

## Skill development conference

The department of industrial and vocational education at the University of Alberta has undertaken the planning and implementation of a western Canadian conference to deal with skill development.

The conference, to be held at the university March 19, 20 and 21, 1974, will provide those western Canadians involved in the instruction of occupational skills the opportunity to study innovations in that field.

The participants will be people who work directly with learners, whether the learners be students or employees. They will come from such agencies as apprenticeship boards, vocational centres, staff development offices, the armed forces and Canada Manpower.

The funds necessary for the planning and implementation of the conference are being made available by the federal department of manpower and immigration following their approval of a submission, originated by the industrial and vocational educational departments of the U of A's faculty of Education, proposing the conference.

In presenting the proposal to the manpower department, the people from the university suggested that "...the millions of dollars being spent annually by different levels of government and by industry towards the imparting of skills to learners and workers necessitates a serious examination of such programs and possible ways of improving them."

The conference format will be designed so that interaction will take place in three ways -- practitioners will describe unique successful practices,

experts in the field of psychomotor development will present new thoughts and information, and, as well, there will be an informal exchange of ideas.

Planning for the conference will be under the supervision of an interprovincial steering committee consisting of representatives from provincial departments of education, advanced education, and

manpower and labour from the four western provinces, the Yukon and Northwest Territories; and from the federal department of manpower and immigration.

The conference director is M.W. Petruk; working with him will be J.F.D. Ilott, D.R. Le Blanc, and W.D. Manuel. All are from the department of industrial and vocational education at the University of Alberta.

## Research on fossil fuel

As the need for energy producing alternates to fossil fuel becomes more apparent, the work of two University of Alberta researchers takes on added importance.

"The fact is nuclear power is the only workable alternate to fossil fuel sufficiently developed at this point," says F.D. Otto. He and A.E. Mather are now involved in research that will help Canada develop her nuclear power technology. Both are professors in the department of chemical engineering.

When it comes to producing nuclear power, "Canada has all her eggs in one basket," says Otto. The country's whole nuclear power program is based on reactors which use heavy water he adds.

Actually Canada has had success with the heavy water method, says Otto. Nuclear power systems have been exported to countries such as India and, as the shortage of fossil fuels makes nuclear power more competitive, export of nuclear power plants and technology could be stepped up.

And, in Canada 16 or more

nuclear power projects are now operating, under construction, or committed to construction. As domestic energy needs become more acute that number is likely to rise.

"Indications are that we're going to be building quite a few nuclear power plants," continues Otto, "...we need to develop our technology."

One of the areas of technology that can stand further development is the production of the large amounts of heavy water used in the Canadian process. That's where Mather and Otto come in.

They have grants from Atomic Energy of Canada Ltd. totalling \$47,475 to obtain data that can be used to improve the present method for the production of the heavy water and secondly to obtain data for an alternate process of production.

Nuclear reactors require a method of slowing down the neutrons used to produce the energy -- this is the role played by heavy water in the Canadian method.

A great deal of heavy water is necessary -- 700 to 900 tons for each 1,000 megawatts of electrical capacity produced.

With heavy water selling for about \$30 a pound, the heavy water would represent an investment of something like \$96 million in a 2,000 megawatt power station such as Pickering, in Ontario.

Heavy water is simply water in which the hydrogen has been replaced by deuterium, an isotope of hydrogen -- it has chemical properties similar to hydrogen but weighs more.

Because of its nuclear properties and its convenient physical form, heavy water is considered an excellent moderator for nuclear reactors and a good heat transfer media for nuclear power plants.

In the method now used, hydrogen sulfide is employed as the agent for exchange in a process which recovers deuterium from ordinary water.

The exchange takes place in large steel towers, or contractors, similar to the tall fractionating towers of a petroleum refinery.

The faster the exchange of deuterium the smaller the contractors can be, says Dr. Otto. He and Dr. Mather will examine the hydrogen sulfide process with an eye to learning more about factors that influence the rate of exchange.

They're also investigating a related problem -- it appears that impurities in the hydrogen sulfide are causing foaming in the exchange towers which reduces their capacity.

So they are involved in research that will be useful in the design of a process to remove impurities from hydrogen sulfide.

The alternate process they are investigating would use aminomethane as the agent for the exchange of deuterium. This process has the potential to recover deuterium from hydrogen, such as the hydrogen used in ammonia production.

Their Atomic Energy funding is for a one year project. It goes to pay the salaries of

## DINING OUT

- with

Satya Das

20 below and a bitter wind. The block and a half walk from the bus was almost unbearable. However, all this was quickly forgotten in the warm and friendly surroundings of the Keg n Cleaver, the latest in the line of Edmonton steakhouses.

Located in a building, 105th Street and 80th Avenue, which used to be an automatic transmission garage, the Keg is part of a chain which includes a Calgary counterpart.

We were shown to a table in a corner grouping midst the brick wall and 'farmhouse' wood panelling, and found a sign with "drinks 75 cents" welcoming our arrival.

I had just acknowledged the cloth napkin and the real wood tables when a young man, a fellow student I presume, came and announced "Hi, my name's Pat, and I'm your waiter tonight." After this pronouncement, he deftly took a wooden board which had been dangling from his neck and set it on our table. This turned out to be the menu.

