

## ANNEXURE 9

### DETAILS OF PROJECTS SUPPORTED UNDER TECHNOPRENEUR PROMOTION PROGRAMME DURING THE PERIOD UNDER REPORT

#### COMPLETED PROJECTS

Sl. No.	Name of the project
1.	Cut off valve
2.	Solar powered lamp
3.	Natural air cooler
4.	Banana stem injector
5.	P&P Dental implant systems
6.	Banana fibre separator machine
7.	Digital Talk Friend (DTF) – Speed warning and limiting devices(SWALD)
8.	Prototype Development of the Energy Efficient Oil Expeller Machine
9.	Design improvement of the motorized cycle hoe
10.	Production of grape flakes
11.	Rotary variable compression ratio internal combustion engine
12.	A Multipurpose Watch
13.	Endodontic Instrument for root canal sterilization
14.	Hydroponics prototype devices
15.	Use of LASER to develop optical experiment module for school level
16.	Design and Development of single antenna for Doordarshan Channels DD1 and DD2
17.	Precision Tool for liner calibration
18.	Integrated use of Neem and Sea Algae in the eco-friendly management of crop pests
19.	Prefabrication Technology Development for small scale and cottage industries – to manufacture Indian Oriental Remedies
20.	Wireless remote patient monitoring system

## ON-GOING PROJECTS

Sl. No.	Name of the project
1.	Arecanut peeling machine
2.	Stored Heat Cooker
3.	Direct Current Transformer
4.	Elliptical Machining Bed (EMB)
5.	Design improvement of Mangal Turbine
6.	Tamper proof electronic lock
7.	Buttonhole machine
8.	Manually operated water pump
9.	Tissue engineering of porcine ureters for cardio-vascular use
10.	Seamless Weaving Machine
11.	Synthesis of nano-crystalline anatase phase Titanium Di-oxide
12.	Visual events recognition on a chip
13.	Soap less washing machine
14.	Vessel cleaning machine
15.	Development and commercialization of electric fences
16.	Automatic vending machine
17.	Growth stimulator for plants
18.	Medical surfactants
19.	Technology up-gradation of Ayurvedic Bullet Proof Jacket
20.	Modified wood stove
21.	Hydraulic Sun Tracker
22.	NUALGI for growth of Diatom algae
23.	Development of PC based Oscilloscope
24.	Hybrid system for solar distillation and drying application
25.	High speed wireless sensor data acquisition system
26.	Auto compression sprayer
27.	Development of indigenous micro-carriers for large scale cell culture
28.	Intelligent LP Gas Detector (IGD)

Sl. No.	Name of the project
29.	Salt harvesting equipment
30.	Geometrical instrument comprising a centre leg assembly and various plotter bodies with plotter holes & fool proof mechanism
31.	Intelligent ground vehicle
32.	LPG fueled Iron Box
33.	Inhaler for insulin administration
34.	Product Hairminator for validation of Hypothesis – Cytotoxic Lectin Inhibit growth of Hair follicle
35.	Technology upgradation of Telescopic Bronchoscope
36.	Development of groundnut separator machine
37.	Development of different variants for mobile operated switch
38.	Design and development of temperature indicating chalks
39.	Development of indigenous micro-carriers for large cell culture
40.	Worm composting to treat medical waste
41.	Scientific evaluation of a herbal medicine for treatment of Asthma
42.	Laboratory Scale Process Development of environment friendly printing ink
43.	Accurate level indicator
44.	Herb-Med (herbal medicine for patients of Kidney stones)
45.	Development of Arrowroot grinding machine
46.	Development of advanced model of pomegranate deseeding machine and procuring certifications to meet the requirement of the export market
47.	Development of water flow electronic controller for household water tank

**TePP Phase-II :**

48.	Design and development of Mechatronic Flyer Frame for Cotton Spinning
49.	Auto-distractor

## ANNEXURE 9(Contd....)

**PROJECT PROPOSALS APPROVED DURING THE PERIOD  
FROM JANUARY, 2008 TO MARCH, 2009**

Sl. No.	Name of the project
1.	Development of eco-washing process for hand made woolen carpet industry
2.	Cooled helmet for two wheelers riders
3.	Digital controlled precise dispensing valve for liquids under gravity flow
4.	Pooga sizing machine
5.	Promotion of Rapid Thrombocheck Test Kit
6.	Mrityunjay – An Advanced Electronic Distant Patient Monitoring System
7.	Mobile crime and accident reporting platform
8.	Light emitting POP tiles
9.	Merlyn D3 Low Cost Modular Bomb Disposal Robot with Flexible Chassis System
10.	Low cost automatic cash depositor
11.	Cardiac Analyser
12.	Drishticare-a tele diagnosis platform for retinal experiment
13.	Laryngotracheal stenosis
14.	Low cost multi-media projector
15.	Micro controller based custom designed overload relay
16.	Scale-up and standardization of an economical commercially viable laboratory process to isolate $\gamma$ -Oryzanols from the waste products arising out of rice bran oil refineries
17.	Development of a herbal skin-nourishing gel
18.	Focal length independent, high resolution wide frame, camera array & X-ray Imager
19.	Device and process to capture losses due to weather event in any specific geographical coordinate
20.	Pickling acid recovery using diffusion analysis
21.	Ball press washer for cleaning and crushing biological raw materials
22.	Control release crop fertilizer with additives
23.	Lengthwise Zig-zag cutting of steel coils
24.	Synthesis of nanocrystalline HAP and sintered compacts of the same
25.	Pedestal wet grinder
26.	Voice net
27.	Shoe brush with wax polish
28.	Bath Brush

