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UNIVERSITY OF CANTERBURY

# Chronicle

## University Host To International Chemical Engineering Conference

Design for change is the theme of Chemeca 81, the ninth Australasian Chemical Engineering Conference, which will bring numerous distinguished chemical engineers to the University this week for a wide-ranging discussion of developments in the industry and in research.

About 100 papers, covering all aspects of development from fundamental research to management of resources and the description of solutions to problems will be presented in five major topic sessions dealing with process and product development, chemical engineering fundamentals, control systems technology, biochemical engineering and energy technology.

The "Design for Change" theme relates to developments which will take place in the process industries in Australia and New Zealand during the next decade to reduce dependence on imported fuels and provide a greater range of products derived from natural resources.

This the first international conference devoted solely to chemical engineering to be held in New Zealand. In addition to New Zealand and Australian engineers, there will be visitors from Britain, the United States, Denmark, Israel, Malaysia, Venezuela and India.

Among the distinguished visitors will be Professor S. R. Siemon, now of Melbourne, who was appointed to the first chair in chemical engineering at Canterbury in 1957, when the present four-year degree course was established. Professor Siemon will deliver the closing address to the conference on the contribution of chemical engineering to the development of Australasia.

Participants will be welcomed by the Pro-Chancellor (Mr C. F. S. Caldwell) on Monday morning and the conference will be officially opened by the Minister of Energy (Mr Birch). The inaugural address will be given by Dr D. Reay, AERE, Harwell, on the marketing of fundamental chemical engineering research. Sessions will begin on Monday afternoon.

On Tuesday evening the conference address, "An Overview of Developments in

Chemical Engineering Education" will be given by Professor C. Hanson (Bradford University). The conference will conclude on Friday with post-conference workshops and a final session on micro-processor applications.

In a foreword to the Proceedings of the conference, Mr Birch says that in the last eight years the international value of crude oil has risen from \$2 to \$35 a barrel. The increase has had the dual effect of raising the value of New Zealand's own energy resources and focussing fresh attention on the potential for further development of the nation's total resources to broaden and strengthen the economy.

"Chemeca 81, will, I believe, serve to highlight the technological changes and challenges which the public must come to terms with if they are to survive and prosper in the period of major world economic and social changes that lie ahead," Mr Birch says. "This is both a timely and important conference for New Zealand and a significant event in world terms."

The conference has been organised by the Chemical Engineering Group of the New Zealand Institution of Engineers. Professor R. B. Key has directed the work of the organising committee, which includes all members of the staff of the Chemical Engineering Department.

The conference is sponsored by the New Zealand Institution of Engineers, the Institution of Engineers, Australia, the Institution of Chemical Engineers in Australia and the Royal Australian Chemical Institute and co-sponsored by the American Institute of Chemical Engineers.

## Commonwealth Scholars

The following Canterbury students have been awarded Commonwealth Scholarships by the University Grants Committee:

Britain: K. R. Morison (Chemical Engineering)

Canada: Joanne Tyndall (French)

## Chaplaincy Appeal

The annual appeal to members of staff by the University Chaplaincy Committee has met with a record response.

To date almost \$700 has been donated to support the work of the Chaplain (the Rev. P. A. Drury) in the University, and the Committee wishes to express its gratitude to all those who have given so generously.

Donations, which are tax-deductible, will still be welcomed, and may be sent to the honorary treasurer, Dr C. G. Freeman (Chemistry).

## The Disabled And The Law

A one-day seminar, "Disabled Persons, Economics and the Law", to be held on 28 September, will be the Extension Studies Department's contribution to the International Year of Disabled People.

The seminar, at Okeover, will examine aspects of the law, consider comparisons with provisions elsewhere and discuss possibilities for reform. It is part of a programme promoted in association with the Canterbury regional committee of I.Y.D.P. and is designed for those professionally interested in the legislative provisions for disabled persons.

The contributors will be Mr R. W. G. Palmer M.P. on welfare law, Mr Brian Easton on welfare economics, Mr A. D. Rennie (Accident Compensation Commission) on current accident compensation and Mr I. D. J. Hall on the possibilities for change and Dr Gwenda Lewis on "the consumer view".

The closing date for applications is 18 September.

Mr E. N. Bracey, a senior lecturer in the School of Fine Arts, has been awarded a master of science degree by the University of Oregon, Eugene, Oregon. Mr Bracey majored in art history.

