General meetings of the Staff Association on November 12 and 19 amended four of the proposed seven recommendations dealing with University Government.

The Executive is currently seeking the support of the general membership for the amended set of recommendations by means of a referendum.

The President, Dr. K. Lynesmith, spoke at the meeting on November 19 of the referendum being held so that the views of staff could be represented at Council in strong terms.

The recommendations dealing with University Government were made by a committee established by Council to carry out a limited review. Council is expected to give final consideration to the recommendations at its meeting on December 13.

If approved by Council, the changes will have to go to State Parliament for amending legislation.

The new set of proposals from the Staff Association:

1. (a) That the University Act be suitably amended so as to preclude student representation on Council via Convocation;
   (b) That direct representation on Council is made available to postgraduate students but not at the expense of staff member representation on Council.

2. That the academic staff members of Council be elected by all full time academic staff of the University acting as a single electorate with all full time members of that staff eligible to nominate for the positions.

3. That candidacy for the position of Dean of Faculty be available to all full-time members of academic staff eligible for appointment as Head of Departments within that Faculty.

4. That candidacy for the Headship of a Department be widened to include the Professors, Associate Professors, and Senior Lecturers within the Department.

5. That membership of Departmental Boards be enlarged to include all Professional Officers in the Department and also one member elected by and from among the general staff of the Department.

6. That all full-time members of staff who are members of the Departmental Board be entitled to vote in any election held within a Department to determine its nominee as Head.

7. That on any Selection Committee for an academic appointment the Department concerned be represented by its appointed Head and one other member of the full-time staff of the Department elected by and from the Departmental Board.

SA members, who represent about 85 per cent of the University's academic staff, have been urged by the Secretary, Mr Pran Chopra, to express their views to the Council by returning their responses to the referendum by December 2.

The Management Committee of the PSA will ask members of the University's sub-division at the annual general meeting on December 4 to:

* recognise the impact departmental policies and decisions may have on the conditions of General Staff in the department.

* ask that the Council acknowledge that not only academic staff have a contribution to make to the administration process of departments and, in so doing, approve Recommendation 5 of the Review Committee, and

* note the other recommendations of the Committee and expresses to the Council its support of those recommendations.

INSIDE: Expansion in Computer Science
Expansion in Computer Science

In recognition of the increasing importance of computers in modern society, the University has embarked on a major expansion of its teaching and research activities in computer science.

According to Professor Leslie Keedy, Foundation Professor of Computer Science, major preparations have been set in motion to upgrade both teaching and research activities in computer science within the Department of Mathematics, Statistics and Computer Science.

Substantial emphasis has been placed on upgrading the undergraduate courses to include a full major sequence of computer science topics from first year through to honours.

Starting in 1986, Professor Keedy says, it will be possible for new students to study computer science in each year of their undergraduate degree, starting in first year.

"Students wishing to take computer science in first year can enrol in the subject Computer Science 1 as part of several degree courses, including Bachelor degrees in Mathematics, Science, Arts Economics and Commerce. The new first year subject, which can only be studied by students who also enrol in the subject Mathematics 1, will provide a general overview of the various areas of computer science, stressing the central role of algorithms. Among the topics introduced in this subject are the design of algorithms, the theory of algorithms, basic computer design, system software, commercial data processing, artificial intelligence and social issues in computing. During this course students will also learn to program in the language Pascal."

Because the study of computer science involves a considerable amount of practical programming work, Professor Keedy says, it is a costly subject both in terms of computing resources and staff time. In recognition of this, the University has agreed to purchase a new powerful computer to be installed early in 1986 in the Faculty of Mathematics, which will serve both the teaching needs of Computer Science I and the research needs of mathematics and computer science. The number of full time academic staff specialising in computer science has also been increased to five.

"Because computer science is a very popular course, it will, unfortunately, be necessary to place some limit on the number of students permitted to enrol in the subject. The University still has to make a final decision on this quota, but it is expected to be at least 168. Selection into the quota will be based on academic merit, measured in most cases by H.S.C. results with some emphasis on mathematics marks."

In subsequent years, Professor Keedy says, it will be possible for those students who have taken Computer Science 1 to proceed to second and third year courses in computer science and in some cases to take a fourth year's honours course in the subject. Students who succeed in a full three year computer science course will be eligible for the highest level of recognition in applying for membership of the Australian Computer Society.

