Frogs don't usually take too well to computers, but Big Bertha from the University of Adelaide's live frog collection recently made an exception.

She showed great interest in an $8000 top-of-the-range multimedia lap-top computer, which was this month donated to Zoology to aid frog research.

Three Information Technology firms — EDS, Protech and Compaq — made the joint donation to Associate Professor Mike Tyler in recognition of his internationally significant research into frogs.

The donation also celebrated the opening of the EDS Asia-Pacific Education Centre in Adelaide.

The State Manager of EDS, Mr Alan

The News IN BRIEF

SPORTS ASSOCIATION BALL

The Adelaide University Sports Association is celebrating 100 years of service by holding a special Centenary Ball on Saturday, 3 August.

Billed as the "Ball of the Century", the event is open to all past and present students of the University, giving them the chance to share good food, wine, and some of their best stories.

The ball will be a black tie event (or Sports Association members can wear their club's sports blazer) and will feature the band Spank You Very Much, as well as guest speaker Mr Bill Scammell, the University's Chancellor.

Venue: Upper Refectory, Union House, from 7.30pm. Tickets (from the Sports Association) are $10 students/$20 others. Phone Pene Bartlett, (08) 303 5403.

AITEA CONFERENCE AND DINNER

The Australian Democrats spokesperson on higher education, Senator Natasha Stott Despoja, will talk about funding for the sector at the Annual Dinner of the Australian Institute of Tertiary Education Administrators (AITEA) at Fernilee Lodge on Friday 19 July.

The dinner follows AITEA's State Conference at the University of Adelaide's Thebarton Campus on the same day.

The conference, organised by AITEA in

International energy research wins major grant

The University of Adelaide — and the environment — are two of the big winners following the announcement of the 1996 Targeted Institutional Links (TIL) Program grants from the Federal Government.

A major international collaborative research project with significant environmental spin-offs has been awarded $215,000 over three years.

The project — a joint venture between the University of Adelaide's Department of Chemical Engineering and the National Laboratory of Coal Combustion at Huazhong University of Science and Technology in China — aims to:

- develop a technique to convert organic waste into an environmentally friendly fuel
- reduce the impact on the environment from organic waste disposal
- reduce the quantity of waste being disposed of.

The leader of the international research project is the University of Adelaide's Dr Dong-ke Zhang (Chemical Engineering), who was recently appointed to the prestigious position of Adjunct Professor with Huazhong University. He is also the winner of the Combustion Institute's David Warren Award for excellence in combustion research.

Dr Zhang said a process called "low-temperature pyrolysis" would be used to thermochemically decompose organic waste, producing value-added fuel oil and other fuel products.

He said the fuel produced by this process could then be used as a substitute for (or a blending agent with) current transport fuels.

"Low temperature pyrolysis is one of the most important renewable energy technologies that will not only help the nation's energy industry, but also minimise the environmental impact of waste disposal," Dr Zhang said.

"This project to convert waste matter into renewable energy will therefore have major benefits for the treatment of agricultural, industrial and domestic waste, including sewage sludge.

"We believe the processes involved in this will be simple, easy to operate and control, and cost relatively little," he said.

The TIL funding for this collaborative research project with Huazhong University was announced last month.

It was welcomed by Dr Zhang, who said the project would boost the University's already expanding commercial and academic links with China.

"I am very happy to be heading this research project, because of my close ties with Huazhong and my interest in this area. Hopefully it will have enormous benefits for the University of Adelaide, for Chemical Engineering, and for the environment as a whole," he said.

—David Ellis

Roseworthy centre a step forward

South Australian livestock management and husbandry is set to take a major step forward with the construction of a $350,000 Livestock Research Centre at Roseworthy Campus.

The new facility, to be operated by the Department of Animal Science, has been jointly funded through the Faculty of Agricultural and Natural Resource Sciences and an ARC infrastructure grant.

The research centre will provide many new opportunities in nutrition, husbandry and dietary research, says Dr Jim Gallagher, deputy Head of the Department of Animal Science.

