

UNIVERSITY

NEWS BEAT

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Microcomputer conference

Life after word processing?

An upcoming computer conference on Microcomputers in the Humanities and Social Sciences will answer the question "Is there life beyond word processing?" according to chief organizer Marc Egnal, Professor of History in Atkinson and Arts.

After a year of organizing, this two day conference beginning April 15 is targeted at two different audiences. Fees have deliberately been kept low to encourage the participation of the York community including students. But Egnal believes that faculty members would find the program particularly useful.

Teachers in the primary and secondary systems will find the topics relevant to their teaching roles.

The conference grew out of a "... sense that the area where people are least informed about the use of a computer is in the Humanities and Social Sciences," said Egnal. "What this conference is designed to do is to broaden the horizons of the participants as to the potential uses of the microcomputer. Basically we are going to find out what the darn thing is good for including word processing but not to the exclusion of the other uses for the machine."

The opening plenary will be addressed by Vice-President W.C. Found, who helped get the ball rolling. Egnal spoke of Found's key role in getting university funding. "In my mind, they've (the university) been very generous," he said.

"Scientists don't have to ask what good the box on the table is. They have obvious uses for a micro. It's the other uses we are concerned with and our program reflects these areas," Egnal

stated.

After the opening remarks, Jim McBride of the Computer Science department will be reviewing three basic software packages: Word processing; Using spreadsheets to do "What/If" analysis; and an examination of the uses of data bases.

The afternoon session includes speakers Charles Matthews from the Geography department who will discuss some of his own work with micros in the field. Following this Ron Owston from the faculty of Education will describe some of the off-the-shelf packages available. These include simulations useful to anthropologists and geographers. The programs can demonstrate how parts of the environment interact, and the applications of large computer simulations where students can play with the variable elements.

A number of other speakers will also be featured. Jan Marmorek of the Office of Educational Development is described by Egnal as his "right-hand person" and has been responsible for much of the development work including the publicity for the event. "It was a lot of slogging for her and she deserves recognition for that."

"We were also fortunate to have David Scadding volunteer his artistic talents to the design of the posters announcing the event," said Egnal. "We are hoping for a turn-out of about 100 people, but whatever the turn-out, the participants will see that we have focussed on quality—not quantity."

For further information, contact Jan Marmorek in the Educational Development Office, 140 Central Square.

Career Conference

Surfing on the third wave

The hardest part of finding a job is knowing where to begin. In response to this reality, a pan university group has organized a conference on careers in the future scheduled for May 11, 1985 entitled "Surfing on the third wave."

"Most students at university are very concerned about where they are going after university, so the objective of the conference is to explore the current climate in career expectation," says Susan Scott, responsible for the New Initiatives program on campus. "We hope to have 150 people at the conference but the workshops will be limited to 25 participants apiece."

The keynote speaker is Lydia Dotto, Co-director of Canadian Science News. Dotto will be addressing the topic "Managing the Mysteries... Work, The Future and You" at 9:15 am in Osgoode Hall.

The program is divided between theory and practice sessions with a number of panel discussions in the morning and organized workshops in the afternoon.

The program includes three panel discussions. The first, on the topic of future jobs, will address the question of where future jobs will be and how one can try to prepare.

Professor V. Murray of Administrative Studies/Sociology will moderate a discussion of "How individuals and organizations deal with rapid technological and social change."

The current environment and its effect on lifestyles and the quality of life will be examined in the "Changing Workstyles" panel.

Registration for the conference is \$35.00 (\$15.00 for students) which includes lunch. Further information may be obtained from the Admissions/Liaison office, B101 in the West office building or by calling 667-3563.

York professor aids mid-course correction for Venus/Halley mission

On February 18, 1985, York Professor Wayne H. Cannon used a little of his spare time to help a Russian interplanetary probe find its way to the planet Venus.

The exercise in international space cooperation centred on a pair of planetary explorers Vega I and Vega II now well on their way to a June 10th rendezvous with their initial target Venus.

