

# Microelectronics comes to Alberta

by Lutful Kabir Khan

A new, highly sophisticated microchip design, fabrication, and research facility will soon be installed in Alberta, and will provide some great opportunities for students here at the U of A.

"This is our big chance," said Dr. Henry Baltes, acting president of the Alberta Microelectronic Centre (AMC), "to get our university and province into the exciting world of microelectronics."

The Alberta government is providing \$14 million spanning three years for the project.

Both Baltes and Dr. Robert James, Dean of electrical engineering at the U of A, are excited about the long-term and short-term benefits to the province from this project.

The facility will provide endless research opportunities for graduate students, faculty members, and even undergraduate students in the engineering faculty in various fields of microelectronics, especially in sensor technology, says James.

According to Baltes, the purpose of the centre is to provide an infrastructure for student instruction in microelectronics, to provide research facilities and also to give Alberta industries the chance to get into the microelectronic field.

An international leader in chip technology, LSI Logic Corporation has already made a deal to come into Alberta. Another electronics company, which Baltes did not want to name, had plans to leave Alberta, but decided to stay after the announcement of the new fab-

*The purpose of the centre is to provide an infrastructure for student instruction..., to provide research facilities and also to give Alberta industries the chance to get into the microelectronic field.*

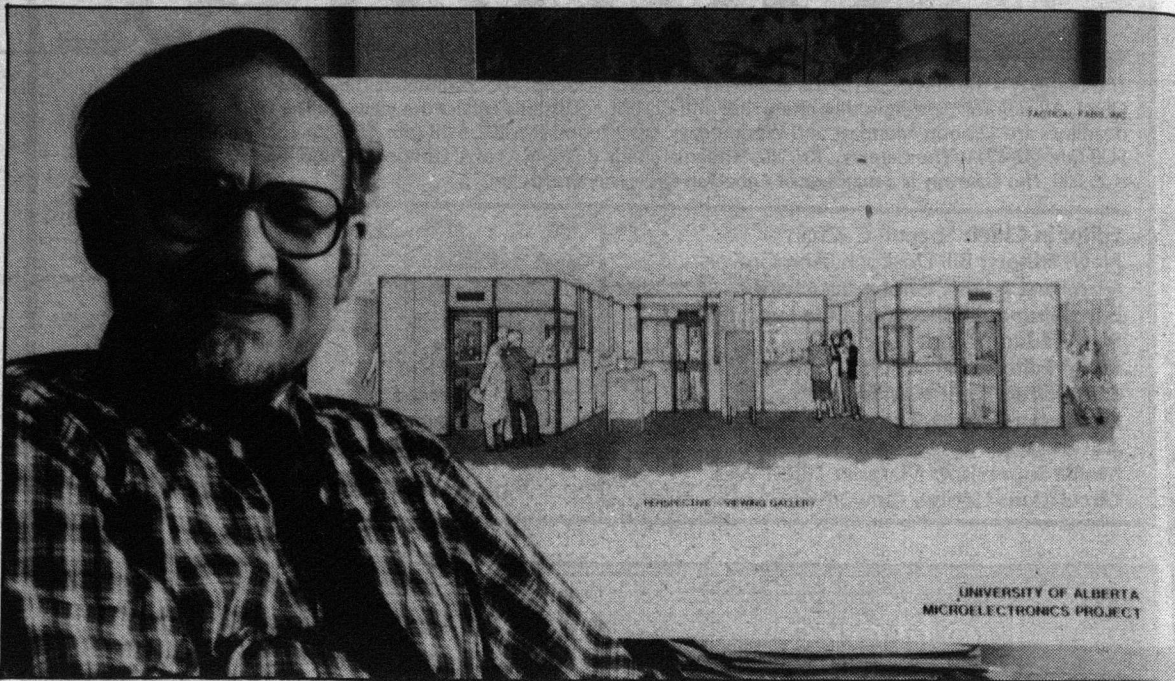
rication facility for AMC.

The chip fabrication facility will be small but very sophisticated. "Nobody else in Canada has the two micron dual layer high performance complementary metal oxide semiconductor (2M-DL-CMOS) technology," boasts Baltes.

Pre-fabricated units called fab-boxes for the centre will be mounted in June. The equipment, costing about \$4 million, will be installed in July-August.

The air inside the facility has to be absolutely free of dust particles.

"Our centre will have class 10 standard," said Baltes, "that means



Henry Baltes: great chance for university and province in microelectronics facility.

less than 10 dust particles per cubic feet of air. The air will be filtered 600 times an hour."

The high level of cleanliness is necessary for microchip production since the circuit elements are often much smaller than dust particles and a single dust particle can ruin the chips.

