## **Innovative Student Projects Award**

### 2015

### **Doctoral Level**

- 1. Dr Jagadish Vengala, BMS College of Engineering, Bangalore (Seismic Response Study of Bamboo Based Constructions)
- 2. Dr Vaibhav Singhal, Indian Institute of Technology Kanpur

  (Effect of Toothing and Openings on Bi-directional Seismic Behaviour of Confined Masonry Walls)
- 3. Dr P Chandrasekhar, Indian Institute of Technology Delhi (Design of Smart Controllers for Active Distribution Systems)
- 4. Dr Arnab Hazra, Indian Institute of Engineering Science and Technology, Shibpur (Development of p and n Type TiO2 Nanostructure Based Devices for Alcohol Sensing)
- 5. Dr Sreekanth Mandati, Indian Institute of Technology Hyderabad

  (Fabrication of CuInSe2 and Cu(In,Ga)Se2 Absorber Layers by Pulse and Pulse-reverse Electrochemical Techniques for Solar Photovoltaic Applications)

### Master's Level

- Mr Vignesh S., Sri Venkateswara College of Engineering
   (Design of robotic Manipulator Using Magnetorheological Fluids for Handling Soft and Fragile Objects)
- 2. Mr Siddhartha Moulik, Indian Institute of Chemical Technology
  (Hydrodynamic Simulation and Molecular Modeling of Membrane Processes for Solving Challenging Separation Problems)
- 3. Ms Shital Yadav, Indian Institute of Technology Hyderabad

  (Polymer submicron and Nano-Fibers Applications in healthcare, drug delivery, Oil Spill Remediation and Print Transfer technique)
- 4. Ms Meenakshi Sarkar, CSIR Central Mechanical Engineering Research Institute Durgapur (Design of Robust Controller to Achieve Optimal performance of Autonomous Vehicles)
- 5. Mr Sayan Dey, Jadavpur University
  - (Porous Nickel (III) Oxide Nanostructures: Study of its Defects by Positron Annihilation Technique and its Environmental and Electronic Applications)

## **Bachelor Level**

1 Mr Srimathan S, Mr Srinivasaprasad S and Mr Subash G Sri Venkateswara College of Engineering

(Turmeric Harvester as a Tractor Attachment)

- 2 Mr G Vignesh and Mr S Aakash, St Josephs College of Engineering (Design and Development of 3D Printer)
- 3 Mr R Solomon Jeshur Raja and Mr AV Vamsi Krishna, St Joseph's College of Engineering (Effect of Dynamically Controlled Reflectors on the Performance of Solar Panels)
- 4 Mr D Vinod, Mr Ankit Murarka and Mr Sri Satya Teja, SRM University (Low Cost Single Character Braille Display Setup for Deaf-Blind)
- 5 Mr Syed Ghazi Sarwat, PSG College of Technology, Coimbatore (Advance Microscopy and Modeling of Energy Materials)
- 6 Ms T Ramya, Mahatma Gandhi Institute of Technology
  (Creep Damage Evaluation of DS CM247 Nickel Base Superalloy Using ACPD Technique)
- 7 Ms Ramashree T and Ms Sajini R, Sri Venkateswara College of Engineering (PCR Amplification of TEM Gene of ESBL Escherichia Coli From soil Samples)
- 8 Mr Jothivanan E and Mr Vamsi Bharadwaj YV, St Josephs College of Engineering
  (Dy Agram (Beta) A Unique DNA Based Ink and Hologram for Authentication Security)

### **Doctoral Level**

- 1 Dr Kranthi Kumar Maniam, Indian Institute of Technology Madras

  (Development of Shape Controlled Palladium Structures as Electrocatalysts for Fuel Cell Applications)
- Dr G Sivakumar, Indian Institute of Technology, Bombay.
   (Understanding Solution Precursor Plasma Spray Process to Deposit High Performance Ceramic Coatings)
- 3 Dr. Sandip Chakraborty, Indian Institute of Technology, Guwahati.

  (Capacity Enhancement, QoS and Rate Adaptation in IEEE 802. 11S: A Performance Improvement Perspective)
- 4 Dr Jeevanjyoti Chakraborty, Indian Institute of Technology Kharagpur.

  (Electrokinetics in Narrow Fluidic Confinements: The Role of Streaming Potential)
- 5 Dr. Himanshu Sharad Bhatt, Indraprastha Institute of Information Technology, Delhi. (*Emerging Covariates of Face Recognition*)

## Master's Level

- 1 Mr P Pravin Kumar Venkat Rao, Visvesvaraya National Institute of Technology Nagpur. (Effect of Seismic Zone & Storey Height on response Reduction Factor for Steel Moment Resisting frame)
- 2 Mr Parthsarathi Pachori, Indian Institute of Technology Kharagpur (Energy Integration in Refinery Distillation Columns -A Simulation Study)

3 Mr. Krishan Kant, Indian Institute of Technology Delhi.

(Design, Control and Implementation of Brushless Generators Based Standalone Microgrid)

4 Mr. Debranjan Mukherjee, Indian Institute of Technology, Kharagpur.

(Voltage Sensor-less Space Vector Control of Vienna Rectifier with Programmable Input Power Factor)

5 Mr S Balamurugan, National Engineering College, Kovilpatti.

(Leaf Based Cotton Plant Identification Using OMAP)

### **Bachelor Level**

1 Anirban Paul, Nitish Kumar and Shikha Maharana

Indian Institute of Space Science and Technology (IIST)

(Polymer MEMS with novel transduction techniques)

2 Harish Rammohan S

St Joseph's College of Engineering, Chennai.

(Design of Gyroscopically Controlled biomorphic robot and gait generation for assisted walking of humans)

3 Ashish Tatolu and Surabissree M DI

Sri Venkateswara College of Engineering, Tamilnadu.

(InvitroStudies on the Binding of Mangiferin to IL4 Receptor of B lymphocytes)

4 Akash Vinit Mehta, Urvish Kishore Patel, Rajeev Mohan Panthai and Viral Ramesh Jain St John College of Engineering and Technology, Maharashtra.

