SPECIAL COLLECTIONS

New UBC initiatives taken to improve accessibility

The University of B.C. has taken another series of initiatives in its long-range plan to improve accessibility to post-secondary education for B.C. high school students.

The program, to be carried out over the next five years at an estimated cost of $159,000, includes:

- An expanded information program about UBC directed at all B.C. high schools and the development of special material aimed at low-income students; and
- A pilot project to be carried out in five B.C. high schools chosen because of their low "participation rate" in higher education and because their students do less well than those from other schools in terms of the award of University grants and bursaries.

"Participation rate" is a term used to indicate the percentage of students who elect to enrol at a university following graduation from high school. A school with a low participation rate sends few of its students to university, while one with a high rate sends many more graduating students to university.

A major aim of the pilot project will be to determine why some students elect to enrol at university, while others do not.

The pilot program will begin this summer with a workshop for representatives of the five high schools, who will meet on the campus with UBC staff and other experts.

Prof. Erich Vogt, UBC's vice-president for faculty and student affairs, said the purpose of the workshop would be to provide the high school representatives with information about the University and to get their advice on the best method of communicating with students on opportunities for post-secondary education.

"There have been some studies that indicate that students make a decision about going on to university in grades eight and nine," Prof. Vogt said. "We'd like the advice of the representatives from the five high schools on that so we can develop appropriate material for students."

He added that the suggestions resulting from the workshop sessions will be incorporated into materials that will be sent to all B.C. high schools.

Another aspect of the pilot project will be the provision by UBC of special $750 bursaries for two students in each of the five high schools. They will be awarded to competent students, to be identified by the high schools, who might not normally have the financial resources to go to university.

UBC's expanded program of information to all B.C. high school students will include both audio-visual and printed materials. Film and audio-visual cassettes will be made available on loan to high schools or school district resource centres, and a revitalized admissions guide to the University will be prepared.

UBC is also considering a toll-free telephone link between B.C. high schools and UBC departments that provide services to students for the purpose of providing information to prospective students and high school officials.

Other aspects of the plan approved by the UBC Board of Governors would involve visits to the campus by grade eight and nine students as well as visits by UBC students to their former high schools to provide information to prospective students on campus life and academic programs.

High school counsellors, particularly those involved with students at the grade eight and nine levels, will be invited to attend a UBC-sponsored orientation conference.

At its February meeting, UBC's Board of Governors took the first step in a plan to improve accessibility to the University for low-income students.

It approved the addition over the next five years of a total of $250,000 to University bursary funds, bringing to $450,000 the amount available annually to aid low-income students or to supplement financial awards made by the B.C. Student Assistance Program of the provincial government.

The object of this move was to ensure that low-income B.C. students will have enough money to cover basic expenses while studying full-time at UBC.

UBC reports

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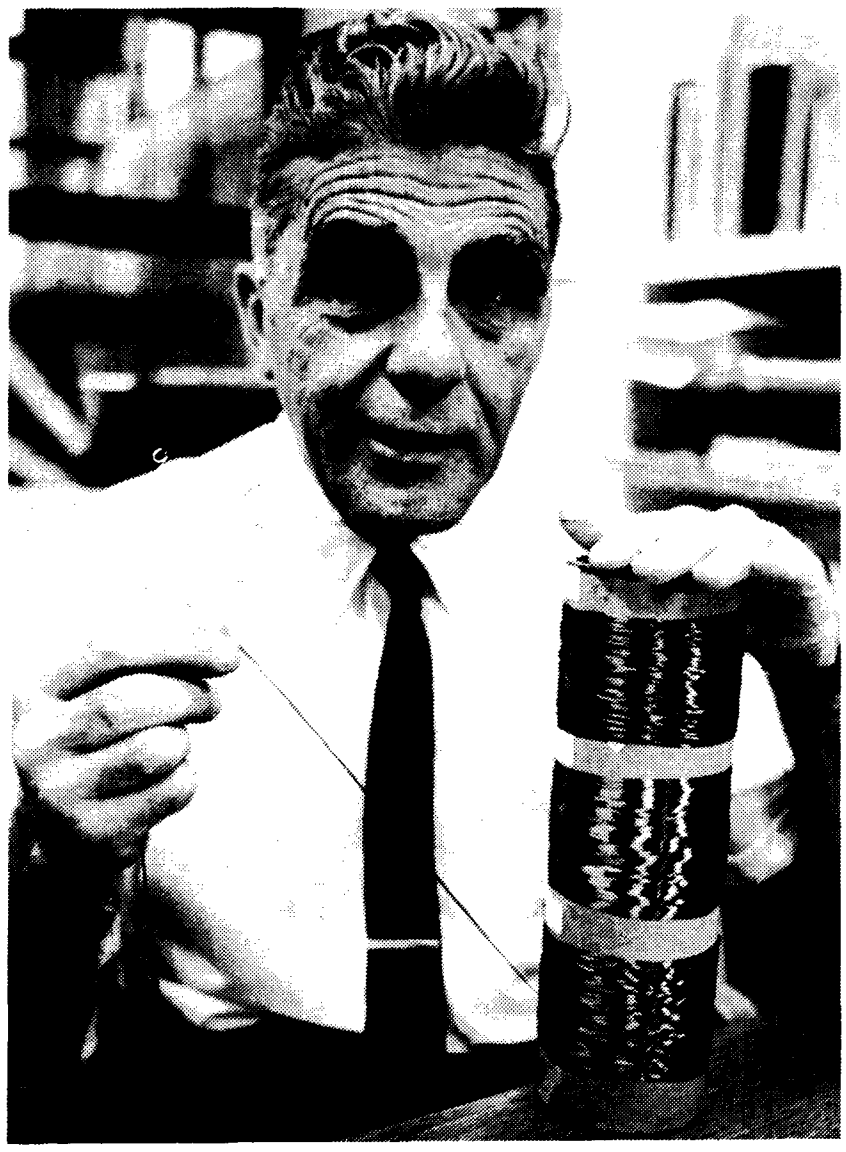

Picture by Jim Banham

Key figure in revival of interest in carbon chemistry is UBC professor of chemistry Dr. Gil Hooley, shown with roll of carbon fibres he uses for experiments in his laboratory on equipment he devised and made himself.