"The extension of livestock research facilities at the Roseworthy Campus will provide a unique service, particularly for postgraduate students, and will allow previously unachievable, or very time consuming and expensive research to be carried out in a modern, well-designed building," he said.

"Postgraduate students are already utilising the new centre to carry out extensive tests into nutrition and various diets of sheep. The building can hold sheep, goats and pigs and could diversify into cattle, deer and horses."

Several experiments which have recently been set up include looking at the palatability, digestability and nutritive value of different types of rice straw, and looking at increasing the nutritive value of low quality roughage rations such as poultry manure, citrus peel, molasses and wheat straw. A wide range of lupins is also being evaluated for livestock.

The airconditioned centre contains a laboratory and surgery facilities as well as feed storage rooms and yards, capable of holding up to 100 animals in individual pens and metabolism crates.

"The combination of this research centre, the new SARDI nutrition laboratories, and the SARDI/PISA Pig and Poultry Production Institute provides a valuable tool for livestock research, and will ensure that the Roseworthy Campus is on a very competitive level with other institutions in Australia and overseas," Dr Gallagher said.

—Elizabeth Butler

The new facilities will be officially opened at the Roseworthy Industry Day on 25 October, and will be open for inspection by the general public at the Roseworthy Open Day on 27 October.

New Creative Writing Chair

From Page 1

"What we're trying to do, through the new Chair in Creative Writing, is to create a training and research structure for writers in South Australia and encourage them to remain here."

Professor Boumelha said there was strong demand for higher degrees, and graduate certificates and diplomas in Creative Writing.

"Adelaide itself has a very active writing scene, which is shown through the South Australian Writers' Centre and Writers' Week during the Festival of Arts.

"We've already had a lot of interest in the courses, without any publicity, and I think the demand will be high. There's no shortage of people who write, or who would like to write," she said.

The University and the SA Government's Department for the Arts have each contributed half the funding for the new Chair.

Professor Boumelha said advertising for the position would begin soon.

—David Ellis

Environmental Studies Medal winners Megan McCarthy and Brett Bryan with environment awareness program award winner Anne Brow at the Mawson Graduate Centre's 21st anniversary celebrations on 2 July. Photo: David Ellis

PUBLIC LECTURE

Variation in learning is the key to unlocking student potential

A failure by teachers to consider variation in students' learning behaviour means that many are failing to reach their potential, according to Professor Erik Meyer, a visiting senior research fellow in the Faculty of Medicine.

Professor Meyer, from the Student Learning Research Group at South Africa's University of Cape Town, is studying the way medical students in the Faculty conceptualise "diagnosis".

He argues that university teachers need to be sensitive to differences in their students' learning and take some responsibility for making appropriate responses to these differences.

He believes that responding to variation in learning — rather than focusing on improving teaching — will revitalise university teaching.

Professor Meyer said that even "virtuous" learners — students who seek to understand deeply what they are learning — can fail at university if the methods of assessment are not sensitive to their intentions.

"There are also some kinds of learning environments that discriminate against students who are trying to understand deeply what they are doing," he said.

"Good students often can't compete the way the competitive rules of the game are structured."

He discussed these issues at a public lecture in the Faculty of Medicine on 28 June. Professor Meyer is being hosted by the Department of Pathology, and is one of a series of Visiting Senior Research Fellows who will be in the Faculty in 1996-97.

He praised the Faculty of Medicine for examining the issue of learning. He added that, in general, university teachers had failed to recognise the importance of variation in student learning.

Professor Meyer is studying students' conception of "diagnosis", a fundamental issue for medical teachers. He has found that at one end of the scale, some students have a simple "unistructural" conception — that of finding a label for the ailment — and at the other end, some students have sophisticated conceptions based on likelihoods and tested hypotheses.

These conceptions, he argues, shape the way the students approach learning.

"Telling the student that their view is naive or unsophisticated won't help," he said.

Students with under-developed conceptions can't simply be told to change those conceptions; learning opportunities must be created for them that will help them to develop more sophisticated conceptions at a faster rate.

"The problem-based learning approach being adopted in the medical curriculum shows every sign of being able to do this at the first year level," Professor Meyer said.

