A FOUR-MAN delegation from the Beijing University of Iron and Steel Technology visited the University of Wollongong in mid-April to discuss the development of an exchange agreement made between the Chinese and senior members of this University. The visitors included Professors Wang Run, Xiao Jimei and Tong Guang Xu of the Beijing University of Iron and Steel Technology, and Mr Xu Wen Hai of the Ministry of Metallurgical Industry.

The concept of a technology exchange between the University of Wollongong and Beijing University came as a result of a visit to China by Emeritus Professor Geoff Brinson in 1983. Professor Ko, a Vice-president of the Beijing University of Iron and Steel, had been involved in research pertaining to the metallurgy of Chinese archaeological artifacts in collaboration with Dr Noel Barnard of the Australian National University.

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National University in Canberra. Dr Barnard, with the support of the Australia China Council, arranged for Professor Ko to visit the ANU in 1982 and, during his stay in Australia, Professor Ko expressed his wish to visit a steelmaking centre.

It was arranged for Professor Ko to visit the University of Wollongong where the Department of Metallurgy acted as host Department.

Subsequently Professor Brinson arranged to visit Professor Ko in Beijing and spent approximately a month in China. While there Professor Brinson visited B.U.I.S.T. in Beijing, the Northeast University of Technology in Shenyang, and the X'ian Institute of Metallurgy and Building Construction.

During his visit Professor Brinson discussed with his Chinese colleagues the strong common interests that the University of Wollongong held in common with B.U.I.S.T. and the other Chinese universities. The advantages of forming a firm liaison between the universities became immediately apparent and arrangements were pursued enthusiastically by the universities concerned.

Initial collaborative agreements were signed when an Australian delegation, which included the University of Wollongong's Deputy Vice-Chancellor, Professor Alex Clarke, and Australian Iron and Steel's General Manager, John Clarke, visited Beijing in 1984. This visit was followed up by a reciprocal visit to Wollongong by delegates from Shenyang's Northeast University of Technology in 1984 and then by delegates from B.U.I.S.T.

During their two and a half weeks' stay the Beijing delegation visited the Port Kembla Steelworks, the BHP Research Laboratories in Melbourne and Newcastle as well as Monash University and the University of New South Wales.

The University of Wollongong sees the interchanges of technology as being only part of the benefits of a liaison between the countries.

Already a grant from the Australian China Council has supported a visit to Wollongong by Miss Han Rubin of the Beijing University of Iron and Steel Technology for a 12-month period. During this time Miss Han will collaborate with the Department of Metallurgy in the application of modern metallurgical techniques for the investigation of culturally significant metallic artifacts from various countries including China, Taiwan, Indonesia and England.

These artifacts are mostly irons and bronzes. While in Australia Miss Han will gain experience in the techniques that are available from these studies in Australia, during which time her Australian colleagues will gain a valuable insight into Chinese methods of the study of ancient metallic artifacts.

Miss Han hopes to visit other centres in Melbourne and Sydney where artifacts are available for examination.
John Baily retrospective exhibition

JOHN BAILY admits to being an artist who paints landscapes in the perceptual mode. That is to say, he combines landscape painting with contemporary art form. (He also does very much more. He is an administrator of some note. He has been, for example, Chairman of the Adelaide Festival Centre Trust which built and constructed the city’s large performing arts centre; Chairman of the Visual Arts Board of the Australia Council for the Arts and Director of the Art Gallery of South Australia. He is presently Principal of the Sydney College of the Arts and Chairman of the NSW Cultural Grants Advisory Council. He is also on the committee for the Bicentennial on Queen’s Square.)

Local art lovers had the opportunity to study his paintings at a major retrospective exhibition of his work staged by the School of Creative Arts at the University of Wollongong from March 25 to April 14. The exhibition was in fact officially opened by the Vice-Chancellor, Professor Ken McKinnon, on March 24.

Introducing the Vice-Chancellor, Professor Peter Rousch, Director of the Institute of Education in the University, commented on the impact the Long Gallery in the School was having on art, and music, in the region. He went on to say that the gallery, when restored, would be the largest in the State of NSW outside Sydney.

Professor McKinnon spoke of his long association with John Baily, whom he had known for 35 years. They had been at one stage students together.

Sketching John Baily’s career, he quipped ‘this was not a segment from This is Your Life’. But his homily nevertheless was more than touched with overtones of nostalgia and affection.

Especially welcome at the opening was Ethel Hayton, MBE, a founder of the University and a Life Member of the Friends of the University.

