

BULLETIN

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'Live project' — A student initiative

A practical or 'live' project which has taken shape in recent months was officially opened at an informal, but very significant, ceremony on campus.

The project, a timber storage facility, was opened by the Pro Vice-Chancellor (Development), Dr Les Eastcott, who was presented with a 'key' to the door by participating students.

It has been the initiative of the Department of Industrial Technology and has been constructed by third year Bachelor of Education (Industrial Arts) students under the supervision of Lecturer, Mr Luke Solly.

A shortage of teaching space and storage for timber prompted the original suggestion by Laboratory Craftsperson, Mr Geoff Jenkins. Luke acted on the idea and with the enthusiastic help of 24 third-year students turned it into a reality.

The result is a 6x6 metre solid timber building, which will enable the existing storage space to be used as a finishing and assembly area.

Not only has the facility served a practical purpose, but it has also served to develop confidence and practical skills to enhance the theory learned in the course.

The idea came about due to an expansion of electives for third year students in the course.

Because a building course is now offered as part of the Industrial Arts curriculum in high schools, the Department expanded its programme to suit the new module of Building Technology and it is a popular elective in the course.

When speaking at the opening, Dr Eastcott applauded the leap between theory and practice.

He said not only had the



● Mr Luke Solly and Dr Les Eastcott with some of the Industrial Arts students who constructed the timber storage facility.

project provided the students with practical experience but it had also provided a community interface as other projects were planned for the future.

These projects include raft viewing platforms for the Shortland Wetlands Centre and a further storage facility on campus. Negotiations are currently being held for work to be carried out on historic buildings in Newcastle, an initiative which will give Industrial Arts students invaluable practical experience.

Mr Solly said he saw the projects as an opportunity to develop a practical aspect to the theory of the module.

The opportunity to gain practical skills, such as basic building, stress analysis, drawing and design, engineering science and technology through this pro-

ject, was one that had to be acted upon', Luke said.

The enthusiasm for this project was very heartening, with the students talking about going on to bigger and better projects.'

Bulletin

The next *Bulletin* is listed to appear on December 4.

The deadline for your contribution is November 27 at 5 pm. We are happy to receive news about campus activities, (seminars, concerts and other events), visitors, diary entries, advertisements, and Letters to the Editor. Please contact John

Armstrong or Linda Aurelius at Extension 328.

ACADEMIC SENATE

If there were rafters in the Purdue Room of the Great Hall, some people trying to attend the first meeting of the Academic Senate would have been hanging from them.

There was a capacity house, with apologies being received from only a few members.

The Academic Senate is the supreme academic body of the University and replaces the Senate of the old University together with the Academic Board of the former Hunter Institute of Higher Education.

It consists of a total of 100 members (ex-officio and elected). The approximately 80 elected members have been chosen by the academic staff of the nine schools of the new University.

At the inaugural meeting, a quorum of 45 was agreed to.

The Vice-Chancellor, who is President, welcomed the members. He described the meeting as the 'most important individual step in the amalgamation'.

Professor Morgan said that under the University of Newcastle Act (1989) the Academic Senate had a very significant status — a status more substantial than that of the old Senate and the old Academic Board.

'It is important for us to conduct our affairs in a manner reflecting this', he said. 'If we show ourselves to be irresponsible I suspect the Interim Council will find it necessary to reduce our powers'.

As the Inaugural Meeting was a formal meeting, it would be necessary to hold additional meetings to deal with an accumulation of business. He hoped that the members would find serving on the Academic Senate to be enjoyable and productive.

The meeting was mainly devoted to the election of a Deputy President and the establishment of a committee structure.

After the Vice-Chancellor outlined the duties performed by the Deputy President, he called for nominations.

Professor Ron MacDonald (elected member, from the School of Science and Mathematics) and Ms Jenny Graham, (ex-officio member, Head of the School of Health) were nominated and each addressed Academic Senate on their experience.



● Professor Ron MacDonald

A secret ballot was conducted. The Vice-Chancellor announced that Professor Mac Donald had been successful and expressed his pleasure that two candidates had stood.

Academic Senate established the following committees: Standing Committee, the Admission and Progression Committee, the Library Committee, the Timetable Committee, the Animal Care and Ethics Committee, the Research Ethics Committee, the Central Animal House Management Committee, the Asian Studies Committee, the Careers Advisory Committee, the Schools Liaison Committee, and the Medals Committee.

Professor MacDonald, in an interview with the *Bulletin*, said that whilst the Interim Council was the supreme body of the University, it relied on the Academic Senate for advice on all academic matters.

According to the By-law, the Interim Council was *required* to refer academic matters to the Academic Senate for comment, he said. The business of the Academic Senate was, therefore, very important in terms of the University's academic mission.

However, Professor Mac Donald said, the main immediate goal was to further, in a considered fashion and as quickly as possible, the process of amalgamation.

He said that, for example, the Academic Senate was required by resolution of the Interim Council to give consideration to the range of new courses proposed for the next few years.

The restructuring of graduate studies, which was begun by the Senate of the old University,

must be continued and a committee to administer graduate studies must be set up.

According to Professor Mac Donald, the rationalisation of the School/Faculty structure of the new University clearly required the attention of the Academic Senate.

'In five of the Schools, academic business is considered, and transmitted, by the Faculty Boards to the Academic Senate by the Faculty Boards.

'In four of the Schools, academic business is considered, and transmitted, by School Boards and Course Committees to the Academic Senate', he said.

There had been a rearrangement of the system used to administer the University's research work.

Professor MacDonald said the Senate Research Committee now gave advice to the Vice-Chancellor directly, instead of through Senate. However, it was envisaged that the committee would report regularly to the Academic Senate through the Chair, Professor Michael Carter (Deputy Vice-Chancellor, Academic), the Dean of Research, Professor Geoffrey Kellerman, who is executive officer of the committee, or members of the committee.

'A prime concern of members of the University is the University's research profile and applications for grants for research should continue to be made to the Senate Research Committee'.

Professor MacDonald, who is Professor of Physics, has been elected Deputy President of the Academic Senate until the end of 1991. He is the senior elected academic member of the staff, with a place on the Interim Council and responsibility for the expression of academic views on the Council.

The position carries a great deal of executive responsibility, including chairing a number of key committees and having an influence in policy-making.

'Whilst a Deputy President is elected as an individual, the incumbent's prime role is to transmit the views of the academic body to the Council. The attraction of the job rests mostly on the input one can have into determining the future of the University', he added.



● Dr Joan Cooper prepares for leaving the University.

University loses Head of Management

Dr Joan Cooper and the University will part company after more than 21 years. Dr Cooper has resigned and plans to take up her new appointment — Reader in Information Systems at the ANU in Canberra — during the long vacation.

Dr Cooper's new position is in the Department of Commerce in the Faculty of Economics at the ANU, the Head of which is a former member of staff of this University, Professor Mark Tippett.

She will primarily teach Information Systems in Professor Tippett's department and plans to join up with a former member of staff in Mathematics, Professor Jenny Seberry (formerly Wallis), to collaborate on research projects.

Professor Seberry is attached to the Australian Defence Force Academy in Canberra. She is an expert on cryptology and computer security and supervised Joan's PhD research when Jenny was at the University of Newcastle.

Dr Cooper is looking forward to teaching Information Systems, which has proved to be extremely popular at Australian universities. At the ANU, it is an interdisciplinary subject available to students in several departments.

Dr Cooper grew up in Warners Bay. After finishing her schooling at Gateshead High School, she enrolled in the Faculty of Science in 1968 and completed a BMath degree and a PhD degree. She was employed in the Department of Mathematics before transferring to the Computing Centre.

Farewell

A farwell luncheon to honour Joan Cooper will be held in the Staff House on Thursday, December 14, at 12.15 pm.

All Joan's friends and colleagues are invited. For further details please telephone Marilyn at Extension 742.

Transferring to the academic staff, she first worked in the Department of Commerce and moved to the Department of Management after it was established in 1986. She has been Head of the department for the last three years.

Dr Cooper said that student numbers in the department had soared this year following the introduction of new management subjects. It had been anticipated that approximately 80 students would enrol in the first semester subject, Information Management. However, there was a staggering enrolment of 250 and in the second semester subject — Management Strategies — enrolments increased again to 320.

Whilst looking forward to the challenge of the new position, Dr Cooper is sad to be leaving the many friends and acquaintances she has made over the years at the University. She has many fond memories and spoke of her high regard and the initial guidance she received from Emeritus Professor Reyn Keats, who established the former Faculty of Mathematics. 'Reyn sold Mathematics to me and encouraged myself and many more women to complete their higher degrees', she said.

Dr Joan Cooper has a wide range of friends and colleagues at this University and the *Bulletin* wishes her 'happy days'.

Inaugural Award of the Australia Prize

The Government of the Commonwealth of Australia has instituted the Australia Prize as an annual international award for outstanding achievement in science and technology promoting human welfare.

The prize consists of \$A250,000 and an inscribed medal.

In 1990 the field in which the award is to be made is Biological Sciences related to Agriculture or the Environment.

The Australia Prize may be awarded to an individual or shared equally between a group of no more than four people.

Copies of the Nomination form and the Conditions of Award may be obtained from the Secretariat, GPO Box 9839, Canberra, ACT, 2601, or telephone 61-62-761510.

INTERIM COUNCIL

The Interim Council met on November 1. The meeting was the Council's first since the University of Newcastle Act (1989) took effect amalgamating the old University, the former Hunter Institute of Higher Education and the former Newcastle Conservatorium of Music and giving the Council full responsibility for the new University.

The Chancellor, Justice Elizabeth Evatt, welcomed the newly-elected Deputy President of the Academic Senate, Professor Ron MacDonald, who is an ex-officio member of the Council.