He said differences in student learning could not be resolved by sending a student for counselling or study skills assistance elsewhere because learning is always context specific. The teacher must therefore take some responsibility, as a part of that context.

"Furthermore, students tend to extract things from their learning environments that are congruent with their own conceptions of what 'learning' is."

Teaching students study skills was not as effective as adjusting to individual variation in learning.

"This is not to say that study skills are not useful, but unless you begin to change fundamental issues, like conceptions of learning, how do the students cope when they get stuck? If you don't attempt to change these fundamental issues, we are not being serious about their problems."

Professor Meyer said that research was increasingly being done into how to respond to variation in student learning, but he believed new approaches — such as grouping students on the basis of individual similarities in learning behaviour — could have powerful results.

Already, from a student learning perspective, researchers could anticipate the kinds of difficulties students experience when entering university and why.

"If students are honest in telling us about how they go about learning, we can anticipate with a reasonable degree of accuracy the kinds of difficulties they will experience in adjusting to university study," he said. "And we can take preemptive action if we are concerned.

"To do this requires a shift in thinking at a policy level; the basic issue concerns extending the locus of academic practice to include scholarship of student learning."

—David Washington

Professor Erik Meyer from the University of Cape Town — one of a series of Visiting Senior Research Fellows in the Faculty of Medicine in 1996-1997. Photo David Ellis

New gamma ray telescope to be built at Woomera

From Page 1

Dr Patterson, from the University of Adelaide's Department of Physics & Mathematical Physics, said the telescope would give Australian and Japanese astrophysicists access to a world-class facility for research and postgraduate training.

"This is a fine example of international cooperation in science which will benefit South Australia," he said.

"Our collaborative partners — Professor Tadashi Kifune from the University of Tokyo and Professor Toru Tanimori from the Tokyo Institute of Technology — have received 'priority funds' for this project from the Japanese Government.

"It's hoped that funds for some vital site works will also be available from Australian sources, such as the Australian Research Council."

Dr Patterson said the design study of the gamma ray telescope had been completed by the Mitsubishi Electric company of Osaka, based on the design of a 10-metre radio telescope at Nobeyama, Japan.

The dish will be filled with mirrors to collect the faint "light flashes" produced in the Earth's atmosphere by gamma rays of very high energy.

"The information gathered by this telescope will be able to tell us more about large-scale conditions in the universe, because the gamma rays are absorbed on their way between galaxies," Dr Patterson said.

"We are very interested to find out more about some special gamma ray pulsars in our own galaxy, as well as the more energetic emissions coming from blazars," he said.

Dr Patterson said as well as the construction of the new telescope, plans had been made for the existing 3.8-metre CANGAROO telescope at Woomera to be refurbished.

He said it would be recoated with a fresh aluminium mirror at the Anglo-Australian Observatory in Coonabarabran, New South Wales, to improve its sensitivity until the new 10-metre telescope is constructed.

—David Ellis

Geology field trip an 'outstanding success'

A group of PhD students from the University of Adelaide has returned from a unique geological field trip in North America.

Nine students from the Department of Geology and Geophysics — Garry Adams, Darrell Beng, Peter Haines, Rob Menpes, Scott Mildren, Paul Polito, Bruce Schaefer, Charles Sevcik and Jon Teasdale — spent one month in the US and Canada visiting sites of major geological significance.

Their journey took them to some of the world's best known sites, including the Grand Canyon, Death Valley, Yellowstone, Yosemite and Zion National Parks, and twice across the Rocky Mountains.

They were also given guided tours of several large, world-class mining operations, including the Gold Quarry gold mine (Newmont Mining), the Robinson/Ruth copper mine (BHP) and the Homestake Gold mine (Homestake Mining).

Organised by the students themselves, the field trip was aimed at giving them first-hand experience of geological sites they had only read about in textbooks.

"We wanted to incorporate the best known examples with the widest range of geological phenomena in an area that was easily accessible, highly regarded and well documented," said PhD student Mr Paul Polito.

