

**DETAILS OF PROJECTS SUPPORTED UNDER TECHNOPRENEUR PROMOTION  
PROGRAMME DURING THE YEAR**

**Project Proposals Approved During the Year 2010-11**

<b>Sl. No.</b>	<b>Name of the project</b>
<b>TePP Phase I</b>	
1	Electro mechanical device for regulating the moisture content in a closed chamber
2	Multistage Bamboo Slivering Machine
3	Development of India's first Re-engineered stabilizer for beating heart surgery
4	LASER Scan Head: Design & Development
5	Low cost Laparoscopic Surgical Tool Interface to a Virtual Reality Laparoscopic Surgical Simulator
6	Low Specific Cost Solar Parabolic Dish Concentrator System
7	Development of Soleckshaw
8	India specific sugarcane harvester
9	Development of a commercial product - Digital Protractor
10	Design & development of ozone system for enriching the oxygen in diesel engine
11	Production and testing of selected Probiotic products as poultry feeds
12	An Innovative, Cost-effective process for Synthesis of peptide designer molecules for bio-medical applications
13	Continuous Ethanol Fermentation from mahua flower by using packed Bed Bioreactor with Immobilized Yeast for production of Industrial Grade Ethanol
14	Development, design, prototyping and trial of an oropharyngeal device that causes minimal gagging
15	Design and Development of Fresnel moulds, lenses and goods
16	Crankshaft Metrology System
17	Waste management products from non-recyclable plastics
<b>TePP Phase II</b>	
18	Development of Process Technology for production of Photographic Films

Sl. No.	Name of the project
19	Research and Development of a STATCOM for computerized environments (P2-STAT-n)
20	Split type forming cutter, inserts and cutter heads
21	Remote patient monitoring system
22	Scale-up and Commercialization of Environment Friendly Printing Ink
23	Integrated use of Sea algae, Neem, Humic and Beneficial Microbes for Growth and Control of Pest and Disease in Crops
<b>Micro-Technopreneurship</b>	
24	Development of a modified Chess Game
25	Development of a prototype of newly invented muga reeling machine
26	Pedal/Wind Operated RO Water Plant
27	D-Red Motor bicycle
28	Novel Plant Cell Culture medium from biowaste (fly-ash)
29	Kit Based Stop-Start System
30	Blupen-Flash drive with wireless data transfer
31	Low cost handheld computing device with Barcode
32	Alternate growth medium for rice straw
33	Electricity from Tidal waves
34	Diagram Mould bricks(DMB) for electrical & plumbing work
35	Development of a Fuel Flexible Multi-draft Thermal Biomass Gasifier
36	Water Tank Auto shut off with alarm (WATASA)
37	Jewellery from indigenous natural fibre of Assam
38	Controlled Motion in Ironing through Automation
39	Wearable beat Generator to improve speech fluency
40	Development of a Wet Diaper Alarm for Babies/Disabled
41	"HEPCO" BEVERAGE
42	Improved Special Design Water Tap for Public Hydrants & domestic use
43	Automatic Machine to make Dauna & Pattal
<b>COMPLETED PROJECTS</b>	
1	Hi-fi digitalized turning machine
2	Accurate level indicator
3	Hydraulic sun tracker
4	Development of PC based Oscilloscope

