

# UNIVERSITY NEWS

VOL. 7 NO. 12

DALHOUSIE  
UNIVERSITY

MAR. 3, 1977

## IN THIS ISSUE:



"I don't know why Mother doesn't like these cute little animals..."

(Alan Floyd Photo)

Intro '77 in pictures.... 7

Media accountability .....	2	Today's anesthetist .....	10
Business Office .....	2	Infertility clinic .....	10
\$5,000 for Riley .....	3	The Jones recipe .....	11
Science Fiction weekend .....	6	Law's Moot court .....	11
Awards Office .....	8,9	V'ball champions .....	15
		Entertainment .....	16

Atlantic Canada's universities are in a national league. Could lack of adequate funding bring about lower quality education? Yes, says the AAU:

# IT'S A REAL THREAT

### If universities:

Are unable to hire or keep good teachers, the quality of education is bound to deteriorate;

Cannot afford to assemble or hold good, fund-luring research teams, the quality of education is bound to deteriorate;

Cannot afford to buy teaching equipment, or chemicals, or books, the quality of education is bound to deteriorate;

Cannot afford to pay adequate salaries to faculty and support staff, there may be work disruptions, and the quality of education is bound to deteriorate.

They were some of the points put forward by the Association of Atlantic Universities in their recent direct appeal to the Council of Maritime Premiers, when they said that a minimum 12.5 per cent increase in their grant towards operating expenses was required for 1977-78.

Replying, to a Feb. 14 editorial of The Chronicle-Herald / Mail-Star, AAU Executive Director Jeffrey Holmes set forth the foregoing points and went on to answer other questions the editorial raised.

He reiterated what the Atlantic university presidents themselves have expressed privately and publicly in years past, rejecting the Herald's rejection of the argument that the level of education might "slip back" without adequate grant increases.

"The threat (of a deterioration in the quality of instruction), unfortunately, is a real one," said Holmes.

Full text of this letter: Page 5.



## The Image of Man in Modern Thought

The Killam Lecture  
Series — Page 2

No, Chemistry's Dr. Stuart Grossert hasn't stuck his head into the flask of his rotary evaporator to see if it's working.

A / V Services cameraman Gary Castle couldn't resist shooting the trick reflection when he visited Dr. Grossert last week.

Report on Dr. Grossert and Sulfur, the abundant and versatile element -- Page 14.



## The 1977 Killam Memorial Lectures:

# The Image of Man in Modern Thought

*Men and women go out of their way to develop knowledge in particular areas, often at the expense of other areas. The resulting knowledge, or speculative hypotheses, often have an effect on the definition, or meaning of humanity and, especially, of what it is to be a human being.*

*This changing definition affects not only the individual in his most private existence, but also affects the society, often by way of the University, the central purveyor of ideas in which he lives now and in which his children will live in the future.*

### MARCH 11: ALAN WALKER

Alan Walker, a Harvard professor who combines his skills as paleontologist, anthropologist and anatomist in his studies of early man, will deliver a public lecture at Dalhousie on March 11.

His talk, to be given at 8 pm in Theatre A of the Sir Charles Tupper Medical Building, concludes the university's 1977 Killam Memorial Lecture series. He and the

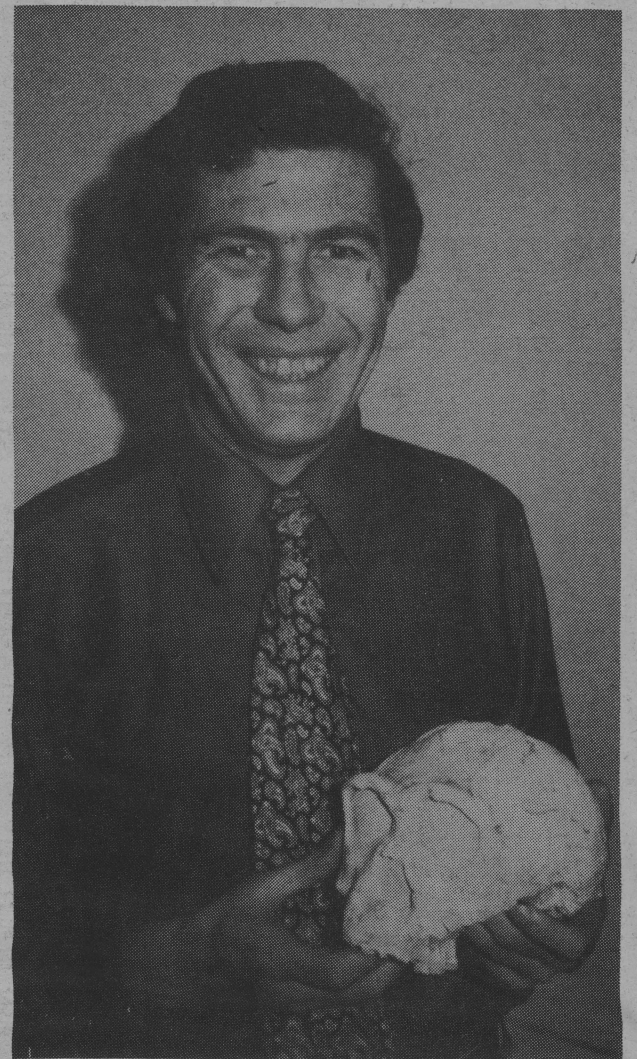
three earlier speakers in the series—David Suzuki, Richard Hoggart, Henri Peyre—represent a group of leading thinkers who attempt to show how their particular field of endeavour defines or redefines the meaning of being a person within the theme of the series: **The Image of Man in Modern Thought**. Dr. Walker will discuss current inquiries into the origin of species and their implications for the image of man.

He has been centrally involved in some of the most exciting discoveries about the pre-history of man in Africa. He has done work in the Lake Rudolf Basin and has been associated with the famous work of the Leakeys.

Professor Walker has been conducting research on both primate and human evolution and the locomotion of living primates. He has a special interest in the behaviour of early humans. To this end he is attempting to reconstruct a picture of early man—what he was, how he lived, worked and acted.

Dr. Walker has been lecturer at Makerere, senior lecturer of human anatomy at Nairobi, and is now associate professor of anatomy and anthropology at Harvard.

The lecture is free. Admission tickets are available at the Dalhousie Arts Centre Box Office from noon on Thursday, March 10.



Alan Walker

## Four in Business Office changes

Several appointment changes have been made in the Business Office at Dalhousie.

Otto M. Nofle was appointed budget officer effective Dec. 1, 1976, Parker D. Staples became acting chief accountant and business manager of the business office, and Earl J. Wambolt retained his position as general accountant and assumed new duties as the assistant to the controller, Glendon R. George.

Mr. Nofle joined Dalhousie as chief accountant and business manager in January, 1970. A native of Halifax, he is a graduate of the Maritime Business College and of Dalhousie's Master of Business Administration program. He has been a Registered Industrial Accountant for 16 years.

As budget officer, he will be responsible for receiving and co-ordinating of all budgets and for reviewing of budgets throughout the fiscal year.

Mr. Staples, also a Registered Industrial Accountant, was with the Bank of Nova Scotia before he joined Royal Trust in 1966. He held a variety of administrative positions with that firm until he joined Dalhousie in 1975, as an accountant in the business office. In 1976 he used his systems analysis experience to help set up Accounting Systems Development.

As acting chief accountant and business manager, Mr. Staples will be in charge of the business office, payroll operations, the stationery department, and accounting operations. He will also be involved with revisions in the university's accounting data processing methods, and the implementation of changes in procedure necessary in the Business Office.

Mr. Wambolt was in the employ of Canadian General Electric Co. Ltd. for seven years before he became research grants officer at Dalhousie in 1973. In 1974 he was made general accountant. He is responsible for preparing financial and other information for Statistics Canada, CAUT and other organizations and agencies.

In his new capacity as assistant to the controller, Mr. Wambolt will look after residences, food services, insurance and real estate concerns.

The growth of Dalhousie and increased demands from both internal and external bodies for current, reliable information was behind the creation of Accounting Systems Development. John R. MacGillivray was appointed director of the new department in January, 1976. He is now analysing Dalhousie's needs and will design, test, implement and monitor a financial system that will make use of existing computer resources on campus and recent advances in accounting technology.

Mr. MacGillivray's undergraduate degrees (BA, BED, B Comm.) were taken at Saint Mary's and Dalhousie. His professional RIA and AACI certifications were completed at Dalhousie and his MBA is from the University of Toronto. His MTM courses were taken at Leatham, Simpson of Montreal.

In 1966, Mr. MacGillivray was an office manager with Royal Trust; he stayed with the firm for 10 years. When he left in 1976 he was director of Royal Trust accounting systems. He is a member of the Society of Industrial Accountants, MTM Association, Boy Scouts Association and various alumni associations, and enjoys, as a hobby, computer programming.

## Cambridge lives within its means; surplus for Oxford

Oxford University has reported a surplus of nearly \$850,000 for 1975-76. The surplus, equal to 1½ per cent of turnover, which totalled nearly \$51 million (up 28 per cent from the previous year, largely because of inflation).

University Grants Committee support increased by almost \$6.8 million to \$32.6 million.

Cambridge University, meanwhile, managed to keep its spending within its income of \$47.6 million in 1975-76. Of this income, \$31.9 million came from the UGC.

## More scientists turn to writing

More and more scientists and engineers are putting pen to paper — to write about their work. And the trend is likely to increase until at least the turn of the decade, according to a National Science Foundation report.

**Statistical Indicators of Scientific and Technical Communication, 1960-1980** is the first attempt to develop a system of indicators of scientific and technical information which can be used to help planners and policy-makers see the health and status of scientific communications.

Scholarly articles increased from 106,000 in 1960 to 151,000 in 1974, up 40 per cent, and may reach 169,000 by 1980. Environmental topics showed the greatest single increase, with computer sciences next.

## The accountability of the news media

Well-known experts in the print and non-print news media at the local and national level will be fair game next week when they take on the general public at a Media Accountability session at Dalhousie University. The event begins at 7 pm, March 9, in the McInnes Room of the Student Union Building.

The event is jointly sponsored by Dalhousie's School of Business Administration and the CBC. The format will consist of a series of brief statements by panel members followed by discussion from the floor.

Members of the audience will probably come on strong as devil's advocates when they ask the panel to respond to such questions as:

Are there two sides to a story and if so should both be presented? How does the media respond to accusations that it misrepresents the facts? What is TV's role vis-a-vis the other media? Should the media be policed.

Participating in the session will be Clark Davey, managing editor of The Toronto Globe and Mail; Glen Sarty, executive producer of the 5th Estate; Charles Lynch, publisher of Southam News Services; Darce Fardy, director of television, CBC Halifax; Bruce Little, media critic on CBC Information Morning and Bill Smith, Editor, Chronicle Herald. Moderator will be Robert Murrant, an authority on the legal aspects of censorship.

## UNIVERSITY NEWS

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# \$5,000 award for ocean pioneer Gordon Riley

Gordon A. Riley, an oceanographer who pioneered the concept of the ocean as a biological system that interacts with physics and chemistry, is the 1976 winner of the American Association for the Advancement of Science (AAAS)-Rosenstiel Award in Oceanographic Science.

He received the \$5,000 prize at the AAAS annual meeting in Denver last week.

Dr. Riley was selected to receive the prize in part because "he was the first to consider biological oceanography in terms of differential equations and to cast conceptual ideas in rigorous form, thus advancing theories and understanding."

His published research, representing nearly 40 years of work in biological oceanography, covers such areas as the

*The annual AAAS-Rosenstiel Award in Oceanographic Science is funded by the Rosenstiel Foundation through the Rosenstiel School of Marine and Atmospheric Science of the University of Miami. Its purpose is to honor outstanding achievement and distinction in oceanographic science, including relevant aspects of ocean engineering where significant new principles are concerned, and aspects of atmospheric science with important implications for understanding of oceanic processes. The award recognizes achievement in three broad areas on a rotating basis: geology, physics, and chemistry of the seabed, biology and living resources; and physics and chemistry of the water column and the atmosphere.*

*The American Association for the Advancement of Science, formed in 1848, is the largest general scientific organization in the United States. It has 114,000 individual members, who are scientists, engineers, and others interested in science, and about 300 affiliated scientific and engineering societies and academies of science.*

composition, productivity, and environmental control of marine ecosystems in general and plankton populations in particular. His recent research in non-living dissolved and particulate organic matter in the sea has stimulated further interest in and study of that area of oceanography.

