

First McMaster Quartet Concert On Sunday

The McMaster Quartet of Canada, resident string quartet in the School of Music this term, will give its first concert in the old University Hall on the city site on Sunday, 24 June, at 3 p.m.

The quartet, which consists of Marta Hidy (violin), Sasha Weinstangel (violin), Mark Childs (viola) and Zdenek Konicek (cello) will play Smetana's String Quartet in E Minor, "From My Life" and Beethoven's String Quartet in F, Opus 59 No. 1, "Rasoumovsky".

The first lunch-time recital will be on Thursday next, 28 June at 1.10 p.m. in the School of Music. Marta Hidy and John Luxton will play Bethoven's Sonata in C minor, Opus 30, No. 2 and Brahms's Sonata in D minor, Opus 108, No. 3.

During the term the quartet will conduct several string workshops, hold rehearsals with the University's Chamber Orchestra and will also visit the University of Otago and Waimate during the mid-year recess. The players will leave for Canada on 10 August.

The concert programme at the University

24 June, 3 p.m. First concert: Smetana's String Quartet in E Minor "From My Life", 1876 and Beethoven's String Quartet in F Op. 59, No. 1, Rasoumovsky, old University Hall.

28 June, 1.10 p.m.: Lunch-time recital, Marta Hidy and John Luxton. Beethoven's Sonata in C minor, Op. 30, No. 2 and Brahms's Sonata in D minor, Op. 108, No.3. School of Music.

9 July: Christchurch Teachers College Concert.

15 July, 3 p.m. Second concert: Dvorak's String Quartet in F, Op. 96 and Beethoven's String Quartet in E minor Op. 59, No. 2, Rasoumovsky, Christchurch Teachers College Auditorium.

17 July, 1.10 p.m.: Lunchtime Recital. Marc Childs, John Luxton and Chamber Orchestra. Telemann's Concerto in G major; Hindemith's Tauermusik and Brahms's Sonata in E minor Op 120, No. 1, School of Music.

19 July, 1.10 p.m.: Lunch-time Recital. Zdenek Konicek and John Luxton. Cello sonatas by Rachmaninov and Brahms. Rugby Street.

23 July, 8 p.m.: Concert with Chamber Orchestra including works by Sammartini, Arensky and Moon, Rugby Street.

24 July, 1.10 p.m.: Lunchtime Recital Trios by Gordon Jacob and Brahms. School of Music.

29 July, 3 p.m.: Third concert. Verdi, String Quartet in E minor and Beethoven's String Quartet in C minor Op. 59, No. 3, Rasoumovsky. Christchurch Teachers College Auditorium.

31 July, 1.10 p.m.: Lunch-time Recital with Chamber Orchestra. School of Engineering.

2 August, 1.10 p.m.: Lunch-time Recital. Sasha Weinstangel. Tartini's Sonata No. 10 in G minor; Telemani's 2 Fantasias for unaccompanied violins and Weinstangel's Trio Music (piano, violin and cello), Rugby Street.

5 August, 3 p.m.; Fourth concert. Boccherini's String Quartet, Op. 33, No. 6; E. Glick's Suite Hebraique No. 3 and Brahm's Piano Quintet, Op. 34.

New Microprocessor System

The Electrical Engineering Department has taken delivery of an INTEL microprocessor development system (funded largely by grants of 59,500 obtained by Professor J. Arrillaga, Mr B. Dewe and Mr W. K. Kennedy from the Ministry of Energy (Electricity Division) and \$6000 obtained by Mr D. J. Byers from Industrial Electronics and Automation Limited (Napier). Under its programme of assistance to educational establishments INTEL Corporation supplied the software free of charge and gave a 20 per cent discount on the hardware.

Consisting of a main chassis and processing unit, disc drives and printer, the system is used as a tool in the development of small, special purpose, microprocessorbased devices. It assists in both program and hardware development for the 8080/8085 and the single chip 8084/8741 ranges of microprocessors.

Three programming languages-Assembler, a high-level language called PL/M, and Fortran, are supported by the system. These will be expanded in the future with BASIC and RMX-80, which is a real-time executive designed for controller applications.

During the development of hardware the system can be used in the In-Circuit Emulation (ICE) mode, whereby the full resources of the development system are connected to the prototype for its evaluation. Both ICE-45 and ICE-48 have been purchased.

Future plans include support for the 8086 range of 16-bit microprocessors.

The importance of this equipment in both the teaching and research activities of the Electrical Engineering Department can be gauged from the fact that more than half the final year students are working on projects involving microprocessors. Postgraduate research utilising microprocessors includes such topics as

Large generator/turbine auto-run-up control

Control of High-voltage D.C. links

Power system protection A.C. motor variable speed drive

Power system transient-stability studies

Image processing

Digital control system design Artificial intelligence (robotics)

Aids for the disabled

The new development system will significantly improve the efficiency with which such research activities can be pursued.