UBC carbon chemist to receive top award

Prof. J. Gilbert "Gil" Hooley, who says he likes to "get his hands dirty" in his tiny research laboratory on the third floor of the UBC Chemistry Building, will receive one of the top honors of the American Carbon Society in June.

He'll receive the Charles E. Pettinos Award before an international audience during the 14th biennial Conference on Carbon at Pennsylvania State University June 24-29 for "continued pioneering contributions" to a long-neglected area of carbon research. The award carries with it a cash prize of $1,000 and a plaque citing Dr. Hooley's achievements.

The award climaxes a 37-year teaching and research career, which began in 1942 when Dr. Hooley returned to the UBC campus after obtaining his Ph.D. at Massachusetts Institute of Technology and serving a three-year stint as a research chemist at Corning Glass Works in New York state. Before going to MIT he received his bachelor and master of arts degrees at UBC in 1934 and 1936.

Prof. Hooley says the research for which he will be honored began in

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See CARBON

Pediatrics department head named

Dr. Robert M. Hill, a specialist in the treatment of arthritis in children, has been named head of the Department of Paediatrics in the University of B.C.'s Faculty of Medicine.

Dr. Hill, 52, has been acting head of the department since the resignation in June, 1977, of the late Dr. Sydney Israels, who died suddenly in July, 1978.

In addition to his association since 1961 with the UBC medical school, Dr. Hill has been medical director at Sunnyhill Hospital in Vancouver since 1963 and director of the children's arthritis program of the Canadian Arthritis and Rheumatism Society since 1964.

Dr. Hill entered private pediatric practice in Vancouver in 1960 after serving for a year as chief resident in pediatrics at the Vancouver General Hospital. He continued in private practice and was a member of the clinical staff of the UBC pediatrics department until 1971, when he joined the UBC department on a full-time basis.

Dr. Hill was educated at Oxford University in England, where he was awarded the degrees of Bachelor and Master of Arts as well as his medical degree. He served with the British army in Singapore from 1952 to 1954, when he returned to England for post-graduate work in obstetrics.

He took his specialty training in Boston, Mass., where he was on the staff of the Children's Hospital there as an out-patient fellow and a resident in pediatrics. He was also a research fellow in Boston's Children's Cancer Research Foundation.

Dr. Hill has been active in professional organizations and has served on professional advisory committees to a number of B.C. organizations. He is a past president of the B.C. Paediatric Society and the B.C. Neurological Association and has served on the advisory committee of CARS, the Cerebral Palsy Association of the Lower Fraser Valley and the Kinsmen Rehabilitation Foundation.

Architect named

UBC's Board of Governors has approved the appointment of the Vancouver firm of Reno C. Negrin and Associates as architects for the new building to house the Department of Psychology.

Estimated 35,000 at Open House

An estimated 35,000 visited the campus March 2 and 3 for UBC's triennial Open House.

Observers said they thought attendance was down somewhat from the previous Open House in 1976 and attributed the decline to inclement weather.

UBC President Douglas Kenny said he wanted to acknowledge the efforts of everyone who participated in Open House.

"There is no doubt that exhibits were superior to previous Open Houses," Dr. Kenny said.

"I would like to express my appreciation for the hard work of students, faculty and staff whose efforts made Open House a success.

"It is only through the efforts of members of the University community that such a large and important undertaking can be accomplished."

Service reduction rejected

Next year it will cost students more to live in residence, have an exam reread, write a "supp," and get a duplicate library card.

UBC's Board of Governors, at its March meeting, approved increases in rental and room-and-board rates for campus residences as well as incidental fees for a range of services administered through the Registrar's Office.

Students living in UBC's three single-student residences — Place Vanier, Totem Park and Walter Gage — were this year offered the option of no increase in rates if they agreed to a reduction of services provided by UBC's housing office.

Opinions expressed at public meetings and in a survey conducted in the residences indicated that students would rather have an increase in rates than a reduction in services.

The new rates in single-student residences, which are effective May 1, provide for a room-rate increase of 8.6 per cent at Place Vanier and Totem Park, where full room and board are provided, and an 8.9 per cent increase at the Walter Gage Residence, where room only is provided.

A 10-per-cent increase in the meal rate at Totem Park and Place Vanier will raise the daily rate to $3.66 from $3.33 a day.

Similar percentage increases will apply for student room rates during the 1979 summer session.

A six-per-cent increase in rental rates will become effective Sept. 1 for accommodation in family residences in Acadia Park and Acadia Camp.

UBC's registrar, Jack Parnall, said the increases in incidental fees for services provided by his office are intended to reflect the actual cost of providing the services.

Here is a list of the services and the new rates (figures in brackets are the increases approved by the Board of Governors):

Application fee for out-of-province students requiring document assessments — $20($5 increase); provision of duplicate library cards — $5($1 increase); fee for rereading examination papers — $20($5); on-campus supplementals — $20($5); off-campus supplementals — $25($5); off-campus deferred exams — $15($5); special supplemental exams — $50($10); special exams — $35($5); fee for provision of first transcript of marks (no change in 50-cent charge for second transcript) — $3($1); late registration fee for winter session — $35($5); late registration fee for summer session — $35($10).

