Burroughs Computer For Ilam

A Burroughs B6714 computer will be installed at Ilam late next year. It will be connected by telephone lines to a batch terminal at Lincoln College.

The new computer is part of the Universities' recommendations, approved by the Government, for the purchase of computing equipment to meet national university needs over the next few years.

Bruce Moon, Director of the Computer Centre, describes below the reasons for the decision and features of the new computer.

Early in the Universities' planning for this quinquennium it was recognized that special provision for computing equipment on a national basis was likely and in consequence a discourse amongst them commenced. In the initial stages this was taken rather further than a need for co-operation in planning alone and in many quarters the idea gained strong support that computing facilities should themselves comprise only one or two very powerful processing units linked to the various universities by a communications network.

In January 1970 the Vice-Chancellors' Committee sent to the United States and Britain a small working party to investigate university computing developments generally and regional centres in particular. The large region idea was strongly represented in the party, and on its return this was substantially unaltered though the organizational problem was recognized. At a meeting of a larger committee of the Universities in May it was decided, although the advice of the University of Canterbury Computer Centre was against it, that two regional systems would be established — one based on Auckland to serve Auckland and Waikato and the other based on Christchurch to serve the remainder.

As planning for the larger region began, its impracticability became increasingly evident and concurrently it became clear that the competitive situation developing amongst computer manufacturers would produce a more satisfactory solution based upon smaller regions. In February the Government had announced its agreement in principle to the sum of $3½ million being spent on university computing in the quinquennium and clearly this represented a valuable and prestigious deal to the successful company.

There was some talk about the need for diversity among universities and the purchase of machines from several manufacturers, but in December Burroughs Ltd proposed the supply, as a single order, of five B6700 machines with remote batch terminals at Lincoln and Waikato connected to the adjacent major systems. It then became clear that the total amount of computing power this would supply to the Universities would be sufficient, without imposing excessive management and communication problems, to ensure that the final solution would be cast in this form.

Programs Developed

It was of course important to establish that the total capacity provided would meet the needs for a reasonable time, especially since the likelihood that the load would double every two years was well established. The need for accurate performance information was particularly necessary to the University of Canterbury whose student population has a profile with the highest per capita demand for computing resources and Canterbury took the lead in developing a suite of programs to provide a 'benchmark' for performance measurement, and its subsequent evaluation. The majority of these programs were real ones from the 360/44 jobstream, with some contributions from the other universities and, by the time tests were finished it is possible that the 'benchmark' had been run on a larger number and greater variety of computers than any comparable set of programs elsewhere.

Benchmarking and other information on the facilities it would make available established the superiority of the Burroughs proposal and in August 1971 the Government announced its agreement to the negotiation of a $3,350,000 contract with that company for the supply of five 6700 systems.

The Canterbury-Lincoln machine (and that for Auckland and Waikato) will be a 6714 and it will be required by the contract to establish a benchmark time of eleven minutes compared with 60 minutes for the 360/44 with its current programming system and 15 minutes for 6712s to be supplied to the three smaller universities. Acceptance date is 31 January 1973 and enlargement and adjustment of the quarters of the Computer Centre will be needed to meet that goal. Drafting of sketch plans has commenced.

Advanced Features

The 6700 system architecture has a number of advanced features, making it rather different in its internal organization from the traditional kind of computing machine and it has substantial capacity for growth and communications ability. One of the features of its development is expected to be the attachment of a large variety of devices in university departments around the campus — smaller computers, remote batch terminals, experimental equipment, lowspeed terminals for remote entry and initiation of jobs. In fact the number and variety of possibilities of this kind which now open up is so great that it is almost bewildering and many careful decisions for effective development still lie ahead.

Another challenge is the maintenance of the existing workload now carried by the 360/44 and continuity in operations during its transfer to the new machine. While the new Burroughs configuration proposed has significant magnetic tape handling and disc storage capacity, it does not provide the card punching or graph plotting facilities the Centre possesses at present and it is a further task to ensure that suitable substitutes are found.

Clearly much effort will be needed in the months ahead to realize the potential of the new equipment but there are good grounds for thinking that these efforts will build upon a sound and substantial base.

UNIVERSITY OF CANTERBURY

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SUCCESS IN RECRUITING "LIMITED"

In seeking academic staff in the United States the Vice-Chancellor (Professor N.C. Phillips) gained quite a different impression from the impression he had formed before he went there.