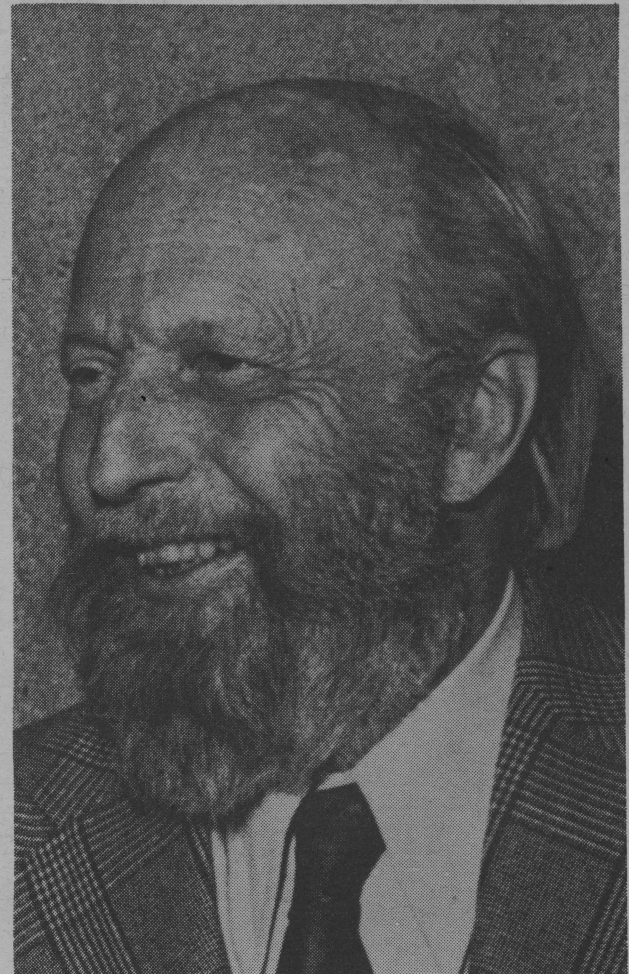
A Canadian citizen since 1971, Dr. Riley was born in Webb City, Missouri. He received his BS degree from Drury College, his MS in zoology from Washington University, and his Ph D in zoology from Yale University, where he was a Sterling Fellow from 1937 to 1938 and an instructor at the university's Bingham Oceanographic Laboratory from 1938 to 1942.

After working as a marine physiologist at the Woods Hole Oceanographic Institution between 1942 and 1948, he returned to Yale. During a 17-year association with the university, he served as research associate and later associate director at the Bingham Laboratory and as professor of oceanography from 1959 to 1965.

In 1965 he assumed the directorship of the Institute of Oceanography at Dalhousie, a position which he held, together with a professorship in oceanography, until 1973. He continued to teach until 1976 and is now professor emeritus of oceanography at Dalhousie.

Among his extra-curricular activities, Dr. Riley has served on the National Science Foundation Advisory Panel on Environmental Biology and the Canadian Committee on Oceanography. He is currently a consultant to the Brookhaven National Laboratory's oceanographic program.

Of his current professional life, Dr. Riley says that although he is nominally retired and no longer actively engaged in laboratory research, he is continuing to supervise the thesis research of several graduate students and has undertaken editorship of one of the volumes of the Elsevier Press series on "Ecosystems of the World."



Gordon A. Riley

## Acquisitions head, a friend to all, retires after 20 years at Dalhousie



Pat Hamilton

Friend to student, faculty and colleague, Pat Hamilton, head of acquisitions in the Killam Library has retired after 20 years at Dalhousie. She's now off to take a well deserved rest.

She joined the university library system in 1956. Most of her years were spent as head of circulation. Pat managed that shop for the years when the entire library operation was housed in what is now the Macdonald Science Library, at a time when the university experienced its most rapid years of expansion in population and facilities.

Mrs. Hamilton says she just barely managed to survive the move to the Killam Library, which was accompanied by a transition to a new IBM card system...a system she says she went into "ice-cold."

A year after Killam was opened she moved to the job of head of acquisitions.

She did a first-rate job, said Dorothy Cooke, University Librarian. "She trained many of our people, she helped many students. She'll be missed."

## Guess who's third → from the left

Henry Hicks raising his dulcet tones (?) to Hallelujah?

It could be our Senatorial President, but it isn't. It's Russian concert pianist Mstislav Rostropovich who with other famous names in music took part in the "Concert of the Century" held last year at Carnegie Hall, a concert that raised over \$1 million for Carnegie's preservation. Left to right: Yehudi Menuhin, Dietrich Fischer-Dieskau, Rostropovich, Vladimir Horowitz, Leonard Bernstein and Isaac Stern.



The sextet joined the chorus at the end of the concert to add their voices to Handel's Hallelujah Chorus. (The photograph, by World Wide Photos, appeared in the December 1976 issue of Gramophone, a British monthly record magazine).

## Higher fees expected to keep 51,000 U.K. post-graduates away

British universities expect to lose up to 51,000, or 10 per cent, or their postgraduates in 1977-78 because of the proposed increase in tuition fees, according to a report in The Times Higher Education Supplement.

In response to a survey by the (U.K.) University Grants Committee on the likely effect of fee increases, the universities said the group they were most concerned about were postgraduates. They face the stiffest increases, from about \$310 a year to \$1,275.

The universities estimated reductions in numbers of anything up to 30 per cent among British postgraduates.

In addition to asking for enrolment estimates, the UGC told universities it was assuming a fee increase for part-time postgraduates of 25 per cent.



Robert Sampson (left), president, and Peter Mancini, vice-president.

(Dave Grandy, Dal Photo)

## Sydney pair top Student Union poll

Two undergraduate students from Sydney will lead the Student Union through 1977-78.

They are Robert Sampson, second-year commerce student, and Peter Mancini, third-year arts student.

Sampson was elected President of the Student Union in last month's elections, and Mancini vice-president.



Russian Cultural Day is coming on March 26, at the SUB.

4 pm - a lecture by Professor Yuri Glasov on **Pasternak and Solzhenitsyn** (Nobel-prize winners in literature)

8 pm - an evening of Russian poetry with translation. Free and open to the public. For further information call Dept. of Russian, 7017.

## Fraser exhibition

An exhibition of Carol Fraser's works open tonight (March 3) at 8 pm in the Dalhousie Art Gallery.

This first large exhibition of Fraser's work includes 70 paintings, drawings and coloured ink washes, most of which have not been shown before in Canada. Organized by the gallery, the exhibition will travel to seven major art institutions across Canada during the next year.

## Student aid, employment report due this summer

*An important document, says retiring Student president Gord Neal*

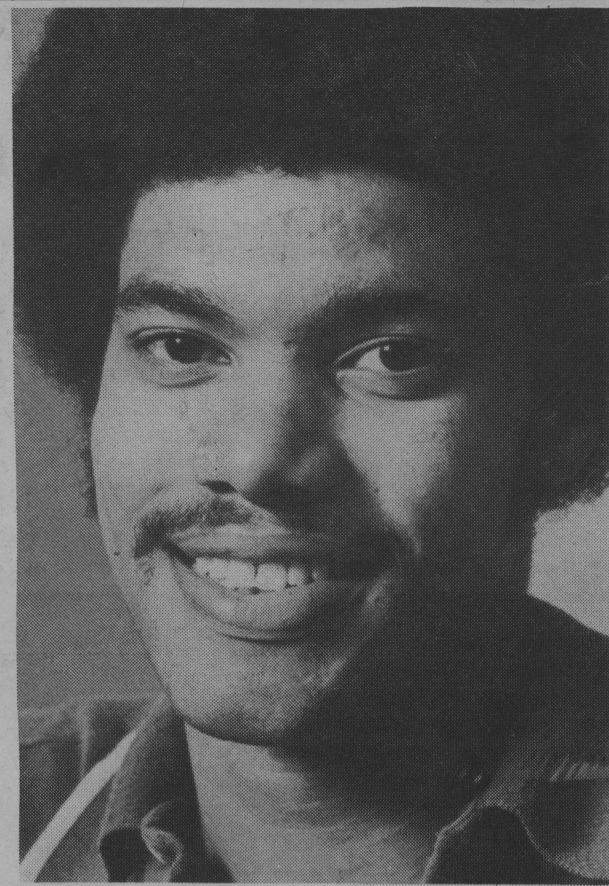
Although Gord Neal won't be president of the Dalhousie Student Union when an important document is released this summer, he considers it one of the most worthwhile efforts initiated during his term of office.

The report will be the culmination of a student council research project designed to examine student aid and employment—two issues that retiring president Neal says are factors that could effect enrolment the year after next. "More stringent student aid regulations and the already tight job market are bound to take their toll."

Asked about the problems associated with the office of president, Neal said that all students thought the chief officer should be available at all times. But this expectation was incidental to several overriding issues which were not new to him, but are ones that each president had to live with. One was that the work year was really only nine months instead of an entire year because members of council drifted off during the summer months. The second problem was that each year brought an entirely new elected council into office. Under these circumstances it's almost impossible to get a program through in the short space of time or be assured that it will be carried over by the next administration. "It's a continuity problem."

One of Gord's disappointments was council's refusal to appoint an external affairs officer. Such a person could have been used extensively in conducting student affairs outside the university (i.e. relations with the provincial department of education).

As for co-operation with the university administration it was tops. Neal's year in office gave him insight into how a



university functions. He learned that the administration was receptive to the needs of the students. Dr. Henry D. Hicks practised an open-door policy throughout the year. In fact, the president was instrumental in assuring that funds would be available for the student aid-employment research project. The administration was also prepared to compromise on the matter of the "clean-up campaign."

### Neal: A problem of continuity

Students were now deeply concerned about a possible increase in tuition fees. Gord hopes that if this does happen that students will learn about it before they leave for the summer.

"We appreciated the university's position in this regard but as president I have a responsibility to the student body to make their feelings known on the matter."

—Roselle Green

## Silver Jubilee for Dalhousie's Atlantic Summer School

It's a 25th anniversary this year for Dalhousie University's Atlantic Summer School which puts on an intensive four-week program for high potential middle and senior-executives.

If you are in this category, sign in and be a member of this historic class.

The school is organized by the university's Advanced Management Centre. As part of the centre's continuing commitment to managerial excellence and its continuous updating of programs, this year's course will explore a new field—international business: problems, pitfalls, opportunities and risks.

The course, which consists of 60 sessions, will run from May 30 to June 24. Heavy emphasis will be placed on reading assignments, simulated sessions, task exercises

and lectures. Whenever possible the case method approach will be employed. A wide variety of management problems will be dealt with in the areas of finance, management behaviour, industrial relations, management science, marketing, and business policy.

Last year's registrants came from Maine, Quebec, Ontario, Alberta and the Bahamas, in addition to a contingent from the Atlantic provinces. They represented crown corporations, utilities, banking and trust interests, and government departments.

The faculty consists of individuals who have had wide business experience and are well recognized in the field of management development and education both in Canada and abroad.

## Patriation or Separation: Ex-premiers of N.S. among conference speakers

Two former premiers of Nova Scotia, Senator C.I. Smith and the Hon. Robert L. Stanfield will join other distinguished participants in a conference, March 19, entitled **The Future of the Canadian Constitution: Patriation or Separation?**

The conference is sponsored by the constitutional and international law sub-section of the Canadian Bar Association and the Public Services Committee of the Dalhousie University Faculty of Law.

The purpose of the conference will be to discuss the principles of the constitution as they relate to patriation of the British North America Act and the possibility of a separate Quebec.

The subject of patriation in a historical perspective will be developed by Judge Peter J.T. O'Hearn a judge of the county court in Halifax. The federal and provincial positions on the question of change in the constitution will

be discussed by Senator Carl Goldenberg, a former adviser on the constitution to the Prime Minister; Innes MacLeod, general consultant to Premier Gerald Regan; Herbert Marx, professor of law at the University of Montreal.

Professor William Lederman, of the Faculty of Law at Queen's will examine the ways and means for change within the framework of legal constraints.

Economist Eric Kierans of McGill; law professor Pierre Patenaude from Sherbrooke University and Claude Ryan, editor of *Le Devoir*, Montreal, will explore the subject — **Motives and Merits for Change: Is it worth it and for whom?**

Rounding out the list of participants are law professor Rowland Harrison and W. Andrew MacKay, vice-president and professor of Law both from Dalhousie; and John P. Merrick, chairman of the Nova Scotia and International Law subsection of the Canadian Bar Association.

12.5% -- OR LOWER QUALITY:

# The threat is real

-- says AAU's Holmes

On the right is a reproduction of an editorial published in *The Chronicle-Herald* and *The Mail-Star* on Feb. 14.