When in full operation by fall of 1986, the centre will employ about 40 people. "A few bright students, faculty members, and skilled technicians will be employed," said Baltes, "and training will be provided by LSI Logic Corp. in Santa Clara, California."

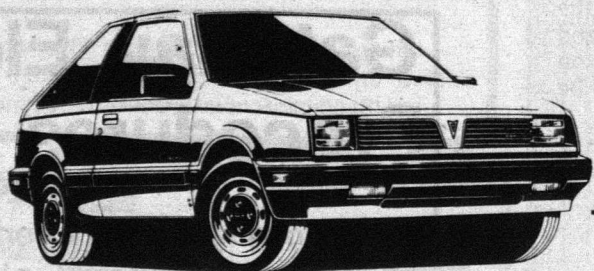
Another extensive program at the centre will be the sensor research technology. Sensors are unique in that they are made to detect different quantities in different environments. So they have to be made to suit the particular specifications.

The centre will have Organic Film Deposition Technique to manufacture sensors for research purposes or to provide feasibility proof for industries. "Graduate students will have endless opportunities for research in this field because of the diversity of sensor types," said Baltes.

The design facility of the microelectronic centre will be located in Calgary. It will have provisions to develop CAD (Computer Aided Design) tools for industrial use.

Most of the fabrication equipment for the centre comes from the United States. The master silicon wafers come from LSI Logic of California. But all the personnel will be Canadian. "When in full operation, about 40 skilled professionals will be working at the AMC," said Baltes. "But students at the University of Alberta will have special opportunities for education and research here."

**GRADUATES!  
YES, YOU CAN  
BUY THE ALL NEW  
'86 SUNBURST**



**NOW!  
AT  
\* \$215/MTH**

**FRONT WHEEL DRIVE  
JAPANESE IMPORT BY PONTIAC**

THE G.M. COLLEGE GRADUATE FINANCE PLAN ENABLES YOU TO PURCHASE THE G.M. OR TRUCK OF YOUR CHOICE AT SPECIAL DISCOUNT PRICES WITH SPECIAL G.M.A.C. FINANCING TERMS (5% DOWN PAYMENT) PROVIDED YOU ARE GRADUATING THIS SPRING, HAVE A VERIFIABLE COMMITMENT FOR EMPLOYMENT AND DO NOT HAVE A DEROGATORY CREDIT RECORD.

EXAMPLE: '86 SUNBURST  
ST. # 6390

PRICE	\$8690.
GRADUATE DISCOUNT COUPON	-250.
SPECIAL PRICE	8440.
5% DOWNPAYMENT	-430.
AMOUNT FINANCED	\$8010.

48 MTHS AT SPECIAL RATE OF 13%/ANNUM:	
PAYMENTS	* \$215./MONTH
TOTAL PAYMENTS	\$10,320

TOTAL PRICE (INCLUDING INTEREST) \$10,750

IT'S OUR WAY OF SAYING "CONGRATULATIONS"

**NORTHGATE** PONTIAC BUICK GMC LTD.  
PONTIAC • BUICK GMC

13215 - 97 St.

476 - 3371

## Capitalists change China?

"Hong Kong and China — who is leading whom?" will be the topic of a seminar on Wednesday by Dr. J. Paltiel.

China takes Hong Kong over in 1997, but Paltiel asserts that, at the same time, Hong Kong businessmen are involved more extensively in the Chinese economy. So "will Hong Kong change China" by 1997?

The Hong Kong Graduate Students' Association is presenting the

seminar. "It's going to be an academic discussion, we do not take any stand," said Toby Cham the VP Internal of the Association.

"A lot of people are uncertain about what's going to happen," said Cham, "when China takes Hong Kong back over in 1997."

Everyone is welcome. The seminar will be in the Tory Building, room 1-103, 5:00-6:00 p.m.

**COURSE IN  
POLISH ART & CULTURE**  
May 28 — June 24, 1986  
The University of Warsaw

4 weeks in Poland: lectures, guided tours, visits of Polish towns. All in English, French. Subjects: art, history, literature, sociology, film, theatre, music. Cost: Cdn. \$1900 includes: round trip flight from Montreal (ticket valid one year), room, board (hotels), tuition, transportation in Poland, Diploma. 25 participants. The Course given every year since 1973.

Deadline: April 10, 1986

Contact: Dr. Andrew Stoga: 483-2976 after 6 pm.

**JAVA JIVE**  
HUB MALL & SUB  
**SPRING SALE**  
Coffee & Tea accessories  
**20%-40%-60%  
OFF**  
**MARCH 20-29**