<b>Sl. No.</b>	<b>Name of the project</b>
5	Multi-purpose mosquito trap
6	Areca nut tree climbing & harvesting robot
7	Voice Net
8	Track every coin
9	Instant Rasam Mix/Paste/Granules
10	Extra Air Power
11	Close circuit cooling tower
12	Power saver in Lathe Machine
13	Cardiac Analyser
14	Development of slide rule (ready reckoner)
15	Snow-breeze - a people's Air-Conditioner
16	Cooled helmet for 2-wheeler rider
17	Light emitting POP tiles
18	An affordable augmentative & alternative communication device with dynamic message generation and speech synthesis for children with Cerebral Palsy
19	Dynamic multi focal spectacle frame
20	Herb-Med - herbal medicine for urological stones clearances
21	Auto-distractor (Phase-II)
22	Cabinet of Personal Computer
23	Mosquito free healthy air
24	Mechanical automatic Sliding Door Closer
25	Research and Development of a STATCOM (P2-STAT)
26	Development of eco-washing process for hand made woolen carpet industry
27	Innovative baghel devices
28	Novel tamper proof, tear proof, durable leather as printing paper for niche applications
29	Fertilizer spray through Ariel flying machine
30	Solar water heater using fused tube lights
31	Electro-chemical sensor for toxic metals analysis in drinking water
32	Electric Rocker (Terasa)
33	Waste heat recovery from engine exhaust
34	Onsite mobile electrolytic generation of NaOCl, Cl <sub>2</sub> and Chlorine Dioxide
35	Improvement in related to vehicle road wheels rotating without friction

Sl. No.	Name of the project
36	Backpack beverage container for tea/coffee
37	Micro Thruster Augmented Wind Turbine
38	Development of an "Autopilot" for a UAV
39	Cultivator suspension system
40	Eco brakes - energy efficient braking system
41	Two speed system for rickshaw
42	High low gear box attachment
43	Zero tech invention
44	Tree climbing gear
45	Improved machine human interface a replacement to mouse
46	Phantom power eliminator
47	Wireless threat assessment system
48	Scientific evaluation of a herbal medicine for treatment of Asthma
49	Highly Flexible Stepper motor controlled diamond bruiting machine
50	Indigenous dialysis device refinement for commercialization and test marketing (Phase-II)
51	Nimble carpet shearing machine
52	Peeling device (machine) for Banana Stem
52	Tissue engineering of porcine ureters for cardio-vascular use
53	AAC device with dynamic message generation and speech synthesis for children with cerebral palsy
54	Multi point illumination white LED solar lamp

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**TePP ON-GOING PROJECTS [as on 31.12.2010]**


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**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	Seamless Weaving Machine

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Sl. No.	Name of the project
10	Visual events recognition on a chip
11	Soap less washing machine
12	Vessel cleaning machine
13	Development and commercialization of electric fences
14	Automatic vending machine
15	Growth stimulator for plants
16	Medical surfactants
17	Technology up-gradation of Ayurvedic Bullet Proof Jacket
18	Modified wood stove
19	NUALGI for growth of Diatom algae
20	High speed wireless sensor data acquisition system
21	Auto compression sprayer
22	Development of indigenous micro-carriers for large scale cell culture
23	Intelligent LP Gas Detector (IGD)
24	Salt harvesting equipment
25	LPG fueled Iron Box
26	Inhaler for insulin administration
27	Product Hairminator for validation of Hypothesis - Cytotoxic Lectin Inhibit growth of Hair follicle
28	Technology upgradation of Telescopic Bronchoscope
29	Development of groundnut separator machine
30	Development of different variants for mobile operated switch
31	Design and development of temperature indicating chalks
32	Development of Arrowroot grinding machine
33	Development of advanced model of pomegranate deseeding machine and procuring certifications to meet the requirement of the export market
34	Development of water flow electronic controller for household water tank
35	Development of Walnut cracker machine
36	Guided crank PIN design IC engine
37	Cost-effective V-trough flat photo-voltaic modules
38	Prototype development of heating/cooling apparel
39	Stem cell marker protein CD44 in cancer diagnosis: development of an immuno-diagnostic kit
40	SN Door Wind Mill

