

### List of projects sanctioned during 2011-12

Sl.No.	Title	Investigator/ Complete address of Institute	Duration	Total Cost (in Rs)	Industry Contibution (in Rs)
1	Development of Smart Prognostic System for Early Indication of Cardiac Problem of a Patient	Prof. Ajoy Kumar Ray, Vice Chancellor, Bengal Engineering and Science University, Shibpur, Howrah 711103	36 months	37,42,500	4,00,000
2	Inspection of Warp and Weft Lacking in textile web material using wavelet and artificial intelligence	Dr. A. Senthil Kumar, Prof & Head, Department of Electronics and Instrument Engg. School of Electrical Science, Kongu Engg. College, Perundurai, Erode - 638 052.	24 months	18,30,800	1,50,000
3	Development of simple Surface Plasmon Resonance based detection of pollutants in water	Dr. S. Ananthi, Head, Dept. of Instrumentation, University of Madras, Guindy Campus, Chennai 600 025.	24 months	28,99,800	3,00,000
4	Development of an efficient staple yarn characterization unit with multi sensor fusion and field programmable gate array (FPGA) based data reduction card	Dr. Anindita Sengupta, Assistant Professor, Bengal Engineering and Science University, Shibpur, Howrah 711 103, West Bengal.	36 months	31,09,400	3,00,000
5	E-Pick counter for power looms	Prof. (Dr.) P.A. Khatwani, Prof. & Head, Dept. of Textile Tech. & Processing Sarvajnik College of Engg. & Technology, Athwalines, Surat 395 001.	24 months	10,10,750	1,00,000
6	Development of a Plasma based System to Synthesize Nanotitania and Study its Self Cleaning Effect	Dr. Balasubramanian C, Scientist SD, F.C.I.P.T., Institute for Plasma Research, Gandhinagar 382 044, Gujarat.	24 months	28,33,000	3,00,000
7	Design and Development of Electro-active sensor fabrics for monitoring body kinematics and vital signs	Dr. G. Thilagavathi, Department of Textile Technology, PSG College of Technology, Coimbatore 641 004, Tamil Nadu	18 months	24,97,200	2,50,000

8	Development of Digital Signal Processor (DSP) controlled Infra Red (IR) Laser absorption based in-situ gas sensor for Industries	Dr. Alok Verma, Scientist, Opto-electronics Division, Society for Applied Microwave Electronics Engineering and Research (SAMEER), IIT Campus, Hill Side, Powai, Mumbai 400 076.	24 months	31,16,000	3,00,000
9	Design of Pulse-jet Filtration Apparatus	Dr. Arunangshu Mukhopadhyay, Professor, Department of Textile Technology, National Institute of Technology, GT Road, Bye Pass, Jalandhar 144 011, Punjab	30 months	52,28,000	5,00,000
10	Design of a compliance monitored clubfoot brace for management of clubfoot deformity in children	Prof. Vrisha Madhuri, Unit of Padiatric Orthopedics, Christian Medical College, Christian Medical College Vellore, Vellore, 632004, Tamil Nadu	24 months	34,98,000	4,00,000
11	Indigenous Development of table-top Surface Plasmon Resonance (SPR) set up	Prof. Vinay Gupta, Department of Physics and Astrophysics, University of Delhi, Delhi 110 007.	24 months	40,71,200	3,90,000
12	Design & Development of Prototype Plasma Treatment System and Process Optimisation to Modify the Surface of Polyester & Nyloc Fabric to Improve its Adhesion with Polyurethane (PU) & Polyvinyl Chloride (PVC) Coatings/ Lamination	Mr. Ramakrishna Rane, Scientist SD, F.C.I.P.T., Institute for Plasma Research, Gandhinagar 382 044, Gujarat.	24 months	21,32,000	2,00,000
13	Design and develop and indigenous automatic single fibre length measurement instrument for long staple fibres, like wool, pashmina, angora, etc.	Shri Achintya Kr. Samanta, Scientist B, Wool Research Association, Kolshet Road, Thane 400 607, Maharashtra	24 months	25,23,000	2,50,000
14	Development of a Tele-Surgical Training Robot and Simulator Model	Dr. T. Asokan, Associate Professor, Department of Engineering Design, Indian Institute of Technology Madras, Chennai 600 036	30 months	50,24,200	5,00,000

