

1980 chancellor election repeat of 1978 race

UBC's triennial election for chancellor early next year will be a repeat of the last race held in 1978.

Vying again for the office will be the incumbent, Hon. J.V. Clyne, and Stan Persky, both graduates of the University.

Some 80,000 ballots will be distributed early in the new year to members of Convocation, basically made up of all UBC graduates and faculty members, who will elect the chancellor, who sits on both the Board of Governors and Senate, UBC's two main governing bodies.

Election day — the day on which ballots are counted in the election for chancellor — will be Friday, Feb. 6.

Mr. Clyne, who has been UBC's chancellor for the past three years, is a 1923 graduate of UBC, a former member of the Supreme Court of B.C. and retired chairman and chief executive officer of MacMillan Bloedel.

As a student, Mr. Clyne took part in the 1922 Great Trek by UBC students, which resulted in the provincial

government appropriating funds to complete buildings at Point Grey to house the University. He served three terms on Senate between 1951 and 1960 and in 1961 was the recipient of the Great Trekker Award from the AMS for his contributions to University and community life.

Mr. Persky, a student from 1966 to 1973, holds two UBC degrees and was active in student affairs as a member of Senate and president of the Arts

Undergraduate Society. He was also a teaching assistant in the Departments of History and Philosophy.

He has taught at Northwest Community College in Terrace and is the author of poetry and books on provincial and civic affairs.

In other election news, faculty members are currently voting to name two of their number to represent them on the Board of Governors.

Nominated for the two Board seats

are: Prof. Penny Gouldstone of the Faculty of Education; Prof. Hugh Greenwood, head of the Department of Geological Sciences; Prof. Charles Krebs of the Department of Zoology and Institute of Animal Resource Ecology; Prof. C.L. "Mitch" Mitchell of the Faculty of Commerce and Business Administration; and Prof. Peter Pearse of the Department of Economics in the Faculty of Arts and the Faculty of Forestry, who is seeking a second term as a governor.

Election day for the faculty members who will sit on the Board is Friday, Nov. 28.

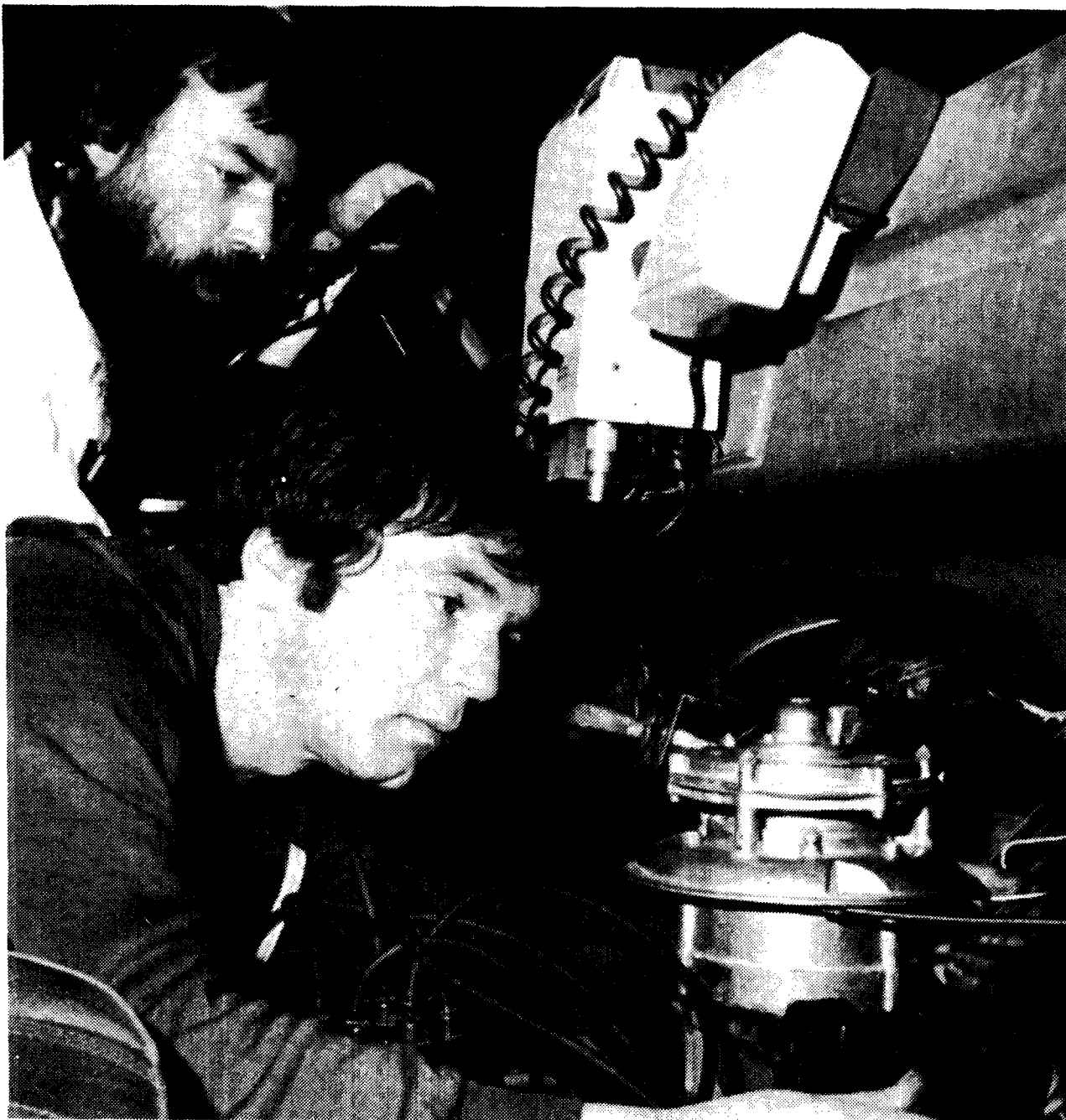
Nominations for the member of the UBC employed staff who will sit on the Board close today (Wednesday, Nov. 19) at 4 p.m. The election will take place on Dec. 17.