"Computer science is the subject normally studied by those who wish to become professional computer programmers and systems analysts," he says. "The opportunities of employment in this field are excellent. In fact, the shortage of computer programmers and systems analysts is so high in Australia that the Government's immigration policy for 1986 allows for 500 programmers and analysts to be recruited form abroad. This is the highest of all the professional categories."

"Thus, students entering the new computer science course can expect to look forward to a bright future, he adds.

Standards Agreement

Many Australian businesses, particularly manufacturers of high-technology products, will benefit from recent agreements between Australia and the UK and Australia and the USA.

The agreements recognise the equivalence of six of the most basic primary standards of measurement: length, time, temperature, voltage, capacitance and resistance.

The Minister for Science, Mr Barry Jones, announced that the CSIRO National Measurement Laboratory had exchanged statements with the corresponding UK and USA laboratories.

"This mutual recognition of equivalence should assist many Australian businesses, particularly manufacturers of high-technology products who are required to satisfy stringent technical specifications set by UK or US partners," Mr Jones said.

Copies of the statements of equivalence are available from: Dr. Paul Hewitt, CSIRO Division of Applied Physics, National Measurement Laboratory, P.O. Box 218, LINDFIELD, NSW, 2070. Tel: (02) 467 6329.
Dr. Rob Evans, Senior Lecturer in Electrical and Computer Engineering, is designing the main control computer for the giant Australia Telescope Project. The contract between the CSIRO and Dr. Evans is worth about $80,000.

In north-west NSW, at Culgoora, near Narrabri, the land has been levelled and the rail tracks laid in preparation for the compact array of the Telescope; an array of six huge antennas will be constructed in line with a seventh antenna at Siding Spring near Coonabarabran.

The Australia Telescope Project, which will cost a total of $32 million, links the antennas with telescopes at Siding Spring and Parkes. When operating together, the telescopes form one of the most powerful radiotelescopes in the world with high resolution and sensitivity capable of probing deep into the southern sky.

In 1981 the CSIRO gained support for the ambitious project from the former Prime Minister, Mr. Malcolm Fraser.

Dr. Evans believes that his research interests - signal processing, control theory and industrial electronics - coupled with the CSIRO's preference for Australian expertise led to him receiving the contract.

"Five of the antennas will be built along a 3km rail track and the sixth will be built on a 200m length of track 3km from the main track," he says. "In all, there will be 37 stations along the two tracks for parking the antennas during operation.

"Using observations taken over a few days with antennas at different stations, it will be possible to obtain a complete synthesised map of particular parts of the sky."

Dr. Evans says that with assistance from a colleague, Dr. R. Betz, a Research Assistant, Mr. M. Beavis, a Master's student, Mr. R. Kennedy, and professional and technical staff in the Department about half the work on the two control computers for the main installation at Culgoora has been finished. He expects to commence installation in July, 1986.

Making sure the radiotelescope operates accurately is a great challenge to the designers of the control computer.

Dr. Evans has designed a 16-bit high performance computer system, using state-of-the-art technology, which receives data passed on from the antennas and controls the azimuth and elevation positions of the dishes.

"Our allowed margin of error for the dishes is one second of arc. This is the equivalent of holding the rims of the dishes to within half a millimetre accuracy in a 25-knot wind."

To reduce backlash, Dr. Evans collaborated with Dr. Dennis Cooper, of the CSIRO's Division of Radio Physics, on selecting a system of opposing electrical drives.

TUNRA negotiated the contract between the CSIRO and Dr. Evans.
Medical Education Needs Revision

Professor Ron Laura and Dr. Greg Doran, in their new book, are concerned to show that the orthodox conception of medical education is badly in need of revision and expansion. Towards a New Philosophy of Medical Education will be published as a volume in the Harvard Series, Frontiers in Education, under the general editorship of Professor Israel Scheffler, of Harvard University. Publication of the Harvard Series will be undertaken by Routledge & Kegan Paul in London and Harvard University Press in Boston.

Our photo shows Professor Laura, Dean of Education, and Dr. Doran, Senior Lecturer in Medicine, celebrating the signing of their contract for the forthcoming publication.

Of the varied reasons the authors draw in support of their claim about medical education, the notion of "community health" figures prominently. The concept of medical education is confused in part, they insist, because there is to date no coherent and comprehensive vision of what it means to promote community health.

