

# KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bangalore - 560 012

**List of projects selected for “PROJECT OF THE YEAR” award  
during the Seminar and Exhibition of Student Projects – 37<sup>th</sup> SERIES: 2013-14  
held on 28th and 29<sup>th</sup> July 2014 at  
B. V. BHOMARADDI COLLEGE OF ENGINEERING AND TECHNOLOGY, HUBLI**

## **BEST PERFORMING COLLEGE AWARD : 2013-14 : 37<sup>TH</sup> SERIES OF SPP**

The Best Performing College Award goes to **DAYANANDA SAGAR COLLEGE OF ENGINEERING, BANGALORE**. This award has been decided based on the following parameters of projects demonstrated by students such as

1. Projects invited and sanctioned
2. Participation in Seminar and Exhibition projects
3. Project Presentation
4. Projects Awarded
5. Innovation and creativeness in the concept

## **BEST PROJECTS OF THE YEAR (Seminar projects)**

### **CIVIL ENGINEERING**

#### **“PERFORMANCE STUDY OF GEOPOLYMER COMPRESSED BLOCKS AND PRE-FABRICATED STRUCTURAL ELEMENTS”**

COLLEGE : JAIN COLLEGE OF ENGINEERING, BELGAUM  
GUIDE : KOMAL KATTIMANI  
STUDENTS : NITHIN KELAGERI  
PATIL SHREYANSH  
MOHAMMAD J. SHAIKH  
SHIVPRASAD UCHUKAR

#### **“PERFORMANCE EVALUATION OF WASTE TYRE AND TUBE RUBBER AS A PARTIAL REPLACEMENT FOR FINE AND COARSE AGGREGATES IN CEMENT CONCRETE.”**

COLLEGE : SJB INSTITUTE OF TECHNOLOGY, BANGALORE  
GUIDE : DR NAGARAJ SITARAM  
STUDENTS : CHINMAY M N  
HARIKRISHNA R  
CHIRANTH V GOWDA  
AKASH ADITYA

## **“APPLICATIONS OF GEOPOLYMER IN BUILDING MATERIALS AND RETROFITTING”**

COLLEGE : BV BHOOMARADDI COLLEGE OF ENGINEERING AND TECHNOLOGY, HUBLI  
GUIDE : M. V. CHITAWADAGI  
STUDENTS : SANTOSH C. SATALI  
KAVITHA S  
BASAVARAJ M. M  
SURESH B. MASANAGI

## **CONSTRUCTION TECHNOLOGY AND MANAGEMENT**

### **“STABILIZATION OF BLACK COTTON SOIL USING FLY ASH AND GEOPOLYMER”**

COLLEGE : DAYANANDA SAGAR COLLEGE OF ENGINEERING, BANGALORE  
GUIDE : PRAMOD K  
STUDENTS : RAGHAVENDRA S.R  
GIRISHA Y.A  
CHANDRU S THANGADAGI  
SUHAIL AHMED

## **COMPUTER SCIENCE AND ENGINEERING**

### **“A SECURE MONITORING OF 46 HABIT DRUGS USING ABE IN CLOUD”**

COLLEGE : CHANABASAVESHWARA INSTITUTE OF TECHNOLOGY, GUBBI, TUMKUR  
GUIDE : SHANTALA C.P  
STUDENTS : NITIN K R  
RAVISH T M  
SHARATH YADAV C  
SANJAYA G PRAKASH

### **“HARNESSING THE CLOUD FOR SECURELY OUTSOURCING LARGE SCALE SYSTEM OF LINEAR EQUATIONS”**

COLLEGE : K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE  
GUIDE : GOVINDARAJU G.N  
STUDENTS : DIVYA NAGARAJ  
POOJA N  
SREEVATHSA B.S

### **“PORTABLE EMERGENCY APPLICATION KIT & DOCUMENT LOCKER WITH MULTI LEVEL SECURITY SYSTEM & SELF ERASE PROTOCOL”**

COLLEGE : PROUDHADEVARAYA INSTITUTE OF TECHNOLOGY, BELLARY  
GUIDE : LAKSHMI DURGA  
STUDENTS : K.SASHIKUMAR  
RAJESH KUMAR GUPTA  
NAGARAJA. N

