monash Associations Liaison Committee*

The Monash Associations Liaison Committee is a committee of delegates from individual university associations interested in and working for the University.

Its objectives are:

- (a) to provide an opportunity for parents and others interested in Monash University to associate themselves more closely with the University,
- (b) to encourage contact between members of the University and members of the community for their mutual benefit,
- (c) to assist with specific projects associated with the University and help raise funds for specific University purposes.

During 1972 several successful functions were held, including a parent orientation day, several public lectures, a dinner for parents of first year students, and a "Monash book fair" consisting of:

- (a) a display and sale of antiquarian books, which went under the title of the First Australian Antiquarian Booksellers' Fair. There were ten exhibitors from Australia, New Zealand and England; and
- (b) a sale of second hand books—some 12,000 books were collected. The fair was held in Robert Blackwood Hall and raised \$2,500 for the special education fund.

#### *Safety*

The National Safety Council has now completed safety surveys of all University buildings and subsequent actions will be undertaken by the University safety officer. Emergency procedures for all University buildings are being reviewed. The University maintains its affiliation with the National Safety Council and the local Dandenong and District Safety Group. Pedestrian vehicular safety has been discussed at length and a number of suggested innovations are under consideration by the University's road consultants. The University safety officer and the

radiation protection officer attended a civil defence course on "Radiation monitoring".

In early 1972 a radiation protection officer was appointed to take charge of the growing routine work involved with safety in the use of ionizing radiation at the University. He also acts as executive of the radiation sub-committee of the safety committee. At the end of the year a one-day course on the safe use of radioisotopes was conducted for research students and technical staff. A co-ordinated central service for the disposal of low level radioactive waste was organized and should be in operation in 1973. In 1972, of the 153 workers in the film badge monitoring service, none received more than 30 per cent of the maximum dose of radiation permissible under the Health Regulations of Victoria.

#### 4. STAFF APPOINTMENTS

The high demand for University teaching staff continues. The total full-time academic staff numbered 734 at 31 December 1972, an increase of 14 over the corresponding 1971 figure. There were 140 new appointments and 126 resignations.

#### FULL-TIME ACADEMIC STAFF (as at 31 December)

	Arts	Economics and Politics	Education*	Engineering	Law	Medicine	Science	Total
Deans	1	1	1	1	1	1	1	7
Professors	18 (2)	12 (5†)	5 (1)	7 (1†)	5 (2†)	16 (2†)	19 (5†)	82 (18)
Readers	4 (1)	2		1	1	5	13	26 (1)
Associate Professors	8	1	2	9	2 (1)	9	1	32 (1)
Senior Lecturers	54 (2)	28 (3)	17	29	12 (2)	36 (1)	54 (3)	230 (11)
Lecturers	54 (8)	23 (3)	16 (5)	18 (2)	16 (4)	23 (7)	41 (4)	191 (33)
Senior Tutors	13	1	4 (1)			1	1	20 (1)
Senior Teaching Fellows	18 (7)	5 (4)	4 (2)	8 (5)	4 (1)	27 (16)	29 (8)	95 (43)
Teaching Fellows	27 (14)	16 (13)			3 (2)	1	4 (3)	51 (32)
Total	197 (34)	89 (28)	49 (9)	73 (8)	44 (12)	119 (26)	163 (23)	734 (140)

\* Includes Higher Education Research Unit.

† Includes visiting professors.

(The numbers in brackets indicate those who took up their first appointment at Monash in 1972.)



Full-time academic staff who left Monash during 1972 to take up other appointments, or at the end of visiting appointments were:

Professors	5
Visiting Professors	11
Readers	4
Associate Professors	1
Senior Lecturers	15
Lecturers	19
Senior Tutors	1
Senior Teaching Fellows	49
Teaching Fellows	21
	126

Those who resigned included Professor H. A. F. Dudley, foundation professor of Surgery, who was appointed to a chair of Surgery at Queen Mary's Hospital, London; Professor F. H. Gruen, professor of Agricultural Economics, appointed to a chair at the Australian National University; Professor B. Hudson, foundation professor of Medicine, appointed as principal research fellow, Australian National Health and Medical Research Council; Professor Z. F. Oliverius, professor of Russian, who returned to Czechoslovakia, and Professor H. D. Rankin, foundation professor of Classical Studies, appointed to a chair at the University of Southampton.

Two of the rotating University visiting professorships were filled during 1972, and ten other scholars who were accorded the title held appointment during the year.

Of the full-time academic staff who took up appointment during the year, 76 (of whom 64 had taken their first degree in Australia and 12 overseas) were recruited from Australia, and 64 (of whom 20 had taken their first degree in Australia and 44 overseas) were recruited from overseas.

The following professors took up their appointments during 1972:  
 Professor R. Baxt, B.A., LL.B. (Syd.), LL.M. (Harv.) *Sir John Latham Chair of Law*

Professor B. E. Hobbs, B.Sc., Ph.D. (Syd.) *Geology*

Professor C. I. Johnston, M.B., B.S. (Syd.), F.R.A.C.P. *Medicine*

Professor R. G. Keightley, B.A., Ph.D. (Cantab.) *Spanish*

Professor W. A. Rachinger, M.Sc., Ph.D. (Melb.) *Experimental Physics*

Professor R. J. W. Selleck, B.A., B.Ed., Ph.D (Melb.) *Education*

Professor R. H. T. Smith, B.A. (N.E.), M.A. (North Western), Ph.D. (A.N.U.) *Geography*

Professor C. G. Weeramantry, B.A., LL.D. (Lond.) *Sir Hayden Starke Chair of Law*

The following professors were appointed but will not take up duty until 1973:

Professor A. Brown, M.A., D.Litt. (Lond.) *English*

Professor A. S. Henry, M.A., Dip.Ed., Ph.D. (St. And.) *Classical Studies*

Professor W. R. Jackson, B.Sc. (Manc.), Ph.D. (Lond.) *Organic Chemistry*

Professor E. M. Laurenson, B.E., Ph.D. (N.S.W.), F.I.E.Aust., *Civil Engineering*

Professor J. S. Maritz, D.Sc. (Rand) *Mathematical Statistics*

Professor R. M. Parish, B.Sc.Agr. (Syd.), Ph.D. (Chic.) *Economics*

Eight research fellowships and thirty-eight more junior full-time research posts were filled during 1972.

The following table gives figures of administration and specialist support staff in faculty offices, teaching departments, computer centre and central administration. The total of 190 compares with 169 at the end of 1971.

	<i>Admin. Assistants and above</i>	<i>Systems Analysts and Comp. Prog.</i>	<i>Lab. Mgr. and Managerial Staff</i>	<i>Prof. Qual. and Spec. Staff</i>	<i>Total</i>
Faculties and Teaching Depts.	15	2	20	14	51
Central Administration	81	9	—	6	96
Computer Centre	2	12	—	1	15
Ancillary Areas (includes Halls of Residence and Bookshop)	16	—	8	4	28
	<u>114</u>	<u>23</u>	<u>28</u>	<u>25</u>	<u>190</u>

In the University library graduate and other staff with formal qualifications totalled 64 compared with 58 at the end of 1971.

Total full-time staff of the University at 31 December 1972 was 2,416 compared with 2,376 in 1971.

The University records with regret the deaths in 1972 of:

Mr M. H. Kott of the department of Physiology

Mr F. Rebecca of the faculty of Economics and Politics

Miss S. K. Millard of the faculty of Law

Mr J. H. Peacock of the careers and appointments office

Miss M. J. Hurst of the department of Anthropology and Sociology

Mr D. W. Gill of the department of Civil Engineering

Mr A. S. Gourlay of the department of Genetics

Mr L. A. Damen of the North-East Halls

## 5. ACADEMIC DEVELOPMENTS

The following degrees and diplomas were conferred by the University at graduation ceremonies in 1972, the final column indicating the total number of degrees and diplomas awarded since the foundation of the University.

	<i>Male</i>	<i>Female</i>	<i>Total</i> 1972	<i>Total</i> 1961-72
Bachelor of Arts	195	335	530	2873
Bachelor of Arts with Honours	47	50	97	416
Master of Arts	17	5	22	73
Bachelor of Economics	254	56	310	1414
Bachelor of Economics with Honours	41	6	47	182
Master of Economics	7	2	9	38
Master of Administration	5	—	5	6
Bachelor of Education	84	12	96	199
Master of Education	2	1	3	3
Bachelor of Engineering	54	—	54	242
Bachelor of Engineering with Honours	80	2	82	324
Master of Engineering Science	20	—	20	51
Bachelor of Jurisprudence	73	16	89	416
Bachelor of Laws	95	7	102	292
Bachelor of Laws with Honours	13	—	13	32
Master of Laws	2	—	2	6
Bachelor of Medical Science	1	—	1	11
Bachelor of Medical Science with Honours	17	1	18	60
M.B., B.S.	90	17	107	567
M.B., B.S. (Honours)	25	5	30	135
Doctor of Medicine	1	—	1	7
Bachelor of Science	132	84	216	796
Bachelor of Science with Honours	105	31	136	552
Master of Science	15	5	20	107
Doctor of Science	—	—	—	2
Doctor of Philosophy	64	7	71	344
	—	—	—	—
TOTAL DEGREES	1439	642	2081	9148
	—	—	—	—
Diploma in Education	171	249	420	1981

## 1972 ANNUAL EXAMINATION STATISTICS

There has been a steady increase in the overall pass rate since 1964, and has reached a stage in 1972 where the average pass rate for the whole of the University is over 80 per cent compared with a figure of just below 60 per cent in 1964.

PASS RATES (per cent)  
(For first year full-time students)

<i>Group (a)</i>	64	65	66	67	68	69	70	71	72
Arts	57	70	67	74	80	77	78	80	83
Economics and Politics	61	70	77	85	83	76	76	88	81
Law	60	71	76	72	80	72	80	82	79
Science	60	78	88	89	90	86	89	90	89
<i>Group (b)</i>									
Diploma in Education	84	88	90	90	89	92	92	92	96
Engineering	55	70	70	84	74	75	84	88	82
Medicine	64	84	89	91	97	96	99	96	98

*Note:* For the purpose of this table, students are regarded as having passed in—

*Group (a)* if they have passed more than half the subjects or units taken, except that those taking three subjects are regarded as having passed the year only if they have passed all three subjects;

*Group (b)* if they passed all subjects or failed in one or two subjects but were granted passes in the year as a whole and continued into the next year of the course.

## VICE-CHANCELLOR'S REPORT

1972 was the last year of the 1970-72 triennium and, because of the curious timing which has somehow come about, it also saw the production of the Fifth Report of the Australian Universities Commission which charts our course for the 1973-75 triennium. When Sir Leslie Martin became the first chairman of the AUC he decided that the five-year cycle which the British universities use was too long for Australia and decided that three years was the right period here.

While there is something to be said for this Sir Leslie did not allow for the slow reaction time of the machine that he was creating: thus in any one triennium the first year is simultaneously spent in finishing off the buildings remaining from the preceding triennium, launching all the enterprises authorized for the current triennium, and also in making plans for the next. These plans have to be finalized before the end of year one.

Year two is spent by the Commission in making what have come to be described as "visitations" (by unkind analogy with the plagues of the Old Testament) and in formulating its advice to governments.

Year three is spent, so far as triennial planning is concerned, by governments in analysing reactions to the AUC's recommendations so that, by Budget time, a concerted view has been reached which can form the basis for legislation.

This timing is all wrong: in 1973, the first year of the new triennium, the Australian universities will be winding up the 1970-72 triennium, launching the 1973-75 developments, and making plans for 1976-78. It is to be hoped that Professor Karmel, whose Fifth Report is by general consent a great improvement on its predecessors, will now try to bring some changes into the time programme of the triennial system.

The Fifth Report is a far-reaching document which it would not be appropriate to try to summarize here, but two or three new concepts of great importance should be described. The first of these is the recognition that in the area of new developments, the AUC should only concern itself with proposals, like the establishment of new faculties of Veterinary Science or Medicine, which have cosmic effects on finance. Developments which are really no more than rearrangements, or which spring from the natural growth of universities, are to be noted but not specially commented on.

It so happens that all the Monash proposals for the 1973-75 triennium fall into this category and so we escaped without comment except in so far as student numbers are concerned: here we are in difficulty.

As we approach our full projected size of 12,000 undergraduates and a thousand or so postgraduate students the regulation of student numbers becomes a matter of some delicacy: if a thousand students are admitted to the faculty of Arts, say, in each year what will be the stationary size of the faculty? This calculation, complicated by uncertainties of survival rates, proportion of part-time students, and course deferments, has been thrown into disarray because the AUC has changed the system of counting. A student is no longer a student: he is a fraction of an EFTS, or equivalent full-time student, calculated in a new way.

Suffice it to say here that Monash, although in an impeccable financial position, is in student deficit. This situation will require attention in 1973-75.

There is no longer much room for manoeuvre, because most faculties are now accepting their maximum planned number of freshers each year. The main growth area is in Masters degrees by course work and plans are maturing in many faculties for increased effort in this area: examples are the new degree courses for Master of Environmental Science and the LL.M. by course work, both planned in 1973.

Planning, however carefully carried out, is apt to be overtaken by

unsuspected changes and this is the experience of the faculty of Science. Perhaps because of increased interest in and concern for the environment this faculty has experienced an increasing tendency for students to prefer biological to physical sciences. Fortunately it was possible in 1972 to modify building plans so as to accommodate this trend but some departments, like Zoology, Physiology and Biochemistry, will be under great pressure for a year or two.

These re-considerations slowed down the building programme in the year under review and will result in 1973 being one of the busiest building years in Monash's history. In particular a complex building linking Zoology, Psychology and Botany will go some way to alleviating the problems mentioned above while a reorganization in the medical school will also effect some improvement.

In this University the word "centre" is reserved for cross-department and cross-faculty enterprises of which the Centre for Southeast Asian Studies is the very successful prototype. The Centre for Research into Aboriginal Affairs followed a little more hesitatingly but the idea is gaining support and many more centres are in the planning stage. One which is of tremendous potential is the Centre for Continuing Education which has now reached the stage of appointing its first director. Dr McDonnell, who will take up duty when he returns from study leave at the Open University in 1973, has the responsibility of stimulating, co-ordinating and developing adult education at graduate level right across the University, and of helping in every way those who have already begun to provide courses for practitioners who seek to be brought up to date with new techniques and new developments.

In the area of student affairs mention should be made of the enactment of a statutory constitution for the Monash Association of Students. In the early days of this University the Vice-Chancellor, an optimistic character, was impatient with those who sought to regularize procedure by the adoption of formal statutes and regulations. There was no time for this, he would say; the urgent thing is to press on with expansion so that no potential student need be unnecessarily prevented from entering; the tidying-up of the rules could come later. This naive approach nearly brought the University to disaster when, in the middle of the then fashionable wave of student dissent, attempts were made to refine the discipline statute. Much the same happened to the statute for the Union with its constituent Students' Representative Council.

However times have changed and MAS, the successor to the SRC, is now legitimized. Neither parent is entirely satisfied with the birth certificate but the prospects are hopeful.

It is not widely realized that what are generically entitled student services—the University health service, the careers and appointments office, student counselling, and student housing—are paid for from general funds and are administratively responsible to the Academic Registrar. Perhaps rather belatedly Council has recognized its concern

in this area and has set up a standing committee to watch over the operation of, and the future developments in, this area.

Closely related to the functioning of these remedial services is the efficacy of the student housing programme. 1972 saw the completion of the last hall of residence in the present series, Richardson Hall, which will bring the combined capacity of the five campus halls up to about 960 (860 students). With the two independent affiliated colleges, Mannix and Marist, about 1,100 students can be accommodated.

Attention has now shifted to non-collegiate residence and much thought has been given in recent years to the design of low rental flats for graduate and other students. Unfortunately these thoughts have not hitherto resulted in action but the AUC's offer of some pump-priming finance will surely bring results in 1973.

Robert Blackwood Hall, the University's magnificent auditorium, came into full use in 1972 and was the venue for a surprisingly large number of concerts, lectures, conferences, exhibitions and so on as well as being used for the more humdrum purposes of examinations. The Alexander Theatre has been in use for a number of years and, with Robert Blackwood Hall, will enable Monash to become the artistic centre, in the broadest sense, for this rapidly developing part of the Melbourne metropolitan area.

In my own office the plans which have been developing for some time have come to fruition with the appointment of two Pro-Vice-Chancellors who share the duties and responsibilities of the Vice-Chancellorship with me. While it may seem strange that, Parkinson-wise, I need two deputies, the fact is that as the University has grown, and I have grown older, I have been unable to devote the time, energy and creative thought which they deserve to several areas of the University's life. Professors Swan and Scott have now assumed responsibility, by delegation, for a number of these areas and it is to be expected that they will be more effectively supported than hitherto.

Finally it should be said that Monash has now completed twelve years of teaching and, in that time, has grown from an idea to a large and vigorous university probably in the full flower of its intellectual life. In that dozen years the central task has been the appointment of a first class academic staff. While in these melo-democratic days it is asserted that students and junior staff must have an equal say with their seniors in faculty affairs, the fact is that a university is as good as its academic staff: we are very fortunate in ours.

*Faculty of Arts—Dean: Professor G. R. Manton, M.A. (Cantab.)*

### *Students*

The total of undergraduate enrolments rose from 2,951 in 1971 to 3,015. With the first year quota remaining at 1,100, it is unlikely that

the total will increase unless a greater proportion become candidates for honours and complete a four-year course.

There was a further increase in graduate enrolments from 326 to 358. Of these, 90 were candidates for the M.A. preliminary, 193 for M.A. and 75 for Ph.D.

