**INSTITUTE AUTHORITIES**

 

Prof. A. D. Sahasrabudhe Prof. B. B. Ahuja

Director & Professor Deputy Director & Professor

(Mechanical Engineering) (Production Engineering)

  

Prof. (Mrs.) P. P. Rege Prof. D. W. Pande Prof. S. D. Agashe Dean Academics & Professor Dean R& D & Professor Dean Student Affairs & Professor (Electronics & (Mechanical Engineering) (Instrumentation & Control

Telecommunication Engineering) Engineering)

 

Prof. B. N. Chaudhari Prof. M. S. Sutaone

Dean Quality Assurance & Professor Dean Alumni & International Affairs

(Electrical Engineering) & Professor

(Electronics & Telecommunication

Engineering)

**HEAD OF DEPARTMENTS**

**  **

Dr. J. A. Kher Prof. S. S. Bhosale Prof. J. V. Aghav

Asst. Professor & Head Professor & Head Professor & Head

(Dept. Applied Science) (Dept. Civil Engineering) (Dept. Computer & IT)

  

Prof .S. S. Dambhare Prof. A. M. Sapkal Dr. S. L. Patil

Professor& Head Professor & Head Asso. Professor & Head (Dept. Electrical Engineering) (Dept. Electronics & (Dept. Instrumentation

Tele Communication Engineering) & Control Engineering)

  

Dr. K. V. Dalvi Prof. S. N. Sapali Prof. S. T. Vagge

Asst. Professor & Head Professor & Head Professor & Head

(Dept. Mathematics) (Dept. Mechanical (Dept. Metallurgy &

Engineering) Material Science)

 

Dr. (Mrs.) S. N. Chaure Prof. (Mrs.) N. R. Rajhans

Asst. Professor & Head Professor & Head

(Dept. Physics) (Dept. Production Engineering)

**HEADS OF OTHER COMMITTEES/CENTRES**

  

Dr. (Mrs.) S. N. Madhekar Dr. (Mrs.) V. S. Vyas Mr. S. S. Kumbhar

Chairman, Library Committee Controller of Examination Central Computing &

Networking

  

Mr. S. A. Meshram Mr. A. M. More Prof. P. Waychal

Training & Placement Officer Asst. Training & Placement Officer Head of Innovation

Centre

  ****

Dr. S. P. Mahajan Dr. S. S. Pardeshi Brig. K. S. Pathania

Vice President, Vice President, General Manager,

Gymkhana Boat club Admin

**FACILITATORS**

**   ** Mr. R. S. Jadhav Mr. C. R. Bamble Mrs. Anisha Dhongade Mr. V. B. Gonte

Librarian Administrative Officer Accounts Manager Accounts Officer

**BOARD OF GOVERNORS**

|  |  |
| --- | --- |
| **Members** | **Designation** |
| **Dr. F. C. Kohli**  Former Chairman,  T.C.S. Ltd., Mumbai,  Air India Building, 11th Floor,  Nariman Point, Mumbai 400 021. | Chairman |
| **Mr. Sanjay Kumar**  Principal Secretary,  Department of Higher & Technical Education,  Maharashtra State, Mumbai 400 032. | Member  (Ex-Officio) |
| **Mr. Prataprao Pawar**  Chairman, Sakal media,  Sakal Papers Ltd., 595, Budhawar Peth,  Pune 411 002. | Member |
| **Mr. Atul Kirloskar**  Chairman,  Kirloskar Oil Engines Ltd.,  LK Road, Khadaki, Pune 411 003. | Member |
| **Mr. Maitreya Doshi**  Chairman & CEO,  Premier Ltd, 58, Nariman Bhavan,  Nariman Point, Mumbai 400026. | Member |
| **Mrs. Kanta Batra**  Deputy Secretary,  University Grant Commission,  New Delhi – 110002. | Member  (UGC Nominee) |
| **Prof. W. N. Gade**  Vice Chancellor,  University of Pune, Pune – 411007. | Member  (University of Pune Nominee) |
| **Prof. B. N. Chaudhari**  Professor & Dean (QA),  (Dept. Electrical Engineering),  College of Engineering Pune,  Shivajinagar, Pune – 4110005. | Member  (Senate Nominee) |

