Study in Japan

Graham Beverley, who is completing a Bachelor of Engineering at the University, will spend a month in Japan, sponsored by the Mitsui Educational Foundation. It is interesting that Graham will follow another Beverley, his brother David, who spent a year on a Mitsui scholarship in 1978.

Before beginning his Mechanical Engineering course at the University, Graham was a student at the old Newcastle Boys' High School at Waratah. Like his brother, he is employed by the BHP Co. Limited.

The Mitsui Educational Foundation was established by Mitsui and Company (Australia) Limited several years ago to enable Australian students to visit Japan for study. Australia's airline Qantas and the Australian government will assist the students with travel and daily expenses. Knowledge of Japanese is not a basic requirement.

Extension of time

The Vice-Chancellor expects that the Council will be asked to extend the period in which responses to the Review of University Finances Report will be accepted.

The Council originally announced that it would welcome submissions until October 17 and would refer them to the Finance and Personnel Committee in November.

Professor George told those who attended his Third Term meeting with staff on October 7 that because of the University's difficult financial position the most important matter under consideration was the reports of the two Working Groups on ways in which the University could adapt to the future financial climate.

"It seems to me that since it took a year to bring the investigations to this stage we should get discussions moving. The Council will probably need to hold a special meeting to consider the Review adequately.

"Senate considers that an extension of time is desirable so that serious attention can be given to the recommendations."

The Vice-Chancellor said that Professor L Short had written his paper on ways in which the staff establishment could be reduced in response to members of Senate's concern at the automatic freezing of staff positions to reduce expenditure.

"Senate has not resolved its mind on the paper and will not say anything about it. It doesn't form any part of the comments on the Review of the finances."

"I repeat that I hope the Blue Book (the Review) gets a serious and considered response and that useful information is sent to the Finance and Personnel Committee and the Council.

The Vice-Chancellor referred to the investigations of the Academic Salaries Tribunal, Mr Justice Ludecke, who was presently hearing evidence at different universities and colleges of advanced education. The Federation of University Staff Associations had submitted that academics should get a ten per cent increase across the board.

It's pay up time!

The Bursar's Division forwards invoices to students to meet the cost of lost Library books and other charges, including outstanding debts to Edwards Hall, Library and Parking Fines.

The attention of students is directed to the policy of the University Council that students should not be permitted to:

- complete re-enrolment for 1981,
- be issued with a transcript of their academic record or proceed to Graduation if they are indebted to the University.

So now is the time for you to check amongst your papers and make sure there are no outstanding fine notices that you have overlooked. If you do have any fines, charges or other debts to pay, please take the fine notice or letter to the Cashier and pay the amount before the end of term.
Letters to Editor
In his paper C62:80 Professor Short details a number of procedures that the University Council might adopt to reduce the number of academic staff of the University. Professor Short's paper is not concerned with the standing of this University among the academic community - on the quality of its research and teaching or on the calibre of its graduates and the effect that such reductions in academic staff would have on both these fields of endeavour. It looks at the University from a financial viewpoint purely and solely. Nor is it concerned with the human aspect of its proposals - what it would mean to an academic who has given good service to the University and with a family to support, to suddenly find himself out of work with very little prospect of finding employment elsewhere. Is the University to be insensitive to human problems?

It is stated in the paper that "in practice academic appointments are regarded as carrying protection from dismissal in 'extreme cases'" and there is a very valid reason for this to be the case. Universities have been regarded as Institutions where the search for truth is inviolable, as institutions where academics may carry out their work without fear of dismissal for attacking authority or espousing unpopular viewpoints. There are many cases in the history of Australian universities where tenure has protected such academics. The removal of tenure would certainly give more flexibility to the management of the University, but it would greatly weaken its position of intellectual leadership in the community. It is much easier to say nothing than to speak out, if speaking out may mean you lose your post.

The recommendation to Council by Working Group 1 that academic appointment below the rank of Professor should be for a fixed term with tenure to be awarded at a later stage only if warranted is also one which can only have the result of lowering the calibre of the academic staff. It is certainly open to challenge that all posts at all levels in this University have proved to be successful but this proposal can only have the following results. If you behave yourself for your fixed term (three or five years) and don't rock the boat you may get tenure. Is that the kind of academic this University wishes to attract? At the same time an academic who accepts a fixed term appointment will be unable to carry out a long term research programme, will probably try to publish as many papers as possible to enhance his reputation, can hardly develop the expertise of an office teacher and will most certainly be looking for a permanent job all the time and particularly in the final year. Is this the kind of academic this University wishes to attract?

If the University wishes to attract academics of calibre from Professors to Lecturers it can, as its regulations now permit, to appoint applicants to tenurable positions - giving both the University and the applicant up to three years to find out whether the arrangement is satisfactory.

The next problem raised in the paper is the question of redundancy - and an academic may become redundant if at any particular stage the number of students in his department falls below a certain magic level. Who is to go will depend on relative competence! Who, in the name of heaven, is going to make that decision? It is very doubtful if anyone outside a department would be in a position to judge on the competence of an academic in another department, and it is very doubtful that departments would be allowed to take such decisions.