Revenue from all these incidental fees totalled $126,711.45 in the 1977-78 academic year. The increases will result in an estimated revenue increase of $38,950 in 1979-80.

UBC's Board of Governors also approved a $25 fee to be paid by students from other universities who pay short-term visits to the Faculty of Dentistry to attend lectures and observe academic work.

The fee will provide for the use of library facilities, the use of facilities operated by the Dental Students' Association and the provision of accident liability.

Students entering third-year Agricultural Sciences who are required to take part in a pre-winter session field trip will each pay $115 in 1979-80, an increase of $15 over previous years.

Picture by Jim Banham

Climax of Englebert Humperdinck opera *Hansel and Gretel,* playing this week in UBC's Old Auditorium, occurs when witch Jennifer Jestley, a graduate student in music, ropes in frightened Gretel, right, played by Heather Ochs, Music 2, and Hansel, portrayed by Lena Hauser, Education 4. The production, by UBC professor French Tickner, who also conducts the UBC Symphony Orchestra and Opera Chorus, continues tonight (Wednesday) and on Friday and Saturday at 8 p.m. Tickets are available in the UBC Music Building or by calling 228-3113.

Board to meet in Kelowna April 30

UBC scholarship winners from the Okanagan and UBC alumni from the area will be among the guests at a reception and dinner for the University's Board of Governors when the Board meets in Kelowna on April 30.

It will be the first meeting of the UBC governors away from the University.

Board chairman Ian Greenwood, general manager of B.C. Tree Fruits Ltd. and himself a resident of Kelowna, said he was "delighted" that the meeting would be held in the Okanagan.

"UBC is provincial institution," he said, "with thousands of students from outside the Lower Mainland. I am delighted that the Board of Governors will meet in Kelowna, and I am sure they will find it a most hospitable city."

The UBC Board usually meets on the first Tuesday of each month, but the May meeting has been moved ahead one day to April 30, a Monday, to simplify travel arrangements.

It will be a busy day for the visitors from the University. They will tour Okanagan College in the morning as guests of college principal Ron Jeffels, and the Board meeting itself will be held from 2 p.m. to 5:30 p.m. The reception and dinner sponsored by the UBC Alumni Association, with the scholarship winners as special guests, follows a half-hour later.

On Tuesday, May 1, UBC President Douglas Kenny will be the guest speaker at a Kelowna service club luncheon.

Funeral services held for UBC plant expert

Funeral services were held Thursday (March 8) for Dr. Cedric A. Hornby, a member of the UBC faculty for nearly 29 years, who died March 3 at the age of 62.

Born in England, Dr. Hornby was educated at UBC, where he received the degrees of Bachelor of Science in Agriculture in 1936 and Master of Science in Agriculture in 1940.

He joined the staff of the federal agricultural experimental station in Summerland, B.C. in 1938, where he was a research officer until 1941 when he joined the Royal Canadian Navy. At the end of World War II he enrolled at Cornell University, where he was awarded the degree of Doctor of Philosophy in 1949.

Since joining the plant science department of the Faculty of Agricultural Sciences in 1950, Dr. Hornby had specialized in the field of plant breeding, particularly with horticultural crops. He developed a special strain of quick-ripening tomato suitable for the climate of the Lower Mainland.

He was an active member of numerous professional organizations and served as president of the B.C. Institute of Agrologists in 1960-61.

Dr. Hornby is survived by his wife, Marguerite; two sons, Ronald and Ian; and a daughter, Ruth, all of Vancouver.

Friends and associates of Dr. Hornby's were requested to make gifts to the University for cancer research in lieu of flowers for his funeral. Cheques should be made payable to the University of B.C. and sent to the Department of Finance with a note attached specifying the purpose of the gift.

Librarians breathing easier

The people who run the government publications division in UBC's Main Library are breathing a little easier as the result of a policy reversal by the federal government.

Minister of Supply and Services Pierre de Bane announced recently that the federal government had decided to reverse a decision announced in December to reduce from 580 to 302 the number of Canadian libraries that receive government publications free of charge.

The effect of the proposed cut on university and college libraries would have been particularly severe, resulting in a reduction from 28 to 3 in the number of libraries enjoying full depository status, and a reduction from 189 to 125 those which have selective status.

UBC would have been one of the three full-deposit libraries in B.C. that would have been affected by the decision.

The federal decision was protested by the Association of Universities and Colleges of Canada, the Canadian Association of University Teachers, the Canadian Library Association as well as libraries that would be affected by the change.

In a letter to Ottawa, UBC's chief librarian Basil Stuart-Stubbs said the effect of the cut would be "a critical reduction in the access to information about federal government activities, programs and research now being enjoyed by the public."

Government publications, he said, "are unique sources of information for students, businessmen, scientific and academic researchers, educators and members of the public-at-large."

He described UBC's collection of government publications as "one of the best in the country," adding that in 1977 UBC's government publications division answered 16,000 queries by members of the University community as well as provincial and federal government departments in the Lower Mainland.

Mr. De Bane announced recently that all full and partial deposit libraries would continue to receive government documents free of charge. He said Supply and Services would achieve a $2 million reduction in expenditure by raising the price of Hansard, the official record of debates in the House of Commons, and other parliamentary documents to reflect current production costs.

CAUT suggests new savings plan

The Canadian Association of University Teachers has recommended that the federal government create a savings plan to enable Canadians to pay for educational costs.