15	Design and development of computerised instruments to measure the vertical and in-plane wicking characteristics of fabrics	Dr. Apurba Das, Associate Professor, Department of Textile Technology, Indian Institute of Technology, IIT, Hauz Khas, New Delhi 110016.	24 months	19,86,400	2,00,000
16	Development of Accelerated Tensile Creep Apparatus for testing of Geotextiles	Ms. Manisha A. Hira, Scientist C, The Synthetic and Art Silk Mills Research Association, SASMIRA, Worli, Mumbai 400 030.	12 months	11,17,700	1,00,000
17	Design of Smart FES System for physically challenged person	Dr. Dinesh Bhatia, Department of Biomedical Engg., Deenbandhu Chhotu Ram University of Science and Technology, Murthal Sonapat, Haryana 131039.	36 months	42,91,200	5,00,000
18	Development of epitope based diagnostic gadget for detection of Mycobacterium tuberculosis in the Indian population	Dr.T.S. Keshav Prasad, Faculty Scientist, Institute of Bioinformatics, Discoverer building, 7th Floor, International Tech Park, Bangalore 560 066.	24 months	71,44,300	7,00,000
19	Rotor Jet micro fibre production assembly for Technical Applications	Dr. R. Neelakantan, Assistant Professor, Anna University, Department of Textile Technology, Anna University, Chennai 600025	24 months	16,92,400	1,50,000
20	Development of portable jute fibre strength tester	Dr. Sandip Basu, Indian Jute Industries Research Association, 17, Taratala Road, Kolkata 700088.	18 months	19,84,400	2,00,000
21	Development of an Instrumentation to measure slash resistance of fabrics	Dr. R. Alagirusamy, Professor, Department of Textile Technology, Indian Institute of Technology, IIT, Hauz Khas, New Delhi 110 016.	24 months	25,34,100	2,50,000
22	Design and Development of a Device to Measure Electromagnetic Shielding Ability of Textiles	Dr. Ravi Prakash Singh, Scientist B, The Synthetic and Art Silk Mills' Research Association, SASMIRA, Worli, Mumbai 400 030.	24 months	30,23,200	3,50,000

23	Indigenous development of miniaturized table top surface plasmon resonance based fiber optic sensor	Dr. Rajan Jha, Assistant Professor, School of Basic Sciences, Indian Institute of Technology Bhubaneswar, Samantapuri, Bhubaneswar 751013, Orissa	24 months	63,94,000	6,00,000
24	Electrospinning geometry optimization for preparation of core-sheath nanofibres and conversion of nanofibres into yarns	Dr. N. Vigneshwaran, Scientist, Central Institute for Research on Cotton Technology, Adenwala Road, Mathunga, Mumbai 400019. Prof. T.S. Natarajan, Professor, Department of Physics, Indian Institute of Technology, IIT Madras, Chennai 600036.	24 months	22,43,400	2,00,000
25	Development of Low--Cost Versatile Endoscopic Equipment System for Neurosurgery (Ventricular, Intra-Cranial and Skull-Base Surgery)	Dr. Ashish Suri, Additional Profesor, Department of Neurosurgery, Neurosciences Centre, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110 029.	36 months	86,03,000	11,43,000
26	Somatic Cell Flow-through based Reader for detection of mastitis in bovine	Dr. K.G. Thirumurugan, Associate Professor, TANUVAS, Department of Animal Biotechnology, Madras Veterinary College, Chennai 600007.	36 months	40,60,000	400,000
27	Production of low cost hollow fiber hemodialysis cartridge	Dr. Sirshendu de, Professor, Department of Chemical Engineering, IIT Kharagpur, Kharagpur 721302.	36 months	35,70,000	3,50,000
28	Design of Ultra Power CMOS Cell for Temperature Sensor in VLSI"	Dr. Vijay Nath, Assistant Professor, VLSI Group, Department of Electronics and Communication Engg., Birla Instutute of Technolgy, Mesra, Ranchi - 835215, Jharkhand.	24 Months	10,70,060	Defence R&D Laboratory, H, bad Contribution - 2,50,000

