



# THE GREENHOUSE EFFECT—IS THE WORLD DYING?

*Important meeting of Australian Conservation Foundation*

The greenhouse effect, stratospheric ozone and acid rain are terms that meant nothing to most people 15 years ago. Today they are synonymous with the well-being of our planet and are discussed in public, political, and government forums.

How much hotter will the earth become? Will the sea levels really rise? Will the antarctic ozone hole grow? Does Australia have an acid-rain problem?

What can we do about these problems?

There is no question but that we have brought about these changes to planet Earth through various domestic and industrial activities.

Despite more than 20 years of international research, we still do not have all the answers as to the exact causes and, therefore, the probable cures. The atmosphere is 99 per cent nitrogen, oxygen and argon, but it is the rest, the trace gases, that determine its chemistry; and there are hundreds of them. It is issues such as the antarctic ozone depletion that illustrate our vulnerability.

Industrially and domestically we burn so much fossil fuel each year that the atmospheric carbon dioxide levels are measurably increasing. This is the primary cause of the greenhouse effect. Globally there is almost as much other matter, derived from living and recently dead plants, burnt annually in agriculture, deforestation, bushfires, and waste management.

Research in the Department of Chemistry at The University of Wollongong is assessing the impact of this burning on atmospheric pollution, and subsequent influence on global climates. These measurements are carried out using an analysis technique developed by Dr David Griffith, based on state-of-the-art Fourier Transform Infrared (FTIR) spectroscopy. Most gas species of interest are effectively collected while not being allowed to react further with each other. This technique can



Dr David Griffith

measure a wide range of gas species whose concentrations are only one part in ten billion.

In FTIR emission spectroscopy, the heat radiated by a hot flame or plume is analysed spectrally to determine its composition. This is a remote sensing technique, which has the great advantage that a fire or plume can be studied from afar, without any need to go into the fire to collect samples, and offering no interference with the sample itself. In the coming year Dr Griffith hopes to test this technique on some real (but controlled) bushfires.

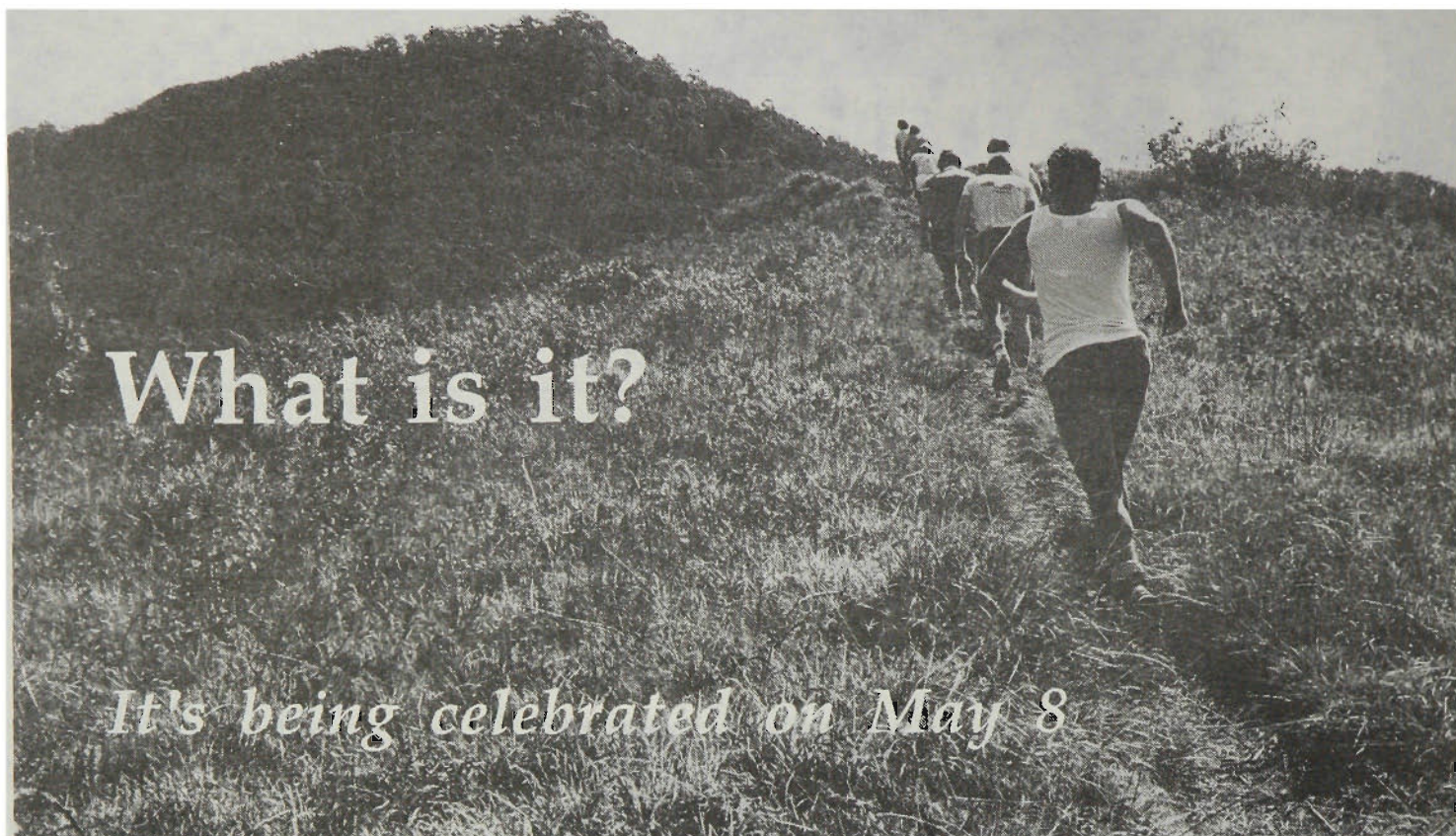
In his years of research, Dr Griffith has collected much data on the composition of the atmosphere. This enables him to explain how the greenhouse effect and ozone holes