The Vice-Chancellor referred to the fact that the management structure of the new University provided for three Deputy Vice-Chancellors and a Pro Vice-Chancellor (Development). He said one Deputy Vice-Chancellor and the Pro Vice-Chancellor (Development) were new senior officers of the University and their appointments were for five years from November 1 — the date on which the amalgamated University was established.

Council approved the Vice-Chancellor's recommendation that the appointments of the other two Deputy Vice-Chancellors also be for five years from November 1.

The Vice-Chancellor reported that the entrance to the former Hunter Institute of Higher Education in Rankin Drive had been named the University of Newcastle East Gate and the main building of the former Hunter Institute had been named the Hunter Building of the University.

The Vice-Chancellor warned that the University might be forced to follow some other universities and pay salary loadings to some academic staff. Academic salaries were now 'totally out of line' with the salaries paid in industry, commerce and the public service and in certain disciplines the problem of attracting and keeping staff was acute.

He said that in some areas the loadings paid were substantial; in other areas, differential salaries were paid and research inducements were offered to attract new staff.

The Council asked the Vice-Chancellor to report on developments on the academic salaries front and suggest an appropriate basis for the introduction of salary loadings.

The Interim Council established the following committees of Council: General Purposes Committee, Legislation Committee, Finance Committee, Affirmative Action and Equal Opportunities Committee, Academic Exclusion Appeals Committee, Disciplinary Appeals Committee and Honorary Degrees Committee.

Council was told that an Occupational Health and Safety Committee would be established to advise the Vice-Chancellor and the Academic Senate would be responsible for providing a Management Committee for the Wollotuka Aboriginal Education Centre.

Council also established a Board of Governors of International House.

The following members were elected to University boards and committees: *Radio 2NUR*, Dr Peter Hendry and Mr John Peschar; *Kintatba Community Child Care Centre*, Mr Brian Adamthwaite, Dr Hendry and Dr Alan Taylor; *Edwards Hall*, Dr Alec Forsythe, Mr Peter Rundle and Dr Hendry; *TUNRA*, Dr Forsythe, Dr Manuel Alves, Emeritus Professor Alan Carmichael and Mr Jack Risby; *Institute of Aviation*, Mr Richard Owens and Dr Hendry; *Institute of Behavioural Sciences*, Mr Adamthwaite and Dr Elwin Currow; *Institute of Industrial Economics*, Mr Rundle and Mr Owens; *Institute of Coal Research*, Dr David Kay and Dr Alves and *Standing Committee of Convocation*, Dr Hendry and Mr Adamthwaite.

After a member expressed concern for members of each sex to be included on committees, the Council reaffirmed its commitment to EEO principles.

After being informed that it was necessary to decide the Students' General Service Charge for next year, the Council resolved that there was only one students'

association at the new University.

The Vice-Chancellor reported that the old University and the former Hunter Institute of Higher Education had separately set general services charges for next year. The level of the charges differed, he said.

Professor Morgan said the matter was a complex one and it would be wrong to fix the charge for next year before further discussions were held.

There was acceptance across the University of the view that there should be one Union, one Sports Union and one Students' Association and, although progress on arranging this had not been rapid, there were signs of the differences between the various student bodies being reconciled.

Mr Phil Oke, past President of the Student Union of the former Hunter Institute, said there was no objection to the setting up of a single students' association and, with new presidents of students' associations have taken office recently, he agreed that discussions should be got underway.

The Council resolved that action be taken to obtain the views of the Student Union and the student bodies at the former Newcastle Conservatorium of Music and the Central Coast Campus so that the views can be considered with documents written by the Union, the Sports Union and the Students' Representative Council of the old University.

Council emphasised the fact that it intended to set the level of the Students' General Service Charge for next year at its meeting on December 8.

The Vice-Chancellor reported that he had taken action to have the extensions proposed for the Union at the old University and the new Refectory at the former Hunter Institute of Higher Education professionally re-evaluated.

Ernst and Young would assess the financial aspects and Mr Brian Suters would examine the building plans for the projects and, after meeting with representatives of the two Unions, would advise whether the needs of the amalgamated University would be met by the proposals.



The Senate Research Ethics Committee: Assoc. Professor Tim Roberts, Ms Jo Bentley, Assoc. Professor Richard Barry, Dr Don Munro, Dean Graham Lawrence, Assoc. Professor Roger Smith, Ms Maralyn Rowley, Mr Peter Farley (Secretary), Ms Carol Abela and Professor Cliff Hooker. Absent: Ms Margaret Gibberd.

Committee focuses on research ethics

Professor Cliff Hooker describes the Senate Research Ethics Committee as 'one of the quiet committees of the University' — quietly working behind the scenes to ensure the University fulfills its responsibilities. Professor Hooker is Chair of the SREC and what follows is an article on the committee's work, written by him.

The primary function of the Senate Research Ethics Committee is to ensure that all research proposals by University staff and students satisfy community ethical standards.

Roughly speaking, SREC tries to ensure two things:

- That participants in research (especially patients, clients and students of medical practitioners) have their integrity and autonomy as persons respected and protected, and
- That any physical harm or risks to them from research activities are both minimised and clearly outweighed by the benefits of that research (benefits which either come to themselves directly or to the community at large.)

All formal research proposals conducted by University staff and students are provided with an ethics application form which is completed at the same time as the research proposal is drawn up. All of the ethics application forms, together with copies of the original research proposal, are then brought before SREC and discussed in detail.

The Committee has to come to a clear understanding of what is

involved for both participants and researchers in a particular piece of research and to decide if everyone's best interests have been carefully taken into account.

Often the Committee will seek to come to an agreement with the researcher to alter the proposed research so as to improve the care with which it treats the people involved. In these cases it is typically not because the researcher has been careless, but because it is often beyond any one person's ability to see all of the ways in which people are affected by the research activity, especially ways which lie outside of the research focus itself. The non-research, community members of SREC play an especially valuable role here.

Typical concerns

Here are some typical concerns that arise in SREC discussions.

Researcher A will be asking for volunteers from a hospital outpatient clinic to conduct a drug trial. Is there a clear statement of the nature of this testing which sets out fully and clearly the possible side effects and their likely severity?

Researcher B wishes to do some blood testing with similarly

selected volunteers. Is there the⁵ voluntary consent form which can be handed to the volunteers and on which they may record in writing their voluntary consent to participate? Ensuring well-informed voluntary consent is a primary way in which the integrity and autonomy of people is respected.

Researcher C wishes to conduct some skills testing in primary schools so as to better understand how children learn in social groups, but there is some danger from the way the procedures are proposed that some children may become labelled as 'dumb', or poor learners, by either teachers or their fellow students. In this case SREC will be keen to ensure that research procedures are not discriminatory in this way as well as, e.g., not being discriminatory on religious, racial, sexual or other grounds.

Researcher D wishes to take blood samples from students, accompanied by a variety of other information, for genetic research of a general statistical nature. Nonetheless, SREC will be concerned that the anonymity of the donors is fully protected, perhaps by ensuring that samples are identified only by number after they are taken, or that all identifying information is kept under lock and key and subsequently destroyed once the statistics have been extracted.

On the other hand, SREC will be equally concerned to ensure that samples are taken under the supervision of qualified medical personnel, that people for whom it might not be advisable to give the blood sample are screened out (e.g. pregnant women) and that there is access to medical assistance for the rare case where that may be required. In this case SREC will be equally concerned to ensure that the safety of staff taking the blood samples is protected through the use of proper procedure for handling blood.

Researcher E wants to conduct a questionnaire in private homes concerning consumer spending patterns, family income, etc., but the real focus of the research cannot be made explicit without spoiling the responses which people given.

SREC will be concerned to ensure that people are approached courteously and with care for their voluntary participation, and it will also want to ensure that any

More over the page

sensitive information taken is treated with proper confidentiality. But, especially in this case, it will require that all those who did agree to participate are subsequently fully informed of the aims and results of the research so as to clearly indicate by its value the worth-whileness of having participated.

All of which means a great deal of work for the SREC Committee members. During the course of any one year more than 50 major research grant applications would be reviewed and about the same number of senior student research projects would also be reviewed.

In addition to this, the Committee is constantly discussing the principles on which it operates and also the new documents on research ethics which now regularly appear from various groups such as NH&MRC.

Committee members

The Committee is made up entirely of volunteers. About half of these are drawn from the most involved sections of the University research staff. The other half are community representatives. Your current SREC Committee is:

Ms Carol Abela, lawyer in private practice; Richard Barry, Associate Professor, Department of Pathology, Faculty of Medicine; Ms Jo Bentley, Lecturer, Department of Legal Studies; Ms Margaret Gibberd, businesswoman; Cliff Hooker, Professor of Philosophy (Chairperson); Graham Lawrence, Dean, Christchurch Cathedral; Dr Don Munro, Psychology; Tim Roberts, Associate Professor, Department of Biological Sciences; Ms Maralyn Rowley, Nurse and Patient Advocate and Roger Smith, Associate Professor, Faculty of Medicine.

Besides their responsibilities to individual researchers, the Committee maintains a fruitful liaison with the Hunter Area Research and Ethics Committee, based at Royal Newcastle Hospital, and participates in the national network of institutional ethics committees which seeks to improve the quality and consistency of ethical decision making in research.

The SREC's responsibilities continue to widen. Most recently, for example, NH&MRC have been pressing ethics committees to monitor on-going research to ensure that ethical standards continue to be met.

And there is an ever-

widening range of University activities for which SREC is expected to offer ethically-informed guidance.

And the ethical responsibilities go on growing more complex as community expectations and legal involvement rise. For both the small committee of 'quiet volunteers' and the University which supports them, the future will present some very interesting challenges!

LETTERS

Two and a half years ago this University came dangerously close to being a trendsetter when the Vice-Chancellor circulated a memo announcing the prohibition of smoking in all general-access areas of University buildings. The memo explicitly mentioned such areas as common rooms, while areas such as corridors and foyers, though clearly included, were not expressly mentioned.