(Alternative to Natural Sand)

5 Shivam Chourey

Indian Institute of Technology, Patna

(Development and Control of Magnetically Controlled Micro-robots)

### 2013

### **Doctoral Level**

- 1 Dr Chandan Karfa, Indian Institute of Technology Kharagpur (Formal Verification of Behavioural Transformations During Embedded System Design)
- 2 Dr Sandeep Anand, Indian Institute of Technology Bombay, Mumbai (Interface Circuits and Controllers for Effective Utilization of Solar Photovoltaics)
- 3 Dr Manmohan Dass Goel, Indian Institute of Technology Delhi (Blast Response of Structures and its Mitigation Using Advanced Lightweight Materials)
- 4 Dr. A Shahin, Indian Institute of Technology, Kanpur (*Phase Behaviour and Soft Glassy Rheology of Aqueous Laponite Suspensions*)
- 5 Dr Pijus Kundu, Indian Institute of Technology Kharagpur (Performance Enhancement of Microthruster Using Nano-Engineered MEMS structure for Long Term Space Mission)

# Master's Level

- 1 Christy Jojy, Department of Computer Science, University of Kerala, Thiruvanthapuram (SAR Image De-Speckling Using Importance sampling Unscented Kalman and Non Local Means Filters)
- 2 Hrilina Ghosh, Bengal Engineering and Science University, Shibpur (Silicon Oxide Nanoporous Structures for Sensitive Toxin Detection)

- 3 Mr Srinadh Mattaparthi, Indian Institute of Technology Hyderabad (Biomimicked Polymeric Surfaces Exhibiting Superhydrophobic and Antireflective Properties)
- 4 Rahul, School of Engineering Sciences and Technology, University of Hyderabad (Development of Novel Nano Composites Using Unique approaches and Their Mechanical & Tribological Characteristics)
- 5 Mr Vijay Bhooshan Kumar, School of Engineering Sciences and Technology, University of Hyderabad

(Core Shell Nanostructure of PCL, PCL@SiO2, ZnO-SiO2 and their Physical Properties and Biomedical Applications)

## **Bachelor Level**

1 Parag Agrawal and Rishi Barua

Indian Institute of Technology, Guwahati

(Learning Weakness of Players from Cricket Text Commentary)

- 2 Anirudh Vasudevan, Ashwin Kumar M and Chandrasekar MG
  - Sri Venkateswara College of Engineering, Sriperumbudur

(Power Harvesting Tile Using Piezo Disk Element Matrix)

3 Kaustubh Umathe, Ajay Jamodkar, Ameya Chandrayan and Anil Kumar Visvesvaraya National Institute of Technology, Nagpur

(Unified Multi-Input DC-DC Converter for Hybrid Distributed Generating Systems)

- 4 Sivagurunatha Pandian M, Shivaraman I, Shreenath M and Sundaraganesh G Easwari Engineering College, Chennai
  - (Wireless Communication and Security Embedded Saftey Helmet)
- Varun Vishnudas Verlekar, Ankit Prakash Naik, Avinash Gupta and Gaurav Sunil Revalkar Goa College of Enginerring, Govt. of Goa
  - (Design and Analysis of Multi-axis 3D Machining Unit)
- 6 Yallappa D, College of Agricultural Engineering, Raichur (Design, Development and Performance Evaluation of Pedal Operated Flour Mill)
- 7 Rohit Thakwani, National Institute of Technology Silchar (Solar Powered Wheelchair)
- 8 Satish Kumar S and Rohan Kanna C
  - SRM University, Kancheepuram Distt (TN)

(Automated Vehicle Speed Management Assisted with GPS)

- 9 Akhil S Anand and Yesaswi Narendra Chilamkurti
  - Indian Institute of Technology, Patna

(Design and construction of Flapping Wing MAV)

10 Mr Prashant Sharma and Mr Manoj Kumar Ellur

International Institute for Aerospace Engineering and Management, Jain University, Bangalore (Analysis of Flight Test Data from Helicopter Development Programme)

# 2012

- Dr. Amit Kumar Jain, Indian Institute of Science, Bangalore (Control of High Power Wound Field Synchronous Motor Drives: Modelling of Salient *Pole Machine Control Using VSI, LCI and Hybrid LCI/VSI Converters*)
- 2 Dr.Shibayan Roy, Indian Institute of Science, Bangalore (Role of Boron on the Evolution of Microstructure and Texture in Ti-6Al-4V-0.1B Alloy)
- 3 Dr. V Pramitha, Cochin University of Science and Technology, Kerala

- (A new metal ion doped panchromatic photopolymer for holographic applications)
- 4 Dr. Abhijeet B Joshi, Indian Institute of Technology, Bombay, Mumbai (Nano-Engineered Lactate Biosensor)
- 5 Dr. Devanjan Bhattacharya, Indian Institute of Technology Roorkee (Development of a Geo-hazard Warning Communication System)

### Master's Level

- 1 Mr. Sanhtosh Prabhu M, Indian Institute of Technology Kharagpur. (Formal Verification of abstract digital controllers for hybrid systems)
- 2 Mr. Gokul B, Indian Institute of Technology Madras, Chennai (Development of a Multifunctional Sensor Network with an optimized Communication Protocol for Industrial Process Monitoring)
- 3 Mr. Pardeep Garg, Indian Institute of Science, Bangalore (Alkane and inert additive mixtures as working fluids for organic Rankine cycles)
- 4 Ms. B Nandini, Indian Institute of Technology, Kharagpur (Novel Soft Lithographic Fabrication of Superhydrophobic Surfaces and their Durability Studies)
- 5 Mr. Indrajit Sarkar, Bengal Engineering and Science University Shibpur, Howrah (Modification of Input Filter circuit to realize Stepless Communitation in Matrix Converter PSpice Simulation Study and Experimental Verification.)

# **Bachelor Level**

- Joshi Kumar A.V., Madhan Prabhu T. and Mohan Raj S.
  Sri Sai Ram Engineering College, Chennai
  (Visual Cognition: A Pragmatic Approach for Visually Impaired Using Android)
- 2 Mr. Sanuj Govind Agrawal, Mr. Sumit Shrikrishna Naik and Mr. Bhusan Bharat Patil S.S.B.T"s College of Engineering and Technology, Bambhori, Jalgaon Maharashtra (*Green Air Conditioner with Double Cooling Effect*)
- 3 Surabathuni Pallav, Indian Institute of Technology, Patna (Design and Characterization of Einstein-Szilard Refrigerator)
- 4 Rajnish Kumar Yadav, Indian Institute of Space Technology, Thiruvanthapuram (On the Use of undirected Probabilistic graphical Modeling for Cognitive wireless Networks)
- 5 Mahadeva Subramanian H, Niranjan Balaji E and Meiyappan C Sri Venkateswara College of Enginering, Sriperumbudur (Security Enriched Electronic Ballot Box)
- 6 S Hima Sundharam and M Mahalakshmi St Joseph's College of Engineering, Chennai (Design and Implementation of Intelligent Robotic Fish)

### 2011

- 1 Dr. Shruti Sharma, Thapar University, Patiala (Monitoring of Damage in Reinforcement in Concrete)
- 2 Dr. Pritha Banerjee, Indian Statistical Institute, Kolkata (Fast Placement and Floorplanning Methods in Modern Reconfigurable FPGAs)
- 3 Dr. Pralay Mitra, Indian Institute of Science, Bangalore (Algorithmic Approaches for Protein-protein Docking and Quaternary Structure Inference)
- 4 Dr. Chandra Shekhar Sharma, Indian Institute of Technology, Kanpur (Synthesis, Fabrication and Properties of Carbon based Multiscale Micro and Nano Structures)