are caused, and what factors contribute most to these. It is only industries that contribute to these effects, it is all of us, in our daily lives.

Find out more about the nature of the greenhouse effect and the ozone layer, and what can be done to reduce detrimental effects. This will be the subject of a lecture by Dr David Griffith for the May monthly meeting of the Australian Conservation Foundation (ACF). All members and non-members are welcome.

The meeting starts at 7.30 pm on Wednesday May 10 and is to be held in the Illawarra Environment Centre (upstairs), Central Chambers, 157 Crown Street, Wollongong.

**The Art of Lunch**  
Every Thursday from  
12.35 to 1.25 pm  
Details on Page 7



What is it?

*It's being celebrated on May 8*

*On again this year: the gruelling climb up the mountain*

**University Day**, known previously as Anniversary Day, commemorates the establishment of the University as a College of the University of New South Wales in 1961. In formal terms, Wollongong University College was constituted by resolution of the Council of the University of New South Wales on 8 May 1961, making our University some 27 years old.

In recognition of this historical link, University Day is to be held this year on Monday May 8, rather than on its previous August date. In future years, it will be celebrated on the Monday nearest to May 8.

### **Events**

As in previous years, a highlight will be a public address by a notable speaker on a topic of current concern. This year the speaker is Mr Michael T. Somare CH, MP, Minister for Foreign Affairs for Papua New Guinea. The title of his lecture will be Education and the Papua New Guinea Relationship.

In order to make the Anniversary Day a truly campus-wide celebration involving all students and staff, a range of other events is also being organised. These include a lunch-time performance by the well-known band, The All-Nighters; an open-air theatre performance by Creative Arts students; staff-student tennis and volleyball competitions; a day-long exhibition of Melanesian Art in the Long Gallery, and lunchtime displays of Tai Chi, and

Kendo, and other activities, by groups from the Sports Association. The annual Summit Run to Mt Keira will also be held during the day.

In the evening the public lecture (Music Auditorium) will be preceded by the 25-year Staff Awards and the presentation of the annual Ethel Hayton Trophy to an academic staff member who has made a notable contribution to community activity. Musical interludes will be provided by music students directed by David Vance. The address will be followed by a wine-and-cheese supper.

### **Program**

#### **Daytime**

9.30 am – 6 pm: Melanesian Exhibition 'Art and War' – Long Gallery, Creative Arts.