|  |  |
| --- | --- |
| **Members** | **Designation** |
| **Prof. B. B. Ahuja**  Deputy Director & Professor ,  (Dept. Production Engineering) ,  College of Engineering Pune,  Shivajinagar, Pune – 4110005. | Member  (Senate Nominee) |
| **Prof. A. D. Sahasrabudhe**  Director & Professor,  (Dept. Mechanical Engineering),  College of Engineering Pune,  Shivajinagar, Pune – 4110005. | Member Secretary  (Ex-officio) |
| **Prof. B. S. Sonde**  Former VC Goa University,  Professor Emeritus IISc,  274. Shree Anandnagar, 18th Cross,  Electronics City, P.O. Hasur Road,  Bangalore 560100. | Member  Invitee |
| **Prof. Uday Salunkhe**  Director,  Wellingakars Management Institute,  Matunga, Mumbai 400 019. | Member  Invitee |
| **Prof. G. B. Pant**  Former Director,  Indian Institute of Tropical Meteorology (IITM),  C903 Padma Vilas,  Pashan Baner Link Road, Pashan, Pune 411021. | Member  Invitee |
| **Prof. S. G. Dhande**  Former Director,  Indian Institute of Technology,  Kanpur 208016. | Member  Invitee |
| **Commodore Anand Khandekar**  Former Director Nvidia,  Suneet 773/7B, Behind Kamala Nehru Marg,  Shivajinagar, Pune 410004. | Member  Invitee |

|  |  |
| --- | --- |
| **Members** | **Designation** |
| **Mr. Harish Mehta**  Chairman and MD,  Onward technologies Ltd,  2nd floor Sterling centre,  Worli, Mumbai- 400 018. | Member  Invitee |
| **Dr. S. K. Mahajan**  Director,  Directorate of technical Education,  3 MahapalikaMarg Mumbai – 411001. | Member  Invitee |
| **Dr. Abhay Wagh**  Deputy Secretary,  Higher and Technical Education,  Mantralaya Mumbai – 411001. | Member  Invitee |

**Senate Members**

|  |  |
| --- | --- |
| **Members** | **Designation** |
| Prof. Anil Sahasrabudhe | Chairman,  (Director, COEP) |
| Prof. Priti Rege | Member Secretary,  (Dean Academics, COEP) |
| Prof. G. K. Kharate | Member,  (Dean Engineering, UOP ) |
| Prof. Sudhir Agashe | Member, |
| Prof. Jagannath Aghav |
| Prof. Bharatkumar Ahuja |
| Mrs. Vahida Attar |
| Dr. Vithal Bandal |
| Dr. Prashant Bartakke |
| Prof. Sukhanand Bhosale |
| Prof. Bhalchandra Birajdar |
| Dr. Sandeep Butee |
| Mr. Uttam Chaskar |
| Dr. (Mrs.) Rohini Chattrala |
| Prof. Bhalchandra Chaudhari |
| Dr. (Mrs.) Shweta Chaure |
| Dr. Kiran Dalvi |
| Prof. Sanjay Dambhare |
| Dr. (Mrs.) Charusheela Deshpande |
| Dr. (Mrs.) Anjali Dharme |
| Prof. Narendra Dhokey |
| Mr. (Mrs. ) Sunanda Ghanegaonkar |
| Mr. Shashikant Ghumbre |
| Mr. Shirish Gosavi |
| Dr. Rajendra Goyal |
| Dr. Rajiv H |
| Ms. Yashodhara Haribhakta |
| Mrs. Vandana Inamdar |
| Mrs. Sadhana Jadhav |
| Dr. Maheshwar Jaybhaye |