The authors charge that the concept of "health" is represented primarily in terms of the absence of disease, coupled with the attribution of a range of positive mental and physical attributes to those whom we regard as healthy. This being so, the work of doctors is naturally channelled into institutional practices for the eradication of disease. Doctors are expected, among myriad other things, to make sick people well; their interest, that is to say, is focussed upon those who are ill, not upon those who are healthy. This focus is perhaps as it should be, but the temptation has been to think that the promotion of community health can be equated with the treatment of disease.

There is much more, the authors argue, to promoting health than curing disease. Unfortunately, the institution of medicine, and the philosophy of medical education associated with it, has been construed largely in terms of the disease model. We are thus led as a society to believe that the answer to our health problems is to be found in the building of larger hospitals, the purchase of more sophisticated and expensive technological devices, along with the accelerated use of drugs, and the promulgation of a medical curriculum which ensures that doctors are capable of functioning in accord with such expectations. This being so, we tend to forget that the promotion of community health is the responsibility of the community as a whole, not a particular sector of it, not even the community of doctors.

The authors urge a form of medical holism supported by a wide array of community involvements. The efforts of the medical establishment to promote health are bound to be futile, Laura and Doran argue, so long as we continue, for example, to pollute the air and violate our lakes and streams with toxic wastes. Nor will the health of the community be advanced if the nature of our social institutions are dehumanising, alienating and stressful.

Little does it avail the cause of community health to capitulate to corporate interests which promote drugs as "technological fixes", and increase the shelf life and cost of food products by processing them to such distortion that they are robbed of what made them worth eating in the first place.

Nor does it serve the ultimate aim of community health to pursue costly research programmes such as IVF which are designed to overcome sterility when we do little or nothing to eradicate the causes of sterility due to excessive drinking, smoking, malnourishment, lack of exercise and the like. We know far too little of the way in which genetic abnormality and degenerative diseases characteristic of our times are the result of life styles which betray systemic imbalance and abuse.
The biological features of human disease, the authors argue, are not logically independent of the cultural manifestations of human nature. In this sense, medicine is neither a science nor an art; the craft of medicine is a social science and its social expression is part of a philosophy of life.

In the second half of the book, it is argued that the task of medical education is far more comprehensive than the articulation of a curriculum for the education of doctors, though the authors provide valuable suggestions as to the terms in which such a curriculum may be articulated. They also urge that inasmuch as the institution of medicine is in itself conservative, no medical school curriculum can represent the radical departure required without disenfranchising itself from the establishment which legitimates its programmes. The authors thus place a special emphasis on the various roles which community education can play generally in the promotion of health.

It is argued that holism in medicine is the aim, but that medical holism needs to be underpinned by holism in epistemology; by a theory of medical science that is, capable of recognising the extent to which systemic factors such as mental attitude, stress, diet, exercise and the character of the environment feature in the advancement of community health. Medical education in Laura and Doran's sense is not just another social service to be provided, it is social philosophy to be practised.

TV Debates Series on ABC

The first series of nationally televised debates from Australian universities will go to air on the ABC early next year.

It is expected that there will be six to eight debates in the first series. Provided they are successful, Television Debates from Australian Universities will be continued, hopefully until the Bi-Centennial celebrations in 1988.

The proposal was devised at a National Conference of University Information Officers at Sydney University last year and subsequently supported by the Australian Vice-Chancellors' Committee.

A working Party appointed by the AVCC from the ranks of Information Officers is currently helping the ABC to find an academic to chair the 1984 series. The ABC has asked for an audition video tape to be supplied for each nominee.

This University has been asked to nominate potential Chairpersons. Our nominees will also be considered for membership of the various panels of commentators. Suggestions are welcomed by the Publicity Office (Ext 328).

Currently in Bavaria

Arts graduate Anne Cractun, who recently completed her Diploma of Arts studies, is in Germany participating in an intensive German course under a scholarship awarded by the Goethe Institute. She left Australia on November 28 and expects to return in February.

The Scholarship covers the cost of tuition at the Goethe Institute on the Chiemsee in Bavaria and accommodation and provides $400 pocket money for the two months.

Anne will take up a teaching position on her return, and hopes she will be totally fluent in German when classes begin.
Vale Ghulam Kibria

Dr. Ghulam Kibria, a popular and talented postgraduate student in the Department of Economics from 1978 to 1983, tragically drowned in Newcastle on November 10. He went for a swim at Susan Gilmore Beach during a week-end visit from Canberra.