29	Functionally impregnated Zeolite based potassium sensor	Dr. L Cindrella, Assistant Prof., Department of Chemistry, National Institute of Technology, Tiruchirappalli- 620015.	18 Months	9,50,000	1,50,000
30	Development of Instrument for Tea Quality Monitoring	Prof. Priyabarta Srakar, Department of Polymer Science and Technology, University of Calcutta, 92 APC Road, Kolkata- 700 009.	36 Months	24,44,400	2,50,000
31	Development of sensor for the detection of adulteration in Oil	Prof. Priyabarta Srakar, Department of Polymer Science and Technology, University of Calcutta, 92 APC Road, Kolkata- 700 009.	36 Months	25,24,400	2,50,000
32	Lab scale prevision I - V and C - V real time analyzer for design and development of a selective gas for sensor	Prof. Anup Mondal, Department of Chemistry and Excellence for Green Energy & Sensor Systems, BESU, Shibpur, Howrah - 711 103.	24 Months	19,80,872	2,00,000
33	Design & Development of new class of photo chemical reactor (PCR): An integrated approach to the photo oxidation of environmentally hazardous toxic organic pollutants	Dr. L. Gomathi Devi, Prof., Department of Chemistry, Central College, City Campus, Dr. Ambedkar Road, Bangalore University, Bangalore - 560 001	36 Months	28,82,989	1,67,469
34	Hardware based field - type E-Nose for Flavor Detection of Tea using Metal Oxide Semiconductor (MOS) sensor	Dr. M Bhuyan, Prof., Department of Electronics and Communication Engg. Tezpur University, Tezpur, Napaam - 784 028.	24 Months	33,53,360	3,00,000
35	Development of Mark-I hand held/stand alone potentiostat having application for the detection of adulteration in milk	Dr. P.C. Panchariya, Scientist- E II, Digital System Group, CEERI, Pilani - 333 031.	24 months	23,04,560	2,50,000
36	Development and demonstration of prototype plasma carburizing System	Er. Alphomsa Joseph, Engineer, FCIPT, A-10/B, Sector - 25, Gandhinagar - 382044	36 months	32,22,500	3,00,000

37	Design & development of computerized instrument for testing bending behaviour of semi-rigid fabrics with special reference to technical textiles	Dr. Surajit Sengupta, Mechanical Processing Division, National Institute of Research on Jute & Allied Fibre Technology, Kolkata – 700 040, WB	36 Months	30,08,000	3,00,000
38	Design and Development of an Instrument to determine / characterize medullation type and distribution in various Indian wools	Sh. Girish Kherdekar, Scientist, Wool Research Association, Kolshet Road, Thane – 400 607, Maharashtra	24 Months	19,99,200	2,00,000
39	Preparation of a multi-analyte ELISA Array of bone turnover markers for the assessment of bone health	Dr. Meena Desai, National Institute for Research in Reproductive Health, J.M. Street, Parel Mumbai -400 012	24 Months	24,75,000	nil
40	Design and Development of an Instrumental set-up for measuring the Photoenergy Transmitting Capability of Horticultural shading nets	Design and Development of an Instrumental set-up for measuring the Photoenergy Transmitting Capability of Horticultural shading nets	24 Months	29,31,000	3,00,000