



Solar research team to build power station

The granting by the New South Wales Government of \$800,000 to build a prototype solar power station in Western NSW is a major breakthrough for ANU scientists who have been working for several years to develop solar energy on a commercial basis.

The Head of ANU's Engineering Physics Department, Professor Stephen Kaneff is confident that the prototype solar power station can be built in the next two years. Its design is now practicable because of a number of technical advances and it appears economically viable in areas remote from electrical grids. He attributes the success of the project in the main to the overriding importance of economic considerations by the Energy Conversion Group, led by Peter Carden, which resulted in the realisation of cost competitive collector systems and the rejection of any particular proposals which did not have the potential of meeting cost constraints.

'This has led to the development of an original class of concentrating mirror collectors based on thin metal paraboloidal shells several metres in diameter provided with reflecting surfaces which focus the sun's rays on to an energy absorber at the focal point of each concentrator', Professor Kaneff says.

'Within the absorber a fluid may be heated or a chemical may be dissociated, thereby capturing the energy from the sun for transport (and/or storage) to a central plant where this energy may be used in the form of high temperature heat or converted to other forms (such as mechanical work, electricity and so on) as required.'

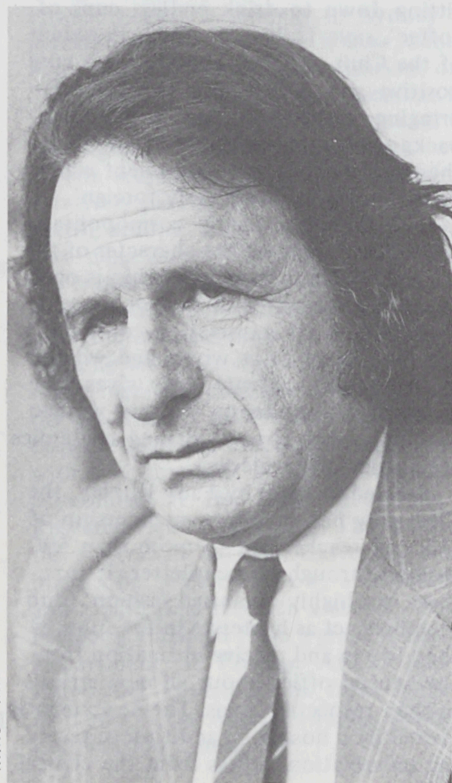
Provision for storage capacity

The project calls for the building of a system consisting of 14 pairs of tracking concentrating collectors supplying superheated steam to a uniflow steam engine driving an alternator with an output of 25kWe. The unit has a backup flash boiler so that energy is still provided if there is no sunshine and the initial small amount of storage provided has been exhausted. Later, adequate storage can be added to make it a stand-alone system.

On the basis of assessment of average needs for electrical utilisation in rural homes, energy for up to 10 or so houses can be provided. The waste heat from the system will later be applied to provide hot water, space heating, possibly air conditioning and certainly desalination of water.

The basic knowledge and techniques needed to build the system have already been gained in the research program by the Energy Conversion Group. The task of production while straightforward, still requires much engineering design and production effort. Using existing

Professor Kaneff



Mike Finn

University facilities where appropriate and with the aid largely of sub-contractors, a simple facility for assembly and testing the system needs to be established off-campus. This approach is the most economical in realising the prototype in the shortest time.

Of the \$800,000 allocated over two years for the task, about one quarter is required to build, instal and commission the prototypes with the remainder being directed at establishing the assembly and testing facility, payment of University support services, extra engineering design effort, and to allow for contingencies. Were another unit to be built, total cost would be very much less than that directly attributed to the prototype.

Currently in areas remote from electrical power grids, electricity is generated almost exclusively by diesel electric sets ranging in size from a few kilowatts upwards. Generation costs in such areas range from about 10c per kilowatt hour in the less remote regions and for larger size systems to 30c per kilowatt hour and more for smaller systems located further afield. As oil costs rise these figures will increase and make electricity an extremely expensive commodity in most of inland Australia (up to \$1 or more per kilowatt hour) and thereby impose a severe rationing of an important commodity which can have a significant bearing on living standards and development potential.

In such areas the availability of cheaper electricity can have a substantial influence. The present solar power system is viewed as a forerunner of a class of

systems which, when produced in commercially significant quantities, has great potential for alleviating the energy costs of inland Australia. Once a production facility for the prototype unit is established, a significant number of further units can be produced at much lower cost. For a production run of 500 units costs per unit would drop to about \$30,000 which corresponds to a production cost of electricity assessed by commercial standards of 7c per kilowatt hour. There are some 20,000 remote homesteads and small townships in Australia which could take advantage of this kind of system.

Substantial employment potential

It is worth pointing out that establishment of a significant solar industry in Australia provides a potential for employment which can rise to substantial proportions in view of the relatively labour intensive nature of the technology involved; indeed few other industries seem to be available for improving employment prospects.

