



ANNEXURE 9

DETAILS OF PROJECTS SUPPORTED UNDER TECHNOPRENEUR PROMOTION PROGRAMME

Sl. No.	Name of the project
PROJECT PROPOSALS APPROVED DURING THE YEAR 2009-10	
TePP Phase I	
1.	Fabrication of high energy planetary mill and low temperature synthesis of tungsten-carbide & cobalt composite powder at nano scale using the same
2.	Improved machine interface - a replacement to mouse
3.	Portable microchip slide projector (teaching aid)
4.	Development of sensor-based systems for estimation of Fluoride and E. Coli in drinking water
5.	Development of filler grade PTFE powder and recycling PTFE scrap material
6.	Portable front-loaded washing machine without concrete structure
7.	Development of Piezoelectric Transformers
8.	Bathrooms for the safety of elderly
9.	Multimodal interaction systems for urban children for playing computer games
10.	Innovation on Normal Scaife i.e. GEM-Polishing wheel for gem polishing application
11.	Cabinet of Personal Computer
12.	Faucets (washbasin and bathroom taps) with independent control of temperature and flow
13.	Products designed to maintain temperature without the need of continuous power
14.	High energy density capacitor development
15.	Light duty variable displacement compressor
16.	Retractable auto disposable syringes
17.	Cabinet of Personal Computer
18.	Multi-radio data communication system for wireless Active RFID/Sensor network
19.	Synthesis of carbon nanotubes loaded with metal nanoparticles for application as electrodes in fuel cells
20.	Instant sewage treatment plant (e-STP)
21.	Natural potassium extract from agricultural organic source
22.	Nutraceutical composition containing egg yolk derived anti-diarrhoeal agent
23.	Prickly pear (OPUNTIA) Products - The New Emerging Nutraceuticals

Sl. No.	Name of the project
24.	Bio conversion of feather - A poultry waste to high nutritive value feed using keratinases
25.	Municipal solid waste Window Turner
26.	Solar powered DC/BLDC motor operated kerosene dispensing unit with biometric/bar code access control for PDS
27.	Testing of pollution control device, dry scrubber at ARAI, Pune
28.	Development of cost effective new generation electronic energy meter for domestic use
29.	Bulk synthesis of carbon nanotubes
30.	Non-electric water level indicator
31.	Handwriting improvement slate
32.	Digitally controlled three dimensional billboard
33.	Peptone biotech
34.	Multi-level automated two-wheeler parking unit
35.	Mechanical automatic sliding door closer
36.	Self propelled 3-row potato seeding device
37.	Application turned lacquering process on solid bamboo species to make non-toxic, eco-friendly toys and accessories for children
38.	Indian sink utensils washer
39.	Electrical transmission tower damaged protection monitor
40.	Vaneer laminated lumber
41.	Development of ELISA kits for Thyroid Stimulating Hormone(TSH), Thyroxine (T4) and 3,5,3 - Triiodothyronine (T3)
42.	Embedded hardware based security solutions
43.	Automated multilevel modular system for parking vehicles
44.	Recycling of Tungsten Carbide Scrap Material by a cost effective process
45.	Design of eco-friendly leisure boat
46.	Evolutionary glass slumping technology within the realms of art, architecture and sciences
47.	Acceptor
48.	Community lighting from the use of hand pump
49.	Project Y-Cook - Convenient to eat, multi dish just eat food in thermoformed interlock-able multilayer rigid containers
50.	Customized vermin-compost production
TePP Phase-II	
51.	Testing, trials & validation of prefabrication technology (PFT) developed products
52.	Design and development of 3GPP LTE (Long term evolution) cellular products for base station, CPE (Customer Premise Equipments) and WiL TE (Wi Fi+LTE) based femtocells
Micro-Technopreneurship :	
53.	Development of speech enabled chest vibrometer
54.	Design and development of water disinfection process controller
55.	Development of bioactive wound dressings



Sl. No.	Name of the project
56.	Indirect type solar drier for processing food products
57.	Development of filtered air supplying device for helmets
58.	Vehicle driver monitoring system
59.	Insype
60.	Electric steering for car
61.	Wireless transmission of power
62.	Foot operated mechanical fingers
63.	Mobile presence authentication system
64.	Development of multi-layer scan able voice output communication aid and special access switches
65.	Development of a novel method for biometric recognition
66.	Automatic cooler regulator
67.	Portable refrigerator
68.	Micro-mouse