I wrote to the Vice-Chancellor to suggest that the prohibition would be more likely to be heeded if appropriate notices were displayed to attract the attention of those who had not read the memo, and if ashtrays, those invitations to smoke, were removed from general-access areas. I received a neutral acknowledgement, that passed the buck to someone who appears to have taken no appropriate action.

Since then, while other institutions have made and implemented more stringent restrictions, the University has sat idle in this matter of public health and comfort. Smoking in offices, still permitted, infuses whole corridors and buildings with its foul products. Despite being prohibited, smoking is still indulged in in corridors, common rooms, and other areas of common access. Toilets, notionally places of cleansing, are becoming fouled by the smell and waste of tobacco. And this is not just by students and visitors, who are unlikely to have read the Vice-Chancellor's memo, but by members of staff, who should know better.

Other institutions now make it clear when interviewing prospective staff that smoking is not permitted anywhere within their buildings. This University not only permits smoking, it encourages it with the provision of ashtrays, the absence of no-smoking signs, and the absence of mechanisms for enforcing even the

feeble memo of two and half years ago.

To the undoubted delight of some academics here, Newcastle University has missed out on the chance to be a trendsetter. Is it now fighting for the opposite distinction of being the last bastion of conservatism? There is a danger in that distinction: the increasing number of legal precedents set as more and more employees successfully sue their employers for failing to provide a safe and healthy working environment.

Simon

Electrical Engineering & Computer Science

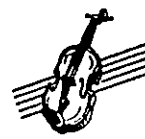
Once again ...

Terry Caelli is a graduate of this University — not a former graduate (*Bulletin*, November 6-12, 1989).

He is a former undergraduate, a former member of staff, but, unless the University strips him of his degree, he will not become a former graduate.

John A. Lambert,

Director, Computing Centre



Music Making at the Con

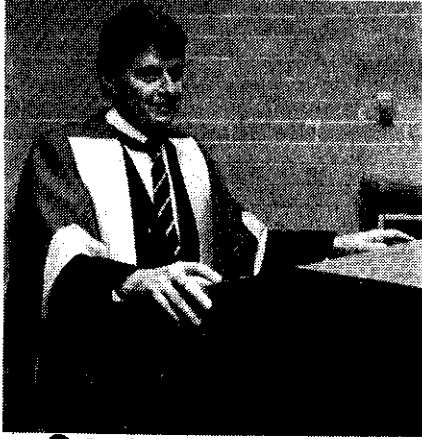
Tuesday, November 28, 7 pm
Newcastle Conservatorium
Children Orchestra Concert — a program of popular orchestral classics. \$3 and \$1.50 concession.

Wednesday, Nov. 29, 8.15 pm
Peter Watchorn (harpsichord) — program of Baroque music. \$5 and \$3 concession.

Thursday, November 30, 6 pm
Meet the Staff Series (III) — Elizabeth Holowell (violin), Charles Watts (viola), Wendy Ireland (cello), Fiona Morphet (double bass), Nigel Butterley (piano) also Graeme Aubrey performing traditional eastern and western melodies on electronic music studio equipment plus John Kellaway (trumpet) and Helen Smith (piano). \$4 and \$2 concession.

Friday, December 1, 7.30 pm
Young Graduates Concerts — Geoffrey Nash (guitar), Ginastera, Sor, and Brouwer, Peter Martin Studio. \$5 and \$3 concession.

Professor Carr's lecture warmly received



● Professor Vaughan Carr delivering his Inaugural Lecture.

On the night of November 1, Professor Vaughan Carr, Professor of Psychiatry, attracted a full house to the Medical Sciences Theatre.

Professor Carr gave his Inaugural Lecture in a series planned by Convocation. Inaugural Lectures are conducted to present the University's new senior researchers to staff and students, together with citizens from the region.

Professor Carr titled his lecture *The Thing Itself: A Perspective on Mental Illness*. He said that a state of tension seemed to exist between the conventional psychiatric viewpoint about schizophrenia and that of people who had had first-hand experience of the illness. He confessed that he didn't know what schizophrenia was.

'Yet, there certainly are people who suffer deeply from this thing we call schizophrenia', Professor Carr said. 'We see them not only in our clinics and mental hospitals but also in the workplace, in families, and, sadly, among the homeless on the streets.'

He asserted that people looked at schizophrenia and all forms of mental illness 'through the lens of our time'. What we saw was at least as much due to the imperfections of that lens as it was to the mental disorders themselves.

'In doing so, we may better understand its limitations, its distorting properties and how to allow for them. We may even learn how to make a better lens.

In the end, we may also get a useful, if fleeting, glimpse of ourselves by way of its reflective

properties.'

Professor Carr suggested that there were several serious flaws in our way of viewing mental illness and that each had the potential to work against the welfare of the mentally ill.

One flaw — and the most central in the lens — was the split between mind and body, an idiosyncrasy of the past 400 years which enabled Western medicine to split off mental from physical maladies.

'This dualism', he said, 'makes possible the segregation of the mentally ill as embodied in the asylum movement begun in the eighteenth century — medicine's grand apartheid.

This "great confinement" of the mentally ill has continued now for over 200 years and we persist in perpetuating the anachronism of madhouses today, with all their consequences, including social stigma and discrimination'.

Another flaw in the lens could be described under the broad heading of prejudice. Professor Carr said. There was pervasive discrimination against the mentally ill, who were met with fear and hostility in everyday life.

The fact that so little is understood about mental illness leaves so much open to wild speculation, false assertions, fear and suspicion. This, in turn, provides the basic ingredients for the sensational stories so common-place in the media that illustrate vividly the social stigma of mental illness'.

He couldn't propose a comprehensive model for understanding mental disorders as an alternative to the current dualistic framework. However, we were in a position to deal with the more pernicious manifestations of the mind-brain dichotomy.

'We can cease to segregate the mentally ill within ghettos — relics of the asylum era — and, instead, more thoroughly integrate them within general medical services.

'At the level of the clinic, those of us who are responsible for educating doctors of the future can begin to dismantle the petty apartheid occurring at that level.

'We can insist that all human dysfunctions be regarded from multiple perspectives simultaneously — biological, psychological and social.

'In doing so, we must acknowledge the value and the limitations of each perspective and recognise that we are, in effect,

illuminating the same room through different windows', he said.

One of the perspectives on schizophrenia he wanted to put forward was to regard the schizophrenic person as an active agent — not merely the passive victim of some alien disease process: but one who could play an active role in shaping the illness, in containing its effects and steering its course over time.

In a study conducted in Adelaide, Professor Carr investigated the ways in which schizophrenic patients in the community learned to live with their illness, i.e. how they applied various coping techniques to minimise the disruption to their lives brought about by the experience of hallucinations, delusions, thought disorder and the other effects of schizophrenia.

'Broadly speaking', he said, 'schizophrenic patients actively struggle to cope by learning how to reduce their level of arousal, by consciously manipulating their focus of attention through various diversions and cognitive control mechanisms, and by engaging in social interaction'.

In other words, Professor Carr declared, with effort and determined practice, patients could effectively reach an adaptive compromise of a somewhat different order, one in which behaviour was consciously modified so that some control of the illness was achieved.

Professor Carr dedicated his Inaugural Lecture to his father.

Pen Pals Sought by Singapore

The National University of Singapore Students' Union would like to hear from students willing to become pen pals of the University. Mrs Lillian Yeo, of the National University's External Relations Committee, said in a letter that the University was very interested in fostering close ties by playing host to visiting university students and through general correspondence.

The Information Office in Room 171, McMullin Building has copies of a form for the correspondence program. Students who are interested can fill in the form and send it to Miss Yeo.



● Dr Les Eastcott, the Minister for Health and the Arts, the Hon. Mr Peter Collins, final-year Arts (Communications) student Ms Jane Peters, and Lecturer in Photography, Mr David Aderman at the opening of the 48 Hours — A Day in the Life of Hunter Women Exhibition.

48 hours — A day in the life of Hunter women

A student photographic exhibition depicting the busy lives of 16 Hunter Valley women has won praise from the New South Wales Minister for Health and the Arts, Mr Peter Collins.

The Minister said the exhibition brought together both of his portfolios, an occurrence which was happening more often in the community.

The exhibition was a collaboration of ideas of the Women's Health Unit based at the Newcastle Western Suburbs Hospital and a group of final-year students enrolled in the Bachelor of Arts (Communications Studies), who have majored in photography.

48 Hours — A Day in the Life of Hunter Women was a photographic essay on the lives of a group of Newcastle women, but was no ordinary set of photographs.

The title was incongruous and was meant to be so. The project deliberately set out to guide the observer through the diversity of women's roles in the community and also to show just how much these women can pack into any one day.

The exhibition was part of their final-year assessment for the nine students who participated in the exercise.

It was the brainchild of Ms

Rosemary Blue, a Health Educator with the Women's Health Unit, and has come together after about 18 months in the planning. Ms Blue conceived the idea and set about making it a reality, but realised she needed the professional expertise that she didn't have.

She contacted the Department of Visual Arts Media Studies in the School of Visual and Performing Arts with the idea. With the help of the Head of the Department, Mr Frank Morgan, and Photography Lecturer, Mr David Adermann, it was turned into a student project which has impressed its viewers with its outstanding quality.

Mr Collins said in opening the exhibition at Charlestown Square Shopping Centre earlier this month that the exhibition brought together photographically art and health.

He congratulated everybody involved in the exhibition, because of its 18 months in planning and the expertise shown by the students in capturing their subjects.

The exhibition featured the personal and professional lives of 16 Hunter Region women from a wide variety of areas such as their work, sport, civic life, the arts, achievement, traditional and non-traditional roles, science and medicine, women helping other women and historical perspectives.