- 5 Dr. Subba Reddy B, Indian Institute of Science, Bangalore
  (A Novel Technique for Enhancing the Pollution Flashover Strength of Ceramic Disc Insulators)
- 6 Dr. Kaushik Bhattacharyya, Indian Institute of Technology, Kharagpur (Design and Implementation of Switched Capacitor based embedded DC-DC Buck Converter)

### Master's Level

- 1 Mr. Sambit Bakshi, National Institute of Technology, Rourkela (Development of Robust Iris Localization and Impairment Pruning Schemes)
- 2 Ms.Priyanka N, Sri Venkateswara College of Engineering, Sriperumbudur
  (A Boost Converter with an Active Clamp Circuit for High Intensity Discharge Lamp Application)
- 3 Mr. Adithya Kumar Pediredla, Indian Institute of Science, Bangalore (Robust Cell Detection and Active Contour Models for Cell Segmentation)
- 4 Mr. Vikas Singh, Indian Institute of Technology, Madras, Chennai (Design of High Speed, High Resolution Continuous-Time Delta Sigma Modulator)
- 5 Mr. Gopinath T, Bengal Engineering and Science University, Shibpur (Structure and Properties of Diffusion bonded joints between Stainless Steel and Titanium Alloy with Interlayer)

### **Bachelor Level**

1 Mr. Ankit Chhabra

Visvesvaraya National Institute of Technology, Nagpur (Modal Mass Criteria for Optimum Tuned Mass Dampers)

2 Mr. Ayan Dutta and Mr. Suparno Datta

Heritage Institute of Technology, Kolkata

(Distributed Algorithm for Circle Formation by Anonymous Transparent Fat Robots)

3 Ms. Sujatha Krishnaswamy

Sri Venkateswara College of Engineering, Sriperumbudur (TN)

(A Certificateless designated verifier ring signcryption scheme-Design and Implementation)

4 Ms. F. Menaka Mischella and Ms. Lasante Christina

St. Joseph's College of Engineering, Chennai

(Navigation Database Decoder)

5 Mr. Saravanan S

St. Joseph's College of Engineering, Chennai

(Design and Development of a Multi-purpose Air-conditioner)

6 Mr. U Mahendaran and Mr. M Prasanth

PSG College of Technology, Coimbatore

(Design and Development of Smart Wing Using SMA)

7 Ms. Saranya M, Mr. Swaminathan S and Mr. Vijay Karthick B

Sri Venkateswara College of Engineering, Sriperumbudur (TN)

(SMART-The Automated Food Concocter)

8 Mr. J Srinivasan

Muthayammal Engineering College, Namakkal (TN)

(Real-Time Remote Crack Detection System for Railway Track using Time Domain Reflectometer (TDR))

9 Mr. Nelson Naveen I and Ms. Princy Perpetua C

St. Joseph's College of Engineering, Chennai

(Real Time Implementation of GPS based Maritime border indicator for Fishermen)

### **Doctoral Level**

- 1. Dr. S Vinodh, PSG College of Technology, Coimbatore (Investigations on the Development of Total Agile Design System in a traditional manufacturing environment.)
- 2. Dr. Sadiq A, Indian Institute of Technology Madras, Chennai. (Investigations into Magnetorheological Abrasive Honing (MRAH)
- 3. Dr. Vincent G, Indian Institute of Technology Madras, Chennai.

  (High Power Voltage Source Inverter Topologies and Current Control Strategies for DSTATCOM Applications.)
- 4. Dr. Preetinder Kaur, College of Agricultural Engineering & Technology, Punjab Agricultural University, Ludhiana.

(Mathematical Modeling of Macro-perforated Modified Atmosphere Packaging for Fresh-cut Vegetables)

### Master's Level

- 1. Ms. Seetha N, Indian Institute of Technology Roorkee.

  (Effect of Organic Shock Loads on Activated Sludge-Biofilm Reactor)
- 2. Ms. Hunny Mehrotra, National Institute of Technology Rourkela, Rourkela. (*Iris Identification using Keypoint Descriptors and Geometric Hashing*)
- 3. Ms. Diptimayee Samantaray, Homi Bhabha National Institute.

  (Thermo-viscoplastic constitutive Modeling of high temperature flow behaviour of an austenitic stainless steel and a ferritic steel).
- 4. Ms. Swati Sharma, Sardar Vallabhbhai National Institute of Technology, Surat. (Degradation of 4-chlorophenol in wastewater by organic oxidants.)
- 5. Mr. Pabitra Palai, Indian Institute of Technology Bombay, Mumbai (Development of Ultra Fine Grained AZ80 Mg alloy by Severe Plastic deformation and Evaluation of its Mechanical Properties)

### **Bachelor Level**

- 1. Mr. P Nirmal Kumar, Ms. G Gangha, Ms. Kalaimathi, Ms. P Kayalvizhi Pondicherry Engineering College, Puducherry (Seismic Hazard Analysis of Puducherry Region)
- 2. Mr. Rohit Banga, Mr. Akhil Langer Indian Institute of Technology Roorkee
  - (Providing Natural Language Interface to health Care Services Over SMS)
- 3. Mr. Ashfaq Shaikh, Mr. Abhishek Gachche, Mr. Mohan Nalawade, Mr. Rajan Paramoji Hirasugar Institute of Technology, Nidasoshi (*Rice Husk Gasifier Stove*)
- 4. Mr. Arun M, Mr. Jayanth Kumar T, Mr. Murugan G, Mr. Mano R Sri Venkateswara College of Engineering, Sriperumbudur (Design and Modelling of Mechanised Rotating Fixture For Under Frames in Railway Coaches)
- (Design and Modelling of Mechanised Rotating Fixture For Under Frames in Railway Coach
   Ms. Shreya Gupta, Mr. Moksha Udani, Mr. Antrix Patel
   Institute of Technology, Nirma University
  - $(Manufacturing\ of\ an\ API(Active\ Pharmaceutical\ Ingredient) Aceclofenac)$
- 6. Mr. Nishant Sinha, Ms Priyanka Chaubey Sikkim Manipal Institute of Technology, (Active Sway Control of Single Pendulum Gantry Crane System)

7 Mr. Vivek R, Mr. Swaminathan D, Mr. Sathya Narayana V Sri Venkateswara College of Engineering, Sriperumbudur (Design, Development and Validation of S-Band RF Power Amplifier)