### **“PATHIPA DARSHINYAHA PAALANA (WOMAN PROTECTION MOBILE APP)”**

COLLEGE : SKSVMA COLLEGE OF ENGINEERING AND TECHNOLOGY, GADAG  
GUIDE : MANJULA DYAVANUR  
STUDENTS : SUPRIYA H.S  
VIDYA ANNIGERI  
SHRADDA PATIL  
SHWETA PYATI

## **INFORMATION SCIENCE AND ENGINEERING**

### **“CONTROLLING AIR CONDITIONER (TEMPERATURE AND AIRFLOW) USING WIRELESS SENSOR NETWORK”**

COLLEGE : B V BHOOMARADDI COLLEGE OF ENGINEERING & TECHNOLOGY,HUBLI  
GUIDE : DR. MEENA S M  
STUDENTS : KARTHIK S K  
MAHESHWARI M K  
SURAJ M H

## **ELECTRONICS AND COMMUNICATION**

### **“DSP BASED CONVERTER-INVERTER CONTROL STRATEGY FOR SINGLE PHASE WIND POWER GENERATION SYSTEM”**

COLLEGE : JSS ACADEMY OF TECHNICAL EDUCATION, BANGALORE  
GUIDE : DR. B. G. SHIVALEELAVATHI AND H. S. KAVITHA  
STUDENTS : RAJATH P HEBBAR  
PRAJWAL S N  
SUDARSHAN RAJ KESHRI  
SRIHARI G

## **ELECTRICAL AND ELECTRONICS ENGINEERING**

### **“OPTIMIZATION IN GENERATION FROM A HORIZONTAL AXIS WIND TURBINE VIA BLADE PITCH CONTROL AND STRUCTURE MORPHING”**

COLLEGE : SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMKUR  
GUIDE : DR. K.P.SHIVAMURTHY  
STUDENTS : JAINENDRA MISHRA  
MAHENDRA SINGH SENWAR  
SINDHU RAVINDRA B  
SOURABH KUMAR

## **MECHANICAL ENGINEERING**

### **“STUDY OF HEAT TRANSFER THROUGH CIRCULAR DUCT WITH INSERTIONS (SPIRAL RIB INSERTIONS) AND DETERMINING THE LOCAL HEAT TRANSFER COEFFICIENT”**

COLLEGE : B.L.D.E.A'S V.P. DR. P.G.HALAKATTICOLLEGE OF  
ENGINEERING AND TECHNOLOGY, BIJAPUR  
BRANCH : MECHANICAL ENGINEERING  
GUIDE : V.V. NAGATHAN  
STUDENTS : SRINIDHI R PURANIK  
DINESH B HOSAMANI  
MANJUNATH R JAMKHANDI  
HRISHIKESH S PATIL

### **“SMART HIGHWAY INTEGRATED ENERGY PRODUCTION SYSTEM”**

COLLEGE : HMS INSTITUTE OF TECHNOLOGY, TUMKUR  
GUIDE : DR C B VIJAYA VITTALA  
STUDENTS : MD AMINUL HASSAN  
SURENDRA SAPKOTA  
MD ALAY MOHIUDDIN  
SYED NEYAZ IMAM

## CHEMICAL ENGINEERING

### “CHEMICAL RECYCLING OF WASTE PLASTICS INTO FUELS AND VALUABLE CHEMICALS”

COLLEGE : SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD  
GUIDE : SHIVANAND Y. ADAGANTI  
STUDENTS : MANJUNATH S  
ANNAPURNESHWARI .V. PATIL  
ANIL .S. ANDEWADI

### “ONE-POT SYNTHESIS OF FMOC/CBZ - PROTECTED B-AMINO ALKYL AZIDES DIRECTLY FROM ALCOHOLS AND THEIR UTILITY IN THE SYNTHESIS OF 1,4-SUBSTITUTED 1,2,3-TRIAZOLE BASED N-PROTECTED $\epsilon$ -AMINO ACIDS”