Each Vega will release a probe which will enter the Venusian atmosphere. The probes will divide in two parts, one being an inflated balloon and instrument package which will float in the atmosphere and be used to determine wind conditions on the planet. The other half is a surface lander whose descent through the atmosphere will be parachute controlled.

A hostile environment awaits the pair's arrival on the cloud-shrouded planet. Venus' surface conditions will be analysed by the landers providing they survive their difficult descent. At 55 km above the unfriendly surface the probes will be released and by the time they hit their target they will be subjected to a surface pressure about 100 times and a temperature at least 25 times that of the Earth.

The mother craft will then continue on to rendezvous with Halley's comet to give the world its first good look at what may very well be a giant dirty snowball.

France and Hungary are putting together the instrument package but participation includes that of Austria, Bulgaria, Czechoslovakia, the Federal Republic of Germany and the German Democratic Republic, Poland and the United States. U.S. scientists are participating on an individual basis.

Cannon was asked to assist in mission navigation owing to his experience with Very Long Baseline Interferometry. As a member of York's departments of Earth and Atmospheric Science and Physics Cannon formed a group of scientists in the 1970's to develop applications of VLBI to geophysics which include the measurement of the Earth's rotation rate, polar motion and continental drift.

The ability of VLBI to measure small distances and changes in velocity remotely is unmatched by any measurement technique. VLBI techniques will allow Cannon to measure wind speed on the planet Venus by studying changes in the signal from the balloon probe as it drifts through the atmosphere.

"We're assisting in the navigation basically. Navigation requirements for a deep space mission are very taxing. You have to send a probe to the other side of the solar system, land on a planet 300 million miles away, with all the navigation done from Earth," said Cannon.

"This is the first time Canadians have been actively involved in the navigation of a deep space probe to any effect. It's a significant contribution (to the project). For grad students it's giving them the opportunity to participate in a research area new in Canada."

The Canadian VLBI research effort's main focus is the study of geophysics and planetary physics. "Its use in deep space operation is for the future. It's a foot in the door. Other countries like Japan and India plan deep space probes of their own and they may require our knowledge. In my opinion, there will be more



Professor Wayne H. Cannon

opportunity for Canadians to be involved in deep space projects in the future," said Cannon.

After the mother ships have released their probes Vega I and II will carry on to a rendezvous with Halley's comet on March 6 and 9, 1986. This flyby mission will study the environment of the deep space in the vicinity of Halley's. Numerous measurements will be taken at a distance of 10,000 km from the sunward side. Vega will be travelling at speeds of 78 km per second. At this speed impact with any particle of debris from the comet would likely cause irreparable damage to the craft. The crucial phase of the encounter will give scientists only five to ten minutes in which to train the onboard TV cameras on the nucleus of the comet.

This aiming procedure must be done by onboard computers

which can recognize the cometary nucleus and command the pointing platform to track it, as the spacecraft speeds past the central part of the optically thick coma which is the stream of out-flowing water vapour and gases released by the heating effects of the sun.

If it is determined that the comet's immediate environment is clean another probe, GIOTTO, a Japanese European mission, will then be able to come perhaps within a few hundred miles.

Cannon and his collaborators from the University of Toronto, the Earth Physics Branch of EMR, the Herzberg Institute of Astrophysics and at York are breaking ground with the application of this new measuring technique and it bodes well for Canada's participation in international space science.

Department of English The Lucille Herbert Memorial Scholarship...

...exists to assist any good undergraduate student in English (Faculty of Arts) who proposes to travel to Europe, especially in France, and who has completed at least four courses in English. Travel might be specifically for study, perhaps at a summer school, but in fact there are no restrictions on the reasons for travel.

One award per year: Value, \$750

Procedure for Application: Write to: Professor D.R. Ewen, Chairman, Department of English (Arts), York University, 4700 Keele Street, Downsview, Ontario M3J 1P3

Applicants should provide the following information: Present level of study; English courses taken and grades obtained; present academic plans; object of travel. (No letters from referees). Applicants may be expected to attend an informal interview.

Closing date for applications: April 19, 1985

(The Department Committee reserves the right not to make an award in a given year)