### 2009

### Ph.D Level

- 1. Dr Karnail Singh, Research Engineer, GE, JFWTC, Bangalore (Understanding Film Formation Mechanism in Latex Dispersions)
- 2. Dr. Ansuman Banerjee, Member of Consulting Staff, Interra Systems India Pvt Ltd, Kolkata (Formal Methods for Accelerating Formal, Semi-Formal and Dynamic Property Verification Through Novel Specification Styles)
- 3. Dr. Chandrashekhar N Bhende, Assistant Professor, Electronics and Communication Engg. Department, Indian Institute of Technology, Guwahati.
  - (Power Quality Analysis and Harmonic Control in Distribution Network)
- 4. Dr. Sanjay Gairola, Professor and Head, Department of Electronics and Communication, IMS Engineering College Ghaziabad.
  - (Multipulse AC-DC Converters for Power Quality Improvement)
- 5. Dr. K Ashoka Reddy, QIP Research Scholar, Department of Electrical Engineering, Indian Institute of Technology Madras.
  - (Novel Methods for Performance Enhancement of Pulse Oximeters)

# M.E./M.Tech Level

- 1. Ms. A Anu Mary, Research Scholar, CLAD, Central Leather Research Institute, Chennai. (Synthesis and Characterization of Hybrid Biodegradable Films from Collagenous Wastes and Cellulose Derivatives for Biomedical Application)
- 2. Mr. Rajesh Balagam, Lab 1, Department of Chemical Engineering, Indian Institute of Science, Bangalore
  - (Estimating the Effective Population size of HIV-1 in vivo)
- 3. Mr. Madhu S Nair, Lecturer, Department of Computer Science, Rajagiri College of Social Sciences, Kalamassery, Kochi
  - (Restoration and Enhancement of Color Images Using Fuzzy Approach)

## **B.E./B.Tech Level**

- Mr. Prajwal S, Mr. Sreekumar CR, Mr. Narayan Prasad N and Mr. Nikhil BN Sri Bhagawan Mahavir Jain College of Engineering, Bangalore (Microsatellite Subsystem Design and Analysis)
- 2. Mr. Lakshmanan S, Mr. Iniyan K, Mr. Keerthan Jagan Mohan and Mr. Vinoth Kumar E B Sri Ramakrishna Engineering College, Coimbatore (Design and Fabrication of Indexing Table with Fixture Implementing SMED and Cost Reduction)
- 3. Mr. Nelvin Johny and Mr. Abel K Mathew St. Joseph's College of Engineering, Chennai (Fabrication and Comparison of Rotary Valve Engine with Cam Assembly Engine)
- 4. Mr. Nikhil Shah and Mr. Rachit Oza

Nirma University, Ahmedabad

(Recovery of Nickel from Spent Catalysts)

- 5. Ms Joannah Ranjini Gabriel, Ms S Pratheeba and Ms Sharanya R Iyer
  - St. Joseph's College of Engineering, Chennai
  - (A Non-Invasive Infant Monitoring System using CO2 Sensors)

- 6. Mr. Fahad Ali Usmani and Mr. Shadab Mallick
  - Zakir Hussain College of Engineering and Technology, Aligarh Muslim University, Aligarh (*Performance Analysis of Analog Building Blocks in Technologies Beyond Silicon*)
- 7. Mr. Dinesh Singh J and Mr. Natarajan R
  - Sri Sai Ram Engineering College, Chennai
  - ('ASTHRA' An Automated Robotic Vehicle for Disabled Patients Using Embedded Systems)
- 8. Mr. Prathamesh Dhole, Mr. Tanmoy Sinha and Mr. Sumeet Nayak
  - National Institute of Technology, Durgapur
  - (Indigenously Built Low-Cost Online Dissolved Gas Analyser)
- 9. Ms V Aishwarya Vedham and Ms S Priyadharshini
  - St. Joseph's College of Engineering, Chennai
  - (Design and Implementation of PLC based Load Management System)
- 10. Ms K Shashikala, Ms. M Sharmila, Ms K Sindhu and Ms R Sindhumathi Sona College of Technology, Salem
  - (Weed Detection using Multiresolution Analysis)

# Ph.D. Level

- 1 Dr. Rabibrata Mukherjee, Indian Institute of Technology, Kanpur. (Self Organization and Atterning of Soft Polymer Films)
- 2 Dr. Soma Guhathakurta, Indian Institute of Technology, Madras, Chennai. (*Processing of Bovine Pericardium as a Biomaterial in Cardiovascular Surgery*)
- 3 Dr. SR Samantaray, National Institute of Technology, Rourkela (A New Approach to Power System Protection using Time-Frequency Analysis and Pattern Recognition)
- 4 Dr. Venkatesaperumal B, Indian Institute of Technology, Delhi. (An investigation on some operational aspects of a Generalized Impedance Controller Based Self Excited Induction Generator)

### M.E./M.Tech Level

- 1 Mr. Chandan Karfa, Indian Institute of Technology, Kharagpur (Hand-in-hand Verification and Synthesis of Digital Circuits)
- Mr. Rohan Paul, Mr. Dheeraj Mehra and Mr. Vaibhav Singh Indian Institute of Technology Delhi(Embedded System Assistive Devices for Enhancing Mobility for the Visually Challenged \*User-triggered Bus identification and Homing System \* Cane-mounted Knee-above Obstacle Detection and Warning System)

# **B.E./B.Tech Level**

- 1 Mr. Mridul Aanjaneya, Indian Institute of Technology, Kharagpur. (Excursions in Neighborhood Geometry of Tessellations)
- 2 Mr. Arvind T, Ms. Nithya M and Ms. Pranayini.G Sri Venkateswara College of Engineering, Sri Perumbudur (TN) (T9++ Rule Based Text Prediction in Mobile Messaging)
- 3 Mr. C Karthik, Mr. Pradeep S Kanthan, Mr. Sivaganesh. M and Mr. Suresh S Anand Institute of Higher Technology, Kazhipattur (TN) (Design and Fabrication of a Continuously Variable Transmission System)
- 4 Mr. Arivarasan K., Ms. Jeevitha S, Ms. Jyothi Lakshmi Ranganathan and Ms. Ramalakshmi A Sri Venkateswara College of Engineering, Sri Perumbudur (TN) (Remote Controlled Navigation of an Electrical Vehicle)
- 5 Mr. G Bharath and Mr. N Swaminathan St Joseph College of Engineering, Chennai (Advance Control and Automation of Wheelchair)