The paper raises the questions as to whether tenure should be afforded to members of staff who are unable or unwilling to meet the demands of teaching and research at a reasonable level of performance. If there are such members they are relatively few in number. The great majority of academics within the University perform well above the line of duty. All institutions have some who do not. It is a grave mistake to introduce regulations aimed at the few which affect the great majority for in this event the whole institution suffers.

There are some members of the academic staff who have very lucrative private practices and whose responsibility to the University is minimal. Their competence is not in question but some avenues should be explored with them as to how they could be employed on a fractional full-time basis with, one would hope, satisfaction to their conscience and financial benefit to the University.

The final proposal in shedding academic staff refers to the enforced retirement of academics over 60 years of age, though it is not proposed to enforce this where a staff member has dependent children.

One hopes that this is not a veiled attempt to persuade a group of academics who wish to hold their post to procreate in late middle age. The opportunity exists for academics to retire at 60 or if they choose to retire at 65. No case is made that those academics between 60 and 65 are not carrying out their duties satisfactorily.

 Provision could be made for those who wish to retire early, and in England the Crombie scheme makes such provision - it is commonly known as the "gold handshake". Compulsory dismissal or retirement is an entirely different question and any attempt to amend the University By-Laws to this end should be fought unremittently by the academic staff.

G. CURTHOYS, Department of Chemistry.

I read your article on Margaret Kavanagh, President elect of the Students' Association with great interest.

I agree with her statements that "It's about time the SRC concerned itself directly with students". The 1980 SRC has been the best for some years, however, it failed in many ways because of (1) the apathy of some SRC members who see the SRC as some sort of elitist body to be used for their own ends.

(2) The apathy of the student body, here is where it all really starts. If students got behind the SRC with issues such as TEAS and other programs we initiated then the SRC would function as a real Student Union.

I can proudly say that everything I promised in my 1979 policy for President has been forwarded to the SRC. It is only because of the slackness of the SRC and I suppose, the Student Body that half of these policies were not put into practice in 1980. This disappointed me greatly.

I sincerely hope Margaret Kavanagh escapes this problem, because she is, indeed, a capable lady with some very good policies.

Greg Holding, PRESIDENT.
Chair filled

The Vice-Chancellor has announced the appointment of Dr. T.J. C. Boulton to the Foundation Chair of Paediatrics in the Newcastle School of Medicine. Dr. Boulton was educated at Edinburgh University, obtaining his B.Sc. (Hon.) degree in 1967 and his M.B., Ch.B. degrees in 1969. In 1973 he obtained his membership of the Royal College of Physicians, Australia and his Fellowship of the same College in 1977. He was awarded the degree of Doctor of Medicine from Edinburgh University in 1980.

Dr. Boulton received his paediatric training in Australia and his clinical subspecialty interest is endocrinology, with particular reference to diabetes and growth disorders. After his surgical residency in Edinburgh, he did his paediatric residency at the Princess Margaret Hospital for Children in Perth, Western Australia (1970-71), followed by a year as neonatal registrar at King Edward Memorial Hospital for Women in Perth. He then moved to Melbourne and served there in various capacities until

Teacher Education: Auchmuty Report

The long-awaited Report of the National Inquiry into Teacher Education has been released. The inquiry was commissioned in November 1979 with terms of reference later described by its Chairman (Professor J.J. Auchmuty) as "wide and diffuse". The Committee was required to report on "present methods and procedures in teacher education and to make recommendations which might assist in achieving improved teaching and learning in Australian schools, both government and non-government". It was to concentrate on questions of quality rather than quantity and to state its assumptions about the objectives of Australian education for the next twenty-five years.

The Committee had recognised that despite the universal support for the ideal of quality in education, it is difficult to obtain agreement regarding the characteristics of quality and the means whereby it might be achieved. What is required is a consensus about social aims and purposes, or about the nature of the good life and the good society. The Committee's working assumptions are set out in a series of statements that serve as the basis of its analysis of educational practice.

The report is structured to assist education with the extension of opportunities for all, of equal opportunities of access to teaching and learning experiences. It is required that all pre-service courses should contain a "core of studies and learning experiences" consisting of:

- subject disciplines;
- curriculum design and teaching methodology;
- human growth and development;
- theory of education;
- Australian society;
- methods of inquiry and research;
- practical experience.

The Committee's recommendations with respect to inservice education include the provision of a system of sabbatical leave (one term after seven years) for all teachers, and the extension of opportunities for a variety of inservice programmes. Tertiary institutions are urged to provide non-award courses for which appropriate funding provision should be made.

Central to the report is a chapter dealing with the statement of objectives for teacher education. From a series of general objectives is developed a description of the ideal classroom teacher in terms of personal and professional characteristics. Any institution engaged in teacher education could with advantage apply this material in the development of its own statement of objectives and to the assessment of its programmes.

In summary, there would appear little chance of this report ushering in a new era of teacher education in Australia. On the other hand it does contain important statements of principles that should be studied in relation to the critical review of current practices.