## Doubts About Smelter

An aluminium smelter at Aramoana is not strongly favoured by second-year masters students in the Joint Centre for Environmental Sciences at the University of Canterbury and Lincoln College, who have completed a substantial interdisciplinary case study of the proposal as part of their course requirements.

The 160-page study, undertaken by 12 students with first degrees in geography, zoology, botany, geology and law, has been published by the centre because of the wide public interest in the proposal in the hope that it might contribute to a better understanding of the issues involved. Copies may be purchased from the centre at \$8 each.

For the study it was assumed that before the provisions of the National Development Act were applied, the Aramoana proposal would be debated by a "Cabinet committee". In preparation for that debate the class was required to review and critically assess eight topics: the power requirements and implications, the implications for New Zealand's foreign exchange and balance of payments, the probable effect on the national economy, the regional economic effects, the national and regional employment opportunities, the community implications, the physical and biological effects on the environment and a review of the legal framework.

The Director of the Centre (Dr John Hayward) told the students that on completion of these assignments they would be required to meet an evaluation panel—the "Cabinet committee—to present information for and against the proposal. They would not know until two weeks before the meeting which side of the argument they were to present.

Dr Hayward said the class had access only to public information and only in the last 10 days of the study did the environmental impact report on the proposal become available to them.

And the results? The students' principal findings were:

Supplying the smelter's electricity needs will involve a hasty programme of power station construction which will have major environmental implications. Maintaining restrictions on the use of oil-fired generating capacity if dry years should occur between 1986 and 1992 will result in a shortfall in electricity supply. Significant economic costs will be incurred if these restrictions are relaxed.

Any assessment of the economic return to the nation is dependent on the assumptions made and methods used in its derivation. Small plausible changes in the important variables have a great effect on the final outcome.

Assumptions and methods which appear reasonable to the authors result in estimates of economic return and employment generation lower than those made by the consortium.

There will be greater economic activity in Otago with a temporary decline in unemployment and more efficient use of the regional infrastructure. For the people of the harbour communities there will be social disruption and dislocation close to the smelter site and loss of amenity on a wider scale.

Changes may be expected in the ecology of Otago Harbour. The principal physical impact will be the increased erosion of the salt marsh. Lack of information makes it impossible to determine accurately the effects of chemical effluents on ecosystems.

The implications of the National Development Act are that more people are eligible to make submissions but the time constraints imposed make thorough research difficult. Invoking the National Development Act probably reduces the planning period.

Dr Hayward said that in undertaking the study the students worked from the premise that development and use of New Zealand's resources should serve short and longer-term goals. "Such development and use raises complex issues which can seldom be resolved by a single person, discipline or agency," he said. "The joint centre gives integration of the many issues involved in resource development and management. This study formed part of our teaching programme."

## New Book On Structure Of Wood Results From Intensive Research Programme

Ten years of collaboration between a University of Canterbury wood scientist and a D.S.I.R. physicist have led to the publication of a new book entitled "*Three Dimensional Structure of Wood—an ultrastructural approach*".

Co-authored by Dr B. G. Butterfield, a reader in botany, and Dr B. A. Meylan, a scientist with the D.S.I.R. Physics and Engineering Laboratory, the book has been published by Chapman and Hall, Ltd., London and was released in New Zealand last month.

The work, which is Dr Butterfield's fifth book, presents the results of the authors' intensive research programme into the ultrastructure of wood since they began working together in 1970. Over this period they have clocked up countless weeks in the field, in the laboratory and on the scanning electron microscope and have produced more than 20,000 scanning electron micrographs revealing aspects of the fine detail of wood.

Examining mostly New Zealand native species, the two Brians have co-authored more than 30 research papers on various aspects of cell differentiation and ultrastructure and published three other books, including the 250-page *Structure of New Zealand Woods*. Over the years, their work has received world acclaim, with reviews of their various books using such expressions as "a landmark in the history of wood

anatomy", "magnificent" and "a new perspective that will be a lasting one".

In 1978 Dr Butterfield was elected a Fellow of the Institute of Wood Science (London) for his research and in 1980 Dr Meylan was awarded a D.Sc. from the University of Leeds for his contribution to *Structure of New Zealand Woods*. Something of the almost universal recognition that their work has received can be gauged by the fact that micrographs from their publications have now been reproduced with permission in more than 20 overseas textbooks. Their electron micrographs have also been used by B.B.C. Television.