Amongst the subjects were the Mayor of Cessnock, Alderman

Maree Callaghan, NBN News presenter, Ms Anna Manzoni, Radio 2NC personality, Ms Madeleine Randall, and Newcastle gynaecologist, Dr Allison Hamilton.

The main focus of the exhibition was the diversity of roles women play in our society, the amount of work and responsibility they have, their awareness of the community in general and how they can become role models for other women.

'It looked at the women's lives from a holistic point of view and took in the physical, spiritual, social and psychological aspects', Ms Blue said.

'It has been a unique exercise taking in all aspects of women's lives. From a solely health initiative, this exhibition has evolved into a social commentary which I am sure people found most interesting — and the subjects themselves have been enthusiastic about the project, seeing it as a valuable contribution to the awareness of women's roles in the community', she said.

This exhibition showed all the aspects that go together to make up women's lives — professional and personal aspects, which, when we saw the scope, warranted the title, *48 Hours — A Day in the Life of Hunter Women*.

Media independence

A conference on *Media Independence* in the Australasian Region will be held in the Merewether Building at the University of Sydney on December 2.

Speakers include specialists on the media from Fiji, Indonesia, Kanaky/New Caledonia and the Philippines.

The Honourable Gough Whitlam will deliver the keynote address.

The conference, to be held from 8.45 am to 6.30 pm, has been organised by the Communications Law Centre, with assistance from the Australian National Commission for UNESCO, the Australian Journalists' Association, the Evatt Foundation and the Human Rights Centre, University of New South Wales.

Registration costs \$100 (students \$40) and more information is available from Ms Bronwen Turner at (02) 66 30551.



● Professors G. Goodwin and R. Evans, the principal researchers associated with the Centre for Industrial Control Sciences.

University scores seven awards

The University has been successful in gaining seven Industry Research Awards offered by the Department of Employment, Education and Training under the new Australian Postgraduate Research Awards Scheme (APRA).

The APRA Scheme, which will replace the Commonwealth Postgraduate Research Awards Scheme from the commencement of 1990, offers scholarships to support postgraduate research Masters or PhD programs, with a stipend of \$12,734 per annum to \$16,433 per annum dependent upon area of research.

APRA Industry Awards are a specific category of award offered in response to joint proposals made to DEET by an academic researcher and a local industry sponsor. Industry Awards carry a stipend value of \$16,433 per annum.

Academic staff at the University have maintained highly effective links with industrial groups in the Hunter Region, the State and nationally. These are appropriately reflected in the successful allocation of seven awards.

The successful recipients of the awards are:

Professor R.J. Evans, Department of Electrical Engineering and Computer Science, in conjunction with *Mr L. Lock Lee*, BHP Central Research Laboratory

for research on Signal Detection utilising Neural Networks.

Professor A.W. Roberts, Department of Mechanical Engineering, in conjunction with *Mr Ken McNaughton*, Allico Steel Corporation Pty. Ltd., for research on Optimum Design and Manufacture of Bulk Materials Handling Storage and Discharge Equipment.

Professor R.J. Evans and Dr R.E. Betz, Centre for Industrial Control Science, Department of Electrical Engineering and Computer Science, in conjunction with *C.W. Pope Pty. Ltd.*, for research on Signal Processing for Ultrasonic Crack Detection in Pipelines.

Dr R.A. Fredlein and Dr G.A. Lawrance, Department of Chemistry, in conjunction with *Dr K.E. Anthony*, Australian Manganese Company Limited for research on High Performance Electrolytic Manganese Dioxide.

Assoc. Professor D.J. Hill, Centre for Industrial Control Science, Department of Electrical Engineering and Computer Science, in conjunction with *Mr N.R. Godfrey*, BHP Engineering Research Project on Co-ordinated Voltage Regulation and Stabilisation in Power Systems.

Assoc. Professor A.J. Husband, Faculty of Medicine, in conjunction with *Dr A.W. Cripps*, Auspharm Institute of Mucosal Immunology Pty. Ltd., for research on The Interaction of Antigen with Mucosal Lymphoid Tissue.

Professor G. Goodwin, Centre for Industrial Control Science, Department of Electrical Engineering

and Computer Science, in conjunction with *Dr John Edwards*, Industrial Automation Services Pty. Ltd., for research on Rolling Mill Strip Flatness Control.

AVCC NEWS

New era in Australian higher education

The Australian Vice-Chancellors' Committee (AVCC) will open its membership to all higher education institutions within the Unified National System by January, 1991, negotiating with the Australian Committee of Directors and Principals Limited (ACDP).

The historic decision was made during a three-day meeting of heads of Australian universities in Perth this week.

AVCC Chairman, Professor Brian Wilson, said that the unanimous agreement took account of the changing nature of the higher education system following the initiatives of Mr John Dawkins, Minister for Employment, Education and Training, implemented over the past two years.

'We believe that a single committee covering the broader range of institutions can only strengthen our position in discussions on higher education with the Government', he said.

'Regardless of the merits of Mr Dawkins' enthusiasm for a Unified National System, it has the potential to create a uniform system in which the peaks of academic achievement — of students and staff alike — are submerged in a mass-produced anonymity'.

One of the great strengths of the Australian higher education system, Professor Wilson said, had been the quality, variety and depth of studies and programs available to students.

'If universities cannot maintain academic autonomy to retain and develop individual strengths and initiatives, the range of offerings may be reduced to a conveyor-belt system of obsolescent, no-frills courses unsuited to the subtleties of current market demands and historic academic quality', he said.

'The AVCC, which was formed in 1920, currently represents 23 Australian universities. Most higher education colleges are under the umbrella of the Australian Committee of Directors and Principals Limited', he said.

University does well in research

The amount of Australian Research Council (ARC) grants provided to this University for 1990 is a record.

The ARC awarded the University a total of \$1,706,882. This is approximately 20 per cent more than the 1989 figure.

The amount of funds which the University has received for research projects since 1987 consistently has exceeded \$1 million (1988, \$1,019,310; 1989, \$1,390,389; and 1990, \$1,706,882).

Seventy-five applications for support for research projects have been funded, compared with 53 applications last year.

The NH&MRC has allocated \$642,695 in new grants to researchers from the Faculty of Medicine. When the *Bulletin* went to press, the amount of funds provided for continuing grants had not been announced.

Research grants had been harder to come by than previously, according to the Vice-Chancellor.

Professor Morgan told the Academic Senate that despite the care taken in administering the applications made by UN researchers it was 'a lottery' and an increasingly competitive business.

ARC had increased the total allocation but there had been a great increase in the quantity and the quality of research applications.

Professor Morgan said he agreed that applying for research funds absorbed a lot of time and required commitment. However, people from right across the University should be encouraged to seek money for research.

If applications were to be successful next year, they should be prepared properly and submitted now. Those who had applied before and failed should not be deterred and should apply again.

'We have experienced researchers who can offer advice to staff about how to enhance their applications.

'There is a need for those who have not made applications before to ask for help now', he said.



ARC GRANTS New Grants

Dr J. Clulow and Professor R.C. Jones, Mechanisms of Water and Electrolyte Reabsorption from the Ductuli Efferentes Testis of the Rat, \$35,000.

Dr C.E. Offler, Cellular Pathway of Short-Distance Transfer of Photosynthates in Fleshy Fruits, \$32,000.

Dr J.W. Patrick, Pathway and Mechanism of Photosynthate Unloading with Special Reference to the Role of Transfer Cells, \$45,000.

Dr E. Von Nagy Felsobuki, Investigation of Electronic and Structural Properties of Small Alkali Metal Vapours, \$30,000.

Dr W.J. Collins and Dr R. Offler, Contrasting P-T-T Histories in the Tia Complex, Southern New England Fold Belt, \$35,000.

Dr D.J. Hill and Dr I.M. Mareels, Analysis and Stabilisation of Power System Dynamics, \$56,000.

Professor J.F. Burrows, Dr D.H. Craig and Dr C.W. McKenna, Computer-Assisted Studies in the Analysis of Language, \$19,573.

Professor R.G. Tanner, Dr B.F. Curran and Dr C.E. Penglase, Oriental Influences on Greco-Roman Religion, \$25,000.

Professor M.G. King and Professor A.J. Husband, Behavioural Conditioning of Immunity, \$42,000.

Professor R.J. MacDonald and Dr B.V. King, Interface Phenomena in Epitaxial Growth of Thin Films, \$35,000.

Professor G.J. Jameson, Dr N. Ahmed and Mr G.M. Evans, Fluid Dynamics of a New Device for Mineral Flotation, \$85,000.

Total = \$439,573.00

Continuing Grants

Professor T.K. Roberts and Dr J. Falconer, The Effect of maternal Immunisation with Leucocytes or Trophoblast on Livestock Productivity, \$32,600.

Dr J.C. Rodger, Fertilisation and Early Development in Marsupials and its Experimental Manipulation In Vivo and In Vitro, \$38,000.

Dr G.A. Lawrance and Dr M. Maeder, Carbon Acid Metal Template Syntheses and Complexation of Pendant-Arm Macrocycles, \$33,000.

Dr R.J. Loughran, The Measurement of Hillslope Erosion and Sedimentation with the Environmental Isotope Caesium-137, \$5,215.



● Dr John Rodger

Dr B.V. King and Professor R.J. MacDonald, The Modification of Solid Surfaces by Recoil Implantation, \$25,000.

Dr I.D. Moore, Collapse of Buried Flexible Structures, \$35,000.

Professor A.W. Roberts and Assoc. Professor A.J. Chambers, Handling and Transportation of Bulk Materials, \$49,313.

Dr J. Rosenberg, A Massive Memory Supercomputer, \$52,874.

Dr S.W. Sloan, Stability Analysis in Geotechnical Engineering, \$30,000.

Dr E.M. Andrews, Anglo-Australian Relations During the First World War, \$20,000.