If successful, the prototype can be followed by a proliferation of units in inland Australia to be built in sizes from a few kilowatts up to perhaps one megawatt or more. In the larger sizes it will be more appropriate to employ the solar ammonia concept for energy transport and storage as this produces systems which are more economical and flexible.

'Accordingly, we see a path of development which may proceed from the present units to larger units closer to urban areas. Perhaps in 10 to 15 years' time, towns to the west of the Great Dividing Range would be supplied with electricity, initially without storage but later by stand-alone systems, and eventually into the next century it is possible to envisage solar electricity being fed into the grid to power an increasing fraction of the urban load. It seems that the above kind of development is more than a dream but whether or not it occurs depends very much on the aspirations of society', Professor Kaneff says.

'Meanwhile we acknowledge continued support for our research into energy conversion from the University over the past six years, from Uncle Ben's over the past year or more, and recently from the National Energy Research Development and Demonstration Council. The present project is a natural and necessary development stemming from our research findings and we are pleased that the New South Wales Government has clearly recognised the needs which can be satisfied by this kind of system and is willing to provide very substantial means for meeting those needs'.

Professor Ross Acting V-C

Professor Ian Ross is the Acting Vice-Chancellor of ANU during Professor Anthony Low's absence from the University. Professor D.B. Carr, Research School of Biological Sciences, is the Acting Deputy Vice-Chancellor.

Professor Low is absent from the University from 19 May to 20 June. He is a member of a delegation of three Vice-Chancellors visiting Japan following a visit to Australia in 1978 by three Japanese University Presidents. The visit would take about three weeks and the Vice-Chancellor would then visit South Korea, the North Australia Research Unit in Darwin and attend a meeting of the Australian Vice-Chancellors' Committee in Perth on 18-20 June.

National twin register will help research

The Department of Population Biology in ANU's Research School of Biological Sciences is establishing a nationwide Australian Twin Registry.

Dr Nick Martin, Research Fellow, who is one of the co-ordinators says that many of the outstanding problems in medical science, such as susceptibility to different cancers and to coronary heart disease, are problems of genetical predisposition interacting with environmental hazards. One of the best ways of understanding these interactions is to compare the health of twins.

The special value of twins for research is that about one-third of twins are identical in genetic makeup so that any differences observed between them must be environmental in origin. The other two-thirds are non-identical (of which half are male/female pairs) and these share only about half their hereditary factors in common. Thus, by comparing the differences between identical twins with those between non-identicals the relative importance of genes and environment can be estimated.

The catch is that to obtain reliable estimates a very large sample of twins is required and in Australia this can only be achieved on a national basis.

Dr Martin has produced a pamphlet designed to recruit twins of all types and all ages throughout Australia. The initial aim is simply to register the names and addresses of twins. Subsequently, they may be invited to take part in different studies but they are always at liberty to refuse. The first study to make use of the register is already in progress in Sydney where twins are being compared for the effects of alcohol intoxication on driving skills. However, many studies may only involve filling in a postal questionnaire.

The pamphlet for registration on the Australian Twin Register is now being distributed around Canberra. If you are a twin or you know any twins please phone Marilyn Olsen on 494486/815049ah or send a note to Australian Twin Register, Research School of Biological Sciences, ANU, PO Box 475, Canberra.

University Council meeting

Items considered by the Council of the Australian National University on Friday 11 May 1979 included those mentioned below.

Membership of Council. Council recorded its appreciation to Sir William Vines, co-opted member of the Council, who has resigned from the Council, for his able and willing service to the Council.

Outside studies programs. Council noted the importance of adequate study leave for the proper development of scholarly work by University's academic staff.

It had before it the report of the Working Party established by the Vice-Chancellor to recommend to him the procedures which should be adopted to implement the recommendations of the Tertiary Education Commission contained in its final report 'Study Leave in Universities and Colleges of Advanced Education'.

Council accepted as a basis for current planning the recommendation of the Tertiary Education Commission that, subject to allowance for existing commitments during the 1979-1981 triennium, from 1 January 1979 the total time spent by members of staff under outside studies programs should not be greater than 7 per cent of available man-years of the staff of lecturer level and above, averaged over a triennium.

It noted that acceptance of the recommendation of the Tertiary Education Commission did not carry with it an intention that existing contractual obligations between the University and members of staff in respect of study leave should be abrogated.

It approved that on and from 1 January 1979 no contractual entitlement to outside studies should be extended to a person offered an appointment with the University; and that the provisions relating to earnings on study leave in the University's statement of policy on outside earnings should apply to all staff on outside studies. That statement of policy is:

The Vice-Chancellor may limit the outside earnings to be retained by the member on study leave (outside studies) after considering the circumstances of each case includ-

ing the amount of financial support accorded the member for study leave purposes.

