CHRISTMAS HOLIDAYS

The University will close from Friday, December 23, to Tuesday, January 3 - the annual Christmas/New Year break.

The three working days between Christmas and New Year (28 to 30 December, 1977) are granted as concessional holidays to members of General Staff not required for duty. Those members of staff who are required for essential duty will be granted an equivalent time off, which should normally be taken in the following month. In those few cases where this is not possible, Heads of Departments may permit the time off to be taken up to, but not later than, Easter, 1978.

Staff are not permitted, at their option, to work between Christmas and Easter - only those required for essential duty should be in attendance. The concessional days granted to staff are in lieu of Newcastle Show Day, the concessional half-days before Christmas and Easter and the concession of Christmas shopping time.

Holiday arrangements on the campus over the long vacation:

University News: This is the last issue until the first of the new year, 1978, appears on February 23.

The Auchmuty Library: After the New Year the Library will open on January 3. Until the first day of First Term (March 6) the Library will only be open on weekdays - on Mondays, Wednesdays and Fridays from 9 am to 5 pm and on Tuesdays and Thursdays from 9 am to 7 pm.

The Staff House will provide normal services up to Tuesday, December 20. On December 21, 22 and 23 light refreshments only will be served. However there will be a normal bar and bottle sales service. The Staff House will close on December 23 and re-open on Wednesday, February 1.

The Union will close on December 23 and reopen on January 3. During the long vacation the building will be open from 9 am to 5.30 pm on weekdays.

ART COLLECTION AUGMENTED

The art collection belonging to the University of Newcastle continues to grow. Already one of the most important in the district, the collection was recently enlarged by the addition of several acquisitions and donations. These works were donated to the University:

- Woman Seated, by Manolo Ruiz-Pipo
- Woman with Veil, by Manolo Ruiz-Pipo
donated by Mr. W. Bowmore to the Faculty of Medicine for the University's Art Collection. At present hung in the Great Hall Foyer.

- Portrait of Professor Beryl Nashar, by Phyll Stone
-donated by the Federation of Business and Professional Women Clubs, NSW Division. To be hung in the Library Stage II near the Reading Lounge.

Works which were purchased by the University and will be hung in the Library:
- City Scape, by Frank Hinder
- Riverina District, by Alex Graham Andrews.

A number of prints and etchings have also been purchased by the University and will be hung in various academic buildings, or the Great Hall Foyer. They are:
- Two Girls, A Rose and a Lizard, by Louis Kahan
- Spiders Web, by Krishna Reddy
- Esprit de la Mer, by Aki Roland
- Forteresse, by Suzanne Runacher

Recently returned from exhibition in London, "Student Teacher's First Billet" will be hung in the Library.

TO OUR READERS

Wishing you a

Wonderful Christmas
THE ROOS ROOM: THE ASHWORTH ROOM

Two seminar rooms in the Department of Classics have been named in recognition of the late Bart Roos and the late Douglas Ashworth. The naming took place on November 30 in the presence of University and Classics Department staff, students, dignitaries and friends of the men who were being remembered.

Professor Brin Newton-John opened the Douglas Ashworth Room. He was invited to perform the opening because he was an old friend of Mr. Ashworth’s. The room was dedicated by Canon V. Pitcher, Professor John Bishop, of the University of New England, who has been a long standing friend of the Roos family, opened the Bart Roos Room. Father K. Carroll C.Ss.R. blessed the room.

Professor Godfrey Tanner, Head of the Department of Classics, supplied the following information on the two ex-staff members for the benefit of people who did not know them. “Bartolomeus Willem Roos came to Newcastle University College in 1960 as Lecturer in Classics from the staff of Sydney Grammar School. He had graduated from the University of Utrecht just before the war with the qualification Doctorandus Litteris Humanioribus. In that University he had been taught the great Latinist and expert in Roman Religion, Waagenvoort, and the eminent Sanskrit scholar, Gonda.”

“A young son of a farmer, he chose just before the war to use the money his father had given him for a trip to Greece on an expedition to Iceland and Greenland. He and his wife Paula had twelve children, of whom one was an undergraduate of this University. They back from his sabbatical leave at the beginning of 1967 from a year in Holland in rather poor health, and his condition rapidly deteriorated, and we had the sad news of his death in August 1967.