Dr G.B. Samuel, Politics and Social Order among Eastern Tibetans: An Ethnographic Study of Values and Social Organisation with Special Reference to the Gesar Epic, \$30,000.

Assoc. Professor C.A. Croxton, Statistical Mechanics of Complex Molecular Systems, \$29,000.

Assoc. Professor B.J. Fraser and Dr F.W. Menk, Propagation Studies of ULF and ELF Waves, \$75,000.

Professor R.J. MacDonald, Dr D.J. O'Connor and Dr B.V. King, Ion Solid Interactions, \$104,300.

Assoc. Professor P.V. Smith, The Application of Semi-Empirical Techniques to the Determination of the Surface Relaxation and/or Reconstruction of Metals and Covalent Solids, \$35,829.

Dr B. Fenelon, Dr D.B. Dunlop and Dr M. Hunter, Cognitive Deficits, Event-related Potentials (ERP) and Reading Retardation, \$20,500.

Dr D.C. Finlay, Dr D.L. McElwain and Mr M.L. Manning, Electrophysiological and Behavioural Studies of Visual Perception, \$32,000.

Professor M.G. King, Dr H.P. Pfister and Professor G. Singer, Entrainment of Biological Rhythms by Body Temperature Conditioning: Application to Shift Workers, \$16,110.

Total: \$663,741.00

Program Grants

Professor R.A. Antonia and Dr L.W. Browne, Transfer Processes in Turbulent Shear Flows, \$102,919.

Professor G.C. Goodwin, Dr R.H. Middleton, Professor R.J. Evans, Dr D.J. Hill and Dr C. De Souza, Robust Control and Communication Systems, \$116,049.

Total: \$218,968

Grand Total: \$1,322,282.00

Note: An amount in excess of \$400,000 has also been awarded to the University for small research projects.



● Professor Graeme Goodwin

NH&MRC Grants

New grants

Professor G. Burns and Professor R. Burton, Understanding the Molecules that Regulate the Migration of Cells, \$118,139.77.

Professor S. White, Nervous Regulation of Blood Flow to Airways and Heart, \$64,911.86.

Dr J. Cubis, Dr M. Brinsmead, Assoc. Professor R. Smith and Mr T. Lewin, Depression During Pregnancy and the First Postnatal Year, \$132,839.34.

Assoc. Professor P. Dunkley, Molecular Mechanisms of Hormone and Neurotransmitter Release, \$42,571.83.

Dr L. Olson and Professor N. Saunders, How Big and Floppy is the Throat in People who Do and



● Dr Max Brinsmead

Do Not Stop Breathing During Sleep, \$39,478.83.

Dr D. Henry, Dr D. O'Connell and Mr A. Mitchell, Can Reports from Patients Speed up the Identification of Side-effects with New Drugs, \$43,602.83.

Dr D. Van Helden and Dr D. Powts, Mechanisms Involved in Control of Blood Vessels, \$62,344.04.

Professor R. Clancy and Dr A. Crittys, Why only Some Patients with Chronic Bronchitis Develop Acute Infection, \$63,428.05.

Assoc. Professor A. Husband and Professor M. King, Effects on Immunity Through Behavioural Modification, \$43,430.14.

Dr M. Agrez, Interactions between Different Cell Types in the Human Colon, \$31,949.42.

Total: \$642,696.11



● Assoc. Professor Alan Husband

Students and Industry

A *Communicating with Industry* (1989) Night was held in the Student Union of the former Hunter Institute of Higher Education.

The work of final-year students of the Bachelor of Arts (Communications) course was featured, including graphics, photography, radio and sound, video, professional writing, screen writing and public relations.

Mr Frank Morgan, Head of the Department of Visual Arts and

Media Studies, said the night gave the Department an opportunity to show off its wares.

Mr Morgan said the purpose of the BA (Communications) course was to turn our people with high insights and an understanding of what it meant to be an Australian. The students, who worked closely with the marketplace, looked for different solutions to the problems which faced them.



● One of the final-year BA (Communications) students, Mr Mark Crosdale, of Abermain, is a photo journalist who works for a magazine, *Truck and Bus*, published in Surrey Hills.

Since being employed by the Shennen Publishing Company, Mr Crosdale has been to Germany, Tokyo, Switzerland and Austria. He covers transport matters world-wide and feels that Australia is a microcosm for the world, because manufacturers use this country as a testing ground.

He evaluates new truck models overseas and writes reports for Australian readers. He also covers large motor shows held overseas.

Letter to the Editor

Dear Sir,

The Higher School Certificate is a farce. More than half of the first-year intake of students are definitely not university material.

This year I was so alarmed at the lack of intellect of the Physics IA class (and they are supposed to be superior to Physics IB) that I decided to conduct a simple experiment with them. (Yes, I know I am not supposed to experiment on humans without a clearance from the ethics committee, but my defence is prepared).

During the presentation of a ten-lecture strand on electromagnetism I spent three lectures dealing with Ampere's law in various mathematical forms. At the end of the third lecture I told both classes (day and evening) 'if you are ever asked to state the essential meaning of Ampere's law in simple terms, you simply say that it gives the magnetic field produced by one or more electric currents'.

Next lecture, when I went on to deal with Faraday's law, I contrasted it with Ampere's law, and reminded them of what I had said in the previous lecture. I then ordered them to write the meaning of Ampere's law in their notes if they had not already done so, and slowly spelled it out for them.

The following lecture, both classes, I recited for the third time that Ampere's law gives the magnetic field produced by electric currents, in case they should ever be asked.

The first part of the first question on electromagnetism in the examination paper was 'Describe in simple language the essential physical meaning of Ampere's law'. Three marks! Just for one short sentence of 10 words or so. Fewer than 20 per cent of candidates answered it correctly.

If it were not for about 10 per cent of the class, who have done well in the examination, proving that they now understand elementary electromagnetism and its laws, I would go away into some quiet corner and shoot myself. I don't know who to thank for those few wonderful bright-eyed students who make lecturing worth while, but I'm not thanking the HSC for them.

Colin Keay,
Department of Physics.



• Ms Denise Frost and Ms Bronwyn James examine some of the objects in the Pacific Tribal Art exhibition.

Pacific art exhibition

The final art exhibition for the Year on Pacific Tribal Art held recently on campus was impressive for its wide ranging collection of tribal artefacts from areas as diverse as the New Guinea highlands and the Solomon Islands (Melanesia), Hawaii (Polynesia), Borneo and Irian Jaya (Indonesia), the islands of Micronesia and New Zealand.

The items themselves, whether used for food gathering, ceremonial rites, war or personal adornment, gave a fascinating insight into cultures that have now all but disappeared. The materials used, too, gave the feeling of the richness and oneness with the natural world of these inhabitants, whether in the use of a particular wood, or stone, or bone (for example, a delicate cassowary bone dagger), or the choice of mother-of-pearl inlay, or the carving of prized jade or greenstone.

The History Department, in conjunction with the Art Advisory Committee, has purchased a unique ancestor spirit carving that they hope to set up as part of a Pacific Region display in the Library.

Altogether, a most interesting exhibition of a kind not usually seen in Newcastle. We look forward to seeing what is promised for us by the Art Committee in the New Year.

Study focuses on women's exercise



• Dr Christina Lee

A \$20,000 grant from the National Heart Foundation will enable a research program assisting middle-aged women to exercise more to reduce the risk of suffering from heart-disease.

The program, headed by Dr Christina Lee, Lecturer in Psychology, will initially identify why many women aged 50 to 60 do not exercise.

'Clearly, the objections raised to exercising, such as the usual one, "it is not proper for a lady my age", need to be canvassed', Dr Lee said.

'As a result of interviews with approximately 300 women, we will know enough to be able to commence to devise programs assisting some women to overcome their unwillingness'.

The latter phase of the research program dealing with ways for women to cope with social and psychological 'barriers' to exercise will involve Professor Saxon White, Professor of Human Physiology, and research in his laboratory.

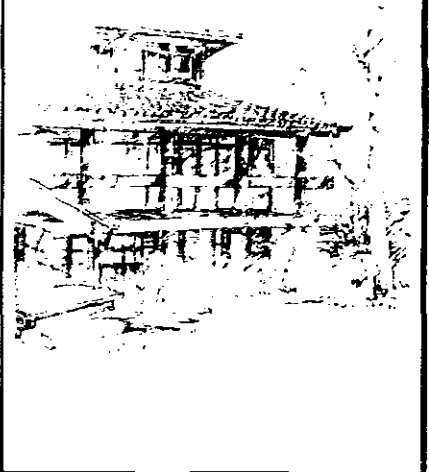
Dr Lee said approximately two per cent of middle-aged women exercised regularly. The reasons why the percentage was so low had not been carefully analysed.

Clearly, it was important to obtain answers, because exercise reduced the risk of heart disease markedly — by as much as half if the exercise were sustained.

Greeting cards for Christmas

For a different sort of Christmas greeting card, Convocation has available a set of six cards for \$3 (plus 50c for postage) picturing sketches of University buildings in their bushland settings by artist, Allan Gamble.

Convocation also has a range of fine quality mementos of the University, which would make beautiful and unusual gifts for Christmas, and are on permanent display in the ground floor corridor of the McMullin Building opposite the Convocation Office. Enquiries: Nicolette Connon, Extension 370.





● The first Vice-Chancellor of this University, Professor James Auchmuty — from *Newcastle Seen*.

Newcastle's modern history in pictures

Around the time when Master Ron Morrison started work as a cub photographer on the *Newcastle Morning Herald*, trams, double-decker buses and horse-drawn bakery carts could be seen in the streets of Newcastle.

The year was 1949 and the *Herald's* News Editor told the cub photographer that he should show the newspaper's readers, in one, two or three pictures, what had happened — 'you are the eyes of the people who cannot be present'.