Sl. No.	Name of the project
41	Development of low cost, high performance LED based home illumination system for rural and tribal areas
42	Prepaid cash card for ATM system for electric bill
43	Electronic retrofit kit for Cam Dobby
44	Prototyping Chandrapabha water gun (Rain Gun) and trial runs for testing the durability, acceptability, replicability etc.
45	Design and Development of a Holographic Pulse Portrait Camera System
46	Digital controlled precise dispensing valve for liquids under gravity flow
47	Pooga sizing machine
48	Promotion of Rapid Thrombocek Test Kit
49	Mrityunjay - An Advanced Electronic Distant Patient Monitoring System
50	Merlyn D3 Low Cost Modular Bomb Disposal Robot with Flexible Chassis System
51	Drishticare-a tele diagnosis platform for retinal experiment
52	Laryngotracheal stenosis
53	Low cost multi-media projector
54	Micro controller based custom designed overload relay
55	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
56	Development of a herbal skin-nourishing gel
57	Focal length independent, high resolution wide frame, camera array & X-ray Imager
58	Device and process to capture losses due to weather event in any specific geographical coordinate
59	Pickling acid recovery using diffusion analysis
60	Ball press washer for cleaning and crushing biological raw materials
61	Control release crop fertilizer with additives
62	Lengthwise Zig-zag cutting of steel coils
63	Synthesis of nanocrystalline HAP and sintered compacts of the same
64	Shoe brush with wax polish
65	Bath Brush
66	Development of aqueous metal oxide based super capacitors
67	Heart throb-portable generic multi factor medical measurement unit
68	Real time flight data analyzer
69	Automated scan lock
70	Variable length pedal-crank assembly with doubling of torque

Sl. No.	Name of the project
71	Steerable Headlights
72	Active bioconjugates 2-0 alpha pyranosyl L-ascorbic acid
73	Shoulder harness helmet
74	Development of friction stir welding process
75	Innovation of Ultraclean electro stag refined technology/cost effective substitute for clinical applications
76	Development of a wireless sensor network & communication protocol in underground mine environment
77	Multi-crop portable circular oil expeller
78	Microprocessor based lubrication flow and inductive sensing and controlling device
79	2-D Nano-Positioner
80	Development of a commercial Rheometer for High Performance Concrete
81	Slow-release multi-micronutrient zinc and boron based fertilizer
82	Intelligent fuel pump calibrator
83	Smart solar irrigation unit
84	Fully automatic cashew-nut breaking machine
85	Design & development of dynamic stretch comfort measurement device for sport and healthcare application
86	Solar wafer/cell inspection equipment
87	Low temperature heat engine
88	Design & development of domestic monoblock pump without shaft
89	Fermenter - microprocessor based controller with GSM mobile technology
90	Design & development of a prototype of a digital textile printing machine
91	Pilot plant desalination of sea water
92	Integrated security management
93	Design and development of a DNA fingerprint based photopolymer hologram reader/writer for Personnel Identification and Security
94	Process optimization and production of novel probiotic consortium (Synshrimp) for eco-friendly shrimp farming
95	Optimization of production technology for the commercialization of Shrimpactiva (Algal Bioactive) for proactive Shrimp disease management
96	RSW Chiller
97	Simultaneous production of multiple digestive enzymes from microbial sources
98	Planar inverted F-antenna for mobile communication (PIFA)
99	Intralock intravenous canula
100	Development of Customized Audiometer

Sl. No.	Name of the project
101	Development of Bhavana's Procto Tub
102	Banana cotton separator
103	Control of biofouling in ships and atomic power station cooling system
104	Manually operated wheat reaper
105	Development of improved seed drill
106	Instant sewage treatment plant (e-STP)
107	Portable front-loaded washing machine without concrete structure
108	Product development of sugarcane bud chipper
109	Development of Star Node Circuit Breaker (SNCB) for newly invented midget transformers as well as for some presently available conventional transformers
110	Multimodal interaction systems for urban children for playing computer games
111	Bathrooms for the safety of elderly
112	Design of novel plant bioreactor
113	Fabrication of high energy planetary mill and low temperature synthesis of tungsten-carbide & cobalt composite powder at nano scale using the same
114	Portable microchip slide projector (teaching aid)
115	Development of sensor-based systems for estimation of Fluoride and E. Coli in drinking water
116	Development of filler grade PTFE powder and recycling PTFE scrap material
117	Portable front-loaded washing machine without concrete structure
118	Development of Piezoelectric Transformers
119	Bathrooms for the safety of elderly
120	Multimodal interaction systems for urban children for playing computer games
121	Innovation on Normal Scaife i.e. GEM-Polishing wheel for gem polishing application
122	Faucets (washbasin and bathroom taps) with independent control of temperature and flow
123	Products designed to maintain temperature without the need of continuous power
124	High energy density capacitor development
125	Light duty variable displacement compressor
126	Retractable auto disposable syringes
127	Multi-radio data communication system for wireless Active RFID/Sensor network
128	Synthesis of carbon nanotubes loaded with metal nanoparticles for application as electrodes in fuel cells
129	Instant sewage treatment plant (e-STP)
130	Natural potassium extract from agricultural organic source