The number qualifying to graduate at pass level at the end of 1972 rose from 530 to about 550 and at honours level remained at about 96. During the year, 29 qualified for the degree of M.A. and 4 for the degree of Ph.D.

### *Staff*

A slight increase in the allocation of staff to the faculty brought some relief to one or two departments, but the overall staff-student ratio is still too low to enable us to provide the essential minimum of staff for small departments without unduly restricting the larger departments. In the department of Anthropology and Sociology, which has been the most hard pressed for some years, quotas have had to be enforced both at first year and at second year level.

During the year, three professors resigned their chairs. Professor W. A. G. Scott, foundation professor of English and dean of the faculty for its first five years, resigned his chair of English at the end of the first semester on appointment as Pro-Vice-Chancellor. The faculty, no less than the English department, owes much to his far-sightedness and good sense, especially in the initial planning stage and during the early years of growth. Professor H. D. Rankin resigned from the end of the year on appointment to a chair at the University of Southampton. In his eight years as professor of Classical Studies, he has developed undergraduate courses in Latin, Greek, Ancient History and Classical Civilization, and built up a department which has been highly productive in its research. Professor Z. F. Oliverius, after occupying the chair of Russian for nearly four years, has returned to the Charles University in Prague. He has made notable contributions both as a scholar in the field of Russian linguistics and as a representative of Australian slavists overseas.

Among distinctions gained by members of the faculty were the conferment on Professor I. P. Barko by the French government of the *Palme Académique*, and the award to Dr G. Serle of the Ernest Scott prize at the University of Melbourne for the best book on an historical subject during the preceding two years. The award was for his book on the history of Victoria during the land boom, entitled *The Rush to be Rich*. This is the second time Dr Serle has received this prize.

There have been three promotions to associate professorships: Dr M. G. Clyne and Dr W. Veit in the department of German, and Dr J. T. Platt in the department of Linguistics.



In July, Professor A. M. McBriar succeeded Professor H. D. Rankin as associate dean. In place of the office of sub-dean, which for some years has been held by members of the academic staff, the last of whom, Dr J. S. Duncan, resigned to return to full-time teaching in April, the faculty now has a full-time student adviser, Miss Belinda Dawson, a Melbourne honours graduate. A further full-time position created this year, and funded from the faculty grant for research assistants, is that of computer programmer, filled by Mr P. Hohaus, an honours graduate in Information Science. He assists those in need of computer services, especially in the social sciences and in the field of language and literature data retrieval, and provides a useful link between the faculty and the computer centre.

### *Visitors*

Two visitors stayed for an extended term. Professor Frank G. Ryder (University of Virginia) spent three months in the German department as visiting professor under the auspices of the Australian-American Educational Foundation. He engaged in graduate and undergraduate teaching and gave an inter-departmental research seminar on Metrical Theory. Dr Roeslan Abdulgani, a former Deputy First Minister and Foreign Minister of Indonesia, spent ten weeks as visitor to the Centre of Southeast Asian Studies, where his wide knowledge and personal experience was of great value both to individual graduate students and in seminars. He also gave undergraduate and public lectures.

### *The Faculty Board*

As in some other faculties, the new semester timetable has not been an unqualified success. Clearly some adjustments need to be made, such as the lengthening of the mid-year break, and more thought needs to be given to method of assessment. This subject and the related subject of student work load are continually under review by the board, and a questionnaire was distributed to all students re-enrolling at the end of the year in an attempt to sound out student opinion in the light of their experience in 1972. The board has also thoroughly revised its regulations in an attempt to set them out more simply and clearly, and in anticipation of a change from a subject to a unit system in 1974.

The question of credit towards the B.A. for work completed at tertiary institutions other than universities has been fully discussed with appropriate representatives of the Victoria Institute of Colleges, and a more liberal policy has been formulated. This is a step towards the greater degree of interchange which is expected to develop in the near future.

The Fifth Report of the Australian Universities Commission, published in August, was generally welcomed as markedly better than its

predecessors, not least because it takes a less restrictive view on new developments of a relatively minor kind and encourages universities to take on themselves the responsibility for devising and implementing their own priorities. Within the 1973-75 triennium the faculty hopes to institute teaching in social work within the department of Anthropology and Sociology and also to establish a department of Visual Arts and a school of Librarianship. It has also agreed that unless there is a clearly established student demand or professional need any other new developments involving additional staff should take place within existing departments.

#### *General Departmental News*

A course in contemporary written Chinese was introduced for the first time as a third year unit taught within the department of Japanese. If the demand justifies it, a minor sequence in Chinese will be instituted.

A gamelan presented to the Australian people by President Suharto and housed in the Indonesian Embassy in Canberra was lent to the department of Music for teaching and performing purposes by the Indonesian Ambassador. Thanks to a grant from the Australian Council for the Arts, Mr Poedijono, the Indonesian musician and dancer, spent four months teaching gamelan to students in the Music department, and a series of concerts was presented. The proceeds, supported by other grants and donations, have enabled the department to purchase its own gamelan for 1973.

Most departments in the faculty have commitments outside the University. Those concerned with subjects taught at school are called upon both for examining and for advising on the syllabus, and several departments arrange special meetings and classes for school pupils. The department of Anthropology and Sociology has mounted a number of investigations, involving student participation, into social problems, particularly those relating to the environment and urban planning. The department of Indonesian and Malay, in collaboration with the Forelanders Trust, again organized a crash course in Indonesian. The special eight weeks course in English as a foreign language, sponsored by the Immigration Department, was organized this year by Dr M. Clyne.

#### *Graduate Studies and Research*

It is the normal practice within each department to hold research seminars to which graduate students as well as staff contribute. On an inter-departmental and inter-faculty basis this work is organized by centres. The best established and most active of these is the Centre for Southeast Asian Studies, which holds both work-in-progress seminars by graduate students and general seminars by visitors or members of staff. Sixteen work-in-progress seminars and twenty general seminars

were held during the year. The attendance was rarely below fifteen and frequently above forty. In addition, in a series of seminars, one topic, "The Guided Democracy Period of Indonesia's Recent History (1959-65)" was explored intensively by a small group of staff and graduate students. This took place during the last week of the visit of Dr Roeslan Abdulgani, which proved to be a landmark in the development of the centre's activities. The first monograph in a series of *Monash Papers on Southeast Asia* was published in July.

The Centre for General and Comparative Literature, which has now been in existence for three years, held eight seminars on Satire. Papers were given by graduate students and staff of the departments of German, English and Russian. This centre is under the part-time directorship of Mr D. C. Muecke, reader in English, who with the help of Associate Professor W. Veit and other members of the staffs of language and literature departments provides two undergraduate courses in general and comparative literature.

A number of serial publications continue to be edited and published either mainly or solely by Monash departments. The department of French continues to be responsible for the publication of *The Australian Journal of French Studies*, now in its tenth year. Others are *Apeiron*, a journal for ancient philosophy and science, and *Ramus*, a journal for critical studies in Greek and Roman literature (both published by the department of Classical Studies), *Komos*, a quarterly of drama and the arts of the theatre (department of English), *Linguistic Communications* (department of Japanese) and *Melbourne Slavonic Studies* (department of Russian).

#### *Public Lectures*

The main series of Lectures on Visual Arts in 1972 was a series of six on Asian Art. The lecturers were Dr Leonard Cox, Dr Harold Bolitho, Dr Walter Veit, Mr Gordon Thomson, Mr Hugh O'Neill and Mr W. Willetts. In addition, a lecture on "Freud and the Understanding of Art" was given by Professor R. Wollheim, Power Lecturer for 1972, and a lecture entitled "Studying with Eisenstein" by Professor Herbert Marshall, of the University of Southern Illinois.

The faculty also sponsored three public lectures by Professor John Plamenatz, Chichele Professor of Political History at Oxford, on "The Social Thought of J-J. Rousseau".

#### *Accommodation*

The contract for the nine-storey southern extension to the Menzies building was signed in December, and the building is expected to be ready for occupation early in 1974.

*Faculty of Economics and Politics—Dean: Professor D. Cochrane,  
B.Com. (Melb.), Ph.D. (Cantab.)*

### *Bachelor of Economics Course*

#### APPLICATIONS AND SELECTION

With the increase in the number of courses being handled through the VUAC selection process, the number of applicants for the Bachelor of Economics course in 1972 declined from the record number in the previous year. First preference applications fell from 1,244 for 1971 to 1,053 and the total number of applicants with the faculty's course in one of their first three preferences decreased by almost 20 per cent from 4,338 to 3,486. On the other hand, the faculty's first year quota was increased from a gross enrolment of 500 students to 500 equivalent full-time students, an increase of approximately 40 students. The acceptance rate for normal matriculants remained fairly high at 77 per cent.

#### ENROLMENT

Enrolments in the subjects taught by the faculty increased in 1972 both as a result of the increased first year quota of Bachelor of Economics candidates and the continued demand by candidates for the degrees of other faculties. The total number of Bachelor of Economics candidates increased from 1,569 in 1971 to 1,683 in 1972. Enrolments of students for the degrees of other faculties in the subjects taught in the first three years of the Bachelor of Economics course increased to 1,615 compared with 1,533 in the previous year.

### *Graduate Courses*

#### ENROLMENT

Applications and enrolments for the Master of Administration degree decreased slightly compared with the previous year. On the other hand, applications and enrolments for the Master of Economics candidature increased. Total enrolments for higher degrees in the faculty increased slightly.

#### GRADUANDS

During 1972, 357 candidates graduated with the degree of Bachelor of Economics, including 47 honours graduates; 5 candidates graduated with the degree of Master of Administration, 7 with Master of Economics, 2 as Doctors of Philosophy in economics, 2 Masters of Arts in politics and 1 Doctor of Philosophy in politics. The Ph.D.s in economics were awarded to Mr P. L. Swan for his thesis entitled

"General Motors and the Australian Automobile Industry in Economic Perspective" and Miss C. R. Weston for her thesis entitled "An Economic and Statistical Study of Predictability in Australian Share Markets". Mr U. Sundhaussen was awarded the Ph.D. in politics for his thesis entitled "Political Orientations and Political Involvement of the Indonesian Officer Corps 1945-1966".

#### RESEARCH GRANTS

Research grants were approved for three projects in the faculty for 1972. Professor F. H. G. Gruen was awarded \$32,858 for an econometric analysis of protection; \$4,870 was awarded to Mrs E. Preston for her study of trade between Japan and Australia; and \$5,311 to Dr H. G. Gelber for a project entitled "Australia, the United States Alliance and Power Relationships in the Pacific".

#### *Staff*

##### ECONOMICS

Several new appointments have been made—Dr R. M. Parish, formerly professor of Economics at the University of New England and currently economist with the International Bank, has been appointed to a chair in the department and Dr C. B. Schedvin, senior lecturer in Economic History, University of Sydney, has been appointed to a readership, Mr B. F. Jones, Deputy Director General, Postmaster General's Department, has been appointed to a senior lectureship in Administration.

Dr P. A. Riach has been promoted to a readership and Dr M. C. Knowles and Dr G. P. Sampson have been promoted to senior lectureships.

During the year a number of resignations were received from tenured staff—these included Professor F. H. G. Gruen, Mr W. G. Cook, Dr G. C. Pursell and Mr T. N. Young.

#### *Visitors and Conferences*

##### DEPARTMENT OF ECONOMICS

During 1972 the department had as visiting special lecturers Professors R. W. Clower (University of California at Los Angeles), B. Higgins (University of Montreal), F. De Vyver (Duke University), R. V. Call (University of Arizona), and S. A. Zeff (University of Tulane). Professor Clower presented the sixth annual Monash Economics Lecture. The seminar programmes included the following participants: Mr Justice Moore, Commonwealth Conciliation and Arbitration Commission; Mr J. Stone, Australian Treasury; Mr A. Holmes, Reserve Bank of Australia; Professor S. Turnovsky, Australian National University; Professor

J. L. Cochrane, University of South Carolina; Professor A. S. Douglas, London School of Economics; Professor A. Katz, University of Pittsburgh; Professor G. Staibus, University of California at Berkeley; Mr A. Silberston, Oxford University; Professor W. A. Brock, University of Chicago; Dr J. D. McConnell, Stanford Research Institute; and Professor O. Kahn-Freund, Oxford University.

Many conference papers were presented by members of the department during the year. They included papers by Professors F. Gruen, R. H. Snape and J. W. McCarty, Drs H. D. Evans and P. Gilmour, Mrs L. Corner and Messrs L. McGregor, C. Burrows and N. Klijn at the ANZAAS conference in Sydney; Professor I. A. McDougall submitted a report to and attended the annual meeting of the Economic Commission for Asia and the Far East in Bangkok; Professor I. Gross presented papers to the Pacific Basin Economic Council in Fiji, the Life Officers' Association in Terrigal, a seminar on Consumerism in Perth; Dr I. Wills attended the second Asian Population Conference in Japan; Professor Cochrane was guest speaker at the Convocation Meeting at the University of Tasmania; Professor Isaac presented a paper to a conference on Incomes Policy at the National Institute of Economic and Social Research in London and attended an international conference in Tel Aviv on Labour Relations; and Mr D. Campbell presented a paper to a conference in Sydney on the Human Consequences of Technological Change.

#### DEPARTMENT OF POLITICS

In 1972 Dr D. M. White was granted a visiting scholarship to Corpus Christi College, Cambridge, and Dr H. G. Gelber was invited to a visiting professorship in the department of Political Science at Yale University. Professor Feith, who was on sabbatical leave, paid a number of visits to South East Asia, and to India and Bangla Desh.

A number of visiting scholars gave seminars to the department, including: Professor Arend Lijphart, University of Leiden; Professor Sergio Cotta, University of Rome; Professor D. H. Mendel Jnr., University of Wisconsin; Professor Jurgen Domes, Free University of Berlin; Dr R. O'Neill, Australian National University; Professor Alvin Proctor, Kansas State College of Pittsburgh; Mr Herman Kahn, Hudson Institute, New York; Professor Shlomo Avinari, Hebrew University of Jerusalem; Professor J. Plamenatz, University of Oxford; and Dr D. E. Butler, Nuffield College, Oxford.

*Faculty of Education—Dean: Professor S. S. Dunn, B.A., Dip.Ed. (Adel.), B.Ed. (Melb.), F.A.Ps.S., F.A.C.E.*

As will be seen from the report which follows, 1972 can best be described as a period of further expansion and of planning for the next

triennium during which the education building will be extended and the faculty will come close to its ultimate size.

### *Students*

In 1972 the quota for Dip.Ed. was fixed at 500 full-time students and for the first time we were unable to accept all full-time Monash graduates who applied. The position for 1973 has not improved and the three universities and two colleges offering Dip.Ed. had fewer places than applications. However the demand and supply position for teachers seems to be more nearly in balance. It would be wrong to imply that all applicants are enthusiastic to be teachers, and the unmotivated studentship holder adds to the difficulties of a course which, by its nature, has always proved difficult to organize in a manner that satisfies either staff or students. Further efforts to improve the course are described later.

It is also worth recording that of twenty-one students who started the Dip.Ed. course designed for tertiary teachers eighteen graduated in 1972 and the remaining three students were unable for good reasons to undertake the second half of the course in 1972. This course has attracted attention overseas as well as in Australia.

The growth in B.Ed. numbers has been rapid as can be seen from the semester subject enrolment figures: 1970-494\*, 1971-801, 1972-1,166. With this trend in operation it became essential to establish a quota for 1973 but at the time of writing this report it appears that all qualified applicants may be accepted.

There was also expansion in the higher degree area and the M.Ed. by course work is proving popular. Part-time M.Ed. students find the combination of work and study difficult and a number do not persist. This problem is not unique to Monash as a report prepared by Dr Radford of the Australian Council for Educational Research and shortly to be published by the Australian Advisory Committee on Research and Development in Education will show.

### *Staff*

There was a very slight increase in academic staff.

The Victorian Education Department again made a significant contribution to the work of the faculty by seconding experienced teachers to help with method teaching and supervision of school practice.

\* In 1970 B.Ed. subjects were not in semester units. The figure given is a conversion from year-long subjects.

### *Building*

The Australian Universities Commission approved the education building as a "green light" project and plans for the expansion were prepared but cost estimates of the quantity surveyor exceeded the funds available with a consequence that the plans needed revision.

### *Curriculum*

At the Dip.Ed. level a course in which the foundation subjects were approached by a team teaching method was started, making three alternative types of course available for full-time secondary students. Some evaluation of these courses has been attempted and will be continued in 1973. The use of "electives" for students towards the end of the year has proved popular and some excellent studies have been attempted, although there is some risk of enthusiasm exceeding competence.

During 1972 arrangements were also made to accept for Dip.Ed. in 1973 a group of graduate students who wish to teach in the primary school. This course has been planned in close collaboration with the principal and staff of Burwood Teachers' College.

Further thought has been given to plans for expanding training facilities in special education. The Victorian government has established a committee to report on special education and Professor Neale is a member. Developments at Monash need to be expanded keeping in mind facilities that already exist and will be incorporated in the teachers' colleges when they become part of the State college system.

### *Research*

In addition to research funded by the faculty several staff members have been able to attract research grants from outside funding bodies—Mr Clift, Professor Fensham, Dr Hore, Dr Hunt, Mr Jackson, Mr Linke, Professor Neale, Mr Perry, Dr Scott, and Professor Taft.

### *General*

The faculty had a number of distinguished overseas and local visitors during the year. In August we were host for a day to visitors to the Fifth International Seminar on Special Education and were able to describe to them work in special education being undertaken by the faculty. We were also delighted to have working with us for several weeks Professor I. Goldberg, professor of Special Education at Teachers' College, Columbia, USA, who was the first recipient of the Elwyn Morey Memorial Award. Professor Goldberg's visit was not only stimulating to staff and students in the faculty but through public talks and discussions he made a distinct contribution to arousing interest



and fostering understanding in the community of the right of handicapped children to education.