COLLEGE : SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMKUR  
GUIDE : DR .THOMAS THEODORE AND DR. H. S. LALITHAMBA  
STUDENTS : DARSHAN M. K  
DEBANJANI DAS  
MAHENDRA N  
NEHA B. S

## BIOTECHNOLOGY ENGINEERING

### “SELECTION AND SCREENING OF MICROBIAL CONSORTIA FOR EFFICIENT AND ECO-FRIENDLY DEGRADATION OF PLASTIC WASTES IN URBAN AND RURAL AREAS OF BANGALORE”

COLLEGE : DAYANANDA SAGAR COLLEGE OF ENGINEERING, BANGALORE  
GUIDE : SINOSH SKARIYACHAN  
STUDENTS : MEGHA M  
MEGHNA N KINI  
KAMATH MANALI MUKUND  
ALYA RIZVI

### “ISOLATION OF PLANT HORMONE (GA3) FROM FUNGI AND PRODUCTION AND OPTIMIZATION STUDIES”

COLLEGE : KLE DR M S SHESHGIRI COLLEGE OF ENGINEERING  
AND TECHNOLOGY, BELGAUM  
GUIDE : DR. UDAY M MUDDAPUR  
STUDENTS : MANOJ V GADKARI  
SHRUTI M KULKARNI  
PRIYANKA SABANNAVAR

## BEST PROJECTS OF THE YEAR (Exhibition projects)

### COMPUTER SCIENCE ENGINEERING

#### “A SECURE ATM SYSTEM USING DELAY CONSTRAINT AND GSM MODULE”

COLLEGE : CHANNABASAVESHWARA INSTITUTE OF TECHNOLOGY, GUBBI  
GUIDE : SHANTHALA C.P  
STUDENTS : SUSHMITHA N  
VAISHALI VAISHNAW  
VANDANA K V  
SHANTHALA.CP

#### “VISION BASED ANALYSIS USING SIXTH SENSE TECHNOLOGY”

COLLEGE : HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI, BELGAUM  
GUIDE : ARUNA A DAPTARDAR  
STUDENTS : VISHAL J KESTI  
MRUTYUNJAY HIREMATH  
PANKAJA SHAHAPURE  
ASHWINI PATIL

### ELECTRICAL AND ELECTRONICS ENGINEERING

#### “ELECTRONIC LOAD CONTROLLER FOR MICRO HYDEL SYSTEMS”

COLLEGE : K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE  
GUIDE : DR.B.R.NATARAJAN  
STUDENTS : ABHISHEK. M  
GANGADHAR.B.V  
SUBRAMANIAN A.J  
GIRISH KUMAR C.H

#### “ENERGY EFFICIENT SOLAR DISHWASHER”

COLLEGE : RAJARAJESWARI COLLEGE OF ENGINEERING, BANGALORE  
GUIDE : SINCY ELEZEBETH KURUVILLA AND PAVAN  
KUMAR K.R  
STUDENTS : SANGEETHA J.S  
SHASHI C.N  
JNANADEEPTHI SEETHARAM

### ELECTRONICS AND COMMUNICATION ENGINEERING

#### “PLC BASED ADVANCE WATER DISTRIBUTION SYSTEM”

COLLEGE : CHANNABASAVESHWARA INSTITUTE OF TECHNOLOGY, GUBBI  
GUIDE : DR. SURESH D S  
STUDENTS : SUDHAKAR K  
DEEPAK N V  
RAJESHWARI K M  
SASHA S

## **“UNMANNED MOBILE PATROL VEHICLE FOR HOYSALA”**

COLLEGE : M S RAMAIAH INSTITUTE OF TECHNOLOGY, BANGALORE  
GUIDE : LAKSHMI S  
STUDENTS : PAWAN J S  
MUKESH KUMAR SAINI  
GULAM HUSSAIN  
MUHAMMED SHAMIM

## **SMART WATER METER**

COLLEGE : SCHOOL OF ENGINEERING AND TECHNOLOGY, JAIN GLOBAL CAMPUS,  
RAMANAGAR  
GUIDE : VINAY KUMAR S. B. AND C. PRASANNA KUMAR  
STUDENTS : SACHIN JAIN B. N.  
SHARATH V.C.  
SUHAS S.