L.N. SHORT.
12 month visit

Dr. Charles du V. Florey, Reader in Community Medicine from St. Thomas' Hospital Medical School, London, is here as a Visiting Lecturer in Community Medicine. He was born in Sheffield, England, of Australian parents, but apart from a brief visit, at the age of 18 months, to this country, it is the first time he has been on this side of the world.

After his medical education in the United Kingdom, Dr. Florey went to the United States and studied for a degree in Public Health at Yale University. He remained there to carry out research in serological epidemiology and then later to investigate aspects of cardiovascular and renal disease.

On leaving the United States in 1969, Dr. Florey worked for the British MRC for two years in Jamaica, West Indies, studying the frequency of diabetes in a rural population and determining its relation to cardiovascular disease. On return to the United Kingdom in 1971 he worked in the Health Services Research Unit at St. Thomas' Hospital, principally on air pollution and its effects on health and on the relation between carbohydrate metabolism and cardiovascular disease.

Dr. Florey is spending a year in Newcastle with his wife and two children where he will be helping in the research in Community Medicine and in the preparation of material in that subject for medical students.

The Star Show

John McCallum, Tutor in Drama at the University, is co-author of The Star Show, a new play which the critics have praised. The play's season at the Hunter Valley Theatre Company opened on October 10 and runs until November 15. McCallum (second from left) is pictured with David Wood, Alan McFadden and Taft.

EXAMINATIONS

The final examination timetable is now available in booklet form. Some alterations were made to the provisional timetable so make sure you collect a booklet for your own reference; enough have been printed for every student to have a personal copy. They can be obtained from the Library, the Examinations Section, Room G75, McMullen (Administration) Building and the foyers of most other buildings.

IMPORTANT REMINDERS

Ten minutes reading time is given for all examinations, so be ready to enter the examination room at least 15 minutes before the commencement of each examination.

Calculators may not be taken into the examination room unless they have been specified on the examination paper as an aid.

Leave your examination answer book plus other supplied material on your desk. Do not risk having your answers cancelled by thoughtlessly taking from the examination room anything other than your examination question paper and your personal belongings.

Room and desk allocations: Name lists of students expected to sit for each examination will be put on the relevant departmental notice boards. These will show the examination rooms and, in most cases, the desk number.

The heading and instruction section of each examination paper will also be displayed with the listings so that students can check the conditions for each examination.
**Fact-finding Tour**

Professor Graeme Jameson, Head of the Department of Chemical Engineering, will join a group of people from the Hunter Region for a fact-finding tour of some aluminium smelters in the United States.

The group leaves on October 19 and is scheduled to return on October 30. In between it will pay visits to the Eastalco Aluminium Plant in Maryland, the Intalco Plant in Washington State, the Mount Holly Plant in South Carolina, Cornell University in New York and the University of Wisconsin. Aspects of aluminium production to be studied include pollution and the effect of fluoride on livestock and plant life. The tour has been arranged by the Hunter Development Board, which issued the invitations to people representative of community organisations. All costs will be covered by the Hunter Valley Aluminium Company (Alumax - BHP Co., Ltd.).

Professor Jameson says he regards his invitation as recognition of the local community of the fact that the University can contribute to meeting regional needs. Going to the United States is one way in which our staff with technical expertise can help the University to fulfill its community responsibilities.

He had been included in the tour because of his interest in the problems of pollution and the effects of fluoride emission from aluminium smelters. Presently, he and a few other members of the University's staff were assessing the Environmental Impact Statement in connection with the proposal to establish two aluminium smelters in the lower Hunter. The staff members would probably adopt a cautious attitude to the proposal until the evidence "for" and "against" had been fully analysed.

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**Surveying the Hunter**

Book Review by: Donia Rowe


Surveying the Hunter is a book to be read and enjoyed. It will be enjoyed by the serious reader and by the browser. It is a book about surveying, written by surveyors; and tells the story of the role of surveyors in developing New South Wales and, notably, the Hunter Region.

Although Surveying the Hunter is a slim volume (88 pages), there's plenty of meat in it. It illuminates the career of the early colonial surveyors: the organisation of the profession; surveyors' professional training; and the maritime, land and colliery surveyors who shaped Newcastle, its hinterland, the mines, and the harbour. Many surveyors had varied careers and sometimes performed duties quite unassociated with the usual ones of measuring and mapping. The first surveyor general in New South Wales, Ait, served as a member of a commission for the trial of pirates on the coast of New South Wales. Barrallier, who surveyed the estuary of the Hunter River in 1801, was responsible in his career for supervising the erection of Nelson's Column in Trafalgar Square.

A selection of documents at the end of the volume throws more light on the surveyors' daily lives. As one document of 1890 shows, surveyors knew the practical value of soaping their socks for keeping off leeches while working in the bush. If soap was useful, the idea of training and employing female surveyors was frowned upon. What would to-day's feminists have to say to the comment in 1893 that:

Perhaps the time is not far distant when the Survey Lecture Room at the Sydney University will be crowded with 'sweet girl graduates'... This is a progressive age, and women are coming to the fore in many unexpected ways, but we incline to hope that we shall not live to see a female surveyor shouldering her theodolite up a steep hill on a hot day...