'Only those who have been thinking about it for some time are willing to come to New Zealand,' Professor Phillips told Council when reporting on his visit overseas, ' and success in this field was limited.'

Had the University been seeking a physicist it would not have had much difficulty, but it was seeking to fill posts in French, Art History, Computer Science, Accountancy and Japanese. 'The surplus of Ph.D's in the United Kingdom and the United States does not extend to all subjects and many graduates would accept a less than ideal job in their own country rather than emigrate. I am driven to the reluctant conclusion that Britons are no longer great emigrants,' he said.

At Exeter, Dr Llewellyn showed Professor Phillips over student flats costing £854 a place. He saw other flats at the University of Surrey, which began to build on a new site in January, 1966. Early this year the move was completed.

'I was astonished at the lavishness of the physical plant in universities abroad, not only in Britain and the United States, but also in Africa,' Professor Phillips said. 'In Ghana the provision of buildings was on a scale which strikes a New Zealand Vice-Chancellor as very generous. But I am pleased to see that we have had some approvals for buildings which will take us over the hill in the long haul to Ilam.'

Gifts to the University acknowledged by Council include a grant of $200 from the Canterbury Savings Bank for research in economics and a cheque for $99.50 from the estate of the late Miss M.U. Bethell as royalties arising from the publication of her poems in an anthology of 20th century New Zealand poetry. The grant is to be used for the purchase of books on poetry.

Research Support Now Tighter in U.S.

Changes in the North American academic scene over the last year or two were noted by Mr R. Shepherd (Civil Engineering) on study leave this year at the California Institute of Technology, the University of California, and Simon Frazer University, the University of British Columbia and the British Columbia Institute of Technology.

Research monies were not as readily available now as they were a few years ago, said Mr Shepherd, in his report to Council.

Nevertheless by New Zealand standards it was still relatively easy to finance university research particularly in the applied fields such as those broadly described as environmental engineering and including areas such as earthquake engineering where social benefits may accrue readily from the work. The leading engineering schools were magnificently equipped to undertake those research projects which the faculty chose to pursue and the degree of professionalism which was apparent in the organisation and administration of the facilities was something New Zealand could emulate with advantage.

'Our greatest asset is undoubtedly the quality of our students, but many of these men are understandably attracted to the post-graduate study opportunities available in the outstanding engineering departments in North America. My observations lead me to believe that the recent restrictions on university expenditure in North America are not likely to result in our best graduates failing to gain financial support to enter the graduate schools at Berkeley and Caltech. More than adequate provision is still available for good students and the outstanding leadership provided in the leading civil engineering graduate schools must remain a strong draw to ambitious young men,' he said.

'The opportunities for graduate employment have undoubtedly become much more limited in the last two years, particularly for those men and women obtaining higher degrees in the pure sciences. However the demand for engineers with post-graduate qualifications awarded by the more highly ranked Institutions still exceeds the supply and although the newspapers may be able to report instances of Ph.D. holders driving cabs for a living I was unable to find a single case of a person holding a recent engineering postgraduate qualification being unable to extract a range of job offers from prospective employers.

'Undoubtedly the possibilities of obtaining a faculty position in an American university are much less than they were in the preceding decade,' Mr Shepherd said. 'Nevertheless, lest we in New Zealand should assume that this will automatically result in a solution being found to staff shortages in certain characteristically hard-to-staff disciplines, it may be pertinent to reflect that all assistant professors in North America may aspire to full professorial status, their chances of obtaining this promotion being based essentially on their own abilities and ambition. The basically democratic nature of the operation of North American university departments ensures that the election of a departmental chairman is the rule rather than the exception and this results in the responsibilities – and the detractions – of administration being spread across the faculty and in turn allows each senior person to devote worthwhile periods to his own academic activities right through to retirement. The undoubted attractions of the New Zealand life style could be significantly increased, so far as academic staff are concerned, by some modification of the relatively inflexible administrative structure common in the departments of this University.

'There was less evidence of student unrest at the Institutions which I visited than I expected,' he added. 'Possibly the disenchantment with some aspects of American foreign policy and with the lack of progress in solving certain domestic problems has spread beyond the universities to a more representative – and influential – sector of the population. Certainly there seemed to be more awareness of the problems facing American society, as reflected in discussions on radio and television and in the newspapers, than is apparent in this country. Perhaps our problems are smaller. Probably we have yet to recognise them clearly.'