It invited the Vice-Chancellor to report in twelve months' time on the working of the new arrangements.

University housing operations. Council approved that the categories of persons eligible for tenancies of University dwellings should be extended to cover all full-time members of the University's staff, postgraduate students and visitors, regardless of their place of recruitment or marital status; and that the present arrangements for the grant of group tenancies to undergraduate students remain unchanged.

Research School of Chemistry. Council approved the taking of steps to fill the Chair of Organic Chemistry which will become vacant following Professor A.J. Birch's retirement on 31 December 1980; and the establishment of another Chair of Organic Chemistry in the School and the taking of steps to fill the position.

Appointments. Council reappointed Professor R.St.C. Johnson as Deputy Chairman of the Board of the School of General Studies for one further year until 31 December 1980.

Dr C.M. Mayrhofer has been appointed Head of the Department of Classics for a period of two years from 1 June 1979.

Emeritus Professor. Council directed that the name of Professor Burgess Don Cameron be inscribed on the Roll of Emeritus Professors. Professor Cameron retired from the University on grounds of ill health last month. He was the longest serving member of the academic staff of the University and served as a member of Council.

New initiatives in IAS. Council noted the establishment of a Centre for Economic Policy Research in the Research School of Social Sciences which would be involved in basic analysis of fundamental problems in Australian social and economic policy without commitment to the support of particular policy proposals.

The Centre does not involve any additional financial outlay but is to be financed from an earlier recommendation by the Vice-Chancellor's Advisory Group on budgetary matters that 1 per cent of the budgets of the Research Schools, together with an additional 1 per cent in each of the next two years, should be set aside to fund a series of new programs of research in the Institute.

on the one hand and between non-malignant bowel conditions and the consumption of low-fibre food on the other — both of which apply to our rich refined type of Western diet.

Replacement of some of our excessive consumption of red meat, dairy fat, white flour and sugar by an increased intake of leafy vegetables, whole grain cereals and fruit should not only tend to reduce the incidence of disorders of the large bowel to the low level experienced by our Asian neighbours but would also protect against the development of obesity and cardiovascular disorders.

Unfortunately the reductionist philosophy of disease care espoused by Dr Dent and his colleagues is all too typical of the ethos of specialised so-called scientific medicine. From the point of view both of preventive medicine and promotion of better health the research grant from the ACT Cancer Council might be better spent on public education in the simple elements of good nutrition. In this way the responsibility for health care would be shifted to where it belongs, namely, to the individual to take personal responsibility for her or his health through a change in lifestyle—even though this may conflict with the social pressures towards poor nutritional habits of living.

Bryan Furnass

University Health Service



The bush walkers

Club welcomes newcomers

Bush walking, international cookery and coffee mornings are some of the group activities offered by the ANU Club for Women for its members. The Club's primary function, however, is to welcome newcomers on the campus and provide a meeting ground for them. It is towards that end that the Club's activities, recreational and service, are geared.

'It is not a case of a group of women sitting down to drink endless cups of coffee', says Thilly Campbell, President of the Club. 'The Club performs a very positive and worthwhile function in bringing together women of different backgrounds and cultures and helping them to fit in a new environment which to some may be completely foreign'.

The Club is a highly cosmopolitan body thus reflecting the character of the University itself. Its membership is open to women largely with past or present University Staff Association connection whether direct or as wives, and women postgraduate students and wives of postgraduate students. Visiting women academics and wives of visiting academics are particularly welcome.

Started in 1960 by Lady Huxley, the Club now has an active membership of 300 and reaches out to more than 500 women through its newsletter. It functions in a highly organised fashion. Club members act as hostesses in the suburbs they live in and receive intimation from the central office about all new arrivals in their respective areas. The newcomer is visited by a hostess in addition to receiving information papers from the central office.

'Our main problem is to get as much information as possible about the difficulties the newcomers face on arrival and during the settling-in period', Mrs Campbell says. 'These difficulties may relate to language barrier or to medical problems or information about schooling and so on. With Belle Low, who is particularly interested in the difficulties newcomers face, we are now trying to categorise

these problems and compile an information handbook which could be handed to newcomers as a matter of routine'.

Mrs Campbell finds bush walking, organised and led by Penny Hebbard, a great help for short term visitors. These can take a whole day at times and are useful in throwing people together in pleasant Canberra environs. It has enabled them to see the natural flora and the creeks and the gorges around Canberra which may be unknown to many Canberra people. The intimacy fostered by the bush atmosphere is conducive to later social contact.

Coffee mornings are usually accompanied by a talk given by somebody distinguished in his/her field, often of University interest but also of outside interest such as women's liberation in Africa. The international cookery group is currently organised by Gillian Hills. It encourages its members to cook and sample the cuisine of other countries.