Noon – 12.30 pm: Tai Chi, Kendo and Aerobics displays – Central Lawn.

12.30 – 1.30 pm: Band Performances (All-Nighters) – Central Lawn.

12.30 – 1.30 pm: Staff/Student Volleyball and Tennis Competitions – Vice-Chancellor's Lawn and Tennis Courts.

12.30 pm: Summit Run – Starting point western entrance on Northfields Avenue.

1 – 1.30 pm: String Orchestra Performance (Creative Arts) – Forum (outside Administration).

#### **Evening**

Starts 6 pm in Music Auditorium with musical interludes by students directed by David Vance. Ethel Hayton Award. 25-year Staff Award. Presentation of a contribution to the Ethyl Hayton Memorial Scholarship by the Zonta Club of Wollongong. Public Lecture by the Right Hon Michael T. Somare CH MP Minister for Foreign Affairs for Papua New Guinea entitled 'Education and the Papua New Guinea Relationship'.

7 pm, in performance space adjacent to Music Auditorium: wine and cheese supper. Space display of historical photographs.

### **Art of War**

Melanesia embraces the islands of New Guinea, New Britain, New Ireland, The Solomons, Vanuatu, Fiji and New Caledonia and has a population of some five million. To learn something of the region's history see page 7

## May Graduation Ceremonies

Four graduation ceremonies will be held from May 10 to May 12 in the Sports Hall, Recreation and Sports Association building. Details are as follow:

### Wednesday May 10 - 2.30 pm

**Commerce:** All Commerce and Management degrees and diplomas, including AssocDipAdmin, AssocDipCompApp, and GradDipEd Stud (School Admin).

**Mathematical Sciences:** All Mathematics and Computing Science degrees and diplomas.

**Speaker:** Mr Gerry Freed, BLE Capital Limited, Fellow of the University.

### Thursday May 11 - 9.45 am

**Arts:** All Arts and Creative Arts degrees and diplomas.

**Speaker:** Dr Marion Adams, Dean, Faculty of Arts and Head of Germanic Studies, The University of Melbourne.

### Thursday May 11 - 2.30 pm

**Education:** BEd (external conversion courses only)

**Science:** Science, Human Movement and Nursing.

**Speaker:** Professor P. LeP Darvall, Dean, Faculty of Engineering, Monash University.

### Friday May 12 - 9.45 am

**Education:** BEd (excluding external conversion courses), all other Education degrees and diplomas.

**Engineering:** All Engineering degrees and diplomas.

**Speaker:** Mr P. Songo, High Commissioner, Papua New Guinea High Commission in Australia.

Invitations to academic staff to attend the ceremonies will be sent out shortly.

## New Executive Management Structure

The Council of the University has agreed on a new executive management structure.

Professor Peter Rousch will retire early in July 1989 and his position of Deputy Vice-Chancellor (Services and Development) will be abolished. A new position of Pro Vice-Chancellor (Academic) will be advertised internally with appointment for a four-year term, either full-time or part-time as appropriate.

The Pro Vice-Chancellor will provide support for the sole Deputy Vice-Chancellor (previously Deputy Vice-Chancellor, Academic and Research) on academic matters, staff appointments and leave, course and subject approvals, space allocations, timetabling and co-ordination of academically related units (Aboriginal, Student Learning, Conservatorium, co-ordination with TAFE and High Schools, Library and Ethics Committees).

The position of Business Manager now held by Mr Jim Langridge will also be abolished. In its place a new position will be created which will have a wider range of responsibilities including University finances, business and commercial developments, international operations, marketing, information and management systems and capital developments. Some of these responsibilities were previously held by the Deputy Vice-Chancellor (Services and Development). This new position will be filled by Mr Langridge. As yet the title of the position has not been determined.

## Clear skies for opening of Heritage Week



Heritage Week opened on Monday of last week to brilliant sunshine. The opening ceremony of the University's activities was performed by Professor Peter Rousch, seen on the left at the exhibition of Aboriginal artifacts with the Lord Mayor, Alderman Frank Arkell. Above is Dr Arthur Smith, founder of the Aboriginal Education Unit, with Carol Speechley, from the Unit



*The Tempest in rehearsal. Centre stage in this picture are a thoughtful, lips-pursed Lynne Williams and, arms crossed by the scaffolding, Stephen Edwards*

## *The Tempest Project*

### **An experiment in the collaborative generation of new musical theatre**

During the past few weeks, 75 students from the School of Creative Arts have been involved in finding new ways of creating a piece of musical theatre, guided by Stephen Edwards (composer, musical director) and Lynne Williams (director, librettist).