S.R. Siemon Laboratory At Ilam

Professor S.R. Siemon, Professor of Chemical Engineering at the University of Melbourne, and the first Professor of Chemical Engineering at Canterbury, is pleased that the five-storey Chemical Engineering Building at Ilam is to be named after him.

'While I should not agree that the honour is at all merited needless to say I am greatly warmed to be so remembered and gratified to have my name so perpetuated,' Professor Siemon said in a letter thanking the Council. 'This is especially so as I understand that University policy is to be very sparing with names.

'Please convey to the Council my sincere thanks for conferring on me this great honour and my hope that the University will continue to grow from strength to strength and in recognition as it deserves. My kindest regards to all members of the Council who remember me, also the staff of the University administration.'

Music Building at Ilam

Tenders for the Music building on the Ilam site have been authorised by the Minister of Education, Mr Talboys, and the architects, C.E. Thomas and Associates, have been instructed by the Ministry of Works to call tenders.

Tenders had been called for subcontracting and some had already closed, the Acting Vice-Chancellor (Professor A.M. Kennedy) told Council.

Sketch plans and estimates for extensions to the Students' Union at Ilam approved by Council in June have been studied in Wellington and the chairman of the University Grants Committee (Sir Alan Danks) advised Council that it could now proceed with working drawings and with obtaining a firm estimate of cost. This work was well under way and should be completed by the end of the year, Professor Kennedy said.

Professor P.H. Fowler, F.R.S. Royal Society Professor of Physics at the University of Bristol, stands beneath the portrait of his grandfather, Lord Rutherford, in the University Hall.

Professor Fowler, whose father, Sir Ralph Howard Fowler, also a distinguished physicist, married Eileen, the only child of Lord and Lady Rutherford, was visiting the University in September to deliver the Rutherford Memorial Lecture. He was closely interested in the mementoes the University has of its most famous graduate and inspected a display of medals awarded to Rutherford in the Canterbury museum.

– Photograph by David Sims

PRACTICAL DRAMA

Course Suggested at University

A course in practical drama at the University is advocated by Mr M.G. Thompson (English) in a report on study leave from October last year to May this year, during which he saw more than 100 plays, witnessed rehearsals and observed work at the drama departments of the Universities of Bristol, Exeter and Hull.

Of his impressions of the theatre in Britain Mr Thompson said he saw much that he enjoyed and a few productions that excited him greatly. 'One, Peter Brook's production of *A Midsummer Night's Dream*, came closer than anything I have ever seen to breaking down the barriers between actors and audience; it was theatre at its most delightful and enriching – a rite, a romp, a celebration and a participation in magic. But, thankfully, without a mystique,' he said.

'In general I was disappointed, however, particularly with the work of the large subsidised companies. Shakespeare, as presented by the Royal Shakespeare Company, seemed to carry centuries of annotation on his back; too often it was Shakespeare produced for men of jaded palates by men of jaded palates. Call it conservative prejudice if you will, but my chief response to the clinical, cerebral, cynical and naturalistically debased Shakespeare I saw was to thank God that in New Zealand we account ourselves lucky to see the bard produced at all, and are not therefore faced by the dilemmas of cultural surfeit. When we approach Shakespeare – or indeed any classical dramatist – we must work from the premise that few people in the audience have seen the play before; and that those who have are not so blase as to require the work to be packaged in the perversions of mere novelty. The temptations to impose our impressive conceptions all over the play are therefore not so great.

'One strong conclusion I arrived at is that the New Zealand pulse (or do I generalize from a personal idiosyncrasy?) does not beat in the same manner as its English counterpart. Educated by Dame Ngaio Marsh into the belief that a play must move at a strong tempo, I found many evenings spent at the Old Vic and the Aldwych to be rather enervating.

'It should be clear from all this that I have returned to New Zealand a nationalist. But in case that term should be misunderstood I will elaborate. I believe that we have in New Zealand the basis of a great society – a society that could, if its gears were set right, combine an impressive level of equality and social justice with a primitive dynamism no longer felt by the older nations. The condition of advance is commitment to the country and its future by educated New Zealanders. But so far the educated New Zealander has failed, selfishly and ignobly, to create his environment, and to come to terms with life in this country. The result, of course, is that huge numbers of people have been sucked down the twin drains that impoverish our culture: the brain drain and the sensitivity drain. The challenge of building where nothing has been has not been squarely faced. 'Lack of opportunity, lack of aesthetic life, lack of cultural architectures' – the cry goes up from hill to hill, and those of us who remain live lives of deprivation and a desperation that does not always express itself quietly.