Computer Facilities

"Marked Contrast" With Overseas Universities

The contrast between computer facilities at Canterbury and some overseas universities is very marked, according to Professor P. J. Penny (Computer Science) in a report on study leave in North America and Britain.

"Members of Council may expect a Professor of Computer Science to comment a little regretfully on the quantity and quality of computer facilities available in universities overseas." Professor Penny said. "Here, I will mention only the two universities in which I spent most time.

"The number of terminals available for staff and students gives a good indication of the accessibility and, to a fair extent, the power of computing services. At Imperial College, the Computing and Control Department alone has 30 terminals. With computer facilities as accessible as this, the speed with which students learn is really very impressive.

"At Alberta, the Director of Computing Services told me that they have 'about 400' terminals on their main machine-an Amdahl 470, which is as powerful as any computer available. Most of the staff in their Computing Science Department have a terminal in their office, and there are University College, London, is recomportable terminals with accoustic couplers used for working at home. People turn to use their terminal as readily as I pick up pencil and paper. To comment on only one aspect of the value of such facilities, I point out that anyone who has got used to being able to compose and edit 'manuscripts' on a terminal will know how very effectively one can work

"Alberta is a rich university, even by North American standards, and Imperial College is probably better off than most other universities in the U.k." he said. "One does not expect to have in New Zealand universities facilities to compare with those in the best equipped universities overseas. However, at Canterbury we have 16 on the undergraduate system for the whole admitted with the minimum of bother. University. The contrast is very marked."

During his leave Professor Penny tried to assess the implications of developments in micro-electronics, Small, programmable processors could now be manufactured for less than a twentieth (no exaggeration) of the ago. One expected such processors to be

example was the introduction of quite quite difficult for some years ahead." powerful microprocessors in some makes of cars to control fuel and ignition systems in the interests of greater economy and better emission control.

Within the computer field itself, the effect of this new technology was most obvious with the smallest systems. The electronic hardware could be manufactured in very large quantities, and therefore very cheaply. There was only a limited requirement for input-output or auxiliary storage units, which were still fairly costly. Mini-computers now costing \$5000 were close in capacity to those which cost \$20,000 in 1972, and their price should fall still further

"If a list were made of a number of computer systems, from the very small to the very large, one could draw a line below which the smallest systems have recently become very much cheaper, and above which the costs have so far not changed a great deal," Professor Penny said, "This demarcation line will move slowly upwards.

Vacation Home In London

mended by Bruce Weatherall (Journalism) for staff on leave in London during the British university vacation.

luxurious, but it was cheaper than the average bed and breakfast hotel, he said. It Bloomsbury and was of great benefit since it took him four weeks to find a flat

Education for his two sons of secondary said in his leave report. He encountered "a obfuscation" on applying to Local Education Authorities and finally took the boys terminals on the Burroughs system and six to the nearest school where they were

The school was a fairly tough Inner London Comprehensive of the sort whose reputation has reached as far as New Zealand-a reputation unlikely to create an insatiable demand for places therein. "In fact this particular school proved to be cost of equivalent processors some 10 years much better than its reputation indicated. and I do not regret having sent my sons used eventually with "almost anything there," he said. "It was still a tough school electrical" that could be made more useful by New Zealand standards, however, and I

with some degree of automatic control. An i decisions on choosing computing equipment

With micro-electronic technology ready for very wide application there was a phenomenal demand by North American industry for people of proven research ability. The demand was not so apparent in Britain but the Government had invested £400 million to promote developments in micro-electronics. A further £100 million investment was announced while he was there with £60 million of it for education and training.

Some loss of staff from universities had occurred. In each computing department he visited in North America there was at least one academic vacancy, a definite change from the position since he was last there in 1972. Imperial College was experiencing what was described as "a continuation of the brain drain". Its Computing and Control Department was prepared to make five appointments on the computing side in 1978, but filled only two positions. "This situation will undoubtedly accentuate our own department's difficulties in attracting and the changing situation will make well-gualified staff," Professor Penny said

Campbell Hall, one of the hostels of

The accommodation was not specially was conveniently situated on the edge of

school age posed problems, Mr Weatherall quite incredible barrage of bureaucratic

think this may have been the reason why getting into it was so easy.

"Finally, I must repeat what many others have said before me-the cost of living in Britain, and in London particularly, is very high by New Zealand standards, quite apart from the cost of rental accommodation. Basic foods like meat, milk and bread cost two or three times as much as in New Zealand, travel costs are high and so, for example is the cost of electricity. As a general indication, the \$700 a month which had remitted from New Zealand was barely enough to cover basic living costs. I had to plunder my savings deeply, the back-pay we received in October was a godsend, and my small part-time lecturing job also helped a great deal. Without these latter, we would have spent a very poverty-stricken leave indeed," Mr Weatherhins lla

For Sale: Ansatel Unit

The Computer Centre has an Ansatel unit that is no longer required. If anyone wishes to purchase this at a nominal cost, please contact the Secretary (Ext. 89).