## **ENVIRONMENTAL ENGINEERING**

### **“FABRICATION OF ZINC OXIDE-CHITOSAN BASED PHOTOCATALYTIC REACTOR FOR DEGRADATION OF TEXTILE DYE CONGO RED”**

COLLEGE : SAPTHAGIRI COLLEGE OF ENGINEERING, BAGALORE  
GUIDES : DR.CHAITANYALAKSHMI.G AND MR. VIJAY  
KISHORE.  
STUDENTS : KUSHA SHARMA  
SWATI KRISHNA  
CHAITRA SHETTY

## **BIOTECHNOLOGY ENGINEERING**

### **“A NOVEL APPROACH IN UTILIZATION OF FLOWER WASTE FROM CHICKBALLAPUR MARKET TOWARDS DEVELOPMENT OF VALUE ADDED PRODUCTS”**

COLLEGE : SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY, BANGALORE  
GUIDES : PRIYA NARAYAN AND SRINIVAS V  
BANDLAMORI  
STUDENTS : RIZWAN PASHA  
ASHWINI MOHANDAS  
REVATHI B R

## **INFORMATION SCIENCE AND ENGINEERING**

### **“MULTI-TOUCH REACTABLE”**

COLLEGE : K.L.E INSTITUTE OF TECHNOLOGY, HUBLI  
GUIDE : GIRISH SAUNSHI  
STUDENTS : KESHAV M. KATWE  
VINAY A. WALVEKAR  
MAMATA KURABAGATTI  
NUPUR TATTI

## MECHANICAL ENGINEERING

### “EXOSKELETON FOR HUMAN PERFORMANCE AUGMENTATION”

COLLEGE : BV BHOMARADDI COLLEGE OF ENGINEERING AND TECHNOLOGY, HUBLI  
GUIDE : MANTESH C CHOUKIMATH  
STUDENTS : ARUN BHAT  
ANIL KAKHANDKI  
ASHIFALI NADAF  
NIKHIL SHERIGAR

### “STUDY OF PARABOLIC TROUGH COLLECTOR FOR TAPPING SOLAR ENERGY”

COLLEGE : DAYANANDA SAGAR COLLEGE OF ENGINEERING, BANGALORE  
GUIDE : NARASIMHE GOWDA  
STUDENTS : ABHIJEETH NAGARAJ  
SUNIL KUMAR SHETTY  
KIRAN KUMAR PH  
SACHIN S JAMAKHANDI

### “DRIVING ACCESSORY FOR HANDICAPPED”

COLLEGE : GOGTE INSTITUTE TECHNOLOGY, BELGAUM  
GUIDE : DR. S. L. GOMBI  
STUDENTS : KARAN JADHAV  
ROHIT PATIL  
KAUSTUBH KULKARNI  
AJINKYA PITRE

### “BEACH CLEANING EQUIPMENT”

COLLEGE : SHREE DEVI INSTITUTE OF TECHNOLOGY, MANGALORE  
GUIDE : CHANDANA N.C  
STUDENTS : SUDHARSHAN J  
DARYL D'SOUZA  
VINYAS A  
VINESH

### “SOLAR POWER ACTUATED DRIER”

COLLEGE : SRINIVAS INSTITUTE OF TECHNOLOGY, MANGALORE  
GUIDE : UDAYASHANKAR B  
STUDENTS : CHANDAN A J  
DEEPAK S  
GAUTHAM B  
NITHESH