Nominations for two UBC students to sit on the Board and 17 students who will sit on Senate close on Dec. 19 at 4 p.m. An advance poll for the student elections will be held Jan. 19. Election day is Jan. 20.

UBC reports

Volume 26, Number 22.
Nov. 19, 1980.

Published by Information Services, University of B.C.,
6328 Memorial Road, Vancouver, B.C. V6T 1W5,
228-3131. Jim Banham, editor. Lorie Chortyk,
editorial assistant. ISSN 0497-2929.



Picture by Jim Banham

Dr. Don Sheraton, left, gives UBC Physical Plant mechanic Vic McDonough some pointers on providing tender, loving care of one of 18 UBC vehicles which are being converted to run on compressed natural gas instead of conventional gasoline. Dr. Sheraton, who's senior research engineer for B.C. Research, the applied research

organization located on UBC's south campus, is in charge of the conversion scheme and will monitor mileage and wear and tear on the vehicles for a year. McDonough will service the trucks on a day-to-day basis. Provincial government is paying the cost of converting the vehicles and for the natural gas that powers them.

Top UBC scholarship winners named

Selection committees have named the 1980 winners of three top UBC scholarships awarded for a combination of academic excellence and involvement in UBC and community service.

The \$2,500 Sherwood Lett Memorial Scholarship, named after a former

UBC chancellor and Chief Justice of British Columbia, was won by Mark Crawford, a fourth-year honors student in Political Science.

The \$1,250 Harry Logan Scholarship, named for the late Harry T. Logan, a former head of UBC's classics department and one of the

University's original faculty members, went to fourth-year Poultry Science student Barbara Johnstone; and the \$2,000 Amy Sauder Scholarship was awarded to Civil Engineering

Please turn to page 2
See AWARDS

Bursary funds double

The recent decision by the Board of Governors to put another \$40,000 into the UBC bursary fund means that more than \$600,000 will be available in bursaries next year.

The University has more than doubled the amount of bursary money it has made available to students in the past 18 months to \$290,000. The remainder comes from private donations.

About 1,000 students receive bursaries at UBC. They are awarded on a basis of financial need, range from less than \$100 to \$1,000, and are outright grants which don't have to be repaid. In general, they fill in the gaps after government loan funds have been given out. Much of the bursary money goes to those students whose needs exceed the \$3,500 maximum of the government loan-grant program.

Byron Hender, director of the financial aid office at UBC, said he welcomed the increase in bursary money, coming on top of the other recent increases in these funds. And he said the Board's decision to make representation to the federal and provincial governments to deal with deficiencies in the Canada Student Loan Program could prove to be at least as beneficial to students.

"This program is the critical source of funds," Hender said. "That \$3,500 ceiling just isn't high enough. About 10 per cent of the 5,000 UBC students applying for assistance this year will need more than \$3,500 to see them through."

Under the government program, a student is entitled to a maximum federal loan of \$1,800 and a maximum provincial grant of \$1,700.

Hender said the number of students applying for financial aid has dropped from about one in three to about one in four in the last couple of years.

"But those who do need money, need more money," he said.

In addition to bursaries, UBC awards more than 1,500 undergraduate scholarships each year, based on scholastic achievement and worth more than \$700,000 in total.

Meanwhile, President Douglas Kenney said he did not think that higher tuition fees would keep prospective students from enrolling at UBC next year.

"Even with the increases announced

Please turn to page 2
See BURSARY FUNDS

Senate told of plan for coal research centre

Fresh air and new life are stoking old coals at UBC. Coal, the Cinderella fuel, is receiving special emphasis.

Much of Canada's vast deposits of coal are in B.C. Their development will mean new research and technology and a huge demand for Canadians with special training.

UBC has created a Coal Research Centre to administer coal research and graduate student training. UBC's Senate was informed of the development at its Nov. 12 meeting.

Acting director of the centre is Dr. Paul Watkinson, professor in the chemical engineering department. His major responsibility will be to develop an administrative structure for coal research, and find money for space, equipment and staff.

It is hoped that the centre will eventually move into an addition to the coal and mineral processing laboratory now under construction on campus. The three-storey, 20,000-square-foot, \$2.2-million building is the only one of its kind in Canada.

At the moment, coal research is going on in a number of UBC departments — mining and mineral process engineering, metallurgy, chemical

engineering, soil science, mechanical engineering and geological sciences. Some members of the chemistry department are also interested in coal research.

The centre will have a board of management consisting of the deans of faculties with a major interest in the centre — Applied Science, Graduate Studies, Agricultural Sciences and Science.

Dr. Watkinson will report to Graduate Studies dean Dr. Peter Larkin. Money to finance the centre will be sought from Victoria.

Senate approves pre-examination study period

UBC's Senate has voted to provide a study break of a minimum of two days before Christmas and April exams and to shorten exam periods by increasing the number of daily exam periods and by staging exams on Saturdays, if necessary.