Below is a response from Jeffrey Holmes, executive director of the Association of Atlantic Universities, which appeared in the *Herald* on Feb. 19.

To The Editor  
The Mail Star  
1650 Argyle Street  
Halifax, Nova Scotia

Sir:

Your editorial of 14 February re education costs raised a number of good questions, the kinds of questions the media should be asking about higher education. Following are some preliminary answers, which I would be happy to expand on with one of your reporters.

You refer to the request by the Association of Atlantic Universities for an average regional increase of 12.5% in government grant towards operating expenses. This, as we explained in the brief to the Maritime premiers, means an actual increase of 10% in university income, unless student fees are increased.

Your editorial rejects the argument of the AAU president that the level of education might "slip back" without increases. You point out that "no respectable qualified faculty would permit deterioration in the quality of instruction".

The threat, unfortunately, is a real one. For a start, the universities are in a national league when it comes to hiring or retaining good professors. Salary levels in the region, understandably, are below the national average and this does make it difficult to attract top-class senior scholars from outside the region, or retain those promising young faculty who are pursued by universities across Canada.

The effects of this situation are not immediately apparent but do hurt the quality of education over a number of years.

Quality deteriorates in other ways. If an institution cannot afford to put together or hold research teams which, in turn, attract grants from national agencies. If universities cannot afford to buy teaching equipment, or chemicals for experiments, or books for the library. If the university is disrupted by strikes or slow-downs because unionized faculty or support staff are unhappy with wage levels.

The effects of all these things are slow, but the increase in university budgets has not kept pace with inflation since the beginning of the 1970's. By this time, the effects are cumulative and they do affect the quality of education.

Your editorial notes that there was "no hint of what a 12.5% increase would be in actual dollars".

As published by the MPHEC, government grants to universities and colleges in the Maritimes (all post-secondary not just university) were \$120 million in 1976-77. A 12.5% increase across the post-secondary board, then, amounts to \$15 million.

As the MPHEC 1976 Overview points out, the Maritime provinces will recover an estimated \$103 million from the federal government under the Fiscal Arrangements Act.

As your editorial points out, the source of a considerable amount of support (through federal taxes, provincial taxes or student aid) is the public. And the universities are accountable to the public, via the MPHEC, in each provincial legislature.

## Biggest borrowers

Nearly 60 per cent of all post-secondary students have never borrowed to finance their education, according to a survey, "Some Characteristics of Post-Secondary Education Students in Canada," released earlier this year by the Department of the Secretary of State.

The students were not reluctant to borrow; most did not need the money, and a few did not meet the qualifications for borrowing.

But full-time undergraduates in the Atlantic provinces had a higher incidence of borrowing (more than 60 per cent) than those in other provinces (about 50 per cent).

In addition, more than 50 per cent of the undergraduates in the Atlantic provinces had accumulated debts of more than \$2,000, while under 40 per cent had done so in the rest of Canada.

## Education costs

During their latest meeting in Charlottetown, the Maritime Premiers were approached by the Association of Atlantic Universities with the warning that already high tuition fees would have to be increased unless there is a 12.5 per cent hike in government funding for operating expenses.

There is, of course, another option of which a hint was given by the Association's president, Dr. Ronald Baker. The universities of the region, he suggested, are afraid they might be forced "to slip back" in the level of education being provided unless there are increases in funding.

One suspects that the latter is not too great a threat. With personnel quotas supported by tenure policies, staff reductions do not appear to be seriously imminent and no respectable qualified faculty would permit deterioration in the quality of instruction.

But the additional funding remains a matter of prime concern. We have heard no hint of what a 12.5 per cent increase would be in actual dollars. Probably, it would represent a considerable amount. Whence, then, comes the money?

Assuming that government does grant the request, the money comes from the taxpayer. If government refuses and the universities raise

tuition fees, the same two courses remain open that are now in effect. In some cases, the students or their parents will foot the bill. In others, student loan agreements will provide the needed finances. In either situation, the money comes from the public.

That is a source which already is contributing a considerable amount to the support of higher education in these provinces and it should be pointed out that no great accountability in spending has been asked.

In our own homes, we have had to reduce our spending, often denying ourselves things which we should like to have. Have the universities eliminated every unnecessary expenditure? It is a question which no doubt will arouse indignation but, surely, the public, which ultimately is paying the bills, has a right to ask.

Who pays when university administrations are involved in legal entanglements with the community or with staff members? Who paid the expenses of the university presidents who accompanied Dr. Baker to Charlottetown in an effort to influence the Premiers? Who is going to be asked to pay the additional 12.5 per cent? And precisely what may that nameless "Who" — representing any one of us — expect in return?

"Have the universities eliminated every unnecessary expenditure?" your editorial asks. It goes on to speculate that such a question will no doubt "arouse indignation".

I doubt if it will. It is a reasonable question and one the universities are forced to ask themselves every year in drawing up budgets when the increase in government support is less than the inflation rate.

To answer your last series of smaller questions:

(a) The university pays when administrations are involved in legal entanglements with the community or with staff members. As a corporation, the university has a public responsibility to conduct its affairs in a legal manner.

(b) The presidents of Acadia, Dalhousie, Moncton and U.N.B. went to Charlottetown (Professor Baker was already there, as president of U.P.E.I.). Their expenses were charged to their individual institutions, as part of the universities' cooperation on a regional basis. My expenses were paid by the Association of Atlantic Universities.

(c) The provincial legislatures will be asked to pay the increase recommended by the regional and provincial Treasury Boards, as part of the normal government budgeting process.

Your last question (What may the public expect in return?) is, of course, the important one.

What are the intellectual, social, cultural and economic benefits of the universities to this region?

I can discuss those questions with the reporter for hours. But in the end they are questions that only the public can answer.

Yours sincerely,

*Jeffrey Holmes*  
Jeffrey Holmes  
Executive Director

## Madcap Russell at Cohn next week

Anne Russell, acclaimed by international critics as "the world's funniest woman", will appear in concert on Friday, March 11 at 8:30 p.m. in the Cohn Auditorium.

After an eight-year absence from North American audiences, Ms. Russell will once again mock serious music. Her concert will include old Anna Russell favorites and some new musical parodies.

She is a multi-faceted wonder who tells stories at the piano, plays bagpipes, French horn and sings, writes, composes and arranges her own music. A madcap musical institution, she had charmed audiences around the world for several decades with her enactment and destruction of every musical cliché.

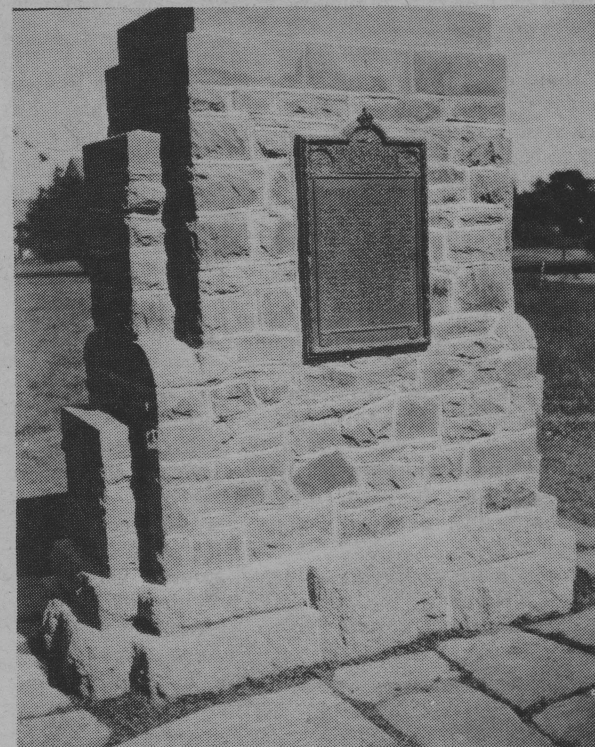
## I - DID YOU KNOW...



...that the first Dalhousie College was the building where Halifax City Hall now stands, on Grand Parade? The university was housed in this building from 1820 to 1887.

The money for the university came from the spoils of war - £11,500 — which British troops from Nova Scotia collected in Customs duties at the port of Castine, in the state of Maine, during the seven months of 1814 that it was in their possession.

Pictured below is the Castine monument which can be found on Studley Campus [upper campus] on the green area between the Macdonald Science Library and the Old Law Building.



(DID YOU KNOW series compiled by Pamela McWhinnie)

(The picture at top is of the Halifax Tandem Club in front of the College building on Grand Parade, circa 1820; it is from a lithograph by W. Eager, reproduced by B.W. Thayer and Co., Boston. The original was presented to Dalhousie by the Dalhousie Club of New York in 1949.)

## Karr and his ancient, friendly bass again

Gary Karr makes music sound friendly. The seventh-generation basist (and his 366-year-old Amati string bass) appear in concert with Harmon Lewis on keyboard as the Karr-Lewis Duo on Sunday, (March 6) at 3 p.m. in the Cohn Auditorium.

There is no mistaking Karr's talent as a musician. The voice of the mighty bass (loaned to him permanently by Olga Koussevitzky, widow of the Boston Symphony conductor) takes on a personality through the talented fingers of the artist. Gary Karr is a competent and sensitive musician, who feels that the traditional classical style of music doesn't have to be serious as well.

The Lewis half of the Duo focuses on demonstrating the inventiveness of his instruments, the harpsichord and organ. Harmon Lewis, Professor of Music at Dalhousie, has performed with Gary Karr since 1972.

Their program on Sunday includes "Madrigal" by Granados; J.S. Bach's "Suite No.3"; "Le Banjo" by Gollschalk; and "The Last Doublebass in Las Vegas" by Eugene Kurtz among other selections.

# Take me, Canada, said Spider to Immigration

NOW, 3 YEARS LATER, HE'S "LANDED", READING, REVIEWING AND WRITING SCI-FI IN THE ENDURING, SCENIC VALLEY

HALYCON ONE happens next weekend (March 11, 12) at the Killam Library. Science fiction freaks will begin descending on the campus Friday evening for Judith Merrill's public lecture, "Ask Another Question".

Saturday is devoted to a workshop program for those seriously interested in the field of science fiction, although there will be displays, rap sessions and film screenings as well. John Mansfield of Ottawa and East River will give a lecture entitled "War Games and Science Fiction."

Guest speaker at the banquet Saturday evening in the Faculty Club's Great Hall is Spider Robinson.

University News's Allison Berry had the opportunity to meet and interview Mr. Robinson, author of over two dozen short stories, novellas and novellettes all with the SF twist. Following is the conversation she had with him.

"Some friends from college days invited me up to visit them in Canada. I was smart enough to accept, stayed a week at their place on the Bay of Fundy, then hightailed it back to New York. When I got to the Port Authority bus terminal, I threw my bags and guitar into one of those 25-cent lockers and raced full tilt, flat out, to Canadian Immigration and said: 'Take Me!'"

Three years later, Spider Robinson was "accepted" into Canada. Why the wait? "It took a long time to convince the authorities that freelance writer does not mean unemployed," says Spider. "Granted, the distinction is a subtle one..."

Spider had a letter from Issac Asimov, one of the big daddies of SF, attesting to Spider's history of publications, calling him a "fine writer, a credit to the profession". However, the last paragraph kept Spider from showing it to Immigration. It read: "Of course, his personal appearance and personal habits may be considered eccentric..."

As of January, 1976, Spider Robinson has been "landed". He enjoys the calmness of his life in Hampton, N.S. and the people, but it's the "staggering beauty of the Annapolis Valley" that really amazes him. "It's the only scenic wonder that doesn't wear off" and that, coming from a respected and widely-read science fiction writer is quite the compliment.

There are a few things Spider doesn't like about Canada, and one of them is Longman, Canada Ltd. who published his book *Telepath*.

"You've never heard of it?" he says, "Small wonder! Longman hasn't done a thing to sell it; they don't fill orders from bookstores, they don't publicize it! Now, in the States, it's doing very well, probably due to the marketing it has had."

Needless to say, Spider's most recent book has a different publisher, Ace Books. *Callaghan's Cross-Time Saloon* will be coming out in June, he says, and don't be surprised if it's not packaged as SF. Spider's eyes are dancing, fingers twitching and he starts speaking of *Star Dance*.

Imagine an orbiting studio where the first dancer in zero gravity is demonstrating an entire new set of postulates... Therein lies a story of about 30,000 words that is the cover story of the March, 1977 issue of the popular SF magazine, *Analog*.