“A keen lover of the soil he retained his family interest in farming all his life, and spent his working and free time farming a property at Wyee which was resumed by the Electricity Commission in 1964. He then acquired the property at Bulahdelah where he was living at the time of his death, and used to board, in Newcastle on week nights between lecturing days. Many of our part-time students have happy memories of his unfalshy teaching of evening Latin classes in the old rooms at Tighes Hill where now is the Gas Welding Laboratory. Dr. B. Curran has very much succeeded to his old teacher’s interest in the sphere of Roman Religion,” Professor Tanner said.

“William Douglas Ashworth - 1924 to 1971 - was appointed to this University in 1961 shortly after leaving the staff of the University of Queensland. Before taking up an Australian lectureship in that State he had been Assistant Lecturer in Latin at Bedford College London. Trained in the University of St. Andrews he went on to Oxford, where he performed very creditably in the Honours School of Litterae Humanioribus. "His study was interrupted by war service including a time with the Royal Air Force in the Far East. He and his second wife, Janice, settled at Paxton near Illalong as he was an enthusiastic amateur farmer, and working on the Roman agriculturalist and veterinary writer Columella was his main research interest. He came back from his sabbatical leave at the beginning of 1967 from a year in Holland in rather poor health, and his condition rapidly deteriorated, and we had the sad news of his death in August 1967.

“The room was opened by the University’s President, Mr. B.D. Henry, Senior Lecturer in Chemical Engineering, who has admitted to the degree of Doctor of Philosophy by the University of Loughborough in England. The degree was awarded for a thesis in connection with Optimal Sequencing of Multi Component Distillation Trains. Dr. Henry carried out the study under the supervision of Professor D.C. Freshwater.

In December 1965 he was promoted to the rank of Senior Lecturer and was Acting Professor during the absence of Professor Tanner on Study Leave in 1967. In 1968 he went on leave himself with his family to London to work at the Institute of Classical Studies and to fly to Sweden several times to consult with Professor Lundstrom at Upsala where the Index of Columella was being printed by the Swedish Academy. This work, finally completed by his colleague Associate Professor G.G. Betts of Monash and formerly of this Department, was published in 1971 shortly after Mr. Ashworth’s death,” Professor Tanner said.

POSTS ON STAFF ASSOCIATION

CHANGE HANDS

The University's Staff Association has made changes in its Executive. Associate Professor G. Curthos and Professor K.R. Dutton remain President and Vice-President respectively. Judy Driscoll has been elected Secretary, succeeding Fran Ghair. John Bern is the new Assistant Secretary, and Associate Professor Ray Walker has been elected to the Executive.

STAFF MEMBER'S HIGHER DEGREE

Mr. B.D. Henry, Senior Lecturer in Chemical Engineering, has admitted to the degree of Doctor of Philosophy by the University of Loughborough in England. The degree was awarded for a thesis in connection with Optimal Sequencing of Multi Component Distillation Trains. Dr. Henry carried out the study under the supervision of Professor D.C. Freshwater.

LIST OF NON-Academic POSITIONS

UNFILLED AS AT DECEMBER 15, 1977

N137/77 Computer Operator - Computing Centre - Closes 19.12.77,
N138/77 Computer Operator - Computing Centre - Closes 19.12.77,
N139/77 Office Assistant/Typist (Junior) - Computing Centre - Closes 19.12.77,
N140/77 Technical Officer - Electrical Engineering - Closes 19.12.77,
N141/77 Stenographer - Secretary's Division - Closes 19.12.77,
N142/77 Adult Library Assistant - Library - Closes 23.12.77,
N143/77 Adult Library Assistant - Library - Closes 23.12.77.

Further information and full details may be obtained from the Personnel Department, Ext. 518 or 3550.
Mr. Keats, a Professional Officer in the Department of Chemistry, stated that the overall impression he had while from their work for the JA was that the mills of the University, like those of God, "grind exceedingly slow". Yet, he was still an incurable optimist.

Mr. Keats reflected that during his time as Chairman of the Sub-Division of Chemistry, Mr. Keats was elected as Chairman for the first time. After a number of years he was still serving as Chairman, with the A.G.M., which was only a few weeks away.