## INDUSTRIAL AND PRODUCTION ENGINEERING

### “SMALL SCALE CHICKPEA HARVESTING ”

COLLEGE : B.V.BHOMARADDI COLLEGE OF ENGINEERING & TECHNOLOGY, HUBLI  
GUIDE : SANJAY KULKARNI  
STUDENTS : MOHAMED TAUSEEF  
SARASWATI RAJPUROHIT  
PRASHANT SALIMATH  
ROHAN ARGEKAR

## **BEST PROJECTS OF THE YEAR (Biofuel projects)**

### **B.E Project on Biofuels**

#### **CHEMICAL ENGINEERING**

##### **“MANUFACTURE OF C-11 COMPOUNDS FROM CASTOR OIL”**

COLLEGE : DAYANANDA SAGAR COLLEGE OF ENGINEERING, BANGALORE  
GUIDE : PROF. SURESH C. MAIDARGI  
STUDENTS : B. R. KEERTHI  
                  UJWALA K  
                  SANTOSH H B  
                  HARSHA

#### **MECHANICAL ENGINEERING**

##### **“STUDIES ON EFFECT OF BIODEISEL ON THE ENGINE CRANKCASE LUBRICANT”**

COLLEGE : NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BANGALORE  
GUIDE : Dr. N. KAPILAN  
STUDENTS : BHAVYA SHREE M  
                  CHAITRA K N  
                  NETHRA M

##### **“BIOMASS GASIFIER STOVE USING AGRICULTURAL WASTE (CROP RESIDUE)”**

COLLEGE : SHAIKH COLLEGE OF ENGINEERING AND TECHNOLOGY, BELGAUM  
GUIDE : PROF. VEERANNA D. K  
STUDENTS : VIKAS A BHAVI  
                  SATISH G. KALAKERI  
                  SADANAND I. KAMMAR  
                  SHRISHAIL M. NARAGATTI

#### **BIOTECHNOLOGY ENGINEERING**

##### **“PRODUCTION OF BIOFUEL FROM SOIL AND WASTE WATER ALGAE USING VERTICAL REACTOR SYSTEM”**

COLLEGE : SAPTHAGIRI COLLEGE OF ENGINEERING, BANGALORE  
GUIDE : PROF. VINUTHA MOSES AND PROF. SOUMYA C  
STUDENTS : PRUTHVI AVADHANI H A  
                  R VIDHYA



## **M.Sc., Project on Biofuels**

### **BIOTECHNOLOGY**

#### **“HEAVY METAL INDUCTION FOR ENHANCED LIPID PRODUCTIVITY IN FRESH WATER MICROALGAE”**

COLLEGE : INDIAN ACADEMY DEGREE COLLEGE, BANGALORE  
GUIDES : DR. SIBI G  
STUDENTS : ANURAAG T S  
PRANAV KUMAR MISHRA  
GEETA BAFLIA

#### **“NUTRITIONAL ANALYSIS OF PONGAMIA SEED CAKE FOR ANIMAL SUPPLEMENT”**

COLLEGE : MAHARANI LAKSHMI AMMANI COLLEGE FOR WOMEN, BANGALORE  
GUIDES : MRS. BABITHA B AND DR. SAVITHA G  
STUDENTS : RABIA ZAIB  
PUSHPALATHA M  
ARPITHA JADE  
AMRUTHA P

## **M.Tech., Projects on Biofuels**

### **THERMAL POWER ENGINEERING**

#### **“INVESTIGATION ON CONVERSION OF FLOWER WASTES INTO BIO-ETHANOL AND PERFORMANCE EVALUATION ON SINGLE CYLINDER IC ENGINE”**

COLLEGE : BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, DAVANGERE  
GUIDES : DR. S KUMARAPPA AND DR. B M KULKARNI  
STUDENTS : VEERABHADRAPPA C BALIKAI

#### **“STABILITY ANALYSIS OF BIODIESEL, ETHANOL AND DIESEL BLENDS AND PERFORMANCE TESTING OF CI ENGINE WITH THESE STABLE BLENDS”**

COLLEGE : BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, DAVANGERE  
GUIDES : MR. S RAJESH  
STUDENTS : VICKY SINGHA