In 1872, an Education Act was passed and to celebrate the centenary the faculty organized a series of seven lectures. The total attendance for the series was about 700.

Co-operation between the faculties of Education in the three Victorian universities is fostered by scheduled meetings of the three deans. On problems concerning initial teacher preparation of secondary teachers the principals of the two colleges—Melbourne College of Education and Monash Teachers' College—are also involved.

The report of the Higher Education Research Unit which is attached to the faculty for administrative purposes follows.

*Higher Education Research Unit—Director: Mr J. C. Clift, M.Sc (N.Z.)*

#### *Staff*

In 1972, Dr Ryan, senior fellow, resigned his position. Mr I. Thomas was appointed as a fellow in the unit and took up his position in June. Dr T. Hore accepted the position of senior fellow and will take up his position early in 1973.

#### *General*

During the year the unit provided comment and analysis of a number of items referred to it from the Professorial Board's Standing Committee on Education.

At the request of the faculties of Arts and Science, the unit undertook to assist these faculties in carrying out a survey of student workload. In both faculties these surveys were conducted across all years of study. Following the academic input audit in 1970 HERU published a socioeconomic input audit for the years 1970–71. This audit is seen as the basis for studies of trends in the coming years. A start has been made on the next stage of the input audit to compare academic progress against the various factors: academic, social and economic.

Advice and assistance on matters of material presentation, course evaluation and student assessment were provided to academic staff representing all faculties of the University. Advice was also provided to institutions outside Monash. Mr Clift was invited to be a member of the committee to consider the curriculum for a Diploma in Tertiary Education to be introduced at the Darling Downs Institute of Technology. Towards the end of 1972 a number of workshops were held within Monash on tutoring techniques, and throughout the year a number of staff requested assistance with their teaching, including the use of videotape for self-analysis.

A videotape entitled "This is Microteaching" was prepared to explain this particular technique and a number of teaching incidents were

recorded on videotape. These are to be used in workshops on teaching to assist academic staff to analyse teaching situations.

Mr Clift received an extension of his grant from the Australian Advisory Committee for Research and Development in Education for research into the cost-effectiveness of microteaching.

*Faculty of Engineering—Dean: Professor K. H. Hunt, M.A. (Oxon.), M.Mech.E. (Melb.), C.Eng., F.I.Mech.E., F.I.E.Aust.*

### *Undergraduate Students*

The first year quota rose (from 340 in 1971) to the "final" figure of 360. In the event the first year numbers were 354, and a few students were admitted with "Anderson Scores" at the Victorian HSC examinations lower than the cut-off point for 1971. Reasons for the slight slackening in demand for places are, presumably, (a) the larger quota, (b) the fear on the part of young people that professional engineering jobs are getting harder to find, and (c) the development of new courses, some leading to VIC degrees, in Victorian Colleges of Advanced Education. At the same time, AES admissions into second and third year rose (from 30 in 1971 to 50 in 1972), this increase being accounted for largely by transfers from science courses, not only within Monash University but also from other Australian universities and from overseas.

### *Course Structure*

After lengthy discussions within the faculty and in conjunction with the faculty of Science, the structure of the first year was changed to give substantially greater weight to the subject Engineering 101 in future. It is hoped that this, coupled with new physics and chemistry subjects (now tailored more specifically for engineers), will give students a better feel for engineering earlier in their courses, and provide a better groundwork for their later studies. The new structure will be introduced in 1973. The principle of a common first year for all engineering courses has been retained.

### *Graduate Studies and Research*

A substantial number of research projects, involving students and staff, are supported by outside agencies and industry. Continuing and new grants from the Australian Research Grants Committee totalled \$63,860, and supported eleven different projects, as compared with \$38,679 for nine projects in 1971.

Many staff and research students have attended and contributed to technical conferences in Australia and overseas.

Research activity and the interaction between the faculty and the engineering industry continue to grow. The following paragraph highlights some of the research activity.

Fluidized bed design has advanced as a result of work in the department of Chemical Engineering. Predictions made four years ago based on a new model of bed behaviour have been partially verified during the year. Their use is for petroleum catalytic cracking, roasting of ores, etc. Combustion in fluidized beds can reduce capital costs of boiler installations, and reduce emission of contaminating flue gases. In Civil Engineering important research is continuing on the buckling behaviour of box-girder bridge panels, and there is evidence of the influence of this work on the design of such bridges overseas. In Electrical Engineering major progress has been made with electronic computer control of respiration and anaesthesia. A complete working system is now being used regularly for experimental purposes connected with clinical care to examine the differential effects of muscle relaxants and deep hypothermia with cardio-pulmonary bypasses. Professor Lampard's election during the year to honorary membership of the Australian Society of Anaesthetists testifies to the recognition accorded to this and related work. A technique developed in Materials Engineering can detect (in situ) regions of corrosive damage of steel in prestressed concrete, and a new theory to explain cracking in heat-affected welding zones in steel has been proposed. In Mechanical Engineering some fundamental work has been undertaken to determine the precise sources of noise in impactive industrial processes. Freeway traffic noise is also being investigated with a view to possible means of controlling it. These examples merely highlight a little of the important research in progress.

### *Buildings*

After a delayed start, work continued during the whole year on building 6, which will not be ready until towards the middle of 1973. Pressures on accommodation of all kinds are at present severe, and, during 1972, the Project Committee started on the detailed specification for additional accommodation.

### *General*

The demand from practising engineers for special short courses continued to grow. During 1972 the following courses were run:

Control Engineering—Systems Design, (jointly: departments of Chemical, Electrical and Mechanical Engineering. Duration—35 hours. Held October—November 1972).

*Chemical Engineering:* Topics in Air and Water Pollution, (24 lectures and 15 hours practical work, held in July 1972); Seminar on Case Studies in Pollution, (4 hours in July 1972, jointly with I.Chem.E.); Rheology and Flow of non-Newtonian Systems, (20

lectures and 16 hours tutorial and practical work, held in November 1972).

*Materials Engineering:* Advanced Materials (one of three streams at the Australian Institute of Physics summer school: one week in February 1972, at Monash).

*Mechanical Engineering:* Noise and its Control (full-time course of one week during November 1972).

*Faculty of Law—Dean: Professor David E. Allan, M.A. (Cantab.); of the Middle Temple, Barrister-at-Law*

### Students

EFTS enrolments in the faculty in 1972 were somewhat lower than in previous years. This was because 1972 was a transitional year in which the Law school moved to a new curriculum. First year law students (except for those enrolled for the B.Ec./LL.B.) do not study law subjects. Accordingly, in 1972, there were very few students studying the first law subjects. EFTS enrolments were 615.

Actual student (body counts) enrolments were:

B.Juris./LL.B.	695
B.A./LL.B.	114
B.Ec./L.L.B.	242
B.Sc./LL.B.	13
	<hr/>
	1,064
LL.M.	13
Ph.D.	6
	<hr/>
	1,083
	<hr/>

### Staff

The following new appointments were made during the year:

Professor C. G. Weeramantry, B.A., LL.B. (Lond.), Advocate of the Supreme Court of Ceylon, formerly Puisne Judge of the Supreme Court of Ceylon, Barrister (Vic.), was appointed to the Sir Hayden Starke Chair.

Professor R. Baxt, B.A., LL.B. (Syd.), LL.M. (Harv.), Solicitor (N.S.W.), Barrister (Vic.), was appointed to the Sir John Latham Chair. Professor Baxt was previously a senior lecturer and an associate professor in the faculty.

Mr R. G. Fox, LL.M., Dip.Crim. (Melb.), Barrister and Solicitor (Vic.), has been appointed to a senior lectureship. Mr Fox was formerly associate professor in the faculty of Law and the centre of Criminology in the University of Toronto.

Dr W Weerasooria, LL.B. (Hons.) (Ceyl.), Ph.D. (Ceyl. and Lond.), has been appointed to a senior lectureship. Dr Weerasooria was head of the department of Law at Vidyodaya University of Ceylon and is an advocate of the Ceylon Bar.

Mr J. Epstein, A.B. (Syr.), LL.B. (Stan.), Member of the Bar of the State of California, has been appointed to a lectureship. Mr Epstein had previously taught at the University of Warwick and at Osgoode Hall Law School.

Dr Y. F. R. Grbich, LL.M. (Well.), Ph.D. (Lond.), Barrister and Solicitor (N.Z.), has been appointed to a lectureship. Dr Grbich had teaching experience at the Victoria University of Wellington.

Miss J. M. Luck, LL.B. (Hons.) (Tas.), LL.M. (Lond.), Barrister and Solicitor (Tas.), was appointed to a lectureship.

Dr G. D. S. Taylor, LL.M. (Well.), Ph.D. (Cantab.), Barrister and Solicitor (N.Z.), was appointed to a lectureship. Dr Taylor has had teaching experience at Cambridge and at the Victoria University of Wellington.

Mr G. L. Teh, LL.B. (Hons.) (Lond.), LL.M., of the Inner Temple, Barrister, was appointed to a lectureship. He was previously a teaching fellow, senior teaching fellow, and senior tutor in this school.

Mr C. R. Williams, B.C.L. (Oxon.), B.Juris., LL.B. (Hons.), Barrister and Solicitor (Vic.), was appointed to a lectureship.

Mr L. E. de Sousa, B.Sc., LL.M. (Bom.), and Miss H. McRae, B.A., LL.B. (Hons.) (A.N.U.), were appointed to senior teaching fellowships. After holding a teaching fellowship in this school, Miss McRae spent a year as an acting lecturer in the University of Keele.

Mrs T. L. Morris, LL.B. (Hons.) (Melb.), Barrister and Solicitor (Vic.), and Mr J. A. Rutherford, B.A., LL.B. (Hons.), Barrister and Solicitor (Vic.), were appointed to teaching fellowships.

Four members of staff were promoted during the year: Mr H. A. Finlay, from senior lecturer to associate professor, Dr I. C. F. Spry, from senior lecturer to reader, Mrs A. H. Lahore, from lecturer to senior lecturer, and Mr C. W. O'Hare, from lecturer to senior lecturer.

Miss S. M. Walters resigned her lectureship during the year to return to England to read for the Bar, Mrs G. M. Bird resigned her teaching fellowship, and Mr J. R. Steelman resigned his senior teaching fellowship. The death occurred, in a motor accident, of Miss Susan Millard, research assistant in Law.

The following law teachers visited the school and lectured during the year:

Professor M. P. Jain, formerly of Banaras and now of Delhi University, visiting professor, February-June 1972.

Professor J. Stone, University of Sydney, visiting professor May 1972. Professor Stone delivered the fourth Wilfred Fullagar Memorial Lecture, "On the Liberation of Appellate Judges—How not to do it".

Professor F. R. Crane, professor of Law in the University of London

and dean of the faculty of Laws in Queen Mary College, visiting professor, June–December 1972.

Professor O. Kahn-Freund, formerly professor of Comparative Law in the University of Oxford.

Professor H. W. R. Wade, professor of English Law in the University of Oxford.

Members of staff on study leave for all or part of the year were Professor Baxt, Mr B. M. Dwyer, Dr E. M. Eggleston, Mr J. I. Fajgenbaum, Mr P. J. Hanks, Mr P. E. Kilbride, Mrs A. H. Lahore, and Mr F. A. Trindade.

### *Curriculum*

The new undergraduate curriculum, which had been planned over the previous three years, was introduced in 1972. The concept of two degrees has been retained, but the law content of the first degree is now largely prescribed. On the other hand, the LL.B. is composed largely of optional subjects taught to small groups, and this has enabled the Law school to offer teaching in a very wide range of legal topics. A number of LL.B. subjects are taught by means of seminars and research papers.

The new rules for the honours school require the submission of a supervised research paper. Ten students completed the honours degree in 1972, five with first class honours.

One consequence of the new curriculum was that few first year students enrolled in law subjects. However, in order to give first year students a point of contact with the faculty, a series of seminars was held on one Wednesday afternoon a month on current matters of public concern or controversy which had a legal content. Speakers from the community who had experience of these problems were invited to lead the seminars.

The planning of the LL.M. by course work has been completed, and courses will be offered in 1973.

### *Faculty Organization*

The composition of faculty board was revised in 1972, so that the board now consists of all full-time staff, four elected students, and representatives of the bench and legal profession. Students also serve on some faculty committees.

In 1972 the faculty introduced an informal organization of the staff into interest groups. The principal object of the interest groups is to provide a forum for discussion among staff teaching and researching in broad areas of the law. Each group is charged with the responsibility of keeping under review that part of the curriculum falling within its expertise, fostering research and advising on law library development. Each group has co-opted as consultants a number of persons from outside the faculty.

There are nine interest groups:

Government Law  
Criminal Law, Procedure and Evidence  
Commercial Law  
Industrial Law  
Property  
Common Law  
Taxation  
Family Law  
International, Foreign and Comparative Law

It is proposed in 1973 to ask the interest groups to play a larger role in the programme of the honours school. In particular it is hoped that honours students preparing research papers will give work-in-progress seminars to the interest groups.

#### *Law Library*

The law library has continued to develop to meet the demands of the teaching and research programmes. General financial assistance has been received from the Victoria Law Foundation.

#### *Activities*

Members of the faculty have played a full role in law reform, professional and community affairs. In May, the faculty was host to a weekend professional conference on family law reform, and in October to a weekend conference for legal practitioners on industrial property. The faculty is also co-operating with the Australian Finance Conference in the organization of a national conference for lawyers and businessmen on consumer credit laws. It is expected that this conference will be held in Melbourne in March 1973.

The faculty participates in the work of the Cussen Institute for Post-graduate and Continuing Legal Education, and has held two colloquia with the Law Institute on the future of legal education.

The Monash University Law Students Society has continued to organize lunch-time lectures with guest speakers. It has played a prominent role in several law reform projects and has operated a legal referral service, in co-operation with the Citizens' Advice Bureau.

*Faculty of Medicine—Dean: Professor R. R. Andrew, M.D., B.S.  
(Melb.), F.R.C.P., F.R.A.C.P.*

#### *Monash Medical Centre*

An indication of possible progress was a letter from the Minister of Health, 14 April 72, to the chairman of the Hospitals and Charities

Commission, authorizing the re-commencement of joint planning and directing the preparation of a master plan, by the University and the HCC. This followed a letter to the Vice-Chancellor, 21 March 72, asking for university co-operation in the planning, to which he agreed.

The Joint Planning Committee accordingly was revived and the Professional Planning Committee reconstituted: the former to be a joint policy making body with senior representatives of the University and HCC: the latter a small group of chairmen of departments with the dean and HCC. Provisional planning among the university members is proceeding but no real progress can be achieved until there is adequate financial support. A budget was submitted at his request to the Minister of Health on 1 December 72.

An increasing shortage of beds, and a probable increased quota of medical students in the 1976-78 triennium, add greatly to the need for the enlargement of our clinical resources centred on the medical centre.

It should be emphasized that morale in the faculty has been seriously undermined by the continuing failure over a period of years, by the State government, to fulfil the recommendations made to them and accepted by them, twelve years ago (Lindell Report), and at intervals since then.

### *Geelong Hospital*

Students continue to have a residential period at this hospital for supplementing their studies in medicine, surgery, obstetrics and paediatrics. About 10 per cent of fifth year and 25 per cent of sixth year have seven and six weeks respectively in residence. Staff from three departments regularly visit the hospital. It is clear that the students place a high value on this aspect of their clinical work.

Following a decision by Council (19 April 72) to approve in principle affiliation between the University and hospital, a visit to Geelong by the dean and the chairmen concerned has resulted in a provisional affiliation agreement being drawn up, and it is expected that this will be before Council and the Committee of Management in 1973.

The faculty believes that links with other community hospitals will need to be considered in the near future.

### *Students*

There are 932 undergraduates over the six years of the course, including 17 reading for B.Med.Sc. Women comprise 21 per cent and overseas students number 125.

A committee of faculty appointed in 1971 to consider the whole question of overseas students reported to faculty board (5/72) recommending that the 15 per cent presently reserved for overseas students



be reduced to 10 per cent for 1974, and finally to restrict entry normally to sponsored overseas students by 1975. This was approved by Council and will give the faculty about 12 additional places from Victorian applicants. Of the 60-70 overseas students admitted each year to Australian medical schools, Monash has been admitting about one third.

During the year considerable unrest among a group of students, especially in fifth and sixth years, resulted in several large meetings of staff and students at which over 200 attended. The principal anxieties expressed by students were directed to continuous assessment and the statutory and professional requirements. It is claimed that too little account has been taken of individual hopes and desires for a more flexible course which gives more attention to intellectual satisfaction and less to registration requirements.

An ad hoc working party, elected equally from staff and students, chaired by an academic outside the faculty, will report to faculty early in 1973, with recommendations on the direction given them to review the curriculum and to design and evaluate new teaching methods and programmes.

Other students submitted well-reasoned arguments for a reconstituted sixth year and suggestions for more emphasis on integration. Further criticism was directed to continuous assessment being used in the final aggregate marks. These points were considered by the dean, chairmen, and clinical deans, and it was agreed there was a number of reasonable suggestions, some of which could be implemented in 1973. Others could be considered in 1974.

While the ferment evident is deplored by many, the responsible and constructive nature of some of the criticism made it clear that serious consideration and action, where it is agreed to be justified, could result with advantage to students and staff.

As part of all this activity, the undergraduates represented with force the point that they wished to be much more strongly represented in decision-making bodies, particularly faculty board. The dean has agreed to convene a meeting of the whole faculty (about 200 members) to discuss this proposal early in the first semester, 1973.