Among those present at the opening of the John Baily retrospective exhibition was Mr Evan Williams, Director of the Office of the Ministry of the Arts in the Government of New South Wales.

New computer system for University

THE UNIVERSITY OF WOLLONGONG has purchased financial modules and a personnel-payroll system from the data processing consultants Tanbert and Associates Pty Ltd.

This was undertaken because of the need to reduce duplication of functions in administrative sections and at the same time provide easier access to accounting information.

The new system, which operates on the IBM System/38, is currently being tailored to meet the University’s special requirements.

The University of Wollongong is Australia’s fastest-growing university. Over the past three years student enrolment has soared to over 6,000; the projected growth by 1990 is estimated to reach 10,000.

The University went to tender in March last year and took the unusual step of selecting a computer on the available software rather than on the actual processing power of the hardware.

Said John Tong, who heads the Administrative Data Processing Unit, ‘We were attracted to this particular software because of the abstract design which allows flexibility and the inbuilt integration of the General Ledger, Accounts Payable and Accounts Receivable modules. The decision to move to a “foreign” operating system was not an easy one; over the next two years we will be replacing 340,000 lines of COBAL programs by RPG 111 programs on the S/38’.

Jim Langridge, University Deputy Secretary, added: ‘The University has pioneered the exchange of information by electronic means. The software is a further step in decentralising the information retrieval function’.

Credit Union Employ Students

THE Illawarra Credit Union has this year allocated $8400 to the University of Wollongong to enable part-time employment to be offered to a number of students enrolled in full-time courses at the University.

Sixteen students have been given three hours per week employment in the Departments in which they are enrolled over a period of 23 weeks.

Students are selected on an academic performance basis by the Head of Department and, to be eligible, must not have received financial assistance from a previous scholarship.

Tasks allocated to the students are varied but usually relate specifically to research areas in which they are involved. Typical duties include the design of computer programs, preparation of stimulus materials, biomedical assays and general laboratory work.

The employment scheme was introduced by the Illawarra Credit Union in 1981 and the manager, Mr Barry Kelly, is delighted with the enthusiasm shown by the University staff and students.
At the opening ceremony for the Illawarra Technology Centre, the Minister for Technology is introduced by Mr John Anderson, Director of the Centre.

Technology Centre opens

MINISTER FOR TECHNOLOGY Mr Eric Bedford officially opened the University of Wollongong’s Technology Centre.

Located off-campus in Keira Street, Wollongong, the Illawarra Technology Centre was established by the University as a result of a study initiated by the State government in 1983.

The State government is planning to provide approximately $400,000 towards the recurrent costs of the centre and discussions are well advanced for the release of Federal government funds to provide further support to the project.

Many local groups such as the trade unions, industry, and the Wollongong City Council have also played a part in the establishment of the Centre.

In his opening address Mr Bedford stated ‘The Government believes that the Centre, under the umbrella of the University of Wollongong, has the potential to be a critical part of a wider effort directed at the development of the region. The Centre will help industry in the region put new ideas and processes to effective use’.

The Illawarra Technology Centre Ltd has four main functions:

1) To provide technological information to entrepreneurs and established industry groups by access to data bases and information networks.
2) To provide technical, marketing and management advice on a fee basis with a strong emphasis on the application of technology.
3) To foster enterprise by providing incubation facilities and assistance to entrepreneurs.
4) To provide a range of services (such as access to finance or organisation and technology support networks) which are essential to the development of new technology firms.

A number of firms have already taken residency in the Technology Centre; these include:

1) The Automation and Engineering Applications Centre Ltd (A.E.A.C. Ltd) a non-profit company established to provide electrical, mechanical and computer engineering support to Australian industry in the area of manufacturing automation.
2) Electronics and Industrial Technologists (Electech), a group which provides hardware and software design services for applications where it is necessary to interface electrical or mechanical equipment to microprocessor control systems.
3) Integrated Interactive Ideas (Triple i), a company which is building information retrieval systems for industry using the latest laser disc technology.
4) Illawarra Bio-Tech, a development arm of a large private diagnostic laboratory which is producing polyclonal antibodies and which is concentrating its research program towards the production of an anti-bladder epithelial antibody.
5) Metals Technology Services Pty Ltd, a Metallurgical Consultancy company which specialises in the production and application of high technology special and structural steels used in the petroleum industry.
6) Siromath, an Illawarra branch of a consulting company set up by CSIRO, AMDEL and a firm of consulting actuaries which concentrates on data analysis and systems modelling as well as other mathematical-based industrial functions.
7) Spinifex Software Pty Ltd, a specialist educational software developer.