Their latest book begins with a general section on the structure of wood, explaining fundamental aspects of wood anatomy including general histology, cell wall architecture and ultra-structure. Other sections deal with the structural characteristics and their diversity in softwoods, palmwoods and hardwoods. The book is fully referenced to current research papers, mostly from the last 10-15 years. It has been designed as a reference work for wood scientists and as a text for advanced classes in University Botany and Forestry Schools.

The publishers have also produced a set of 35 mm slides, selected from the 226 figures in the book and these should prove to be a valuable teaching aid.

*Three Dimensional Structure of Wood: an ultrastructural approach* retails locally for \$63.95.

# New Zealand University Term Dates, 1982

UNIVERSITY OF CANTERBURY  
- 3 SEP 1981  
LIBRARY

	Auckland	Waikato	Massey	Victoria	Canterbury	Lincoln	Otago
Enrolment	22-25 Feb.	22-25 Feb.	25-26 Feb.	17-25 Feb.	22 Feb.	25 Feb.	22-23 Feb.
Term 1 begins	1 March	1 March	1 March	1 March	1 March	1 March	26 Feb.
Graduation	6-7 May	16 April	6-7 May	28-29 April	5-6 May	7 May	8 May
Term 1 ends	8 May	7 May	7 May	8 May	4 May	6 May	8 May
Term 2 begins	31 May	31 May	31 May	24 May	26 May	24 May	31 May
Mid-term break (examinations)	5-10 July	28 June-2 July	-	21 June-3 July	3-10 July	19 June-10 July	-
Term 2 ends	14 August	13 August	6 August	21 August	17 August	20 August	7 August
Term 3 begins	6 Sept.	6 Sept.	30 August	6 Sept.	6 Sept.	6 Sept.	30 August
Lectures end (approximately)	8 October	-	8 October	9 October	9 October	22 October	9 October
Examinations begin (approximately)	18 October	26 October	15 October	15 October	18 October	26 October	21 October
							Graduation 10 December

### Statutory Holidays

Waitangi Day	Saturday 6 February
Easter	Friday 9 April-Tuesday 13 April (inclusive)
ANZAC Day	Sunday 25 April
Queen's Birthday	Monday 7 June
Labour Day	Monday 25 October

## Vacation Conferences

The following conferences are being accommodated in the University in the second term vacation:

A.N.Z.S.O.M. and N.Z.O.H.N.A. (Occupational Medicine), University Hall, 20-24 August.

Australian and New Zealand Society for Medical Education, Rutherford Hall, 22-27 August.

New Zealand Society for Veterinary & Comparative Pathology, University Hall, 20-22 August.

North-West Kiwanis Conference, University Hall, 24-30 August.

New Zealand Ecological Society Conference, College House, 25-28 August.

Australian and New Zealand Endocrine, Diabetes, Reproduction, Clinical Biochemistry Societies, College House, Bishop Julius and Rochester Halls, 28 August-4 September.

Chemeca '81, School of Engineering, 30 August-4 September.

University 'Go' Society, College House, 28-30 August.

## Chess Club

It is proposed to establish a University Chess Club, if sufficient interest and support are forthcoming. An approach has been made to the Staff Club seeking its sponsorship, by way of providing a few chess sets

## An Ancient Precedent

As the protest in Australia over the reintroduction of fees for students undertaking second and higher degrees continues, one academic has found an honourable precedent for the right of university staff to withhold their labour.

In a letter to the *Queensland University News*, Mr J. K. Atkinson, of the university's French Department, says that in response to drastic action taken by the civil authorities against the masters and scholars of the University of Paris in the spring of 1229 (sparked off initially by a brawl involving scholars and townspeople, but the real causes of which went much deeper), the masters and scholars of the nascent university withdrew their labour for a period of two academic years, 1229-1231. Oxford was the one to gain most at the time from an influx of continental scholars.

The "strike" was broken primarily by papal intervention. Pope Gregory IX issued his Bull *Parens scientiarum* in 1231. One of its clauses reads as follows:

"And if perchance the right to assess the rents of lodgings is withheld from you, or (which God forbid) some monstrous injury or offence is committed against you or any of your people, . . . it shall be lawful for you to suspend lectures until you receive suitable amends. . . . And if any of your people happens to be imprisoned without due cause, it shall be lawful for you . . . to cease lecturing at once if you see that this is expedient."