The Club provides a variety of services to its members such as a hiring service for baby furniture, clothing pool — it is not unusual for people to arrive completely oblivious of climatic conditions — and a new service of block booking of theatre tickets is under consideration. To make it easy for mothers with young children, creche facilities are provided for at the Club's coffee mornings.

Mrs Campbell emphasised that the Club would very much like to get information from newcomers not only about their problems but also on how to develop group activities still further. Those interested should contact her on 512346 or Mrs Low on 498749.

Federal Government should persist with legislation on student fee

Senator Carrick and the Federal Government should persist with their proposed legislation to forbid the ANU, and ultimately the Council, exacting from the individual student that part of a compulsory fee which the Council then permits itself to pay out, in compliance with the wishes of student organisations, local and national, for the support of political, ideological, 'life-style', social, religious or anti-religious causes. The ANU Council has now had a long time to come to its own senses without being legislated against in this matter.

Had it been the DLP that dominated student politics, and had the ANU therefore paid out to the National Civic Council, the Right-to-Life Association, the Lebanese Christians, the Festival of Light, and the Women's Christian Temperance Union, or insisted once again upon the wearing of gowns to lectures, I would have protested much earlier and, I fear, with much greater prospects of success. This is not an issue of 'which political side are you on?': you should

not be compelled to finance one side or another, and you have a perfect right to be utterly indifferent to both, and to the causes which divide them.

Students, like other adults (excepting overseas visitors), are free citizens before being students. The individual's rights as a citizen cannot be over-ridden by any supposed corporate authority of student organisations, or of the University as a quasi-medieval corporation. If the student does not wish to take part in extra-curricular activities, but just wants to get a genuine education, what is there so 'non-university' in that? The Federal Government is not merely entitled, but has a positive duty to legislate, if need be, to uphold the individual's rights.

More than a year ago, I put the foregoing case to Council and Administration in two letters, and have taken it up with no-one else at all; but since the Council has seen fit to authorise public statements about the issue, I feel free to send copies of this to political and other figures.

A.L. Burns

Research School of Social Sciences

Letters to the Editor

Primary prevention of causes of colorectal cancer key to control

Dr Owen Dent (11 May) promotes the prevailing viewpoint of *secondary* prevention of colorectal cancer, namely, the early detection of rectal bleeding followed by a surgical 'cure' of the disease. He fails to mention the fact that the great majority of patients with detectable bleeding are suffering from *non-malignant* conditions of the large bowel such as haemorrhoids, anal fissure or diverticulosis. Although common sense decrees that we should seek medical advice and diagnosis when we experience rectal bleeding or change in bowel habit any general acceptance of the sort of secondary prevention advocated by Dr Dent and his colleagues would undoubtedly increase the already crippling costs of medical technology.

Since the great majority of cancers (including colorectal cancer) are environmentally induced a more rational key to control surely lies in the *primary* prevention of causes. Thus several international epidemiological studies have shown a link between consumption of excess animal fat and colorectal cancer

An occasional series 2

This is the second article in an occasional series to bring to *ANU Reporter* readers comprehensive reports about the work being done at the University about Australia's neighbours. In recent years Japan has emerged as Australia's biggest trading partner. This has not been

without its problems but, as the article illustrates, relations between the two countries are much more stable than most people realise, and economic relations will in the future be much more diversified than in the past.

Australia-Japan trade relations

ANU's Australia-Japan Economic Relations Research Project is about to launch a new series of major studies, alongside its current research program, on key developments in the Western Pacific economy.

The new studies stress: the change of gear in Japanese trade and economic growth and its impact on Australia and the regional economy; Japan's new role in the international economy and international financial markets; the emergence of China and its impact on the regional economy; the impact of rapid growth in Northeast Asia and other Pacific economies; divergences of approach to international economic policy between Japan and the United States, Australia's principal economic partners.

Explaining the new developments in Canberra, the Project's Research Director, Dr Peter Drysdale, said 'Australian economic ties with the Pacific economy now straddle important differences in approach to foreign economic policy and conflicts of economic interest between Japan and the United States and this has to be a major focus in our research program'. Dr Drysdale explained that the program of future work had been developed in recent discussions in Canberra with Kiyoshi Kojima, Professor of International Economics at Hitotsubashi University and Research Director of the Japanese end of the Research Project.

The Project will publish next month a research report which identifies the principal factors conditioning future economic relations between Australia and Japan. This is the second research report following the Project's major report to the Governments of Australia and Japan in April 1976. The new report is one of several recent activities at the Project which underscore the new emphases in research. Dr Drysdale and Dr Alan Rix,

Dr Rix (left) and Dr Drysdale



Research Fellow at the Project, published in the April *Current Affairs Bulletin* a review of the Australia-Japan relationship in the context of Australia's broader foreign economic relations. In March, the Project hosted a seminar in Sydney presented by Dr Lawrence Krause, Senior Fellow at the Brookings Institution, on 'Foreign Exchange Rate Management in the Pacific Region and Developments in the Regional Capital Market'.