IBM has also provided a computer installation on loan to the Centre. The installation includes an IBM 4361 processor and a pair of IBM 5080 graphics workstations and with a CAD/CAM software package will present a valuable opportunity for the Centre to demonstrate CAD/CAM technology to local industry. One application of this technology which should prove to be of particular interest is the computer design of circuit boards for development of automated process control systems.

Peter Shepherd: more than the portrait

AN EXHIBITION of paintings and drawings by Peter Shepherd opened on April 22 at the Long Gallery in the School of Creative Arts at the University of Wollongong. It remained open until May 12.

The exhibition was in fact a powerful, private vision based on images of the artist himself and artists as a species.

This was Peter Shepherd’s first solo show since his exhibition at the Graham Gallery in 1983. He had spent a year working for the exhibition. Previously he had been working in Italy, UK and USA.

The exhibition was opened by Professor Edward Cowie at a special preview, during which adventurous collectors had the opportunity to view and purchase works.

Music was provided by the University of Wollongong Conservatorium String Quartet, led by Alexandra Stender.
The rain gods continued their April-long tantrum for the Conferring of Degrees Ceremonies during the first days of May. But it takes more than sudden, dramatic downpours and soggy grass for the meet-the-press-and-relatives sessions to dampen the spirits of graduates and their families on such an occasion. It was in some ways a record-breaking three days: for example the number of degrees awarded — 860 — was the highest ever for the University, and one recipient of an honorary degree had reached the venerable age of 81.

The ceremonies took place in Union Hall and the degrees were conferred by the Chancellor of the University, Mr Justice Hope.

Those receiving Honorary Degrees were the composer John Antill, OBE, CMG — who became the first to be awarded a Doctorate of Creative Arts — and the noted poet Luigi Strano who was awarded a Master of Arts (Hons) Degree. Citations were delivered by Professor Edward Cowie, Head of the School of Creative Arts, and by Professor Barry Leal, Chairman of the Department of European Languages.

The conferring proceedings began on Wednesday, May 1 — for graduates in Engineering, Metallurgy and Education during the morning session and for Arts and Mathematics graduates in the afternoon. On Thursday morning degrees in Commerce, Creative Arts and Industrial Studies were awarded and on Thursday afternoon Arts and Science. The Friday sessions were for Education graduates.

In keeping with tradition, notable speakers closed each session with the time-honoured Occasional Address. Speakers on this occasion were Emeritus Professor Geoffrey Brinson of the Department of Metallurgy (one of the most respected and popular figures in the University and for whom 150 people had attended a farewell function during February to mark his retirement); Emeritus Professor G.E. Roberts, Deputy Vice-Chancellor, Macquarie University; Dr Martha Cleary, Project Manager of ICI and a Member of the Commission for the Future; Mr Frank Hambly, Secretary of the Australian Vice-Chancellors’ Committee; Dr Peter Wilemski, Chairman of the Commonwealth Public Service Board; and Professor Grant Harman, Head of the Centre for Administrative and Higher Education Studies, University of New England.
Co-winner of the University Medal and a Bachelor of Arts—Honours Class 1, was Mrs Janet Lysaght. With her here is her husband, John Lysaght, who is managing director of Australia's leading cold-rolled steel works. (Mercury picture).

Bachelor of Engineering graduate and winner of the Sam Marshall Memorial Prize was Ian Dunn, seen here with, left, Professor Peter Arnold of the Department of Mechanical Engineering, and Mrs Margaret Marshall, widow of Professor Marshall. (Mercury picture).

Ross Kennedy graduated a Bachelor of Commercial and Managerial Studies. He is seen here with his wife, Debbie.

Dr Ted Booth is obviously elated at the graduation of four students from his course—Computers in Education. Graduates, from left, are Jane Cook, Jean de Hosen, Beverley Foley and Jenny Moore. Jane is a professional officer at the University. (Mercury picture).

Below: Elated Bachelor of Engineering Than Dat Huynh with his equally joyful wife, Hanh. (Mercury picture).

Yet another woman invading what was formerly a male preserve is Robyn Bennett, with her degree of Bachelor of Metallurgy.
Honours Class III graduate in Mechanical Engineering, Clinton Webb, is given warm congratulations by his mother.

Yesterday students, today graduates, tomorrow metallurgists; the Metallurgy class of '85 pose on campus as they prepare for the future.