A total of seven recommendations made by an ad hoc committee on examinations went before Senate at its November meeting. Four were approved, one was deferred, one was withdrawn and discussion of one was postponed until the December meeting of Senate.

Here are the motions that were approved:

- A study period of a minimum of two days (including weekends) be inserted between the end of classes and the beginning of the final examination schedule in the December and April periods. This study interval is intended solely as a period for students

to review and reflect upon the semester's (year's) work and is to be free of class meetings, examinations, assignments or other responsibilities of students.

The original motion of the ad hoc committee called for a study period of "four to five days (including weekends)." This was amended by a motion from student senator Ian Bakshi to read "a minimum of two days (including weekends)."

- Departments and schools be requested to review their needs for common examinations with a view toward eliminating unnecessary common exams and reducing the number of course timetable sequences utilized by multi-section courses offering common examinations, this review to take place during the 1980-81 academic year.

- Examination periods be shortened by increasing the number of exam periods per day where necessary, and by use of Saturdays, if necessary.

This motion, in its original form, called for a shortening of the exam period by increasing the number of examination groups scheduled per week and through full use of evenings and Saturdays. The version approved by Senate was proposed by the chairman of the ad hoc committee, Dr. Lawrence Jones of Commerce and Business Administration.

- To assist in the implementation of the recommendation for a minimum two-day study period in the December period, the President's Standing Committee on Registration be requested to consider means of completing course registration prior to Labor Day.

Postponed for discussion until the December Senate meeting was a motion calling for final exam schedules for December and April to be made available to students prior to course registration for the academic year.

A motion requesting the administration to institute an examination of the appropriateness of the standard time sequences presently utilized for course scheduling was withdrawn by Dr. Jones when President Douglas Kenny, Senate's chairman, said he had already initiated such a study.

He told Senate a review of course scheduling had not been carried out at UBC for 12 years and described lecture scheduling in some faculties as "sheer anarchy."

Pending the findings of the lecture schedule review, Dr. Jones said he would defer a motion from the ad hoc committee calling for exam scheduling to be based on a scheduling method in which exam groups are populated by courses with common times in the course timetable.

Senate has referred back to its Committee on Student Awards a policy statement on the terms or conditions under which the University would accept awards for financial aid to students.

Convocation Senator J.F. McWilliams, who chairs the student awards committee, reminded Senate that there had been repeated discus-

sions at Senate meetings regarding awards that gave preference to or appeared to discriminate for or against one group of students or another.

The committee proposed that the following statement be approved by Senate and included in all relevant University publications including the Calendar:

"In B.C., human rights legislation does not rule out affirmative action in regard to University awards. Never-

theless, the Senate may decline awards to be adjudicated by the University, which contain criteria that are contrary to the interests of the University as an academic institution. Normally, this would include criteria such as color, creed, national origin, race and sex."

Senate asked that the committee reconsider the policy statement in the light of the Senate discussion as well as a section of the report defining a full-time student for scholarship purposes.



Bob Black

AAPS gets new prexy

Bob Black, a 24-year employee of UBC, has been elected president of the campus Association of Administrative and Professional Staff.

Black, who is an area supervisor for the Department of Physical Plant, is a former president of the UBC local of the Canadian Union of Public Employees.

He succeeds Olga Leland, UBC's communications supervisor, who is also an employee of Physical Plant.

Other members of the new AAPS executive are: Rayleen Nash, Graduate Studies, first vice-president; John Connell, Registrar's Office, second vice-president; Fran Takemoto, Finance, treasurer; and June Prenty, School of Nursing, secretary.

Members-at-large on the executive are: Phil Sawkins, Physical Plant; Jo Ann Hinchliffe, Physical Education and Recreation; Peter Davern, Education; and Rene Davis, TRIUMF.



Chris Niwinski

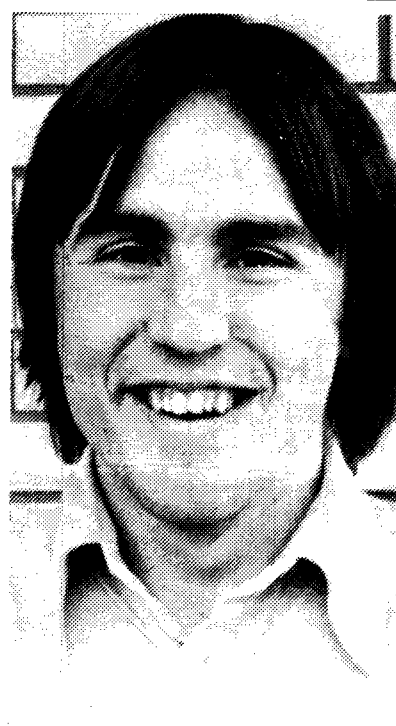
AWARDS

Continued from page 1

graduate student Chris Niwinski.

Mark Crawford, winner of the Sherwood Lett award, is a member of the AMS Students' Council and has worked on a number of committees with the council.

He has also been involved in many



Mark Crawford

public service activities, both on and off campus, including an involvement this summer with a provincial track meet for mentally handicapped people held in Victoria.

He participates in several organizations concerned with parliamentary issues in Canada, and plans a career in the area of public policy analysis and formulation.

Barbara Johnstone, the Harry Logan award winner, completes her degree in Poultry Science this year, and plans to do graduate work at UBC in the field of poultry nutrition.