Spider wrote the work in collaboration with his wife, Jeanne, who was one of the founding members of Halifax's Dance Co-op. A professional dancer and dance teacher, Jeanne recently secured a Canada Council grant to take a one-woman show in dance history around to 25 elementary schools in the Valley. Her aim is to increase from zero the awareness of dance in that area.

While Jeanne is seeking to build audiences for dance, Spider is worrying somewhat about the boom in SF.

"It dismays me to some extent," he confesses, "to see large numbers reading SF, mainly because of the publishers' reactions. They are now printing anything and we're seeing a wave of the worst SF that has ever been written. For new readers of SF to wade through the sludge is asking to much."

What does he suggest? Well, for starters you can read



"Dr. Broderick, you really must ask your Science Fiction Freaks to behave themselves..."

his column in *Galaxy*. In "Galaxy Bookshelf", Spider reviews recent SF publications, recommending only the cream to virgin readers. He stresses that he is not a critic, but a reviewer, or one who says why he liked this, or didn't like that, but maintains a consistent set of prejudices so that he can be of use to the reading populace.

Spider calls himself his own number one reader and one of the New Wave of SF writers. That means that he doesn't write pulp format, but prefers an experimental style. "You have to look two or three times to classify my work as SF".

"In fact, I'm one of the most non-technical science fiction writers in the world. Most of the science in my stories is thumbtacked in by *Analog* editor, Ben Bova."

One could say that Ben Bova discovered Spider. Granted, Spider got interested in science fiction at the age of six when he read a Robert Heinlein story that "blew the top of my head off". I immediately went back to the library and said "more please", and was led to a section where all the books had little yellow rockets on the spine.

"That confirmed me as a Sci-Fi nut. It was years later that I became a SF freak, the SF standing for "speculative fiction". Then I went to college. My major? English, although I was a history major for one year."

After getting the "magic bit of paper" that was supposed to get him a job, Spider hit a new low. He did get work, as a nightwatchman guarding a sewer for nine months; he found that he had a lot of time to read.

He had tried his hand at writing SF, submitting several shorties to fan-type magazines. Then one night, after reading a particularly unimaginative story, he said to himself and the rats, I can write better than this turnip!

"A light bulb went on in my head, I sat down at the typewriter in the guard shack and pecked out a story. Next day I sent it to *Analog* and a couple of weeks later received a letter and a cheque from Ben Bova. I quit my job immediately!"

"Later on, I lunched with Ben and Isaac Asimov, who go out of their way to help newcomers."

For a year, Spider edited a real estate weekly, which was part of a New York businessmen's newspaper, but when they offered him a big promotion he turned it down, realizing that he hadn't written anything for himself all year.

Spider wanted to write a SF story that was "as entertaining as a cold beer on a hot day." So he wrote *Telepath* and won the John W. Campbell award for best new science fiction author.

What role does he feel SF plays in the broader spectrum of North American literature.

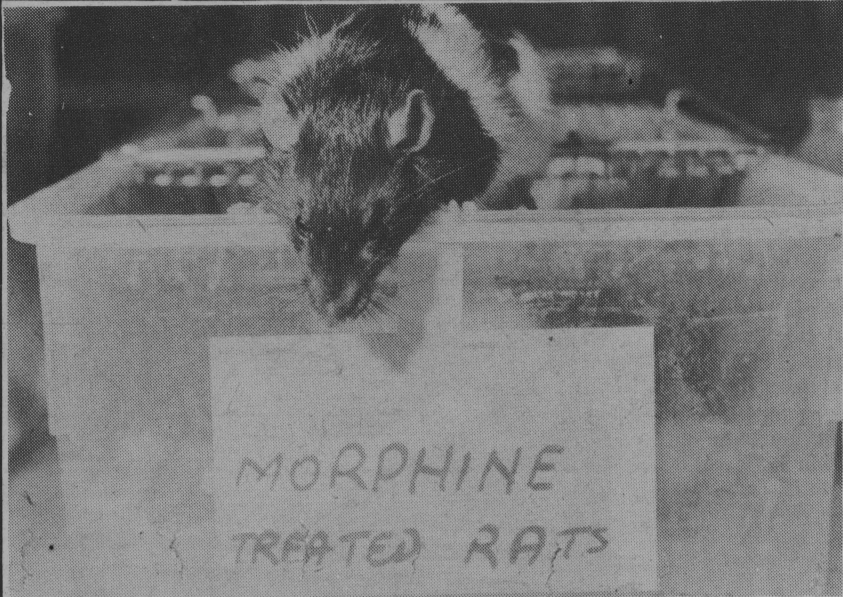
"It's the only branch of literature that consistently entertains me, stretches my mind and inoculates me against future shock," he declared.

"Science fiction helps you to adapt to change in that you daily, for recreation, postulate that the whole world has changed in some major way. SF asks you to consider alternate realities..."

"If you're considering daily different realities, then there is very little in the world that will deeply startle you. You'll still get surprised," says Spider, "but you'll be better able to survive and ride out the waves of history as they are happening."

cont. on p. 12

# IntroDal '77 — in pictures



Morphine treated rats behave quite differently from those not "under the influence", as visitors to a Pharmacology display found out. [Alan Floyd Photo]



Halifax's Town Crier declares IntroDal '77 officially open. [Kerry DeLorey, Dal Photo]



Pathology professor D. Taylor sets a mouse on the arm of a young visitor to the Tupper. [Alan Floyd Photo]



Pharmacology technician George Evans holds rat that took part in Pharmacology's display. [Alan Floyd Photo]

IntroDal '77 opened doors to chemistry laboratories, invited you to party with political scientists, took you on a tour of Spain and Germany, and encouraged you to make friends with computers...

IntroDal '77, thanks to the efforts of participating faculty and students and staff, and the co-ordination of the IntroDal Committee, was an exciting visual profile of Dalhousie as a centre of learning and as a valued entity within the community.

The public came to Dal; they had a "hands-on" experience in many cases which they obviously enjoyed. Faculty and their families from Studley campus took the opportunity to learn about their colleagues research on the Carleton Campus, and liberal arts students were tracked into the Tupper, while health students ventured into other theatres of learning at the Arts Centre.

The number of visitors to IntroDal displays was small, however it's a sure bet that the good word was circulated by those who did pass through the open doors.



Gary Tanji, a Biophysics technician, guides chart from computer tracer during demonstration in the department. [Alan Floyd Photo]



Young visitor to Physics listens to sounds from an electronic synthesizer and examines them on an oscilloscope.



Premier Gerald Regan at the opening; President Hicks in the background. [Kerry DeLorey, Dal Photo]



Co-operative work powers their television picture — courtesy the ingenious Physicists.



Show me, in Physics.

Physics photos by Gerhard Stroink & Forrest M. Fyfe.



Gary Arbique, a third-year university student from Dartmouth conducts one of the low temperature shows in Physics.



## Budgeting for university

The Massey Commission, created by federal authorities in 1949, declared that "everyone has the right to education".

Universities and colleges across the country were instructed to open their doors to a much wider segment of the population than had hitherto been attending. Federal grants were soon introduced.

For Atlantic universities, the new era began with the academic year 1953. Student aid programs had been designed and the word was out that no qualified student was to be turned away for lack of funds. Enrolments jumped, of course, and the constituency of most of the colleges changed; no longer was the typical institution a community of a few hundred students and faculty, sectarian in nature.

Dalhousie's enrolment doubled in the 10 years from 1939 to 1949 and by 1969, there were 4,500 students attending classes. Today, there are 8,900 registered. The outlook shows an increase AND another change in constituency.

More and more adults are entering the university as "mature students" with most of them in attendance part-time.

No financial aid is available as yet to part time students at Dalhousie, so it's necessary for these students to be good money handlers. In fact, all students should learn to budget.

The following are typical expense categories for an academic year, as supplied by the Awards Office:

- \$\$\$ Tuition fees and prescribed fees (student union student society, laboratory, etc.);
- \$\$\$ Books and instruments (including special clothing as in nursing, physical education);
- \$\$\$ Residence OR lodging and food;
- \$\$\$ Local transit, if required;
- \$\$\$ Return transportation to home town, one trip only;
- \$\$\$ Miscellaneous (laundry, clothing, entertainment-suggested allowance of \$15.00 per week);
- \$\$\$ Special costs (dental, medical, optical, dietary);
- \$\$\$ Utilities.

A student should figure his approximate expenses and then compare them with typical resources for the academic year:

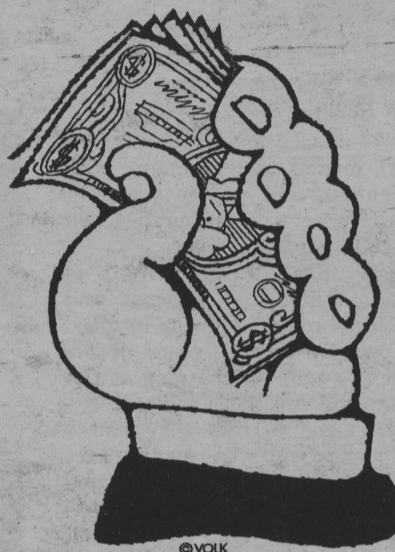
- \$\$\$ Contributions: personal, parental, spouse, others;
- \$\$\$ Governmental loan and bursary;
- \$\$\$ Part-time employment;
- \$\$\$ Scholarships and prizes;
- \$\$\$ Stipends and fellowships;
- \$\$\$ University bursaries;
- \$\$\$ Loans: Banks, credit unions.

Yes, everyone has the right to education today. Dalhousie turns no qualified student from its doors for lack of funds. But what is expected is that the student will accept responsibility for financing his education; that he will make use of the Awards Office in searching out available funding and, after he has completed his studies, to pay back any loans, making it possible for more students to get an education.

## You can't win if you don't even try ...

A prof's praise goes a long way. Likewise a word about the availability of scholarships, prizes and other awards open to students scoring top marks, might encourage some fledgling scholars to take a walk to the Awards Office.

There are a variety of scholarships (Rhodes, for example) that must be applied for by a student. All too often, however, students are not aware of the opportunities; just as often they lack confidence, thinking that too many others are making honors and tipping personality scales. There may be, but then you can't win if you don't try!



## File foraging

Students and scholars are invited to peruse scholarship and fellowship files at the Awards Office, as well as to check various directories for opportunities in Canada and abroad.

The Grants Registry, a comprehensive listing of awards for graduate and postgraduate study, is one of the most useful directories. Two other publications of note are the Scholarships Guide for Commonwealth Postgraduate Students, and Awards for Commonwealth University Staff.

National Research Council publishes two directories, Awards to University Staff and Postdoctorate Fellowships in Government Laboratories.

The Awards Office is open from 9 am to 5 pm weekdays.

## Aid for graduate students

The Faculty of Graduate Studies administers Dalhousie Graduate Fellowships and the prestigious Izaak Walton Killam Memorial Scholarships. The faculty office also looks after a smaller number of awards provided by external benefactors as well as giving information and advice on funding available for graduate study either at Dalhousie or elsewhere.

Students applying for admission to a graduate program at Dalhousie who wish to be considered for a Dalhousie Fellowship or Killam Scholarship should indicate that they are seeking financial aid in the appropriate place on their application for admission form. It is not necessary to apply separately for these awards as well-qualified candidates will subsequently be considered automatically.

The recommendation for scholarship support is made initially by the academic departments or professional school to which a student has applied. Students might well find it useful therefore, to talk to the Graduate Co-ordinator of the department or school in which they wish to do graduate work at the time of application.

It is also advisable to apply early as scholarship funds are usually distributed in the spring for the academic year commencing in September. While Graduate Studies, like other areas of the university, is feeling the economic pinch, there is still substantial support available to well-qualified students who apply in good time.

The major external scholarships which may be held at Dalhousie are provided by the Canada Council (humanities and social sciences), the National Research Council (physical sciences), and the Medical Research Council. The faculty office can provide information and applications to students interested in these awards as well as others which may be available in specialized fields of study. Students must be pursuing a program on a full-time basis in order to be eligible for scholarship support.

The faculty also administers through elected committees modest funds for research development in the social sciences and humanities (R.D.F.A. Committee) and pure sciences (R.D.F.S. Committee). These funds are available to assist smaller research projects particularly in the "start-up" phase, and a limited amount is for travel to



Dr. K.T. Leffek  
Dean of Graduate  
Studies



Sean Wood  
Grad. Studies  
Admin. Asst.

international conferences. Access to R.D.F.A. funds is open to both faculty and graduate students, R.D.F.S. funds support faculty research in which graduate students may be involved. Resources for the current financial year have been exhausted but applications may be made for projects commencing after July 1, 1977. Forms may be obtained from the faculty office.