|  |  |
| --- | --- |
| **Members** | **Designation** |
| Prof. (Mrs.) Madhuri Joshi | Member |
| Prof. Rajendra Joshi |
| Mrs. RadhikaJoshi |
| Dr. Ganesh Kadu |
| Dr. Jayant Kher |
| Dr. Mohan Khond |
| Dr. Govind Kulkarni |
| Dr. (Mrs.) Shailaja Kurode |
| Dr. Arvind Latey |
| Dr. (Mrs.) Suhasini Madhekar |
| Dr. Shrinivas Mahajan |
| Prof. Dileep Malkhede |
| Mr. Sunil Mane |
| Mrs. Ujjwala Mate |
| Mr. Shripad Mohani |
| Dr. (Mrs.) Rohini Mudhalwadkar |
| Dr. (Mrs.) Arati Mulay |
| Dr. Milankumar Nandgaonkar |
| Dr. Shantipal Ohol |
| Mr. Vinod Pachghare |
| Prof. Deepak Pande |
| Dr. Vijay Pande |
| Prof. Gajanan Parishwad |
| Prof.(Mrs.) Snehal Pathak |
| Dr. Chetankumar Patil |
| Dr. Sanjaykumar Patil |
| Dr. Rajendrakumar Patil |
| Dr. Shrivijay Phadke |
| Mrs. Vijaya Rajguru |
| Prof. (Mrs. ) Neela Rajhans |
| Dr. Mahadeo Ranadive |
| Prof. Pratap Raval |
| **Members** | **Designation** |
| Prof. (Mrs. ) Priti Rege | Member |
| Prof. Shivalingappa Sapali |
| Prof. Ashok Sapkal |
| Prof. Satish Sathe |
| Mr. Arun Sawant |
| Mr. Hanumant Shinde |
| Dr. Mahesh Shindikar |
| Dr. Ishwar Sonar |
| Mr. Dayaram Sonawane |
| Dr. Bhagwan Sonawane |
| Prof. Mukul Sutaone |
| Prof. Dhananjay Talange |
| Dr. Kamlesh Tripathi |
| Dr. Vipin Tripathi |
| Mr. Rajaram Ugale |
| Prof. Shashikant Vagge |
| Dr. (Mrs). Vibha Vyas |
| Prof. Prakash Wani |
| Mr A M Abhijit |
| Mr S P Gosavi |
| Dr. Jagdish Dadge |
| Mr. Yatin Pitkar |
| Mrs. H. K. Munot |
| Ms. S.U.Dangarikar |
| Mrs. S V Unde |
| Dr. Mukund Kale | External Member |
| Dr. S. S. Sundarrajan |
| Mr. S. P. Dixit |
| Dr. I. S. Mulla |
| Mr. J. Ramanand |
| Dr. Suresh Phadke |
| Dr. Shrikant Lele |

|  |  |
| --- | --- |
| **Members** | **Designation** |
| Karan Patil | Student Member |
| Madhura Gurjar |
| Edan Sabooni |
| More Diraj V |
| Siddharth Nitin Jain |
| Mihir Kelkar |
| Deshpande Shreya |
| Abhijit Datta |
| Sayali S Bhajipale |
| Ashwini A Mutalik Desai |
| Kiran Trimukhe |
| Srushtee Chirme |
| Harsha Gandhare |
| Dnyaneshwar Mutkule |
| Pushkar Chaudhari |
| Omkar Bhaskar Methavade |

**Finance Committee**

|  |  |
| --- | --- |
| **Members** | **Designation** |
| **Mr. Prataprao Pawar**  Chairman  Sakal Papers Ltd.,595, BudhawarPeth,  Pune 411 002. | Chairman |
| **Mr. Ravi Pandit**  Chartered Accountant  Maratha Chamber of Commerce, Pune | Member  Nominated by BoG |
| **Dr. Abhay Wagh,**  Deputy Secretary,  Higher and Technical Education  MantralayaVistarBhavan,  Mumbai 400 032. | Member  (Ex-officio) |
| **Prof. A. D. Sahasrabudhe**  Director & Professor  (Dept. Mechanical Engineering)  College of Engineering Pune  Shivajinagar, Pune – 4110005 | Member Secretary |

**Building & Works Committee**

|  |  |
| --- | --- |
| **Member** | **Designation** |
| **Prof. A. D. Sahasrabudhe**  Director & Professor  (Dept. Mechanical Engineering)  College of Engineering Pune  Shivajinagar, Pune 4110005 | Chairman |
| **Mr. Atul Kirloskar**  Chairman  Kirloskar Oil Engines Ltd.  LK Road, Khadaki, Pune 411 003. | Member  Representing BOG |
| **Mr. Salil Randive**  ChinayRandive& Associate C/o. Piraymal Sons Pvt. Ltd.  1st Floor, Army-Nevy Building,  M.G.RoadNear Kalaghoda,  Mumbai 400 001. | Member  Nominated by BOG |
| **Prof. Uday Athavankar**  Professor of Industrial Design,  I IT Mumbai, | Member  Nominated by BOG |
| **Superintending Engineer,**  PWD  Central Building, Pune-411001. | Member  (Ex- officio) |
| **Prof. B. G. Birajdar**  Professor, (Dept. Civil Engineering)  College of Engineering Pune  Shivajinagar, Pune – 4110005 | Member Secretary |