The Australia-Japan Project, administratively part of the Research School of Pacific Studies, is a small unit located in Liversidge Street. It stands out among the University's research organisations in having become the centre of an Australia-wide and overseas network of researchers working on various aspects of Australia-Japan-regional economic relations under the direction of the Project, and also as a Project involving research cooperation with a counterpart group of Japanese economists at the Japan Economic Research Center in Tokyo. The staff at the Australian National University comprises one research fellow, a secretary and a part time research assistant. The Project is financed from a grant from the Department of Foreign Affairs and supporting contributions from some members of the Australia-Japan Business Cooperation Committee.

Project has brought together international economists

Under a Research Committee chaired by the Chancellor, Sir John Crawford, and with Dr Drysdale of the Department of Economics, School of General Studies, as Research Director, the Project has brought together over the past six years a strong group of international economists and others to work on various aspects of Australia's economic relations with major Western Pacific trading partners.

The comprehensive inquiry of the Ad Hoc Working Committee on Australia-Japan Relations, which reported to the Government in May 1978, described the work of the Project: (It) 'is valued for its bringing together of information, and for thoughtful suggestions on policy. In Japan the report has helped to catalyse for the Japanese Government a way of thinking about the Australia-Japan relationship favourable to Australian, as well as Japanese interests'.

Basic principles underlying the work of the Project are embodied in both the coming research report and the recent Sydney seminar: the coordination of the research effort at a wide range of institutions; and relevance to policy. The Project has aimed, since its inception in 1972, to act as an initiator and co-ordinator of research not just at the Australian National University, but at universities around Australia and in Japan. It is widely recognised internationally as a leading centre of work on Japan's external economic relations.

The report to be published shortly includes papers by economists from ANU, Griffith, Adelaide and overseas universities. The papers cover various aspects of the Project's research program, including trade in motor vehicles and economic relations between Japan and China. This cooperation between researchers at different universities is also served by the publications and seminar series as well as representation from other universities in the Research Committee of the Project. The present research program is very much an effort being undertaken by ANU in an Australia-wide research effort.

Research has wide ramifications

The Project has endeavoured to provide information to policy makers which can assist in their own thinking about Australia's economic relations. It specifically aims to involve policy makers, from both government and private enterprise, in discussing regional economic issues. The report, edited by Sir John Crawford and Dr Saburo Okita (chairman of the counterpart research committee in Japan), entitled *Australia, Japan and Western Pacific Economic Relations* and presented to the Australian and Japanese Governments in 1976, had a direct impact on the policy approach of both Governments, initially in the negotiation of a new Treaty of Friendship and Cooperation between the two countries. The report was published commercially in 1978 for an international audience under the title *Raw Materials and Pacific Economic Integration* by Croom Helm of London.

Later publications by the Project have continued this interchange, and the seminar series has always had strong support from business and government departments, as well as strong academic participation.

Two of the large scale studies presently under way examine the prospects for Japanese economic growth and their implications for the Australian economy. One is being conducted by economists from ANU, the University of New South Wales and the Japan Economic Research Center, Tokyo. The other looks at long term contracts in the resource goods trade, which extends work already done for the 1976 report. It is being prepared by economists from ANU and Osaka University. There are two studies of Australia-Japan transport links, one dealing with civil aviation and the other with bulk shipping.

Research under the auspices of the Project also includes a comparison of small firms in Australia and Japan, work on trade in motor vehicles, and Japan's non-tariff trade barriers, particularly as they affect Australia's trade in agricultural commodities. The agricultural and resource goods trades are also the subject of another study on Japan-China trade and its effect on Australian trade. Work on the growth of Tokyo as a capital market, foreign exchange rate management in the region, and on the supply and use of nuclear energy in the Pacific region, is among the Project's large upcoming research activities.

Regional economic implications

Study of the regional aspects of Australia-Japan trade have led the Project into a study of the Korean economy and trade relations between Australia and Korea. The emergence of that country as one of Australia's fastest growing customers and indeed one of the world's most dynamic economies, and of China, will have profound long-term effects on Australia's economic relationships with the Western Pacific economies including Japan. Research will centre initially on the prospects for trade in minerals, metals and agricultural goods, based on exchanges between the Project and the Korean International Economic Institute in 1979 and a longer term research program which is likely to begin in 1980.

Briefly ...

Honours. Professor A.J. Birch, Professor of Organic Chemistry in the Research School of Chemistry, has been elected an Honorary Fellow of the Chemical Society of London. Professor J.A. Passmore, Professor of Philosophy in the Research School of Social Sciences, has been elected a foreign member of the Royal Danish Academy of Sciences and Letters. Professor Passmore was recently appointed a University Fellow.