Graduate Studies acts as a clearing house for information on research in general although the administration of research is the responsibility of the Vice-President (Academic and Research). Information and application forms for most kinds of Canada Council and National Research Council assistance are maintained on a regular basis. The faculty subscribes to a number of publications which describe research opportunities in Canada and throughout the world, and accumulates any material which may assist in the research requirements of the Dalhousie community.



## The Awards Office

# What's available in financial aid?

## HERE'S WHAT, AND HOW TO GET IT

**Scholarships** A scholarship is a cash payment, non-repayable, which is made to students in recognition of outstanding academic achievement. Scholarships are competitive, and some have additional requirements, such as registration in a particular program or a particular level of studies, or certain subjects.

Students admitted to the first year of study at Dalhousie are eligible for ENTRANCE Scholarships valued from \$400 to \$1500.

The ranks and averages which students have achieved in Grade XI and Grade XII classes are important criteria which the Dalhousie Scholarship Committee considers in making award decisions. Teachers and counsellors are relied on to supply this and other relevant data.

Since most entrance scholarships are allotted in March and April, it is important that application for admission be sent to the Registrar's Office as early as possible.

All students who have been admitted are automatically considered for entrance scholarships. No special application forms are required for University Scholarships or for private scholarships that Dalhousie administers.

However, EXTERNAL entrance scholarships must be applied for by the individual. Sometimes forms are available at the Awards Office, but more often one must write directly to the source awarding the scholarship. Addresses are generally listed in the Awards booklet.

Students who have successfully completed a "normal course load" in eligible programs in the Faculties of Arts and Science and Health Professions, the School of Dental Hygiene or the School of Business Administration are automatically considered for IN-COURSE Scholarships ranging in value from \$200 to \$1000 (Commerce — \$300-\$1500). All entrance and in-course scholarships are

administered by the Director of Awards.

There are other private scholarships for students continuing their studies, and meeting specific conditions, one of which is high academic standing in a specific faculty and / or department.

Students are encouraged to read through the Awards book to familiarize themselves with available awards, and are urged to make their interest in funding known to their professors and the departmental chairman. It is often on a department's recommendation that a student's qualifications are studied by the Scholarships Committee. In other cases, departments have the responsibility of selecting candidates or even the successful winners for a certain award.

There are, as well, the EXTERNAL in-course scholarships not administered through the university which must be applied for by the individual.

Students in their final year who are considering graduate work, should check for graduate scholarships and also investigate graduate awards and fellowships.

Faculty of Law and Faculty of Medicine ENTRANCE scholarships and in-course scholarships have special application forms which students must obtain from the faculty concerned. Since many of the award competitions close in March of the year preceding enrolment in the professional faculty, students must plan ahead.

**Loans** A bursary is a non-repayable grant which is made to students proving financial need and holding a satisfactory academic record.  
**Bursaries** A loan is a sum of money borrowed by a student proving financial need, on a promise to repay at some specific time.

Thousands of students across the country have used the Canada Student Loans Plan (usually in conjunction with a provincial bursary) to finance their university education.

The federal government introduced the plan in 1964 to assist Canadian citizens and landed immigrants who, without loan assistance, would be unable to pursue full-time post-secondary studies.

Borrowers under the plan are required to repay principal and interest by regular monthly instalments. Payments commence six months after the borrowers cease to be full-time students at a specified educational institution. No payments are made while the borrower is a full-time student nor for six months after. Interest during this period is paid by the federal government on behalf of the student.

The provincial bursary is complementary to the plan.

Need for assistance is determined by provincial loan authorities in the province in which the applicant is a bona fide resident. The assessment for need is based on educational costs. The resources of a student are taken into account as follows:

- income from summer or other employment;
- parental fixed contributions;
- other assets a student may have.

A student in need of a Canada Student Loan must, as a first step,

obtain an application form. Nova Scotia residents should contact:

N.S. Student Aid Committee,  
Dept. of Education,  
P.O. Box No. 578,  
5614 Fenwick St.,  
Halifax, N.S. B3J 2S9

Awards Office personnel at Dalhousie can provide financial counselling if a student runs into difficulties. They come into the picture officially after acceptance as a full-time student. The Awards Office is responsible for institutional endorsement of all forms relating to governmental student loans and bursaries.

In Nova Scotia, a maximum federal loan of \$1800 and a maximum provincial bursary of \$1000 can be awarded to any one student.

If a student is still short of money after securing governmental assistance, supplementary assistance may be obtainable from the Awards Office. A student must be able to demonstrate genuine need in the written application and in a subsequent interview, before being considered for a university bursary or a private bursary administered by the university.

Students in the Faculties of Dentistry, Law and Medicine are considered for university student long-term loans under the same application procedure used for bursaries.

**Prizes** University medals are awarded to those First Class Honors graduates in recognition of their superior achievements in their studies. Other prizes are monetary or book awards.

Some of the prizes Dalhousie students are eligible for have criteria that result in an automatic selection, i.e. the highest standing in a particular class gives the achiever the prize.

In the above cases students must apply themselves to their students; there are a few prizes where one may apply for the award by writing an essay, doing overseas service, good works or showing

promise of putting leadership skills to work.

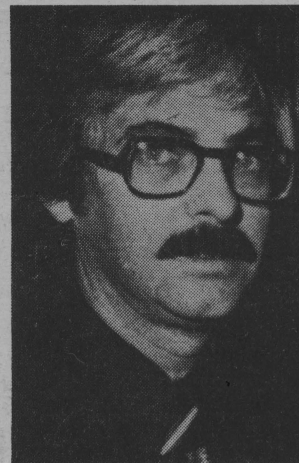
The Prizes and Awards section in the Scholarships, prizes and awards booklet shows the range of possibilities. Students can check with the Awards Office for others, such as information on academic exchanges.

### Fees Deductible for Income Tax

The amount of fees constituting an income tax exemption for the student, is calculated by deducting from the total charge (1) the portion of the Student Union fee for operating expenses of the union, and (2) the Society fee. Fees may be claimed as a deduction only by the student. A special certificate for income tax purposes will be issued on request by the University Cashier.

### A Word about T4A Forms:

If you're required to file an Income Tax Return, don't forget that you have to list any bursaries, prizes or scholarships you've received while at Dalhousie. The University issues T4A forms in February covering awards administered by the institution.



Director Steedman



Asst. Dtr.  
Tennant

## They're there to help ...

If it were not for dollars, there would be no sense in having an Awards Office.

Gordon Steedman, Robert Tennant and the others in Room 125 of the Arts and Administration Building would be out of a job.

As it is, they perform an invaluable service for many a student.

The staff of the Awards Office are interested in you, the student, and your financial and related problems.

They can give you information about financial aid from all provinces and territories of Canada. They will assist you in obtaining student loans and bursaries, giving financial counselling where possible. Loan forms are endorsed at the Awards Office.

The office can give you information on scholarships available at Dalhousie and on those tenable elsewhere.

For foreign students, the office provides applications for loans and confirmation of enrolment for the United States Guaranteed Loans Program and Government of Bermuda Bursaries.

Director Steedman estimates that the office handles about \$300,000 in undergraduate scholarships. How many student loan forms do they endorse? Well over 7,500. However, the office wants more people to know about its services.

"Too many students don't know what's available to them, nor do they know what is expected of them," says the assistant director Tennant.

If things start to go wrong, they flounder about often leaving it too late before they contact the office for help.

"We don't mind sitting down and discussing the rudiments of introductory banking with a student, showing him how to fill out a cheque, or explaining the student loan plan to him a second time," says Tennant. "And we would rather talk about budgeting in September, than try and help to pull a student out of a financial black hole in January!"





Some excellent works were to be seen at the annual Staff, Student and Alumni exhibition at the Dalhousie Art Gallery last month. Pictured at the opening, above, left to right: Dr. C. Beecher Weld, an artist in his own right and for a long time active with the universities



General Committee on Cultural Activities, and Professor G.V.V. Nicholls, whose report of the mid-Sixties triggered the "culture" boom for the university and the community. Below: Gallery staffers Tom Lackie and Mary McLaughlin with Dr. Wilkie

Kushner, of the University's Health Service, and the creator of the "semaphore" art in the background. [A/V Services].

## \$55.7 million Canada Council '75-76 aid for social sciences, humanities, arts

Canada Council grants and services for the social sciences, humanities and the arts in 1975-76 totalled \$55.7 million, according to the council's 19th annual report. Of total expenditures, \$25.3 million was for the social sciences and humanities and \$30.4 million was for the arts.

In the humanities and social sciences, the council devoted the biggest part of its expenditures to established programs - such as doctoral fellowships (\$8.8 million), research grants (\$6.94 million), leave fellowships for university scholars (\$3.78 million), and aid to scholarly publication (\$1.62 million). However, it also spent some \$609,000 on its new "Program Grants" to groups of university scholars, and expanded its work in developing new policies and programs to help the research community in Canada.

The council's Program Grants are given to teams of scholars working on independent projects that have a clearly defined goal. During the year under review, grants in amounts ranging from \$86,507 to \$142,547 were given to five groups of scholars in academic disciplines ranging through economics, psychology, sociology, archeology, zoology, physics, geology, botany and English literature. The universities involved are Dalhousie, Queen's, Montreal, Toronto, and the University of Quebec at Montreal.

As examples of these projects:

- **Dalhousie University** scholars are examining the conditions in the Atlantic Provinces that seem to be perpetuating and enlarging the income gap between small, labor-intensive enterprises (in which most of people in the region are engaged) and the big, capital-intensive and strongly unionized industries;
- At the University of Toronto and the University of Quebec at Montreal the quest for information about prehistory of this continent is taking scholars to the Yukon and the Ungava region, respectively, to study prehistoric plant, animal and human remains and evidences of early settlement.

The biggest major editorial project, under the council's "negotiated grants" program for universities, is the bilingual **Dictionary of Canadian Biography**. This project involves the Laval University Press and the University of Toronto Press and, up to and including 1975-76, it had received council grants totalling \$1.2 million. The dictionary is the work of some 500 to 600 scholars in Canada, the United Kingdom, the United States and France.

The council has also initiated work of its own on behalf of the scholarly committee, and it refers in its annual

report to the new methods it has developed to evaluate its work more effectively and to the work of its "consultative groups." These groups of scholars examine specific fields of scholarly inquiry to point up neglected areas of research or particular problems and to formulate recommendations. One of the groups, which looked at the problems of survey research, reported last year. Other groups are studying subjects such as the ethics involved in conducting research involving human beings, or the needs of the scholar in the humanities.

The council makes a special plea on behalf of universities, in light of what it views as the "frightening cutback in research funds channelled to the universities through our Council and the other granting councils."

Key in its concern is the apparent disenchantment with the university as an essential thread in our social fabric and the inadequate allocation of public funds for university-based research. The council sees the university as one of the few places left in which thinking people are free to probe and question the conventional wisdom.

"That island of freedom is being eroded today. People must be reminded of the enormous contributions universities have made, and are making, in illuminating and sometimes solving social, medical and environmental problems which bear directly on our lives."

## Taking the arts to more people

The Canada Council helped to bring the arts to more people in more places during 1975-76 than ever before.

Drawing comparisons with 1972-73, the council's 19th annual report points out that over the three-year period, council assistance reached more than twice as many cities, towns, and settlements as previously.

The council also draws attention to the remarkable growth in the range and variety of the arts over the past few years, calling it "a phenomenon of central importance which is not as widely recognized as it should be."

In the year under review, the council spent \$30.4 million on grants and services to the arts, compared to \$25.3 million for the humanities and social sciences.

Among the arts disciplines, theatre received the largest amount of subsidy, a total of \$7.2 million. The council extended its support to 102 theatre organizations in 38 towns, double the numbers in 1972-73.

In music, a total of \$6.96 million was shared by 153 organizations in 52 towns (68 organizations in 20 towns in 1972-73). The grants enabled orchestras to give more concerts at home, as well as on tour. Some, such as the Atlantic Symphony and the Quebec Symphony, performed between 25 and 30 per cent of their concerts out of town, often in places not served by a resident orchestra. "Another indicator of the upsurge of interest in the arts across the country", says the report, "is that the more the better amateur choirs are coming to the council's attention." In 1975-76, close to 50 choirs received grants, four times as many as in 1972-73.

The council's assistance to writing, publication and

translation amounted to \$5.2 million. In three of these programs alone (block and project grants to book publishers and aid to periodicals) grants were given to 149 publishers in 38 towns and cities across Canada, compared with 116 publishers in 19 centres 3 years ago. In addition, 135 institutions located in 74 towns and settlements received grants for public readings by Canadian writers during 1975-76, compared with 37 institutions in 27 towns in 1972-73. Several new promotion and distribution programs were launched to ensure that the works of Canadian writers reach more people: one of them will help bring Canadian writing to the impulse buyer by showing how to distribute books and periodicals in such places as newsstands and corner stores.