Lynne Williams writes: 'Our work in London focuses mainly on projects designed to fill the great hole which exists in contemporary musical theatre repertoire – to fill the gap between the extremes of the light entertainment offerings of Andrew Lloyd Webber and those of esoteric chamber opera composers.

'This gap offers unlimited opportunities to composers, directors, designers and performers to create a kind of musical theatre which meets head-on the complex issues of contemporary life. Our experience has shown that a collaborative process offers the best chance of finding new directions and new solutions – of working ideas into an organic piece of theatre whose power springs from the input of many different kinds of creative arts.

'We have chosen *The Tempest* as a basis for our project on campus because, of all Shakespeare's plays, it offers a text most able to support the added dimension of music and its underlying themes of spiritual and temporal power, freedom and slavery, revenge and forgiveness still speak as vividly today as ever.

'In this project, we are hoping that students will gain insights into the processes involved in the generation of new work. It is a time-consuming and often frustrating kind of research but richly rewarding. The School of Creative Arts at The University of Wollongong is in a unique position. With its cross-discipline approach to the Performing and Visual Arts, it has the potential to be a breeding ground for a whole range of original musical theatre works, perhaps to help fill the great hole in the repertoire with contemporary companions for Mozart's *The Magic Flute*, and Berg's *Wozzeck*.

'We invite you to join us in the New Theatre, University of Wollongong, on Friday May 19 or Saturday May 20 at 8 pm to share in the collaborative experience of The Tempest Project; tickets cost \$8.

'There will also be three workshop/performances for schools on Wednesday 17, Thursday 18 and Friday May 19 at 11 am; tickets \$4.'

Bookings: Sheila Hall – phone (042) 27 0985 or 27 0580. Limited seats available.

NB: The venue and dates of this project have been changed due to circumstances beyond our control. Apologies to anyone trying to book at The Illawarra Performing Arts Centre.

## **Friends of the University**

**Encompassing-Graduate Group  
Community Involvement Committee  
Projects Committee  
Bequests and Benefactions Committee**

### **What's on**

**May 8**

University Day Address and presentation of Ethel Hayton Trophy to individual or group having done most to foster university-community relations.

**May 10, 11, 12**

University Graduation days.

### **Wanted – space ...**

An accessible storage space is required by the Graduate Group of the Friends of the University for secondhand books.

A successful bookfair was held on Open Day 1988, and it is hoped to continue this function on an annual or biennial basis. If you have a suitable space (a garage would be perfect) please contact Muriel Murada on 27 0073.

**AND REMEMBER, don't discard your superfluous literature!**

## Language learning at Wollongong

Knowledge of a second language is a top priority for many people nowadays, and not least the staff and students of Australian universities.

The Department of Languages is keen to cater for this need by upgrading and extending its teaching and study resources. Since the University's language needs certainly go far beyond French, Italian, Spanish and Indonesian/Malay (the four languages in which we currently offer formal courses), our plan is to acquire a very wide range of 'teach-yourself' courses for the use of the whole university. These would be lodged in the Department of Languages to form the nucleus of an eventual 'University of Wollongong Language Centre'.

We have in mind not only audio-visual courses in, say, Russian, Arabic, Mandarin, Japanese or Korean, but special-purpose courses such as Scientific Russian, Business Portuguese or Technical Chinese.

Please note that the beneficiaries of the project are to be *all* University staff, not only academic and teaching staff.

A brief questionnaire has recently been distributed throughout the University. Those receiving the questionnaire are asked to make further copies and to circulate these in their own departments or sections. We are hoping to receive as many completed forms as possible by May 12 so that we may assess and act on this Institution's general and specific language requirements.

Please contact me, ext 3644, or the secretary of the Department of Languages, Ms Kate Earl, ext 3676, for extra copies or further information.