She has been active in the Agriculture Undergraduate Society and is currently serving as president of the group. She has been involved for several years with 4-H in the Fraser Valley, winning prizes for both showing animals and judging.

The recipient of the Amy Sauder award, Chris Niwinski, is working on his Master's degree in Civil Engineering. His contributions to the University community include work on several committees during his two terms on the AMS Students' Council, and three terms as student member on the University Senate.

After graduation he hopes to continue his involvement with Senate by seeking election through Convocation.

BURSARY FUNDS

Continued from page 1

for next year, our tuition fees will still be well below 10 per cent of our operating costs. Only a very few Canadian universities will have lower fees, and none of them comes close to UBC on student aid," Dr. Kenny said.

"It is the policy of this University that any person who meets the academic requirements should not be kept out for financial reasons."

According to figures published by the Canadian Association of University Business Officers (CAUBO) for 1978-79, the most recent year tabulated, the lowest tuition fees as a percentage of cost were in Quebec. UBC was the lowest for the rest of Canada, at 9.09 per cent. The percentage at UBC dropped to 8.69 in 1979-80 and to 8.59 for the current academic year, even though fees went up in September.

Plans pondered to avert looming library crisis

Two options for new construction aimed at averting a looming crisis for UBC's library system are currently under intensive study by a number of University bodies.

If all goes well, these groups will complete their work over the next two months and further recommendations will be considered by UBC's Board of Governors when it holds its first meeting of the new year on Feb. 3.

The recommendations will reach the Board through President Douglas Kenny, who is being advised by a 33-member committee he established in 1979 to grapple with the problem of library space requirements. It's chaired by Prof. Peter Larkin, dean of the Faculty of Graduate Studies.

That committee submitted an interim report to President Kenny last May, having come to the conclusion that if the present rate of acquisition of books and other materials continues, the existing library system would be full before the end of this decade.

The Larkin committee recommended an immediate start on a building program designed to meet the needs of the library system until the end of this century.

President Kenny lost no time in acting on the interim report. He ordered the University's Department of Facilities Planning to carry out technical studies to provide more detailed information on the feasibility and costs of two construction plans broadly outlined in the interim report. The Larkin committee was asked to make priority recommendations in the fall based on the technical studies.

The Larkin committee identified two construction options — labelled Plan A and Plan B — which were selected from a total of five plans proposed by facilities planning.

Central to both the options preferred by the Larkin committee is the basic reconstruction of UBC's Main Library, a rambling, mazelike structure, which has had two wings and an eight-storey book-stack area added to it since the central, stone-faced unit was built in 1924-25.



Picture by Jim Banham

Two proposals for new library construction at UBC, currently under study, call for demolition of the north and south wings and eight-storey bookstack area at rear of the Main Library. A proposed new six-storey structure would be built in stages around the central "heritage" section, a campus landmark since 1924-25.

The building now fails to meet National Building Code and Fire Code standards. A study carried out in 1979 found that if the Main Library was upgraded to meet the standard of both codes, the result would be a loss of 60,000 square feet of floor area, a worsening of existing space problems and a severe disruption of library service.

The Larkin committee proposals call for the demolition of the north and south wings and the stack area and construction of six floors of new space that would provide for efficient use of the book and other collections housed in the building. The original, stone-faced section of the building would be retained as a "heritage" structure, but would be extensively renovated to conform to the surrounding rebuilt structure.

Plan A — the one which appears to have the edge in the deliberations now taking place — is based on the concept of the centralization of library services and calls for construction of two new sub-surface wings on either side of the Ladner Clock Tower linking the Main and nearby Sedgewick

Library, a sub-surface building under the Main Mall of the campus. This, of course, in addition to the demolition and reconstruction of the Main Library outlined above.

The Larkin committee has come down on the side of this plan "largely on the argument that centralization of library services is desirable from the subjective perspective of users," and because it would probably lead to the greatest economy of operation and contribute to the long-term need for revitalizing the inner campus core.

Plan B, which is based on the concept of a partial decentralization of library services, is predicated on the construction of a new science library as well as the demolition and reconstruction on the Main Library.

The new science library is proposed for the site now occupied by the movable, wooden buildings that house the Institute of Animal Resource Ecology on the Main Mall immediately south of the Biological Sciences Building.

An integral part of Plan B is also the reconstruction of the Main Library in stages, the final phase of

the work being extensive renovation of the heritage section.

However, reconstruction of the Main Library will still require construction of a small-scale structure in front of that building. This, together with the construction of a new Science Library, will enable the divisions presently housed in the Main Library to be moved into the new structures so that reconstruction of the Main Library can proceed by stages.

The small-scale structure proposed under Plan B will also provide additional permanent space to meet the long-term needs of the Main Library.

A similar timetable for reconstructing the Main Library would also apply under Plan A, with divisions now housed in that building moving into the proposed wings linking the Sedgewick and Main Libraries while the phased rebuilding of the Main Library proceeds.

Plan A continues to gather support. The latest endorsement of it came last week from the President's Committee on Land Use, one of the bodies that has been taking a close look at the Larkin committee proposals.

Prof. Roy Taylor, chairman of the land use committee and director of the UBC Botanical Garden, said there's general agreement that Plan A is the way to go, providing adequate provision is made to ensure that the integrity of the area around the Main Library is preserved through extensive landscaping, although not necessarily in its present form.

The land use committee also wants one aspect of the Plan B retained — the designation of the site now occupied by the Institute of Animal Resource Ecology for future library construction.