"At that meeting there were two nominations for Chairman and one for Secretary. Maurie Edmonds and I were duly elected. "In the eight years since Maurie and I have had the loyal support of the many members who have served on the Management Committee."

Other offices in the PSA that Mr. Keats held were Central Councillor (two years), Government Agencies (six years) and delegate to Annual Conferences (four times).

Fifty-four members attended the sub-division's annual meeting on December 7. Mr. Keats described the achievement of the Sub-Division's annual meeting and the hearings into the Equal Pay Award Claim in the Federal Arbitration Court as the most prominent highlights of the last 12 months.

Another achievement of the past year had been the establishment of regular meetings of the Chairmen and Secretaries of the Sub-Divisions of the Universities of New South Wales, Wollongong and Newcastle to discuss their common difficulties and problems and to plan a common approach to their solutions.

As the staff of the Faculty of Science grew the Health and Research Employees' Association, which had the coverage for non-academic staff in medical schools, would appear on the University site.

"I am sure we all look forward to a long and happy association with the H. and R.E.A. and its members and take this opportunity to assure them of our ready co-operation in the future," Mr. Keats stated.

Dr. David Kay, a Professional Officer in the Department of Biological Sciences, is the new Chairman of the PSA body at the University. The annual meeting elected Dr. Kay Chairman and the following remaining office-bearers for 1978:

Mr. M. Edmonds, Assistant Secretary, Mr. J. Armstrong.

Committee Members: Mr. G. Jones, Mrs. L. Kealy, Mr. G. Martin, Mr. D. Robertson, Mr. P. Muller, Mr. N. Keats, Mr. R. Archer and Mr. B. Kelaher, Delegate to Central Council:

Mr. P. Muller,
Delegate to Government Agencies Divisional Council:

Mr. Edmonds, Mr. Kelaher,
Delegates to Annual Conference:

Mr. Edmonds, Mr. Martin.

The three divisional structure within the Department of Education came into operation on December 5, 1977. The Divisions are:

1. Curriculum Studies: Chairman - Dr. R.A. Telfer
2. Educational Psychology: Chairman - Dr. E.J. Braggett
3. Educational Foundations: Chairman - Dr. R.A. Telfer

Each academic staff member within the Department has been allocated to a Division which encompasses his/her major teaching interest(s). However, many members of staff will be active in more than one Division. Courses within the Department will also be taught on a cross-divisional basis.

Both the previous Head of Department, Associate Professor A.R. Barcan, and the new Head of Department, Associate Professor T.N. MacDonald, believe that the new structure will improve existing channels of communication and ease administrative pressures on the Head of Department. As well it is anticipated it will bring members of staff with similar academic interests closer together in the Department. When addressing mail to the Department of Education, members of the University are asked to bear in mind the tripartite divisional structure.

The structure will be reviewed in late 1978.

(The University Council appointed Associate Professor McDonald Head of the Department of Education from December 5, 1977.)
HONORARY APPOINTMENTS

Four retiring staff members were appointed to Honorary positions at the last meeting of the University Council.

Associate Professor W.F. Geyl, who retires on February 28, 1978, has been appointed Honorary Associate of the University to permit an ongoing association with the Department of Geography whilst he completes research work. His appointment will begin on March 1 and continue for two years.

Mr. K. Bridger, Senior Lecturer in Mechanical Engineering, retires from the University on December 31. He has been appointed Honorary Associate of the University for two years from January 1. Mr. Bridger intends to carry out research in the history of engineering, with particular emphasis on the Newcastle/Hunter Valley region and will collect and arrange for display, suitable exhibits in the field of mechanical engineering design.