### *Organization*

As the result of strong representation to the faculty board, it was agreed to: (1) abolish faculty executive, (2) declare the faculty board as the main administrative organ, (3) provide for a steering committee, (4) arrange board meetings alternately on campus and downtown.

In addition the inter-hospitals committee has been strengthened and widened to include non-professorial representatives and students.

The faculty secretary (Mr Trevor Short) was appointed, in August,

secretary to Victorian Universities Admissions Committee. Mr Stephen Williams has been appointed in his place.

### *Staff*

The student-staff ratio has gradually deteriorated: 6.9 (1969); 7.2 (1970); 7.2 (1971); 7.8 (1972); (AUC calculations).

There are 103 tenure, 46 non-tenure academic staff. Of the 149, 71 are on campus and 78 downtown. In addition there are over 200 clinical instructors appointed annually by Council from our six affiliated hospitals. These visiting staff, who provide about half our clinical teaching, will be paid on a sessional basis next year as a result of a recommendation by the AUC and agreement by the federal government. Finance to this end was included in the 1973-75 triennial grant, and is to be disbursed according to faculty recommendations.

This year was notable for the resignations of Professor Hudson to take up a senior research appointment at the Florey Institute, University of Melbourne, and of Professor Dudley to take up the chair of Surgery, St. Mary's Medical School, London. Both foundation professors gave remarkable service to the faculty over the eight years of their tenure.

Professor Colin Johnston, from University of Melbourne, was appointed (19 December 72) to the chair of Medicine at Prince Henry's Hospital.

Dr J. L. Veale (department of Physiology) was appointed professor of Physiology at the University of Adelaide, and Dr L. B. Geffen (department of Physiology) accepted an offer from the Flinders University of South Australia to become their foundation professor in Human Biology.

Professor Barry Firkin was on study leave for four months as Sims Travelling Professor, a prestigious Commonwealth appointment.

The dean took three months study leave in UK and Europe earlier in the year and attended the fourth World Conference on Medical Education in Copenhagen in September.

### *Research*

Outside grants totalled \$683,514. The National Health and Medical Research Council grants numbered 53 (\$222,154), and the Australian Research Grants Commission 17 (\$100,016).

### *Buildings*

The AUC Fifth Report recommended \$130,000 for extensions to the central animal house.

As the result of changes in student preferences over the last few years, it has become clear that serious restrictions would be imposed

on science students in the biological sciences entry of 1973. A re-examination of the University building projects by the Vice-Chancellor, Comptroller, and an inter-disciplinary committee of chairmen and deans concerned finally recommended an extension of the medical school (E block) of 5,100 sq. ft. gross (3,800 sq. ft. net). This will greatly ease the pressures as it will be in operation for the first semester 1974, and allow for the establishment of the approved chair in Pharmacology and development of the department. For this purpose \$150,000 has been granted.

The joint project with University of Melbourne of a teaching facility at the Psychiatric Hospital, Larundel, has been granted \$80,000 from the AUC (Fifth Report). This will be a most welcome addition to our teaching and research resources in psychological medicine.

### *Manpower*

The submission of the faculty was accepted by Professorial Board and Council as the University submission to the Karmel Committee on Medical Schools inquiring into medical manpower.

It was recommended that, subject to the provision of adequate pre-clinical and clinical resources, the quota should be raised from 160 to 200 at an appropriate time, possibly in the 1976-78 triennium.

*Faculty of Science—Dean: Professor K. C. Westfold, B.Sc., M.A.  
(Melb.), D.Phil. (Oxon.)*

### *Teaching*

In 1972 new subjects approved for inclusion in the B.Sc. course were—Geology 203, Earth Sciences 205, Materials Science 205, Biomathematics 203, Biomathematics 205, and Information Science 301. These will be offered for the first time in 1973 and, except for the last named, will be followed by courses at the third-year level in 1974.

The faculty has invited the Higher Education Research Unit to conduct a study on student workloads. Although this study is not yet complete student responses in some areas have already given an indication of areas of pressure and these are being reviewed by the departments concerned. Independently of this inquiry many departments with large classes have continued their interest in providing audio-visual aids which allow the students access to material given in lectures which is found difficult and which can be studied in the students' own time.

Although strictly outside the domain of the faculty of Science, mention is made here of the new course for the Master of Environmental Science which was approved by the Professorial Board. This course will be administered by a board of studies containing representatives from several faculties, but it will report to the Professorial Board through the faculty of Science.

### *Research*

There were 32 degrees of Doctor of Philosophy awarded in the faculty of Science, and 16 degrees of Master of Science, including 4 from departments in the faculty of Medicine.

The level of research undertaken in the faculty in all its departments can best be seen from the list of publications, published separately, and from the list of grants made to individual members of the academic staff, given elsewhere in the Report of Council.

The Jeffrey telescope on Mt Burnett near Emerald is now operational and has attached to it a spectrometer and photometer manufactured in the department of Physics. It will be used by third year and honours and graduate students in physics in 1973. It is hoped that other interested departments will also submit programmes for its use in the near future.

The behaviour-environmental laboratories in the Jock Marshall Zoological Reserve were completed with the exception of the outside caging which is to be constructed under a separate contract. The M. A. Ingram Trust provided an additional grant of \$2,000.

### *Other Educational and Professional Activities*

Members of the faculty continue to take a significant part in the VUSEB standing committees. Two books concerned with teaching at the junior-university and secondary-school level were published: *What is Mathematical Logic?* (OUP) by J. N. Crossley, C. J. Ash, C. J. Brickhill, J. C. Stillwell, and N. H. Williams, and *Probability and Statistics* (Rigby) by G. B. Preston and G. A. Watterson, published under the aegis of the School Mathematics Research Foundation. Dr D. F. Dorward was an adviser and provided the narration for the ABC TV series "Wild Australia". Dr E. H. M. Ealey, who is the co-ordinator for the course for the Master of Environmental Science, was also involved in an HSV7 TV series on Ecology and Conservation.

The department of Mathematics was host to the Astronomical Society of Australia in its annual meeting last May, and the department of Physics for the Australian Institute of Physics summer school on Magnetism and its Applications, Phase Transitions and Advanced Materials, in February.

### *Personal*

Dr B. E. Hobbs arrived to take up his new appointment as the foundation professor of Geology in September, Dr W. A. Rachinger was appointed to the third chair in Physics, Dr W. R. Jackson to the chair of Organic Chemistry, and Dr J. S. Maritz to the second chair in Mathematical Statistics. The latter two will take up their duties before the beginning of the 1973 academic year.

Professor M. Canny was elected president of section 12 of ANZAAS, Professor R. D. Brown was elected vice-president (physical sciences) of the Australian Academy of Science, Professor B. O. West vice-president of the Royal Australian Chemical Institute, and Professor R. W. Cumming President of the Australian Psychological Society. Professor B. R. Morton has been appointed to the permanent council set up to direct the establishment of the Australian Institute of Marine Science, Professor R. Street, who is chairman of the Australian Institute of Physics and of the Australian Research Grants Committee, was appointed to the Commonwealth Advisory Committee on Science and Technology.

Dr T. P. O'Brien spent a period of study leave as Leverhulme Fellow and visiting professor at the University of Tokyo, Professor B. W. Holloway as visiting research fellow at University College, London, and Professor R. H. Day as the Association of Commonwealth Universities Visiting Professor at the University of Exeter.

### *General*

During 1972 it became evident that the swing towards biological sciences in the faculty was likely to pose severe problems in accommodating all those qualified students who wished to study biological sciences. At the same time the current 1970-72 building programme was based on predictions made in 1967. This affected the biological departments in the faculty of Medicine as well as the faculty of Science. The faculty is grateful to the Comptroller, Mr F. H. Johnson, for contriving the means of financing both an extension to block E of the Medicine school and additions to the biological sciences—zoology completion building project, and for securing the agreement of the Australian Universities Commission to the change of programme. These new buildings, scheduled for completion at the end of 1973 and in mid 1974, respectively, should be able to accommodate most of the predicted student numbers in 1975, but the trend indicates that planning should begin soon for further biological buildings for the 1976-78 triennium.

*Library—Librarian: Mr T. B. Southwell, B.A. (Syd.), A.L.A.A.*

Early in the year the library acquired its half-millionth book; a significant achievement considering the University's brief history. During the year another 70,000 volumes were added, some 6,500 of these representing material acquired in previous years, and now taken into stock as part of a special programme involving minimal listing and deposit storage of lesser-used material. The intake was impressive by Australian standards, and approximated the figure needed to reach the agreed target of seventy books per student by 1978. Total

stock at the end of 1972 amounted to 567,300 volumes, and 9,900 periodical titles were currently received.

This achievement was made possible largely by the support of parents, students and graduates to an appeal for funds. Individual letters of thanks have been sent to all donors, but it is seemly that thanks also be recorded here. Financial support from the University itself was also clearly essential and clearly forthcoming, and it is disappointing to see that finance available in 1973 will apparently not match the expected increase in costs.

Service to readers was expanded in all libraries, with particular emphasis placed on reader education; this was a feature in the bio-medical library, but was expanded considerably in the Hargrave and main libraries and plans were put in hand for a considerable expansion in law.

Loans for the year rose by nearly 6 per cent to 354,357. It was reported for 1971 that borrowings from other libraries had fallen for the first time; this trend continued markedly in 1972, and only 6,913 borrowings were reported, as against 9,130 in the earlier year. Of equal significance is the figure for loans to other libraries, of 10,286 as against 9,148 in 1971.

The space problems in the Hargrave and Alfred Hospital libraries were solved during the year, the former by the completion of a new wing, which also makes provision for a more adequate abstract and bibliography room, the latter by expansion into a further area of the medical school, allowing a much-needed rationalization of space.

A new service was introduced in a small way during the year. From a donation received to assist blind students, a tape recorder was purchased; volunteer readers were organized, and with assistance from the audio-visual aids section, text-books required by blind students were recorded and made available for their use, in the library and in their homes.

Audio-visual material generally began to show as normal library material, and much time was spent in devising techniques to meet the unfamiliar problems set by it. A start was made in the purchase of equipment for use in the library, but it is clear that with the variety of standards and the constant release of new equipment, progress must be more than usually cautious.

Development in the computer field continued on budgetary control within the acquisitions area, and creation of the massive "Inventory" file. In this latter area, the biomedical library was completed, and the open access section of the main library and the Hargrave brought near to completion.

Mr D. R. May transferred from the Hargrave library early in the year to become reader services librarian for the main library, a position later re-titled humanities and social sciences librarian. Following Mr T. B. Southwell's appointment as University librarian, a considerable

survey of the library's administrative structure was undertaken, which will hopefully lay more stress on service to users in the years to come.

## 6. UNIVERSITY FACILITIES

### *Alexander Theatre*

The Alexander Theatre has been heavily booked throughout the year, although some of its previous regular bookings (e.g., for graduation ceremonies, lunch hour concerts, examinations) have been taken over by the Robert Blackwood Hall. Bookings by local amateur companies (especially for musicals and light opera) increased. These attract large audiences to the theatre and provide useful revenue, but do little to establish the theatre as a centre for entertainment such as a university might be expected to provide. The Alexander Theatre Guild sponsored a successful pantomime in January, and there were several student productions of merit, including *An Indonesian Adventure*, done in association with the Music department.

The committee has given much thought to the problems of developing a worthwhile and successful programme, as opposed to merely providing a venue for groups who will pay. It seems clear that research into audience potential is needed, and steps have been taken to embark on this in 1973. In the meantime, with the aim of giving further encouragement to dramatic activity within the University, the committee has allocated part of the outside earnings towards the salary of a director of student drama.

During the year a number of improvements have been made, in particular to the equipment. The most urgent need at the present time is for more storage space.

Mr Gordon Troup resigned from the position of director in October when he went on study leave. His place has been taken by Dr Logan Francey.

### *Audio-Visual Aids*

The most important event in 1972 was the occupation of offices and technical areas which were completed as extensions to the television studio and mobile television unit garage in the west medical car park area. For the first time in the history of the audio-visual aids section, staff and equipment were housed as a single unit. The most obvious result was an increase in efficiency of operation. Although the areas occupied are not adequate to meet all activities of the section, the situation is much better than past arrangements where staff and equipment were not only in separated rooms, but occupied rooms in two buildings.

Another significant event was the completion of a survey which reviewed the extent of services provided by the section during the years 1970, 1971 and 1972, and attempted to predict the needs for 1973. Unfortunately insufficient information was available to enable a useful estimate of 1973 usage to be made, but the review of past services was most interesting.

The survey viewed the activities under six broad headings: television, film, sound, maintenance, installation and special services. No trends in particular activities were apparent because of the constantly changing demands made on the section by a department or group of departments in a faculty; however, all services of the section have had considerable use. Suffice it to say that in the three-year period 1970-72 the service activity doubled. All faculties used some aspects of the services available, and thirty-two departments were served, as well as the Alexander Theatre, the Higher Education Research Unit, the main library, Robert Blackwood Hall, the Union, the North-East Halls, and others.

The end of 1972 also saw the completion of the cable distribution system planned and budgeted for within the triennium. Connections were completed to the faculties of Education, Engineering, Law, and the main library. The next triennium includes plans for connections to the Robert Blackwood Hall via the University offices.

Close liaison continued with the teaching hospitals where the section was involved in the preparation of equipment specifications, equipment assessment, special colour microphotography, and general activities related to television and videotape.

The continued lack of a graphic artist to suit the special needs of film and television reduced the effectiveness of the finished product.

Outside earnings continued to provide a significant proportion of the funds available to the section. Funds from this source financed the replacement of obsolete equipment, supported experiments with colour television by the provision of appropriate equipment, and during 1972 allowed for the part-time appointment of a film director. This appointment will not be continued as the level of outside earnings in 1973-74 is in considerable doubt.

### *Bookshop*

The bookshop has had a very good year with increases in turnover, merchandising range and profitability. Sales for 1972 exceeded \$750,000. A further \$20,000 of the advance made available by the University has been repaid.

The bookshop is endeavouring to improve its special order service of overseas-published books, and these are now offered at the overseas price plus postage. A 10 per cent discount is now given to all customers on all books at \$2.00 and over, and on records.



The bookshop has continued to supply MUMUS Co-operative Ltd with titles otherwise unobtainable, thus ensuring that Monash medical students at teaching hospitals are able to purchase textbooks with a minimum of inconvenience.

### *Careers and Appointments*

In the report for 1971, attention was drawn to the likelihood that graduates would find greater competition for the jobs that have come to be regarded as suitable for them, and the careers and appointments office recognized its special responsibility in encouraging attitudes amongst students that are realistic in terms of the changing employment pattern for graduates. Experience during 1972 has confirmed the importance of this work, and underlined the need for much more career counselling in the secondary and earlier tertiary years of each student's education.

Students who finished their courses at the end of 1971 faced the most difficult graduate employment situation for at least a decade, and probably the worst since the war. At the end of June, the careers and appointments office knew of nearly fifty graduates from that year who had not found satisfactory permanent jobs. Although the largest group was female arts graduates, there were graduates of all faculties amongst the unemployed. Another indicator of the difficult employment situation was a drop in the number of employers accepting invitations to interview on campus as part of the employer information programme. The absentees included some large companies who have normally been substantial recruiters of graduates.

During the year a research project was launched to provide information on the patterns of career development of graduates in science and engineering and on the factors that influence them. Pilot studies have been made of all who have graduated in physics and in mathematics and the results have indicated the need for much more detailed work. This is proceeding.

Another project is a study, as yet incomplete, of the career guidance facilities in Victorian schools. An interim report reveals a quite frightening paucity of effort in this area.

Information was again collected on the first occupations of Monash graduates. However, the form of the information was changed a little so that it could be used by the Graduate Careers Council of Australia in a study of the destinations of all graduating students from Australian universities.

The publication of *Careers Weekly* has continued and its circulation has been extended. As well as lists of jobs known to the office, it includes articles on various matters related to career planning and the practicalities of finding a job, and items of news and comment about career matters of interest to students, particularly those in their final

year. It has proved very useful in various aspects of careers counselling, and is now well established with a circulation of about 800, including students, graduates, schools and employers.

The death of Mr John Peacock in May 1972 was an event which shocked and saddened everyone who had worked with him. His contribution to the work of the office, though short in duration, was of a high standard. Later in the year, Mr Barry Walsh rejoined the staff; his experience has been of great value in coping with the employment difficulties mentioned above, and has added strength to the research activities.

### *Computer Centre*

The computer centre completed another successful year of operations. The second B-5500 machine which had been installed in 1971 for the Hospitals and Charities Commission was utilized for the first full year. This resulted in a rise in computing carried out from 15,700 hours in 1971, to 18,865 hours in 1972. Of this the University used 13,667 hours to process approximately 382,000 jobs, compared to 285,000 in 1971. The hospitals computing service used 2,999 hours to process approximately 80,000 jobs and the remainder was used for maintenance. A number of research calculations requiring more substantial computing power than that available on the campus were sent to the CYBER 72 computer at Melbourne University where the equivalent of approximately 1,200 CDC 3200 hours of computer time were used.

The large rise in the number of jobs processed for the University alone was brought about mainly by the increase in computer time available and partly by wider utilization of the MIDITRAN system for undergraduate introductory course work. This saw a rise from 100,000 to 125,000 jobs processed.

Expenditure for the year, excluding the hospitals computing service, amounted to \$659,482 of which \$377,378 came from the University recurrent funds and \$282,104 from revenue earning activities. Revenue earning work accounted for 10 per cent of the 13,667 hours of computer time used by the University.