This reinforces the view expressed by the Larkin committee in its fall report that in the long run both of the construction options outlined in Plans A and B may ultimately be needed to serve an expanding campus population. All that's left to decide is which should come first.

Benefactors give UBC more than \$9.5 million

Benefactors donated more than \$9.5 million to the University in the 1979-80 fiscal year.

The total includes gifts from corporations, associations, foundations and individuals for student aid, research, construction and teaching.

Included in the total is nearly \$500,000 from UBC students for debt retirement on funds borrowed to construct the Aquatic Centre, the Student Union Building and an addition to the Graduate Student Centre.

Since 1928, UBC students have contributed more than \$6.6 million to fund or aid in the funding of 12 major campus buildings, including Brock Hall, the War Memorial Gymnasium, the Place Vanier Residence and the Thunderbird Winter Sports Centre.

More than half the 1979-80 total from benefactors, nearly \$5.5 million, was for the support of UBC research and nearly \$2.4 million was earmarked for financial aid to students. Just over \$1.4 million was given to aid various UBC construction projects.

The total also includes \$456,308 generated by the UBC Alumni Association through its annual Alumni Fund appeal.

UBC was also named as a beneficiary in the wills of 35 persons in 1979-80. The total value of the bequests, some of them from UBC graduates, was \$1,259,780.

Details on private giving to the University in 1979-80 are contained in the booklet "Creative Giving," issued by the University's Resources Office.

In a message in the booklet ad-

ressed to "our friends in the community," UBC's president, Dr. Douglas Kenny says continuing support from individuals and the business community reflects "continuing confidence in the work of the University."

He adds: "In giving to the University, donors have the satisfaction of knowing that they are contributing to the creation of one of Canada's leading centres of excellence."

Lecture series honors UBC geographer

The fifth in a series of eight symposia honoring the Arctic research achievements of Prof. J. Ross Mackay of UBC's Department of Geography will be held next Wednesday (Nov. 26) at 8:00 p.m. in Room 100 of the campus Geography Building.

The symposium, which began in September, has the general title "Frozen Northlands: Exploration and Development." Next Wednesday's speaker will be Prof. William Mathews, a long-time member of UBC's geological sciences department and colleague of Prof. Mackay, whose topic will be "On Scientific Method of J. Ross Mackay."

For the past 30 years, Prof. Mackay, who retires in June, 1981, has been studying the permafrost which underlies half of Canada and other aspects of the geology of the western Canadian Arctic, particularly the area of the delta of the Mackenzie River.

He has been widely honored for his

work, which made fundamental contributions to the classification of ground ice, to the understanding of its growth, and to the Arctic landforms that result from sub-surface ice.

Hansen rolls to raise money

Rick Hansen, world-ranked wheelchair athlete in track and field and a fourth-year physical education student at UBC, will be out to raise money for his provincial sport governing body and fellow athletes on Saturday, Nov. 29.

Hansen will propel his wheelchair 20 miles through the UBC Endowment Lands in aid of the B.C. division of the Canadian Wheelchair Sports Association. Hansen started his "Rickathon" last year and completed the route in one hour, 51 minutes. He hopes to better that time in 1980.

Hansen will start from the south plaza of SUB at 12 noon on Nov. 29 and will travel to Shaughnessy Golf Course via Wesbrook Mall, Thunder-

The development of interest in exploitation of Arctic resources has made Dr. Mackay's work of great practical significance for northern engineering and environmental studies.

bird Boulevard, West Mall and Southwest Marine Drive. He'll follow virtually the same route back to SUB, except that he'll travel along University Boulevard on the return leg as far as Acadia Road.

Pledges to the "Rickathon" should be sent to the Canadian Wheelchair Sports Association, 1200 Hornby St., Vancouver, V6Z 2E2. Call 687-3333, local 290, for further information.

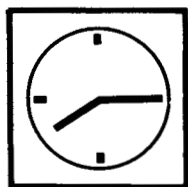
Hansen set a new world record for the 800 metres in the 1979 Orange Bowl wheelchair games held in Miami, Florida, finishing nine minutes ahead of the second-place finisher. He also plays basketball and volleyball in a wheelchair.

UBC Calendar

UBC CALENDAR DEADLINES

Events in the week of:
 Nov. 30 to Dec. 6 Deadline is 5 p.m. Nov. 20
 Dec. 7 to Dec. 13 Deadline is 5 p.m. Nov. 27
 Send notices to Information Services, 6328 Memorial Rd., (Old Administration Bldg.), Campus. For further information call 228-3131.

THE VANCOUVER INSTITUTE



SATURDAY, NOV. 22
 Prof. Anthony S. Arrott, chairman, Physics, SFU, on *Pattern and Rhythm in Physics and Art*.
SATURDAY, NOV. 29
 Dr. J.G. Souther, Geological Survey of Canada, Vancouver, B.C., on *The Volcanoes Around Us*.
 Both lectures in Lecture Hall 2, Woodward Instructional Resources Centre at 8:15 p.m.

