

Technology Development Board fundees score reaches quarter-century

Twenty-five agreements in 22 months. That's the current scoring rate of the Technology Development Board for funding development and commercialization of indigenous technologies.

M/s Avra Laboratories Private Limited, Hyderabad, promoted by A. V. Rama Rao, inked one agreement with the Board. Rama Rao retired as Director of Indian Institute of Chemical Technology, Hyderabad in April 1995 and has since become an entrepreneur. The company proposes to manufacture CMI-392, a candidate anti-inflammatory drug; RU-486 (Mifepristone), a 'morning after' human abortifacient, and other drug precursors. Of the total project cost of Rs 5 crores, the Board is providing Rs 2 crores in a project time of just six months.

Another agreement is with M/s AV Alloys Limited, Hyderabad. One of the promoter directors, Vikram Daga, is a product of IIT, Mumbai. The company proposes to manufacture High Speed Steel (HSS) sheets and plates through continuous electro slag refining (ESR). IIT-Mumbai has done extensive trials which have led to the improvement in

the ESR design and the process techniques. The metallurgical software developed by IIT is able to handle adequately the problems involved in the manufacturing of HSS products. The company has entered an agreement with IIT for transfer of technology.

The third agreement is with M/s Manukirti Biogems Private Limited, Bangalore, incorporated in December 1993. One of the promoters, Subita Srimal, is a scientist and she did her Ph D under the supervision of the late B. K. Bachhawat. She holds a few patents (jointly with others).

The company has approached the Board for development and commercial production of CAL reagent for detection of bacterial endotoxin developed on a pilot scale by Srimal in collaboration with the Indian Institute of Science, Bangalore. CAL reagent is prepared from the blood cells of the Indian horseshoe crab without causing any harm to the animal. The product CAL is to be used in the BET test described in the *Indian Pharmacopoeia* (1996 edition). This test is mandatory for all manufac-

turers of large volume parenterals, and any other injectibles intended for human use. The product substitutes Limulus Amebocyte Lysate (LAL) which is being used world wide for detection of bacterial endotoxins. The total cost of the project is Rs 115 lakhs and is to be completed within 12 months.

Including the 20 agreements signed by the Board in 1997-98, the Board has signed, so far, 25 agreements with 23 commercial enterprises. The total cost of these 25 projects is about Rs 174 crores of which the Board is providing Rs 64 crores.

The technology providers for these 25 projects include national laboratories, academic institutions and in house R&D units in the industry recognized by Government. The range of technologies include, medical and health, engineering and electronics, chemicals and lubricants, bio-fertilizers and bio-pesticides, tele-communications, transport, energy and waste utilization.

Further information can be had from: The Secretary, Technology Development Board, Technology Bhavan, New Mehrauli Road, New Delhi 110 016.

Vice-President presents G. D. Birla awards

The Vice-President of India, Krishan Kant presented at his house on 25 July the G. D. Birla awards for scientific research for the years 1996 and 1997 respectively to Ashok Sen of the Mehta Research Institute in Allahabad, and Biman Bagchi of the Structural Chemistry Unit of the Indian Institute of Science. Instituted in 1991, 'the G. D. Birla Award for Scientific Research' accords recognition to high-calibre scientific research performed by Indian scientists preferably below the age of 50 living and working in India. The award money is Rs 1.50 lakhs. It is available in any branch of science including medical sciences, basic as well as applied. The emphasis is on the work done by a scientist during the last 5 years. The selection is made by a Board presided over by the President of the Indian National Science Academy and

includes 4 or 5 other eminent scientists appointed in consultation with him.

The citations for the Birla Awards for 1997 and 1998 read:

'Sen has made outstanding contribution in various areas such as sigma model, soluble conformal field theories and, more recently, duality. He is regarded as an outstanding theoretical physicist produced in this country during the last two decades. His work on string theory has been very highly regarded by the best experts in the field who consider him as a leader in mathematical physics. His recent work in the field of string theory has brought him international repute. At the age of 40 he is the youngest awardee of the G. D. Birla Award for Scientific Research.'

'Bagchi has done pioneering research in the frontier areas of chemical dynam-

ics in solution. His theory of solvation dynamics has successfully explained many aspects of experimental and computer simulation results. He has developed a microscopic theory of non-polar solvation dynamics. He has also brought to light the important role of the translational motions of solvent molecules contribution to our understanding of the anomalous ionic conductivity of small rigid ions in dilute electrolyte solutions.'

The earlier Birla awardees are: Asis Datta (1991), for Molecular Biology and Biotechnology; Goverdhan Mehta (1992), for Organic Chemistry; R. A. Mashelkar (1993), for Polymer Science and Engineering; Padmanabhan Balaram (1994), for Molecular Biophysics; and Girish Saran Agarwal (1995), for Quantum and Non-Linear Optics.