In the visual arts, the council spent a total of \$3 million, including support to 62 art galleries, museums and workshops, more than twice as many as in 1972-73. Twenty-three of the grants went to new "parallel" galleries, nonprofit centres which many artists, particularly young ones, regard as the public focal point of their work. In addition, the council's Art Bank purchased \$756,000 worth of Canadian contemporary art for rental to government departments and agencies. In film and video, the council expended \$1.3 million to provide 99 grants to individuals and organizations in 27 different centres.

In the field of dance, where council assistance totalled \$4.1 million, changes in policy enabled the council to assist eight young organizations for the first time and to provide substantial increases to four other contemporary dance companies.

## Take me, Canada

cont. from p. 6

Alvin Toffler, author of **Future Shock**, suggests that universities should start now preparing students for "the dizzying disorientation brought on by the premature arrival of the future," by force-feeding them science fiction.

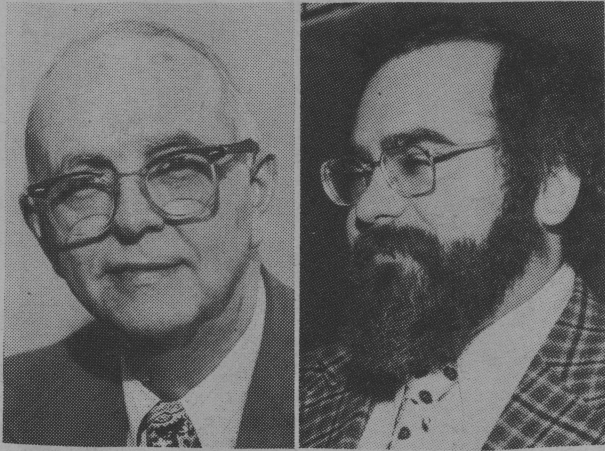
"Our children should be studying Robert Heinlein, Ray Bradbury, not because these writers can tell them about rocket ships and time machines, but more important, because they can lead young minds through an imaginative exploration of the jungle of political, social, psychological, and ethical issues that will confront these children as adults. Science fiction has immense value as a mind-stretching force for the creation of the habit of anticipation," writes Toffler.

SF writers have moved out of the category of the weirdo-who-writes-by-the-stars and have become instead something of prophets. SF has redeeming social value, it seems, but it is still fun as one will rapidly discover by picking up a Spider Robinson novel.

Better yet, grab the opportunity to be entertained in person by Spider during HALYCON ONE.

Registration information is available from Dr. Dorothy Broderick of the School of Library Services.

## People and problems experts gather for Ethnology annual



Dr. Alexander Leighton (left), guest speaker, and Dr. Jerome Barkow, conference co-coordinator.

Dalhousie and Saint Mary's University co-hosted the 1977 annual meeting of the Canadian Ethnology Society in Halifax last week.

More than 100 cultural anthropologists from all areas of Canada attended and 80 papers were presented.

Ethnologists study the diverse ways of the world's peoples and are involved in a variety of interests from the problems of shipboard alcoholism to difficulties created by the periodic migration of people in search of work; from simple sign language to traditional medicines of the Micmacs.

Guest of honor at the conference was Dr. Alexander Leighton, distinguished psychiatrist and social scientist, professor emeritus at Harvard, and Professor of Psychiatry and Preventive Medicine at Dalhousie.

"Reminiscences on Applied Anthropology" was the title of the address he gave to members of the society at a banquet sponsored by the National Museum of Man.

Dalhousie anthropologists and conference co-ordinator Dr. Jerome Barkow was pleased with the meetings and had special thanks to the T-shirted anthropology students from Dalhousie and Saint Mary's who staffed the registration-information desks.

## The Rise of Civilization and the Fall of Man: Discussion next week

Can the rise and fall of civilization be defined? What does the future hold for our children? Have scientific limits been reached? What is the State's responsibility to the development of the humanities and sciences? What is the significance of genetic engineering developments?

Profound questions, some of which will be argued at a panel discussion on The Humanities and the Sciences: The Rise of Civilization and the Fall of Man, to be held next week in the Weldon Law Building.

Sponsored by the Maritime regional branches of the Humanities Association of Canada, the discussion will begin at 8 pm on Thursday, March 10, in Room 115 of the law school.

Taking part will be Professor Ronald Baker, president of the University of Prince Edward Island and chairman of the Association of Atlantic Universities; broadcaster, writer, singer, alumnus Jim Bennet; Dr. Edgar Z. Friedenberg, author and educator; Professor J.R. MacCormack, of the Institute of Human Values at Saint Mary's University; mathematician Dr. Robert Rosen; and Dr. Sonia Salisbury, pediatrician.

The lecture is open to the public; admission is free.



Dalhousie to the forefront again: G.E. (Ted) Brown, prominent over the years in Alumni Association activities and currently an association representative on the university's Board of Governors, was elected president of the Nova Scotia Association of Architects at its annual meeting last month. James G. Sykes, Director of Planning and Development at the university, was elected a councillor of the association. Left to right: Hugh Davison, of Halifax, elected a councillor; Mr. Sykes; Mr. Brown; and Andy Lynch, of Halifax. (Focus Photography)

## Fredericton student first winner of Alberta Letts travel scholarship



Linda Keddy of Fredericton, N.B., is the first recipient of the Alberta Letts Travel Scholarship awarded by Dalhousie University. Ms Keddy, a graduate in political science from the University of New Brunswick, is a first-year student in the Dalhousie School of Library Service Master's program. Prior to her admission to Dalhousie she worked for two years at the York Regional Library in Fredericton.

The Alberta Letts Travel Scholarship was established in 1976 by Dalhousie to mark the many contributions made by the late Provincial Librarian of Nova Scotia to library services in the province and to the Dalhousie School of Library Service. The award will be made annually to a member of the first-year class in the Dalhousie School for attendance at the annual summer conference of the Canadian Library Association, of which Alberta Letts was a former president.

Pictured above are (left to right) Dr. Guy Henson, former Director of the Institute of Public Affairs, who was last year's Alberta Letts Memorial lecturer; Ms. Keddy; and Dr. Violet Coughlin, this year's lecturer.

Dr. Coughlin, of the Faculty of Library Science at the University of Toronto, paid tribute: "I often wonder if librarians in Nova Scotia know what they owe to Guy Henson, a non-librarian."

As Director of the Adult Education Division in the N.S. Department of Education he was the prime mover in the establishment of the Annapolis Valley Regional Library in June, 1948. He was also responsible for Alberta Letts coming to Nova Scotia later that year to be assistant director of Libraries for the Province. (A/V Services)

## Norman Horrocks on ALA Executive Board

Dr. Norman Horrocks, of the School of Library Service, was elected by the Council of the American Library Association at its midwinter meeting in Washington, D.C. to be one of its two representatives to serve on the association's Executive Board for the period 1977-81.

The board acts for council in the administration of established policies and programs. It serves as the management board of ALA, including headquarters operations, subject to review by council, and makes recommendations with respect to policy and operations.

# CHANGED YOUR ADDRESS RECENTLY?

**Change of Address Announcement** / **Annoucé de changement d'adresse**

Please change my mailing address effective / Veuillez changer mon adresse postale à compter du

Name (block letters) / Nom (en majuscules)

Old Address / Ancienne adresse  
P.O. Box, R.R. or Apt. No., Number and Street / Case postale, n° de la R.R. ou de l'app., numéro et rue

City / Ville / Province / POSTAL CODE / POSTAL

New Address / Nouvelle adresse  
P.O. Box, R.R. or Apt. No., Number and Street / Case postale, n° de la R.R. ou de l'app., numéro et rue

City / Ville / Province / POSTAL CODE / POSTAL

Telephone / Area / Région / Number / Numéro / Signature / Date

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33-86-037 (9-73)

## HAVE YOU CHANGED YOUR ADDRESS RECENTLY?

Perhaps it has been a year now. Do you know which offices at the university need to know about your move?

Apart from your own department or office, you should have informed your dean's office, your vice-president's office, personnel and payroll.

Important matters concerning your pay may not reach you or may take an unnecessarily long time unless you inform them.

At this time of year most of us have our minds on T4 slips and tax returns — especially if we are to get a refund.

So forward your correct home address and your office address to the offices mentioned above as soon as possible. For Your Benefit.

Revenue Canada / Revenu Canada / Taxation / Impôt

T4-1976 / Supplémentaire - Supplémentaire

STATEMENT OF PENSION, RETIREMENT, ANNUITY AND OTHER INCOME / ÉTAT DU REVENU DE PENSION, DE RETRAITE, DE RENTE OU D'AUTRES SOURCES

STATEMENT OF REMUNERATION PAID / ÉTAT DE LA RÉMUNÉRATION PAYÉE

For District Taxation Office / Pour le bureau de district d'impôt

EMPLOYEE'S EMPLOYER / SALARIÉ(S) EMPLOYEUR

NAME AND ADDRESS OF EMPLOYER / NOM ET ADRESSE DE L'EMPLOYEUR

# Sulfur – the versatile element

**Sulfur / sulphur** - A pale yellow, non-metallic element found both free and combined in the native state and existing in various forms, of which the best known is a crystalline solid that burns with a blue flame and stifling smell, and used in making matches, gunpowder, vulcanite, sulfuric acid and medicines (flowers and milk of sulfur; refined and cast in moulds - brimstone, once believed to be the material of which hell-fire and lightning consisted).

\*\*\*\*\*

At a time when people everywhere are concerned with the rapid depletion of natural resources, there is one resource, sulfur, that is available in abundance around the world; so much so that in certain quarters of the chemical industry there is a real scramble to develop new applications for it.

Although this may be overstating the case, the low cost of sulfur, its accessibility and its exceptional chemical properties have stimulated research for uses other than the traditional ones.

## We can't do without it

For the record, it is safe to say that sulfur is essential in one way or another for the manufacture of almost everything our present society produces/uses. Dalhousie's expert on the subject, Professor Stuart Grossert has put it very aptly...**Sulfur, Chemistry and You.**

Next to iron and steel, the manufacture of sulfuric acid is the largest chemical industry in the world. Current world production is approximately 100 million tons. In Canada alone, sulfuric acid is produced by over a dozen different companies.

~~~~~  
By Roselle Green  
~~~~~

Sulfur enters into the processes of making chemical pigments, rayon, film and petroleum products. It is used in the vulcanization of rubber (to increase the strength and elasticity, needed for tires, for example). Fertilizer is also a large consumer, and one scientist has even gone so far as to say that the food supply of the world depends heavily on the supply of sulfur. The element, says Dr. Grossert, is widely used in pharmaceutical chemistry. It is a common component of some antibiotics. It can also be found in living matter, both plant and animal.

In the form of sodium sulfide, it is used in the leather and among the biggest users of sulfur in the world because our pulp and paper industry relies heavily on it.

However, in order to retain a perspective on the element, it must be pointed out that sulfur in the form of its several oxides is a major cause of atmospheric pollution. All sulfur oxides are acidic compounds, explains Dr. Grossert, and their removal is of prime importance in the cleaning of stack emissions from many major industries, especially mineral smelters. These acidic oxides are widely scattered over the earth by rain and snow and have been responsible for significant changes in the acidity of lake waters in remote parts of the northeastern United States and Scandinavia. In the latter case, the sulfur oxides are apparently transported by prevailing weather systems, from the massive concentration of heavy industry in Western Europe. (insert sketch)

## How sulfur atoms and molecules work

The advantage that sulfur has over other elements, says Dr. Grossert, is that its properties can change. In the manufacture of vulcanized rubber such as in rubber tires, sulfur atoms form cross-linkages between adjacent rubber molecules. When incorporated to produce pesticides, the sulfur binds to phosphorus and other atoms. Sulfur forms part of the penicillin molecule in addition to being a vital part of many naturally occurring molecules. For example, it occurs in the amino acid methionine which is one of the basic building blocks for some proteins. In fact, sulfur-sulfur bonds form an essential part of the structure of proteins, such as insulin. It's interesting to add that simple sulfur-containing molecules have been found in onions, garlic, cabbages, mushrooms and form the major part of the defence mechanism of the common skunk.

## It's been with us a long time

Sulfur has been known for a long time, probably as early as recorded history. In ancient times it was known as brimstone which, with fire, is said to have destroyed the evil cities of Sodom and Gomorrah.