Sue Walker graduated Bachelor of Arts, having studied part-time and majored in linguistics and psychology. Pictured with her is her husband, Professor Ken McKinnon, Vice-Chancellor of the University. (Mercury picture)

Because of the recession in the steel industry, these ex-Australian Industrial Steel employees, all graduates, decided to requalify and are now seeking teaching positions, having received Diplomas in Education. They are, from left, Graham Strachan, Robert Cooper, Brian Mitchell, John Prior and John Needham.

Dr Martha Cleary, Project Manager, ICI, and a Member of the Commission for the Future, gave the Occasional Address to the graduates in Commerce, Creative Arts and Industrial Studies.

Right: Cheerful Honours Class II Division 2 graduate in Mechanical Engineering was the strikingly bearded Pat Arundell.

Far right: PhD graduate from the Department of Civil and Mining Engineering Subrata Kumar Maitra is also an ME Burdwan and MEngSc Adelaide. He is seen here with his mentor Dr Robin Chowdhury of the Department of Civil and Mining Engineering in the University.
Pneumatic Conveying Conference

More than 70 delegates attended the three-day conference on the Pneumatic Conveying of Bulk Solids at the University of Wollongong.

Delegates came from around Australia to catch up with the latest developments in pneumatic conveying technology, with presentations from local and overseas experts in the field. Speakers included Drs Stan Mason and Alan Reed of the Bulk Solids Handling Unit at Thames Polytechnic, London, along with Professors Leung, Roberts and Arnold from Queensland, Newcastle and Wollongong Universities respectively. Dr Arnold McLean and Peter Wypych of the University of Wollongong and Mr Bill Armitage of NEI John Thompson also presented papers during the three-day conference.

Topics of discussion included:
- Components of pneumatic conveying systems
- Theoretical design models
- Laboratory test rig work
- Scale-up procedures
- Operation and control of blow tanks
- Blow tank design
- Feeding pneumatic conveying systems
- Long-distance pneumatic conveying
- Uprating of systems
- Economic system selection
- Vertical pneumatic conveying and stand-pipe flow
- Design of storage bins

Organised by Uniadvice and the Department of Mechanical Engineering, the conference also included inspection and demonstrations of the sophisticated on-site pneumatic conveying test rigs which are interfaced to the University's mainframe computer. The Thompson-Becorit test rig has a facility for testing long-distance conveying characteristics of various bulk solids, and incorporates a one kilometre-long conveying pipe loop.

During the past few years the Mechanical Engineering Department at Wollongong University has attracted over a half million dollars worth of consultancy work in the field of pneumatic conveying.

'\textit{The Friends}' growth and achievement

IN the report of the Chairman of Directors of the Friends of the University of Wollongong for 1984, the Chairman, Professor Ken McKinnon, Vice-Chancellor of the University, makes the point that the year 1984 was one of steady growth and achievement. The growth was marked by the admission of the Friends' 500th member. That member, appropriately, was Gordon Knight who, among other community roles, was Chairman of Wollongong's 150th Committee, organising the admission of the Friends' 500th achievement. The growth was marked by the admission of the Friends' 500th member. That member, appropriately, was Gordon Knight who, among other community roles, was Chairman of Wollongong's 150th Committee, organising the highly successful public celebration of the city's sesquicentenary.

From a wide variety of activities Professor McKinnon singled out for special mention the conducting by the Friends of the Australian University Graduate Conference, which he described as an outstanding community participation occasion; the March Senior Citizens Week which marked the establishment of a strong Friends Senior Citizens Support Group and helped provide a solid base for the University's academic plans for members of the community; the production by David Vance of Haydn's 'Creation' in June, which went a long way towards dispelling the notion that classical music could not attract a large audience in Wollongong; the Friends' assistance with the Gala Evening, establishing the Patrons of the School of Creative Arts within the University on August 16 and the Open Day/Expo 1984 which included the lowest-cost and best-attended University Open Day in Australia.

As to Uniadvice, the Vice-Chancellor reported that since the appointment of Mr Peter Sophios as Manager, several initiatives had been developed, and that consulting work had increased despite pressures on academic staff resulting from high levels of enrolment.

School of Creative Arts represented in Town Hall concert

The City of Wollongong Symphony Orchestra on May 25 held a concert at the Wollongong Town Hall. The conductor was John Wayne Dixon of the University's School of Creative Arts and Community Studies. Among the pieces were Scarlatti — Keyboard Sonata, Greig — Piano Concerto in A Minor, Sullivan — Selections from the Mikado, Gondaliers, Iolanthe and Yeomen of the Guard. At the piano was Antony Peebles.