Obituary

James Edward Courtney Shearer

The University was saddened by the death on Sunday of Mr J. E. C. Shearer, the School of Engineering Librarian for the last 18 years. The high regard in which his personal and professional qualities were held was demonstrated by staff from every faculty who crowded the Christchurch College Chapel for the funeral service on Tuesday.

Courtney Shearer, guiet and unassuming but with a sturdy conviction of the value of the work he was doing, built the Engineering Library as University expansion began in the sixties into a fullscale library for two professional schools. His integrity, technical ability and willingness to help won him a wide circle of friends throughout the University.

Mr Shearer came to the University in 1962 from the Country Library Service. He gained his New Zealand Library Association Certificate in 1953 and the certificate of the New Zealand Library School in 1955. In 1958 he was admitted as an associate of the Library Association. For seven years he was a field librarian, driving vans about Canterbury, designing and supervising their construction and conferring with local bodies about the development of library services. He was appointed first assistant for the service in 1956 and in 1960 was seconded to help implement regional library services in the North Island.

He was a tutor for the Library Association training programmes and a visiting lecturer at the Library School. He served as chairman of the Canterbury branch of the Library Association and was a member of and honorary librarian for the Canterbury branch of the Royal Society of New Zealand.

Mr Shearer worked with Mr C. W. Collins in the planning of the Engineering Library and when it was completed after several frustrating years of working in inadequate conditions at Ilam, he set about making it a most attractive library which somewhat belied its specialist nature. There were numerous exhibitions of paintings, sculpture and pottery, displays of books on a wide variety of topics outside the field of engineering and a comfortable and attractive reading area for periodicals. He was among those who pressed for the provision of carpet in the Engineering Library, setting the pattern for the libraries subsequently built on the campus.



In his days with the Country Library Service, Mr Shearer was known for his strong practical interests and abilities-his library vans were always in first-class condition-and he brought these qualities to the Engineering Library. He was guick to see the advantages of a photo-copying service, particularly when the engineers were in splendid isolation at Ilam in the early sixties. With Professor E. L. Ellis (Forestry) he established the information retrieval system known as AIDS. This microfiche system has increased library patronage by students and industry markedly in the last two years. This year he installed a microfiche copying and duplicating service and was working on the installation of a book detection system to replace the present exit controllers-a significant

Mr Shearer took an active part in the planning of Engineering School activitiesthe publication of the prospectus. Conversaziones and the organisation of conferences. In his retirement he planned to undertake much of the public relations and publications activities for the first joint conference of the New Zealand Library Association and the Library Association of Australia, which is to be held in the University in January 1981 with about 2000 delegates attending.

development in library book security.

In a tribute at the funeral ceremony Professor H. J. Hopkins said that above all Courtney Shearer's virtues was his devotion to duty. "He was a professional-a librarian. His love of books, his mastery of library systems, the furtherance of the science of

records, were true to the high concept he held of his profession. And his photographic work advanced far beyond the needs of professional competence

"He came to us from the Country Library Service, in which he had brought the joy of knowledge to thousands in the remote places. He arrived with us as the pulse of postgraduate work was quickening. Laboratories were to be extended, library services expanded. These things were accomplished without conflict and to Courtney goes much credit for this. The Engineering Library is a monument to Courtney's ideal of a library with books and room to read them.

"Courteous, gentle and considerate, he invited confidences. He never talked disparagingly to me of others, nor betrayed a confidence. Many sought his advice and were the richer for it. In acknowledging the help he gave me, I wrote of Courtney 'Thy books are motor enough'. And they were enough to carry him along life's highway and into the hearts of all who knew him. Sadly, they were not enough to give him time to savour again the riches of his calling and the quiet reflection of a life well spent," Professor Hopkins said.

Professor Bates Honoured

Professor R. H. T. Bates (Electrical Engineering) has been appointed the Thomas Alvin Boyd Lecturer for 1979 by the Ohio State University, Columbus, Ohio, His Boyd Lecture (entitled "General Introduction to the Extended Boundary Condition") will open the main business of an international symposium/workshop on 'Recent Developments in Classical Wave Scattering-Focus on the F Matrix Approach," which is scheduled for 25-27 June in Columbus.

This is the culmination of 10 years' championing of the extended boundary condition (sometimes called F Matrix) approach which is due to P. C. Waterman, who will also be delivering a keynote paper.

Dr D. J. N. Wall, who gained his Ph.D. in the Electrical Engineering Department under the supervision of Professor Bates and who is a post-doctoral fellow with Professor D. S. Jones F.R.S. in Dundee, is presenting an invited paper at the symposium, which is sponsored by the United States office of Naval Research and Ohio State University.

S.A. Universities

'Repressive Laws Applied Less Rigorously'

whole.

Religious Studies) believes his study leave visit to South Africa was well worth while, though "it would be silly to pretend that such a visit would meet with everyone's approval."