"Must Create Our Own"

'The answer, of course, is that we must create our own opportunities, our own aesthetics, our own architectures. And if I may quote Chekhov 'To do this we've got to work with all our might.' It is time for an ethical cry from our educators: it is better, and more fulfilling, to give where there is little, then to take where there is much. Or is that too puritan a notion? Is our impoverishment inevitable, one of the conditions of our isolation and our small population? I don't know, But sooner or later a generation of educated New Zealanders will either not go away or going, will return, before the sap is dry, to lay a base for cultural achievement,' Mr Thompson said.

'In the meantime we may perhaps play wishfully with the notion that the growth to mature nationhood of most countries, large and small, has been accompanied by an upsurge of the dramatic arts – a nation revealed to itself in public celebration and in a public forum. Unfortunately there are forces at work which cut across the very idea of nationhood. The young, in particular, march in step with an army of imported ideas from McLuhan and others, (the 'Global Village' is one of them) which I believe to bear little relation to New Zealand life, and which are detrimental to the development of any sort of meaningful identity

'If I am even partially correct in locating our failure not in the doings of the philistines – every country has those – but in the failure of people of education and sensibility to create their country, then the function of the places of education becomes critical. It is obvious that one of our earliest tasks must be to help build an environment in which potential expatriates might find it possible to fulfil their ambitions and fill their souls. Chekhov wrote of the Russia of seventy years ago: 'We have no aims, immediate or remote, and in our souls (is) a great emptiness.' He could have been writing of us. So it is that many of our Don Quixotes tilt not at Muldoons here but at mills overseas . . . '

Mr Thompson said that as far as University drama was concerned he believed that the histrionic as well as the literary sensibility should be encouraged. The teaching of drama needed a practical arm. In England he found students knew a great deal more about drama than they did here, mainly because there were theatres flourishing all around them. Plays were notoriously difficult to read; and without the spur of performance very few people in fact read them. In New Zealand one therefore attempted to fill an appalling vacuum, with films and television often the only points of reference.

Benefits of Course

'The introduction of a course in practical drama would be beneficial in many ways. I believe that there is, for instance, a close relationship between the presence of accessible public forums (and the drama is one) and the general level of articulacy. And no one would claim that New Zealanders are an articulate people; we tend to express ourselves in more primitive and physical ways. A living drama is one of the conditions of release from subverbal bondage into expressiveness,' he said.

'Then there are the therapeutic advantages; do-it-yourself is never more useful than when applied in the drama. Through the drama students – and the children they come to teach – can come to learn that they are less alone than they thought. By being dramatized, problems and experiences come to be shared; and there is nothing so rewarding as communal creativity and craft put humbly to the service of a dramatist's vision.

'Given time, a university drama course would make its presence felt right throughout the educational system. Some of our students would become teachers – and one hopes

(Continued P.5)

Dr. Mary Harding Ends Varied Career

A varied teaching career has come to an end for Dr F. Mary Harding, a senior lecturer in mathematics, who will retire in January.

Dr Harding, who is better known to generations of students, many of them now staff members, as Mary, was educated at St Hilda's Collegiate School, Dunedin, and entered Canterbury College in 1928. She graduated M.A. with first-class honours in mathematics in 1932 and was awarded a Sir William Hartley scholarship to Edinburgh. She gained a Ph.D. in 1934.

A teacher at Cheltenham Ladies' College from 1935 to 1942, Dr Harding joined the staff of the School of St Mary and St Anne, Abbots Bromley, in 1942 and was head of the mathematics department. She was appointed principal of St Ann's College, University of Adelaide, when it was opened in 1947 and also lectured in mathematics.

Dr Harding returned to Canterbury in 1953 as warden of Helen Connon Hall and a part-time lecturer in mathematics. On leaving Helen Connon in 1957 she was appointed a full-time lecturer and subsequently a senior lecturer.

When Dr Harding was met by staff last week and presented with a watch, a set of glasses, a vase, a saucepan and book tokens, Professor H.J. Hopkins said there had always been a close relationship between the School of Engineering and the Mathematics Department. The many kindnesses and kindliness Dr Harding had shown towards engineering students had always been appreciated in the school and would be remembered with affection and gratitude.