In spite of the increase in the computer time available there was no increase in the level of service provided. For much of the year it was usual for people requiring less than ten minutes of computer time to wait up to two days for work to be returned, while for longer jobs up to a week was common. Nevertheless, for critical work for the University administration and library an adequate service was maintained, generally on an overnight processing basis. Had it not been for ARGC and outside earnings funds totalling \$31,400, used during the year to purchase computer time from Melbourne University, a critical situation would have been reached in the level of service available.

An arrangement was negotiated with Burroughs Australia for the installation of a B-6700 computer in the centre and this should enable some improvement in the services offered in 1973. The University will have up to four hours computer time per day in return for housing the computer and the right to buy more time as it is required. This will more than compensate for the reduction in the amount of B-5500 time available to the University as a result of the growth in the hospitals computing service workload for its own B-5500.

### *Health Service*

Several significant events occurred during the year. Council appointed a standing committee on student services to consider all aspects of the various student services at Monash University. Their report and recommendations are awaited with interest.

A gynaecological service was initiated in March with funds provided by the Union Board and proved very popular. The two half-day sessions were fully booked throughout the year.

To assist with the increased work load two women doctors were appointed in July 1972. Their contribution to the effective functioning of the health service was considerable. The availability of gynaecological advice and the part-time presence of two women doctors probably explains why visits by female students for the first time exceeded the number of visits by male students, although fewer women attend the University.

For the first time since statistics have been kept there was a fall in the number of patients attending for psychological and emotional conditions. One can only speculate as to possible reasons.

Relevant statistics for 1972 are as follows. The figures for 1971 are shown in brackets.

1,509 (1,479) staff members, i.e. 62 per cent, visited the health service on 4,037 (4,083) occasions.

4,963 (4,395) students, i.e. 43 per cent, visited the service on 18,296 (15,272) occasions.

428 (389) visitors and others attended the health service on 887 (768) occasions.

In total 6,900 (6,263) persons visited the service on 23,220 (20,123) occasions.

It is the opinion of the health service staff that the 1972 work load was very close to the limits of effective functioning with the facilities presently available.

### *Religious Centre*

The establishment of chaplains for 1972 included the Reverend P. Knowles, O.P., the Reverend Dr J. W. Whitehead, and Mr Henry

Shaw. Assistance was rendered by the Reverend Adrian Scott, Vicar of the Mulgrave parish, who conducted services of Holy Communion at regular intervals during the year.

There was an expansion in the use of the religious centre and available rooms were used fully between the hours of 1 and 2 p.m. each week-day. This increase in the number of study groups, discussion groups, prayer meetings and interdenominational activities has justified the expense incurred in preparing the store-room for use by students. Groups with permanent booking include the Christian Science Organization, Monash Jewish Students' Society, Evangelical Union, Student Christian Movement, Newman Society, Lutheran Society, Staff Christian Group, the Islamic Students' Society, and the Yoga Club.

1972 saw the establishment of the Monash Chapel Singers. This group gave three concerts (one lunchtime, one for Open Day and one at Christmas) and participated in two services.

Mass was celebrated each day of term (excepting Saturdays) and there were regular services of Holy Communion; the Sunday morning interdenominational service was well attended by members of the colleges and halls.

On a few occasions prominent speakers known to be visiting Melbourne were invited to address lunchtime meetings. A feature of the weekday bookings was the allocation of the narthex to a different society between 1 and 2 p.m. for the purpose of "open" meetings. The narthex was also used by the clubs and societies for a poetry workshop in connection with the summer school.

The limitation of weddings to Monash personnel, past and present, has been retained. The lack of an organ in the religious centre has placed a burden on the staff responsible for the smooth conduct of weddings, and the need to rely on substitute forms of music is an area of constant concern. The use of students as ushers is an outstanding success and the chaplains are grateful for their common sense and courtesy in dealing with crises, and with the hundreds of guests visiting the University for weddings. Whenever possible, visiting ministers celebrate weddings, and here again the chaplains rely heavily on the ushers in welcoming them and in preparing the building for their use. The number of weddings conducted in 1972 was 246, bringing the total to 825 since the dedication of the building.

The chaplains are occasionally asked to allow christenings of children whose parents were married in the centre. Although no firm policy has been laid down, a time on Sunday afternoons has been allocated for this purpose.

The chaplains appreciate the preparation of leaflet No. 7 on the religious centre by the information service, and anticipate a wide distribution of this publication.

*Robert Blackwood Hall*

In 1972, its first full year of operation, Robert Blackwood Hall was used on 156 occasions, the majority of the activities being those sponsored by the management committee and by bodies within the University, and official University functions.

The increasing popularity of the hall as a venue for activities organized by bodies outside the University is gratifying, 13 organizations having used the hall in 1972. Income-earning activities of this nature are expected to develop rapidly when the hall can be fully promoted.

Some highlights of the campus bookings were: 21 lunch-hour concerts, 13 lectures or forums, 3 separate periods of examinations (totalling 42 days), 6 graduation ceremonies, and 26 activities sponsored by various clubs and societies and the Monash Association of Students, the most notable of these including appearances by David Frost and Ralph Nader.

Negotiations were concluded with the Australian Broadcasting Commission and with the Elizabethan Theatre Trust which resulted in the state finals of the Instrumental and Vocal Competition and two symphony concerts by the Trust's Melbourne orchestra being presented. This was the first time that the Trust's Melbourne orchestra had appeared on stage.

A grant from the Australian Council for the Arts enabled the committee to arrange five free Sunday afternoon concerts which attracted appreciative audiences. The Council's assistance will be sought again in 1973 for a further Sunday afternoon concert series.

Among the activities organized by outside bodies, the increase in school concerts and speech nights was noticeable and the Board of Works conference, the Keyboard Society piano recital and the St Martin in the Fields concert by Musica Viva Australia were notable. The foyers have proved to be ideal display areas, a book fair, an embroidery exhibition, and a four-day exhibition of art of the Western Pacific having been held in 1972.

The variety of uses to which the hall lends itself is apparent. However, it was obvious from activities in 1971 that the hall would not fully realize its potential until many of its facilities had been improved. During 1972, the flood lighting of the stage was built-up to an acceptable standard; plans are under way for the addition of a manager's office and booking office complex, and the installation of an inter-communication and paging system (the cost of which will be met by donations from the Collier Charitable Trust), a stage lift, a screen and projection equipment, and additional lighting, during 1973. It is also hoped that the present sound system, which is barely adequate, will be replaced by a new system.

Despite the appointment of a secretary to the manager in 1972,

operational difficulties continue to present a problem and the management committee is seeking to overcome this with the appointment of a permanent attendant. Such an appointment would greatly relieve demands on the manager and on central services staff.

Thanks to the efforts of the manager, Mr Don Vincent, the Director, Dr Ian Hiscock, and the concert manager, Miss Adrienne Holzer, Robert Blackwood Hall has made a substantial contribution to the development of the University's cultural programme, having provided various activities of interest to members of the University and to the community at large. This is borne out by the fact that some 40,000 people attended a variety of activities during the year. Improvements in facilities will result in an even more substantial contribution in future years.

### *Student Counselling*

1,170 clients visited the service in 1972, a decline of 11 per cent over the previous year. This decline, the first recorded since the establishment of the service in 1964, was more a reflection of staffing shortage (Mr G. Cally, the head of the unit, being overseas on study leave) than of a decline in demand for counselling services. Sadly we had to curtail some of our normal activities outside the centre, namely the engineering and chemistry conferences. The pattern of problems presented was similar to that reported in 1971, i.e. with the bulk of work remaining in the identity-development area. In September, Mr G. Cally returned from study leave full of enthusiasm and new ideas. The counselling staff hope that 1973 will see some significant changes in the unit's operations, and would very much like to increase their involvement outside the unit, an extension which might be dependent on increased staffing.

Mr Peter Lawrence, who was acting head during Mr Cally's absence, resigned after 4½ years of devoted service, following his appointment as head counsellor at the Canberra Institute of Advanced Education. Mr Lawrence made a significant and valuable contribution to the unit.

### *Student Residence*

There is an acute shortage of any type of private home accommodation in the University area and the demand for nearby places is rising: students are reluctant to accept any accommodation which is not within walking distance, or on only one mode of direct transport to the campus.

While the commercial development of flats in Clayton is partially satisfying the demand by groups of students, there is still a complete lack of small reasonably priced flats for graduate and undergraduate student couples or for senior students who prefer to live alone.

At the beginning of 1972, with Roberts Hall operating at full capacity, 688 student rooms were available. One wing of Richardson Hall, the last hall built, opened with six residents on 31 August, and the number increased to forty by the end of the second semester. The occupancy rate remained high during the year despite a turnover of places especially during the examination periods. The number of student rooms available in the five halls of residence for 1973 will be 865.

Dr J. A. McDonell, first warden of Deakin, and executive warden, North-East Halls, resigned at the end of 1972, having made a most valuable contribution to developing the facilities and life-styles of the halls of residence.

Following discussion by the halls of residence committee the overall administration of the halls was placed in the hands of the committee of wardens, with each hall preserving its own individuality as far as possible.

Mannix College felt the effect of the opening of Roberts Hall and had to carry about forty empty rooms. However, a large number of applications was received for the final months of the academic year. Twenty tutors provided tutorial classes and consultation for all the main courses. The library continued to expand and hours of use were extended. Social activities arranged throughout the year by the Mannix College Students' Society were highly successful.

Marist College, constructed in 1969, was opened to male students at the beginning of 1970. Each subsequent year has seen an increase in enrolment which now approaches capacity.

## 7. STUDENT ENROLMENT

The net total undergraduate population increased from 8,627 in the previous year to 9,089, an increase of 462 or 5.4 per cent. Graduate enrolments increased from 1,100 to 1,158 and total enrolment of all students from 11,034 to 11,638. Full details of enrolments are given in the table.

Of these 11,638 students, 743 (6 per cent of the total) were from overseas, as follows: Borneo 7; Burma 6; Cambodia 3; Canada 5; Ceylon 1; Czechoslovakia 2; Egypt 1; Ethiopia 1; Fiji 8; Great Britain 19; Hong Kong 48; India 19; Indonesia 18; Iran 2; Japan 9; Kenya 2; Kymer Rep. 2; Laos 2; Lebanon 3; Malawi 2; Malaysia 461; Malta 1; Mauritius 1; Nauru 1; Nepal 1; New Guinea 9; New Zealand 6; Oman 1; Pakistan 5; Philippines 1; Rhodesia 1; Singapore 48; South Africa 1; Switzerland 2; Taiwan 2; Thailand 12; Tonga 3; Turkey 1; Uganda 1; U.S.A. 7; Vietnam 17; Yugoslavia 1.

## GROSS ENROLMENTS 1972 (as at 30 April)

Faculty and Year	Full-time			Part-time			Total		
	M	F	T	M	F	T	M	F	T
<b>HIGHER DEGREE</b>									
Higher Doctorate	1	—	1	—	—	—	1	—	1
Ph.D.	276	45	321	71	12	83	347	57	404
Master	205	64	269	398	86	484	603	150	753
Total	482	109	591	469	98	567	951	207	1158
<b>MASTER PRELIMINARY</b>									
	17	14	31	68	31	99	85	45	130
<b>BACHELOR DEGREE</b>									
<b>Arts</b>									
I	205	496	701	164	197	361	369	693	1062
II	186	416	602	112	131	243	298	547	845
III	234	433	667	102	112	214	336	545	881
IV	52	59	111	1	—	1	53	59	112
Total	677	1404	2081	379	440	819	1056	1844	2900
<b>Eco. &amp; Pol. I</b>									
I	233	121	354	77	10	87	310	131	441
II	271	103	374	82	10	92	353	113	466
III	262	74	336	124	15	139	386	89	475
IV	34	9	43	9	—	9	43	9	52
Total	800	307	1107	292	35	327	1092	342	1434
<b>Education</b>									
	8	9	17	334	112	446	342	121	463
<b>Engineering I</b>									
I	341	8	349	—	—	—	341	8	349
II	314	6	320	—	—	—	314	6	320
III	253	3	256	—	—	—	253	3	256
IV	137	3	140	—	—	—	137	3	140
Total	1045	20	1065	—	—	—	1045	20	1065
<b>Law</b>									
I	106	34	140	11	3	14	117	37	154
II	67	23	90	17	6	23	84	29	113
III	52	7	59	11	1	12	63	8	71
IV	23	5	28	2	2	4	25	7	32
V	255	44	299	28	1	29	283	45	328
Total	503	113	616	69	13	82	572	126	698
<b>Law/Arts</b>									
I	31	21	52	1	1	2	32	22	54
II	21	6	27	2	1	3	23	7	30
III	9	6	15	—	—	—	9	6	15
IV	3	—	3	—	1	1	3	1	4
V	10	2	12	—	—	—	10	2	12
Total	74	35	109	3	3	6	77	38	115
<b>Law/Eco. and Pol.</b>									
I	100	2	102	4	—	4	104	2	106
II	67	6	73	1	—	1	68	6	74
III	38	1	39	—	—	—	38	1	39
IV	6	1	7	1	—	1	7	1	8
V	16	—	16	—	—	—	16	—	16
Total	227	10	237	6	—	6	233	10	243



## GROSS ENROLMENTS 1972 (as at 30 April)

Faculty and Year	Full-time			Part-time			Total		
	M	F	T	M	F	T	M	F	T
Law/Science I	8	2	10	—	—	—	8	2	10
II	2	—	2	—	—	—	2	—	2
III	1	—	1	—	—	—	1	—	1
IV	—	—	—	—	—	—	—	—	—
V	—	—	—	—	—	—	—	—	—
Total	11	2	13	—	—	—	11	2	13
Medicine I	128	37	165	—	—	—	128	37	165
II	117	46	163	—	—	—	117	46	163
III	133	35	168	—	—	—	133	35	168
IV	117	31	148	—	—	—	117	31	148
V	111	24	135	—	—	—	111	24	135
VI	113	22	135	—	—	—	113	22	135
B.Med.Sci.	12	5	17	—	—	—	12	5	17
Total	731	200	931	—	—	—	731	200	931
Science I	356	216	572	12	6	18	368	222	590
II	309	166	475	38	13	51	347	179	526
III	280	141	421	40	15	55	320	156	476
IV	84	30	114	1	—	1	85	30	115
Total	1029	553	1582	91	34	125	1120	587	1707
<b>TOTAL</b>	<b>5105</b>	<b>2653</b>	<b>7758</b>	<b>1174</b>	<b>637</b>	<b>1811</b>	<b>6279</b>	<b>3290</b>	<b>9569</b>
DIPLOMA—Education	203	274	477	84	95	179	287	369	656
NOT FOR DEGREE	10	8	18	93	51	144	103	59	162
GROSS TOTAL ENROLMENT	5817	3058	8875	1888	912	2800	7705	3970	11675
Less adjustment for students enrolled for more than one course	17	2	19	8	10	18	25	12	37
NET TOTAL ENROLMENT	5800	3056	8856	1880	902	2782	7680	3958	11638

## 8. STUDENT ACTIVITIES

*The Union—Administration and General*

The level of activity in the Union in 1972 indicates that it is fulfilling its function as a meeting place and centre for non-academic pursuits within the University. Over the last several years patronage of Union services and facilities has increased at a rate which greatly exceeds the rate of expansion of the campus population.

During the year the catering service was extended by the addition

of a hamburger bar, and a photographic darkroom was added to the general facilities. The recreation camp at Shoreham completed its first successful year of operation. A book exchange operated early in the year and intermittent activities included Sabin oral vaccine, the Red Cross blood bank, a weekly bazaar and a number of exhibitions. Towards the end of the year, a land-line radio station was introduced as a pilot project.

With increasing demand, a shortage of space for meeting rooms, rehearsal and workshop areas and for commercial and other services became evident. An area in the western foyer of the ground floor is to be enclosed to relieve the immediate pressures and approval has been obtained for a small extension of the Union building along the southern face.

The Union Board's recommendations for amendments to the Union constitution were approved in part by Council. Under the new regulations, the general staff association is represented on the Union Board in place of the Professorial Board, a number of changes are effected in the composition of Union committees and provision is made for the Union Board to conduct referenda on matters concerning the Union and, under certain conditions, to be bound by the results of such referenda.

Many other matters discussed by the Union Board reflected current student interest in issues such as the environment, health and nutrition, and the social and economic welfare of students, including opportunities for students to obtain part-time and casual employment. The Board instigated and supported during the year a gynaecological service, publication of a booklet entitled *Living with Sex*, the installation of a toilet for handicapped persons, an anti-litter campaign, talks on environmental topics, a review of the financial and nutritional aspects of catering, and the serving of vegetarian foods. In the student welfare field, a referral and assistance service, known as Contact, commenced operation in July on an experimental basis. The Board has since agreed to support, for a trial period of one year, the establishment of a student welfare action board and the appointment of a student welfare officer.

#### *Monash Association of Students*

In 1972 the MAS Vietnam moratorium campaign organizers kept up the struggle for world peace. Other campus campaigns included one involving protest against the semester system and another directed against the course-content and entrance regulations of the Diploma in Education.

The 1972 elections brought a female majority to the administrative executive for the first time in MAS history.

One of the most impressive forums held during the year was the

environmental teach-in organized by the Environmental Research and Information Centre and other interested parties.

The Australian Union of Students sponsored a Friendly Society health and medical benefit scheme which was well patronized by students. Participation in the society and in AUS travel activities was greater at Monash than at any other campus in Australia.

The student newspaper, *Lot's Wife*, produced twenty-two issues during the year. Topics of major interest were the semester system, the environment, racial discrimination, student rights and women's liberation.

The activities committee was the largest single user of Robert Blackwood Hall for 1972, and Abschol and the educational affairs committee made significant contributions to their fields of interest.