"Apartheid is, and remains, an abomination, but among whites, at least, those who fight it are frequently academics," he said in a report to the University Council on his leave, "Their struggle, while not very effective, is carried on at considerable cost to themselves. For this reason alone it strikes me as inappropriate to ostracise the South African academic community, although I do think one needs to choose one's contacts with care."

He said that possibly because South African universities were becoming increasingly isolated, academic visitors were something of a prized commodity and he was treated accordingly. Hospitality and kindness were lavish. More important and certainly more exciting was that philosophers there showed an active interest in his work, were very willing to discuss it, argue about it and criticise it." As a result | benefitted enormously, not least because I felt obliged to show a reciprocal interest in their work," Dr Novitz said,

One of his reasons for visiting South Africa was his interest in South African politics bred mainly of the fact that he is a native of that country, "I was interested in gauging the effect of the much-vaunted recent changes in the policy of apartheid on academic institutions, and on the country as a whole," he said. "When I was a student at Rhodes from 1964-9, the Universities Amendment Act of 1959 was enforced with considerable vigour and as a result there were no African students at Rhodes, Although the act remains on the statute books, the Government no longer applies it with the enthusiasm of earlier days. As a result there are now some 30 African students on campus-out of a student population of 2000; and while this certainly does not reflect the population structure of the country, to anyone used to the Rhodes campus of earlier years, this is a welcome change. Much more welcome is the fact that the present Vice-Chancellor of Rhodes University has admitted many of these students to halls of residence and this not only flies in the face of Government policy, but is a violation of the Group Areas Act.

Dr David Novitz (Philosophy and Blacks are disproportionately prominent in oured') students to the University, "We campus affairs and are often sharply critical were most fortunate in that we were invited of white student attitudes, but even so there to a party in the black location where we is considerable multi-racial contact, All of not only met a black student currently this is encouraging, even though it does not studying at Stellenbosch, but other black reflect structural change in the country as a people who live in the city. We were able to get a first-hand account of the Soweto

There was probably greater political

demics at Stellenbosch than at English-

speaking universities. The philosophy

Professor Johan Degenaar (in charge of

few between, but the one that we did meet.

"This was true of most of the changes uprisings as they affected Stellenbosch, and that I experienced in South Africa. To my we were surprised to learn of the extent to knowledge no repressive laws have actually which they had been directed at middlebeen repealed. The only change is that a few class blacks. It would seem from this that of them are applied somewhat less rigor- the South African Government's attempt to ously than before. It is only when white defuse the race issue by creating a black people actually complain about what is middle-class is having the unwelcome effect regarded as a black intrusion or a white of making the newly emergent black impropriety that a law, otherwise dormant, middle-class the front line of white defence. will be invoked. This is ominous for a In Stellenbosch impoverished blacks, unable university like Rhodes because it means that to direct their anger at the well protected much of the change that many well- whites, had stoned cars belonging to intentioned academics work towards can wealthier black people and had attacked easily be undone. At the time that I left their homes," he said, South Africa a right-wing backlash at Rhodes had led to the systematic fire- polarisation among Afrikaans-speaking acabombing of rooms in residences occupied by black students. This, I felt, might well lead to Government intervention and the event- department had a prestigious member of the ual exclusion of black students from ruling party as professor and Head of residence. As far as I know, though, this has Department, while at the same time

He said one other change worth noting political and moral philosophy) was an was that Marxist writings were now openly outspoken critic of the Government and a studied and discussed on campus, often by remarkably gifted philosopher to boot. committed Marxists. It was well known, "Overall the standard of academic philothough that the secret police kept a sharp sophy is high, and the classes taught by lookout, and that any Marxist who dared Degenaar draw large numbers of students put theory into practice would very soon Dr Novitz said. "As at other South African encounter the full force of numerous laws, universities, the students that I met were Despite this, many academics were often eager to discuss political questions, tolerated forthright and fearless in their con- disagreement, and were often well informed. demnation of Government policy and were Black students at Stellenbosch are far and not always well tolerated for it.

Dr Novitz visited several other uni- although willing to discuss matters not versities including the Afrikaans-speaking directly related to his curriculum, was at University of Stellenbosch, which has the first very cautious, and was subsequently dubious reputation of having produced all bitterly critical of the tokenism of his but one of South Africa's Prime Ministers, presence at Stellenbosch, Nonetheless he Despite this, it had recently decided to expressed his intention to take whatever he admit a limited number of black ('col- could from 'this government'".

Light Rescue Course Starts Soon

The Safety Committee reports an excellent attendance at the current First Aid course being conducted by the Red Cross Society.

The committee reminds staff and Safety Officers that there are still some vacancies on the next series of Light Rescue Courses starting in July. Further information from David Johns at Ext. 80/832.

Scientific Research

Opportunities For N.Z. Talent Urged

An appeal for opportunities for talented young New Zealand scientists to avoid "the perpetuation of mediocrity" was made by Professor R. H. T. Bates (Electrical Engineering) in an addendum to the 29th Hudson Lecture he gave to the Wellington branch of the Royal Society recently.