"It's one thing to read about different geological structures, but you don't entirely realise what they're like until you've seen them up close. This was a once-in-a-lifetime opportunity for us, and without a doubt the trip was an outstanding success," he said.

Although at times marred by poor weather, the field trip exposed the group to unique scenes of landscape and wildlife. They also found the American and Canadian people to be very friendly and helpful.

To cut costs, the group decided to camp in tents and cook for themselves for most of the journey.

"This not only showed up a few good cooks among us, but also brought the group closer as a whole, which was very important," said Mr Polito.

"Sleeping in tents made for some interesting times — freezing cold nights in the snow, boiling hot nights in Death Valley — but it added to the whole experience. One night a herd of buffalo even came through our campsite," he said.

Mr Polito said the group was extremely grateful to the many sponsors who helped fund the field trip, and to bus driver and tour guide Dylan Hiroms of Suntrek Tours.

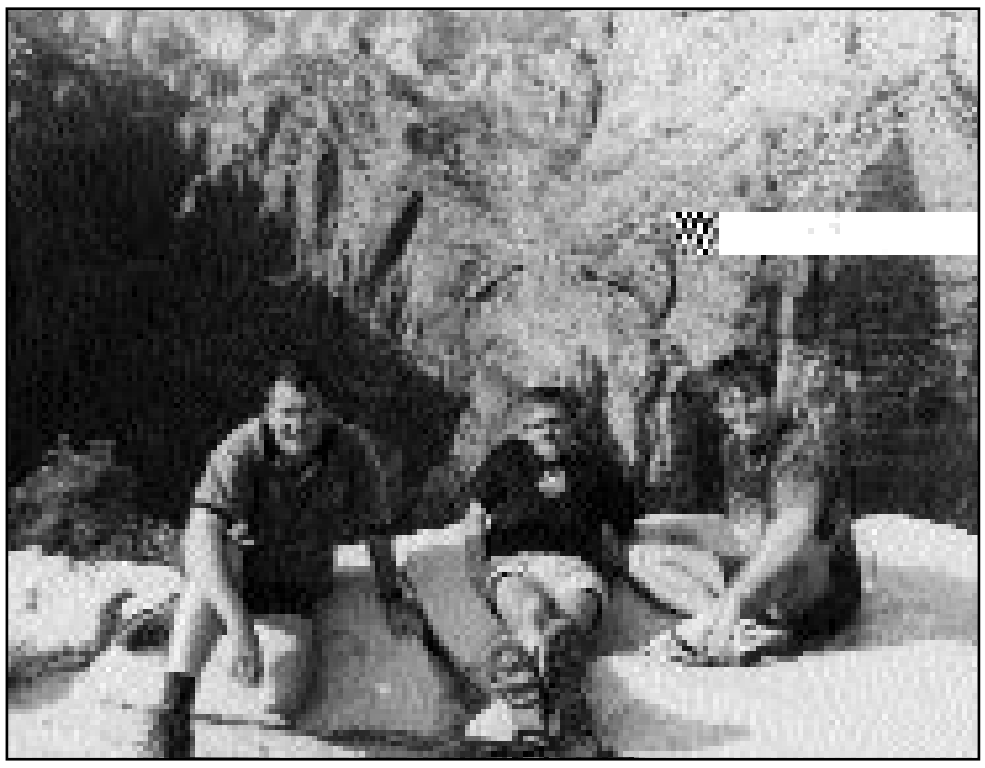
"Dylan's knowledge of the local areas enabled us to go to places we wouldn't have otherwise visited, or even known about. His enthusiasm in the places we visited for geological reasons also broadened our cultural knowledge of the American Indians and the days of the Wild West.

"We all agree that the trip was made such an outstanding success because of Dylan," he said.

Mr Polito said the group's unique experience in North America was something they would all remember, and would be invaluable to their careers in the fields of geology and geophysics.

He said he highly recommended such a trip to other students within the department.