Mr Atkinson comments: "Now, I leave to the theologians amongst us to decide whether this Bull Constitutes an *ex cathedra* and infallible statement! And I leave to the lawyers to decide whether current Australian Government policies constitute 'some monstrous injury or offence'. But for those who find 'strikes' of academics for good cause unjustified, this historical precedent might give cause for pause; for here, right at the founding of the institutions we call 'universities' is recognised the right of masters and scholars to withdraw their intellectual labour for sufficient cause."

and making available to the club a room in the Homestead. If there is sufficient interest and if sponsorship is forthcoming, only members of the Staff Club, it should be

noted, will normally be eligible to use these facilities.

Enquiries should be directed to D. E. Browne (Philosophy) or D. W. Rowe (Law).

"An Indispensable Asset"

## O.E.C.D. Backs Research

An international report has concluded that a university's potential as a producer and custodian of knowledge and highly-skilled staff able to cope with the quest for scientific and technological advance made it an essential investment for the future.

The report, entitled *The Future of University Research*, summarises the findings of a study undertaken as part of the programme of the Organisation for Economic Co-operation and Development's committee for scientific and technological policy.

The purpose of the study was to examine the function of the research activities of the universities of member countries and how they were being affected by various demands. It also made some preliminary assessments of the implications for the future well-being of scientific enterprise in member countries.

The study was conducted in response to concern among member countries for the future of scientific enterprise, and in particular, the role of university research in the process.

A meeting of senior officials of member countries acknowledged in 1980 that university research was an indispensable asset, particularly as the source of knowledge upon which future innovations would be based.

The report says that the picture which has emerged from the study is in many ways a "disquieting" one where university research was "called upon to adapt to a new era characterised by slower growth and complex demands, but where it is largely left to fend for itself in the face of multiple—and at times—contradictory pressures."

It adds that it is "broadly recognised that the future economic health and social development of industrial societies hinge on their ability to exploit the opportunities provided by science and technology and to found growth on the capacity to innovate."

However, the study warns against policies that attempt to harness the scientific effort to short-term needs and instant pay-offs, instead of achieving and maintaining a balanced, solid scientific base.

The report calls for university research of a strategic long-term nature so that industrial societies can engage safely in the continued quest for scientific and technological advance. It says: "In this sense, the universities' potential as producers and custodians of knowledge and of highly-skilled personnel is an essential investment for the future of each of the countries concerned and—because of its inherent international ramifications—a key resource for the O.E.C.D. member countries as a whole."

The report emphasises the importance of university research. It says: "The importance

of university research is not only due to the fact that it is research . . . and that, as such, it plays a crucial part in ensuring the balance and quality of the overall R & D effort. Its uniqueness resides in the fact . . . that it fulfils a number of functions and that its influence extends to the education, economic, social and cultural spheres in a comprehensive way that has no equivalent in any other segment of the research system."

The report concludes that the research function of universities is undergoing a series of profound changes induced by social, economic and political forces. It identifies the sorts of pressures acting on O.E.C.D. universities as:

Fluctuations in student enrolments  
Slow-down in the growth of financial resources and a change in the balance between the various sources of research funds

Government pressure for what is deemed to be "socially relevant" research

The effects of changing social values, "democratisation", employment protection and the growth of bureaucratisation of university research.

### Obituary Miss Eileen Fairbairn

Eileen Fairbairn, who died earlier this month, aged 88, was one of a group of women at Canterbury College early this century who gave wide service to education, particularly at Christchurch Girls' high school, and to the community after their graduation.

She was one of the first teachers to introduce practical geography to secondary schools in New Zealand—as a student she was a contemporary of George Jobberns, who later introduced the subject at university level—and was a foundation member of both the Canterbury branch of the New Zealand Geographical Society and the Canterbury branch of the Federation of University Women.

Born in Dunedin, Miss Fairbairn was educated at the East Christchurch and Christchurch Girls' High Schools and matriculated in 1911. A contemporary recalls, as a fresher, meeting Miss Fairbairn and her sister, Frances, in the Women's Common Room in the west block on the old site, and being impressed by her—partly, no doubt, because she was then a member of the executive of the Students' Association.