Sl. No.	Name of the project
29.	Development of aqueous metal oxide based super capacitors
30.	Nimble carpet shearing machine
31.	Heart throb-portable generic multi factor medical measurement unit
32.	Real time flight data analyzer
33.	Automated scan lock
34.	Variable length pedal-crank assembly with doubling of torque
35.	Steerable Headlights
36.	Active bioconjugates 2-0 alpha pyranosyl L-ascorbic acid
37.	AAC device with dynamic message generation and speech synthesis for children with cerebral palsy
38.	Shoulder harness helmet
39.	Novel tamper proof, tear proof, durable leather as printing paper for niche applications
40.	Solar water heater using fused tube lights
41.	Development of friction stir welding process
42.	Innovation of Ultraclean electro stag refined technology/cost effective substitute for clinical applications
43.	Development of a wireless sensor network & communication protocol in underground mine environment
44.	Peeling device (machine) for Banana Stem
45.	Multi-crop portable circular oil expeller
46.	Microprocessor based lubrication flow and inductive sensing and controlling device
47.	2-D Nano-Positioner
48.	Development of a commercial Rheometer for High Performance Concrete
49.	Slow-release multi-micronutrient zinc and boron based fertilizer
50.	Intelligent fuel pump calibrator
51.	Smart solar irrigation unit
52.	Fully automatic cashew-nut breaking machine
53.	Design & development of dynamic stretch comfort measurement device for sport and healthcare application
54.	Solar wafer/cell inspection equipment
55.	Low temperature heat engine
56.	Design & development of domestic monoblock pump without shaft
57.	Fermenter – microprocessor based controller with GSM mobile technology

Sl. No.	Name of the project
58.	Design & development of a prototype of a digital textile printing machine
59.	Track every coin
60.	Pilot plant desalination of sea water
61.	Integrated security management
62.	Design and development of a DNA fingerprint based photopolymer hologram reader/writer for Personnel Identification and Security
63.	Process optimization and production of novel probiotic consortium (Synshrimp) for eco-friendly shrimp farming
64.	Optimization of production technology for the commercialization of Shrimpectiva (Algal Bioactive) for proactive Shrimp disease management
65.	RSW Chiller
66.	Simultaneous production of multiple digestive enzymes from microbial sources
67.	Snow breeze ice air-conditioner
68.	Planar inverted F-antenna for mobile communication (PIFA)
69.	Innovative baghel devices
70.	Intralock intravenous canula
71.	Development of Customized Audiometer
72.	Develoment of Bhavana's Procto Tub
73.	Banana cotton separator
74.	Control of biofouling in ships and atomic power station cooling system
75.	Phantom power eliminator
76.	Manually operated wheat reaper
77.	Development of improved seed drill
78.	Instant sewage treatment plant (e-STP)
79.	Portable front-loaded washing machine without concrete structure
80.	Product development of sugarcane bud chipper
81.	Development of Star Node Circuit Breaker (SNCB) for newly invented midget transformers as well as for some presently available conventional transformers
82.	Multimodal interaction systems for urban children for playing computer games
83.	Bathrooms for the safety of elderly

**Micro-Technopreneurship**

84.	Electro-chemical sensor for toxic metals analysis in drinking water
85.	Electric Rocker(Terasa)
86.	Waste heat recovery from engine exhaust

Sl. No.	Name of the project
87.	Eco brakes – energy efficient braking system
88.	Cultivator suspension system
89.	Multi point illumination white LED solar lamp
90.	Arecanut tree climbing & harvesting robot
91.	Energy efficient electromagnetic motor
92.	New ocean wave energy harvesting system
93.	Multi-purpose mosquito trap
94.	Design and development of switched reluctance (SR) submersible motor
95.	Vision system for automatic inspection of rectangular sensor devices
96.	Increase in productivity of Spirulina
97.	Extra air cooler
98.	Closed circuit cooling tower
99.	Power saver in lathe machine
100.	Two speed system for rickshaw
101.	High low gear box attachment
102.	Zero tech invention
103.	Tree climbing gear
104.	Onsite mobile electrolytic generation of NaOCl, Cl <sub>2</sub> and Chlorine Dioxide
105.	Improvement in related to vehicle road wheels rotating without friction
106.	Development of an “Autopilot” for a UAV
107.	Micro-thruster augmented wind turbine
108.	Backpack beverage container for tea/coffee
109.	Evolution of some Ayurvedic formulation for their potentiality in the cure and management of diseases like cancer, diabetes
110.	Digital valve controller P/N:DVC 02

**TePP Phase-II :**

111.	A rotary apparatus adopted to perform as a variable compression ratio IC engine
112.	Alkali lignin products & cooler pads from dry pine needles
113.	Tea & tea based herbal health drinks
114.	Indigenous dialysis device refinement for commercialization and test marketing
115.	Remote patient monitoring
116.	Heating/cooling apparel and accessories