*Dr Geoffrey Hull*

## Jessie Street Centenary

Dr Winifred Mitchell, member of the University Council and a prominent figure in the Friends of the University, played a major role in the Jessie Street Centenary celebrated this month in Wollongong.

Jessie Street, born on 18 April 1889, campaigned tirelessly throughout her life for women's rights, social justice reforms and international peace. Long-time president of the United Association of Women, she was a key activist in, for example, the struggle for equal pay for equal work.

A brief biography of Jessie Street by Winifred Mitchell and Mavis Robertson appeared in the *Centenary Information Bulletin*.

Centenary events included a conference at which Winifred Mitchell spoke on the topic of Campaigning for Equality, the opening of a reserve named in honour of Lady Street, a lunch at which Winifred Mitchell again spoke, and the launching of a commemorative envelope by Australia Post.

*Lady Street died on 2 July 1970, survived by her husband, Sir Kenneth Street, and four children.*

### WISNET (Women in Science Enquiry Network)

Are you interested in women in science? Our next meeting is on Tuesday May 2, 7 pm, at 25 Balfour Road, Austinmer. We will share a meal and then Lesley Head will talk to us on her research on 'Aboriginal land-use and resource management in the East Kimberley'.

Please let Lesley know if you are coming, ext 3700, by April 28, so that food and transport arrangements can be co-ordinated. New and prospective members especially welcome.

Remember the opening of the WISNET exhibition on Monday May 29. Watch this space for details.

### Teaching and Learning Styles Workshops

What are described as Super Learning Workshops for Educators on New Trends in Learning Styles are to be given in Australia by Michael Grinder this year.

Workshops on teaching skills will be held in Sydney from September 23 to 26, in Canberra from September 28 to October 1 and from Melbourne from October 3 to October 6.

A Presentation Styles Workshop will be held in Melbourne from October 6 to 8.

The general sponsor, from whom more detailed information is available, is Dr Lindsey F. Smith (retired from the Department of Physics at this University), 1 Kennedy Road, Austinmer, NSW 2514.

### Professional attachments within the project development division of IDP

Members of staff of Australian universities and colleges who would be prepared to join the International Development Program of Australian Universities and Colleges, on secondment, for periods of up to six months, are invited to register their interest. People who would most benefit from such secondments would be those who are active in the planning of education development projects overseas or in the development of training programs for overseas students in Australia. The attachment would be an opportunity to gain practical experience in project development and it would involve working collaboratively with staff of IDP, as well as staff of universities and colleges.

Financial arrangements will be determined by discussion. Inquiries should be addressed to Dr E. Brash, Operations Manager, GPO Box 2006, Canberra ACT 2601.

### Change in key-issue procedures

Security staff are now available to issue keys to buildings and rooms at the following times: Monday to Friday 9 am to 10 am and 2 pm to 3 pm.

This procedure will enable University staff to know exactly when the Security office will be attended. It also allows Security staff more opportunity to leave the office for security and patrol duties.

Arrangements for picking up keys in special circumstances may be made with the Security Supervisor, Mr G. Parsons, ext 3936.

# Research Funds

The sources of research funds given below are available to members of academic staff. Further information including application forms may be obtained from Kim Roser (ext 3201). Intending applicants are reminded that all research applications must be forwarded through the Office of Research and Postgraduate Studies.

## National Multiple Sclerosis Society of Australia Research Grants and Fellowships

The National Multiple Sclerosis Society invites applications for Project grants for approved clinical, laboratory based, epidemiological or rehabilitative studies; Training Fellowships and Grants for Equipment.

Applications close with the University on May 17.

## Worksafe Australia Research Awards

The National Occupational Health and Safety Commission invites applications for support for research to investigate their priority areas of Occupational Skin Disorders and Occupational Cancer.

Applications close with the University May 19.

## Australian Academy of The Humanities Travel Grants

Three (\$A1000) grants-in-aid are being offered for short-term study abroad during 1989-90 to scholars resident in Australia and engaged in teaching and research in the field of Humanities.

Limited funds are also available in 1989 to assist publication of scholarly work.

Applications close with the University on June 16.