Sl. No.	Name of the project
131	Nutraceutical composition containing egg yolk derived anti-diarrhoeal agent
132	Prickly pear (OPUNTIA) Products - The New Emerging Nutraceuticals
133	Bio conversion of feather - A poultry waste to high nutritive value feed using keratinases
134	Municipal solid waste Window Turner
135	Solar powered DC/BLDC motor operated kerosene dispensing unit with biometric/bar code access control for PDS
136	Testing of pollution control device, dry scrubber at ARAI, Pune
137	Development of cost effective new generation electronic energy meter for domestic use
138	Bulk synthesis of carbon nanotubes
139	Non-electric water level indicator
140	Handwriting improvement slate
141	Digitally controlled three dimensional billboard
142	Peptone biotech
143	Multi-level automated two-wheeler parking unit
144	Self propelled 3-row potato seeding device
145	Application turned lacquering process on solid bamboo species to make non-toxic, eco-friendly toys and accessories for children
146	Indian sink utensils washer
147	Electrical transmission tower damaged protection monitor
148	Vanecer laminated lumber
149	Development of ELISA kits for Thyroid Stimulating Hormone(TSH), Thyroxine (T4) and 3,5,3 - Triiodothyronine (T3)
150	Embedded hardware based security solutions
151	Automated multilevel modular system for parking vehicles
152	Recycling of Tungsted Carbide Scrap Material by a cost effective process
153	Design of eco-friendly leisure boat
154	Evolutionary glass slumping technology within the realms of art, architecture and sciences
155	ACCEPTOR
156	Community lighting from the use of hand pump
157	Project Y-Cook - Convenient to eat, multi dish just eat food in thermoformed interlock-able multilayer rigid containers
158	Customized vermi-compost production
<b>Micro-Technopreneurship :</b>	
159	Energy efficient electromagnetic motor

Sl. No.	Name of the project
160	New ocean wave energy harvesting system
161	Design and development of switched reluctance (SR) submersible motor
162	Vision system for automatic inspection of rectangular sensor devices
163	Increase in productivity of Spirulina
164	Evolution of some Ayurvedic formulation for their potentiality in the cure and management of diseases like cancer, diabetes
165	Digital valve controller P/N:DVC 02
166	Development of speech enabled chest vibrometer
167	Design and development of water disinfection process controller
168	Development of bioactive wound dressings
169	Indirect type solar drier for processing food products
170	Development of filtered air supplying device for helmets
171	Vehicle driver monitoring system
172	Insype
173	Electric steering for car
174	Wireless transmission of power
175	Foot operated mechanical fingers
176	Mobile presence authentication system
177	Development of multi-layer scan able voice output communication aid and special access switches
178	Development of a novel method for biometric recognition
179	Automatic cooler regulator
180	Portable refrigerator
181	Micro-mouse
<b>TePP Phase-II:</b>	
182	Design and development of Mechatronic Flyer Frame for Cotton Spinning
183	A rotary apparatus adopted to perform as a variable compression ratio IC engine
184	Alkali lignin products & cooler pads from dry pine needles
185	Tea & tea based herbal health drinks
186	Heating/cooling apparel and accessories
187	Testing, trials & validation of prefabrication technology(PFT) developed products
188	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