**DIRECTOR’S ANNUAL REPORT 2013-14**

**GRADUATION CEREMONY OF THE EIGHTH BATCH OF ENGINEERS**

Honorable Chairman, Board of Governors of College of Engineering, Pune, Dr. F. C. Kohli, distinguished chief guest and the Vice Chancellor of University of Pune, Prof. W. N. Gade, members of Board of Governors, members of Academic Senate, all the graduating students and their family members, faculty, staff, students, media persons, ladies and gentleman, on behalf of COEP, I take this opportunity to welcome you all on the occasion of 8th graduation ceremony of COEP.

Today a total of 978 students will be awarded certificates of which 701 are B. Tech in 9 engineering disciplines 252 are M. Tech in 22 specializations and 25 are Post graduate Diploma in ERP who graduated this year. I congratulate all of them for their success and for making their parents proud.

I am glad to present before you the Annual Report for the academic year 2013-14. COEP has completed a decade of autonomy, constantly pursuing excellence in both academic and non-academic front, adhering to the commitment of the institute to develop human beings who are technologically superior and having social concern.

Today, COEP offers ten UG, twenty-two PG programmes and Ph. D programmes in all departments and has more than 4000 students enrolled in its various courses. All the undergraduate programs run by the institute were accredited by the National Board of Accreditation twice.The NBA team recently visited the college for third round of accreditation in the new outcome based tier-I format.

COEP has been recognized by the world bank funded project as the best governed institute in India. COEP is ranked amongst the top 10-15 best engineering institutions in the country by different surveys conducted by diversified agencies, competing with IITs and NITs. The institute is acclaimed as one of the leading institutes of the country by various industry bodies such

as NASSCOM, CII and FICCI. The institute has received the best industry institute interaction award in mechanical engineering from CII-AICTE.

**Now I would briefly touch upon few major activities and achievements of the institute during the academic year 2013-14.**

* COEP has been selected along with the Indian Institute of Technology Bombay (IITB) and Visvesvaraya National Institute of Technology (VNIT) on a State-level research and development (R&D) project, amounting to Rs 39.39 crores, to develop innovative and low cost healthcare devices for the benefit of the common man.
* The Institute was awarded the “National Employability Award” being amongst the top 10% colleges in India for Employability.
* COEP was honored with the ‘National Education Leadership Award 2013’ given by Star Group of Industries and Dainik Bhaskar for Best  Industry Related Curriculum in Information Technology.
* Department of Production Engineering was honored with the 'Academic Research Award of Excellence' for 2013 by Additive Manufacturing Society of India.
* Mr. Pratap Pawar, Member BoG, COEP was honoured with one of the country’s highest civilian awards, Padmashri for his distinguished service in the field of Trade and Industry.
* COEP students also showed excellence in academics during the entire year 2013-14 by getting admission to top universities in US, UK, Germany etc.
* COEP students secured top honours in All India GATE 2014 examination GauravRai: Civil 2nd; Neelam Tathawadekar : Instrumentation 1st; Ms. ChaitaliPatil: Metallurgy 2nd; and PradipKudagi : Metallurgy 8th and many others in top 100 in different disciplines.
* Preetam Gharate stood 1st in CAT 2014with 99.99 percentile score
* Sachin Panchal was selected in the IES exam 2013-14.
* Kshipra Agre stood 29 th in UPSC 2013 and joined IAS.
* COEP Streetplay and Mad Ads team won several awards across the country ranging from IIT Bombay, IIT Kharagpur to IIM Bangalore.
* COEP had won BAJA 2013 overall championship in India. It continued winning spree in South Africa by winning the race and was adjudged ‘Overall Third in BAJA SAE South Africa Championship 2013’ apart from 1st prize in two other categories. The team was runner up in BAJA-2014 Championship in India andwon highest number of awards in seven different categories.
* COEP Robotics team was awarded the “Best Idea Award’ in National Robotics Competition, ROBOCON 2014.
* COEP team won Firodiya Karandak 2014along with many other awards for Best Script, Art, Direction, Music, Dance and Acting which has never happened in the 36 year old history of Firodiya Karandak.
* ReFocus Labs (a Second Year B. Tech startup from COEP) which was represented by COEP students Mayur More and Shashwat Pradhan won both the AngelHack BlackBerry Challenge award and also the people's choice award. They also won the "Best Game-Over all" for their game "Pastry Push" in the Black Berry contest in 2013.
* COEP Student satellitegroup was highly appreciated for their work in making Pico Satellite.The project is in the process of completing the critical design review and launch will be done in a years’ time.