## Applications for Ship Time on R.V. Franklin

The R.V. Franklin is a 55-metre oceanographic vessel operated as a national facility for the conduct of physical, chemical and biological oceanography. Proposals are invited from individuals and research teams for projects to be included in the cruise schedule for 1991.

Closing date with the University is June 16.

# Scholarships, Fellowships and Prizes

## Selby Fellowships

The Australian Academy of Science invites applications for fellowships available for distinguished overseas scientists to visit Australia for public lecture/seminar tours and to visit scientific centres in Australia.

Fellowships are tenable for visits of not less than two weeks and not more than three months.

Applications close with the University June 16.

## National Multiple Sclerosis Society of Australia Scholarships

The National Multiple Sclerosis Society invites applications for Scholarships for training in research relevant to multiple sclerosis. Applicants must enrol or be enrolled for a higher degree.

Applications close with the University on August 17.

## Previously noted in Campus News

	<i>Internal Closing Date</i>
NERDDC Grants	April 28
German Language Scholarships	May 1
National Heart Foundation Grants	May 17
Clive and Vera Ramaciotti Foundation Grants	June 16
Rikkyo Fellowships	June 16
Matsumae Fellowship	August 17
AINSE Fellowships	August 17
AFUW (Qld) Fellowships	September 16
Health and Community Services Research Grants	Any time

# Conferences

## Boden Research Conferences

The Australian Academy of Science invites proposals for The Boden Research Conferences held in Thredbo in the first week of February each year. The Boden Conferences are small specialist research conferences in the biological sciences with a membership of 20-30, and of two days duration.

Applications close with the University on June 17.

## Elizabeth and Frederick White Research Conferences

The Academy of Science has established a series of research conferences in the physical and mathematical sciences related to the solid earth, the terrestrial oceans, the earth's atmosphere, solar-terrestrial science, space sciences and astronomy. Participation of overseas scientists are encouraged. A sum of up to \$5000 for each conference is allocated and supplementation from other sources is encouraged.

Proposals for 1990 close with the University on June 18.

## Staff Development Courses

### May 2: Time Management

A one-day workshop to help you make better use of your valuable time. Learn to clarify your objectives, plan time according to priorities, change commonplace time-wasting behaviour and protect your time assertively.

### May 9: Superannuation Information

A representative from the State Superannuation Board will run two sessions on the morning, one for those who are contemplating joining a fund and would like to explore the options offered (9 to 10 am) and a second for those thinking they may like to work beyond the age of 60 (10.30 to noon).

### May 24-25: Selection Techniques - General Staff

A workshop to assist members of staff who may be required to sit on selection committees to become aware of their legislative responsibilities and the procedures adopted by the University in the selection process. Learn how to utilise position descriptions, establish selection criteria, short-list applications on the basis of chosen criteria, identify EEO concerns in the selection process and observe your own interview style on video!

### June 8: University Finances - Academic Staff

A workshop presented by the finance section on how the University's Financial system works. Designed to answer any questions that may be baffling you in this area. Inquiries: Shirley Jorgensen, ext 3946.

## Sport

### Vice-Chancellor's Cup – University Golf Day

The winner on the day was the weather – absolutely drenching the final six players on the course. It was lucky they could swim! Seriously, the event was held on one of the worst wet-weather courses in the Illawarra and even before the downpour the course was in deplorable condition. The South Coast Regional Manager for the National Australia Bank, Jim McCullough, donated the trophies. There were 48 starters. You can 'pencil yourself in' now for next year at Wollongong Golf Club – the event will be held on Good Friday every year.

1. Vice-Chancellor's Cup: David Webb: 81  
Runner up David Lungsdin: 82
2. Inter Departmental Trophy: Engineering: 206  
Runner up Commerce: 207
3. Club Handicap Event: Stephen Webb: 73 Nett  
Runner up Geoff Trott: 75 Nett
4. 'Bradman Event' Terry Hai's entire group  
(who took 3 hours to play 9 holes!)

The event was sponsored by the National Australia Bank, which supplied trophies and various items for all players. The University branch of the bank has also donated shirts for the Wollongong team for the Australian Universities Golf Championships to be held here in September.

Paul Manning  
Executive Officer

## Concerts, Exhibitions and Entertainment

### Nadia Kokot in Concert

Concert pianist, member of the Friends of the University, Nadia Kokot, is to give another concert this year after a 12-month break.

