Call for proposals under Molecular Electronics, Conducting Polymers and Non-invasive and other Bio-sensors

Department of Science and Technology (DST), Govt of India under its programme on Technology Systems Development (TSD) intends to support and catalyse technology development projects in the upcoming areas of molecular electronics, conducting polymer electronics, non-invasive and other bio-sensors.

The submitted proposal should aim to establish the technical feasibility of emerging concepts in the areas of biomolecular sensors, conducting polymer based microactuators/artificial muscles, molecular electronic devices such as Memory Switching, Logic Gates, Diodes, Organic electronics devices like Light Emitting Diodes (OLEDs), Organic Field Effect Transistors, Organic Thin Film Transistors (OTFTs), Organic Photovoltaics (OPVs), Biofuel Cells, Bio-photonics, Ion Selective FET (ISFET), Electronic-Nose-Tongue-Vision, Bio-metrics, conducting polymer based sensors for Biological Fluids, Bio-chips, Tactile Sensors, Microfluidics, Energy Devices, Super Capacitors, Information storage (memory) devices based on conducting polymers, Self-assembled Monolayers, Langmuir-Blodgett films and other thin films. The emphasis should be towards development of a device or a technology process leading to a device and not a mere academic research.

Some of the other typical areas in which Proposals can also be submitted in TSD programme are Glass and Ceramics Technology Up-gradation, Water Purification and Rural Micro-water Management, Waste Utilization and Management, Public Health and Safety, Surface Engineering Techniques for Rejuvenation of Traditional Crafts, Laser/Plasmas/Microwave Technology, Decentralized Energy Generation and Harvesting, Alternate Fuels, Fuel Conservation, Efficient Utilization of Fuels, ICT-driven Technologies, Innovative Civil Infrastructure Technologies, Platform Technologies for a Range of Applications. The above list is not exhaustive and Proposals in other innovative areas are equally welcome if the activity is perceived to be useful by DST for technology advancement in the country and is not being taken up under any other major R&D programmes of the Government of India.

The Project Proposals could be submitted for financial support by scientists/engineers/technologists working in academic institutions/registered societies/R&D institutions/laboratories having adequate infrastructure/facilities to carry out technology development work/prototype building. DST would encourage multi-disciplinary proposals envisaging network/collaboration of various institutes having diverse expertise and facilities for synergistic implementation of the projects. Expertise/Intellectual Property Right (IPR), Technology Transfer to Industry with PI/Institute may be highlighted. Prescribed format is available under TSD programme at DST website: **http://www.dst.gov.in**

The guidelines for formulation and submission of projects and the prescribed format can also be collected from **Shri Rajeev Sharma**, Scientist-'C' and Member Secretary (PAC on Tech. Systems), Room No. 20, Hall-C, Department of Science and Technology, Technology Bhavan, New Mehrauli Road, New Delhi 110 016 (e-mail: rajeevsharma@nic.in, Telephone: 011-2659 0310). The complete proposals (15 copies) and/or suggestions regarding additional areas for technology development may be addressed to **Dr G. J. Samathanam**, Adviser and Head, Technology Development and Transfer (TDT) Division, Department of Science and Technology (DST), Technology Bhavan, New Mehrauli Road, New Delhi 110 016, Telefax: (011) 2686 2512/2659 0367, e-mail: samathan@nic.in.