Surveying the Hunter owes its publication to the untiring work of many people, including Dr. John Fryer, Senior Lecturer in Surveying in the Department of Civil Engineering; Mr. Astley Pulver, retired surveyor and grand old gentleman; and Mr. John Armstrong, the University's Publicity Officer. It is splendidly illustrated and quite inexpensive in the soft-cover edition. This reviewer could find little in it to fault. It should find a place on the bookshelves of everyone interested in the history of surveying and the Hunter Region.

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**$10,000 awarded**

Susan Wright, a Ph.D. student in the Faculty of Education, recently won a $10,000 national scholarship provided by the Australian Preschool Association. The Award, in honour of Mrs. Frances Derham, a Victorian art educator who worked towards the promotion of free and creative expression in young children through music, dance, art and drama.

Susan will survey the role of the arts in child development by working and studying for approximately six months in Australia and three months in England, Hungary and the United States. At the completion of the scholarship period, she will write a report and workshops which will be offered throughout Australia.

Susan is a graduate of the University of Alberta, where she gained a degree of Bachelor of Education in 1974 and a degree of Master of Education (Elementary Music Education) in 1978.

She taught music at the primary school level in Edmonton, Alberta, and since her arrival in Australia has taught in the Education Faculty at the University and at the Newcastle College of Advanced Education. For the past 19 months Susan has been employed by Newcastle Technical College in the Child Care Course.
Bulk Solids Handling Research

AN OVERVIEW BY: A.W. Roberts

The handling of materials in bulk form is a major industrial activity throughout the world. One of the more important applications is in the transport, storage and handling of raw materials in the manufacturing processes of the food and power industries in Australia, in particular in the Hunter Valley, the coal and energy areas of New South Wales and Queensland. In this regard, the Department of Mechanical Engineering has had a major role in the field for several years. In this article Professor Roberts, Head of the Department, delves into the considerable progress made by the Department.

Broadly, this research encompasses many aspects of bulk solids, analysis and design of storage bins and conveyors, and economic evaluation and optimisation of bulk handling systems. The Department has also included the development of computer-aided design procedures for the optimum design of storage bins and conveyors.

The research has resulted in a number of publications, and many of these have been presented at international conferences. The work of the Department in the bulk handling area has won recognition.

STORAGE AND FLOW AND BULK SOLIDS: In order that the basic philosophy of storage bin and silo design may be appreciated, it is worth briefly recalling a principal requirement of engineering design. By way of illustration, when a structural engineer designs a bridge or a mechanical engineer designs a machine, a basic requirement is that the strength of the structure is obtained and that the materials and other materials to be used in the bridge or machine elements are selected to ensure that they are able to withstand, within safe limits, the stresses induced as a result of the loads applied. While perhaps not immediately apparent, the problem of designing a storage bin to hold and then discharge a material such as coal is the same, with but a few differences in the normal engineering design problem. In this case the basic objective of obtaining structural integrity in the bin itself forming the actual flow channel. The flow is reliable, predictable and general is the desired objective. It occurs when the walls of the hopper section, that is situated at the top of the hopper, are sufficiently steep and smooth. On the other hand, funnel-flow occurs in certain bottom bins or when the hopper has rough walls with insufficient slope angle. This mode of flow is characterised by the material sifting off the surface and discharging through a vertical channel which forms within the material within the bin. The flow is erratic, with a strong tendency to form stable hollow pipes extending vertically upward, or in other words, these pipes obstruct discharge and reduce the bin capacity. When flow does occur, segregation takes place, there being no re-mixing during flow.

A fundamental aspect of the bulk material handling research involves the testing of the bulk solid to determine the strength and flow properties for the worst conditions likely to occur in practice. In this respect such factors as moisture content, particle size distribution, temperature and storage time are important. With respect to the latter, it is worth noting that most materials continue to consolidate and gain strength with storage time. By way of example, typical run-of-mine coal with moisture content in the range 10-15% will show an appreciable, but not unacceptable, increase in strength after two days or so (that is, after this period of weekend). However, after five days or longer the strength may increase to such an extent that it is impractical to design a satisfactory storage bin to hold and discharge the material by gravity after this period of time. It is also worth noting that the strength and flow properties of materials such as coal will vary significantly from one type to another, and for this reason it is necessary to test such materials for the range of conditions of storage and handling to be employed.

Comprehensive laboratory test facilities have been established in the Department of Mechanical Engineering to aid the bulk solids handling research. Much of the equipment has been designed and manufactured within the Department. In the powder characterisation and flow property testing laboratory the strength and relevant flow parameters are determined under the range of typical field conditions. A system of experimental work at Newcastle. Through the University's consulting company, TUNRA Limited (The University of Newcastle Research Associates), a number of projects have been completed and several are in progress. These include a variety of projects related to the design and construction of storage bins and handling plant and to date this work has been associated with some 70 companies spread throughout Australia (see attached map).