### *Clubs and Societies*

Club activity increased significantly in 1972, despite the introduction of the semester system. More than 100 non-sporting clubs and societies sponsored a heavy programme of activities, including forums, performances, social events, conferences, and field trips.

The clubs and societies executive undertook several new activities, including luncheons to promote inter-club liaison, and a successful "experimental week-end" at Camp Buxton, Shoreham.

The programme of extra-curricular tuition in the Union is now a well established aspect of Union activities. Besides courses sponsored by clubs, including Italian, Hebrew, modern dance, ballroom dancing, folk music, photography and Yoga, an extended range of art, craft and practical subjects was offered. Hundreds of students and staff enrolled for pottery, life drawing, sumi-e, macrame, first aid, typing, and many other subjects. Provision was also made for private instruction from leading music teachers. Only a shortage of space and facilities prevents extensive expansion in this field at present.

A record number of 1,506 people attended the sixty-five courses offered in the 1972-73 Monash summer school. Members of the public comprised over 65 per cent of participants, with Monash students making up 29 per cent and staff 6 per cent of total enrolments.

An appointment to a new Union position, director of student theatre, was made in December. The director will assist and advise established student groups in their activities, conduct regular drama workshops, direct productions, initiate new theatre projects, and generally stimulate interest in theatre amongst students.

### *Sports and Recreation Association*

Monash teams were again successful in intervarsity sport, competing in forty contests, being placed twenty-six times in the top three, and

with wins in the following sports: badminton (men), basketball (men), basketball (women), golf, rowing (eights), skiing (alpine), softball (women), squash (men), table tennis (men), table tennis (women), water skiing (men) and water skiing (women).

In regular club competitions Monash teams in "A" grade, namely football, rugby, squash, rowing and table tennis, did very well.

Five members of the Australian Olympic team had studied at Monash. They were Will Baillieu (rowing), Mal Baird (athletics), John Bertrand (yachting), John Nicholson (cycling), and Ian Watson (basketball).

The facilities were again heavily used, in particular the squash courts. Three new squash courts are being built and should be ready for use in April 1973. The multi-purpose recreation hall is still in the planning stage but it is expected that building will commence in mid-1973.

### *Monash Research Students' Association*

The research students' association started a film society, and several screenings were held during 1972. The thesis-typing service, now in its second year, is progressing well. An orientation programme was organized, featuring a forum on research at Monash, a film, and a barbecue. It is intended that the orientation will be held each February. The graduate students' magazine, *The Researcher*, is published quarterly and a news bulletin is also published.

## 9. FINANCE

### 1. THE 1970-72 TRIENNium

#### 1.1. Funds Available

##### 1.1.1 Recurrent Funds

Funds for expenditure on recurrent purposes during the year ended 31 December 1972 were available from the following sources:

	Total \$000	University \$000	Teaching Halls of Hospitals Residence \$000	\$000
State government grant	9,986	9,898	88	
Academic fees	3,650	3,650		
Commonwealth government grant	7,412	7,323	47	42
	<u>21,048</u>	<u>20,871</u>	<u>135</u>	<u>42</u>

The legislative sanction for the Commonwealth contribution is contained in the *States Grants (Universities) Act 1969-1972*.

### 1.1.2 Capital Funds

Government funds available for expenditure on capital projects during the 1970-72 triennium are as follows:

	\$000
Buildings, Equipment and Furniture:	
On University site, other than halls of residence	9,861
Halls of residence	1,910
Affiliated colleges	83
Teaching hospitals	216
Capital equipment	160
	12,230
	12,230

The legislative sanction for the Commonwealth portion of each of these amounts (i.e. one-half) is contained in the *States Grants (Universities) Act 1969* as amended by the *States Grants (Universities) Act 1970*.

### 1.1.3 Research Funds

A special grant of \$930,000 was allocated for the 1970-72 triennium for research and research training, this amount having been provided by the State and Commonwealth governments in equal proportions.

### 1.1.4 Students' Fees

A summary of the table of fees payable by students enrolled for the year 1972 is set out hereunder.

#### (a) Academic Fees

Undergraduate courses:	full-time \$480 per annum
Graduate courses:	
Master—	full-time \$168 per annum part-time \$84 per annum for first two years and \$20 per annum thereafter
Doctor of Philosophy—	full-time \$114 per annum
Higher Doctorate—	\$210

#### (b) Union Fees

Students studying on campus:	full-time \$58.50 per annum part-time varying amounts less than \$58.50 per annum
Students studying off campus:	full-time \$15 per annum part-time \$10 per annum

## 2. THE 1973-75 TRIENNIUM

## 2.1 Funds Available

The following amounts are specified in the schedules to the *States Grants (Universities) Act (No. 2) 1972* as being available for the 1973-75 triennium for the purposes indicated hereunder.

## 2.1.1 Recurrent

Year	University \$000	Teaching Hospitals \$000
1973	22,600	163
1974	24,020	164
1975	25,370	165

2.1.2 Building \$000

## Buildings and Furniture:

On University site, other than halls of residence	6,830
Non-collegiate accommodation	250
Teaching hospitals	105
	<u>7,185</u>

2.1.3 Research \$000

Special research grants	<u>680</u>
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2.1.4 Equipment \$000

Grants for approved items of equipment	<u>2,780</u>
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## 3. ACCOUNTS

The audited accounts of the University for the year 1972 are appended to this Report.

## 10. GIFTS AND GRANTS

The following gifts and grants were received by the University:

Agnew, Dr J. B., for department of Chemical Engineering	\$50.00
Albright and Wilson (Australia) Ltd: part of a two-year scholarship to encourage research into the effects of phosphates on biological systems in inland water	\$900.00

American Council of Learned Societies: first payment of a grant for American Studies library purchases	\$6,249.48
Angliss, William (Victoria) Charitable Fund as follows:	\$2,800.00
For the Elwyn Morey Memorial Fund	\$300
To the Orthopaedic and Traumatic Surgery section of department of Surgery	\$2,500
Anti-Cancer Council of Victoria, to support research projects conducted by the following in 1972, including 5 per cent (\$1,648.45) for administration, \$964.00 in supplementary grants, \$274.40 in salary adjustments and increases, and \$420.00 as a travel grant to an international cancer congress for Professor R. C. Nairn (Pathology)	\$36,275.85
Dr M. Van der Weyden and Professor B. G. Firkin (Medicine)	\$2,938
Dr H. Burger and colleagues (Medicine)	\$10,267
Dr M. N. Cauchi and Dr A. E. G. Tannenber (Pathology)	\$4,433
Professor R. C. Nairn and colleagues (Pathology)	\$13,331
Professor J. McK. Watts and Mr P. S. Hunt (Surgery)	\$2,000
Anonymous donors	\$1,035.72
Apex Foundation for Research into Mental Retardation: research grant to Mr M. S. Jackson (Education)	\$1,045.00
Asthma Foundation of Victoria, in support of research project by Professor H. K. Muller called "Immunological and Biochemical Mediation of the Inflammatory Response and Asthma"	\$4,700.00
Australian Advisory Committee on Research and Development in Education to aid work of faculty of Education	\$8,818.00
Australian-Asian Universities Co-operation Scheme to department of Genetics for Dr V. Krishnapillai's visit to University of Malaya	\$250.00
Australian Chicken Meat Research Committee for research on the development of the chicken cartilage (Biochemistry)	\$11,970.00
Australian Commission on Advanced Education, second contribution to research project by Professors S. S. Dunn and P. J. Fensham, entitled "Academic Success in Tertiary Institutions of Students"	\$3,250.00
Australian Institute of Aboriginal Studies, for research being conducted by departments of Music, Linguistics, and Anthropology and Sociology	\$12,131.00
Australian Institute of Nuclear Science in Physics and Engineering, to finance research fellowship	\$6,809.27

Australian Institute of Steel Construction, for undergraduate prizes (Civil Engineering)	\$100.00
Australian Pre-School Association, to support pre-school research by Dr Phyllis Scott (Education)	\$4,162.93
Australian Research Grants Committee. On the recommendation of the committee, the Commonwealth government approved grants for 1973 totalling \$560,487.00 as listed at the conclusion of this Report	\$560,487.00
Australian Resources Development Bank Ltd, towards travelling expenses of Dr T. A. McMahon (Civil Engineering)	\$500.00
Australian Road Research Board, in support of research by Professor N. W. Murray on steel box girders (Civil Engineering)	\$4,275.00
Australian Society of Anaesthetics: award of Jackson Rees Research Grant to Dr T. F. Lambert (Paediatrics)	\$1,000.00
Australian Welding Research Association, for continuing support of research projects (Materials Engineering)	\$7,339.00
Baxter, Percy, Charitable Trust, for purchase of equipment (Surgery)	\$1,800.00
Bayer Pharmaceutical Company: first instalment of grant of \$25,000 for research on drug Trasylol (Orthopaedic and Traumatic Surgery)	\$1,000.00
Beecham (Australia) Pty Ltd, to assist with expenses of Professor B. W. Holloway's visit to Bristol (Genetics)	\$250.00
Bosch, Robert (Australia) Pty Ltd, towards work of department of Chemistry	\$50.00
Broken Hill Proprietary Company Ltd., for BHP Post-graduate Scholarship	\$3,300.00
Brown, Dr W. A., to interstate travel funds of department of Electrical Engineering	\$12.50
Buckland, William Foundation, as follows:	\$29,852.00
Films and cassettes (Mathematics)	\$3,200
Equipment (Orthopaedic and Traumatic Surgery section)	\$3,164
Television equipment (Psychological Medicine)	\$9,788
Gel scanner (Genetics)	\$3,800
Olivetti programmer (Medicine)	\$2,500
Braille terminal (computer centre)	\$7,400
Burroughs Wellcome and Co. (Australia) Ltd: assistance in defraying travel expenses of Dr C. L. Clancy (Medicine)	\$200.00
Carlton and United Breweries Ltd, to support research project on yeast genetics (Biochemistry)	\$4,000.00
Carnation Company Ltd, for 1971 Carnation Award in Neonatal Paediatrics	\$50.00



Casa d'Italia, to finance 1972 scholarships	\$600.00
Ciba-Geigy Australia Ltd, to cover costs involved in clinical trials (Obstetrics and Gynaecology)	\$250.00
Clark, Dr P., to department of Social and Preventive Medicine	\$100.00
Colgate-Palmolive Pty Ltd: part of two-year scholarship to encourage research into the effects of phosphates on biological systems in inland water (Zoology)	\$900.00
Collier Charitable Trust, towards intercommunication system for Robert Blackwood Hall	\$4,500.00
Comalco Aluminium (Bell Bay) Ltd, to fund a post-graduate research scholarship (Materials Engineering)	\$3,000.00
Commonwealth Immigration Department: research project on migrant health (Social and Preventive Medicine)	\$8,570.50
Cinzinc Riotino of Australia Ltd, three scholarships (Engineering)	\$2,300.00
Coulter, Dr P. R., donation to department of Chemical Engineering	\$25.00
C.S.R. Chemicals Ltd, annual prize to honours candidate (Chemistry)	\$100.00
Danks, Annie Trust, towards work on study of women medical graduates (Anthropology and Sociology)	\$500.00
Danks Trust, for closed-circuit television equipment (Psychological Medicine)	\$250.00
Department of Aboriginal Affairs, for continuation of research project into Aboriginal health (Social and Preventive Medicine)	\$3,300.00
Difrex (Australia) Laboratories Pty Ltd: purchase of equipment (Surgery)	\$300.00
Electrical Research Board, as follows:	\$9,500.00
Research project entitled "Power Losses in Heat Resistant Thermoplastic Insulants", one half of grant (Materials Engineering). (Funds supplied by Wilson Electric Transformer Co. Pty Ltd)	\$1,750
Research project on asynchronous high voltage direct current transmission links (Electrical Engineering)	\$750
Research project on control and optimization of power systems (Electrical Engineering)	\$7,000
Esso Australia Ltd, to assist the advancement of engineering research and studies (Engineering)	\$2,000.00
Fawns and McAllan Pty Ltd, to department of Surgery	\$1,200.00
Forelanders Trust, to facilitate student travel to Japan (Japanese)	\$500.00
Gould, M. K. and M., to Elwyn Morey Child Study Centre	\$5.00

Hannan, Mrs Lorna, to assist work of Associate Professor J. C. McNeur (Surgery)	\$5,000.00
Hetzel, Dr B. S., towards establishment of the Fawkner Park Community Health Centre, Social and Preventive Medicine)	\$5,000.00
Hicks, George Foundation, as follows:	\$11,000.00
Applied Chemicals scholarships for 1972	\$10,500
Towards Professor O. E. Potter's trip to Japan (Chemical Engineering)	\$500
Hoechst Australia Ltd, to support clinical trials with Streptokinase (Medicine)	\$3,556.00
Hospitals and Charities Commission. Part of grant of \$80,000 for investigation on economic health research by Dr J. S. Deeble (Economics)	\$20,000.00
Hunter Valley Research Foundation, towards travelling expenses of Dr T. A. McMahon to attend conference at Colorado State University (Civil Engineering)	\$250.00
I.C.I. Australia Ltd: research grant to Mr P. J. A. Ritchie being scholarship to carry out postgraduate work in department of Materials Engineering on the adhesion of polyethylene to glass	\$3,250.00
Ingram, M. A. Trust, towards behavioural laboratories in the Jock Marshall Zoological Reserve (Zoology)	\$2,000.00
Institute of Chartered Secretaries and Administrators, towards cost of annual Monash Economics Lecture	\$400.00
Institution of Chemical Engineers, donation to department of Chemical Engineering	\$232.00
Jennett, Miss C., towards cost of seminar on Aboriginal affairs	\$1.00
Jennings, A. V. Industries (Australia) Ltd, donation to library	\$1,000.00
Land Conservation Council, for mammal survey of the shire of Rosedale (Zoology)	\$930.00
Lee, Mr and Mrs A. K., to Elwyn Morey Child Study Centre	\$10.00
Leverhulme Trust Fund, travel grant to Dr T. P. O'Brien (Botany)	\$1,719.48
Life Insurance Medical Research Fund of Australia and New Zealand, grants-in-aid to Professor B. G. Firkin and Dr B. C. Blair (Medicine)	\$8,383.00
Marubeni-Iida Pty Ltd, towards provision of scholarship experience in Japan for honours students (Japanese)	\$150.00
MacIndoe, Mr C. G., purchase of a painting	\$200.00
Mead Johnson Pty Ltd, provision of annual Mead Johnson Award in Paediatrics	\$52.50

M.D. Research Company Ltd, in support of their sponsorship of the M.D. Research Post-Doctoral Fellowship (Chemical Engineering)	\$17,622.00
Merck, Sharp and Dohme (Australia) Pty Ltd, as follows:	\$3,500.00
To support research on pituitary polypeptides by Professor J. Bornstein (Biochemistry)	\$3,000
To support work of Dr D. StC. Black and Dr D. J. Collins (Chemistry)	\$500
M.I.M. Holdings Ltd, to careers and appointments office	\$100.00
Ministry of Aboriginal Affairs of Victoria, as follows:	\$16,300.00
Towards continuance of the Van Leer pre-school project (Education)	\$10,000
For continuation of research project by Dr M. D. H. Dobbin (Social and Preventive Medicine)	\$6,300
Monsanto Australia Ltd, to departments of Chemical Engineering, Materials Engineering and Chemistry, \$500 each	\$1,500.00
Monash University Parents' Group, as follows:	\$8,148.00
1972 Bursary	\$3,750
Library	\$2,000
Special Education Fund	\$379
Student Assistance Fund	\$250
Television camera, videotape recorder and accessories	\$1,400
Cassette recorder	\$369
Moore, Mrs V., to enable the University to acquire a harp-sichord (Music)	\$4,000.00
Muscular Dystrophy Associations of America Incorporated: grant of \$US5,000 to Dr L. Austin (Biochemistry)	\$4,166.32
Myer Foundation, as follows:	\$2,254.00
Towards expenses of the research seminar of Aboriginal health services (Centre for Research into Aboriginal Affairs)	\$1,000
Towards cost of purchasing a Gamelan orchestra	\$500
To Mr H. A. Crouch to enable him to carry out research in Indonesia (Politics)	\$754
National Center for Resource Recovery, Inc., to assist Dr K. Kendall with travelling expenses, to enable him to attend a conference in Boston (Materials Engineering)	\$395.80
National Consolidated Ltd, to provide annual prize for third year Materials Engineering student	\$40.00
National Health and Medical Research Councils grants as follows:	\$248,131.00
Professor G. C. Schofield (Anatomy): Salivary and duodenal motility-inducing factors	\$5,500

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Professor G. C. Schofield (Anatomy) and Dr G. C. Smith: Analysis of cell fluorescence	\$10,220
Dr D. M. de Kretser (Anatomy and Medicine, jointly): Ultrastructural and hormonal studies on the human and rat testis	\$4,500
Professor J. Bornstein (Biochemistry): Role of pituitary polypeptides in diabetes mellitus	\$34,880
Dr M. K. Bould (Biochemistry): Sugar transport in isolated skeletal muscle: mechanism of insulin action	\$1,855
Professor D. A. Lowther (Biochemistry) and Dr P. Ghosh (University of Sydney): The role of lysosomal enzymes in connective tissue degradation in arthropathies	\$10,604
Professor B. G. Firkin (Medicine): A study of platelet physiology and a study of mechanisms of anaemia	\$12,520
Dr J. Hansky (Medicine): Radioimmunoassay of secretin and cholecystokinin in blood and other biological fluids	\$5,300
Dr G. N. Brodie (Medicine): A study of the platelet membranes in myeloproliferative diseases and qualitative platelet defects	\$4,500
Dr I. M. Williams (Medicine): The study of micro-circulatory events in the retina and of their significance in damage to the central nervous system during open heart surgery	\$12,713
Dr D. J. B. St John (Medicine): Study of the physiology and pathophysiology of the mucosa of the gastrointestinal tract	\$4,500
Professor S. Faine (Microbiology): Microbiological and immunological studies of pathogenesis and virulence in leptospirosis	\$5,920
Professor S. Faine (Microbiology): Novel rapid microbiological methods	\$5,020
Dr G. F. Cross (Microbiology): Studies on hepatitis—associated antigens	\$5,300
Dr E. G. Westaway (Microbiology): Biochemical and immunochemical studies of arboviruses	\$13,850
Professor E. C. Wood and Mrs M. Potter (Obstetrics and Gynaecology): Identification of long chain fatty acid metabolic pathways in the human placenta	\$1,000
Professor E. C. Wood and Dr A. Lopata (Obstetrics and Gynaecology): The permeability of human ovarian follicles and studies of oocyte chromosomes at various stages of follicular differentiation	\$2,822