**Important programmes and events:**

* An innovative and unique programme named EAGLE (Energized Accelerated Growth and Leadership Excellence) was launched in August 2013 by COEP in association with the Hermitage Group for the students of third year to build life skills, communication skills, commitment, ethics and to be useful to the society.
* Institute started a unique health initiative Ayushdeep for making health record of all students accessible to them from anywhere, anytime for life.
* The institute has more than 32 clubs and societies who organized more than 200 social, cultural, technical activities throughout the year.
* The annual technical festival of COEP "MindSpark" with the theme “Technology for the Masses” was held from 27th to 29th September 2013 in the college campus.This was the 7thsuccessive year of MindSpark with over 4500 students participating from across the nation.
* 12th Annual sports fest of COEP, “ZEST” was held from 23rdto 26th January 2014. Wheelchair Basketball friendly match between inmates from Paraplegic Rehabilitation Centre (PRC) and Blind Cricket Match between state blind cricket teams of Maharashtra and Gujarat, with support from the Cricket Association for the Blind in India (CABI) were the major highlights of the event.
* Colourful 86th Annual Regatta was organized by the Boat club on 2nd March 2014.
* A large number of eminent personalities Dr. Vijay Bhatkar, Dr. Raghunath Mashelkar, Dr. Anil Kakodkar, Dr. Srikumar Banerjee, Dr. Vijay Mohanan Pillai visited the institute and interacted with students.
* The Ignited Innovators of India Programme of Social Entrepreneurship was conducted with sponsorship from Eaton Corporation under which more than 200 socially relevant projects were undertaken by more than 50 colleges.
* COEP has launched a complaints cum suggestion portal to raise the problems faced by students anonymously.COEP has also launched a counseling forumportal meant for providing support to current students by alumni.
* COEP is also working on a unique Indo-European collaborative research project “Natural Water Systems and Treatment Technologies (NawaTech)” supported by Department of Science and Technology (DST), Government of India with Ecosan Service Foundation for total recycling of hostel waste water. This is the first of its kind project in an educational institute.

**Academic Reforms and Activities**

* Industry Advisory Boards comprising of experts from industry were formed in all departments to help the departments in evolving a road map of the department and to develop better curriculum, assist the students for internships, placements and start working on technology development in niche areas.
* A large number of industry relevant electives were offered by adjunct faculty from the industry.

**Infrastructural Development**

* The Construction of the proposed building of BHAU institute of Innovation, Entrepreneurship and Leadership has commenced and efforts are made to get the construction accomplished by the end of this year.
* There are several renovation works such as virtual lab in instrumentation department, smart renewable energy system lab in electrical department undertaken.
* A state-of-the-art ‘corrosion Lab’ was set up jointly by COEP and Eaton India Engineering Centre at COEP in the department of Metallurgy & Material science. Eaton donated Rs 55 lakhs in cash and kind.
* The new IC Engine Research Laboratory was set up at an approximate cost of Rs 1.8 crore with the support from Kirloskar Oil Engine Ltd. (KOEL) which was inaugurated by Mr. Atul Kirloskaron 8th May 2014. The donations to the tune of Rs 2 crore from Ricardo and AVL in the form of their software was also received in this engine lab.
* The Bajaj Auto has committed an amount of Rs 4.5 crore for the renovation of mechanical engineering department labs; the foundation stone for the same was laidbyShri. Prataprao Pawar, Chairman - Sakal Papers Pvt. Ltd. Pune on 28th May 2014.