For some of these companies the bulk handling group within the Department is retained as consultants on a continuing basis. Much of the work has been associated with the Hunter Valley, with projects undertaken on behalf of the Coal, Aluminium and Refactories industries. It is clear that the bulk materials handling operations are a major activity of the industries of the Hunter Valley, a fact which reinforces the research specialisation in bulk handling at this University.

On the broader Australian scene, the work has been associated with the aluminium companies in Western Australia, power generating and mining operations in Queensland, food processing industries in Victoria and the manganese mining operations on Groote Eylandt.

In one project, work is being performed for a major chemical company, this work being concerned with the bulk handling of ammonium nitrate, an explosive material used in mining operations. Bulk storage facilities for this material are located at various mining sites throughout Australia.

A parallel activity of great importance has been the development of a non-intrusive continuous output bin level indicator and associated electronics for flow control. This system has been designed and developed by two Professional Officers wholly within the Department of Mechanical Engineering. A number of these have been installed in the coal and other industries of the Hunter Valley and considerable interest is being shown by a number of companies throughout Australia.
Through the bulk handling research activities for industry, five technical staff members are being employed by the Department. These include one Professional Officer, two Technical Officers and two Laboratory Assistants. These positions are fully supported by the industrial research funds.

UNDERGRADUATE AND POSTGRADUATE TEACHING AND RESEARCH: In the Department of Mechanical Engineering specialised elective courses in Bulk Materials Handling are offered at the senior undergraduate and postgraduate levels as part of the engineering degree programmes. These courses integrate the latest research developments with the design of coal handling facilities. With the research being planned in order that each centre complements the work of the other. The cooperation of the two groups has been formalised through the establishment of a joint research group, TUNRA Solid Handling Research Associates (TUNRA) as a Division of TUNRA Limited. The laboratory facilities and research activities at both Newcastle and Wollongong are unique to Australian Universities and are highly recognised throughout the world.

CO-OPERATION WITH THE UNIVERSITY OF WOLLONGONG: The Department of Chemical Engineering at the University of Wollongong also has a strong interest in the area of bulk materials handling. The two groups at Newcastle and Wollongong work in close cooperation, with the research being planned in order that each centre complements the work of the other. The co-operation has been formalised through the establishment of a joint research group, TUNRA Solid Handling Research Associates (TUNRA) as a Division of TUNRA Limited. The laboratory facilities and research activities at both Newcastle and Wollongong are unique to Australian Universities and are highly recognised throughout the world.

INDUSTRIAL AWARENESS SEMINARS: Through the activities of TUNRA BSHRA, industrial awareness seminars on bulk materials handling are held from time to time at the University of Newcastle. These seminars involve specialists from the two Universities and consultants and researchers in Australia and overseas. The seminars have always attracted considerable interest, with delegates coming from every State of Australia. A seminar held in August 1979 attracted 120 delegates. A seminar is planned for November this year.

The Department has also been invited to present seminars overseas. To date two such seminars have been presented, one in London in February 1979 and one in Wiesbaden, Germany, in January 1980. The latter seminar was part of the Powder Engineering '80 International Conference on Powders and Bulk Solids. These seminars have been organised by the Powder Advisory Centre, London.

OVERSEAS LIASON: Close liaison in the bulk handling research at Newcastle is maintained with researchers and institutions in other countries of the world. In particular, a cooperative research programme has been initiated with the Department of Mechanical Engineering at the University of Twente in the Netherlands. This Department has an active interest in problems of coal handling, coal combustion and general bulk handling. The co-operative programme is a result of the recent study leave of Professor A.W. Roberts at the University of Twente. The joint project is concerned with the application of spreader stokers to coal feeding in fluidised bed boilers and with the design of coal handling facilities. With respect to the latter, particular interest centres around large enclosed storage silos which offer advantages in terms of environmental cleanliness.

FUTURE DEVELOPMENTS: The work of the Bulk Materials Handling Group within the Department of Mechanical Engineering will continue to develop the research in the various areas indicated.

INDUSTRIAL CONSULTANCIES

These have included visits to Canada, Australia, New Zealand, Europe and South Africa. The work of the Department has been supported by the industrial research funds of the Department of Mechanical Engineering which are awarded to the Department by the New South Wales Government.

The work of the Department is supported by the industrial research funds of the Department of Mechanical Engineering which are awarded to the Department by the New South Wales Government.

Professor Alan Roberts, Head of the Department of Mechanical Engineering and Peter Lewis, Technical Officer, inspect a flow bin in the Department's workshop.
Community Medicine post

Dr. James Dickinson has taken up the post of half-time Fellow in Community Medicine. A graduate from the University of Queensland, Dr. Dickinson has spent the last four years in Canada, two at McMaster University Health Sciences Centre as a resident in Family Practice and two in McGill University as a Teaching Fellow in Family Practice. He spent time in both of these places also working in the Department of Epidemiology, with a particular interest in colorectal cancer.

Dr. Dickinson is accompanied by his wife, Barbara, who is a veterinary surgeon. He will be involved with teaching and research in Community Medicine on a half-time basis, the remainder of his work being in a local general practitioner's surgery as an OP.