The burning of sulfur was used in ancient Greece, according to Homer, to fumigate homes, and the Romans used it for medicine as well as a bleaching agent and for matches. The conqueror Cortes found it in Mexico and used it to make gunpowder and, again in wartime use, the First World War's notorious mustard gas contained the element.

## It's abundant, and its chemical properties stimulate research

### New uses

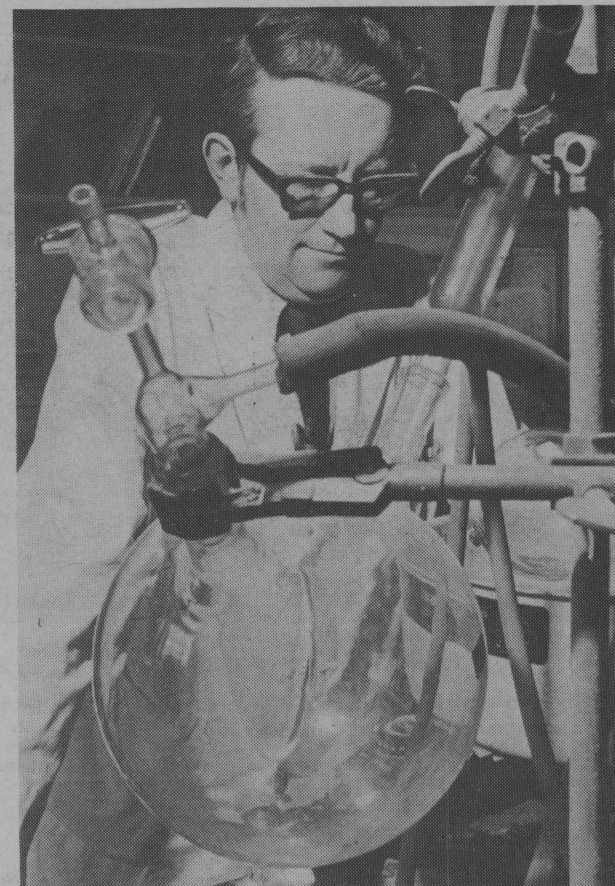
New applications are being tested. It has been experimented with as a coating for structural materials; as a low-cost material for stabilizing copper tailings, thus protecting it from wind and water; as mortar to produce prefabricated bricks; as an additive to other mixtures to produce a paper-covered wallboard; as part of a sand and asphalt mixture for road bases and surfaces; and as a road sub-base for insulation against permafrost and, conversely, thawing damage.

The connection between sulfur and fertilizer is interesting. Dr. Grossert offered the background explanation for the connection. Urea is a molecule which occupies a special place in the history of organic chemistry.

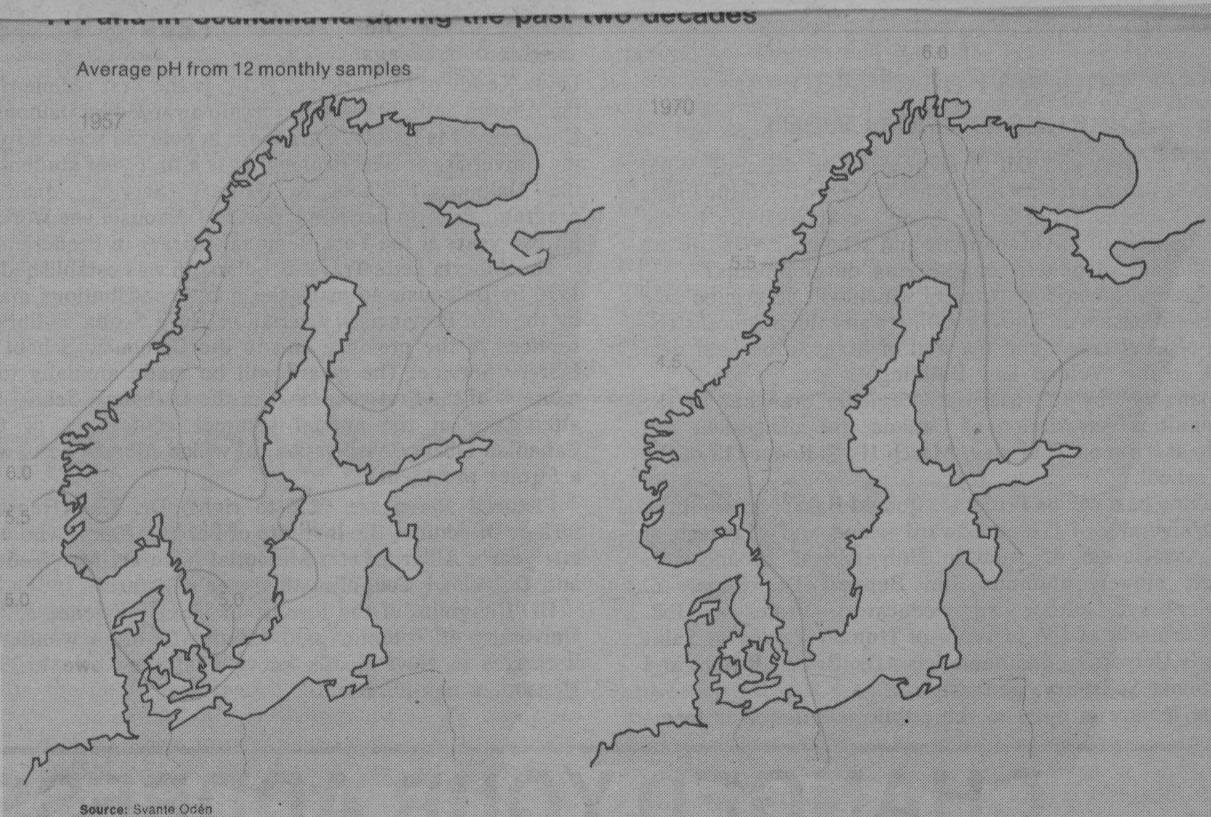
It was the first organic compound to be synthesized from an inorganic molecule by a chemist. Today, urea is a very important fertilizer, since it contains a high proportion of nitrogen. However, much of it is wasted when it is applied directly in pellet form to the farmer's fields. It has now been found that spraying the urea pellets with a thin coating of sulfur makes a very successful slow-release fertilizer.

Finally sulfur is being used in two new types of batteries which are under development. These are lithium-sulfur and sodium-sulfur batteries, which show promise of being able to store much greater current densities than present batteries. If this promise materializes we could see such batteries being used to store electricity produced during off-peak times and thus contribute to a lessening of the need for new electrical generating plants.

Needless to say, sulfur research is continuing apace, and the often-taken-for-granted element will continue to play an important role in today's technological and scientific-oriented society.



Dr. Grossert is seen here working with an air rotary evaporator. He teaches a general introductory organic chemistry class as well as advanced classes in such areas as stereochemistry and heteroatom chemistry. He has a special interest in making molecules which contain sulfur. The general aim of his studies on sulfur chemistry is to examine how the element is able to combine with other elements and in particular how it can be used to make compounds which may have an agricultural or medical application. [A/V Services]



The pH level in Scandinavian countries has risen noticeably in the past two decades, as indicated on the maps above. The pH figures are calculated from monthly samples. (Courtesy Chemical & Engineering News)

## There's no need, metaphysically...

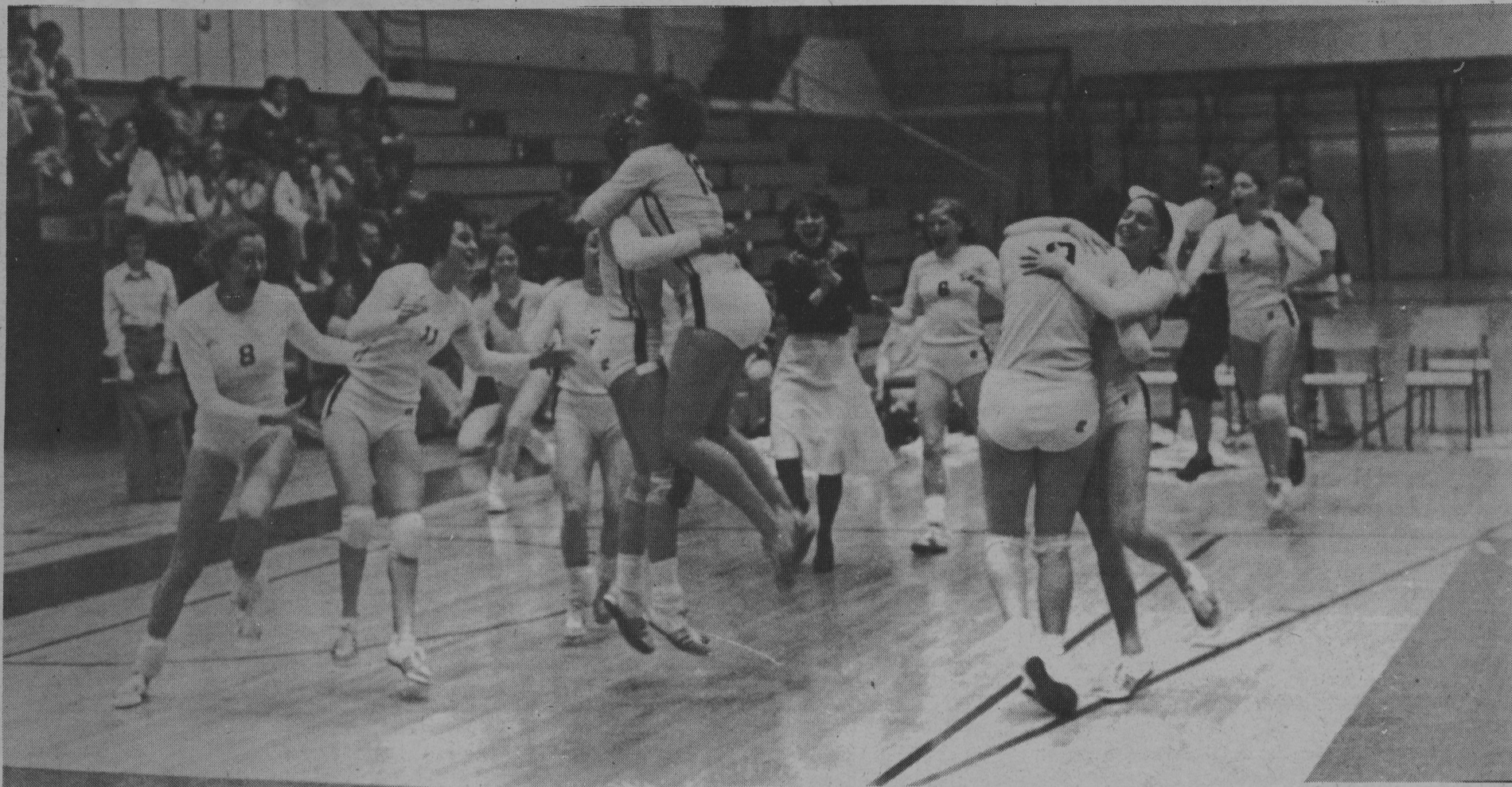
"There is no metaphysical necessity".

That's the title of a short paper, to be read by Professor Richmond Campbell of Dalhousie's Department of Philosophy at a symposium to be held tomorrow (March 4) at 7:30 pm in the Faculty Lounge, fifth floor, Administration Building, Saint Mary's University.

The symposium is arranged by the Halifax Philosophical Circle and sponsored jointly by the philosophy departments of Dalhousie and Saint Mary's.

Killam Memorial Lecture with  
Dr. Alan C. Walker  
paleontologist, anthropologist and anatomist  
on  
Current Inquiries into the Origin of Species and Their Implications for the Image of Man  
8 p.m., March 11,  
Theatre A, Tupper Building

# Tigerettes beat Bloomers to win Atlantic title



## Come-from-behind Volleyball Tigerettes in Nationals

Coach Louis MacGregor had a wish for her Volleyball weeks ago (see clipping at right). "I hope," she said, "they end their college careers as Intercollegiate Champions."

Her wish came true.

In a magnificent come-from-behind rally against the UNB Red Bloomers in the AUA final at Acadia the weekend before last, the Tigerettes shook off the losses of the first two games in the best-of-five series to take the title that was almost in the grasp of UNB.

The Tigerettes bested the lead in the fifth, 15-12. The first two games ended 14-16 and 17-19 against Dal.

In pre-final play, the Tigerettes got rid of Memorial, Acadia and the University of Moncton in quick time (3-0 in each series); UNB defeated Acadia and Memorial soundly, but got their knickers in a twist against Moncton, losing 3-1.