The proposed plan would be similar to the present Registered Home Ownership Saving Plan and would allow a parent or child to contribute up to $2,000 a year to a maximum of $20,000. The return from the income would be tax free, as in an RHOSP.

The plan would provide for a tax-free draw-down of one-third of the funds invested each year while the student is in full-time attendance at an educational institution

There would be a required payout of funds by age 60, if they were unused, and an opportunity for the contributor to transfer the funds in case of death or incapacity of the student.

CARBON
Continued from Page 1

1955 when his curiosity was piqued by a short article he read in a British journal called *Fuel,* which described the chemical phenomenon known as "intercalation."

Intercalation occurs when a wide range of materials, including metals such as sodium and potassium, the element bromine, acids such as sulphuric and nitric, and some 25 metal chlorides such as aluminum chloride and ferric chloride are absorbed into carbon or graphite.

Graphite, which is familiar to most of us as the heart of a pencil, is simply layer upon layer of carbon atoms which can actually be peeled apart into thin layers.

Absorption of the intercalating materials into graphite results in them forming a bond with the carbon atoms. More important, the properties of the intercalated graphite are radically altered, both mechanically and in terms of its ability to conduct electricity.

"When I read that article in 1955, it sounded ridiculous from a chemical point of view," Prof. Hooley says. "But I tried it in my lab, it worked, and I haven't looked back since."

In the ensuing years, Prof. Hooley's research has led to the currently used theory about how intercalation works and dozens of university chemists from all over the world and representatives of Canadian and American government agencies and business firms have beaten a path to his door seeking more information on the subject.

"Think of the graphite as a textbook of 1,000 pages lying on its side, with each page representing a layer of carbon atoms. What I've shown is that the intercalating material diffuses through the graphite a layer at a time beginning with the first and last layers, or the first and last pages of the textbook, as it were. As intercalation continues the materials are bonded to the graphite layer by layer until they reach the central layer."

Intercalation will actually double the thickness of a graphite sample, and it's this phenomenon that has made Prof. Hooley's research of interest to the aluminum industry, which manufactures the metal in carbon pots at very high temperatures.

"If intercalation takes place during the manufacturing process it can crack the graphite pots, which means the pots have to be allowed to cool and be replaced," he says.

Intercalation also results in a marked improvement in the ability of graphite to conduct electricity, so much so that it appears to rival copper. Prof. Hooley says the possibility of being able to substitute intercalated carbon for copper has led to the establishment of a large research group at the University of Pennsylvania, which is working full time on the project.

There's also been a lot of excitement recently on the use of intercalated carbons as a catalyst in a process for making gasoline from coal. The fuel sciences division of the Alberta Research Council enlisted the aid of Dr. Hooley, who was able to show how one intercalated graphite compound actually functioned as a catalyst during the process.

Another aspect of Dr. Hooley's research has been the intercalation of carbon fibres, which are used in the landing flaps and brakes of aircraft, where enormous strength and resistance to high temperatures is required. A major car manufacturer is experimenting with carbon fibres for use in car bodies because of the strength factor and the fact that the reinforced carbon is about one-quarter the density of iron.

Prof. Hooley has been intercalating carbon fibres in his UBC laboratory. He then uses techniques he invented to measure the uptake of the intercalating materials in the carbon and the resulting new conductivity.

Prof. Hooley's basic research into the mechanism of intercalation has been carried out, by and large, with low-cost equipment that he devised and made with his own hands. The apparatus that led to his discovery of how the intercalating materials are actually diffused through carbon he built himself at a cost of $100.

He believes that personal involvement is absolutely necessary for the researcher. "You have to get in and get your hands dirty if you want to produce results," is the way he puts it.

The energy crisis and the discovery of the possibilities of intercalated carbon as an electrical conductor have led to a sudden resurgence of interest in carbon chemistry, he adds.

And in the final analysis, he insists, "it's been a great privilege to have been given the freedom over the past 25 years to pursue an area of basic research that didn't appear to have any immediate value."

Picture by Brian Kent

UBC zoologist Dr. David Suzuki was the recipient of the Award of Distinction of the Northwest Institute of Ethics and Life Sciences at meetings in Vancouver recently. He was singled out for his "unique and noteworthy contribution to society in promoting its awareness and understanding emanating from current advances in science and technology." Dr. Suzuki is widely known for his research in the field of genetics and as the host of CBC television and radio programs dealing with science topics.

Prof. Peter H. Oberlander, on leave of absence from the University, is the first visiting professor in the Canadian studies program of the Hebrew University of Jerusalem in Israel in the first quarter of 1979.

The Hebrew University's Canadian studies program is jointly sponsored by the federal government and Dr. and Mrs. Ralph Halbert of Toronto. Prof. Oberlander is in UBC's School of Community and Regional Planning and director of the Centre for Human Settlements.

Hon. J.V. Clyne, UBC's chancellor, is chairman of a nine-member Consultative Committee on the Implications of Telecommunications for Canadian Sovereignty established by the federal government.

The committee is concerned with the use of communications, satellites, foreign television programming on Canadian stations, the status of cable companies and the framework and timing for the introduction of pay television.

Two members of the UBC faculty have been named to a three-member commission appointed by the provincial government to conduct a public inquiry into uranium mining in B.C.

Chairing the commission will be **Dr. David Bates,** professor of health care and epidemiology and former dean of the Faculty of Medicine. Other commission members are **Prof. James Murray** of the Department of Geological Sciences, and Walter Raudsepp, former chairman of the Pollution Control Board and currently a member of the provincial Pesticide Appeal Board.