Professor G.M. Petersen recalled that when the department was in difficulties some years ago, Dr Harding cheerfully shouldered a heavy teaching load with great kindness to students and a great deal of verve. The queue of students outside her room seemed never-ending. Within the department she had been self-sufficient and had always brightened it.

Dr Harding commented that she had greatly enjoyed her career, but her contact with students had not always been about mathematics. In Australia an engineering student had remained behind after a lecture to seek her assistance. Asked what the trouble was the young man, an Australian representative player, answered: 'I'm worried about my football.' And at Helen Connon Hall she had had occasion to ask a young woman the reason for her late return one evening. 'Well, you see,' came the answer, 'he proposed on the way home and I couldn't very well tell him it would have to wait till the morning, could I?'

When she arrived at Canterbury as a student there were two full-time members of the Mathematics Department and one part-time. The Rector was also part-time. Women students always sat in the front rows at lectures, she said. All students wore gowns and we were very much of a family.'

(From P.4)

Drama Course

better teachers, since histrionic abilities or experience are of use in that profession. The benefits of the course would be felt by the children they taught – and that teaching would be practical as well as literary. Eventually an interest would be created which would help sustain a professional theatre in the city – and part of the vacuum would be filled,' he said.

PERSONAL

Dr Nigel Cooke, a graduate of the University of Leeds, has been appointed a senior lecturer in Civil Engineering, to commence duties early in 1972. After graduating B.Sc. with first-class honours, he studied the deformation of continuous prestressed concrete beams and was awarded the degree of Ph.D.; the conclusions were published in the proceedings of the Institute of Civil Engineers, with Dr Cooke as joint author. Since 1965 Dr Cooke has been employed by the London firm of consulting engineers, Freeman, Fox and Partners, concerned principally with structural analysis and the design of prestressed overbridges for the M5 Motorway through Gloucestershire and Somerset. He has also been engaged on the design and analysis of steel box bridges. Aged 31, Dr Cooke is married with two children.

* * *

A temporary assistant lecturer in the Department of Sociology, Mrs P.G. Koopman, has been appointed to a lectureship with effect from 1 February 1972. Since graduating B.A. from Massey University, Mrs Koopman has taught in both primary and secondary schools, and has been with the University for two years. She is at present completing an M.A. at Massey and expects to complete her thesis on educational sociology at the end of the year.

* * *

Mr William Smith, a teaching assistant on the regional economic geography of Canada at McGill University, Montreal, has been appointed a lecturer in Geography from 1 February 1972. After graduating M.A. with first-class honours in Geography from the University of Aberdeen in 1970, Mr Smith joined the graduate school of McGill University to work for an M.Sc. degree in agricultural geography and will submit his thesis in January.

* * *

A graduate of this University, Mr John P. Walsh, has been appointed a lecturer in Commercial Law in the Department of Accountancy. Mr Walsh graduated LL.M. with second-class honours in 1968, and has since studied labour law at the London School of Economics. Aged 28, Mr Walsh takes up his position this month.

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Mr J.K. McAlpine has been appointed a University representative on the Lincoln College Council.

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The new Mayor of Christchurch (Mr N.G. Pickering) was welcomed by the Chancellor (Mr T.H. McCombs) at the October meeting of Council. Mr Pickering was appointed a member of the Academic Committee. Thanks were expressed to the former Mayor (Mr A. R. Guthrey) for his contribution to the Council over the last three years.

* * *

Dr R.F. McLean (Geography), who has been awarded a research fellowship at the Australian National University, has tendered his resignation from the end of February next year. Council has also accepted the resignation of Mrs J.M. Fineran (Botany) from 13 January next year.

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Mr D.E. Greenland (Geography), who has been offered a post-doctoral research fellowship by the National Research Council of Canada, has been granted special leave to enable him to take the appointment.

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Professor W.B. Johnston (Geography) is visiting the Australian National University in Canberra and the Universities of Sydney and Newcastle.

* * *

Mr P. Manger (German) is to attend the XIV Congress of AULLA in Dunedin in January.

"Open Approach" To Fine Arts Teaching

The better art schools in Britain now attracted many young people who until recently would have considered an art school curriculum too confining. This was because of the more open approach to teaching, said Mr D.C. Peebles (Fine Arts) in a report on study leave in the United States and Britain.

The present was a stimulating time for the creatively inclined, Mr Peebles said. For one thing the rigid distinction between artistic styles was being broken down. A progressive open-mindedness about art itself and its possibilities was in the air and this was also having its effect on the teaching role.