According to *Newcastle Seen*, a handsome book of photographs now on sale in bookshops, people were kept graphically informed about happenings between 1949 and 1975 as long as they read the newspapers to which Mr Morrison supplied pictures.

The book is a comprehensive memorial of major events in

Newcastle during those 26 years. Arranged into various kinds of photographs — front page, special events, city, ocean, harbour, industry, sport, arts, entertainment, floods, personalities, children, lake and valley and others — the collection is expertly printed on glossy paper and sells for \$29.95.

Mr Morrison, a former Head of the Department of Visual Arts at the former Hunter Institute of Higher Education, states that the 320 pictures which *Newcastle Seen* contains were chosen from about 800 prints which he kept since 1949.

One of the pleasures of reading the book is to muse about things almost forgotten, such as the sinking of part of a convoy of amphibious vehicles in Stockton Bight, the crash of a Sabre jet at The Junction, new vessels being launched at the State Dockyard, vehicular ferries working on the harbour, the use of a Council tow truck in Hunter Street, steam

engines pulling trains, Redex car trial competitors in Newcastle and the rescue of people during the Maitland floods.

Moreover, we remember characters and identities also almost forgotten.

Young people who read *Newcastle Seen* will not be able to notice as many changes to Newcastle as their parents will.

However, the book will be sure to meet a solid demand, because Mr Morrison's view of Newcastle's past is kaleidoscopic and sharp. His News Editor would agree.

Shell scholarships

The Shell Australia Postgraduate scholarships have been awarded annually since 1952 to Australian postgraduate students. It is open to Honours graduates of Australian tertiary institutions who are proposing Masters or Doctorate studies in science, engineering, economics/commerce, computer science, or related fields.

The Shell Postgraduate Scholar will receive \$20,000 per annum for the two or three years of study, tenable at an Australian tertiary institution.

Precise terms and conditions of the scholarship are contained in the Prospectus, available from the Registrar's Office or from Shell's Personnel Manager in your capital city.

Applications close on November 23.

The Shell Australia Undergraduate scholarship is new offering undergraduate scholarships to first-year students or those who have successfully completed the first year of an earth sciences or mining engineering degree course, or equivalent, at an Australian tertiary institution.

Copies of the Prospectus and application forms for both the postgraduate and undergraduate scholarships are available from the Scholarships Office.

Joint Institute of Bulk Materials



● The Chairman of the Newcastle Permanent Building Society, Emeritus Professor A.J. Carmichael, presents a cheque from the society to the Vice-Chancellor and Professor Alan Roberts to help establish the Chair in Bulk Solids Handling and Conveying.

A new institute for research in the field of bulk materials handling will be jointly established by the University and the University of Wollongong.

The Institute of Bulk Materials Handling Research is unique in Australia and will be able to contribute a great deal to the enhancement of Australia's industrial development.

A new Chair, named the MERZ/TUNRA Chair in Bulk Solids Handling and Conveying, has also been established.

The title recognised the two organisations which have agreed to provide the majority of the funds to establish the Chair — MERZ Australia Pty. Ltd., consulting engineers based in Perth, and TUNRA Ltd., the University's research company, each of which will provide \$40,000 a year for the next three years.

The Newcastle Permanent Building Society will also provide \$10,000 a year for three years.

The institute is designed to provide a centre to maintain close co-operation with industry and government instrumentalities, foster liaison with overseas institutions and researchers, arrange collaborative research projects, provide a focus for undergraduate and postgraduate training and

research and carry out other related tasks.

The affairs of the new institute will be administered by a Board composed of representatives of the Deans of Engineering at Newcastle and Wollongong, the Directors of the Institute, representatives of industry and the Senates of the University of Newcastle and the University of Wollongong and nominees of the Vice-Chancellors.

The Chairman will be elected by the Board, preferably from the industrial representatives.

The general activities of the Institute of Bulk Materials Handling Research will be funded from subscriptions and donations, profits from Institute activities and levies on the Newcastle and Wollongong Branches.

Explaining the background to the decision to set up the new Institute, the Dean of the Faculty of Engineering, Professor Alan Roberts, said that for a number of years the Departments of Mechanical Engineering at the Universities of Newcastle and Wollongong had been involved in a programme of research associated with the handling of bulk materials.

He said that broadly the research encompassed conveyor performance investigations, deter-

mination of flow properties of bulk materials, analysis and design of storage bins and surface storage facilities and economic evaluation and optimisation of bulk handling systems design. Comprehensive laboratory test facilities had been established in the Departments to aid the research.

The research had been supported by several grants received from the ARGS, Wheat Industry Research Council (WIRC), Australian Electrical Research Board (AERB), NERDDC, Australian Mineral Industries Research Association (AMIRA), CSIRO/University of Newcastle and CSIRO/University of Wollongong grants scheme and from Industrial Sources.

Professor Roberts said that in recent years considerable interest had been expressed on behalf of Australian industry in the bulk handling work at Newcastle and Wollongong. Through TUNRA Limited (The University of Newcastle Research Associates) and the University of Wollongong Consulting Companies Uniadvice and ITC Bulk Materials Handling, more than 500 projects have been completed for more than 300 companies throughout Australia as well as overseas. The total value of projects completed over the past six years exceeded \$3 million.

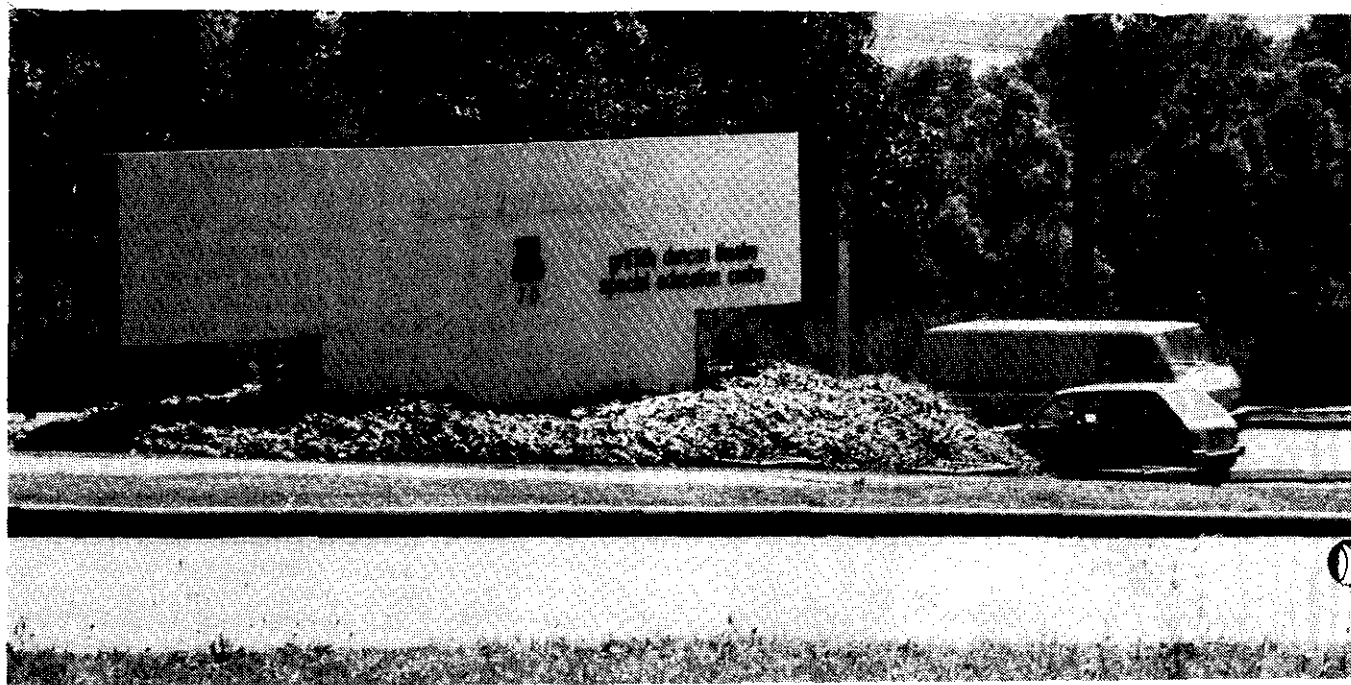
The funds were used to employ members of staff, rent research premises and meet all operation costs. In addition, the funds had been utilised to support the building of special bulk materials handling laboratories (at Newcastle and Wollongong), as well as supporting the research through equipment purchases, postgraduate student scholarships, overseas student exchange programs, overseas visitors and conference travel.

Much of the work has been associated with the Hunter Valley and Illawarra region, with projects undertaken on behalf of the coal, aluminium and refractories industries.

Professor Roberts said the new Institute would conduct research using the existing facilities of the bulk solids handling laboratories of the Universities of Newcastle and Wollongong.

It was proposed that the program of specialist seminars conducted by the research groups from the Universities of Newcastle and Wollongong would continue so that practicing engineers and researchers might be kept apprised of the relevant findings of the research.

Entrance Named



- *It has been decreed following the establishment of the Amalgamated University that the entrance to the former HIHE be named the East Gate of the University.*

Government votes funds for computer network

The Commonwealth Government recently agreed to fund the establishment of a national academic research computer network.

The facility (AARNet) is to be constructed through the interconnection of the Local Area Networks (LAN) of the CSIRO and higher education institutions, including this University, to form a set of regional networks, and the interfacing of the regional networks to a national network.

AARNet will provide unprecedented opportunities for sending messages, carrying out co-operative research and gaining access to computers and databases.

Between this month and December, a preparation will be made for the implementation of phase 1 of both the National and Regional networks. Installation of AARNet is planned for January/April next year.

It is also intended that commercial and industrial research bodies will be able to connect to the network on the terms that such a connection explicitly excludes all activity of a direct commercial nature from the network, and that the connection is in direct support of research activity of common interest to a higher education institution or CSIRO.