Mr. Bridger has been a teacher in the Mechanical Engineering Design Field for approximately 40 years. He was born in Gresford, where Mr. Albert Bridger, his father, was a well-known baker and pastrycook for 25 years. The scrapping of Newcastle's floating dock reminded Mr. Bridger that he had been associated with its construction, sometime between 1928 and 1933. When he was an apprentice fitter and turner at Walsh Island Government Dockyard and Engineering Works. The Depression took away this job, but it gave him an opportunity to continue his A.S.T.C. in Mechanical Engineering at Newcastle Technical College. Subsequently he was to be directly connected with industry, shipbuilding and tertiary education in New-castle beginning with a job as a draftsman at Goninan's from 1935 to 1937. After being appointed draftsman at Newcastle Technical College, he began teaching (in a part-time capacity at Maitland) and was proud to be a colleague of Mr. John Tainsh, Head Teacher of Trades and Diploma Courses. In 1941 he went to the new State Dockyard as a Designing Engineer and was involved in the designing and building of engines and ships (the first was a corvette, the HMAS Strachan). He accepted an appointment as Lecturer in Mechanical Engineering at the Technical College in 1947 and joined Newcastle University College in 1951, when the functions of the Technical College were transferred to UoN University of Technology. He was transferred to the University in 1965.

Mr. Bridger's main interest during his years at the Colleges and the University has been Mechanical Engineering Design. It is difficult to say how many engineers who work at industrial plants in Newcastle were taught by him, but it must exceed a thousand.

Associate Professor A.K. Johnston, who retires on March 31, 1978, has been appointed Honorary Associate of the University. Dr. Johnston will assist the Department of Mechanical Engineering with industrial research projects, particularly those operating through TURRA and generally act as an extension officer in the Department's links with industry and the community. His appointment is for two years from April 1, 1978.

Professor I. McC. Stewart, who retires as Head of the Department of Mechanical Engineering on December 31, 1977, has been appointed an Honorary Professor of the University for 12 months from January 1, 1978.
Professor Stewart welcomes his appointment so that he can continue to take part in the supervision of research work in connection with the use of pulverised coal. In particular in power plant boilers, the gasification of coal underground and the conversion of coal to liquid fuels. He comments: “We are just now receiving recognition for this work. It is important that it be continued. A grant of $40,000 has been received from the National Coal Research Advisory Committee. Professor Stewart took his B.E. and M.E. in Mechanical and Electrical Engineering at the University of Queensland in 1932 and his M.E. in Chemical Engineering at M.I.T in the United States in 1936. He worked professionally in the steel producing and electricity generating industries and, in the early years, in food dehydration. Among other things, he was responsible for designing and commissioning 27 factories for the dehydration of eggs, vegetables and fruit.

At Hebburn he was unfortunate to lose his right arm in a University of Newcastle since appointment so that he can continue to take part in the supercritical water system research program in combustion in particular. From 1943 to 1947 he was in charge of an active fuel economy campaign of the Commonwealth Coal Commission. He was a representative at the international fuel economy conference in England and as a member of a British team investigated fuel economy in Germany.

As Chief Engineer of Hebburn Ltd. from 1947 to 1965 he was responsible for a wide range of developments in mine transport, power generation and coal preparation and investigation into coal utilisation and mine gas drainage problems.

At Hebburn he was unfortunate to lose his right arm in a flight. It is an observable fact aimed at engineers in general. “They should never think that they have all the answers”, he has been Professor of Chemical Engineering at the University of Newcastle since 1965 in charge of an active research program in combustion and heat-transfer (particularly for large boilers), gasification (both surface and underground) and pyrolysis.

He was the first Chairman of the Institute of Engineers’ College of Chemical Engineering and was Chairman of the Institution’s Working Party on Liquid Fuels in Australia. Professor Stewart is an active member of the Anglican Church. During his years at Shortland he has maintained a close interest in the Student Christian Movement and the Coordinating Committee For Overseas Students. He laments that little interest was shown at the University in the discussion on the relationship between religion, life and learning.

The Accounts Department team (Joe Drzyzga, Graham Peck, Harry Carroll, Noel Taylor and an unidentified coxswain) rowing in the event for the Vice-Chancellor’s Trophy at the Aquatic Day on the Hunter River at Raymond Terrace.

**SPORING NEWS**

Newcastle University will play the University of New England at No. 1 Oval from February 19 to 21.

So far the indoor soccer competition has been most successful. Up to 500 players and spectators attend each night. The results and fixtures published in the Newcastle Morning Herald and the Newcastle Sun.

Remember to buy all your Christmas sporting goods from the Squash Court shop and the Sports Centre shop. Squash, tennis, badminton racquets, cricket bats, shoes, T-Shirts etc., for sale.