Dr T. M. Adamson (Paediatrics): Lung liquid in the foetal lamb, its composition at different gestational ages, its rate of formation, factors affecting its formation	\$7,600	
Professor R. C. Nairn (Pathology): Pathogenic mechanisms in immunological diseases	\$19,965	
Dr D. J. Davies (Pathology): The pathogenesis of the local renal graft-versus-host reaction	\$1,013	
Professor M. E. Holman (Physiology): Biophysics of smooth muscle and its innervation	\$9,820	
Professor A. K. McIntyre (Physiology): Central actions of impulses from somatic receptors	\$14,350	
Professor R. Porter (Physiology): Central nervous mechanisms controlling limb movements	\$6,766	
Associate Professor G. A. Bentley (Physiology): A pharmacological and electrophysiological study of vascular adreno-receptors	\$7,495	
Dr B. G. Cragg (Physiology): Quantitative study by electron microscopy of structural changes in synapses occurring with use and disuse and in other experimental models in mental retardation	\$500	
Dr L. B. Geffen (Physiology): Immunological studies of the origin and fate of adrenergic synaptic vesicles	\$6,000	
Dr J. L. Veale (Physiology): A new method of neurological assessment	\$3,010	
Dr J. N. O'Neil (Physiology): Determinants of tissue sensitivity to sympathomimetic amines	\$3,400	
Professor J. McK. Watts (Surgery): Bile formation in the developing and adult liver	\$22,208	
Mr F. T. McDermott (Surgery): Regulation of cell renewal in the gastrointestinal tract	\$5,000	
National Heart Foundation of Australia, to department of Physiology as follows:		\$20,951.08
Dr L. B. Geffen, grant-in-aid	\$3,950	
Dr B. Jarrott, grant-in-aid	\$4,240	
Dr J. B. Chapman and Dr C. L. Gibbs, grant-in-aid	\$5,240	
Dr J. B. Chapman, fellowship	\$3,184	
Travel grant to Dr J. B. Chapman for attending conference in Sydney	\$45	
1972 medical research scholarships	\$800	
Over-expenditure and salary adjustments	\$3,492.08	
Nestle Company (Australia) Ltd, to sponsor visiting professor to the Peri-natal Physiology Symposium (Paediatrics)		\$3,000.00

Nuffield Foundation, to cover expenses of visits of Professor Buller and Dr P. M. H. Rack from England (Physiology)	\$4,850.00
Nylex Corporation Ltd, to provide prize for third year students (Materials Engineering)	\$40.00
Potter, Ian Foundation, to Mr P. L. Gardner for attendance at UNESCO conference, Bangkok (Education)	\$500.00
Potter, Mrs Mary, to department of Obstetrics and Gynaecology	\$280.00
Potter, Professor O. E., to department of Chemical Engineering	\$60.00
Queen Victoria Memorial Hospital, balance of grant to Professor A. C. L. Clark for research project	\$1,600.00
Powergrip Industries, towards purchase of electric typewriter for special education	\$15.00
Radio Research Board, grants as follows:	\$6,125.00
To Professor K. Morsztyn: Electronic telephone handset. (1971-72 grant and half of 1972-73 grant) (Electrical Engineering)	\$2,250
To Dr B. W. Cherry: Electrical resistance of polymeric insulants. First half of grant (Materials Engineering)	\$1,500
To Dr L. Gruner: Investigation of active and passive networks. First half of grant (Electrical Engineering)	\$825
To Mr G. Cambrell: Electromagnetic field investigation of optical fibres. First half of grant (Electrical Engineering)	\$750
To Dr J. L. A. Francey: Millimeter wave generation in semi-conductors. First half of grant (Physics)	\$800
Ramsay Surgical Ltd, for Obstetrics and Gynaecology prize	\$160.00
Rawlings, Professor B., to Roberts Hall	\$20.00
Reserve Bank of Australia Rural Credits Development Fund, grants as follows:	\$11,113.00
Dr D. F. Gaff (Botany)	\$5,746
Dr T. P. O'Brien: for project investigation into the fine structure of cereals and their pathogens (Botany)	\$5,367
Robinson, Estate of late Gerald Henry, to provide travel grants for study of Japanese in Japan	\$4,000.00
Roche Products Pty Ltd, to sleep laboratory for drug evaluation (Surgery)	\$2,000.00
Rouse, Mr. Edgar, to medical research fund	\$100.00
Schaffer, Abraham I., M.D., to department of Medicine (\$US100)	\$83.33

Sheehy, Mrs E. G., to Roberts Hall	\$20.00
Sigma (Pharmaceuticals) Pty Ltd, being the first of two annual grants to support research by Professor A. W. Linnane: The development of new antibiotics (Biochemistry)	\$18,000.00
Spina Bifida Association of Victoria, to be applied to work by Professor Marie Neale (Education)	\$300.00
State Rivers and Water Supply Commission of Victoria, to continue research scholarship (Civil Engineering)	\$3,268.00
Stock Exchange of Melbourne Ltd, towards the 1972 Monash Economics Lecture	\$400.00
Sunshine Foundation, as follows:	\$2,100.00
To Professor E. C. Wood for research project entitled "Technique of Delivery" (Obstetrics and Gynaecology)	\$1,000
To Dr R. C. Bayly towards travelling expenses (Microbiology)	\$600
To Mr D. C. Muecke, travel grant (Centre for General and Comparative Literature)	\$500
Ten, Mr and Mrs C. L., to Elwyn Morey Child Study Centre	\$20.00
Territory of Papua and New Guinea, for research by Mr Russell Linke on basic skills of graphical interpretation (Education)	\$547.53
The Three R's, for continuation of work by Professor Marie Neale on study of intervention-integration with children exhibiting "at risk" characteristics (Education)	\$3,500.00
Thomas, W. C.. F. Charitable Trust, to special education fund	\$200.00
Tiu, Dr Carlos, to department of Chemical Engineering Unilever (Australia) Pty Ltd, part of two-year scholarship to encourage research into the effects of phosphates on biological systems in inland water (Zoology)	\$25.00
Van Cleef Foundation, continued support of the Van Cleef Foundation Fellowship in Neurophysiology	\$900.00
Van Leer, Bernard, Foundation: additional grant to the Centre for Research into Aboriginal Affairs for study "A Victorian Aboriginal pre-school project"	\$16,041.00
Vangelista, Mrs D and group, donations to special education fund	\$10,000.00
Victorian Law Foundation, as follows:	\$823.85
To Mr J. C. Lahore, balance of grant to assist research on copyright	\$22,635.00
To law library, being second instalment of grant	\$2,635
	\$20,000

Water Research Foundation of Australia, balance of grants for research:	\$7,100.00
"Stochastic generation of hydrologic data (Civil Engineering)	\$1,120
"Primary production in salt lakes research" (Zoology)	\$780
"Storage of low flow analysis of Australian rivers" (Civil Engineering)	\$1,500
"Studies of the anaerobic biological removal of organic compounds from dairy wastes"	\$3,700
Watson Victor Ltd, help with travelling expenses for Mr J. Culross (Medicine)	\$400.00
Western Mining Corporation Ltd, towards provision of an annual travel scholarship to Japan for honours students (Japanese)	\$350.00
White, Estate of the late Joe, to the library	\$1,000.00
Wheat Industry Research Council, to Dr A. Holland for his project "The application of immunifluorescent staining of ophiobolus graminis to studies in the ecology of soil microorganisms" (Botany)	\$1,635.50
Wilson Electric Transformer Company, for annual prize for final year student in electrical engineering	\$140.00
Worley, Dr and Mrs R. T., to Elwyn Morey Child Study Centre	\$20.00

Beecham Research Laboratories: provision of materials to the value of \$700 to assist research.

Consul-General for Federal Republic of Germany: the annual Goethe prizes for German studies; and a valuable gift of reprints of journals from Deutsche Forschungsgemeinschaft and the Alexander von Humboldt Foundation.

Mr Godfrey Hawker: a painting by Kenn Taber.

Dr I. Hogbin and Emeritus Professor Elkin: a collection of wax cylinder records of Aboriginal and South Pacific music.

Mr Max Leason: a self-portrait by his father, Percy Leason.

Philip Morris Ltd: a painting by Tom Wesselman.

Powergrip Industries: gift of a Seromax unit to Mechanical Engineering.

Mrs Norah Roberts and family: a bronze bust of Caleb Roberts by Tom Roberts, casting and pedestal from Mr Joseph Brown (for Roberts Hall).

Rotary Heat Exchangers Pty Ltd: gift of a rotary sensible heat exchanger (Mechanical Engineering).

Mr N. Tate: secondhand operating-theatre equipment and light (Medicine).



In addition to the above gifts and grants there have been many gifts of books, journals and other material, some very valuable, to the library and departmental libraries.

The appeal by the churches and Jewish community for the building of the religious centre reached a total of \$239,479 by 31 December 1972. The library fund appeal reached a total of \$49,603 and the development fund \$11,692 by this date. The balance in the development fund was allocated to the purchase of equipment for Robert Blackwood Hall. The special education fund stands at \$3,060.

The following research grants, recommended by the Australian Research Grants Committee, were approved by the Commonwealth government:

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
HUMANITIES AND SOCIAL SCIENCES		
<i>New Projects</i>		
Dr E. M. Eggleston and Mr P. J. Hanks	A critical analysis of the operation of legal aid schemes in Victoria, NSW, ACT and South Australia	4,140
Professor M. I. Logan and Professor M. G. Swift	Policy implications of population migration in West Malaysia	16,750
Mr G. B. Silberbauer	Socio-ecology of the Chanzi district of Botswana	11,670
Dr D. M. Thomson	Studies in episodic memory	4,560
<i>Continuing Projects</i>		
Dr J. L. Bradshaw	Human information processing: determinants and correlates of performance	7,003
Dr C. S. Chen	A comparative study of the learning ability and memory of different strains of rats in a temporal maze	2,150
Associate Professor M. G. Clyne	Migrant German and migrant Dutch in Australia	1,620
Dr K. I. Forster	The perception of sentence structure under conditions of rapid visual presentation	2,803
Dr H. G. Gelber	Australia, the United States alliance and power relationships in the Pacific	6,968

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Dr T. Hore	Teacher-pupil interaction patterns in dyadic situations	1,550
Mr B. A. Knox	The political life and colonial policy of the fourth Earl of Carnarvon (1831-90)	2,300
Dr L. Li	The place of the military in the politics of modern Japan 1868-1945	1,400
Dr A. G. Serle	History of Victoria, 1851-1900	1,200
Dr D. B. Waterson	An historical biography of Sir Thomas McIlwraith 1835-1900	330
Dr W. R. Webster	Single unit activity in sensory systems of unanaesthetized animals	4,575
PHYSICAL SCIENCES		
<i>New Projects</i>		
Dr K. Thompson	Measurement of the viscosity of liquid $^3\text{He}$ and of liquid $^3\text{He}-^4\text{He}$ mixtures at temperatures below 0.05 Kelvin	10,763
Professor R. F. E. Van der Borgh	Finite amplitude convection in a compressible fluid and its application to astronomical problems	15,061
<i>Continuing Projects</i>		
Dr G. C. Fletcher	Theoretical investigation of the electronic and particularly magnetic properties of transition metals and their alloys	9,087
Professor B. R. Morton	Dynamics of convective clouds	13,088
Professor R. Street, Dr J. D. Cashion and Dr J. A. Barclay	Studies of solids at low temperatures in high magnetic fields	33,808
Mr G. J. Troup and Dr J. R. Pilbrow	Electron spin resonance, nuclear magnetic resonance and anti ferro magnetic resonance in compounds and crystals	13,500
Dr R. Weber	Measurement of thermal properties of magnetically ordered materials in the temperature range 0.3 to 700 K and in magnetic field up to 60kG	7,232

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
CHEMICAL SCIENCES		
<i>New Projects</i>		
Professor R. D. Brown and Dr P. Godfrey	Molecules in space	42,133
Dr G. B. Deacon	Reactions of polymercurated arenes and heterocycles	5,339
Dr K. S. Murray	Single crystal magnetic and spectral studies of inorganic and bio- inorganic compounds	500
<i>Continuing Projects</i>		
Dr D. St C. Black	Metal template rearrangements	5,589
Professor R. D. Brown, Dr F. R. Burden and Dr F. Larkins	Molecular orbital studies of elec- tronic structures of molecules	11,200
Professor R. D. Brown and Dr F. R. Burden	The study of short lived molecular species by microwave spectroscopy	13,255
Dr R. F. C. Brown	Pyrolysis and mass spectrometry of organic compounds	5,456
Dr G. B. Deacon	Synthesis and structure of main group element organometallic com- pounds	1,800
Dr F. W. Eastwood and Dr I. D. Rae	Synthesis of sporidesmin	6,204
Dr R. J. Fleming	The effects of ionizing radiation on some common organic polymer materials, studied at the electronic level	630
Dr B. M. Gatehouse	Crystal chemistry of the solid state	6,046
Professor B. O. West	The reactions of cyclic arsines and phosphines	4,605
BIOLOGICAL SCIENCES		
<i>New Projects</i>		
Dr D. F. Gaff	Desiccation-tolerant plants particu- larly grasses	3,524
Dr H. D. Hallam	The fine structure of plants adapted to desiccation	7,710
Professor A. W. Linnane and Dr P. Nagley	Informational macromolecules in nucleocytoplasmic interactions	7,008
Professor A. K. McIntyre	Properties of somatic receptors in monotremes and sub-mammalian vertebrates	9,635

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Professor D. A. Lowther and Dr W. H. Murphy	The biochemistry of cartilage glyco- proteins	7,800
Dr I. C. Parsons	Oxygen effects on chick embryonic erythropoiesis	4,108
Professor R. Porter	Factors involved in the dynamic control of movement	27,026
Dr M. Weiss	Biogenesis of steroids by the adrenal tissue of the Australian monotremes and marsupials	2,080
<i>Continuing Projects</i>		
Dr L. M. Aitkin	Central nervous mechanism in sound localization	8,308
Dr L. Austin and Dr P. Jeffrey	Synaptosomal protein synthesis	7,227
Dr L. Austin	The origin of axonal protein	7,986
Professor M. J. P. Canny	Physiological and structural studies of phloem	5,337
Dr D. J. Collins	Studies of the relation between stereochemistry and biological activ- ity of oestrogens: synthesis of 6, 7-bisnor-1, 11-ethanoestradiol	7,089
Dr G. F. Cross	Mycoplasma-cell interaction	2,391
Dr L. B. Geffen and Dr B. Jarrott	Molecular basis of synaptic plas- ticity	4,982
Dr W. R. Gibson	Endocrine factors which influence lipid deposition in chickens	1,550
Dr J. M. Haslam and Professor A. W. Linnane	The effects of altered biochemical composition on the structure and function of mitochondrial mem- branes	6,117
Professor B. W. Holloway, Dr V. Krishnapillai and Dr V. A. Stanisich	Genetic control of enzyme regula- tion in <i>Pseudomonas Aeruginosa</i>	12,954
Professor D. G. Lampard and Dr S. J. Redman	The application of electrical circuit representations in the analysis of intra-cellular potentials in neurones and of muscle mechanics	7,906
Professor A. W. Linnane and Associate Professor G. M. Kellerman	Effect of antibiotics on mammalian tissues and on human cells in tissue culture	7,589

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Professor A. W. Linnane and Dr H. B. Lukins	Biogenesis of Mitochondria	12,315
Professor D. A. Lowther and Dr H. C. Robinson	Structural studies of connective tissues including factors involved in the maintenance of cartilage	7,902
Dr I. R. McDonald	Adrenal function in the Australian monotremes and marsupials	6,238
Dr R. F. Mark	The function of regenerated synaptic connections in the nervous system	13,352
Dr R. F. Mark and Dr L. J. Rogers	The mechanism of vision and memory in lower vertebrates	3,615
Professor R. C. Nairn and Associate Professor E. P. G. Guli	Immunological studies of biological specificity	6,300
Dr T. P. O'Brien	Cell biology of grasses with special emphasis on cereals	7,565
Dr B. N. Preston	Physico-chemical and mechanical studies on model connective tissue systems	4,240
Dr R. A. Westerman	Communication between cells in the nervous system	12,442
Dr J. B. Youatt	Organic chemical aspects of cell differentiation	5,613
EARTH SCIENCES		
<i>New Projects</i>		
Nil		
<i>Continuing Projects</i>		
Dr A. C. McLaren	Direct observation and identification of crystal defects and their role in the mechanisms of crystallization and deformation of minerals and rocks	2,485
ENGINEERING AND APPLIED SCIENCES		
<i>New Projects</i>		
Dr K. N. Han	Dissolution behaviour of cobalt oxides	6,800
Professor D. G. Lampard and Dr W. A. Brown	Computer control of respiration and anaesthesia	12,513
Dr F. Lawson	Study of the kinetics and mechanism of cementation reactions	1,117
Professor O. E. Potter	Cyclohexane oxidation	9,439

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
<i>Continuing Projects</i>		
Professor J. B. Agnew	Dynamics of packed tubular reactors for exothermic chemical reactions	1,750
Dr C. J. Bellamy and Mr L. G. Whitehouse	Research into compiler techniques for small computers aimed at a low cost computer system for teaching computer programming	6,600
Dr D. V. Boger and Dr C. Tiu	Accelerating and decelerating flows of viscoelastic fluids in conduits of arbitrary cross sections (particularly circular and annular ducts)	6,382
Mr I. H. Lehrer	Mixing studies: (i) Influence of various parameters; (ii) Investigation of the properties of 2-phase jets	1,030
Professor K. Morsztyn	Modelling, control and optimization of large dynamic power systems (power systems simulator studies)	5,400
Professor I. J. Polmear and Dr B. A. Parker	Studies of age hardening phenomena in alloys with special reference to the role of trace element additions	4,747
		560,487

Some of the gifts and grants shown above have payment schedules which extend over two or more years. The following table, which analyses the sources of grants and donations, shows actual funds received during 1972, and is therefore not reconcilable with the list.