MONDAY, NOV. 24

- 8:30 a.m. **CITY WIDE EPILEPSY ROUNDS.** Dr. Kevin Farrell on *An Unusual Case of Epilepsy*; and Dr. Esther Strauss on *Fear Responses in Patients With Temporal Lobe Epilepsy*. Rooms G53 and G55, Woodward Instructional Resources Centre.
- 12:30 p.m. **ASIAN RESEARCH LECTURE.** Ross Francis, Canadian High Commissioner to Malaysia, on *Canada and Malaysia*. Room 117, East Mall Annex.
- WORLD UNIVERSITY SERVICES OF CANADA Film.** The sixth in this series is *This Bluddy Blundering Business*. Room 205, Buchanan Building.
- 3:30 p.m. **INTERNATIONAL RELATIONS TRADE PROJECT Seminar.** David Dunsford, Office of the U.S. Trade Representative, on *Canada/U.S. Trade and Investment Issues*. Penthouse, Buchanan Building.
- 3:45 p.m. **APPLIED MATHEMATICS SEMINAR.** Dr. Lawrence Mysak, Mathematics and Oceanography, UBC, on *Barotropic Instability of Flow Along a Trench*. Room 203, Mathematics Building.
- 4:00 p.m. **BIOCHEMICAL SEMINAR.** Dr. Juliet Benbasat, Biochemistry, University of Minnesota, Saint Paul, on *The Assembly of Bacteriophage T4: Application of Quasielastic Light Scattering*. Lecture Hall 3, Woodward Instructional Resources Centre.
- 4:30 p.m. **ZOOLOGY "PHYSIOLOGY GROUP" Seminar.** Dr. Blake Reeves, Physiology, SUNY, Buffalo, N.Y., on *Oxygen Transport By Avian Blood*. Room 2449, Biological Sciences Building.
- 8:00 p.m. **IMMUNOLOGY SEMINAR.** Dr. Joachim Deeg, Medicine, University of Washington, Seattle, on *Graft Versus Host Disease and Graft Rejection in Bone Marrow Transplantation*. Music Room, Faculty Club.

TUESDAY, NOV. 25

- 12:30 p.m. **ACADEMIC WOMEN'S ASSOCIATION Network.** Eileen Hendry provides a brief history and analysis of the concept of networking; the development of women's networks in Canada and the U.S.; and the role of networks at UBC. Non-members welcome. Penthouse, Buchanan Building.
- UKRAINIAN SEMINAR-TRAVEL Lecture Series.** Frances Swyripa on *Patriotism on the Home Front — Ukrainians in W.W.I.* Room 212, Buchanan Building.
- BIOMEMBRANE SEMINAR.** Dr. Joseph Goren, Biochemistry, University of Calgary, on *Use of Difunctional Reagents in the Study of Membrane-Associated Events of Insulin Action*. Lecture Hall 4, Woodward Instructional Resources Centre.
- ASIAN RESEARCH NOON-HOUR SERIES** presents a film: *Exploding Cities*. Room 106, Buchanan Building.
- BOTANY SEMINAR.** Dr. Gaby Pfyffer, Botany, University of Zurich, Switzerland, on *Identification and Systematic Distribution of Ayclic Polyols in Fungi*. Room 3219, Biological Sciences Building.
- 1:30 p.m. **ELECTRICAL ENGINEERING SEMINAR.** Dr. L. Snider, manager, Electrical Engineering Department, B.C. Hydro Research and Development, on *The Electrical Research Program at B.C. Hydro's New Research and Development Facility*. Room 402, Electrical Engineering Building.
- 3:30 p.m. **OCEANOGRAPHY SEMINAR.** Dr. Andrew J. Willmott, post-doctoral fellow, Oceanography, UBC, on *Forced Trench Waves*. Room 1465, Biological Sciences Building.
- 4:00 p.m. **COMPUTER SCIENCE COLLOQUIUM.** Dr. Subrata Dasgupta, Computer Science, University of Alberta, on *The Form and Description of Computer Architectures*. Room 301, Computer Sciences Building.
- 4:30 p.m. **CHEMISTRY RESEARCH SEMINAR.** Dr. H. Wennerstrom, Chemical Center, Lund Institute of Technology, on *Surfactant-Water Systems: An Overview*. Room 250, Chemistry Building.
- 7:30 p.m. **INTERNATIONAL HOUSE General Meeting.** All members urged to attend. Upper Lounge, International House.
- 8:00 p.m. **STAGE BAND** with Gary Guthman, director. Old Auditorium.

WEDNESDAY, NOV. 26

- 12 noon **PHARMACOLOGY SEMINAR.** Dr. Pierre Dow, Anatomy/Dentistry, UBC, on *The Muscle Spindle*. Room 114, Block C, Medical Sciences Building.
- 12:30 p.m. **WEDNESDAY NOON-HOUR CONCERT** with the Chelys Consort. Peter Hallifax, Nan Mackie and John Sawyer, viola da gamba; and Mark Wardenburg, violin, theorboe, perform *Music of Jenkins, Simpson and Ferrabosco*. Recital Hall, Music Building.
- SIMULATION AND MODELLING IN SCIENCE.** Dr. Brian Seymour, Mathematics, UBC, on *Traffic Flow: A Simple Example of a Nonlinear Wave*. Room 105, Mathematics Building.