The University awarded Dr. Kibria a Ph.D. degree last May. Having a Newcastle University scholarship and supporting himself by tutoring in the Department of Economics and working at a restaurant, his topic was An Analysis of Manufacturing Productivity Growth - a Microeconomic Study of the Jute Industry in Bangladesh, 1954-55 to 1979-80.

Ghulam came from a rural village in Bangladesh. There were 10 children in his family. He was an outstanding student, winning scholarships which enabled him to graduate from Rajshahi University with a BA with honours in Economics and an MA in Economics.

Between 1967 and 1973 he was a member of Rajshahi University's staff, firstly as a Lecturer and later as an Assistant Professor. He then decided to further his studies and went to Canada to embark on an MA degree at Lakehead University in Ontario. After Lakehead awarded him the degree, he enrolled at this University.

In May, 1982, Ms. Francesca Gabbi and Ghulam were married in Newcastle. Francesca was studying for a B.Com. degree.

After submitting his Ph.D. thesis, Dr. Kibria worked for a few months for Professor CA Tisdell, who had supervised his studies, and then he took up an appointment with the Bureau of Industry Economics in Canberra as a Senior Research Officer.

While he was in Canberra, he also tutored in the Department of Economics at the A.N.U. Shortly before he drowned, he helped with an important study on tariffs and Australian trade with developing countries.

It has been suggested that an appropriate way to pay tribute to the late Dr. Ghulam Kibria would be to collect together his published papers and have them bound into a volume. Copies would be donated to his widow, the Bureau of Industry Economics Library, the Auchmuty Library and the Library of Rajshahi University, the institutions with which he had the closest contact. If funds permit, additional copies would be provided to other institutions which had an association with him.

It is hoped that the volume will contain a suitable foreword about the life of Dr. Kibria and acknowledgement will be made in the volume of the persons who have donated to the cost of the tribute.

If you would like to contribute to this remembrance for Dr. Kibria, you please contact Mrs. Joan Allridge, of the Department of Economics (Ext. 746).

Dr. Kibria published widely in international scholarly journals.

Professor Tisdell spoke to the NEWS about Ghulam's numerous personal attributes.

Despite his academic success, Professor Tisdell said, it was characteristic of Ghulam not to forget his family, colleagues and friends.

"Knowing the value of education, he financially helped all of his brothers and sisters to obtain a good education. When he obtained his first job in Australia, instead of deciding first to build a home for himself, he sent money to Bangladesh to ensure that his parents had an adequate home.

"He particularly attributed much of his success to his mother, whom he felt gave him great encouragement as far as obtaining a good education was concerned.

"He was sensitive to the aspirations of his country and never rejected his past. He helped his fellow students at this University and kept in close touch with staff he had known in the Economics Department.

"He contributed much both academically and personally in his short lifetime. His future held much promise. He will be sadly missed by us all," Professor Tisdell said.

The next meeting of the RSI Support Group will be held in the Auchmuty Room in the Union on Tuesday, December 3 at 12:30 P.M.
Nobbys in Ideal Weather

The weather in Newcastle for the Geology Public Field Day was, fortunately, sunny and warm - ideal for viewing the rock exposures in Nobbys.

The Geology Public Field Day was sponsored by the Department of Geology and the Hunter Valley Branch of the Geological Society of Australia.

About 35 people turned up to take advantage of what has become an annual event, in which aspects of the geology of the area are explained and questions answered.

From the Geology Department of the University were Dr. Philip Scoccombe and Dr. Doug Mason; Mr. Russell Rigby, from Newcastle Wallsend Coal Company, was also present.

Of particular interest to the participants was the antiquity of the rock strata (over 200 million years old) and the recognition of rock types indicating particular prevailing conditions during their formation. Coal layers indicated the presence of extensive swamplike areas and layers of volcanic tuff indicated the presence of volcanoes like Mt. St. Helens. Some participants found fossil remains of leaves and twigs.

The participants demonstrated their keen interest throughout the two-hour session by asking a continuous stream of relevant questions.

The Field Day, which has been a success for the past three years, will be scheduled for a similar date next year.

From Krakow

The Department of Geology was visited by two staff members and three post-graduate students from the University of Mining and Metallurgy, Krakow, Poland from November 4 to 9.

Specialists in coal geology and ore deposit geology, they came to discuss research being undertaken in the Department.

Photograph shows (left) Dr. Wojciech Mayer, the three post-graduate students and (right) Dr. Wieslaw Bogacz on a field excursion in the Newcastle area.

