

ESSEX ROBOTS ARE WORLD LEADERS!

The University of Essex is believed to be unique in having a Computer Science Department where undergraduates can design and huild intelligent robolic computers - and tomorrow (Thursday) the laboratory where this is carried out is to be opened officially.

Dr vie Callaghan, who led the team which has developed the Laboratory, said: "We believe that this laboratory is world-beating in allowing subjects as diverse as hardware design, operating systems, communications, distributed processing, software engineering, image interpretation and artificial intelligence to be supported within a unified experimental environment."

The same laboratory is also being used for research, a fact which he said had obvious appeal to undergraduates since

Public viewing

The laboratory will be open to visitors tomorrow from 2pm to 4.30pm. There will be demonstrations of the equipment. it provided further motivation and relevance to their studies. Dr Callaghan added: "Students have access to the same state-of-the-art hardware and software as is used, for

same software as is used, for example, by NASA and British Aerospace." During the current academic year around 300 undergraduate and post-graduate students will use "The Brooker Laboratory" named in honour of computer pioneer Professor Tony Brooker who was at Essex for 21 years.

MOTIVATION

The laboratory provides integrated teaching across the entire Computer Science curriculum. This comprises infrastructure support for five under graduate courses plus some final-year projects, MSe projects, and MPhil and PhD research projects. "The design of mobile robot-

"The design of mubile robotic vehicles provides a unifying theme which is found to increase student motivation enormously," explained Professor Simon Lavington of the *Continued on Page* 3



Second-year Computer Science student Irena Doutlik watches one of the miniature robots travel through a tube. Two larger robots are behind her, Irena, aged 21, comes from Bosnia.

Essex robots are world beaters!

Continued from Page 1 Department of Computer Science.

He said that setting up the Laboratory had been relatively more costly in staff time than in money. Most of the robot related hardware has been designed and built at the University, with a consequen-tial saving of about ten times had it been bought.

In addition, five companies have donated hardware and software worth about £400,000. The University is grateful to the following for their generosity: Advanced Micropower, of Annahilt, County Down; Altera Corporation, California: IIM Computing Ltd, from Worcester; National Power, Pontefract; and Wind River Systems Ltd, California.

The Brooker Laboratory is based round 12 hardware/software development stations plus four large and several small robots. The large robots can communicate with each other and with other computers, via Ethernet or a wire-less radio link. Each of the 12 development stations includes a powerful Workstation.

In addition to all the above the Laboratory is also providing a focus for collaborative research with BT, on semiautonomous surveillance and on collaborative virtual reality; and with Slingsby Engineering on remotely-operated submersible vehicles.

Professor is honoured

"The Brooker Laboratory" has heen named in honour of Professor Tony Brooker, one of the pioneers in the development of software technology for more than 40 years who came to Essex in 1967 as the Founding Professor of the Department of Computer Science. He was instrumental in bringing artificial intelligence to the University, He retired in 1988.

The official opening will be carried out at around 3pm by Professor Mike Brady who is Professor of Information Engineering at the University of Oxford where he leads the robot research group. He was a Lecturer and later a Senior Lecturer in the Department of Computer Science at Essex from 1970 to 1980.

Among the guests will be Professor Brooker and Dr Mark Wilkins, Head of the Information Technology and Computer Science Division of the Engineering and Physical Sciences Research Council.

Sciences Research Council. Some 30 academics from other UK universities and a similar number of industrialists have also been invited, plus many representatives from the University of Essex headed by Vice-Chancellor Professor Ron Johnston and Dr Paul Scott, Head of the Department of Computer Science.