—David Ellis



Three of the Geology group at Angel's Leap in Zion National Park: L to R, Peter

The postgraduate Geology and Geophysics students would like to thank the following sponsors for making their trip a success:

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Fasta Pasta
Haigh's Chocolates
Department of Geology and Geophysics
Suntrek Tours

3 July 1996

The Hon John Howard
Prime Minister of Australia
Parliament House
CANBERRA ACT 2600

Dear Prime Minister,

This is further to our letter of 22 May 1996 regarding the unanimous resolution of our Trustees on 17 May 1996. Thank you for your reply of 19 June 1996.

We write now with the authority and support of the Officers of this Association listed below.

We are directed by the membership of this Association at its recent Annual General Meeting (20 June 1996) to thank you for your public commitment to higher education and its funding. We are particularly directed to thank you for your public assurances that the Coalition's electoral promises will be honoured and most particularly the Coalition's Higher Education Policy of Quality, Diversity and Choice as authorised and released on 20 February 1996.

We believe that the cuts that seem to be being contemplated by the Minister, Senator Amanda Vanstone, would be in breach of the Coalition's Higher Education Policy.

We support in general terms the submissions on this subject by the Australian Vice-Chancellors' Committee, by the Group of Eight (G08) Universities, by the Australian University Alumni Council, by our three South Australian Vice-Chancellors and others.

We support in particular our own Further Education Minister, the Hon. Dr Bob Such, when he says, *inter alia*, that "Drastic cuts would have a severe impact on teaching and research programs and affect our pursuit of academic excellence, economic growth and development".

These views have been put generally to the Australian Senate in a speech by Senator Baden Teague on 30 May 1996. He is a graduate of this University and is an elected Member of our governing body, the Council of the University. Further, Senator Teague was, as we understand it, a significant contributor to your Higher Education Policy and during his eighteen years as a Senator for South Australia he has actively involved himself in education which is almost certainly the most important single factor regulating the future of Australia.

Finally, Mr Prime Minister, we submit that any reduction in Commonwealth funding for Higher Education would not be in the best interests of Australia for that would, *inter alia*, lead both to a diminution of the awards held by our 1.5 million Alumni and the prejudicing of our

BEAUMONT: Fully furn, spac 3 br house with all linen, crockery, etc. Heated pool. Quiet street close to bus, schools. 15 mins to city. Avail mid July 1996. Phone Mary 315202; email mfp@ilanet.slnsw.gov.au.

BROMPTON: Room for rent in 2 br share house. Prefer female, non-smoker, student or staff member. $63 pw. Ph 346 5834.

MILE END: Room for rent in 3 br bluestone villa. Wlkg dist to shops, asian grocery, laundry, cafes. Close to city, and bus. Suit domestically aware and mature student/professional. Avail mid July. $55 pw and % of bills. Ph Anna 223 6734 til 20/7/96 or 3517168.

MILLSWOOD: 3 br, semi-furn house with combustion heater, new carpet, off street parking. Long or short term rental. $67 pw per room + exp. Ph Cecilia 303 8403.

NORTH ADELAIDE: Lg 2 br, fully furn flat with lge lounge, sep dining, pool, garden. $280 pw (incl gas & elec). Ph 267 1081.

NORWOOD; Non-smoking female to share with prof female. Fantastic roomy, furn, flat with lge br. Quiet street. 1 min walk to Parade. Suit graduate or professional. $50 pw + exp. $200 bond. Ph Nicole 364 0254.

UNLEY PARK: 1 br, fully furn, flat, lge lounge. Tree lined, quiet street. 3km from Waite, 5 km to Uni. Close transport. No car-port. Ref & bond essential. $88 pw (elec incl). Ph 271 3386.

WALKERVILLE: Fully furn unit, group of 10 with Caretaker. Avail Oct 96 to Oct 97. $105 pw. Ph 342 0450.

WANTED: Flatmate, female, to help with expenses. 3br house, no furn needed (except for dresser drawers). Close to O-bahn. (1 bus to city). Please write to: 29 Jennifer Ave, Ridgehaven 5097.

WANTED: Polish academic, wife and 2 daughters (9 & 10) seek furn accom within easy reach of North Tce. Req early Sep for 6 mths.