

## NEWS FROM THE INTERNATIONAL FEDERATION OF ROBOTICS FOR ROBOTICA

1. Malaysia has joined the International Federation of Robotics. The country is represented by the Malaysia Centre for Robotics and Industrial Automation (MCRIA) which is located on the Perak Branch Campus of the Universiti Sains Malaysia.

MCRIA was created in May 1995 with the objective of leading Malaysia into high technology and automation, thereby increasing the country's productivity and its competitive edge in the global market. The centre's activities include training, research and development, facilitation of technology transfer to industry, serving as a 'test bed' for prototype equipment, and international collaboration.

A research area of particular interest to MCRIA is 'tropical robotics'—the development of robot technology suitable for use in hot, humid climates.

The Malaysian Government has adopted a programme, called 'Vision 2020', to make that country a fully industrialised nation by the year 2020. At the launch of MCRIA, the Chief Minister of the State of Perak, Tan Sri Dato' Seri Ramli Bin Ngah Talib, noted that a solid manufacturing base is essential for Malaysia to achieve that vision. "Robotics and advanced automation are key components of that base", the Chief Minister said.

Initial funding for MCRIA has been provided by the Perak State Government.

2. The International Federation of Robotics has accepted a bid by the United Kingdom to host the 1998 International Symposium on Robots (ISR) in Birmingham. The 1997 ISR will take place in Detroit, USA.

3. The Japan Robot Association advises that MITI will start this year a new R&D project on 'Friendly Network Robotics'. The project aims to develop technology that will allow robots to be 'truly friendly' to human beings, unlike today's robots which 'reflect a sense of coldness'.

Japan and other countries are facing an 'ageing society'. This will result in an increase in the number of people requiring nursing care and a reduction in the number of young people of working age. It is expected that, in the next century, robots will be capable of helping elderly people to carry out activities of daily living at home and also will be able to perform household chores and other tasks now done by human labour.

Robots suitable for work in a home environment should be constructed of safe, flexible materials. Accordingly, one component of the new R&D project is to develop the technology of 'gentle mechanisms', possibly including the development of soft, flexible artificial skin to cover a future robot that will work in close contact with people.

Other components of the R&D programme concern the interface, telecommunication and 'distributed intelligence' requirements for successful human/robot interaction.

MITI believes that appropriate forms of human/robot 'coexistence' could 'bring about a major renovation in social life in the 21st century'. Moreover, the commercialisation of suitable mechatronic systems 'may create a brisk market demand comparable to that for automobiles and establish a massive new industry'.