Miss Fairbairn graduated B.A. in 1915 and for some time taught without drawing a salary because her father did not approve of his daughters entering the teaching profession. She was formally appointed in 1921 to Girls' High School and taught mathematics and biology as well as geography there for

The report says that while it can reasonably be claimed that adaptability to declining budgets is essential for success, or even survival, it holds risks for universities. "So far as the universities are concerned, however, it would be argued by many that overadaptation is a danger: that universities . . . are also repositories of knowledge, of tradition, of scholarship" it says. "The danger is that something quite unique, quite irreplaceable, might be lost."

The study attempted to analyse trends in the training of postgraduate students, but was hindered by a lack of precise data. It does appear that in some O.E.C.D. countries there is a general decline in the number of postgraduates being trained. "There is no doubt that such trends pose real problems to the universities and to the wider community generally," the report says. "One of the functions of postgraduate training is to provide a scientific elite for industry, government and the universities: an elite which will sustain the progress of technological innovation and provide for future generations of teachers and scientists."

much of her career, though she also taught at Christ's College and St Andrew's College during the Second World War.

Her interest in geography was sharpened by her outdoor interests, which included considerable climbing in the Mount Cook region, tramping and skiing. In 1928 she went to Cambridge to extend her knowledge of the subject, several years before Dr Jobberns arrived as the first lecturer in geography at Canterbury.

On her return to Christchurch she began to interest her pupils in geography. Relief maps, laboriously made with papier mache, adorned her room and field trips stimulated interest. She travelled widely to geographers' conventions, worked tirelessly for the Geographical Society and was elected a life member in 1973.

When the Canterbury branch of the Federation of University Women was established in 1922 after a series of meetings in the previous year, Miss Fairbairn was a foundation member. She was a vice-president of the branch in 1951 and 1953 and was about to be elected a life member.

Miss Fairbairn had an extraordinarily wide range of interests and was a member of numerous organisations. She studied architecture and art, extended her interest in geography to geology and botany, knew several languages, enjoyed music, especially chamber music, skiing, mountaineering and—until her doctor ordered her to desist—ice-skating.

## Former Commissioner For Environment Visiting Fellow In Forestry

The former Commissioner for the Environment, Mr I. L. Baumgart, is enjoying his visit to the University as N.Z. Forest Products Limited Visiting Fellow in the School of Forestry.

Mr Baumgart, who has been involved in forestry for much of his career as a soil scientist and science administrator, said forestry would "take off" in the 1990s and it was interesting and instructive to be in the school as the decade approached. Increased production from forests had advance implications for the training of manpower, especially professional manpower, and he was in the right place in the School of Forestry to consider such questions.

In addition he saw a need for a better public understanding of the role of forestry in the economy. There was a certain public uneasiness to the prospect of a big expansion in forestry. "A very rapid change requires a great deal of understanding, on both sides, and this needs public education," he said. "This expansion will also involve farm forestry and you can't go faster than farmers want to. It is important that farmers fully understand and appreciate what can be done. I can see a role for the School of Forestry as an independent voice in this education."

Mr Baumgart plans to produce a paper on this while he is holding the fellowship. He is also working on student case studies and has given a seminar in the school on the environmental machinery in government.

## Meat Company's Scholarships

The Southland Frozen Meat Company has set up a trust to provide funds for two scholarships to encourage graduates to enter the field of processing and marketing of primary produce (food). Applications are invited by graduates or final-year students with an honours degree, or its equivalent, in physics, chemistry, biology, economics, mathematics, agriculture, engineering, food technology or other discipline which will contribute to the processing and marketing of primary produce. Preference will be given to candidates whose home is within the Otago/Southland region.

Each scholarship is tenable for up to three years and is for postgraduate study or research in New Zealand or overseas. The value of the scholarships is no less than \$4,000 a year and may be increased and allowances made available where overseas tenure is granted.

Application forms and further details may be obtained from the Scholarships section of the Registry. Applications close with the Registrar, on 1 October 1981.

As a young pedologist with the Soils Bureau, Mr Baumgart worked in Rotorua on forest soils when the Forest Research Institute was first established there. In the fifties and sixties he was also closely involved, as senior scientist in D.S.I.R. headquarters, with the relations between the department and the F.R.I. When the Forest Service established three research advisory committees he was appointed chairman of the one concerned with production forestry. He was assistant Director-General of the D.S.I.R. from 1966 to 1974 and was Commissioner for the Environment until his retirement last year.