Visiting Professor appointed

Professor Carl M. Shy has been appointed Visiting Professor of Epidemiology at the University. Professor Shy is from the Institute for Environmental Studies, University of North Carolina at Chapel Hill. He has a longstanding interest in environmental effects on health and has undertaken extensive research in this area with the Environmental Protection Agency of North America.

Professor Shy is working principally during 1980 and 1981 at Royal North Shore Hospital, Sydney. In its Clinical Epidemiology Evaluation Unit and at the Commonwealth Institute of Health in Sydney. It is expected that Professor Shy will be making regular visits to Newcastle to confer with students and Faculty in the Faculty of Medicine.

Special Studies

Australian Academics for Peace in the Middle East are organising a Study Mission to visit Egypt, Israel and Jordan during the summer months. The purpose of the mission will be to meet with government leaders, academics, journalists and others to study the present situation and future prospects for peace in the Middle East. Visits to many significant locations are included, and participants will receive high level briefings.

DATES - Egypt: December 9 to 15; Israel: December 17 to 20; Jordan: December 22 - January 1.

COST - Israel: $1,550; Egypt supplement: $270; Jordan supplement: $170.

The Study Mission is limited to 15 participants.

More details can be obtained by contacting Professor Vahl Davis, School of Mechanical Engineering, University of New South Wales, P.O. Box 1, Kensington, 2033.

Dr. Keats explained that the aims were to examine the cultural basis of conceptions of the meaning of intelligence and compare what was considered to be intelligent in children with what was considered to be intelligent in adults by different groups within the cultures of China and Australia. "The study has significance both within each of the two countries and cross-culturally", she said. "Within each country it may show whether there is consensus or disagreement among various groups in society, including teachers and those being taught, as to what are the expectations for good intellectual performance and hence whether those expectations are seen as being encouraged in present schooling. "It's crucial, I think, that the significance lies in the contribution it may make to the theoretical questions of the universality of the construct of intelligence".

The two cultures in which the study would be carried out, Australia and The People's Republic of China, offered a striking contrast in many cultural values. Should few differences be found, the similarity might be regarded as evidence for shared values in regard to the nature of intelligence which could then be assumed in assessing other evidence involving intellectual performance.

If substantial differences were obtained, Dr. Keats said, different sets of criteria and judgments would be necessary in assessing such evidence and the construct of intelligence as interpreted by Western psychologists should not be regarded as having generality across Eastern and Western cultures.
JOO WAN LEE first came to Australia in February, 1975, under a Colombo Plan programme backed by the Korean Ministry of Science and Technology and the Australian Development Assistance Bureau. Under this he spent a year at Sesto Titan while undertaking a course in Powder Metallurgy at the University of Newcastle. He then enrolled for a Higher Degree in the Department of Metallurgy and in November, 1979, successfully completed his work for a Ph.D. He has now returned to Korea and is engaged in the development of hard metals and precision control systems at the sintered carbide plant of Korea Tungsten Mining Co. Ltd.

Waste seminar

The Economies of Packaging Waste Recovery is a half-day seminar to be offered by the Packaging Council of Australia at the University of Newcastle on October 29. The Minister for Planning and the Environment, Mr. E. Bedford will officially open the seminar and the Vice-Chancellor, Professor D. George will speak at the seminar dinner in the Staff House. The seminar will be held in the Faculty of Medicine Building.

Guinness record?

When members of University's Fourth Grade Cricket team arrived at Dalby Oval, Stockton, for the first match of the new season they had no idea that it would go down in the annals of the game in Newcastle. Sent in to bat on a dubious wicket our team's opening batsmen made 100 runs in just 42 minutes. By the tea interval (after two hours' play) the score was 3 for 92. Shortly afterwards University was dismissed for 373 (Alan McKinnon top score of 132, Steve Ridley 72).

The overall result of this work is that a clearer picture has emerged of what takes place in tungsten carbide-cobalt compacts when they are sintered. It is hoped that it will aid the improvement in design of carbide containing materials for use in cutting tools.

Changing your Address??

Before the end of the year the University will be mailing some important correspondence to students. This will include examination results, letters about prizes, re-enrolment materials and, for some, letters about unsatisfactory progress.

If you have or will be changing your address for correspondence please fill in a Change of Address form and lodge it at the Student Administration Office.

If you will be absent from your address for a short period of time you should make arrangements for someone to receive your mail and hold it or forward it to you. If need be, Australia Post will do this for you for a small fee.
Notwithstanding the fact that brick masonry is one of civilisation's oldest forms of building construction, its behaviour under stress is not understood much at all.

Dr. A.W. Page, Lecturer in Civil Engineering, was awarded $11,320 by the Australian Research Grants Committee for a research project in connexion with the deformation and failure of brick masonry under biaxial stress.

He explained that the grant would be devoted to experiments and a computer simulation program intended to provide structural engineers with more realistic design information so that the risk of buildings collapsing would be diminished.

Until the mid-twentieth century, the design of structures was based on empirical methods which evolved over centuries of use. Dr. Page said. Cumbersome, unsound methods had resulted and it was only in recent years that the concept of "structural masonry", involving a rational engineering approach to design, had emerged. Loadbearing masonry structures had become competitive alternatives to concrete or steel framed buildings for many applications.