ONGOING PROJECTS

TePP Phase I

1. Areca nut 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. Visual events recognition on a chip
12. Soap less washing machine
13. Vessel cleaning machine
14. Development and commercialization of electric fences
15. Automatic vending machine
16. Growth stimulator for plants
17. Medical surfactants
18. Technology up-gradation of Ayurvedic Bullet Proof Jacket
19. Modified wood stove
20. Hydraulic Sun Tracker
21. NUALGI for growth of Diatom algae
22. Development of PC based Oscilloscope
23. High speed wireless sensor data acquisition system

Sl. No.	Name of the project
24.	Auto compression sprayer
25.	Development of indigenous micro-carriers for large scale cell culture
26.	Intelligent LP Gas Detector (IGD)
27.	Salt harvesting equipment
28.	LPG fueled Iron Box
29.	Inhaler for insulin administration
30.	Product Hairinator for validation of Hypothesis - Cytotoxic Lectin Inhibit growth of Hair follicle
31.	Technology upgradation of Telescopic Bronchoscope
32.	Development of groundnut separator machine
33.	Development of different variants for mobile operated switch
34.	Design and development of temperature indicating chalks
35.	Development of indigenous micro-carriers for large cell culture
36.	Scientific evaluation of a herbal medicine for treatment of Asthma
37.	Accurate level indicator
38.	Herb-Med (herbal medicine for patients of Kidney stones)
39.	Development of Arrowroot grinding machine
40.	Development of advanced model of pomegranate deseeding machine and procuring certifications to meet the requirement of the export market
41.	Development of water flow electronic controller for household water tank
42.	Development of Walnut cracker machine
43.	Dynamic multi focal spectacle frame
44.	Guided crank PIN design IC engine
45.	Hi-fi digitalized turning machine
46.	Cost-effective V-trough flat photo-voltaic modules
47.	Prototype development of heating/cooling apparel
48.	Research and Development of a STATCOM (P2-STAT)
49.	Stem cell marker protein CD44 in cancer diagnosis: development of an immuno-diagnostic kit
50.	Fertilizer spray through Ariel flying machine
51.	SN Door Wind Mill
52.	Development of low cost, high performance LED based home illumination system for rural and tribal areas
53.	Prepaid cash card for ATM system for electric bill
54.	Mosquito free healthy cooler
55.	Highly Flexible Stepper motor controlled diamond bruiting machine
56.	Electronic retrofit kit for Cam Dobby
57.	Prototyping Chandrapabha water gun (Rain Gun) and trial runs for testing the durability, acceptability, replicability etc.
58.	Wireless threat Assessment System
59.	Design and Development of a Holographic Pulse Portrait Camera System



Sl. No.	Name of the project
60.	Development of eco-washing process for handmade woolen carpet industry
61.	Cooled helmet for two wheelers riders
62.	Digital controlled precise dispensing valve for liquids under gravity flow
63.	Pooga sizing machine
64.	Promotion of Rapid Thrombochek Test Kit
65.	Mrityunjay - An Advanced Electronic Distant Patient Monitoring System
66.	Light emitting POP tiles
67.	Merlyn D3 Low Cost Modular Bomb Disposal Robot with Flexible Chassis System
68.	Cardiac Analyser
69.	Drishticare-a tele diagnosis platform for retinal experiment
70.	Laryngotracheal stenosis
71.	Low cost multi-media projector
72.	Micro controller based custom designed overload relay
73.	Scale-up and standardization of an economical commercially viable laboratory process to isolate γ -Oryzanol from the waste products arising out of rice bran oil refineries
74.	Development of a herbal skin-nourishing gel
75.	Focal length independent, high resolution wide frame, camera array & X-ray Imager
76.	Device and process to capture losses due to weather event in any specific geographical coordinate
77.	Pickling acid recovery using diffusion analysis
78.	Ball press washer for cleaning and crushing biological raw materials
79.	Control release crop fertilizer with additives
80.	Lengthwise Zig-zag cutting of steel coils
81.	Synthesis of nanocrystalline HAP and sintered compacts of the same
82.	Voice net
83.	Shoe brush with wax polish
84.	Bath Brush
85.	Development of aqueous metal oxide based super capacitors
86.	Nimble carpet shearing machine
87.	Heart throb-portable generic multi factor medical measurement unit
88.	Real time flight data analyzer
89.	Automated scan lock
90.	Variable length pedal-crank assembly with doubling of torque
91.	Steerable Headlights
92.	Active bioconjugates 2-O alpha pyranosyl L-ascorbic acid
93.	AAC device with dynamic message generation and speech synthesis for children with cerebral palsy
94.	Shoulder harness helmet
95.	Novel tamper proof, tear proof, durable leather as printing paper for niche applications
96.	Solar water heater using fused tube lights