But it is a busy retirement. He has undertaken environmental work for the United Nations and the South Pacific Commission in the Pacific. He is chairman of the Toxic Substances Board, an advisory board to the Minister of Health ("and I had hoped to get away from controversial questions!") and is deputy-chairman of the National Research Advisory Council. This year he has also been closely involved in the Second New Zealand Forestry Conference, devoted to the development of exotic forestry. The conference began in March when working parties were appointed to report back next month. Mr Baumgart is chairman of the working party on research and has just completed a report on the party's findings for the resumption of the conference.

## Humboldt Foundation

The Alexander von Humboldt Foundation reports that 556 postgraduate research fellowships and 67 Humboldt awards were granted last year.

1,903 foreign scientists from 71 countries applied for the post-graduate research fellowships offered in worldwide competition. Experts' opinions could be obtained on 1,481 of the applications submitted, and the decisions on the fellowships were taken in three selective meetings. Moreover, 115 American natural and engineering scientists were nominated for Humboldt awards.

556 applicants were granted an AvH post-graduate research fellowship on account of their scientific achievements—the latter being the only criterion of selection, which enabled them to carry out a research project which they may choose themselves at university institutes or other research institutes in the Federal Republic of Germany.

67 internationally known American scientists received the Humboldt award in recognition of the research work. The award includes an invitation to spend several months in the Federal Republic of Germany for research purposes.

As far as subjects are concerned, the trend of the previous years continued. There was a slight decline in applications from the arts sector and an increase in the engineering sector.

## Music Teachers Confer

The establishment of four standing committees on which each of the four university music departments are represented was one of the outcomes of the triennial caber—university conference of music teachers held at the University in the May vacation.

Reporting to the Vice-Chancellors' Committee, the convenor (Professor J. A. Ritchie) said the standing committees would cover the following:

*Library Liaison Committee*, to co-ordinate and rationalise music purchases throughout the national system;

*Research Liaison Committee*, to steer Ph.D. and other research projects in the early stages so as to avoid duplication of effort and later embarrassment;

*Concert and Visiting Artists Committee*, to co-ordinate itineraries and to present a unified front from all four music departments in the area of fee determination and programme structure;

*Course Content Committee*, to ensure fairness for students on transfer and to maintain a continuing brief in those areas which concern the Curriculum Committee of the University Grants Committee.

Professor Ritchie said there was unanimous agreement on the importance of music performance teaching as being fundamental to the total endeavour. The staffing of performance teaching in the university system was considered to be an important priority for future development.

Extramural enrolment policy insofar as the teaching of music at the tertiary level was concerned was discerned. The conference believed that music could not be taught effectively in these circumstances.

## Michael Morrissey Short Stories

Some of the fruits of Michael Morrissey's term as first writer in residence at the University are included in *The Fat Lady and the Astronomer*, a volume of short fiction published by Sword Press at \$7.50.

The collection is described as a fascinating range of unconventional fictions seldom seen in New Zealand writing—some persons, persuasions, paranoias and places one ought to encounter.

Details of an international conference on Plant Protection in the Tropics from 1 to 4 March next year at Kuala Lumpur are held at the Enquiries counter, Registry. It is being organised by the Malaysian Plant Protection Society.

# Notices

## U.G.C. Postgraduate Awards Close Soon

The following scholarships are available for competition this year. Except where otherwise indicated full details appear in the University Grants Committee Handbook for 1981, which is held in the Library. Candidates must read the regulations before applying for any scholarship. Application forms are available from the Scholarships section of the Registry. Applications close at the Registry on 1 October, unless otherwise indicated.

Postgraduate Scholarship.

1851 Exhibition Science Research Scholarship (U.K. Tenure only).

Rutherford Scholarship.

Shirtcliffe Fellowships—supplementary.

Sir Walter Mulholland Fellowship.

Internal Affairs Wildlife Scholarship (now \$4,020 p.a.).

French Awards.\*

Commonwealth Scholarships\* United Kingdom and Canada (Prospectuses available later) and Hong Kong (Prospectus available from Registry). Students interested in Commonwealth awards should watch University notice boards for announcements regarding any other scholarship offers.\*

Edward and Isabel Kidson Scholarship.

Frank Knox Fellowships (details from Registry).\*

McKee Trust Postgraduate Scholarship in Geology.