Unfortunately research into the behaviour of masonry in general, and brickwork in particular, had not kept pace with these developments. Very little emphasis had been placed on the development of a fundamental theory of failure for brickwork to allow the prediction of local failure anywhere in a brickwork panel, he added.

Perennial Student?

New arrival on campus, Coral Bayley-Jones is a Commonwealth Postgraduate Scholar who is undertaking research towards her fifth higher degree qualification, a Master of Philosophy degree in Geography from the University of Leeds. Since 1961 Coral has changed her address to C/- The University of ... so and so on numerous occasions.

These are her qualifications:

A Bachelor of Arts degree with Honours in Geography from the University of Leeds, a Diploma in Education from the University of Cambridge, a Diploma in Recreation from the University of Western Australia, a Master of Philosophy degree in Recreation from Murdoch University and a Master of Science degree in Urban Studies from the University of Salford.

At the University Coral is pursuing Doctoral research into the spatio-temporal relationships between tourism and urban processes under the supervision of Dr. Don Parkes, Senior Lecturer in Geography. The project results from some of her past academic activities.

In 1977 she submitted a thesis for Murdoch University's first higher degree and this dealt with holiday making behaviour in relation to two major tourist resorts. She won the Australian National Travel Association Award for this investigation.

She has written many articles concerning the relationship between tourism and urban planning, an interest first generated when, after graduating from the University of Leeds, she won a City of Bristol Award to go to San Juan, capital of Puerto Rico. There she studied for about three years. She was afforded a civic reception and she delivered a lecture at the Geographical Research Institute of the Hungarian Academy of Science.

As a Ph.D. student she expects to work at this University for about three years. She elected to take up a Commonwealth Scholarship at the University so that she could work with Dr. Parkes, leading researcher in the developing field of chronography.

New Book

Professor Clive Croxton, Assoc. Professor in Mathematics, is the author of Statistical Mechanics of the Liquid Surface, just published by John Wiley in 1981. The book is the first research level text to set out the theoretical foundation of the subject.

The theory of anisotropic fluid systems, in particular the liquid surface, has grown steadily over the past decade. Within the last two years there has been a burgeoning interest in the liquid surface with the discovery of highly controversial new features relating to the role of surface capillary waves. The book reviews the literature of the past decade up to and including the most recent developments.

Apart from the introductory chapters which establish the statistical mechanical foundation to the subject, the book has chapters relating specifically to molecular fluids, liquid metals, mixtures, liquid crystals, water, polymer sorption, quantum fluids and computer simulation. The book concludes with a chapter on recent developments compiled whilst the book was in press.

Professor Croxton, who was recently elected Fellow of the Institute of Physics (London) and Fellow of the Australian Institute of Physics, wrote five previous books on the liquid surface. In addition, Russian for the Mathematician and Physical Scientist, based on a course given by him at the University, will be published shortly. He is preparing a parallel text on the Chinese language.

He recently attended the International Liquid Crystal Conference in Kyoto, Japan, and the International Conference on Statistical Mechanics in Edmonton, Canada.

Student on Council

When University News went to press, students of the University were casting their votes in the election for a student member of the Council. Ian Murray Chaussierville, a Medicine student, and Gregory Raymond Holding, an Arts student, are contesting the election.

The successful candidate will hold office on the Council from January 1, 1981 to December 31, 1982.
SPORT

The Inter-Varsity Table Tennis Contest was hosted by the University of Sydney and lasted a whole week.

Last year's winners - our University - were runners-up this year. Newcastle University students, Robert Haberl and Philip Horton, won the Men's Doubles. Robert Haberl, with a partner from Sydney also won the Mixed Doubles. The third player representing our University is Peter Jones.

A University team, students Robert Haberl, A. Yah, Keith Farrell and Craig Harcombe, competed in this year's Newcastle Table Tennis Association's A Grade Winter Competition. They finished runners-up. The Captain of the winning team (Trident) is Phillip Horton. The A/R grade was won by Avengers, Captain of which is Arnis Lee (Planner's Division). The 1981 Newcastle and District Championships was won by Robert Haberl (singles), Robert and Gary Haberl (doubles), Phillip Horton, Tony Elloy (junior doubles).

These results are the outcome of cricket matches played in the first round of the new season which involved University:


Thirds - University 8/332 (J. Hayes 109, S. Nontsou 103, J. Torpey 4/31).

Fourths - University 373 (A. McKinnon 132, S. Ridley 72, M. Neild 49) defeated Stockton 38 (P. Watterson 6/19 including hat-trick, J. Parsons 3/4 including hat-trick) and 61 (J. Parsons 4/1 including hat-trick).

A team representing the Newcastle University Biology Society was the winning category H team in the 1980 Newcastle Fun-run held on October 12.

The team was composed of a graduate student, Daniel Ojaklev, who completed the course in 49 minutes and 20 seconds, undergraduate, Charles Jeffries (50:20) and John Cox (54:15), and Senior Lecturer Dr. Tim Roberts (59:25).