"Let us do our own things-and at least as well as the rest of the world can", was the title of the addendum, during which Professor Bates referred to the scientific work of George Vernon Hudson at a time when it was thought that anyone who had anything real to contribute to science must depart for the northern hemisphere. "The lesson that he and a few other prophets taught has hardly been learned, even yet," Professor Bates said. "There are of course, people in New Zealand who have reached positions of scientific influence and who are convinced that research done here, in properly chosen fields, can set true bench marks for the international scientific community-all that is required is enough commitment by groups of sufficient quality. It must be admitted, however, that most of the high class work is being directed at the moment by immigrants or by New Zealanders who received their crucial training in the U.K. or U.S.A. This may be why too many of us seem to think that all that can be achieved in New Zealand is to keep up with 'overseas' developments.

"A pathetic reliance on 'overseas experts' still permeates much of our thinking," he said. "An unfortunate corollary to this is that agencies disbursing research funds often pay more attention to the projects than to the people who will do the work-'after all', they probably reason, 'since the essential studies are all done elsewhere, the best thing we can do is to ensure that our scientists learn about as many new developments as possible, which means that we should distribute what little money there is as widely as we can'-a perfect prescription for perpetuating mediocrity. The point that research is done only by those who are driven by 'demons'. It is hopeless to expect results from people who only attempt to perform when appropriate funding and facilities are made available. Most research is, of course, impossible without proper funding. However, a real 'researcher', even if working with only minimal facilities, is likely to produce something worthy of notice-but, if starved of encouragement

and resources, will eventually either 'turn demands imaginative leadership." off' completely or become increasingly ineffective."

Professor Bates said many of those leaving New Zealand universities with masters and doctors' degrees were tremendously talented and it was becoming increasingly difficult for them to get for New Zealand science and engineering. If we used them constructively, not only would they feel fulfilled working here, but the country would save a great deal of money-by, for instance, carrying out many of the developments for which the Broadcasting Corporation, the Electricity Depart-

Re-Elected To Council

Council have been re-elected by the Court J. E. Fergusson (Chemistry). of Convocation.

Three candidates were nominated for the two positions and the voting was: Miss J. M. Herbison 2459, Mr N. B. Utlrich 2126, Dr R. J. Blackmore 1618. Miss Herbison and Mr Ullrich were elected.

Only one nomination, that of Professor E. L. Ellis (Forestry) was received for a vacancy on the Council for a representative of the Professorial Board. Professor Ellis was declared elected.

The recent election for seven representatives of the lecturers on the Professorial Board resulted in the nomination of the following:

Miss M, E, Belcher (English), Mr A, J. Bowen (Mechanical Engineering), Mr D. E. Browne (Philosophy), Dr M. C. Crawley (Zoology), Mrs R. Novitz (Sociology), Dr L. E. Richardson (History) and Dr R. W. G. Syme (Physics). Their nominations will go forward to Council for approval.

The other seven lecturers' representatives needs making repeatedly is that worthwhile on the Board are: Dr R. P. Bond (Classics), Mr R. G. A. Gidlow (Sociology), Dr B. W. Hunt (Civil Engineering), Mr N. S. Roberts (Political Science), Dr I. A. Snook (Edu-

The State Insurance Office has made a grant of \$2874 to Dr J. B. Berrill (Civil Engineering) for the installation of an earthquake motion accelerograph in the State Insurance building, Riccarton,

Professor Bates referred to several research students who had worked on image processing at Canterbury and who had won important positions overseas-indeed they had been sought out by overseas institutions. "There must be other university departments in New Zealand with similar success permanent positions overseas. "This, it stories," he said. "So it is up to those of us seems to me, represents a signal opportunity who are in positions of any sort of influence at all, to try and ensure that there are proper opportunities for talented young scientists. This means that we must keep on irritating cabinet ministers, vice-chancellors, senior civil servants, members of hospital boards, etc. to persuade them to create more of the right kinds of jobs-not only to ment and the Post Office pay through the protect this country's scientific and technose to the Japanese, Americans, Germans, nological position, but also to enrich its or even the British. The real difficulty of cultural life and heritage. In fact, we must course with this sort of thing is that it be constructive stirrers."

Two sitting members of the University cation), Mr P. J. Tremewan (French) and Dr

Personal

Professor P. S. Corbet (Zoology) has been awarded a visiting fellowship at Clare Hall during the tenure of his Commonwealth Visiting Professorship at the University of Cambridge in 1979-80. On his way there Professor Corbet plans to make working visits to the Department of Zoology, University of Malaya in Kuala Lumpur, and to the International Centre for Insect Physiology and Ecology and the headquarters of the United Nations Environmental Programme in Nairobi.