RSBS Open Days. The Research School of Biological Sciences Open Days 1979 will be from Wednesday 4 July to Friday 6 July. The School will be open from 2 pm until 9 pm each day with a public lecture given by two staff members on each day at 7 pm. (Wednesday, John Gibson and Nick Martin; Thursday, Ian Cowan and Barry Osmond; Friday, Steve Shaw and Liz Smith.)

Course in Spanish. The Canberra College of Advanced Education is considering the possibility of adding Spanish to its present range of languages on offer. If introduced, the course will be designed to impart to students practical language skills. The course would require no previous knowledge of the language and would extend over three years. It would be open to all students, including ANU students, wishing to take Spanish as a sub-major in their undergraduate course. Persons interested in the proposed course in Spanish may write for further information to Mr W.F. Mandle, Head of School of Liberal Studies, Canberra College of Advanced Education.

Aid for hurricane victims. Members of the staff of the Research Schools of Pacific Studies and Social Sciences recently organised a collection of \$500 to help the recovery of those affected by the devastation caused by a recent hurricane in Fiji. The cheque for \$500 was sent to the High Commissioner for Fiji in Canberra by the Business Manager of the two Schools, Mr P.J. Grimshaw.

Reporter publication details

ANU Reporter is published on the second and fourth Fridays of each month. The next issue will be published on Friday 8 June, for which the copy closing date is Thursday 31 May, am. Inquiries: Madan Nagrath, ext. 4170/2229.

Obituary

Professor John Conrad Jaeger, Emeritus Professor of Geophysics in the Australian National University, died recently after a long illness, aged 71 years. Born in Sydney on 30 July 1907, he was educated at the Universities of Sydney and Cambridge.

After a distinguished academic career, Professor Jaeger was invited to set up a Department of Geophysics in the Research School of Physical Sciences at ANU. Under the direction of Professor Jaeger the Department of Geophysics (now the Research School of Earth Sciences) developed rapidly into one of the leading research groups of its kind in the world.

Professor Jaeger had a most distinguished career as a mathematician, physicist and geophysicist. He was a man of great scholastic achievement; he published more than 130 articles in the scientific literature, and was author or co-author of six books in applied mathematics and rock mechanics, which are regarded as standard works in their field. In 1954 Professor Jaeger was elected a Fellow of the Australian Academy of Science. He was its Vice-President during 1958-1959, and in 1970 he was elected a Fellow of the Royal Society (London).

Classified

Next closing date: Thursday, am, 31 May, publication date 8 June.

For sale

Beachhouse, Mollymook, attractive 2-bdrms, bushy surrounds, urgent private sale, \$26,000 or offer, 02-6605650.

Boomerangs, guaranteed to come back, free throwing tuition, ideal souvenir, \$5ea, 4410/864017ah.

Hostess food warm trolley; Washing machine, Hoover auto; **Freezer**, upright; all as new, 4296bh/885431ah.

Stereo, National Panasonic, cassette plus amplifier (new) and two pioneer speakers, Paul Hill, B330 John XXIII.

Vacuum cleaner, Sanyo, near new, replaced by one provided by University, \$50, 4199, Michael.

Victa mower with catcher; **TV B/W; Stereo** (Dolby), Sanyo 3 in 1; all as new 4296bh/885431ah.

Datsun 120Y, 1976, auto, 4-door sedan, ex cond, long

rego, \$3800, 4296bh/885431ah.

Holden HG, gd cond, \$1300ono, owner going overseas, 415397ah.

Marina, 1972, 5-mths rego, sound mech cond, many new parts, maintenance history available, \$900ono, 953521bh.

Acres 9.67, Murrumbateman, 21 miles Civic, fenced 3½ sides, mountain views, \$24,000ono, 584808ah.

Accommodation available

House, person wanted to share house near Civic, 3374.

Accommodation wanted

Flat/House, for month of (or part of) June, preferably north-side, for couple/son, 2331 Glenda.

House, 3-bdrms, furnished, near city, for 12 months, Schmeisser, 511034/470022.

Position wanted

Childminding, English girl seeks position as resident childminder with academic family in Australia, Feb–Sept 1980, 513091.

Secretarial

Typing done at home, IBM golfball, experienced, accurate, 884695.

Typing done at home, IBM selectric golfball, fast accurate service, 973409.

Typing, IBM golfball, fast, accurate, reas rates, 883892.

Typing, IBM self-correcting golfball, theses, essays, etc, experienced technical typist, 489080ah.

Typing, electric typewriter, assignments/reports/theses, reas rates, 886518.

Typing, electric typewriter, theses/essays/etc, experienced secretary, reas rates 486107bh/474402 after 6pm.

Typing, IBM Selectric, exp univ typist, reas rates, quick service, 957976 afternoon/evening.

Miscellaneous

Bicycle maintenance and repairs, gd rates, pickup and delivery, 474960ah.