NERDDC Backs Research

Grants valued at more than $280,000 have been awarded by the National Energy Research Development and Demonstration Council to members of the University's staff.

Staff from the Department of Chemical Engineering and the Institute of Coal Research have received the following grants:

* The modelling of ignition and combustion in swirl burners for pulverised coal, Mr. E. R. Lindner (Electricity Trust of South Australia), Dr. J. S. Truelove, Assoc. Professor T. F. Wall, $164,000.

* The mechanism of ash deposit formation, Dr. L. J. Wibberley, Assoc. Professor T. F. Wall, $68,832.

* Pulverised coal burnout - The scaling of test furnace measurements, Assoc. Professor T. F. Wall, $18,850.

These grants bring the total backing for the University's coal combustion group to over $1,000,000 in the past 10 years.

Assoc. Professor C.F.K. Diesel, of the Department of Geology, has been awarded a grant of $30,044 by the NERDDC for a research project in connection with Coal Characterisation by Vitrinite and Inertinite Fluorescence.
Leave Arrangements

The following arrangements will apply for general staff for the forthcoming Christmas/New Year period:

Wednesday, December 25, Public Holiday
Thursday, December 26, Public Holiday
Wednesday, January 1, Public Holiday

The following working days are granted as concessional holidays to members of the general staff not required for duty:

Friday, December 27
Monday, December 30
Tuesday, December 31

The concessional days are in lieu of the Newcastle Show Day, the concessional half-days before Easter and Christmas and the concession of Christmas shopping time.

Advertisements

FOR SALE

Bed, Cocktail Unit, Stereo System, Digital Clocks and many household items. Also Mazda 626 and Kingswood. Leaving Australia, Ph. Ext. 588 or 52 4957.

1981 Toyota Corona Liftback Sedan. A 1 mechanically, very clean inside, 77,000 kms. Air-conditioned, anodised mag. wheels needs a little rustwork. Available end January. $5,500 o.n.o. contact 68 5718 or 26 1228 if no answer.


2-300 Plastic Flower Pots, 4", 6", 8", 10" any bid for any number accepted. Phone 68 5718 or 26 1228.

Indian snacks, samosa, mathri, dal-sev etc., and curries available on order. From R & K Mathur Ph. 559156.

Orders taken up to 18th December, 1985 for Ions Christmas Cakes. Cost: $5.50 ea.

National Colour T.V., 48cm, with stand, Price $210.

Tempest Sterio 2 in 1 with detachable speakers, Radio with 3 bands, 505. Ring Shambhu Electrical and Computer Engineering Ext. 796

TYPING DONE

Mary Priestly, of 38 Cambronne Parade, Elermore Vale, phone 55 9995, is available for the typing of theses, manuscripts etc.

CHILD CARE

Vacation care places are available for December and February at the NCAE Child Care Centre. If you require a place for your child please ring the Director (67 6488) to make arrangements.

WANTED

Antique/old needlework books and tools/instruments for bona fide collector (not a dealer). Phone Cathy Doran 43 7733 or 26 1228.

WANTED TO RENT

Two bedroom unit/house for newly appointed lecturer from late January/early February, for part or all of 1986. Phone (02) 344 5850.

Keyboard Staff Workshops

The keyboard staff workshops have aroused wide interest and demand for places has been high.

Some 70 staff (including typists, programmers, clerks, library staff and word processor operators) will have attended the workshops by the end of 1985.

It is hoped to run a further series in early 1986 to accommodate some further 50 staff.

If you have not yet been offered a place, we'll call you as soon as possible in 1986.

The Staff Office

Visitor in Chemistry

During the week November 11 to 15, the Department of Chemistry was visited by Professor Peter A. S. Smith, from the University of Michigan at Ann Arbor.

Professor Smith's research interests concern organic nitrogen compounds, especially the thermal decompositions of organic azides. During his visit he joined with Assoc. Professor L. K. Dyall to start a collaborative research programme on the rates of these organic azide decompositions, and delivered a seminar entitled Reactivity and Structure: Examples Among the Organic Azides.

COME TO A.W.E.U.N.'S END-OF-YEAR GET-TOGETHER 17 to be held in the Helmore Room of the Union Building 12.30 to 1.30 p.m., Wednesday, December 11.

Bring your lunch and friends. Drinks provided. Donation 50c.

ALL INTERESTED WELCOME!