In the international domain, AARNet will play an active role in establishing connections to overseas research and academic networks in order to provide Australian researchers and scholars with a productive gateway to global computing and communications resources.

The network will comprise a National Backbone network and eight State Regional networks. The National Backbone network will interconnect the Regional networks and also include interfaces to peer international networks. The Regional networks will provide connection services to each site.

Some of the applications which will initially be supported over AARNet, and the ways in which these applications are commonly used:

- **Electronic Mail** — allowing the interchange of ideas, information and resources between users, is one of the most common network services. AARNet will enable efficient mail delivery by allowing the direct exchange of messages between mail systems, and, by using mail gateways, will interconnect the different mail systems in common use.

- **Remote Access** — allowing a network user to establish an interactive session on a remote host. This facility is used for a wide variety of purposes, including access to library catalogues, databases and other information sources, as well as access to shared computing facilities.
- **News** — as well as mail delivery, the other major component of messaging networks is the exchange of public messages, creating a network-wide bulletin board.
- **File Transfer Facilities** — providing a mechanism for the rapid distribution of documents, software, and data, and are also an integral component of the support for the productive use of remote computing facilities.

There are many other network applications, including network job submission, directory services, electronic document exchange, distributed databases, distributed filing systems and such.

Mr David Morrison, of the Computing Centre, is able to provide information on how the network will be accessed from within the University.

Optimistic outlook for Architecture

The President of the New South Wales Chapter of the Royal Australian Institute of Architects, Ms Louise Cox, is optimistic about the future of architecture in the Hunter.

When Ms Cox spoke as guest at two student exhibitions on October 30, she said Newcastle architects had 'scooped the pool' in the New South Wales Chapter's awards recently.

Their success is a wonderful goal for students of the University's Faculty of Architecture to try to reach', she said. 'I congratulate the students on excellent presentations. I have found a lot of future potential here and I hope that Newcastle will be able to keep some of these students'.

Models and drawings of design projects undertaken by BArch degree and BSc(Arch) degree students were exhibited in the David Maddison Clinical Sciences Building.

The BArch students, who are about to move into the architectural profession, selected their projects and found their 'clients'. The students and the 'clients' worked on the various stages of the assignments together.

The BSc(Arch) students, who have completed their third year at University, exhibited their submissions for the development of an art gallery at the Newcastle Civic Centre.

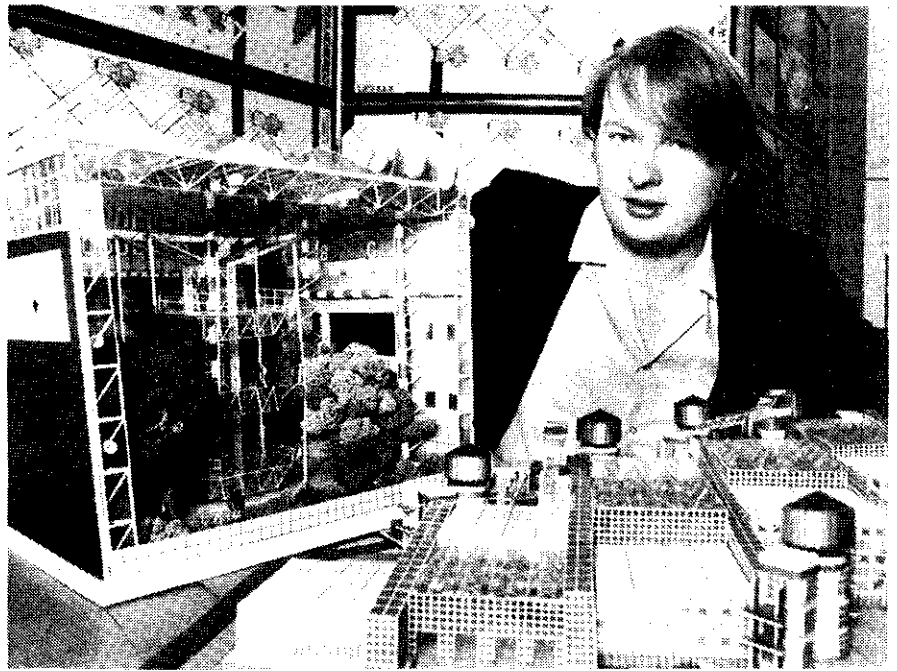
The Dean of the Faculty of Architecture, Professor Barry Maitland, said that the models and drawings would be inspected and the students would be examined. He paid tribute to the hard work of the students and members of staff and the high quality of the exhibitions.

The Dean also thanked the Planning Services Department of the Newcastle City Council for the assistance it had given the Faculty.

Mr Gary Fielding, Head of the Planning Services Department, opened the exhibitions. He agreed with Ms Cox that the profession had a very favourable future in Newcastle.

The designs which students have come up with are fascinating, in particular because they emphasise how buildings can fit into context. My Department thoroughly enjoys the contact it has with students', Mr Fielding said.

The final year students, and their projects are: Mr K. Annuar



Final-year architecture student, Mr Michael Ostwald, with his submission for a research centre at the Australian base in the Antarctic.

The centre is designed to accommodate up to 80 people for a year at a time, with limited external contact.

Entirely prefabricated in modules, from a kit of component parts, the base can be constructed during the short summer over five years.

Module sizes are based on standard cargo containers.

The overall form has been derived from the need to resist winds of up to 280km/hour, snow drifts up to 6 metres deep and temperatures down to -28 degrees centigrade.

Abdul Halim (passenger terminal, Newcastle), Ms Megan Chalmers (ABC Studios, Newcastle West), Mr Jeffrey Cheah (central railway redevelopment, Sydney), Ms Marilyn Chsang (leisure sports centre, Newcastle), Mr Tony Chin (museum of modern art, Newcastle West), Mr Mohd Anuar Ismael (coach terminal, Newcastle), Mr K.C. Khoo (drug rehabilitation centre, Dudley), Ms Josephine King (private school, Maitland), Mr Yogesh Kumar (hotel, South Steyne), Ms Barbara Lara (primary school, Grahamstown), Mr Be-Hsin Lee (conference hotel, Newcastle East), Ms Jillian Lye (redevelopment, Newcastle railway station), Mr Rosman Osman (regional airport terminal, Hexham), Mr Michael Ostwald (research base, Antarctic), Mr Tan Beng Kung (cinema complex, South Steyne), Mr Tan See Ye (industrial museum, Newcastle), Mr Tim Thurn (retail redevelopment, Morisset) and Mr Kamar Ya'Akub (student residence hall, Mayfield).

Resolving Conflict

A course on Resolving Conflict will be held at the Western Newcastle Community Health Centre, Nash Street, Wallsend on Sunday, December 10.

Mrs Jan McCarthy, a Health Education Officer, will be the facilitator. She has been a consultant with the Conflict Resolution Network since its inception in 1986.

A spokesperson for the Department of Community Programmes said the course offered a lively and practical approach for better relationships both at home and the workplace.

The registration fee of \$10 covers lunch.

For further information please telephone Extensions 600 or 522.

18 Guide on advanced standing

TAFE students now have their own Guide to Advanced Standing in courses offered by the University of Newcastle.

The Director-General of the New South Wales Department of Technical and Further Education, Mr Michael Brinsden, and the Vice-Chancellor, Professor Keith Morgan, have jointly launched the booklet, *TAFE Students Guide to Advanced Standing in the University of Newcastle*.

The 35-page guide represents a major achievement in clarifying the educational pathways for TAFE students to enter higher education and is described by Mr Brinsden as being an historic event in post-secondary education.

'It is the first time in New South Wales that a higher education institution and TAFE have jointly published such a valuable guide', said Mr Brinsden.

The strengthening of the relationship between TAFE and the University will enhance opportunities in post-secondary education for the people of the Hunter Region.

The Guide will give those TAFE students planning long term study and career paths access to reliable information about opportunities available to them in higher education.

There is a variety of fields in which such opportunities are available. These include engineering, applied science, art and design, and business and commerce', he said.

The co-operation shown between TAFE and the University of Newcastle is expected to serve as a model for the production of similar publications with other universities.

The guide is planned to be a first of a series of annual publications and will be distributed widely to teachers, counsellors, careers advisers and college libraries.

Professor Morgan said the University took a great deal of pleasure in being involved in the launch of the guide. The credit transfer was a step that would have important consequences for all concerned.

He said it was a gesture that needed to be expanded and developed in the future and which would hopefully become an annual publication.

Contributor to the cause



Mr John Dorman (above) is the winner of the 1989 Environmental Achievement Award.

Following the receipt of 10 nominations, the University's Board of Environmental Studies (ES) decided to present the award to Mr Dorman because of his contribution to environmental matters spanning 30 years and his voluntary personal service to conservation.

Some of his qualifications for the award include: leader of the Australian Conservation Foundation in the Hunter Region, member of the National Parks Association, champion for the creation of the Myall Lakes National Park, protection of the Tomaree Peninsula through the National Trust, and first life membership of the Newcastle Flora and Fauna Protection Society.

Mr Dorman is a contributor to many environmental publications and was a member of the Government's Hunter Regional Planning Committee.

VACANCIES

Word Processor Operator — International House (Position No N165/89)

Applications are invited from suitably qualified persons for the above position. International House is an on-campus self-catering residence for students of the University.

The appointee will be responsible for the running of the

House Office and will assist the Warden in a wide variety of matters involving students and the general management of the residence.

Essential: An ability to relate effectively to young adults. Word processing skills together with the ability to establish and maintain computerised records and to work independently.

Desirable: Previous experience with IBM compatible personal computers.

Commencing salary will be up to \$20,092 per annum, depending on experience, within the salary range of \$18,811 p.a. to \$21,094 p.a.

Applicants should indicate their current keyboard speed.

Further information can be obtained from Mr J. Birch, telephone 68 5601.