WEDNESDAY, NOV. 26 (Continued)

- 3:30 p.m. **GEOGRAPHY COLLOQUIUM.** Prof. Robert Geipel, Technical University, Munich, on *Reconstruction Following Natural Disasters: The Recent Earthquakes in Friuli, Italy*. Room 201, Geography Building.
- CHEMICAL ENGINEERING SEMINAR.** J. Hatton, PAPRICAN, on *Alkaline Anthroquinone Pulping*. Room 206, Chemical Engineering Building.
- ECONOMICS THEORY SEMINAR.** Ron Harstad on *Taxation, Monetary Policy and the Equity-Efficiency Tradeoff*. Room 351, Brock Hall.
- 4:30 p.m. **COMPARATIVE LITERATURE LECTURE.** Albert S. Cook, Brown University, on *The Plastic Image: Rilke, Pound, Arp*. Penthouse, Buchanan Building.
- 7:00 p.m. Fourth of five television dialogues on the topic *Jews and Christians: Past, Present and Future* by Prof. William Nicholls and Dr. Moshe Amon, both of the Department of Religious Studies, UBC. The series will explore Christian-Jewish relationships through the ages. Repeated on Thursday, Nov. 27, at 1 p.m. Channel 10, Vancouver Cablevision.
- 8:00 p.m. **MACKAY LECTURE SERIES.** William H. Mathews, Geological Sciences, UBC, on *Scientific Method of J. Ross Mackay*. Room 100, Geography Building.

THURSDAY, NOV. 27

- 9:00 a.m. **MEDICAL GRAND ROUNDS.** Dr. Robert G. Evans, Economics, UBC, on *Demography, Dollars and Doctors: Exercise in Future History*. Lecture Hall B, VGH.
- 12:30 p.m. **UBC CONTEMPORARY PLAYERS.** Stephen Chatman, director, and Gilles Tremblay, guest composer, with *Music of Tremblay, Cage and Erb*. Recital Hall, Music Building.
- WOMEN'S STUDIES PROGRAM Visiting Speakers Series.** Dr. Kirsten Drotner, English, University of Aarhus, Denmark, on *The History of Childhood: Freedom or Repression?* Room 202, Buchanan Building.
- INDUSTRIAL RELATIONS MANAGEMENT Seminar.** Prof. Ronald N. Taylor, Commerce, UBC, on *Research Issues in Problem Finding*. Penthouse, Angus Building.
- EXPLORING THE NATURE OF EVIL Lecture Series.** Anthony Podlecki, Classics, UBC, on *Evil and Greek Tragedy*. Room 215, Student Union Building.
- 12:45 p.m. **HEALTH CARE AND EPIDEMIOLOGY Seminar.** Dr. A.S. Arneil, chairman, Health Officers Council, on *B.C. Health Officers Council: Its Role in Health Policy Making*. Room 146, Mather Building.
- 2:30 p.m. **PHYSICS CONDENSED MATTER SEMINAR.** Chuck Irwin, SFU, on *Raman Scattering Studies of Intercalation Compounds*. Room 318, Hennings Building.
- 3:30 p.m. **IMMUNOLOGY SEMINAR.** Dr. L.M. Ching, Biostructure, University of Washington, Seattle, on *Generation of Cytotoxic T Cells From T Cell Colonies*. Room 127, Westbrook Building.
- 4:00 p.m. **BIOCHEMISTRY SEMINAR.** Dr. Ross MacGillivray, Biochemistry, University of Washington, Seattle, on *Studies of the Prothrombin Gene*. Lecture Hall 3, Woodward Instructional Resources Centre.
- PHYSICS COLLOQUIUM.** Dr. H.V. Warren, Geological Sciences, UBC, on *Geology and Medicine*. Room 201, Hennings Building.
- 4:30 p.m. **CHINA SEMINAR.** Dr. Dan Overmyer, Asian Studies, UBC, on *The White Cloud Sect in Sung and Yuan China*. Penthouse, Buchanan Building.
- ZOOLOGY SEMINAR.** Dr. J.D. Berger, Zoology, UBC, on *Through the Cell Cycle With Gene and Microscope — The Regulation of DNA Content: Cell Size and Growth Rate in Paramecium*. Room 2000, Biological Sciences Building.
- 7:00 p.m. **SUBFILMS** presents *Meatballs*. Continues until Dec. 3. Showings at 7:00 p.m. Thursday, 7:00 and 9:30 p.m. Friday and Saturday, 7:00 p.m. Sunday. Admission is \$1. Auditorium, Student Union Building.
- 7:30 p.m. **CUSO INFORMATION NIGHT.** Returned volunteers from Papua New Guinea will present a slide-tape show. Recruitment information will be available. Upper Lounge, International House.
- 8:00 p.m. **CENTRE FOR CONTINUING EDUCATION Lecture Series on The World As A Machine: Science and Human Values.** Dr. Andrew Thompson, director, Westwater Research Institute, UBC, on *Alternative Energies vs. the Technological Fix*. Room 202, Buchanan Building. \$6 at door.

FRIDAY, NOV. 28

- 9:00 a.m. **PAEDIATRIC GRAND ROUNDS.** Dr. B. McGillivray and Dr. D. Shaw, Genetics and Obstetrics and Gynaecology, UBC, on *Prenatal Screening: Recent Advances*. Lecture Hall B, Heather Pavilion, VGH.
- 12:30 p.m. **B.C. MENTAL RETARDATION INSTITUTE Lecture.** Dr. John Lord, consultant, National Institute on Mental Retardation, on *Social Integration of Handicapped Persons: The Role of Advocacy and the Professional*. Lecture Hall 5, Woodward Instructional Resources Centre.
- ILLUSTRATED LECTURE** sponsored by the Department of Hispanic and Italian Studies. Prof. Leslie James Woodward, Hispanic Studies, University of St. Andrews, Scotland, on *Dissident Painters of Imperial Spain: Velazquez and El Greco*. Room 203, Buchanan Building.
- BOTANY SEMINAR.** Dr. Michael J. Wynne, Botany, University of Michigan, on *New Marine Algae in Alaska and British Columbia*. Room 3219, Biological Sciences Building.
- DEVELOPMENTAL MEDICINE SEMINAR.** Dr. J. Emmerman, Centre for Developmental Medicine, UBC, on *Combination Endocrine Therapy and Chemotherapy in Treatment of Breast Cancer*. First Floor, Willow Pavilion Lecture Hall, VGH.