A composite team from Administration, Electrical Engineering and Amenities was the winner in the Inter-Faculty Cricket Competition. On December 6 it defeated Engineering by 73 runs.

Best scores for Administration/Edwards Hall/Amenities were Geoff Ashurst (27), John Hay (24) and Vic Bridgewater (22). Engineering was best represented by Peter Kleeman (34) and Tom C.

On December 4, at University No. 2 Oval, the English Department Staff (helped by two talented descendants) narrowly withstood the challenge (called “A Sporting Revenge”) by the Third-Year Students (also helped by two talented descendants and four remarkable former students: Maureen Bononcini, Noel King, Grant Osland and Stephen Quinn). The game was played in the most cordial spirit, unmarred by academic or sexist tensions.


**SYMPOSIUM PROPOSED FOR UNIVERSITY**

The Department of Geology has announced the arrangements for the 12th Newcastle Symposium to be held at the University next May. The symposium will concentrate on advances in the study of the Sydney Basin and the New England Fold Belt. Professor B. Nashar, Head of the Department of Geology, said that the emphasis would again be on the Sydney Basin. However, as the New England Fold Belt was an important provenance for the sediments of the Sydney Basin, it was thought appropriate to include this area in the theme for the Symposium. In this way, a better understanding of the geological events that occurred before, during and after the development of the Sydney Basin could be gained.

Participants are invited to submit the titles of their papers by January 31, and abstracts for these papers not later than February 28. The Symposium will be held on May 5, 6 and 7.

Dr. Robin Offler is Convenor.
Grant from Kidney Foundation

Professor T.O. Morgan, of the Faculty of Medicine, has been awarded a research grant of $3000 by the Australian Kidney Foundation. The sum will be used by Dr. Morgan in 1978 to continue his project in connection with the local hormonal actions of the renin angiotensin system.

The Credit Union

Members are advised that the Board of Directors has reviewed the Credit Union’s lending policy in view of the current economy and the following loan arrangements have now been approved:

- Amount of Loan Available
- Repayment Period
- Membership up to 3 months - $1000 12 months
- Membership up to 6 months - $1500 24 months
- Membership up to 9 months - $1500 30 months
- Membership up to 12 months - $2000 36 months

Engineering Summer School

A Summer School will be held at the University of Newcastle by the Faculty of Engineering from February 6 to 8, 1978. The theme of the school is Scientific Method in Engineering. It is aimed at young women and men with an “interest in” Science and Mathematics who will be sitting for the Higher School Certificate in 1978.

The object is to give an overview of some modern developments in the field of engineering with an emphasis on the relationship between problem solving and scientific method.

The School will consist of a series of lecture and laboratory sessions given by staff of the Faculty, as well as engineers working in industry, and will include topics such as: computers and microprocessors, automatic control, creative design, scientific management, energy (utilisation and sources), measurement techniques (measurement of natural resources by satellite), road and bridge planning and construction, traffic analysis and bio-medical engineering. Enquiries should be made to Mr. B. Kelleher of the Department of Mechanical Engineering.

Accommodation Service Might Help You!

Staff members and students might not be aware that if they are looking for a house or a flat a worthwhile first step is to ring the Accommodation Service (Extension 520).

The Accommodation Officer (Mrs. Kath Dacey) has compiled a register of houses for sale and houses for rent. From the names in the register she should be able to give leads to suitable properties.

Estate Agents and owners of homes get their names onto the register by calling Mrs. Dacey, who also consults advertisements in newspapers.

Mrs. Dacey stated that Departments were sometimes asked to arrange accommodation for people and she had been appointed to the staff. She welcomed the opportunity to give help in these instances.

The Accommodation Service can also be helpful to staff members who want to rent their houses while they are overseas on study leave.

New arrivals on the campus are often in need of temporary accommodation, as are business houses and individuals from outside the University.

Visiting Professors and Lecturers frequently ask Departments or the University to find temporary accommodation of this sort for them.

The Personnel Department informs people who have been selected to fill staff positions to communicate with Mrs. Dacey if they require accommodation in Newcastle and on arrival at the campus they discuss the situation with her.

Inspections of various places usually follow. The Accommodation Service is able to assist another person as well - the staff member who resigns and has need for a buyer or a tenant to take his property off his hands.