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Mr Brian Wearing (History) will be visiting Dunedin next month to speak to the history section of the Otago branch of the Royal Society of New Zealand on "Film and History". He will also address the Dunedin branch of the Institute of International Affairs on the significance of Latin America in the international scene and will give lectures at the University of Otago on Latin American history and politics.

Professor R. P. Kerr (Mathematics) and Professor F. P. Lu (Business Administration) were members of the five-man New Zealand bridge team which defeated Australia in last month's test

France Calm Again

Engineers In Industry

Vitality A Contrast With "Le Mal Néo-Zelandais"

University life in France is now calm after the events of May 1968. according to Dr E. D. Jones (French) who spent much of his study leave teaching English as a second language at the University of Paris 111 (Sorbonne-Nouvelle)

"Contrary to various dire prognostications, the situation was very calm and the students most subdued," he said, "No strikes, no interest expressed in the elections no reactions to provocation. Little involvement in student affairs and university elections. Keenness above all to get through. The situation had returned more or less to what it had been when I last taught at a French university, the College Litteraire Universitaire de Tours, in 1961-2. The students were as assiduous and willing to co-operate as they had been some 16 years earlier. The problems of the French university do not lie on the student level; lecturer level "

He said the French university had not been able to assimilate the upheaval of May 68 and the consequent reforms. The brave attempts at democracy had become lost in the political jungle. The university was answerable to a Minister, Madame Alice Saunier-Seite and its problems appeared to lie on the political level. Attempts were being increasingly made to bring the university under tighter political controlunderstandable given that apparently 40% of French universities were under Communist control even though it was estimated that Communists command only 10% of the vote. (They voted)

"Tensions therefore exist and it was sad to see so many energies wasted in political activity at the expense of research into teaching methods, of co-ordination of classes and courses and of staff-student relations, Little money was available even for basic equipment-stencils are still used and photocopying machines come from the breakdown-ridden Dark Ages, Public relations are not a French forte and students in Paris are very much left to fend for themselves, No spoon-feeding there, I expect, though, that it is good training for later in life and the tussles with Government administrations

"It is easier for the lecturing staff. Because of the peculiar difficulties of Paris-transport, distances, no staff studies and very few and uncomfortable teachers' rooms-lectures (an hour or an hour and a

half in length) are blocked together (for the community." lecturers). This is convenient and saves time being spent in the metro but the great disadvantage is that one never sees one's colleagues. Only rarely could I spend time with a fellow-lecturer in one of the local cafes; staff-student contact was minimal and the all-too-rare staff meetings were the only real opportunities to get to know colleagues,

"Perhaps this isolation was noticed particularly because of the easy situation we know at Canterbury, Conversely, the situation of Paris in the middle of the Left Bank, surrounded by cafe's, bookshops churches, monuments, with Censier, where undergraduate teaching is done, only a few hundred yards from the rue Mouffetard and its markets, showed clearly how much we miss being cut off from the central

Dr Jones had a holiday on the South Coast, speaking the language at every turn enjoying the delights and varieties of the incredibly lovely French countryside, seeing, hearing, eating-being French.

"France and New Zealand lie opposite each other on the globe; both have infinitely varied and forever changing landscapes, but in France human habitation has added a dimension," he said, "May we take advantage of our newness to build an outward-looking society. It is sad to return from France with its newly discovered vitality, even though ever so fragile, to a down-in-the-dumps introverted New Zealand, Would the New Zealand disease-'le mal neo-zelandais'-be a lack of selfconfident inspiration?"

university do not lie on the student level; Horse-Riding As An Aid To Study

Dr Johnston once remarked that nothing concentrated the mind so much as the prospect of being hanged next morning, Professor D, G, Elms (Civil Engineering) has found a slightly less painful alternative; riding a horse for the first time

While on study leave, part of which he spent in Montana, pride forced him onto a horse for the first time, "This disconcerting affair and other ranching activities had an excellent result," he said in his leave report. "It produced (perforce) a clarity of mind and a concentration that led me to one of the nicest pieces of theoretical work I have done for several years. This was written down intermittently on scraps of paper between various more physical activities to the amasement (or amusement-I was never sure which) of the local inhabitants. Subsequently it was written up as a paper which appears to have roused considerable interest and favourable comment.

Professor Elms spent five months as a visiting engineer at the Massachusetts Institute of Technology, where he worked on probabalistic design matters and on the design of retaining walls and bridge abutments. Part of the latter work involved making contributions to a draft U.S. code for the seismic design of bridges which took him to California for three meetings and discussions, "It was interesting to find that, whereas code committees in New Zealand frequently look to American codes for guidance, in the United States the equivalent code committees frequently ask what New Zealand is doing," he said. "It was also pleasing to find that New Zealand work in civil engineering is held in such high regard."

Graduate's Work For Army

Captain W. H. Tucker, who carried out his Ph.D. research on Computer/Music systems in the Electrical Engineering Department under the supervision of Professor R. H. T. Bates, has joined the New Zealand Army under contract for five years.