**Library and Laboratory development**

* In the current year, institute has spent an amount of Rs.165 lakhson new books and journals. Total library collection has crossed 87347books, 91 National and 109 International Journals in print and 1900 e-Journals.
* A total of more than Rs 10 crores worth equipment have been procured for different laboratories from institute funds and through R and D projects.

**Memorandum of Understanding**

* A total of 29 MOUs with different Universities and organizations were signed during the academic year. Prominent among them being,MOUs with Illinois Institute and Technology, USA, Purdue University, Tennessee Tech University, Mitsubishi Electric India Private Limited, Association of Indian Forging Industry (AIFI), SAS Research and Development (India) Pvt Ltd., Cognizant Technology Solutions etc.
* These organizations have extended their support for conducting various academic, non academic, research, exchange programmes for the students and faculty at COEP

**Technical Education Quality Improvement Program (TEQIP II)**

* Several Seminars, Workshops and Conference were conducted throughout the year under TEQIP II.
* Equipments worth Rs. 3.9 crore were procured using these funds.
* The two centres of excellence in “Smart Renewable Energy Systems” and “Signal and Image Processing” are being set up with funding of Rs 5 crore each. COEP is the only institute to have received two centres of excellence.

**Training & Placement and Industry Interaction**

* Several industry institute partnership programmes such as soft skills training, competitions, awards, internships, student projects have been conducted.Institute has signed an MOU with GTT and NASSCOM to provide Business Skills Programme for first year to final year &M. Tech students under National Skill Development Council (NSDC).
* The placement season started on 7th August 2012, and still going on in order to garner maximum placements for our students. Few major companies who selected our students in bulk are Cognizant (175), Accenture (147), Wipro (132), Infosys (78), Dar Group (36), Barclays (12), Lodha Group (12), Bajaj Auto (12), Credit Suisse (11) etc.
* About 144 companies visited the campus till date and 79.06% of students are placed and the placements are still going on.
* Maximum salaries offered this yearwas 40.00 LPA by Ebara Corporation, 40.00 LPA by Works Application, 16.30 LPA D.E. Shaw, 16 LPA Microsoft, 10.15 LPA Texas Instruments, 10 LPA Credit Suisse , 11.50 LPA Citi Technology etc.
* AMCAT assessment test was conducted for all third year, final year B.Tech and M. Tech students.
* Special training for students weak in English Language & Communication skills was conducted by Credilla.

**Major Events and R&D achievements are as follows:**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 12 |
| 2 | No of Seminars/ Talks conducted | 81 |
| 3 | No of National/ International Conferences/ Workshops held in the institute | 07 |
| 4 | No. of publications in National / International Journals | 121 |
| 5 | No. of publications in National/ International  Conferences | 151 |
| 6 | No. of Sponsored Projects | 65 |
| 7 | Value of Sponsored Projects (In crores) | 20 |
| 8 | No. of Consultancy Projects | 84 |
| 9 | Value of Consultancy Projects (In Lakhs) | 246 |
| 10 | No of Ph. Ds awarded | 17 |
| 11 | No of ongoing Ph. Ds | 203 |
| 12 | No. of Students who have gone to universities abroad for further studies | 24 |
| 13 | No. of Students participated in Student Exchange programs | 4 |
| 14 | Memberships of professional societies | 54 |
| 15 | Patents filed | 12 |