C.O. Brawner, associate professor of mineral engineering at UBC, will serve as program chairman and general reporter for the first international Conference on Mine Drainage in Denver, Colorado, May 20-23. The conference will deal with open pit and underground mining, waste disposal and reclamation.

Mr. Brawner was recently awarded the B.T.A. Bell Commemorative Medallion for service to the Canadian mining industry on the occasion of the hundredth continuous year of publication of the *Canadian Mining Journal.*

Prof. J.M. MacIntyre of UBC's Faculty of Law has been appointed vice-chairman of the B.C. Labor Relations Board for a three-year term.

George Morfitt, former chairman and still a member of UBC's Board of Governors, was named Master Athlete of the Year for the second year in a row at the annual Sport B.C. banquet early in February. He was also named 1978 Executive of the Year in Canadian amateur sport in an annual competition sponsored by Air Canada.

Last year, Mr. Morfitt became the first Canadian in 44 years to win the U.S. national veterans squash title and is currently director and treasurer of Sport B.C.

Dean Peter Lusztig, head of UBC's Faculty of Commerce and Business Administration, is a member of the executive committee of the Canadian Federation of Deans of Management and Administrative Studies, which has been established as an incorporated Learned Society.

The new federation, formerly known as the Council of the Deans of Faculties of Management and Business Administration of Canada, includes 41 universities with faculties or schools of management and administrative studies and represents 1,600 full-time faculty members and 50,000 graduate and undergraduate students.

Dr. Ian McTaggart Cowan, former dean of graduate studies at UBC and an internationally known conservationist and zoologist, has been elected chancellor of the University of Victoria. He will serve a three-year term.

Dr. Cowan has remained characteristically busy since retiring from UBC in 1975. He is currently chairman of the Canadian Environmental Advisory Council, chairman of the Canadian Commission on Whales and Whaling and chairman of the Academic Council of B.C.

Dr. J.H. Quastel, of UBC's Department of Psychiatry, will serve as one of two honorary presidents of the 11th international Congress of Biochemistry to be held July 8-13 in Toronto. Dr. Quastel was chosen for the honor in recognition of his many contributions to biochemistry in Great Britain and Canada.

UBC's registrar, **Jack Parnall,** was presented with an honorary life membership in the Association of Registrars of the Universities and Colleges of Canada at its 1978 meetings in Edmonton.

A second member of the Registrar's Office, assistant registrar **Edith Allen,** was awarded a travel bursary by the American Association of Collegiate Registrars and Admissions Officers and the National Association of Foreign Student Advisors. She was the only Canadian selected to take part in an admissions workshop which took place in Southeast Asia earlier this month.

Prof. Keith Aldritt of the UBC English department has been elected a fellow of Great Britain's Royal Society of Literature in recognition of his work as a novelist and author of numerous articles in the field of literary criticism.

Club aids Gage fund

The memorial fund honoring former UBC president Dr. Walter Gage now stands at nearly $70,000, even though the official fund-raising campaign hasn't yet been launched.

The latest contribution of $5,000 was presented to President Douglas Kenny recently by Gordon Youngston, president of the Vancouver Rotary Club.

President Kenny said the gift by the Rotary Club would have been deeply appreciated by Dr. Gage because it would be used to aid students. He also noted that the memorial fund gift was one of a large number made over the years to UBC by Rotarians.

The Gage memorial fund and the campaign to raise contributions for it is being administered through the UBC Alumni Association. The objective is to create an endowment fund that will provide aid to students and support for student projects.

Donations to the Walter Gage Memorial Fund should be sent to the UBC Alumni Fund, c/o Alumni Association, Cecil Green Park. The fund will issue official receipts for income tax purposes on behalf of the University.

Settlement reached

The 37-member Local 15 of the Office and Technical Employees Union has reached agreement with the University on a 1978-79 labor contract which provides for a wage increase of 4 per cent, with a minimum monthly increase of $42.

The one-year contract is retroactive to April 1, 1978, and expires at the end of this month.

The agreement also calls for a work study program to be undertaken by a consultant.

UBCalendar

UBC CALENDAR DEADLINES

Events in the week of
March 25-March 31 Deadline is 5 p.m. March 15
April 1-April 7 Deadline is 5 p.m. March 22
Send notices to Information Services, 6328 Memorial Road (Old Administration Building), Campus. Further information is available at 228-3131.

VANCOUVER INSTITUTE

Saturday, March 17
Dr. Marjorie Halpin, Museum of Anthropology, UBC, on **Experiencing the Mythic Image: An Evening of Northwest Coast Indian Art.**
Saturday, March 24
Nigel Nicolson, M.B.E., F.S.A., F.R.S.L., author and publisher, on **Virginia Woolf: A Personal Portrait.**
Both lectures at 8:15 p.m., Lecture Hall 2, Woodward Instructional Resources Centre.

SUNDAY, MARCH 18

3:00 p.m. **MUSEUM OF ANTHROPOLOGY.** John LeRoy, Anthropology, UBC, on **The Kewa of the Papua New Guinea Highlands: Their World and Their Myths.** Museum, 6393 Northwest Marine Dr.

7:00 p.m. **SUBFILMS** presents Kurosawa's **Dersu Uzala.** Admission $1 with AMS card. Auditorium, SUB.

MONDAY, MARCH 19

3:00 p.m. **COMPUTING CENTRE.** The first in a series of four lectures on **Multi-Way Contingency Tables and Log-Linear Models** by Dr. M. Greig, UBC Computing Centre. Room 443, Computer Sciences Building.

3:30 p.m. **MANAGEMENT SCIENCE SEMINAR.** S.P. Hawkins, Graduate School of Management, UCLA, on **Perspectives in (and Problems with) Management Science: Some Confessions of a Student.** Room 328, Angus Building.