As it is well known, the Accommodation Service also assists students to find accommodation. The register referred to before includes the names and addresses of householders who have offered students full board.

Once students have been accepted by the University they should contact the Accommodation Officer. Mrs. Dacey will provide them with Accommodation Handbooks setting out the types of accommodation offered.

She will also provide addresses of available accommodation. The Accommodation Office is located in the Amenities Section, adjacent to the Mathematics Building. Students and staff are welcome to discuss their requirements, if necessary, without an appointment.

Members of staff with rooms in their homes suitable for students can advise Mrs. Dacey.

Radio Station Officer Arrives

Mr. Martin Hadlow is at age 30 a much-travelled radio announcer/administrator. Born in London, his past career includes study at the East-West Centre in Honolulu, work with an offshore radio station in the UK, a job as an announcer in Hong Kong, a period as Manager for a station in Papua-New Guinea, association with National Radio in New Zealand and the position of Station Coordinator with the University of New England's radio station, ZARM-FM. He resigned from the University to take up his appointment as Assistant Manager of ZNUR-FM, this University's station, which is planning to begin test broadcasting before the end of this month.

Mrs. Dacey

Mrs. Dacey

Mr. Hadlow
Staff Member Leaves for Post in Bangkok

Mr. Michael Sherwood, formerly Senior Librarian in charge of computer applications in the Auchmuty Library, has left to begin an interesting new appointment in Thailand. Mr. Sherwood has gone as a Library Systems Analyst to the Asian Institute of Technology in Bangkok, which has approximately 500 students from most Asian Countries enrolled in post-graduate engineering courses.

The A.I.T. possesses extensive computing facilities and Mr. Sherwood hopes to be able to undertake the development of cooperative cataloguing and information retrieval systems relating to the main libraries in the South East Asian Region. The Institute is considering the establishment of a large-scale information retrieval system and, in particular, he will be participating in a study to assess the feasibility of either loading the data bases at A.I.T., or making a satellite connection with the United States. The operations of the Asian Institute of Technology are funded by several countries. The staff is multi-national. Mr. Sherwood's position is funded by the Australian Government and is initially a two-year contract.

Mr. Sherwood stated that his friends on the campus at Newcastle should not hesitate to contact him if they visited Bangkok, as he was keen to hear news from the University and to show them the A.I.T.

Two Voluminous Gentlemen

Associate Professor Norman Talbot, of the University's English Department, shares an LP of poetry "Two Voluminous Gentlemen" with Rae Desmon Jones, on December 1, by River run Records. Talbot's side is one romantic narrative, "Overhill Faraway," with the choruses read by Jean Talbot. The record tells of a boy who grows up to resent and resist his father. He longs for a mysterious lady, whom he imagines is waiting for him in the uttermost west.

Mr. Ross Bennett, also of the English Department shares the first of River run's LP series with ex-student Mr. Keith Russell. The Belly Laughs Twice was brought out in March this year. Both records cost $6 and can be obtained from River run, 107 Laman Street, Newcastle. If not held by local record stores.

Special Leave Allows Visits to Archives

Brief visits to Archives in England, Rome and Paris are planned by Mr. Ross Bennett during an overseas visit. Mr. Rowe, Archives Officer in the Auchmuty Library, left Australia on December 11. He intends to visit: The Sussex County Archives, Lewes; the Guildhall Archives, the City of London Archives; the University Archives, Oxford and Cambridge; the Manuscripts Department of the British Library (formerly the British Museum Library), The Vatican Library and Archives, Rome; the Manuscripts Department of the Bibliothèque Nationale and the Arsenal Library, Paris.

Something New from Education

Educational Enquiry is a new journal from the Faculty of Education. What makes the Journal noteworthy is that it is aimed at teachers, students and parents living in the Hunter Valley and beyond.

Professor J.B. Biggs, Dean of the Faculty, explains in the Foreword that Educational Enquiry was an important venture for his faculty as it was in an interesting and crucial stage of development.

"With the problem of teacher oversupply, our hitherto most obvious function in terms of student numbers and staff in-

volvement, the pre-service education of teachers, will give way to less obvious, but no less important, functions - in-service teacher education, higher degrees, research and dissemination.

