

**WORKSHOP ON MICROELECTRONICS, SCHOOL OF ADVANCED TECHNOLOGY OF
THE ASIAN INSTITUTE OF TECHNOLOGY (AIT), BANGKOK (THAILAND),
AUGUST 21-24, 2000**

PARTICIPATING COUNTRIES : 10 (INCLUDING 9 MEMBER COUNTRIES OF THE CENTRE)

NUMBER OF PARTICIPANTS : 10 FROM THE MEMBER COUNTRIES OF THE CENTRE AND OTHERS

Electronics is one of the fastest growing areas in research and industrial development. The engine of the growth has been the miniaturization or microelectronics. In view of its expanse encompassing the telecommunications, information technology and entertainment and its near-universal application in industrial controls and automation, Microelectronics is being accorded strategic importance in developing countries and has been identified as one of the areas of priority in the Centre's programme. In pursuance thereof, the Centre organized a workshop on 'Developments in Microelectronics' during August 21-24, 2000 at the School of Advanced Technology (SAT) of the Asian Institute of Technology (AIT) in Bangkok, Thailand under its agreement of cooperation with AIT concluded in 1999. SAT is a centre of excellence in industrial systems, mechatronics, information technology and microelectronics. The microelectronics programme of the School is carried out in collaboration with the National Electronics and Computer Technology Centre of Thailand.

Nine member countries of the Centre attended the workshop, viz. Bangladesh (Mr. Md. Mustafizur Rahman of the University of Dhaka), Egypt (Prof. Ayman El-Dessoki of the National Research Centre in Giza), India (Dr. S. Ahmad of the Central Electronics Engineering Research Institute in Pilani and Dr. L.M. Bhardawaj of the Central Scientific Instruments Organisation in Chandigarh), Indonesia (Prof. Totok Sabar Soegandi of the Indonesian Institute of Sciences LIPI in Bandung), Malaysia (Mr. M. A. Bin Mohamed Isamdar of MIMOS Semiconductor in Kuala Lumpur), Mauritius (Dr. H. C. S. Rughooputh of the University of Mauritius in Reduit), Nepal (Mr. Shashidhar Ram Joshi of Tribhuvan University in Kathmandu), Tanzania (Mr. Emmanuel John Kaale of the Tanzania Commission for Science & Technology in Dar-es-Salaam) and Vietnam (Dr. Tran Xuan Hong of the Ministry of Science, Technology & Environment) and a number of participants from Thailand. Iraq had nominated Mr. Ali Abdallah Abbas, who could not attend. All the participants presented their country reports.

The faculty comprised of international experts including Dr. Jovitha Jerome and Dr. Lertsak Lakawat from AIT, Dr. Somsak Tantivanichkij from Lucent Technology and Dr. Itti Rittaporn, Director of Thai Microelectronics Centre, who also presented the country report of Thailand. Besides fundamentals of

microelectronics including design and packaging concepts the workshop covered digital and analogue electronics design with laboratory session, device fabrication including process technology and VLSI system design, covering design, simulation and integration. Apart from laboratory visits to the Telecommunications and Microelectronics laboratories, the participants also visited one of the microelectronics production centre of M/s Read – Rite, who are one of the world leaders in fabrication of hard disks drives for PCs etc. and have a staff strength of ~ 11,000.

The workshop opened with a brief inaugural function and welcome by Prof. Nitin Afzulpurkar of the School of Advanced Technology (AIT) followed by remarks by the Director of the NAM S&T Centre and Prof. Huyun Ngoc Phien, Dean of the School of Advance Technology (AIT). Prof. Mario Tabucanon, Provost of the AIT, who also gave away the certificates, delivered the Valedictory Address at the concluding session of the workshop.

The workshop adopted a set of recommendations. These included training in LSI/VSLI fabrication at the Central Electronics Engineering Research Institute (CEERI), Pilani, India, development of microelectronics equipment at the Central Scientific Instruments Organization (CSIO), Chandigarh, India, VSLI design in AIT, Bangkok, Thailand and wafer fabrication in Mysem – MIMOS, Malaysia. The workshop also recommended another policy level meeting of member countries to study the future trends in microelectronics R&D and industry.