3:45 p.m. **MECHANICAL ENGINEERING SEMINAR.** Dr. S. Hutton, Mechanical Engineering, UBC, on **The Finite Element Method in Fluid Mechanics.** Room 1215, Civil and Mechanical Engineering Building.

4:00 p.m. **ASTRONOMY SEMINAR.** Dr. Bill McCutcheon, Physics, UBC, on **The $^{12}C/^{13}C$ Ratio in Dark Interstellar Clouds.** Room 318, Hennings Building.

4:30 p.m. **ZOOLOGY/PHYSIOLOGY SEMINAR** with Dr. Ed H. Fisher, Biochemistry, University of Washington, Seattle. Room 2449, Biological Sciences Building.

7:00 p.m. **SPANISH LANGUAGE EVENING** at International House. Food, drinks and music. Everyone welcome.

8:00 p.m. **MUSEUM OF ANTHROPOLOGY.** Richard Pearson, curator of archeology, introduces two color films on **Japanese History and Art: The Scroll of Time** and **The Horyuji Temple.** Sponsored by the Consulate General of Japan, Vancouver. Theatre gallery, Museum, 6393 Northwest Marine Dr. Admission free.

TUESDAY, MARCH 20

12:30 p.m. **BOTANY SEMINAR.** Dr. Jane Lubchenko, Zoology, Oregon State University, on **Effects of Herbivores on Distribution, Abundance, and Diversity on Macroalgae in the New England Rocky Intertidal Community.** Room 3219, Biological Sciences Building.

1:30 p.m. **MODERN CHEMICAL SCIENCE SEMINAR.** Dr. L.D. Burtnick on **Actin: The Role of a Muscle Protein in Nonmuscle Cells.** Room 225, Chemistry Building.

2:30 p.m. **STANDING COMMITTEE ON TEACHING (Faculty of Education) Colloquium.** Dr. Harry G. Murray, Psychology, University of Western Ontario, on **Uses of and Problems with Teaching Evaluation.** Room 100, Scarfe Building.

3:30 p.m. **BOTANY SEMINAR.** Dr. Jane Lubchenko on **Ideas on Heteromorphology in Marine Algae.** Room 3219, Biological Sciences Building.
SCIENCE AND TECHNOLOGY WORKSHOP with Prof. Len Berggren, Mathematics, SFU, on **Ancient and Medieval Mechanics: From Aristotle and Archimedes to Abu Sahl Al-Kuhi.** Room 3252, Buchanan Building.
OCEANOGRAPHY SEMINAR. Dr. Bill Crawford, Institute of Ocean Sciences, Pat Bay, on **Recent Oceanic Microstructure Measurement in the Equatorial Pacific.** Room 1465, Biological Sciences Building.
OPTIMIZATION SEMINAR. Prof. George Bluman, Mathematics, UBC, on **Noether's Theorem.** Room 203, Mathematics Building.

4:30 p.m. **ROYAL SOCIETY OF CANADA LECTURE.** Dr. Robert E. Bell, C.C., F.R.S.C., F.R.S., principal and vice-chancellor, McGill University, and president, The Royal Society of Canada, on **Is There a Need for a National Academy in Canada.** Lecture Hall 3, IRC.
CHEMISTRY RESEARCH CONFERENCE. Niels Anderson, Chemistry, University of Washington, Seattle, on **Recent Prostoglandin Studies.** Room 250, Chemistry.

7:30 p.m. **MUSEUM OF ANTHROPOLOGY.** Marjorie Halpin, curator of Ethnology, on **The Invention of Art on the Northwest Coast.** Museum, 6393 Northwest Marine Dr. $2.50, members; $3.50, non-members.

WEDNESDAY, MARCH 21

10:30 a.m. **MARKETING RESEARCH WORKSHOP.** Ken Kendall, Economics and Commerce, SFU, on **What Do You Find Out by Standing in a Supermarket Aisle? or How Honest Are Consumers? (Conjoint Measurement of Preferences vs. Actual Behavior).** Penthouse, Angus.

12 noon **PHARMACOLOGY SEMINAR.** Dr. L.C. Jenkins, professor and head, Anesthesia, UBC, on **Clinical Studies of Mechanisms of Surgical Pain and Its Management.** Room 114, Block C, Medical Sciences Building.
THE CHANGING WORLD. Prof. Roy Stokes, director, School of Librarianship, UBC, on **Information and Ideas: A Guide to Survival.** Robson Square Theatre (corner of Robson and Hornby Sts.).

12:30 p.m. **NOON-HOUR CONCERT** with the Pro Arte String Quartet. Norman Paulu, violin; Martha Francis, violin; Richard Blum, viola; and Parry Karp, cello, perform **Music of Schubert and Beethoven.** Recital Hall, Music.

WEDNESDAY, MARCH 21 (Continued)

12:30 p.m. **ADULT BASIC EDUCATION SEMINAR.** Dr. Eitan Israeli, eminent adult educator in Israel, on **Education for Minority Groups — Mosaic or Melting Pot?** Room 1004, Scarfe Building.
SCIENCE STUDIES ROUNDTABLE. Ed Levy, Philosophy, UBC, on **Why Science and Technology Will Not Solve the Food Problems: Rice Technology in Asia — A Case Study.** Upper lounge, Graduate Student Centre.

3:30 p.m. **APPLIED PROBABILITY AND STATISTICS Workshop.** Prof. Yoel Haitovsky, Jerusalem University, on **The Linear Hierarchical Model: I. Estimation.** Room 223, Angus Building.