### **Doctoral** level

- 1 Dr. BS Munjal, Gujarat University
  - (Finite Element Analysis, Design & Development of Smart Skin Spacecraft Antenna Reflectors Using Intelligent/Smart Materials & Structural Systems)
- 2 Dr. Atul Srivastava, Indian Institute of Technology, Kanpur (Optical imaging and control of convection around a KDP crystal growing from its aqueous solution)
- 3 Dr. S Senthilvelan, Indian Institute of Technology, Madras, Chennai (Design, Development and Performance of Injection Molded Polymer Composite Gears)
- 4 Dr. Kaushik Nath, Indian Institute of Technology, Kharagpur (Studies on Biological Hydrogen Production by Two Stage Fermentation Process)
- 5 Dr. Sanjay P Kamble, Institute of Chemical Technology, Matunga, Mumbai (*Photocatalytic/Photochemical Mineralization of Pollutants*)
- 6 Dr. Vipin Kumar, Indian Institute of Technology, Delhi, New Delhi (Power Quality Improvements at AC Mains in Variable Frequency Induction Motor Drives)

# Master's level

- Wg Cdr. S Bharadwaj, Defence Institute of Advanced Technology, Pune (Design and Fabrication of the Fuzzy Logic Controller for an Autonomous Mobile Robot)
- 2 Mr. Pankaj Kumar Sa, National Institute of Technology, Rourkela (Development of Impulsive Noise Removal Schemes)
- 3 Mr. Arup Kumar Das, Indian Institute of Technology Kharagpur (Studies on nucleate boiling and bubbling process through submerged orifices)
- 4 Mr. Kaushik Sengupta, Indian Institute of Technology, Kharagpur.

  (Mode-Locking in Nonlinear Non-autonomous Communication Systems: Stability and Phase Noise Analysis)

## **Bachelor level**

- 1 Mr. S Alvin Christopher Julius, Mr. S Praveen Kumar; Mr. G Saravana Kumar and Mr. K Ravishankar.
  - Sri Ramakrishna Engineering College, Coimbatore
  - (Design and fabrication of bush driving, block crimping and driving unit)
- 2 Mr. NR Karthikeyan,
  - PSG College of Technology, Coimbatore
  - (Study of thermal properties of copper and copper oxide nanofluid)
- 3 Mr. S Sathis Kumar
  - Bannari Amman Institute of Technology, Sathyamangalam
  - (A Novel Approach to Process Cotton & Long-Staple Fibres (Wool/Silk/Polyster) on Short-Staple Ringframe)

# 2006

- 1. Dr. Shashi Kumar Singh, College of Agricultural Engineering, Punjab Agricultural University, Ludhiana
  - (Design and Development of a Tractor Mounted Air-Assisted Sprayer for Cotton)
- 2. Dr. Shyam Sunder Kapdi, Indian Institute of Technology, Delhi (Development of Biogas Enrichment & Compression System for Rural Energy Applications)
- 3. Dr. A Kamaraj, Agricultural Engineering College and Research Institute, Tamil Nadu

Agricultural University, Coimbatore

(Eco Friendly Fuel Production from Sago Industrial Wastewater through Hybrid Reactor)

4. Dr. Goutam Mukherjee, Government College of Engineering and Leather Technology, Kolkata (Studies on Eco-Friendly Process Innovations in Tannery Operations)

# Master's Level

1. Ms. Gopika Arora, College of Agricultural Engineering, Punjab Agricultural University, Ludhiana

(Effect of Enzymatic Pretreatment on Milling Characteristics of Basmati Rice)

2. Ms. Shuchi Verma, Indian Institute of Technology, Roorkee (Studies on Microbial Degradation of Oily Sludge)

- 3. Mr. Gagandeep Bakshi, College of Agricultural Engg, Punjab Agricultural University, Ludhiana (Studies on Low Cost Processing of Okra)
- 4. Mr. Jeny Rajan, University of Kerala, Thiruvananthapuram (Image Denoising using Partial Differential Equations)
- 5. Mr. Tamal Das, Indian Institute of Technology, Kharagpur (Micropatterning of Concanavalin A by Microcontact Printing)
- 6. Mr. Jitendra Solanki, Indian Institute of Technology, New Delhi (Design, Control and Implementation of Distribution Static Compensator (DSTATCOM)
- 7. Mr. Prabhat Kumar Agnihotri, Indian Institute of Technology, Kanpur (Synthesis and Characterization of Carbon Nanotubes on the Surface of Carbon Fiber for Structure Applications)

### **Bachelor Level**

1. M. Mohan Kumar, E. Narayanan, L. Siva Kumar and J. Vijaya Pandi Sri Ramakrishna Engineering College, Coimbatore (Design and Fabrication of 100T Four Pillar Upstroking Hydraulic Cure Press)

2. Aravindh C, Balaraman. R and Janaki Raman B

Sri Venkateswara College of Engineering, Sriperumbudur (Parametric Analysis of Transesterification of Pungam Oil)

3. MR. Aravind Raghavendra R Arun, H Chidambaram and V Yuvaraj

Sri Sai Ram Engineering College, Chennai.

(Fabrication and Automation of PLC based 3 in 1 Multipurpose (LMD) Machine Centre)

4. Prashant C., St. Joseph's College of Engineering, Chennai

(A Study on Production of Docosahexaenoic Acid from Thraustochytrid)

5. Y. Yoga Priya and R.D. Sagilla

S.K.R. Engineering College, Chennai

(Railway Station Signaling System using Embedded System)

6. S. Sundarraj, Sri Venkateswara College of Engineering, Sriperumbudur (IVoiS-Interactive Speech Operated Switch with Speaker Authentication)

7. R. Aravind and E. Eben Raja

St. Joseph's College of Engineering, Chennai

(Computer Aided Instrumentation for Respiration Monitoring System Using Pressure and Optoelectronic Sensors)

8. Sneha Gupta, Indian Institute of Technology, Bombay (Nanocrystalline Silicon Formation Through Aluminium Induced Crystallization)

## 2005

- 1. Dr. Somashekhar S. Hiremath, Indian Institute of Technology, Madras, Chennai (Finite Element Modeling and Analysis of the Fluid Structure Interaction in Hydraulic Servovalve)
- 2. Dr. C. Ramana, Agricultural Engineering College & Research Institute, Tamil Nadu Agricultural University, Coimbatore

(Investigation on Parameters Affecting the Development of Parasol Sprayer for Orchard)

- 3. Dr. G. Sivalingam, Indian Institute of Science, Bangalore (Synthesis and Degradation of Biodegradable Polymers)
- 4. Dr. Abdul Rahiman Beig B., Indian Institute of Science, Bangalore (Application of Three Level Voltage Source Inverters to Voltage Fed and Current Fed High Power Induction Motor Drives)