Other members of the Society who ran were Assoc. Professor Russell Jones (48:03), a graduate student, Chris O'Neill (52:00) and a Tutor, Jim Stanger (66:30).

University Boat Club hold a rendezvous at the Raymond Terrace Aquatic Centre every Sunday from 9 am to noon. Contact the expert, Tom Osborn, and open the door to a rowing career.

The Engineering Fraternity's membership has reached 100 this year. Pictured are some members at a recent Fly Roast at Scobie Heath, during which the Fraternity and the Medical Society competed on the cricket field for a challenge trophy. Medals were the victors in the last over. More than 100 people attended.

Off to Canada

Professor Clifford Hooker will leave for Canada late this month to take charge of a national seminar on Research Priorities in the Interface between Science and Human Values.

Sponsored by the Canadian Social Sciences and Humanities Research Council, the seminar will bring together scientists, social scientists and arts scholars from across Canada, who have been meeting in four regional groups.

Professor Hooker organised an initial national review of the area in 1979, which appeared as the research publication The Human Context for Defence and Technology, by the Research Council, in April, 1980. Subsequently, he was asked to direct the 1980 inquiry process, whose aim is to prepare recommendations to the Research Council as a basis for a major long term research effort by the Council beginning in 1981.

Donations

The Japan Foundation has made another donation to the Japanese Section. The donation consists of six short language films in colour and two language books. The total value of the donation is $700.

The films and books are a new addition to the earlier donations from the Japan Foundation such as Library books, films, slides, class-use maps, etc.
FOR SALE

FOUR BEDROOM HOME, large rooms, fully carpeted, opposite University. For further details please telephone Lorne on Extension 397.

BRIDGE LESSONS

Learn Contract Bridge! Course of seven lessons for beginners - Wednesdays 7.30pm starting October 29 at the Newcastle Bridge Club, 12 Young Road, Broadmeadow (near Squash Courts) cost: $25. FREE introductory lesson October 22 for anyone who has not played before. For further particulars please contact Chris Oibley Extension 677 or 63 4068.

ACCOMMODATION WANTED

Visiting Professor and wife (no children) require home or apartment, December 4, 1980 until September 1, 1981. Prefer Beach-side locality. Please contact G. Goodwin, Extension 591.

STAFF Appointments

Mrs. L.S. Davies, Office Assistant/Typist, Faculty of Medicine.

Mr. B.C. Frost, Tutor, Department of Psychology.

Mr. S.T. McLnally, Trainee Medical Photographer, Faculty of Medicine.

Convocation is taking orders for a glass plate which features the Arms of the University and a garland of wattle. The plate was designed and manufactured by Philips Lighting Industries, of Wallsend. The price is $19.95 and the Secretary of Convocation, C/- the University, is taking the orders.

The plate is numbered and engraved to show the name of the purchaser for an additional $5.

Diary of Events

WEDNESDAY, OCT. 15
9.15 am Department of Mechanical Engineering Seminar. Professor A.W. Roberts will speak on Some Reflections on Study Leave in the Netherlands.

SUNDAY, OCT. 19
8 pm Newcastle Film Society presents SMILE (M. Ritchie, U.S.A. 1975). "There may have been grittier and grimmer exposes of the beauty contest scene - but I doubt that there has been a funnier or more sublime one, or one so richly rooted in its scene" (New York magazine). 801.

MONDAY, OCT. 20
7.15 pm Coal Industry Forum sponsored by Newcastle Committee of the Economic Society of Australia and New Zealand. Panel members will be: Mr. W. Chapman, President of the Northern District Branch of the Australian Coal and Shale Employees' Federation, and Mr. A. Lawrence, an executive of R.W. Miller and Co. Pty. Ltd. The Forum will involve an assessment of the prospects in the 1980s for Hunter Valley coal development and marketing. Staff House.

WEDNESDAY, OCT. 22
6.30 pm Hunter Valley Branch of the Australian Federation of University Women will meet in the Staff House at 6.30 pm. Guest speakers will be Dr. Daphne Keats and Professor John Keats, of the Department of Psychology. They will speak on Participating in Co-operative research in the People's Republic of China.

THURSDAY, OCT. 23
2.20 pm to 4 pm Department of Sociology seminar. Dr. Peter Hemenstall will speak on Protest or Experiment? Theories of Cargo Cults.

FRIDAY, OCT. 24
Room Engineering Fraternity Fluid Symposium, Camellia Courtyard, the Union. Barbecue and kegs. $2 a head. Everybody welcome.

Room to 1 pm Mr. Kevin Casey (Water Resources Commission, NSW) will speak on River Engineering. Room R04 (Geography Department). All welcome.

SUNDAY, OCT. 26
8 pm Newcastle Film Society presents WINSTANLEY (K. Brownlow and A. Mollo, UK 1975). The Diggers were primitive anarchists who set up a number of small agrarian communities, with all property held in common, in England at the time of the Civil War. The film centres around the Digger leader Gerard Winstanley and is a meticulous reconstruction of the period, filmed with an almost entirely amateur cast. 801.

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