Applications close on November 24, 1989.

Office Assistant/Typist (Temporary/Part-time) Department of Sociology (Position No N164/89)

A competent person with a sound knowledge of general office duties is required for the above position.

The position is for 28 hours per week. It is anticipated employment will be available until April, 1990 — with the possibility of extension.

Essential: Good typing skills.

Desirable: Word processing skills. A working knowledge of, or a willingness to learn, Wordperfect 5. Working experience in an academic department.

The Department will, early 1990, have nine full time academic staff and is undergoing a period of growth in both its teaching and research.

Commencing salary will be up to \$361.13 per week.

Applicants should indicate their current typing speed.

Further particulars may be obtained from the Head of Department, Dr J. Bern, telephone (049) 68 5307.

Applications close on November 22, 1989.

VACANCIES

Equal Employment Opportunity Officer - EEO Unit

(Position No N161/89)

The EEO Unit monitors and implements the University's EEO Management Plan and affirmative action program. The successful applicant will provide assistance to the EEO Co-ordinator in a wide range of tasks, including research, development and implementation of EEO and AA policies, strategies and initiatives and preparation, conduct and evaluation of EEO and AA staff training programs.

Assistance with the collection of statistical data and analysis of such data, particularly for annual reports, is also required. The appointee will be expected to take some responsibility for activities relating to one of the identified target groups of employees.

The appointee will also be required to serve on University committees relevant to the promotion of EEO objectives and prepare information sheets and other material to publicise the EEO program.

Essential: A demonstrated commitment to Equal Opportunity principles.

Desirable:

- Experience in working in EEO/AA programs.
- Tertiary qualifications relevant to the duties identified.
- Experience in staff developmental or other similar educational activities.
- Qualifications and/or experience in data collection and analysis.
- Public Relations experience.

Commencing salary will be in the range \$26,132 to \$28,532 per annum depending upon qualifications and experience.

The position is available either on a 35 hours per week basis, or a 17-1/2 hours per week, (job-share) basis, and applicants should indicate their preference when applying.

Further information may be obtained from the Equal Employment Opportunity Co-ordinator, Susan Jones, telephone (049) 68 5317.

Applications close on November 24, 1989.

Stenographer - Secretariat Division

(Position No. N162/89)

Applications are invited from suitably qualified persons for the above position.

The appointee will be responsible for providing secretarial services to the Deputy Secretary, Council and General Administration Branch. Duties will include the taking and transcription of shorthand for reports, submissions, letters, memoranda, minutes, agendas and schedules. In addition the appointee will be required to collate, photocopy and distribute documents.

Essential: Shorthand and typing skills. Previous experience in and a knowledge of office routines. A capacity to meet deadlines. Sound interpersonal and communication (written and oral) skills.

Desirable: Previous experience in the preparation of minutes, reports and correspondence to a high standard. Word processing skills.

Commencing salary will be up to \$19,227 per annum depending on experience.

Applicants should indicate their current shorthand and typing speeds.

Further information may be obtained from the Deputy Secretary, Mr P.R. Welsh, telephone 68 7262.

Applications close on November 29, 1989.

Laboratory Assistant (Part-time) — Central Animal House

(Position No. N163/89)

Applications are invited for the above position which is available until October, 1991 on a two day (16 hours) per week basis.

The successful applicant will be responsible for the care, feeding and cleaning of a variety of small and large animals. Duties will include the breeding of rodents in a barrier maintained colony and assisting the Veterinary Surgeon with the treatment of sick or injured animals.

Essential: A caring attitude towards animals and the ability to pay attention to detail.

Desirable: Completion of, or attendance at, a TAFE course in animal attending, animal care of veterinary nursing. Knowledge of sterile techniques, experience working with animals, in part-

icular with the breeding of laboratory rodents. A current Class 1 drivers licence.

Commencing salary for adults will be within the range \$9.58 to \$10.08 per hour plus an examination allowance if applicable. Juniors are paid according to age.

Further information can be obtained from Ms Robyn Gentle, telephone 68 5299.

Applications close on November 24, 1989.

Professional Officer (Surface & Groundwater Hydrology) — Department of Civil Engineering & Surveying

(Position No N160/89)

Applications are invited for the above position to join a team investigating the estimation of regional groundwater recharge using catchment models.

Essential: Recent degree in Engineering or Science.

Desirable: Skills in hydrology, statistics, computer programming and report writing.

Employment is available on a full time basis for 1990. A further extension may be available depending upon availability of funds and progress. The successful applicant would be encouraged to undertake a higher degree while working on the project.

Salary will be within the range \$442.61 to \$596.39 per week depending on qualifications and relevant working experience.

For further information contact Dr Brian Williams (049) 68 5681.

Applications close on December 1, 1989.

General Information: Excellent conditions of employment apply. Superannuation is available for all permanent positions.

Applications, quoting position number, should be addressed to the Staff Office, University of Newcastle, NSW 2308. Please include all details of all relevant information, qualifications, experience and previous employment. Applicants should include copies of recent references or the names and addresses of three referees from whom further information could be obtained.

Applications are welcomed from both women and men, including Aborigines, people with disabilities and people from non-English speaking backgrounds.

REVIEW

Beauty and the Beast, written by Louis Page, directed by Brian Joyce, Drama Studio, Wednesday 18 October 1989.

This production was disappointing. The most obvious and most discussed flaw was the fact that 36 times in a 2:40 minute play the theatre was plunged into darkness for scene changes. There has to be a better way of conveying variation in setting and worlds than to physically alter stage settings so many times. Examples of this were the incidents set in the limbo land to which fairy Mielle is consigned for consorting with a human. The effect was one I enjoyed, but by the third time (Act II Scene 15) the effect had considerably palled. There was just too much busy stagework to create atmosphere and settings which could, perhaps, have been achieved by lighting, and exploiting different parts of the stage.

Articulation was also a problem: at times it was difficult to hear what was being said, while at others you almost had to reach for earmuffs.

In terms of acting, the actors playing minor but multiple roles carried the day — the monkeys, sisters, courtiers and fairies: Sara Stephens, Kristy Street, Glenn Hazeldine and Michael Joyce. Costumes and basic stage set were also well done.

However, all in all, a disappointing piece; any new ideas and reflections on gender-related issues were unfortunately buried. A familiar story needs rather better production and direction than this.

Marea Mitchell

Altarcation

The 1989 exhibition of works by final year students of the Bachelor of Arts (Visual Arts) and the Bachelor of Education (Art) is the largest of its kind ever held in Newcastle.

The exhibition, entitled *Altarcation*, was opened on November 16 by the Pro Vice-Chancellor, Dr Les Eastcott, and is on view in the Art Building, the Ceramics and Illustration Building and the Main Concourse of the Hunter Building.

About 115 graduands from the BA (Visual Arts) and 19 from the Art Education course have displayed their works, which cover a broad range of established and

emerging areas of art practice.

The artworks include the specialisations of painting and drawing, sculpture, printmaking, ceramics and glass, fibre art and textiles, plant and wildlife illustration, photography, film and video.

The students' work has been assessed whilst on display and counts towards the final mark of each student.

The Course Director for the Visual Arts course, Mr Garry Jones, said that the calibre of the students' work was very high.

The scale, breadth and diversity of this blockbuster exhibition reflect the flourishing art environment of the School of Visual and Performing Arts', Garry said.

'It puts on view some of the finest emerging art talent of the Region', he said.

The exhibition is open to the public from 9 am to 9 pm each day.

Advertisements

For Sale

Valiant automatic station wagon (registered until March, 1990). Features include: good tyres, mechanically sound, tow bar and goes well (owned by an engineer). Asking price: \$1,950, or near offer. Please telephone 28 1584.

Fifteen year-old three bedroom brick home (all built-ins) near Charlestown. Features include: lounge, kitchen-dining room, bushland setting and close to schools. Please telephone 43 4933.

Ballet gear — Women's x-over (new), \$10; character shoes (as new), size 6, \$30; demi-pointes (as new), size 5-1/2, \$25; pointes (new), size 3-1/2, \$30. Please telephone Kathy at 43 6618.

Four white venetian blinds in various sizes: 1530x1610 (drop), \$25; 2710x1610 (drop), \$30; 1195x1440 (drop), \$25 and 2710x1400 (drop), \$30 or near offer. Please telephone 58 2240 before 8 am or after 4.30 pm.

Free

Border Collie cross pups free to good homes. Male and female (black and white). These puppies would make an excellent Christmas present. Please telephone Kathy at Extension 389.

Position Wanted — Photographer

University student is available to photograph faculty, club functions or dinners at very reasonable rates. Please telephone Em at 51 2125 for a quote.

For Rent

Three bedroom fully-furnished house in East Maitland for one year (from mid-December). Rental: \$150 per week. Please telephone 33 7761.

Employment opportunities with Outward Bound

Interested in developing your skills in applied research? If so, Outward Bound Australia are offering Summer Research Scholarships for undergraduates and graduates in the fields of psychology, behavioural sciences, education, physical education, outdoor education/recreation, management/business, and sports medicine.

Successful applicants with work as research assistants/trainees for a minimum period of six weeks during the summer vacation at the Outward Bound national base in Canberra.

Outward Bound is a non-profit, independent, educational foundation which provides unique personal development opportunities through outdoor experimental learning programs for over 8,000 students per annum. For further details please get in touch with Ms A. Petrovic, C/- the Secretary's Division.

Invitation

Dr Clare Burton, the Director of Equal Opportunity in Public Employment, will address a public meeting on Wednesday, November 29 at 12.30 pm to 1.30 pm in Lecture Theatre EF02, Engineering Complex.

Topic:

EEO, Amalgamation and Award Restructuring.

Dr Burton's visit is sponsored by the following campus groups: AWEUN, the EEO Unit, the HREA, the PSA and the Staff Association.