# Master's Level

- 1. Lt Cdr VK Rai, Indian Institute of Technology, Kharagpur (Fault Diagnosis and Condition Monitoring of Rolling Element Bearings using Advanced Signal Processing Techniques)
- 2. Mr. T.S.R. Ch. Murthy, Indian Institute of Technology, Kanpur (Development and Characterization of TiB2 based materials for high temperature applications)
- 3. Ms. D. Sirisha, Agricultural Engineering College & Research Institute, Tamil Nadu Agricultural University, Coimbatore
  - (Ergonomical evaluation of selected farm equipment for assessing their suitability to women workers)
- Ms. Uttama Lahiri, Indian Institute of Technology, Kharagpur (Implementation of an Intelligent Relay using DSP Board TMS320F243)
- 5. Mr. Pralay Mitra, Bengal Engineering and Science University, West Bengal (MAP Assembly Problem)

# **Bachelor Level**

- 1. D. Barani Shankar and A. Vino Xavier Raj
  - St. Joseph's College of Engineering, Chennai

(Design & Implementation of a Hybrid Vehicle using Brushless DC Motor)

- 2. Siddhartha Das, Indian Institute of Technology, Kharagpur
  - (Modelling of Coupled Momentum, Heat and Solute Transport during DNA Hybridization in a Microchannel in Presence of Electroosmotic Effects and axial Pressure Gradients)
- 3. H. Jayaram and M. Vinoth
  - Amrita Institute of Technology, Coimbatore

(Semi-autonomous Surveillance Robot)

4. Pankaj Pandya and Vikram Singh Yadav

College of Agricultural Engineering, Jawahar Lal Nehru Krishi Vishwa Vidyalaya (JNKVV), Jabalpur

(Water Harvesting and Efficient Land Utilization in Satpura Hilly Area (Jabalpur)

5. Daibashish Gangopadhyyay

Indian Institute of Technology, Kharagpur

(Ultra Wide-Band Monolithic CMOS Operational Amplifiers)

6. Praveen Kumar and Shrikant Kashyap

Indian Institute of Technology, Roorkee

(A Fully Automatic Bilingual Question Answering System for E-Learning Documents)

7. S. Devadurai and J. Maria Alen Dioney Biju

St. Joseph's College of Engineering, Chennai

(Computer Controlled Multifunctional Robot (Bomb Diffuser)

8. U. Sathyamurthy, S. Raghuveer and V. Venkatesh

Sri Siva Subramanya Nadar College of Engineering, Chennai

(Microcontroller Based Protection System for Unmanned Level Crossings)

9. Kevin Thomas, Ajay Babu Vaddi and Ch. K.V.V.G. Sreeram

St. Joseph's College of Engineering, Chennai

(Remote Control of Battlefield Artillery Units using Optical MMI)

### 2004

# **Doctoral Level**

- Dr. Anupam Singh Ahlawat, Indian Institute of Science, Bangalore (Intelligent Optimal Control of Earthquake or Wind Induced Flexural and Torsionally Coupled Vibrations in Buildings)
- 2. Dr. Jayan PR, Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Coimbatore

(Investigation on the effect of Soil, Machine Parameters influencing the Performance of a Dibber Wheel Towards Developing a Dibber Planter)

- 3. Dr. NS Mahesh, University Visvesvaraya College of Engineering, (Bangalore University) (Some Studies on Spray Casting of Aluminium-Silicon Alloys)
- 4. Dr. J Ramkumar, Indian Institute of Technology, Madras (Multimode Techniques for Defect Constrained Drilling of GFRP Composites)
- 5. Dr. P Thanikaivelan, Faculty of Technology (Anna University), Chennai (Approach Towards Zero Discharge Tanning Methods)
- 6. Dr. Ushamani M, Cochin University of Science and Technology, Cochin (Kerala) (Studies on Photosensitive Polymers for Optical Recording)

### Master's Level

- 1. Mr. Arvind Kumar, Indian Institute of Science, Bangalore
  (Numerical Modelling of Transport Phenomena in DC Casting of Non-dendritic Billets)
- 2. Mr. Surender Maddela, Indian Institute of Technology, Kanpur (*Electrodeposition of Ni-WC Composite Coating*)
- 3. Mr. Pramod Kumar Pandey, Indian Institute of Technology, Kharagpur (Simulation of Water Balance Model for Optimum Design of On-farm Reservoir for Rice Fish Integration under Rainfed Ecosystem)
- 4. Er. Manpreet Singh, College of Agricultural Engineering, Punjab Agricultural University, Ludhiana (Punjab)

(Design and Development of Straw Push-Through Assembly for a No-Till Drill)

# **Bachelor Level**

1. D. Vinod, V Ashok Kumar and V Vijayarangan

Sri Sai Ram Engineering College, Chennai

("INTELLBOT - Intelligent Software Robot Incorporation of Artificial Intelligence)

2. Mohamed Rafiq M and Srihari Sridharan

Crescent Engineering College, Chennai

(Enhancing Network Security Using File Scrambling Techniques : Cryptography & Steganography)

3. Abu Saad Papa, G Anantha Kumar, P Rajaji and A Shankar Madras Institute of Technology, Anna University, Chennai

(Text Telephony)

4. Sanjeev Bhalla and Sourabh Saluja

Indian Institute of Technology, Roorkee

(Design and VLSI Implementation of an Efficient Cryptographic System)

5. A Kumar Venkatesh, P Ravi Kumar and G Vignesh Kumar

Sri Ramakrishna Engineering College, Coimbatore

(Design and Fabrication of a Semiautomatic Device for Assembling of Air Pressure Horn)

## 2003

### **Doctoral Level**

1. Dr. S Kaleemullah, Agricultural Engineering College & Research Institute, Tamil Nadu Agricultural University, Coimbatore

(Studies on Engineering Properties and Drying Kinetics of Chillies)

2. Dr. TPD Rajan, Faculty of Engineering & Technology, University of Kerala, Trivandrum (Processing and Characterization of Aluminum Metal Matrix Composites)

### Master's Level

- 1. Sandhya, College of Agricultural Engineering, Punjab Agricultural University, Ludhiana (Modified Atmosphere Storage of Shelled Peas in different Poly-films.)
- Vinod Kumar Singh, Indian Institute of Technology, Delhi (Design and Development of Micromachined (MEMS) Microstrip Patch Antenna at X- and Ka-Band Frequencies)

### **Bachelor Level**

1. Shaifally Dawra, Thapar Institute of Engineering and Technology (Deemed University), Patiala (Punjab)

(Studies on the Effects of Parameters on the Kinetics of Liquid Phase Mercaptan Oxidation using Indigenous Catalyst)

2. Hamsa Priya, Jayashree B and Swapna Priya G

Kumaraguru College of Technology, Coimbatore

(Multiparty Event Scheduler using Mobile Agents)

3. Guneet Sethi, Indian Institute of Technology, Kanpur

(Experimental and Theoretical Study of Microwave and Conventional Sintering of Bronze)

4. Jagrut D Dave, Indian Institute of Technology, Bombay

("Parikshak" - A Distance Evaluation System)