	\$000	\$000	%
ARGC	568		31.8
NH & MRC	224		12.5
Other Government sources	307		17.2
		1,099	
Foundations and trusts, private industry, individuals		689	38.5
		1,788	100

For and on behalf of the Council,  
D. I. MENZIES  
Chancellor

## ACCOUNTS FOR THE YEAR 1972

The audited accounts of the University for the year 1972 follow this introduction, in which the salient features are set out for ready reference.

1. *Capital Funds*

Since the incorporation of Monash University on 30 May 1958, the following funds have been provided for the acquisition of physical facilities of a permanent nature—

	\$000	%
State Government Grants	28,050	50.5
Commonwealth Government Grants	27,531	49.5
	<u>55,581</u>	<u>100.0</u>

These funds have been expended as follows:

	\$000	%
Land	415	0.8
Site Development	3,780	7.6
Buildings	41,188	82.5
Equipment	2,289	4.6
Furniture	2,216	4.5
	<u>49,888</u>	<u>100.0</u>

2. *Recurrent Funds*

A brief summary of the income and expenditure for recurrent purposes of the University for the year ended 31 December 1972 is given hereunder—

*Income:*

	\$000	%
State Government Grants	9,898	47.4
Commonwealth Government Grants	7,323	35.1
Academic Fees	3,650	17.5
	<u>20,871</u>	<u>100.0</u>

*Expenditure:*

	\$000	%
Teaching and Research	14,749	71.3
Libraries	1,751	8.5
Administration	2,211	10.7
Buildings and Grounds	1,556	7.5
Other	413	2.0
	<u>20,680</u>	<u>100.0</u>

The following accounts, which have been prepared in the form prescribed by the Auditor-General, provide further details of the year's activities.

MONASH UNIVERSITY

(I) STATEMENT SHOWING INCOME AND EXPENDITURE FOR ALL GENERAL PURPOSES  
YEAR ENDED 31 DECEMBER 1972

	DIRECT GOVERNMENT GRANTS AND ACADEMIC FEES					INDIRECT GOVERNMENT GRANTS AND OTHER FUNDS			TOTAL
	Recurrent	Research Projects	Buildings, Equipment and Furniture	Recurrent (Teaching Hospitals)	Buildings, Equipment and Furniture	Grants and Donations	Union Development	Other Items	
	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>INCOME—</b>									
State Grants:									
Received this year	9,898,496	155,000	3,512,070	87,676	91,750				13,744,992
Deduct Accrual at 1 January 1972					6,126 Dr.				6,126 Dr.
Commonwealth Grants:									
Received this year	7,323,000	723,078	1,532,500	47,379	16,498				9,642,455
Add Accrual at 31 December 1972			2,454,500		69,126				2,523,626
Deduct Accrual at 1 January 1972			474,930 Dr.						474,930 Dr.
Academic Fees	3,649,504								3,649,504
Fees for Special Short Courses								39,574	39,574
Union:									
Fees								421,857	421,857
Other Income								35,350	35,350
Union Development Fees							145,115		145,115
Grants and Donations:									
Government-financed Bodies						530,984			530,984
Student Assistance Fund						865			865
Other						642,844			642,844
Appeals:									
Library Fund						38,335			38,335
Religious Centre						6,088			6,088
Other						1,589			1,589
Outside Earnings							57,261	447,626	504,887
University Bookshop								49,977	49,977
Other Income						16,621	5,000	203,787	225,408
<b>TOTAL INCOME</b>	<b>20,871,000</b>	<b>878,078</b>	<b>7,024,140</b>	<b>135,055</b>	<b>171,248</b>	<b>1,237,326</b>	<b>207,376</b>	<b>1,198,171</b>	<b>31,722,394</b>



	DIRECT GOVERNMENT GRANTS AND ACADEMIC FEES				INDIRECT GOVERNMENT GRANTS AND OTHER FUNDS			TOTAL
	Recurrent	Research Projects	Buildings, Equipment and Furniture	Recurrent (Teaching Hospitals)	Buildings, Equipment and Furniture	Grants and Donations	Union Development	
	\$	\$	\$	\$	\$	\$	\$	\$
<b>EXPENDITURE—</b>								
<i>Teaching and Research:</i>								
Salaries	11,227,904	188,438		47,982		353,775		5,602
Superannuation	798,626	1,782				8,145		
Departmental Maintenance	824,481	162,347		81,573		158,409		3,235
Minor Equipment	299,914	459,428	151,623			92,466		195
Major Equipment			67,371		6,478			
Research Scholarships and Fellowships	532,394	34,232				227,507		
Study Leave Grants and Overseas Travel	126,401	3,581						
New Appointments	123,260							
Other	815,833	86,999				111,052		3,670
<i>Libraries:</i>								
Salaries	894,553							
Superannuation	53,806							
Books, Journals and Binding	697,215	38,515		5,500		23,543		
Equipment and Furniture	13,574					200		
Other	91,417					714		
<i>Administration:</i>								
Salaries	1,571,797							
Superannuation	124,330							
Postage, Telephone and Advertising	225,965							
Equipment	12,082							
Other	277,189							
<b>Forward:</b>	18,710,741	975,322	218,994	135,055	6,478	975,811	12,702	21,035,103

	DIRECT GOVERNMENT GRANTS AND ACADEMIC FEES					INDIRECT GOVERNMENT GRANTS AND OTHER FUNDS			TOTAL
	Recurrent	Research Projects	Buildings, Equipment and Furniture	Buildings, Equipment and Furniture (Teaching Hospitals)		Grants and Donations	Union Development	Other Items	
				Recurrent	Furniture				
	\$	\$	\$	\$	\$	\$	\$	\$	
Forward:	18,710,741	975,322	218,994	135,055	6,478	975,811		12,702	21,035,103
<i>Buildings and Grounds:</i>									
Construction of New Buildings			2,050,476		29,097	150,224	6,406	5,023	2,241,226
Purchase and Sale of Land			65,894 Cr.					477	65,417 Cr.
Site Development			149,396						149,396
Repairs & General Maintenance	1,058,068							3,173	1,061,241
Furniture and Furnishings	20,496		116,903		5,123	294	1,379		144,195
Rents, Rates, Power, Lighting, Heating	361,634								361,634
Equipment	13,649								13,649
Other	102,348							5,644 Cr.	96,704
<i>Sundry Expenditure:</i>									
Union Activities	25,785						26,530	442,654	494,969
Student Services	186,039					1,606			187,645
Audio-Visual Aids	92,823					573			93,396
Scholarships and Prizes	20,660					5,523			26,183
Halls of Residence								31,943 Cr.	31,943 Cr.
Owned Houses & Transit Flats								429 Cr.	429 Cr.
Alexander Theatre and Rotunda	39,202					512			39,714
Expenditure re Outside Earnings								432,101	432,101
<i>Appeals:</i>									
Robert Blackwood Hall						7,210			7,210
Library Fund						27,670			27,670
Other						50			50
Other	48,103					7,215		96,219	151,537
<i>Inter-Fund Transfers</i>	365						9,652	10,017 Cr.	—
<b>TOTAL EXPENDITURE</b>	<b>20,679,913</b>	<b>975,322</b>	<b>2,469,875</b>	<b>135,055</b>	<b>40,698</b>	<b>1,176,688</b>	<b>43,967</b>	<b>944,316</b>	<b>26,465,834</b>
<b>STATE OF FUNDS—</b>									
Balance, 1 January 1972	670,314 Cr.	140,014 Cr.	975,439 Cr.	—	33,857 Cr.	663,583 Cr.	313,129 Dr.	489,150 Cr.	2,659,228 Cr.
Result for Year:									
Deficit		97,244							
Surplus	191,087		4,554,265		130,550	60,638	163,409	253,855	5,256,560
Balance, 31 December 1972	861,401 Cr.	42,770 Cr.	5,529,704 Cr.	—	164,407 Cr.	724,221 Cr.	149,720 Dr.	743,005 Cr.	7,915,788 Cr.

## (II) STATEMENT OF SOURCES AND APPLICATION OF FUNDS

SOURCES—	1958-70	1971	1972	Progressive Totals to 31/12/72
	\$	\$	\$	\$
(1) State Grants:				
Recurrent—				
General	43,449,842	8,986,152	9,898,496	62,334,490
Teaching Hospitals	300,717	87,300	87,676	475,693
Site, Buildings, Equipment and Furniture—				
General	21,311,038	1,229,430	3,512,070	26,052,538
Teaching Hospitals	1,908,600	3,000	85,624	1,997,224
Research Projects	853,311	155,000	155,000	1,163,311
Total State	67,823,508	10,460,882	13,738,866	92,023,256
(2) Commonwealth Grants:				
Recurrent—				
General	30,070,500	6,676,000	7,323,000	44,069,500
Teaching Hospitals	162,644	47,200	47,379	257,223
Site, Buildings, Equipment and Furniture—				
General	20,813,600	1,208,360	3,512,070	25,534,030
Teaching Hospitals	1,908,600	3,000	85,624	1,997,224
Research Projects	1,674,164	549,629	723,078	2,946,871
Total Commonwealth	54,629,508	8,484,189	11,691,151	74,804,848
Total Government:	122,453,016	18,945,071	25,430,017	166,828,104
(3) Academic Fees and Fees for Special Short Courses	12,549,121	3,475,446	3,689,078	19,713,645
(4) Union:				
Fees	1,341,383	353,691	421,857	2,116,931
Other Income	82,705	22,232	35,350	140,287
(5) Grants and Donations, including Appeals	4,945,914	1,053,417	1,237,326	7,236,657
(6) Union Development	895,477	190,568	207,376	1,293,421
(7) Other Income	1,846,990	756,625	701,390	3,305,005
<b>TOTAL FUNDS AVAILABLE</b>	<b>144,114,606</b>	<b>24,797,050</b>	<b>31,722,394</b>	<b>200,634,050</b>

APPLICATION—	1958-70	1971	1972	Progressive Totals to 31/12/72
	\$	\$	\$	\$
(1) Recurrent Purposes:				
General—				
Salaries and other operating expenses	75,722,332	18,065,603	19,603,033	113,390,968
Equipment and Furniture	6,024,087	300,799	377,712	6,702,598
Books, Journals and Binding	3,720,626	661,172	699,168	5,080,966
Teaching Hospitals—				
Salaries and other operating expenses	436,561	129,000	129,555	695,116
Books, Journals and Binding	26,800	5,500	5,500	37,800
(2) Site Acquisition and Development	3,865,635	245,716	83,502	4,194,853
(3) Building Funds:				
General—				
Buildings	34,268,220	1,380,829	2,050,476	37,699,525
Equipment	1,483,381	391,532	218,994	2,093,907
Furniture	1,795,907	155,769	116,903	2,068,579
Teaching Hospitals—				
Buildings	3,430,475	28,478	29,097	3,488,050
Equipment	185,406	2,747	6,478	194,631
Furniture	140,202	2,035	5,123	147,360
(4) Research Projects	2,411,952	680,138	975,322	4,067,412
(5) Grants and Donations, including Appeals:				
Salaries and other operating expenses	2,847,280	761,434	881,664	4,490,378
Equipment and Furniture	747,275	76,171	94,992	918,438
Books and Journals	50,638	7,683	42,598	100,919
Buildings and Site Development	750,708	94,559	157,434	1,002,701
(6) Union Development	1,313,910	85,264	43,967	1,443,141
(7) Other Expenditure	3,148,077	808,527	944,316	4,900,920
<b>TOTAL FUNDS APPLIED</b>	<b>142,369,472</b>	<b>23,882,956</b>	<b>26,465,834</b>	<b>192,718,262</b>

## (III) STATEMENT OF BALANCES AT 31 DECEMBER 1972

	\$
Bank Overdraft .....	35,548
Students' Fees Received in Advance .....	183,440
Sundry Creditors and Accrued Expenses .....	1,532,521
Loans on Mortgage .....	165,085
Superannuation Funds .....	1,204,296
Accumulated Funds—	
Direct Government Grants and Academic Fees:	
Recurrent .....	861,401
Research .....	42,770
Buildings, Equipment and Furniture—	
General .....	5,529,704
Teaching Hospitals .....	164,407
Indirect Government Grants and Other Funds:	
Grants and Donations .....	717,238
Student Assistance Fund .....	6,983
Union Development Fund (Dr.) .....	149,720
Other Items .....	743,005
	<u>7,915,788</u>
	<u><u>11,036,678</u></u>

	\$
Cash on Hand and at Bank .....	14,234
Investments—	
Secured Deposits .....	5,660,328
Fixed-Interest Securities, at lower of par or cost .....	298,298
Ordinary Shares, at cost (Market Value: \$406,124) .....	354,327
	<u>6,312,953</u>
Sundry Debtors—	
Accrued Government Grants .....	2,523,626
Student Assistance Fund .....	3,437
Other .....	638,348
	<u>3,165,411</u>
Stocks on Hand .....	319,704
Payments in Advance .....	20,080
Superannuation Investments held as Nominee—	
Secured Deposits .....	139,672
Fixed-Interest Securities, at lower of par or cost .....	625,694
Ordinary Shares, at cost (Market Value: \$449,268) .....	438,930
	<u>1,204,296</u>
	<u><u>11,036,678</u></u>

(IV) DONOR-NOMINATED TRUST FUNDS  
STATEMENT OF INCOME AND EXPENDITURE FOR YEAR ENDED 31 DECEMBER 1972

<i>Income—</i>		\$
Income from Investments .....		4,696
<i>Expenditure—</i>		
J. W. Dodds Memorial Scholarship .....	400	
Vallejo Gantner Memorial Travel Fund .....	800	
Oscar Mendelsohn Lecture .....	416	
Monash University Rowing Club .....	54	
The David B. Rosenthal Memorial Trust .....	50	
Hume Turnbull Scholarship .....	1,000	
William and Katherine Winter Foundation .....	2,000	
	<u>          </u>	4,720
Deficit for the Year .....		<u>          </u> 24

BALANCE SHEET AS AT 31 DECEMBER 1972

		\$			\$
<i>Trust Funds—</i>			Cash at Bank .....		2,950
Balance, 1 January 1972 .....	80,829		<i>Investments—</i>		
<i>Add:</i>			Government Securities, at cost .....	1,000	
Endowment Received .....	5,000		Semi-Government Securities, at lower of par or cost .....	60,978	
	<u>85,829</u>		Fixed-Interest Securities, at lower of par or cost .....	17,960	
<i>Deduct:</i>			Ordinary Shares, at cost (Market Value: \$2,614) .....	2,917	
Deficit for year .....	24			<u>          </u>	82,855
Balance, 31 December 1972 .....	85,805				<u>85,805</u>
	<u>85,805</u>				

(V) STUDENTS' LOAN FUND  
STATEMENT OF INCOME AND EXPENDITURE FOR YEAR ENDED 31 DECEMBER 1972

<i>Income—</i>		\$
Interest on Loans .....	911	
Interest on Fixed Deposit .....	1,759	
Bank Interest .....	<u>360</u>	
		3,030
 <i>Expenditure—</i>		
Nil		
Surplus transferred to Students' Loan Fund .....		<u><u>3,030</u></u>

BALANCE SHEET AS AT 31 DECEMBER 1972

		\$		\$
<i>Students' Loan Fund—</i>				
Balance, 1 January 1972 .....	120,452		Cash at Bank .....	7,270
Surplus for Year .....	<u>3,030</u>		Loans to Students—	
			Long-term .....	63,194
Balance, 31 December 1972 .....	<u>123,482</u>		Short-term .....	8,265
			Accrued Interest .....	<u>1,753</u>
				73,212
			Fixed Deposit .....	<u>43,000</u>
		<u><u>123,482</u></u>		<u><u>123,482</u></u>

**CERTIFICATE BY MONASH UNIVERSITY**

In our opinion the statements of account herewith, numbered (I) to (V), correctly record the transactions of Monash University for the year ended 31 December 1972.

26 June 1973

J. A. L. MATHESON  
Vice-Chancellor

F. H. JOHNSON  
Comptroller

**AUDITOR-GENERAL'S CERTIFICATE**

**PURSUANT TO THE PROVISIONS OF SECTION 36 OF THE MONASH UNIVERSITY ACT 1958**

The books and accounts of Monash University for the year ended 31 December 1972 have been audited by an officer acting under my direction. In my opinion, the statements of account herewith numbered (I) to (V) correctly summarize the financial transactions for the year.

3 July 1973

B. HAMILTON  
Auditor-General