Diary of events

Next closing date for diary items is Thursday, am, 31 May, which covers the period 11 June to 24 June.

Monday 28 May

Chinese Dept and Contemporary China Centre, Film in Chinese – The prelude to marching east (The film describes the war against Japan in northeastern China fought by the New Fourth Army under the command of General Chen Yi in 1940.) 7.30pm, Coombs LT.

Tuesday 29 May

Far Eastern History sem, Dr Michael Godley (University of Hawaii) – The Italian connection: fascism and Chinese nationalism, 11am, sem rm D, Coombs Bldg.

Contemporary China Centre RSPacS sem, Mr Umphon Phanachet – China's foreign trade: some observations on recent developments, 2pm, sem rm D, Coombs Bldg.

Demography RSPacS sem, Dr Michael Cook – The ageing of ethnic groups in Australia, 3.45pm, sem rm A, Coombs Bldg.

Meeting, Miss A. Dargan – Establishment of social club, 5pm, Gateway rm, University House, inquiries 3616.

Wednesday 30 May

Anthropology RSPacS sem, Mr Ananda Rajah – Hinduism in Singapore, 9.30am, Nadel rm, Coombs Bldg.

Botany Dept sem, Dr M.J. Aston – Reasons for different humidity responses of stomata, 1pm, sem rm, Botany Bldg.

Indonesia Study Group sem, Drs Moh. Arsjad – Interaction between patterns of growth in production and employment opportunities, 12.15pm, rm 318, Asian Studies Bldg.

University Lectures for 1979, Prof G.L. Mosse – The myth of the war experience, 8.15pm, Coombs LT.

Thursday 31 May

International Relations RSPacS sem, Major D. Horner – Australia and Allied strategy

in the Pacific: 1940–1946, 11am, sem rm B, Coombs Bldg.

History RSPacS sem, Dr J. Rickard (Monash) – H.B. Higgins: the case for a psycho-biography, 11am, sem rm D, Coombs Bldg.

RSES sem, Dr I. McDougall – Linear volcanic island chains in the Pacific Ocean: recording plate motion?, 4pm, sem rm, Jaeger Bldg.

Friday 1 June

Political Science SGS sem, John Formby – Environmental impact assessment and public enquiries, 11am, rm 1004, Arts III Bldg.

Sociology SGS sem, Ray Rist – Education for minority groups, 12noon, sem rm 2075, HA Link Bldg.

Chinese Dept and Contemporary China Centre, Film in Chinese – Struggle in an ancient city. (The film is based on the novel of Li Yingru. It concerns the underground struggle against the Japanese and their puppet government in Hebei in 1943.) 1pm, Coombs LT.

Monday 4 June

Chinese Dept and Contemporary China Centre, Film in Chinese – Struggle in an ancient city, 7.30pm, Coombs LT.

Tuesday 5 June

Far Eastern History RSPacS sem, Professor J.S. Gregory (La Trobe University) – Western reports on the Taipings: making a documentary collection, 11am, sem rm D, Coombs Bldg.

Philosophy RSPacS sem, Prof Graeme Duncan – Human nature and political theory, 11am, sem rm F, Coombs Bldg.

Demography RSPacS sem, Mr Paul Meyer – Survey and anthropological evidence of the value of children in Java, 3.45pm, sem rm A, Coombs Bldg.

Research School of Chemistry, 'Chemistry in Australia' Lecture Series, Professor G.M. Badger (Chairman, Australian

Science and Technology Council) – Science and technology and the national well-being, 4pm, RSC LT, RSC Bldg.

Wednesday 6 June

Indonesia Study Group sem, Mr Peter Gardiner – Recent estimates of mortality in Indonesia, 12.15pm, rm 318, Asian Studies Bldg.

Botany Dept sem, Mr D. Bagnall – Chilling sensitivity in *Sorghum* species, 1pm, sem rm, Botany Bldg.

Human Geography RSPacS sem, N. Thrift – Informal seminar, 2pm, sem rm C, Coombs Bldg.

University Lectures for 1979, Prof G.L. Mosse – The war and nature, 8.15pm, Coombs LT.

Thursday 7 June 1979

International Relations RSPacS sem, Mr I. Chowdhury – Strategy of a small power in a subsystem: Bangladesh's external relations, 11am, sem rm B, Coombs Bldg.

History RSPacS sem, Dr James Kerr (Aust. Heritage Comm.) – Design for convicts, 11 am, sem rm D, Coombs Bldg.

RSES sem, Dr L. Liu – Is there free silica in the mantle?, 4pm, sem rm, Jaeger Bldg.

Asian Civilizations lecture, Lama Chentse Rinpoche – Beliefs and practices of Tibetan Buddhism, 4 pm, rm 13, Asian Studies Bldg.

AFUW–ACT, Social evening to welcome 1979 graduands, all women graduates welcome, 8pm, Common rm, RSC Bldg. RSVP 2322.