5. Deepak Jain, Indian Institute of Technology, Delhi

(Pollution-Preventing Lithographic Inks)

6. P Vijayalakshmi and I Vijayasankar

Pondicherry Engineering College, Pondicherry

(Evaluation of Stress Distribution on Dental Structure – Replaced by Fixed Partial Denture)

### 2002

## **Doctoral Level**

Dr.(Mrs.) HM Bastian

Institute of Chemical Technology (UDCT), University of Mumbai, Mumbai (Reactive Separation Processes)

Dr. I Rajendran

PSG College of Technology, Coimbatore

(Studies on Isotropic and Orthotropic Leaf Springs)

3. Dr. BC Meikap

Indian Institute of Technology, Kharagpur

(Abatement of Particulate Laden SO2 in a modified Multi-stage Bubble Column Scrubber)

### Master's Level

1. Mr. Ranjay Laha

Indian Institute of Technology, Kharagpur

(Studies on SiC: Characterization, Metallization and Schottky Junction Formation for H-gas Sensing)

2. Mr. Ashish Bajpai

Indian Institute of Technology, Kanpur

(Deoxidation and Segregation in Continuously Cast Low Carbon Steel Billets)

3. Mr. TNV Murali Krishna Rao,

College of Agricultural Engineering, Tamil Nadu Agricultural University, Coimbatore (Tamil Nadu)

(Design, Development and Evaluation of Cotton Stalk Puller)

4. Mr. Varinder Singh Saimbhi

College of Agricultural Engineering, Punjab Agricultural University, Ludhiana (Punjab) (Modifications and Development of Rotary Tiller Blade using Computer Graphics)

5. Ms. Subhashini Ghorai

Indian Institute of Technology Delhi

(Fluoride Removal from Drinking Water using Activated Alumina)

6. Mr. D Devaprakasam,

Indian Institute of Science, Bangalore

(Design and Testing of a Surface Force Apparatus)

### **Bachelor Level**

1. Sanjay B Rupadja, Vivek K Walvekar, Rahul R Deshmukh, T Avinash Rao, Parag B Prabhune, Ms. Priya D Chore, Ms. Pooja B Farkade, Ms. Aarti B Lanjewar

Government College of Engineering, VMV Post Office, Amravati

(Design of Microprocessor Based Under Frequency Relay)

2. Kiran R Aatre, Michael P D'Souza, Gaurav Sen, Neil T George and Sonalkarjetkar

MS Ramaiah Institute of Technology, Bangalore

(Stabilization of Air-Borne Systems using Smart Structures)

3. Mr. L Dayaanandu and J Srihari

Sri Ramakrishna Engineering College, Vattamalaipalayam, Coimbatore

(Design and Fabrication of Axle Face Cleaning Special Purpose Machine)

4. Mr. J Karthikeyan

Kumaraguru College of Technology, Chinnavedampatty, Coimbatore

(Effect of Partial Replacement of Cement with Silicafume on Properties of High Performance Concrete)

5. Mr. S Ravikanth, Santhosha Nayak M, Mr. Prasanna SN and Mr. BN Sandeep

MS Ramaiah Institute of Technology, Bangalore

(The Moped Boat)

6. Ms. Nilima Ghosh, Mr. Pranab Debnath and Mr. Manik Barman

North Eastern Regional Institute of Science & Technology, Nirjuli

(Modeling and Simulation of Dissolved Oxygen in Fast Moving Shallow River)

7. Mr. Johnson Mendonca, Mr. Visesh C Challa and Mr. Guruprasad G

MS Ramaiah Institute of Technology, Bangalore

(Analysis and Experimentation of a Supersonic Nozzle for Spray Deposition)

8. M Ganesh, K Venkatraghavan, M Balaji and J Balakumaran

AC College of Engineering and Technology, Karaikudi, Sivagangai District, Tamil Nadu (FPGA Based Stepper Motor Control)

9. N Meenakshi, V Ramya, S Angaleswari, C Uma Devi, M Renuga and A Brinda AC College of Engineering and Technology, Karaikudi, Sivagangai District, Tamil Nadu (Microcontroller Based Robotic Syringe Pump for Cancer Therapy)

## 2001

### **Doctoral Level**

1. Mr. B Srinivasa Rao,

Indian Institute of Science, Bangalore-560012

(Pressure less Infiltration of Al-Mg based Alloys into Al2O3 Preforms)

2. Mr. Pranesh Murnal,

Indian Institute of Technology Bombay, Powai, Mumbai-400076

(VFPI: An Innovative Device for Aseismic Design)

3. Dr. Om Vir Singh,

University of Roorkee, Roorkee-247667 (Uttaranchal)

(Bioconversion of Agro-Food By-Products to Gluconic Acid By Aspergillus Niger)

4. Ms. Nisharani A Adhage,

University Department of Chemical Technology (UDCT), University of Mumbai, Nathalal Parikh Marg, Matunga, Mumbai

(Cyclodextrin Based Drug Delivery Systems)

# Master's Level

1. Mr. Rajesh Arya,

Indian Institute of Science, Bangalore-560012

(Developmental Studies on a Novel Power Conditioning System for Flash Lamp Pumped Solid State Lasers)

2. Mr. Amol Arvindrao Kulkarni,

University Department of Chemical Technology

(UDCT), University of Mumbai, Nathalal Parikh Marg, Matunga, Mumbai (Design of Multiphase Reactors)

# **Bachelor Level**

1. Dinakar Ramadurai and Mandeep Singh Oberoi

Sri Venkateswara College of Engineering, Post Bag No.3, Pennallur, Sriperumbudur, Tamil Nadu-602105

(Auxiliary Powered Automated Aid for Independent Ambulation)

2. Antarpreet Singh

College of Agricultural Engineering, Punjab Agricultural University, Ludhiana-141004 (Punjab) (Design and Development of Soil Openers for Reduced Tillage Seed-cum- Fertilizer Drills)

3. Capt SD Singh, Capt PK Singh, Capt SD Reuben and Capt R Bhandari

College of Military Engineering, Dapodi, Pune-411031

(Design & Development of Six Station Hexagonal Turret for CNC Lathe)

4. Vijay Gupta

Indian Institute of Technology, Hauz Khas, New Delhi-110016 (Adaptable Components Using MMIC/MEMS)

## 2000

## **Doctoral Level**

1. Dr. Surajit Das,

Indian Institute of Technology, Kharagpur

(Studies on Induction, Maturation and Conversion for Enhanced Somatic Embryogenesis in Santalum Album L.)

2. Dr. AW Patwardhan,,

Department of Chemical Technology, University of Mumbai, Mumbai.