He then proceeded to explain the menu: Teriyaki at \$4.75 (an 11 ounce cut of sirloin marinated in Teriyaki sauce), an 11 ounce New York cut (\$4.95), sirloin, also in the 11 ounce size at \$4.25, a combination of steak and lobster, and lobster tails, the most expensive items on the menu at \$5.25.

All meals include one of the rapidly growing features in Edmonton restaurants - all the salad you can eat from a self serve salad bar with sourdough bread. This salad bar had garbanzo beans and pinto beans accompany the greens, with a good array of dressing.

As the menu was being explained to us, we were visited by a young lady who asked if we wished any drinks from the bar. We took a look at the 75 cent sign and ordered with an extra dash of enthusiasm.

Our drinks came and we were ready to make our selection from the menu. I chose the Teriyaki while my friend opted for the sirloin. A flagon of the house red wine was requested to help the steaks down.

The wine list is rather small, but it has some excellent buys on it. Similkameen, which retails at \$1.55, is a bit overpriced at \$3.50, the other reds are about average price. The real buys come in the champagnes. A bottle of Mumm's, which retails in the ALCB for around \$9.00 is only \$11.00 for a full bottle and \$6.00 for the half. And Heidsieck, about \$10.00 retail sells for \$12.00 at the Keg n Cleaver.

I suggest you take advantage of these very agreeable champagne prices.

I had ordered onion soup (40cents) and had not known quite what to expect. I was very pleasantly surprised. The soup had a flavor I've been trying to discover in many places and disappointed every time. The ingredients were expertly combined so as to bring out various individual flavors. The major disappointment came from the topping, a cluster of croutons sprinkled with parmesan cheese, most of which found its way to the bottom of the soup bowl.

The steaks arrived. There are occasions, rare ones, when the presence of food is greeted with silent admiration. This was one of them. Sizzling, inch and a quarter thick steaks, with a baked potato almost as big as the steak loaded with sour cream were set down before us. I ventured an initial slice into the tender chunk of hot grilled meat, with the subtle nuances of Teriyaki sauce wafting up to the nostrils to stimulate the salivary flow, and enjoyed in rapturous silence.

I usually order my steaks medium, but I had ordered this one rare to gain full benefit from the Teriyaki sauce, and I was well rewarded.

The house red wine had a great similarity to Andres red dinner wine, and at \$1.50, it's a good complement to a steak if you don't want to spend money on an expensive wine.

The expression of contentment on my friend's face indicated that the sirloin was holding its standards rather well.

Our waiter, Pat, checked on the progress of the meal periodically, and asked us if we wished some Spanish coffee (\$1.00). We politely declined, as our stomachs were full to capacity.

I would suggest you make sure you are very hungry before you launch into a steak at the Keg n Cleaver.

Including the drinks and the wine, the bill came to a bit over \$13.00, and it was perhaps, dollar for dollar, one of the best food buys in Edmonton.

three research associates and for supplies and equipment.

Otto and Mather are also involved in the improvement of natural gas technology. Presently they are collecting data on the solubility of hydrogen sulfide in amine solutions -- this data is used in the design of processes

for the removal of hydrogen sulfide from natural gas.

Some of the natural gas data they collected previously is now being put to use for the design of a portion of the Syncrude plant to be built in the Athabasca Tar Sands near Fort McMurray.

## Help retarded

by Greg Neiman

Gloria Mansfield, Provincial co-ordinator for Citizen Advocacy under the Alberta Association for the Mentally Retarded is looking for people under 30 years of age to help handicapped people adjust to community life.

"Citizen Advocacy," she says, "is more than just a buddy system like Big Brother or Uncles at Large...it is being a friend and a spokesman for a handicapped person...a citizen advocate is a person who volunteers to form a one-to-one relationship with a handicapped child or adult to help that individual meet practical or emotional needs."

The association is trying a pilot project where volunteers are matched with handicapped people from the Winnifred Stuart School for Retarded Children "to ensure that their friends' rights aren't stepped on and to act as a peer model for that person."

"The rationale for citizen advocacy," says Mansfield, "is that protective social service organizations that would provide a variety of hard services for their clients are often deficient in their ability to truly meet the needs that a person may have. Citizen advocacy is seen as a supportive soft service complementing existing services."

A similar project has been set up in New Brunswick, dealing with many types of social handicaps, and has seen a tremendous success, Mansfield says.

In Edmonton there have been a few applications, and one match has already been made, but many more are needed.

"We feel that Edmonton community is right for it

now," says Mansfield, adding that some patients from Red Deer and Deerhome will be living in an apartment block in the city.

"These people will hopefully be phased into the community."

Persons interested in volunteering their services in this project are invited to apply at the Alberta Association for the Mentally Retarded at 9908-109 Street Edmonton, T5K 1H5 or phone 424-0541.

"We believe that a handicapped person has the same right to lead as normal a life as anyone else."

## grant

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travel, general purpose grants and personnel awards.

The largest contribution came from the federal government, accounting for \$229,676.32 of the total. The provincial government contributed \$67,393, industry \$15,812.50 and associations and organizations \$79,176.64.

Other sources accounted for the remaining \$41,081.49.

The University will lease a temporary building that housed the pathology and bacteriology departments to the University hospital for five years, the board decided Friday.

Under the agreement, the university retains ownership of the land while the hospital will assume all expenses and pay a nominal \$1 a year in rent. The transfer was sought due to serious overcrowding of laboratory facilities at the hospital.

Those departments affected have been moved into the Medical Sciences building.