4:00 p.m. **GEOPHYSICS SEMINAR.** Dr. J. Greenhouse, University of Waterloo, on **Geomagnetic Variations in the Eastern United States: Implications for Continental Tectonics.** Room 260, Geophysics and Astronomy Bldg.

4:30 p.m. **ECOLOGY SEMINAR.** Dr. William Reed, Animal Resource Ecology, UBC, on **The Possibility of Increasing Yields from Fisheries By Means of Age-Selective Harvesting.** Room 2449, Biological Sciences Building.

7:00 p.m. **DUPLICATE BRIDGE.** Informal game at the Faculty Club. Faculty, staff and graduate students are invited to participate. $1.75 per person includes refreshments. For further information, call Steve Rettig, 228-4865.

8:00 p.m. **SENATE MEETING.** Tickets for the visitors' gallery can be reserved by calling Frances Medley, clerk to Senate, 228-2951. Board and Senate Room, Old Administration Building.

THURSDAY, MARCH 22

9:00 a.m. **MEDICAL GRAND ROUNDS.** Dr. Kam S. Tse, Medicine, VGH, on **Eosinophils and Eosinophilia.** Lecture Hall B, Faculty of Medicine Building, VGH.

10:30 a.m. **APPLIED MATHEMATICS SEMINAR.** Prof. Wolf-Jurgen Beyn, University of Muenster, on **The Convergence of Finite Difference Methods for Ordinary Boundary Value Problems.** Room 203, Mathematics.

11:30 a.m. **BIOCHEMICAL DISEASES SEMINAR.** Dr. D. McTaggart on **Cystic Fibrosis.** Room 101, Ambulatory Care Area, Children's Hospital, 250 W. 59th Ave.

12:30 p.m. **ADULT BASIC EDUCATION SEMINAR.** Report of the **Ministry of Education Committee on Adult Basic Education,** with members of the committee, chaired by Dr. Ron Faris. A copy of the report may be obtained from the Adult Education department, or call 228-5881. Room 1005, Scarfe Building.
UNIVERSITY CHORAL UNION, directed by James Fankhauser, performs **Music of Vaughan Williams, Stanford and Britten.** Recital Hall, Music Building.
PHARMACEUTICAL SCIENCES SEMINAR. Dr. Seymour Heisler, Pharmacology, Laval University, on **Stimulus-Secretion Coupling Studies in Exocrine Pancreas.** Room 237, Wesbrook Building.
ENERGY ENGINEERING SEMINAR. Brian Talbot, Stan Vernon and Tom Noon, Engineering and Quality Control, Greater Vancouver Sewerage and Drainage District Treatment Plants, on **Production and Utilization of Methane.** Room 1202, Civil and Mechanical Engineering Building.
ENGLISH LECTURE. Nigel Nicolson, M.B.E., F.S.A., F.R.S.L., on **Art of Biography.** Room 104, Buchanan Building.

1:00 p.m. **FACULTY ASSOCIATION GENERAL MEETING.** Room 100, Mathematics Building.

2:30 p.m. **PHYSICS CONDENSED-MATTER SEMINAR.** *James Chiu, UBC, on* ***Electron Properties of the Pd-H System.*** Room 318, Hennings Building.

3:30 p.m. **APPLIED MATHEMATICS SEMINAR.** Prof. Bengt Fornberg, Applied Mathematics, Caltech, on **Numerical Calculations on Flow Past a Cylinder.** Room 203, Mathematics Building.

4:00 p.m. **PHYSICS COLLOQUIUM.** H. Gush on **Cosmic Microwave Radiation.** Room 201, Hennings Building.

4:30 p.m. **PLANT SCIENCE SEMINAR.** Dr. M.D. Proverbs, Agriculture Canada, Summerland, B.C., on **Suppression of Codling Moth by Release of Sterile Male Moths.** Room 342, MacMillan Building.

7:00 p.m. **SUBFILMS** presents **Looking for Mr. Goodbar.** Repeated Friday and Saturday at 7:00 and 9:30 p.m. and Sunday at 7:00 p.m. Admission $1 with AMS card. Auditorium, Student Union Building.

7:30 p.m. **CUSO INFORMATION NIGHT.** Upper Lounge, International House.

8:00 p.m. **SYDNEY ISRAELS MEMORIAL SEMINAR.** Dr. Saul Levine, Child in the City Project, University of Toronto, on **Violence in Adolescence: Alienated Adolescents.** Lecture Hall 2, Woodward Instructional Resources Centre.

THURSDAY, MARCH 22 (Continued)

8:00 p.m. **WESTWATER LECTURE.** J. Bristol Foster, director, Ecological Reserves Unit, B.C. Ministry of Lands, Parks and Housing, on **Coastal Ecological Reserves — Helping to Keep the Options Open.** Centennial Museum, 1100 Chestnut St.

FRIDAY, MARCH 23

11:30 a.m. **DEVELOPMENTAL MEDICINE SEMINAR.** Dr. J. Diamond, Pharmaceutical Sciences, UBC, on **The Role of Cyclic Nucleotides and Calcium in the Mechanism of Vasodilatation.** Room 15, 811 W. 10th Ave.

12:30 p.m. **UBC PERCUSSION ENSEMBLE,** directed by Kenneth Moore, performs **Music of Read, Chavez and Payne.** Old Auditorium.
LINGUISTICS LECTURE. Pierre E. Laporte, director, Research and Evaluation of New Programs, Office de la langue francaise, Gouvernement du Quebec, on **Meaning and Consequences of Bill 101 from the Point of View of Socio-Political and Linguistic Evolution in Quebec.** Room 102, Buchanan Building.