"Whatever our role, as research, teacher or in-service educator, we need to keep in touch, not only with those practical exigencies that assist or motivate our activities but also with the conceptual and empirical roots that validate these strategies.

The publication has been edited by Mr. W. Warren and a committee of Department of Education Staff. In a statement the committee offers the Journal as an outlet for research effort of any variety and reports of innovative and experimental programmes from which other professionals in education can learn.

Articles in Educational Enquiry number one:

Role Stereotypes and Education by Alan Blatman Toward a Modified Curriculum For Non-English-Speaking Children: A Demonstration of a Need, by James Leigh; Simple Physics Experiments Introducing Programmable Calculator Use and the Effects on Attitudes to Physics, by Ross Flanagan; Can We Do Without the Canal?, by R. Ireland; Personal Development Through Expertise in a Particular Skill, by R.J. Milton.

A list of Abstracts and Reports is also given.

Scholarships, Fellowships

Applications are called for the Australian Federation of University Women (W.A.) Inc. Post- Graduate Bursary. The Bursary has a current value of $450. The aims of the bursary is to provide assistance for a short term project or some special assistance necessary to a research project (e.g. equipment, travel, secretarial or other assistance for a limited period).

The Australian Federation of University Women (W.A.) Inc. also invites applications for the Mary Walters Memorial Bursary. The value of this bursary has also been increased, and will be $300 in 1978. The aim of this bursary is to provide assistance necessary for the completion of the higher degree. Both bursaries are open to women of any age who: (1) hold a first degree from a University in W.A. OR (2) hold a first degree from a University in any country and who have been accepted for a higher degree which involves a research project at a recognised University in any country.
The Churchill Trust is now inviting applications from Australians of 18 years and over from all walks of life who wish to undertake overseas study during 1979. The Trust will consider proposals for an overseas study project that will enhance the applicant's work and make him or her a more useful member of the community. Successful applicants will be awarded a return economy class overseas air ticket to the countries they wish to visit and an overseas living allowance. In special cases they may also be awarded supplementary allowances including a dependants allowance. Applications will close on February 28, 1978.

The University of Adelaide is inviting applications from graduates with an honours degree, or equivalent experience, in economics, agricultural economics, for postgraduate study leading to the award of the MSc Degree of the University of London. Successful candidates will have a basic value of Stg. 1705 per session with additional allowances payable. Bursary candidates who have not already applied to the Registrar, Imperial College, for entry as Research or Advanced Course students should do so without delay.

The Education Research and Development Committee is inviting applications for Advanced Research Training Fellowships (formerly overseas research fellowships) commencing in the period July 1, 1978 to June 30, 1979. Fellowships provide for a short period of advanced training in one or two institutions, either overseas or in Australia, where educational research is carried out at a high level. Fellowships are not intended to assist in the gaining of formal post-graduate qualifications, nor to supplement Sabbatical leave positions. Benefits include: return economy class air travel; payment of all compulsory fees; sustenance allowance. Applications will close on January 27, 1978.

The Netherlands Government is offering three scholarships to Australian students who wish to undertake post-graduate study in the Netherlands during the 1978/79 academic year, i.e., September to July. Benefits include economy class air travel from the Netherlands to Australia, a monthly allowance of approximately $348 for a period of 10 months, an establishment allowance of approximately $110, a book allowance of approximately $110, and an allowance for travel within the Netherlands where the travel is related to the study programme. The cost of travel from Australia to the Netherlands is not included in the scholarship. Applications will close on January 6, 1978.

The Australian Coal Association is offering scholarships tenable at all Universities and Colleges of Advanced Education in the fields of Mechanical, Electrical, and Mining Engineering, and Geology. This scheme is designed for the purpose of maintaining a flow of graduates into the coal mining industry. Only persons with a genuine interest in a career in the coal mining industry should apply. Scholarships holders may select one or the other of the following schemes. In the scheme A, allowances are payable as a contribution towards the cost of books, instruments and living costs. Allowances vary from $700 in the first year to $1000 in the fourth year. In the scheme B, the allowance payable is $1000 when a student is living away from home, but allowances vary from $900 to $100 pa if a student is living at home. In the scheme B, the allowance payable is $600 pa, payments being made in three instalments per year.