He is to play a large part in the design and commissioning of a new digital communications system for the Defence Department. His rank during the latter four years of his contract will be that of major.

A paper on improved means for automatically estimating the pitch of speech, song and music (played by a unisonous instrument), authored by Dr Tucker and Professor Bates and published in New York by the Institute of Electrical and Electronic Engineers, incurred appreciable page charges, the major share of which has been generously paid by the Defence Department.

Investigation Of Role As Managers

Professor H. McCallion believes his approach to educating engineering students will improve after spending his study leave investigating the logging industry at Rotorua. It also enabled him to produce a framework within which to examine the activities of people in operational roles.

Reporting to the University Council, Professor McCallion said that in the main, university education for engineers aimed at enabling them to design reliable machines and other physical instruments for the societies they served. However, the role of professional engineer encompassed many other skills which generally had to be learnt by experience-planning, organising and regulating the work of other people so that the instruments may be used or produced economically. Experience was necessary because much of the associated knowledge was informal and subjective.

"To many graduates, educated to infer from formal models and objective knowledge, learning from experience may be disconcerting and frustrating," he said. "Consequently many seek employment in activities which exercise their intellect on formal models with objective knowledge, making recruitment of the brighter engineering graduates for operations management roles in manufacturing industry difficult. It is claimed that this was not a problem in earlier generations because bright people joined the work force directly from school, undertook part-time study and climbed gradually through an employment hierarchy. It is also claimed, by operations managers, that the activities of managing a manufacturing enterprise offer intellectual challenges which equal, if not excel, those found in designing and developing instruments or in researching structural producerproduct relationships that affect the performance of those instruments.

"If this is true then at least a few university engineering teachers should direct their research activities towards helping to produce a formal logical structure within which fresh graduates may organise the largely subjective knowledge they gain in their early working life," he said. "Close contact with functioning enterprises is necessary for research of this nature, and a period of study leave provides an opportunity to undertake such work without thought-deflecting interruptions."

Much had been written about personality, organisational and technical factors

that affected the operational efficiency of enterprises but a formal logical structure was still not evident to engineers, he said. "About five years ago I became aware of attempts by various philosophers to produce models of the activities of people and since then I have gradually extended my understanding in that direction. During my leave I attempted to apply the knowledge in a study of the training needs of engineers in the manufacturing and processing industries of New Zealand.

"In that study, which was sponsored by the Engineering Industry Training Board, the lack of operational definitions of many activities and of formal models of the socio-technical systems involved, gave rise to a number of difficulties. These difficulties helped me to decide to spend my study leave attempting to improve my knowledge and understanding of the operational activities of people in employment hierarchies and of the structure of those hierarchies. Fortunately the Board of the Logging Industry Research Association was willing to provide an environment, of which I was completely ignorant, so that I could live again through some of the difficulties a new graduate has on entering the work force in addition to having ready access to a range of sizes of enterprise from the largest to the smallest in the New Zealand economy with which to clarify difficulties in developing models, Remaining in New Zealand had the added advantage of giving free time to continue searching for production engineering type problem situations of major importance to the economy

"My knowledge and understanding reached a state that enabled me to produce what I believe to be a clear statement of a conceptually sound and logical framework within which to examine the activities of people in operational roles." Professor McCallion said, "I directed my activities towards producing a statement of the factors affecting the functional efficiency of an enterprise, with a view to outlining the operational research needs of the logging industry."

He spent the first three months gaining familiarity with the processes and skills needed in the industry, from the nursery through forest management, logging and transporting, to the production of pulp, paper, sawn timber and panel products. Most of the next three months was spent in the F.R.I. and LIRA libraries and in discussion with foresters and managers, gaining an understanding of their operational problems.

"During the remaining time I produced a statement of what I believed the industry needed by way of operational research and what I believed should be the role of the Logging Industry Research Association within the industry," Professor McCallion said. "This statement was presented to the Board of the Logging Industry Research Association at its annual general meeting in November last year. Many members of the board welcomed the views of an outsider. although there were hints that only an 'ivory towered ignoramus' would have the temerity to produce a distorted mirror and tell the industry to have a fresh look at itself. Needless to say I had disagreements on what needs to be done with many members of the industry, but we appeared to part as friends.

Professor McCallion joined working parties on a number of engineering and operational problem areas associated with the logging industry and also attended two major seminars. He also joined an investigation into technical, organisational and economic factors likely to limit the use of industrial robots in New Zealand's manufacturing industry. He had already been associated with the project for three years and to gain experience with the machine, a Unimate 2000, he attended a one-week course on programming, operating and maintaining it. For an experimental period it was installed in Wanganui for unloading diecast automotive gearbox castings from a diecasting machine. He organised and supervised the gathering of technical, organisational and economic data, and reported the findings to the D.S.I.R. and to the board of the company. He also reported the finding from a survey on the activities performed by and the scientific and technical knowledge used by professional engineers and technician engineers employed in the manufacturing and processing industries. The report, with recommendations from a committee he chaired. was adopted and published by the Engineering Industry Training Board.