With her well-known enthusiasm Nadia has prepared an exciting and interesting program, with the focus on 'the king of ragtime writers', Scott Joplin, composer of the famous Maple Leaf Rag and The Entertainer. Nadia will talk about Joplin's life and times, and show slides of America during the ragtime era.

Her concert (20 ragtime numbers) will be given in the company with members of the Sydney Palm Court Orchestra – violin, cello and clarinet. Vera Troitsky, well-known Wollongong soprano, will sing arias from Scott Joplin's opera, *Treemonisha*. Orchestration is by Wal Gregory, also of Wollongong.

The concert will be held in the Performing Arts Centre on Friday May 12 at 8 pm.

Admission price is \$12 (\$8 concession).

For telephone bookings the number is (042) 26 3366.

### Art and War – Exhibition of Melanesian War and Ceremonial Clubs

The School of Creative Arts in The University of Wollongong is holding the most comprehensive exhibition of Melanesian war clubs ever staged in Australia.



Concert pianist, Nadia Kokot

The exhibition will be shown in the Long Gallery, The University of Wollongong. It is open to the public until Sunday May 14 inclusive.

Opening times are: Mondays to Fridays 9.30 am to 12.30 pm and 1.30 pm to 3.30 pm, Sundays 1.30 pm to 4 pm.

### Revised Art of Lunch Program

All performances are free and open to the public and are held weekly on a Thursday (during session lunchtimes from 12.35 to 1.25) in the Music Centre, Building 24, on the western side of the campus.

April 27: Staff and students from the School of Creative Arts present readings of new prose and poetry. Venue: Music Centre.

May 4: Third-year Bachelor of Creative Arts music students Kathleen Brennan (soprano) and Scott Saunders (baritone) present a shared vocal recital. Venue: Music Centre.

May 11: Theatrical things including mime, juggling and satirical sketches as Short Back and Sides present Half a Pound of Lentils. Venue: Music Auditorium.

May 18: New scripts #1: Head of Theatre at the School of Creative Arts, Jeff Kevin, leads third-year directing students in the first of two programs of new work. Venue: Theatre.

May 25: Final-year Bachelor of Creative Arts students Sue-Ellen Lynch (flute) and Nicole St. Ilan (viola) are joined by Vanessa Lucas (violin) in Beethoven's Serenade Op. 25. The program will also feature the first performance of Andrew Ford's *Swansong for solo viola*. Venue: Music Auditorium.

June 1: New scripts #2. New theatre. Venue: Theatre.

June 8: Third-year Bachelor of Creative Arts students Toni Simon (piano) and Peter Dorich (saxophone) present a concert including music by Ginastera and Francaix.

Please Note: Details for April 27, May 11 and June 8 have been changed since the original announcement.

Inquiries: (042) 27 0987 or (042) 27 0996. Parking: enter by Western Entrance, Northfields Avenue. Admission: free. Convenor: Andrew Schultz.

## Seminars

### Department of Accountancy

Seminars have been scheduled for March and April of this session. All seminars are held in the Social Sciences Building, Room 2001, in the Department of Accountancy starting at 11 am.

Date: Friday April 28

Topic: *Cognitive Style as a Factor in Accounting Students' Performance in Multiple Choice Examination.*

Presenters: Mr Robert Shanon and Mr Hai Yap Teoh, Department of Accountancy.

Everyone interested is cordially welcome. Inquiries to Hai Yap Teoh, tel. 27 0625.

### School of Learning Studies - Revised Dates

All sessions are on Wednesdays at 12.30 pm in Room 21.104. Coffee and tea provided

Date: April 26

Topic: *Using Systemic Linguistics in Education: A New Imperialism?*

Panel: Ms Beverly Derewianka, Ms Jenny Hammond, Ms Jan Wright.

Date: May 10

Topic: *Some Curriculum Issues in the New Syllabus Document 'Contemporary English' and 'Writing K-12'.*

Panel: Dr Ted Booth, A/Prof Brian Cambourne, Dr Anne Cranny-Francis.

### Department of Philosophy

Date and time: Friday April 28, 10.30 am.

Topic: *Tropes and Field Views of Matter.*

Speaker: Keith Campbell, University of Sydney.