The weekend before the championships, Dal's fans were treated to some of the best volleyball seen in the area when

the Tigerettes handed UNB their first league defeat of the season in a close match that went to five games and lasted just under two and a half hours.

All in all, a good performance, since the Tigerettes had their revenge for having been beaten by UNB once this year.

graduating co-captains, Bonny McNamara and Carolyn Cox."

Dalhousie has won the AUA championship three times now, and last weekend (Feb. 25, 26 and 27) travelled to Ontario for the national championships, being played at the University of Waterloo.

Coach MacGregor last week gave her team a good chance: "We've met three-quarters of the teams competing."

(Results of the national championships: Page 16)



The Law School's hockey team made the most of their study break junket the weekend before last when they did battle with the Harvard and University of New Brunswick law school teams. They defeated both. The score against UNB was 8-2, and in the second game against Harvard, 7-4. Two scores for the first Harvard game were reported,

however. Team co-ordinator Jim Batten gave it as 4-3; Dean Ronald St. J. Macdonald, jubilant [perhaps too jubilant?] at the victory, was sure it was 5-4. In any case, the Dal team did the hat-trick. The Harvard team may visit Dal in the near future. [A/V Services]

### VOLLEYBALL

#### Final stretch for Tigerette co-captains

Co-captains Bonny McNamara and Carolyn Cox of the Women's Volleyball Tigerettes made their last home appearance for Dalhousie last weekend, and this weekend go into the AUA championships at Acadia.

And their coach, Lois MacGregor, has a wish for them: "I hope they end their college careers as Intercollegiate Champions."

Says MacGregor: "They've worked hard in practices and have competed well under great pressure...and they've given me a tremendous help to me in my 12 years coaching at Dal."

— UNIVERSITY NEWS, Feb. 17, 1977

#### Wrestling Tigers in Nationals

Dalhousie Wrestling Coach Bob Thayer and six of his Tiger wrestlers made up the bulk of the AUA team which competed in the CIAU championships at University of Guelph last weekend. Accompanying Thayer were heavyweight George Feiber, Terry Young 190, Peter LaMothe 177, Wally Kazakowski 167, Greg Wilson 158, and Bill Sanford 134. All but LaMothe had had previous national experience.



DALHOUSIE CULTURAL ACTIVITIES PRESENTS  
*Cooh-Whatta Way to  
Wile Away the Winter...*  
Winter/Spring 1977

**WOODY HERMAN**

Saturday, March 5, 8:30 p.m.; Big Band Sound; reg: \$8.00/7.00; stu.-sr. citizens: \$7.00/6.00.

**KARR AND LEWIS DUO**

Sunday, March 6, 3:00 p.m.; 'Cello and harpsichord; reg: \$1.00; stu.-sr. citizens: FREE.

**ANNA RUSSELL**

Friday, March 11, 8:30 p.m.; "World's Funniest Woman"; reg: \$5.50/4.50; stu.-sr. citizens: \$4.50/3.50.

**DALART TRIO**

Tuesday, March 15, 8:30 p.m.; piano, 'cello and violin trio; reg: \$3.00/2.00; stu.-sr. citizens: \$2.00/1.00.

**TORONTO DANCE THEATRE**

Friday, March 18, 8:30 p.m.; Modern dance innovators; reg: \$4.50/3.50; stu.-sr. citizens: \$3.50/2.50.

**RICERCARE**

Saturday, March 19, 8:30 p.m.; European Wind Ensemble; reg: \$4.00/3.00; stu.-sr. citizens: \$3.00/2.00.

**PRESERVATION HALL JAZZ BAND**

Wednesday, March 23, 8:30 p.m.; Thursday, March 24, 8:30 p.m.; New Orleans Jazz Band; reg: \$6.50/5.50; stu.-sr. citizens: \$5.50/4.50.

**LARRY COOMBS AND THE DALART TRIO**

Friday, March 25, 8:30 p.m.; piano/cello/violin trio featuring clarinetist; reg: \$3.50/2.50; stu.-sr. citizens: \$2.50/1.50.

**DANNY BECKERMAN**

Sunday, March 27, 3:00 p.m.; Classical guitarist; reg: \$1.00; stu.-sr. citizens: FREE.

**EUGENIA AND PINCHAS ZUKERMAN**

Thursday, March 31, 8:30 p.m.; flute and violin concert; reg: \$6.50/5.50; stu.-sr. citizens: \$5.50/4.50.

**VICTOR BORGE**

Wednesday, March 30, 8:30 p.m.; Friday, April 1, 8:30 p.m.; Saturday, April 2, 8:30 p.m.; Sunday, April 3, 8:30 p.m.; TICKETS AVAILABLE FOR MARCH 30 ONLY; reg: \$7.00/6.00; stu.-sr. citizens: \$6.00/5.00.

**OPERA AS YOU LIKE IT**

Wednesday, April 13, 8:30 p.m.; Thursday, April 14, 8:30 p.m.; Friday, April 15, 8:30 p.m.; Saturday, April 16, 8:30 p.m.; Behind the scenes with opera highlights; reg: \$6.00/5.00; stu.-sr. citizens: \$5.00/4.00.

**WORLD'S GREATEST JAZZ BAND**

Thursday, April 21, 8:30 p.m.; An all-star jazz band; reg: \$6.50/5.50; stu.-sr. citizens: \$5.50/4.50.

**CHET ATKINS**

Friday, April 22, 8:30 p.m.; SOLD OUT.

**JOE WILLIAMS**

Friday, April 29, 8:30 p.m.; Blues balladeer formerly with Count Basie; reg: \$7.00/6.00; stu.-sr. citizens: \$6.00/5.00.

**CANADIAN BRASS**

Saturday, April 30, 8:30 p.m.; Friday School Matinee, April 29, 1:30 p.m.; A musical brass revue; reg: \$4.50/3.50; stu.-sr. citizens: \$3.50/2.50; Matinee tickets not available to the public.

**MAYNARD FERGUSON**

Saturday, May 21, 8:30 p.m.; A brass blend of big sounds; reg: \$7.50/6.50; stu.-sr. citizens: \$6.50/5.50.

**COUNT BASIE**

Thursday, June 2, 7:00 p.m. and 9:30 p.m.; Swinging Big Band; reg: \$7.00/6.00; stu.-sr. citizens: \$6.00/5.00.

## Rosenberg paintings sought by Mount gallery

Mount Saint Vincent University Art Gallery is looking for people who own paintings by artist Henry M. Rosenberg. The gallery is planning an exhibition of Rosenberg's work for May and would like to borrow privately owned works by this famous artist. Noted art historian and former principal of the Nova Scotia College of Art and Design (1945-1971), Dr. Donald Cameron MacKay will organize the show and prepare an illustrated catalogue.

Henry M. Rosenberg was principal of the Victoria School of Art and Design (now the Nova Scotia College of Art and Design) from 1898 to 1910. The American-born artist studied in Chicago, accompanied Frank Duveneck to Europe and in Italy studied with James McNeill Whistler. He was closely associated with John Singer Sargent, Arthur B. Davies and other eminent artists of the time.

While principal of the Victoria School, Rosenberg lived in Dartmouth but maintained a studio in Halifax, crossing the harbour twice a day until 1934, and many of his paintings came out of those daily trips.

Rosenberg also painted throughout Nova Scotia, particularly along the Eastern Shore, frequently with Ernest Lawson, the Nova Scotia-born member of the

American group, "The Eight". His works often were displayed in major exhibitions in New York, Chicago, Philadelphia and Halifax.

Anyone who knows the location of Rosenberg's works should contact the Art Gallery at the Mount.

## Kipawo Showboat at Cohn March 26

Kipawo Showboat Company, following sell-out performances in Wolfville, will be bringing to Halifax's Rebecca Cohn Auditorium its first production of the 1977 season, Rodgers and Hammerstein's famous musical, *Carousel*. The show contains well known songs like "If I Love You," "June is Bustin' Out All Over," "A Real Nice Clambake," "You'll Never Walk Alone," "Mister Snow," "What's the Use of Wondering," as well as musical gems such as the "Soliloquy" and the magnificent "Carousel Waltz."

There will be two performances on Saturday, March 26, at 2:30 and 8:30 at the Cohn. For reservations call the Box Office (2298). Reserved seats are \$4.00 and \$3.00.

## King's seeks 1977-78 Junior Fellows

The University of King's College is looking for junior fellows for 1977-78.

Suitable jobs for doctoral or pre-doctoral candidates, the fellowships involve tutoring for an average of six hours per week in the Foundation Year Program, an intergraded and inter-disciplinary introduction to the social sciences and humanities and work under the direction of the professorial staff of the program.

The appointments are for a year at a time and in 1977-78 will carry salaries of about \$6,700. Junior Fellows may also be appointed as dons in the university residences.

Applications should be made, including curriculum vitae and names of three referees, to the Chairman, Committee on Appointments, University of King's College, Halifax, Nova Scotia, B3H 2A1. The appointments should be announced by early April.

## WHO consultant to lecture in French

Dr. Henri Paret, a consulting expert in the World Health Organization, will give a lecture in French next week, under the auspices of l'Alliance francaise.

Dr. Paret's topic is "Y a-t-il un imperialisme de la medecine?" The lecture will begin at 7:30 pm in the Theatre C of the Sir Charles Tupper Medical Building on Thursday, March 10.

## Baking nurses

Dalhousie University Nursing Alumni will hold a Bake Sale, beginning at 11 am on Saturday, March 19, at the Bayers Road Shopping Mall (the stand will be near Zeller's).

## CALENDAR

**MARCH 7**

...Microbiology seminar with Dr. M. Willison on extracellular cellulose biosynthesis by acetobacter xylinum-a re-look, at 1:30 p.m., seminar rm., 7th floor, Tupper.

**MARCH 9**

...Media Accountability session with well known media experts from the local and national scene. A panel presentation followed by open discussion from the floor. 7 p.m., McInnes Room.

...Physiology & Biophysics seminar with Bill Fraser on Inert Gas Transport in Human Tissue, 4 p.m., Rm. 3K, 3rd floor, Tupper.

**MARCH 11**

...Friday-at-Four with Dr. R.K. Winkelman, Mayo Clinic, on New Horizons in Dermatology. His lecture will be given at 4 p.m., Theatre A, Tupper.

...Chemistry seminar with Dr. P.G. Farrell, McGill, 1:30 p.m., Rm. 215, Chemistry Bldg.

...French Cine Club presents La Tete de Normand St. Onge, 7 & 9 p.m., Killam Aud.

**MARCH 14**

...Microbiology seminar with Dr. J. Farley on spontaneous generation and the origin of life, at 1:30 p.m., seminar room, 7th floor, Tupper.

German Club film presentation, 8 pm, Killam Auditorium, Peter Voss Der Millionendieb.

**MARCH 16**

...Annual Athletic Awards Night, 7 p.m., McInnes Rm.

...Physiology & Biophysics seminar with A. Wong on Sodium-calcium exchange in Excitable Tissue, 4 p.m., Rm. 3K, 3rd floor, Tupper.

**MARCH 17**

...African Studies seminar with Drs. K.A. Heard and R.I. McAllister on Developments in South African Politics, 4:30 p.m., African Studies house, Seymour St.

**ART GALLERY**

...Carol Fraser exhibition, until March 27

...Sidney Tillim's "Adam and Eve Drawings, until March 27

**MUSIC**

...Noon-hour music recital every Tuesday, 12:45 p.m., in the Music Resources Centre, Killam and every Friday at 12:45 p.m., in the Arts Centre foyer.

**THEATRE**

...the department stages a noon-hour theatre presentation every Tuesday 11:30-12:30 p.m.

## Dentistry helps

The Project Room at the Nova Scotia Museum will have dozens of teeth of different shapes and sizes and origin on display March 5, 1977.

How do shark's teeth measure up to a set of human teeth? What is your tooth composed of that it gets holes (cavities) in it?

Dalhousie's Faculty of Dentistry will lend slides and display material to the museum for the project while dental hygienists from Dal's School of Dental Hygiene will be on hand to talk about your teeth and instruct you in the care of them. Museum personnel will show the teeth of other mammals and reptiles.

For further information, contact Mrs. Joan Waldron at the N.S. Museum.

## SPORTS: ONE 4TH, TWO 2NDS

Dalhousie came up with two second places and a fourth place in regional and national intercollegiate championships last weekend.

The volleyball Tigerettes finished fourth in the national CIAU women's playoffs; UBC won the championship.

The basketball Tigerettes finished second to SMU in AUSA play, and the men's curling team was second to UBC, also in regional play.