(Design of Multiphase Reactors : (i) Development of Dead End Systems, (ii) Modeling of Flow Generated by Impellers and Mixing)

3. Ms. Dheepa Srinivasan,

Department of Metallurgy, Indian Institute of Science, Bangalore

(Phase Evalution, Thermal Stability and Hardness of Melt Spun Nanocrystalline Al-X-Zr.(X=Sc.,Cu, Ni) Alloys)

4. Dr. Souvik Mahapatra,

Indian Institute of Technology, Bombay,

(A comprehensive Study of Hot-Carrier Induced Damage Distributions in MOSFETs Using a Novel Charge Pumping Technique)

5. Dr. G Narayanan,

Indian Institute of Science, , Bangalore

(Synchronised Pulsewidth Modulation Strategies based on Space Vector Approach for Induction Motor Drives)

# Master's Level

1. Lt. Cdr. B Ajay,

IN, Institute of Armament Technology, Pune

(Development of a Laser Torsional Vibrometer)

2. Mr. Dharmesh Godha,

Indian Institute of Technology, Kanpur

(Embedding and XML Engine into an HTTP Server)

3. Mr. Nilesh Prakash Vichare,

Department of Chemical Technology, University of Mumbai

(Studies in Sonochemistry and Cavitation Phenomenon)

4. Mr. V Balamurugan,

Department of Applied Mechanics, Indian Institute of Technology, Madras

(Active Vibration Control of Smart Beams, Plates and Shells using Piezoelectric Materials)

5. Ms. Jayalaxmi,

Dept. of Metallurgical and Materials Engineering, Karnataka Regional Engineering College,, Suratkhal

(High Temperature Low Cycle Fatigue Behaviour of Modified 9 Cr.-1Mo Ferritic Steel)

# **Bachelor Level**

1. Saptarshi Mondal, Subhankar Mallick, Pulak Bose and Debabrata Mukherjee

Kalyani Government Engineering College, Kalyani, Nadia

(Web-based Multi-tiered Heterogeneous Distributed Office Automation and Decision Support System)

2. Sukanta Das, Sourav Saha, Mrityunjoy Saha and Asif Eqbal

Kalyani Government Engineering College, Kalyani, Nadia

(GANANAA: A Bangla Programming Environment)

3. V Aravind,

Department of Metallurgical Engineering, Indian Institute of Technology Madras (The Effect of Ag2O and TiO2 on the Formation of Functionally Graded Bioactive Ceramics)

4. Parag Jain, Varun Dev, Yadvinder Singh, Ajay Sharma, Ravdip H Singh, Neeraj Sharma, Bikramjit Sarkaria and Amit Sangwan

Punjab Engineering College, Chandigarh

(Mechanism for Shock Free Transfer of a Trauma Patient from a Stretcher Trolley to the Ward Bed)

### 1999

# **Doctoral Level**

1. Dr. VM Duraisamy,

College of Agricultural Engineering, Tamil Nadu Agricultural University, Coimbatore (Investigation on the Effect of Soil, Crop, Machine & Operational Parameters in relation to Mechanical Harvesting of Groundnut)

2. Dr. N Nagendra,

Department of Metallurgy, Indian Institute of Science, Bangalore (Processing Microstructure and Fracture Characteristics of High Volume Fraction Al 2O3 (Al-AlN) Matrix Composites)

3. Dr. KR Rajagopal,

Department of Electrical Engineering, Indian Institute of Technology, Delhi (Analysis and Design of Hybrid Stepper Motor and Torquer used in Space Application)

# Master's Level

1. Mr. SG Sanjay,

Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore (TCP over End-to-End ABR : A Study of TCP Performance with End-to-End Rate Control and Stochastic Available Capacity)

2. Mr. Ganesh Sriram,

Department of Chemical Engineering, Indian Institute of Technology, Bombay (Culture Fluorescence of Xanthomonas Campestris (for Optimal Application of a Novel Oxygen Supply Strategy to Bioreactor)

3. Mr. Satyabody Kadni,

Department of Electrical Engineering, Indian Institute of Technology, Delhi (Design of DSLODEM: A Multiple HDSL Add – On Card)

4. Mr. Abhishek Richhariya,

Department of Mechanical Engineering, Indian Institute of Technology, Delhi (Development and Optimization of Electronic Fuel Injection System for Two Stroke S.I. Engine)

5. Mr. Kandukuri Yagnanna Sastry,

Department of Metallurgical Engineering, Indian Institute of Technology, Madras (Stress Corrosion Cracking of 18%Ni Maraging Steel Weldments in 3.5% NaCl Test Environment)

6. Mr. V Raman,

Ocean Engineering Centre, Indian Institute of Technology, Madras (Performance of Armoured Caisson Breakwater)

7. Mr. Santosh Kumar Pandey,

Department of High Voltage Engineering, Indian Institute of Science, Bangalore (Signal Processing Tools to Enhance Interpretation of Impulse Tests on Power Transformers)

### **Bachelor Level**

1. Vikrant Lal and Shubhashish Datta,

Indian Institute of Technology, Hauz Khas, New Delhi

(Topology Design for WDM Networks)

2. Piyush Gopal Gigras,

Indian Institute of Technology, Hauz Khas, New Delhi

(Modelling of Trickle Bed Reactors at Elevated Pressures : Pressure Drop and Liquid Holdup)

3. Souvik Basu, Vinay Khaitan, Sudipta Ghosh and Satish Jaiswal,

Kalyani Engineering College, Kalyani

(Secure Electronic Transaction (SET) Compliant E-Commerce System Design and Implementation)

4. Rajesh Reang, Mangboi Lhungdim and A Dominic Phungthar,

Norther Eastern Regional Institute of Science & Technology, Nirjuli, Itanagar, A.P.

(Experimental Investigation on Cyclone Refrigeration)

5. G Deepa,

Indian Institute of Technology, Madras

(Processing and Characterization of Ferroelectric Ceramics – BaTi03 and PLZT)

6. Praveen Kumar Paritosh,

Indian Institute of Technology, Mumbai

(Qualitative Simulation in Process Engineering)

7. Anshul Sehgal,

Indian Institute of Technology, Mumbai

(Partially Occluded 3D Object Recognition using Bayesian Geometric Hashing and Pose Clustering)

8. R Balachandar, S Basker, S Ponnezhil Selvan, B Arunkumar and S Durai,

Arunai Engineering College, Tiruvannamalai

(Fabrication of a Mini Car using Single Cylinder Petrol Engine)

9. Rishi Jain,

Indian Institute of Technology, Kharagpur

(Design and Fabrication of Intrinsically Safe Liquid Level Transmitter for Hazardous Industries)

10. Premananda Mohapatra,

Indian Institute of Technology, Kharagpur

(Experimental and Theoretical Studies on Cu-Ni-X-Zeolite as Catalysts for Si Engine Emission Control)