Friday 8 June

Political Science SGS sem, Ursula Doyle – The EEC and associated Third World countries, 11am, rm 1004, Arts III Bldg.

Chinese Dept and Contemporary China Centre, Film in Chinese, Battle of Shanghai. (The subject of the film is the struggle for the liberation of Shanghai during the Civil War. It is set in May 1949.) 1pm, Coombs LT.

Notices

Director for AAUCS. The Australian Vice-Chancellors' Committee (AVCC) invites applications for the newly-established post of Director of the Australian-Asian Universities' Co-operation Scheme (AAUCS). The Director will be the chief executive of the AAUCS and will be located in Canberra. The appointment will be for a period of five to seven years at a level equivalent to that of a deputy vice-chancellor in an Australian university. Applicants should be able to take up duties not later than 31 March 1980. Applications with the names and addresses of two referees, should reach The Secretary, Australian Vice-Chancellors' Committee, P.O. Box 1142, Canberra City, ACT 2601, by 31 May 1979. Further information is available from Mr D.H. Fraser ext 3692.

Overseas scholarships. Under an agreement between the Australian and Japanese authorities a vacancy exists for a lecturer in Australian Studies on secondment to the University of Tokyo for one year from April 1980. Some teaching duties at two other metropolitan universities will also be involved. Applicants should be of senior lecturer to professor level and be qualified to conduct a tertiary level social sciences course in such fields as Australian history, government and international relations. Benefits include travel costs to and from Japan, salary at least equivalent to that currently received in the home institution, free furnished accommodation and other supplementary allowances. Applications close 9 July 1979. Further information may be obtained from: the Secretary, Department of Education, Woden.

Improve your squash. The ANU Social Squash Club is currently seeking new members. The Club offers the opportunity for members to improve their squash by playing socially against a variety of opponents. It is open to staff and students. It has several courts booked on Wednesday evenings from 7.45pm. To join the Club send \$2 membership fee to Roger Brown, C/- School Computer Unit, Research School of Physical Sciences, and put down your name and grade at the Sports Shop for a timeslot the following Wednesday (60c each per ½ hour).

New research report from Australia-Japan Project

The 1979 research report, containing new papers on Australia-Japan economic relations, will be published by the Australia-Japan Economic Relations Research Project in early June.

Edited by Sir John Crawford and Dr Saburo Okita, who presented the Project's major report to the Governments of Australia and Japan in 1976, the book is entitled *Australia and Japan: Issues in the Economic Relationship*. It contains an overview of the economic issue by the editors, and seven other papers by Australian, Japanese and American scholars.

The papers deal with Australian structural adjustment policies (Janet Sutton), Japanese economic growth (Miyoei Shinohara), Japan-China trade (Kevin Bucknall), the iron ore trade and Brazil (Ipppei Yamazawa), the yen problem (Kiyoshi Kojima), Pacific exchange rate management (Lawrence Krause) and the Australian motor vehicle industry (Chris Findlay).

The report will be available from the Project Office at 5 Liversidge Street (ext 4387 or 4762) in early June at a cost of \$3.80 (includes postage).

Staff Centre Wine Symposium

The ANU Staff Centre is organising a wine symposium to be held on the campus from Wednesday 5 to Sunday 9 September. The symposium will be officially opened by the Vice-Chancellor, Professor Anthony Low.

The symposium will take the form of papers presented at formal sessions in the mornings, with the afternoons being devoted to tasting of wines specially selected by the speakers to illustrate their points. Dr Jim Allen, Chairman of the Wine Symposium Committee, described the symposium as the first of its kind bringing together professional wine makers, marketers and consumers.

Admission to the symposium will be restricted to 500 persons with \$30 attendance fee each person. A symposium dinner will be held on Saturday 8 Sept. for which a charge of \$15 each person will be made. The symposium organisers will arrange accommodation for interstate delegates if desired.

A wine trade fair open to the public will be run concurrently with the wine symposium. This will be held in ANU's Melville Hall from Thursday 6 to Sunday 9 September. It is expected that 40 leading wine makers will exhibit and sell wine at this fair.

Get on the move . . .

Throughout second term the Sports Union will be offering ANU students and members a wide range of social and competitive activities in sport and physical recreation. Activities which have already proved popular will once again be offered along with new activities.

Some of the new activities are traditional Chinese massage and aerobic dancing. Intramural activities include basketball, netball, badminton and hockey. A revised ANU Sports Union Newsletter giving full details is available from the Sports Union Building. Further information from Robert McMurtrie, ext 2860.

Below: The Union has a new bar called the 'Knot Hole' for its members. It has been in operation for nearly two months now. With a capacity of one hundred, the bar is open Monday to Friday from 12 to 2.30pm, and from 4.30pm onwards.



Robyn Byrne