June Christmas

The Staff Club's northern hemisphere Christmas party will be held on Saturday 30 June with a menu including turkey, Christmas pudding and punch. Reservations at \$8 each should be made to Professor John Farrar (Law) by 27 June,

Notices

P.S.I.S. Branch At Ilam

The Public Service Investment Society has opened a branch office at the Christichurch Teachers' College, Dovedale Avenue, Ilam, in the Avon building, opposite Whitcoull's bookshop.

Opening hours are: Monday, Tuesday, Thursday: 11 a.m. to 1 p.m.; Wednesday and Friday: 1 p.m. to 3 p.m.

The following transactions may be carried out at the branch: Cash withdrawals-up to \$200; Cheque withdrawals-up to \$1000; Deposits; Payment of accounts; Signing up new members.

Newspapers Of The Future

A visit to the B.B.C.'s Ceefax newscom made the traditional news media appear a hidebound and inefficient means of presenting news and other information, said Bruce Weatherall (Journalism) in a report on his study leave, spent principally at the City University in London.

Coefex, he explained, is a system by which pages of script and/or simple graphics are transmitted along with the normal television signal, and these pages can be superimposed on the television picture by pressing a button on a special attachment built into the television set. The different page coere everything from a summary of page coere everything from a summary of livestock prices. Independent Television has a similar system, Perstel, and the British Post Office offers Viewdata, similar in effect

"Comparatively few British television sets are yet equipped to receive Ceefax or its competitors, but this is expected to increase as the price of the extra attachments fails," he said. "The capital cost to the broadcasting organisation was, I was informed, surprisingly low. Whether such a system will ever be introduced in New Zealand is impossible to predict, but the implications for conventional sources of information-

A U.S. Rival

This advertisement appeared in a recent issue of *Psychology Today*.

MASTERS AND DOCTORAL PROGRAMS Errn your degree in a quality, state authorised program with Distinguished International Faculty. Curriculum relevant to your present professional/personal goals. Intervive Reletantial Summer Session with Community of Scholars and international include study at Oxford or with personally include study at Oxford or with personally Redremy Drive. Angeles. Co 50027. (213) 662-8609. Angeles. Co 50027. radio, TV, newspapers-me potentially considerable. So it was with great interest that 1 spent some hours in the Ceefax room, with its teleprinter sources of information from the main B.B.C. newsroom, and its row of keyboard/YOU units with which the journalist-operators worth their news summaries or tabulated information on a huge variety of subjects for feeding into the Ceefax computer for transmission."

A.U.T. Meeting On Education Cuts

The Canterbury branch of the Association of University Teachers will discuss the Government's cuts in education spending at a meeting of the branch to be held in the Mathematics Senior Common Room on Thursday next, 28 June at 8 p.m.

Professor Crick's Visit

Professor Bernard Crick, professor of politics and Sociology at Birkbeck College, University of London, is giving a variety of lectures during his visit to the University as a University Grants Committee visiting lecture.

Professor Crick, a prolific writer, lively speaker, policial analysis, literary and drama critic has been giving lectures and seminars this week to policiaal science and English students and on Monday he will be speaking to sociology students about George Orwell. During his visit he also gave a lecture for the W-E-A.

Poster Exhibition In Gallery

Now showing at the School of Fine Arts Gallery is an exhibition of 53 posters advertising films from Europe and America produced during the period 1930 to 1959. The collection is presented by the Canterbury Film Society in association with the School of Fine Arts and will continue to 29 June.

The posters are of particular interests to students of linu and graphic design. Because of the range of styles and graphic design the schibition will also interest the general public. Many are in colour and demonstrate the strong pictorial design techniques of various German graphic studies. Among the momus directorial design techniques of promous directorial design techniques of focuments. Rene Clair's Le Sinnes es Forundinnen, Rene Clair's Le Sinnes es Jor and G. W. Pastri's Wast Front 1918.

The gallery is open 9 a.m. - 5 p.m. on week days.

Music Therapy Course

A course, "Introduction to Music Therapy" began at the Fandles School last Wednesday and will continue for the next fire Wednedays at 7.30 pm. Speakers will be Dr. K. Bradford (("Patient Needs") on 27 June; Mr. J. Botting ("The Emotionally Disturbed") on 11 July; Mr. A. Tavlor ("The Physically Handleapped") on 18 July and M. M. Story ("The Intellectually Handlon Mark Strategies ("The Intellectually Handlsource is 56 and may be made with Mr. A. Stewert, Farndles School.

Accommodation

For sale

Three-bedroom home, Barlow Street, off Creyke Road, low maintenance section, spacious living, good storage. Phone: 519-282.

Wanted to rent

Mature business couple require 3 bedroom house with garage in Teachers' College, University area for one year period from June 1979. Phone: 41-102 after 5 p.m. or 44-058 ext, 855 during day.