UBC men's and women's swim teams meet the University of Victoria. See Saturday, Nov. 29, at 2 p.m.

FRIDAY, NOV. 28 (Continued)

- 1:00 p.m. **MANAGEMENT SCIENCE SEMINAR.** Prof. Uri Ascher, Computer Science, UBC, on *Nonlinear Equations and Unconstrained Optimization in Differential Problems*. Penthouse, Angus Building.
- MEDICAL GENETICS SEMINAR.** Drs. T. Pantzar, D. Kalousek and F. Dill on *Cytogenetic Case Presentations*. Fourth Floor Conference Room, Health Centre for Children.
- 3:30 p.m. **MUSIC LECTURE.** Bernard Lagace, organist, on *J.S. Bach's Art of the Fugue*. Recital Hall, Music Building.
- LINGUISTICS COLLOQUIUM.** Prof. John Gilbert, Audiology and Speech Science, UBC, on *Atrocious Spelling: Does It Tell Us Anything About Language?* Room 2225, Buchanan Building.
- 8:00 p.m. **AN EVENING OF OPERA.** French Tickner directs *Music of Mozart, Verdi, Puccini, Massenet and Berg*. Old Auditorium.
- ILLUSTRATED LECTURE** sponsored by the Centre for Continuing Education. Barbara Honegger, research associate in theoretical parapsychology, Washington Research Center, San Francisco; president of the Parapsychology Research Group; and author of the forthcoming book *Coins in the Grass: The Secret of Synchronicity*, on *Synchronicity: Creating Reality in the Waking Dream*. Lecture Hall 6, Woodward Instructional Resources Centre. Admission \$5; students \$4. For further information, call 228-2181, local 261.
- SATURDAY, NOV. 29**
- 9:30 a.m. **PERIODICAL WRITERS WORKSHOP**, a two-day workshop sponsored by the Centre for Continuing Education for non-fiction writers who want to sell to popular magazines. Workshop continues until 5 p.m. Saturday and Sunday with writer/editors Paul and Audrey Grescoe. Participants must submit a manuscript of at least 1,000 words a week before the course. For information, call 228-2181, local 221.
- 2:00 p.m. **SWIMMING.** Dual meet between UBC and the University of Victoria. Men's and women's swimming and diving events until about 5 p.m. UBC Aquatic Centre.
- 8:00 p.m. **AN EVENING OF OPERA.** French Tickner directs *Music of Mozart, Verdi, Puccini, Massenet and Berg*. Old Auditorium.
- 8:30 p.m. **EARLY MUSIC RECITAL**, sponsored by the VSEM in conjunction with the Music department. Bernard Lagace, organ, performs *J.S. Bach's Art of the Fugue*. Recital Hall, Music Building.

CIRCUIT AND WEIGHT ROOM

Users of the circuit and weight room in the War Memorial Gymnasium are asked to note that these facilities are open only at the following hours: Monday - 8 a.m.-11 p.m.; Tuesday, Wednesday, Thursday and Friday - 8 a.m.-8 p.m.; Saturday - 12 noon-11 p.m.; Sunday - 12 noon-5 p.m. The facilities may be used by students, staff and faculty only upon presentation of a UBC Library card or a Recreation UBC card.

WORLD UNIVERSITY SERVICES OF CANADA

The WUSC seminar will be held in Ecuador next summer from July 11 to Aug. 28. The seminar is open to students from any Canadian university campus. For further information, call Michael Sayers, 732-9690, or come to the WUSC weekly meetings at lunchtime on Mondays (see calendar listings).

PSYCHOLOGY EXPERIMENTS

We need right-handed male volunteers to participate in experiments on verbal memory. The study takes about one hour to complete and includes filling out a questionnaire package. Subjects will be paid \$5 and complete feedback will be provided. For information, call Jeff or Sandy at the UBC Psychophysiology Lab at 228-2756.

STUDENT INTERNATIONAL EXCHANGE

Third- and fourth-year Engineering, Forestry, Agricultural Sciences and Science students are invited to apply for I.A.E.S.T.E. — International Association for the Exchange of Students for Technical Experience. For information, call 228-3022, or visit the Co-op/Internship Office in Room 213 of Brock Hall.

SKATING LESSONS

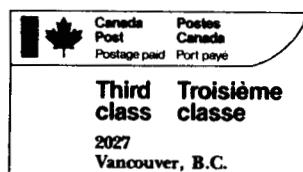
UBC's Community Sport Services offers the following classes: Basic and elementary skating classes for children and adults. Eight Saturdays beginning Nov. 29. Adult hockey skill development classes. Eight Thursdays (evenings) beginning Dec. 4. For further information and brochures, call 228-3688.

DENTAL HEALTH KIT

A kit containing dental health education materials for kindergarten to grade three pupils is available for loan. For information, call Karin Sipko, 228-3228.

NITOBE GARDEN HOURS

After Nov. 10: Weekdays - 10 a.m. to 3 p.m. Closed weekends.



The Librarian,
 Special Collections Division,
 Main Library,

CAMPUS