Venue: Department of Philosophy Seminar Room, North Wing, Social Sciences Building, University of Wollongong, Northfields Avenue, Wollongong (Building 19, Room 1034).

Enquiries to Ms S. Uniacke, Ph. (042) 27 0604.

### Department of Economics

All seminars held in Room 19.2081a.

Date and time: Tuesday May 2, 12.30 pm.

Speaker: Professor J. Moorhouse, Wake Forest University, North Carolina.

Topic: *Demand for legal services and the theory of settlement.*

Date and time: Wednesday May 3, 12.30 pm.

Speaker: Professor Roy Adams, McMaster University, Ontario.

Topic: *Trends in North American Industrial Relations.*

Date and time: Monday May 8, 3.30 pm.

Speaker: J. Halevi, University of Sydney.

Topic: *Marxian and Kaleckian Theories of Wages.*

For further information contact Dennis O'Brien, Room 19.2076, ext 3654.

### Department of Civil and Mining Engineering Research Series - Session 1

Venue for the seminars will be Room 138 Building 4, Photogrammetry Laboratory. Morning tea will begin half an hour before each session. All postgraduate students of the Department are expected to attend; all others are welcome.

Department of Civil and Mining Engineering, The University of Wollongong, NSW 2500. Tel: (042) 27 0040, Fax (042) 26 0238.

Date and time: April 28, 12.30 to 1.30 pm.

Speaker: Mr T. Mowbray.

Topic: *High-speed Desk-top Computing.*

Date and time: May 5, 11.30 to 12.30 pm.

Speaker: Professor A. Hargraves.

Topic: *Gas Dynamic Phenomena in Underground Mines.*

### Biology Seminars Session 1

Biology Department, Building 35 G19, 12.30 pm.

Tuesday May 9 - Dr John Andrews, Research School of Biological Science, ANU, *Subunit interaction and mechanism of Rubisco.*

### Biomedical Evening Series

Each seminar will be preceded by dinner at the Union Bistro at 6.30 pm. All those interested are welcome to meet the speaker at the Bistro. Please contact the Convenor so that appropriate table bookings can be made. The seminar begins at 8.30 pm in lecture room G19 building 35.

Convenor: Dr E.J. Steele (042) 27 0434

Date: Wednesday May 17

A seminar sponsored by Commonwealth Serum Laboratories.

Speaker: Dr Karen Walker, Clinical Immunology Research Centre, University of Sydney.

Topic: *Monoclonal antibodies for radioimmunoassay and therapy.*

Date: Wednesday May 31

A seminar sponsored by Boehringer Mannheim.

Speaker: Dr Caroline Geczy, Kolling Institute of Medical Research, Royal North Shore Hospital.

Topic: *Cytokines and coagulation.*

Date: Wednesday June 14

A seminar sponsored by BioRad Laboratories.

Speaker: Dr Ray Norton, Department of Biochemistry, University of New South Wales.

Topic: *Cardiac stimulatory proteins from sea anemones.*

## Advertisements

### POSITIONS AVAILABLE

For remainder of academic year 1989. Resident Tutors - Halls of Residence, International House and Weerona (\*Females only).

Applications are invited from female students of the University who are undertaking Master's or Doctoral courses during 1989.

Interested applicants should contact Gary Graham, Office Manager at International House, on 29 9711 to obtain further information, a job description and an application form.

Applications should reach The Head, Halls of Residence, University of Wollongong, PO Box 1144, Wollongong, 2500, or be left with the Office Staff, International House, by Friday April 28.

\*Job related requirement.

### SALE BY TENDER

The University has a letrachrome kit available for sale by tender. Included in the kit are preparation bench, spread rollers and container, developing dish, instruction booklet, calculators and colour mixing guide, light box, mixing pallet and measuring gauge, some materials. (Note: no washing tray to complete kit).

The University offers no guarantee on this item. Terms of sale are cash or bank cheque. For inspection phone Mr J. Murray, ext 3622.

Tenders close 11.30 am on April 26. Tenders should be placed in a sealed envelope addressed to Business Services, University of Wollongong, PO Box 1144, Wollongong 2500 and noted Tender for Letrachrome Kit'.