Sl. No.	Name of the project
97.	Development of friction stir welding process
98.	Innovation of Ultraclean electro stag refined technology/cost effective substitute for clinical applications
99.	Development of a wireless sensor network & communication protocol in underground mine environment
100.	Peeling device (machine) for Banana Stem
101.	Multi-crop portable circular oil expeller
102.	Microprocessor based lubrication flow and inductive sensing and controlling device
103.	2-D Nano-Positioner
104.	Development of a commercial Rheometer for High Performance Concrete
105.	Slow-release multi-micronutrient zinc and boron based fertilizer
106.	Intelligent fuel pump calibrator
107.	Smart solar irrigation unit
108.	Fully automatic cashew-nut breaking machine
109.	Design & development of dynamic stretch comfort measurement device for sport and healthcare application
110.	Solar wafer/cell inspection equipment
111.	Low temperature heat engine
112.	Design & development of domestic monoblock pump without shaft
113.	Fermenter - microprocessor based controller with GSM mobile technology
114.	Design & development of a prototype of a digital textile printing machine
115.	Track every coin
116.	Pilot plant desalination of sea water
117.	Integrated security management
118.	Design and development of a DNA fingerprint based photopolymer hologram reader/writer for Personnel Identification and Security
119.	Process optimization and production of novel probiotic consortium (Synshrimp) for eco-friendly hrimp farming
120.	Optimization of production technology for the commercialization of Shrimpactiva (Algal Bioactive) for proactive Shrimp disease management
121.	RSW Chiller
122.	Simultaneous production of multiple digestive enzymes from microbial sources
123.	Snow breeze ice air conditioner
124.	Planar inverted F-antenna for mobile communication (PIFA)
125.	Innovative baghel devices
126.	Intralock intravenous canula
127.	Development of Customized Audiometer
128.	Development of Bhavana's Procto Tub
129.	Banana cotton separator
130.	Control of biofouling in ships and atomic power station cooling system



Sl. No.	Name of the project
131.	Phantom power eliminator
132.	Manually operated wheat reaper
133.	Development of improved seed drill
134.	Instant sewage treatment plant (e-STP)
135.	Portable front-loaded washing machine without concrete structure
136.	Product development of sugarcane bud chipper
137.	Development of Star Node Circuit Breaker (SNCB) for newly invented midget transformers as well as for some presently available conventional transformers
138.	Multimodal interaction systems for urban children for playing computer games
139.	Bathrooms for the safety of elderly
140.	Design of novel plant bioreactor
TePP Phase-II	
141.	Design and development of Mechatronic Flyer Frame for Cotton Spinning
142.	Auto-distractor
143.	A rotary apparatus adopted to perform as a variable compression ratio IC engine
144.	Alkali lignin products & cooler pads from dry pine needles
145.	Tea & tea based herbal health drinks
146.	Indigenous dialysis device refinement for commercialization and test marketing
147.	Heating/cooling apparel and accessories
Micro-Technopreneurship	
148.	Electro-chemical sensor for toxic metals analysis in drinking water
149.	Electric Rocker(Terasa)
150.	Waste heat recovery from engine exhaust
151.	Eco brakes - energy efficient braking system
152.	Cultivator suspension system
153.	Multi point illumination white LED solar lamp
154.	Araca nut tree climbing & harvesting robot
155.	Energy efficient electromagnetic motor
156.	New ocean wave energy harvesting system
157.	Multi-purpose mosquito trap
158.	Design and development of switched reluctance (SR) submersible motor
159.	Vision system for automatic inspection of rectangular sensor devices
160.	Increase in productivity of Spirulina
161.	Extra air cooler
162.	Closed circuit cooling tower
163.	Power saver in lathe machine
164.	Two speed system for rickshaw
165.	High low gear box attachment

Sl. No.	Name of the project
166.	Zero tech invention
167.	Tree climbing gear
168.	Onsite mobile electrolytic generation of NaCl, Cl ₂ and Chlorine Dioxide
169.	Improvement in related to vehicle road wheels rotating without friction
170.	Development of an "Autopilot" for a UAV
171.	Micro-thruster augmented wind turbine
172.	Backpack beverage container for tea/coffee
173.	Evolution of some Ayurvedic formulation for their potentiality in the cure and management of diseases like cancer, diabetes
174.	Digital valve controller P/N:DVC 02

COMPLETED PROJECTS

1. Synthesis of nano-crystalline anatase phase Titanium Di-oxide
2. Low cost automatic cash depositor
3. Mobile crime and accident reporting platform
4. Laboratory Scale Process Development of environment friendly printing ink
5. Intelligent ground vehicle
6. Prototype development of heating/cooling apparel
7. Hybrid system for solar distillation and drying application
8. Geometrical instrument comprising a centre leg assembly and various plotter bodies with plotter holes & fool proof mechanism
9. Worm composting to treat medical waste
10. Pedestal wet grinder