1:00 p.m. **MEDICAL GENETICS SEMINAR.** Dr. D.A. Applegarth on **Current Status of Biochemical Screening for Pediatric Disease.** 4th floor conference room, Health Centre for Children, 715 W. 12th Ave.

2:00 p.m. **URBAN LAND ECONOMICS WORKSHOP.** Prof. Lawrence Smith, Political Economy, University of Toronto, on **Canadian Housing Policy: A Critical Review.** Dean's conference room, Room 319, Angus.

2:30 p.m. **GEOLOGICAL SCIENCES SEMINAR.** Dr. J.L. Luternauer, Geological Survey of Canada, Pacific Geoscience Centre, Sidney, B.C., and Jane Leroux, Geological Sciences, UBC, on **Geological Studies of B.C. Deltas — Where, Why and How.** Room 330A, Geological Sciences Building.

3:30 p.m. **MATHEMATICS SEMINAR.** Prof. Peter Orlik, University of Wisconsin, Madison, on **Singularities and Group Actions.** Room 1100, Mathematics Annex.
COMPUTER SCIENCE COLLOQUIUM. Dr. Peter Cashin, manager, Software Development Digital Systems Division, Bell Northern Research, Ottawa, on **Research at Bell Northern.** Room 301, Computer Sciences.
LINGUISTICS COLLOQUIUM. Pierre E. Laporte, director, Research and Evaluation of New Programs, Office de la langue francaise, Gouvernement du Quebec, on **Meaning and Consequences of Bill 101 From the Point of View of Socio-Political and Linguistic Evolution of Quebec.** Room 2225, Buchanan Building.
JAPAN SEMINAR. Prof. H. Onishi, Tokyo University, on **Sesshu's Paintings.** Room 102, Lasserre Building.
CHEMICAL ENGINEERING SEMINAR. Prof. Howard Brenner, chairman, Chemical Engineering, University of Rochester, on **Micro-Mechanics of Interfacial Transport.** Room 206, Chemical Engineering.

7:30 p.m. **ACADIAN EVENING at International House,** with wine and cheese, followed by a French-Canadian show at 8:30 p.m. The show will be followed by a dance with music from Quebec. Tickets, sold in advance only, $1, students; $2, non-students; available at International House, 228-5021; and the French department, Room 811, Buchanan Tower, 228-4867.

8:00 p.m. **UKRAINIAN STUDIES SEMINAR.** W. Roman Petryshyn on **Ukrainian Canadians in the Vertical Mosaic.** Langara College.
UNIVERSITY CHORAL UNION, directed by James Fankhauser, performs **Music of Vaughan Williams, Stanford and Britten.** Recital Hall, Music Building.

SATURDAY, MARCH 24

10:00 a.m. **WOMEN IN MANAGEMENT WORKSHOP** on **Image and Impact,** with co-ordinator Eileen Hendry, director, Women in Management and Career Development Programs, UBC Centre for Continuing Education. Social Suite West, Hotel Vancouver. For information, 228-2181, local 240.

2:00 p.m. **MUSEUM OF ANTHROPOLOGY** series of documentaries. This week's film is on **Grierson,** a tribute to John Grierson, founder of the National Film Board. Museum, 6393 Northwest Marine Dr. Free with museum admission.

8:00 p.m. **PRO ARTE STRING QUARTET.** Norman Paulu, violin; Martha Francis, violin; Richard Blum, viola; Parry Karp, cello; and Howard Karp, piano, perform **Music of Haydn, Lansky and Dvorak.** Recital Hall, Music Bldg.
INTERNATIONAL HOUSE presents **An Evening in the Philippines.** Free admission. Upper Lounge, International House.

WOMEN STUDENTS' OFFICE MOVES

The Women Students' Office, formerly the Office of the Dean of Women, is now located in Brock Hall. Personal counselling—room 203. Co-operative Education programs, Internship programs and Career Counselling—room 213.

NITOBE OPEN WEEKENDS

The Nitobe Garden is now open weekends. Hours at the Nitobe till Easter are weekdays 7:30 a.m. to 3:00 p.m. and weekends 10 a.m. to half an hour before sunset.

EXHIBIT

An exhibit of works by Liz Magor continues until Saturday, March 31, Tuesday - Saturday, 10:30 a.m. — 5:00 p.m. Fine Arts Gallery, Main Library.

EXTENDED CARE HELPS

The residents of UBC's extended care unit in the Health Sciences Centre Hospital are offering their services to the University community. The average age of the volunteers is 84, so the services they offer are limited. If you have stapling, envelope filling, collating or other simple tasks that you need help with, call Kathy Scalzo, director of rehabilitation, at 228-5487.

FINAL ORAL EXAMINATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Listed below are scheduled final oral examinations for the degree of Doctor of Philosophy at the University. Unless otherwise noted, all examinations are held in the Faculty of Graduate Studies Examination Room on the second floor of the General Services Administration Building. Members of the University community are encouraged to attend the examinations, provided they do not arrive after the examination has commenced.

Monday, March 19, 10:00 a.m.: PAUL LAM, Medical Genetics; **The Role of DNA Repair Inhibitors in Carcinogenesis.**

GRADUATE STUDENT CENTRE

The Graduate Student Centre is now taking reservations for Christmas, 1979, functions. For reservations, call 228-3202.

SUMMER SESSION EMPLOYMENT

The Canada Employment Centre at UBC maintains listings of summer session academic employment opportunities at universities and colleges across Canada. Interested faculty and graduate students can obtain further information by visiting the office, Room 214, Brock Hall, in the south east corner of the building, between 8:30 a.m. and 4:30 p.m.