



Cancer can be beaten

First the chemotherapy, then the radiation, and finally the laetrile. I just couldn't take it anymore!

Earn and learn

by John Roggeveen

A Master's program in oil sands technology has been established at the U of A to develop well qualified personnel for the oil sands industry.

And students in the program are being paid an average of \$1500 per month to take it.

Corporate financial support is provided for 13 or 14 students in the program while they are attending university. AOSTRA, an Alberta government crown corporation, is paying 12 students 75 per cent of a typical industrial salary. Another student is being supported by Hudson's Bay Oil and Gas; one student is self-supported.

The program is a cooperative education program involving the U of A, the Alberta Oil Sands Technology and Research Authority (AOSTRA) and industry.

Funding varies depending on when the student graduated, said Dr. J.D. Scott, academic director of the Master's program. The higher the person's salary was in industry, the higher the amount of support he will receive at university.

The program is open to graduate engineers and scientists who meet the requirements of the Faculty of Graduate Studies and Research. However, only Canadian citizens or landed immigrants are eligible for AOSTRA support.

"We are looking for graduates with two to four years experience in industry," said Scott.

Students in the program must spend 4 months at university,



photo Debbie Pelichos

Moon rocks? Whatever they are, they have something to do with oil sands.

ty, followed by a year in oil sands related employment and another 4 months at university. While working in industry, students will receive a full salary.

"I came back to broaden horizons and to get away from a strictly mining orientation," said Paul Humphreys, a student in the program.

AOSTRA's Dr. Ted Cyr said the program will provide the quality technical personnel desperately needed by the oil industry.

"AOSTRA is developing new technology that will increase the yield of oil from existing

conventional oil reservoirs and from the tar sands," Cyr said.

Other companies are following Hudson's Bay Oil and Gas in supporting the program. Petro Canada has contributed \$10,000 to the program, according to Maurice Dusseault of the U of A Department of Mineral Engineering.

A brochure containing information about the program can be obtained from Dr. J.D. Scott at the Civil Engineering office, the Dean of Engineering or at the Summer Work Experience Program (SWEP) office.

Finance board gives in Loans reform

by Jim McElgunn

The Federation of Alberta Students (FAS) has finally made some real progress with the Students' Finance Board (SFB) over student loans.

The SFB agreed Wednesday to hold at least two meetings with FAS to deal with next year's loan budget guidelines. FAS was very upset this summer when the SFB did not call a meeting to discuss this fall's budget guidelines as it had promised.

The Board also agreed to take regional differences in living costs into account, especially for housing. This is a serious problem in Northern Alberta, notably Grande Prairie, where housing prices are much higher than elsewhere in the province. Current loan guidelines do not allow for these differences.

Married students also got a break. FAS announced Wednesday the SFB will "give serious consideration" to ensuring married students with much higher living expenses than do single students get loans large enough to attend post-secondary institutions.

Alan Murray, FAS president, said the Board also promised to consider notifying students of their loan status if their loans are

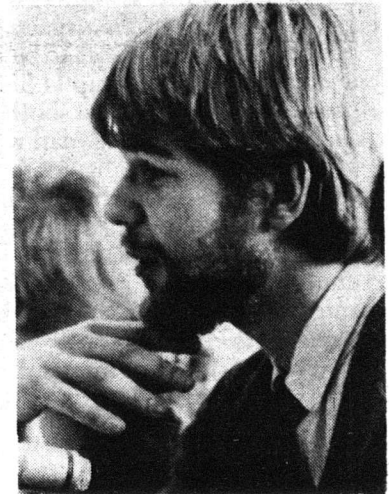


photo Bill Ingles

FAS' Alan Murray

delayed. This will ease the uncertainty many students feel while they are waiting to see if their loan request is granted. The Board says this may be in place by 1981-82.

Murray said the Board regrets the big delay in processing applications this year and "we've been assured it won't happen again."

The most important result of Wednesday's meeting, according to Murray, is that the SFB has recognized that FAS and students in general should have more input into the student loan process.

"Things are looking up."

by Skeet

Nuclear war or peace?

by Greg Harris

"Strangeloveism gone mad." That's how William Epstein described the proliferation of nuclear arms.

Nuclear war "will be certain" before the end of the century unless "real progress" is made towards disarmament, said Epstein, the former Director of the Disarmament Division of the U.N. Secretariat to an audience of over 100 in Dinwoodie Tuesday.

"The arms race is going on at a faster pace than ever before in history," he said.

The Americans possess the capability to destroy about 200 major Soviet cities 50 times over and the Soviets can destroy about 200 major American cities at least twenty times over, Epstein said.

Expenditures for nuclear arms have risen from \$100 billion a year in 1960 to \$600 billion a year in 1980.

And it is not only the quantity of the weapons which is terrifying. The U.S. and U.S.S.R. are now improving the technological capabilities of their weapons.

"It's now a qualitative arms race to find better, more sophisticated ways of killing people," he said.

The U.S. has a technological advantage over the U.S.S.R. with greater sophistication in electronics, computerization, guidance systems, delivery vehicles, and terrain scanning devices. The Soviets are technologically behind by about five years and slowly catching up, he said.

Epstein said the Multiple Independently Targeted Re-entry Vehicles (MIRVs) exemplify the insanity of the arms race. One MIRV missile can strike a different target for each nuclear warhead it carries.

"Even Kissinger, with whom I don't always agree, said that maybe we should have thought through more efficiently the implications of MIRV," he said.

"I suppose it's correct to say that this mutual balance of terror has prevented a nuclear war since World War II, but this doesn't mean it will work forever...mutual deterrence didn't work long in the area of conventional weapons," he said.

Epstein said that even if the mutual assured destruction theory (both U.S. and U.S.S.R. have enough weapons to destroy the other nation after a first strike) continues to prevent nuclear war by design there is still the danger of war through "accident or misadventure."

The gravest danger will be in the near future when even more nations have nuclear arms, according to Epstein.

"Within a decade or twelve years there could be fifty more nuclear powers...then nuclear war will be certain.

"They are not going to have a second strike capacity...the pressures to use them will become intolerable.

"If Iran or Iraq had nuclear weapons they would be used," he said.

Epstein said the best proposal for disarmament is Trudeau's "Strategy of Suffocation" presented to the UN in 1978.

The proposal has four points: a ban on testing nuclear warheads, a ban on testing flight vehicles, a ban on producing high enriched plutonium for weapons, and a reduction of military expenditures.

Epstein concluded that governments won't initiate disarmament unless the public becomes actively involved.

"Unless they can be persuaded, they won't do it...lots of things can be done, but you've got to have the political will to raise some hell," he said.

continued on page 7

Baz