'I found myself being critical of some British art schools because the robust vitality of youth did not appear to be reflected in their programmes,' he said. 'On the other hand others seemed to allow over-much for a rather exclusive diet of trendy non-conformities and for a tyranny of the fleeting moment often more destructive than positive. 'A smart set of Concepts,' says Iris Murdoch, 'may be the most efficient instrument of corruption.'

'For one who, as an artist and teacher, wrestles continuously with the pressing questions – 'what is good about art? how did it get that way? how can it be made more so? – there is always the additional problem of what sort of training needs now to be given, for we dare not base our syllabuses on methods of the past. In the face of this problem, one which persistently faces art teachers today, some that I spoke with were pretty obviously in the process of opting out – saying little or nothing to their students for fear, perhaps, of stifling a doubtful something. I believe that there is little to be gained from such negative attitudes. Rather I hold to the conviction that the tutor continues to bear a responsibility for ensuring that his students do not avoid fundamental issues by limiting their study to a series of momentary and arbitrary happenings which quickly become, in themselves, enslaving. At the same time of course, he must ensure that fantasy, imagination and intuitive guessing are not inhibited in the interests of a severe or narrow formal discipline for when art is supposed to surprise, how can we expect to standardize the ways of making it?

'In a sense the terms Art School and Art Education are misnomers. In any precise manner art cannot be defined, let alone taught. Nevertheless the art school, which possesses creative staff, adequate and flexible floor space, proper facilities for both students and staff and which remains progressive but not insipidly indulgent can assist immeasurably in the development of creative potential. Nor should such a school be tied down year by year, as a few I saw no doubt are, to methods of organisation which would seem to require an earthquake to change them. The attitudes of those entrusted with the control of the modern art training institution should, I feel, be less concerned with rigidly organised courses and more regardful for the effective orchestration of the institution's resources.' Mr Peebles said.

Value of Erskine Endowment

'This is a further indication of the worth of the Erskine endowment in bringing to us men of this calibre, whose impact is felt by the scientific community outside as well as within the University,' said the Acting Vice-Chancellor (Professor A.M. Kennedy) when he read a letter of thanks from Professor R.H. Garstang, Professor of Astro-Physics at the Joint Institute for Laboratory Astrophysics, University of Colorado, for the 'wonderful hospitality' he received at Canterbury as an Erskine visiting fellow earlier this year.

'Professor Garstang gave a course of 11 lectures in the Physics Department, the Chalklin lecture to the Royal Society, a lecture to the Canterbury Astronomical Society and a paper at the Rutherford Symposium. He visited the Mount John Observatory, gave a lecture during a two-day visit to the University of Otago; and gave two press interviews and a taped recording to the NZBC.

Professor J.A. Kitching, of the University of East Anglia, who was an Erskine visitor in the Zoology Department, has made a gift of $100 to the Edward Percival Marine Laboratory at Kaikoura.

Grant for Testing Machine

The Scientific Research Distribution Committee has made a grant of $24,000 for the purchase of a dynamic testing machine for the Department of Mechanical Engineering.

Two grants have come from the same source for the Department of Zoology. One is of $10,500 for the purchase of a spectrophotometer for studies of fish metabolism and the other of $6500 to promote the study of bull kelp, including $5000 for the salary of a post-doctoral fellow.

The Zoology Department has also received two grants from the Marine Department. One is for $650 for the study of fauna in the Waimakariri and the other, of $500, is for research on salmon eggs.

The Ministry of Defence has repeated a grant of $2000 for research on pattern recognition being undertaken by Professor J.H. Andreae (Electrical Engineering) for the Defence Scientific Establishment.

The Tasman Vaccine Laboratory has made a grant of $300 for a study of the properties of certain synthetic resins by the Department of Chemical Engineering.

University Club's Christmas Party

Tickets will be available shortly for the University Club's annual Christmas Party, which is to be held this year on Saturday 4 December, at 6.30 p.m. It will again take the form of a buffet dinner. Tickets ($4.50) may be obtained at the Club bar.

Appointed Adviser

Professor P.J. McKelvey, Dean of the Faculty of Forestry, has been invited to act in an advisory capacity to ANZDEC, which is a New Zealand-based international consulting organisation specialising in agricultural and forestry development projects.

Graduation ceremonies next year will be held on Wednesday 3 May and Thursday 4 May, Council has decided.

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