L. B. Wood Travelling Scholarship—supplementary.

William Georgetti Scholarship.

Reserve Bank Research Fellowship for Ph.D. study in Economics Australia-New Zealand Foundation Scholarship (details from Registry). The Reserve Bank also offers a Fellowship for Economic Research for research not specifically related to Ph.D. studies. See the University Grants Committee Handbook for details.

Scholarship for study in Italy (applications close 28 February 1982).

Wellington Harbour Board Centennial Scholarship.

New Zealand-Japan Foundation Fletcher Challenge Scholarship.

\* Special application forms to be used.

In addition the following overseas scholarships by the University of Canterbury are being made available this year:

Robert Bell Travelling Scholarship in Journalism.

Sims Empire (for study in Britain, value \$4,000 p.a. plus grants towards fares and fees).

Tytheridge Travelling Scholarship in Arts.

Information about these may be found in the University of Canterbury *Awards Handbook* in the libraries. The Sir William Hartley and the Lord Rutherford Scholarships are not being offered this year.

Those interested in overseas study should consult the following books which are in the reference section, James Hight Library:

A.C.U. : *Scholarships Guide for Commonwealth Postgraduate Students*

St James/St Martins Press: *The Grants Register*

UNESCO : *Study Abroad*

University of Canterbury: *The Awards Handbook 1981*

*The University Grants Committee Handbook 1981*

In the United Kingdom a certain number of grants are available which reduce fees for overseas students to the same level as for United Kingdom students. Application forms are available from the Registrars of British universities. For Canada and the United States some assistance is available in the form of teaching assistantships or similar positions. Applicants should enquire about these from the university at which they wish to study. It is always worth writing to the university which interests you to see if there are any awards for which you could apply. Competition for overseas awards is strong and candidates would normally require a good academic record.

## Hamilton Award

Nominations for the Royal Society of New Zealand's Hamilton Award should be sent to the executive officer, Royal Society of New Zealand, P. O. Box 12-249, Wellington, by 31 December. At least two copies of the relevant publications and a supporting statement should accompany the nomination.

The prize is awarded for scientific research carried out in New Zealand or the South Pacific, which has been published in the last five years. The publication may consist of one or more papers and shall include the first investigation published by the author.

The 1981 prize was awarded to Dr R. H. Furneaux for his work in carbohydrate chemistry.

## Booklets For Sale

A limited number of copies of *Looking Left*, edited by Jack Vowles and David Strachan (University of Otago branch of the New Zealand Labour Party), at \$2 each, is available from K. Fea, Physics Department (Ext. 703). The booklets contain six individual essays under the general sub-title of "Democratic socialism and New Zealand in the Eighties".

## Staff Vacancies

### Audio-Visual Aids

Applications are invited from persons with relevant experience for the position of Technical Officer in the University's Audio-Visual aids centre. The appointee will be responsible for the day to day running of the Centre and will act as executive officer of the Audio-Visual Aids Committee. The salary for Technical Officer Grade I is \$17,171 per annum.

Applications close on 18 September.

Further particulars and Conditions of Appointment may be obtained from W. Hansen, Registrar, University of Canterbury, Private Bag, Christchurch.

### Temporary Clerk-Typists

Vacancies will occur shortly in the Records Section of the Registry for temporary Clerk-Typists to assist with examinations and enrolment. Previous experience of this or similar work would be an advantage. Some of the appointees will be required to work through the Christmas and New Year period.

Written applications, which should include details of previous experience, a telephone number and the name of one person to whom reference may be made, close on 14 September 1981 with W. Hansen, Registrar, University of Canterbury, Private Bag, Christchurch.

### House To Let

Furnished house available mid-December 1981-end August 1982. 2 bedrooms and sunroom, large living room, dining room. Dishwasher, colour television, piano. Pleasant garden with fruit trees. Garage. Care of lawn and family cat required. 5 minutes from University in quiet street. Rent by negotiation, bond required. Contact W. B. Wilson, ext. 685.

### To Let, London

One bedroomed flat (twin beds) with settee in living room, Highgate, London, available six months from August 1982. Contact Miss Margaret Cameron, 19 Priory Grange, Fortis Green, London N.2 9ET, Phone 01-444-7783.

Wanted, use of small car for the period December 1981 to end of February 1982. All care taken. Conditions of use to be arranged. Please contact Hilary Neumann, Ext. 8545 (French Department).