The RTZ Advanced Course Bursaries are offered to support a full-time post-graduate course of advanced study of one session leading to the award of a diploma of membership of the Imperial College, and, for suitably qualified candidates, the MSc Degree of the University of London. The Advanced Course Bursaries will have a basic value of Stg. 1705 per session with additional allowances payable. Bursary candidates who have not already applied to the Registrar, Imperial College, for entry as Research or Advanced Course students should do so without delay.

The National Research Council of Canada offers Research Associate- ship tenable in its laboratories. Associateships are intended to give promising young scientists and engineers an opportunity to work on challenging research problems in fields of interest to NRC. Applicants should possess at least a Master's Degree in an engineering, science, or equivalent field, or expect to obtain a degree before the award. Successful applicants will be offered appointments to the staff of the National Research Council on a term basis and will be offered salaries and benefits currently available to members of the continuing staff. Applications will close on January 15, 1978.

The RTZ Educational Trust, sponsored by the Rio Tinto-Zinc Corporation Limited, invites applications for the RTZ Research Bursary and RTZ Advanced Course Bursaries. The RTZ Research Bursary is offered to support post-graduate research in subjects connected with the discovery, mining and beneficiation of minerals. The bursary will have a basic value of Stg. 1755 pa, with additional allowances payable. Applicants must hold a degree or honours in the subjects appropriate to the proposed research.

The Australian Coal Association is offering appointments tenable at all Universities and Colleges of Advanced Education in the fields of Mechanical, Electrical, and Mining Engineering, and Geology. This scheme is designed for the purpose of maintaining a flow of graduates into the coal mining industry. Only persons with a genuine interest in a career in the coal mining industry should apply. Successful applicants will be offered appointments to the staff of the National Research Council on a term basis and will be offered salaries and benefits currently available to members of the continuing staff. Applications will close on January 15, 1978.

The Netherlands Government is offering three scholarships to Australian students who wish to undertake post-graduate study in the Netherlands during the 1978/79 academic year, i.e., September to July. Benefits include economy class air travel from the Netherlands to Australia, a monthly allowance of approximately $348 for a period of 10 months, an establishment allowance of approximately $110, a book allowance of approximately $110, and an allowance for travel within the Netherlands where the travel is related to the study programme. The cost of travel from Australia to the Netherlands is not included in the scholarship. Applications will close on January 6, 1978.

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The Churchill Trust is now inviting applications from Australians of 18 years and over from all walks of life who wish to undertake overseas study during 1979. The Trust will consider proposals for an overseas study project that will enhance the applicant's work and make him or her a more useful member of the community. Successful applicants will be awarded a return economy class overseas air ticket to the countries they wish to visit and an overseas living allowance. In special cases they may also be awarded supplementary allowances including a dependants allowance. Applications will close on February 28, 1978.

The University of Adelaide is inviting applications from graduates with an honours degree, or equivalent experience, in economics, agricultural economics, for postgraduate study leading to the award of the MSc Degree of the University of London. Successful candidates will have a basic value of Stg. 1705 per session with additional allowances payable. Bursary candidates who have not already applied to the Registrar, Imperial College, for entry as Research or Advanced Course students should do so without delay.

The Education Research and Development Committee is inviting applications for Advanced Research Training Fellowships (formerly overseas research fellowships) commencing in the period July 1, 1978 to June 30, 1979. Fellowships provide for a short period of advanced training in one or two institutions, either overseas or in Australia, where educational research is carried out at a high level. Fellowships are not intended to assist in the gaining of formal post-graduate qualifications, nor to supplement Sabbatical leave positions. Benefits include: return economy class air travel; payment of all compulsory fees; sustenance allowance. Applications will close on January 27, 1978.

The Netherlands Government is offering three scholarships to Australian students who wish to undertake post-graduate study in the Netherlands during the 1978/79 academic year, i.e., September to July. Benefits include economy class air travel from the Netherlands to Australia, a monthly allowance of approximately $348 for a period of 10 months, an establishment allowance of approximately $110, a book allowance of approximately $110, and an allowance for travel within the Netherlands where the travel is related to the study programme. The cost of travel from Australia to the Netherlands is not included in the scholarship. Applications will close on January 6, 1978.

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