**Major National and International Conferences / Workshops / Lectures organized:**

* Seminar on Transformation in Engineering Colleges under TEQIP and IUCEE held at COEP from 6th-7th July2013.
* Lecture by Mr. R Gopalakrishnan, Executive Director, Tata Sons on ' Winning in this era of turbulence - alternative ideas’, 23rd August 2013.
* Seminar on “Canadian Start up Visa for Indian Entrepreneurs & otheropportunities related to Higher Studies & Jobs in Canada."- 7th September 2013.
* The National Program on Technology Enhanced Learning NPTEL Awareness Workshop at COEP on 26th Sept 2013.
* Talk by Dr. Jayant Narlikar, renowned Astrophysicist to popularize science among the masses with discussion on the Comet ISON, 2nd October 2013.
* Talk on Innovation by Srikanth Srinivas on 10th October 2013.
* One week Indo-German Winter Academy from November 24-30, 2013.
* "National Conference on Pure and Applied Mathematics" organized by Department of Mathematics at COEP from 17-19 Dec 2013.
* Lecture by Ms. Dame Susan Jocelyn Bell Burnell, lady scientist from UK on "The Universe and US", 4th January 2014.
* ‘Train your Brain' session conducted by Mr. Nilesh M. Waghchoude (Success Coach), UK, 10th January 2014.
* 3rd International Simulation Conference of India (ISCI) 2014 was organized by Production Modeling India (PMI) in association with the Department of Mechanical Engineering, COEP, Pune on 11th & 12th January, 2014 at COEP.
* Robot Study Circle, COEP had organized a TEQIP-II sponsored “One day workshop on Pneumatics and Vacuum Control System” on Saturday, 18th January’14 at COEP.
* Talk by Prof K.P. Mohanan, IISER, Pune on “Critical Thinking” on18th February 2014.
* Talk by French scientist, Prof. Sobine Rabourdin's on "Relevance of Ancient Indian Scientific Thoughts vis-a-vis Modern Science" on 27th February 2014.
* “Start Up Preparation workshop" for budding entrepreneurs, 31st January -1st March 2014.
* Talk by Dr. Baba Kalyani, Chairman & MD, Bharat Forge Ltd., Pune on the topic “Transformation of Our Manufacturing Industry" at the 8th Dr. Dara Antia Memorial Lecture organized by Indian Institute of Metals (IIM) Pune Chapter in association with COEP on 12 March 2014.
* Training for “Objective based education (OBE)” based accreditation for Master Trainers and evaluators” sponsored by NBA, 14th -16th March 2014.
* One week TEQIP sponsored workshop on "Nanomaterials Characterization and Applications in Devices", during 7th April to 11th April 2014.
* Talk by Dr. S. Banerjee, DAE HomiBhabha Chair Professor and former Chairman of Atomic Energy Commission, on Design of new reactors on 24June 2014.

**Awards & Honors**

**For Faculty**

* Prof. S. N. Sapali was honored with the “Best Teacher Award” 2013 by Govt. of Maharashtra.
* Prof. Sandeep Meshram, Prof. P. P. Rege, Prof. B. N. Chaudhari, Dr. V. K. Tripathi, Dr. Mrs. S. N. Madhekar, Mrs. NandiniIyer, Dr. SantoshHosmani and SrinivasBaka got awards from different agencies.
* Dr. Ms. S. P. Metkar was honoured with ‘Career Award for Young Teachers 2013-14’ by AICTE and IEI Young Engineers Award 2013-2014.

**For Students**

* Shreyas Kulkarniwas awarded ‘Popular Award 2013-14’ by TCS
* Chinmayee Sadhu, Rituja Rane and Nandini Waghmare were awarded 3rd prize in NES Innovation Awards 2014 held on 5th March 2014 for their B. Tech Project titled "Stock Market Prediction Model using Fuzzy Logic"
* Ali Sagar Zaidy, Rajesh Krishnan, Pooja Pokharkar were awarded the ‘Best Project Award 2013-14’ by TCS.
* Arundhati Kulkarni (TY E&TC) and Vibhav Bhave (Final Year IT) stood first at the 'Traffic Parliament' organized by Janwani at the Pune Auto Expo’13.
* Kinshuk Basu Chowdhary (TY E & TC) and Vibhav Bhave (Final Year IT) represented University of Pune and secured second position in Quiz contest at the West Zone finals of the National Universities Festival held from 26-29th December’13.

All these achievements have led to COEP being reckoned consistently among the top 15 institutes in India by all national level surveys.

|  |  |  |
| --- | --- | --- |
| **Organization** | **Institute Ranking** | |
| AICTE –CII Joint Survey | “Best industry institute interaction award” in Mechanical and Production Engineering for 2013 | |
| India Today-Nielsen | 15th amongst Top Engineering Institutes in India. | |
| Outlook | 18th amongst Top 75 Engineering Institutes in India. | |
| 3rd amongst top 3 Engineering institutes in West Zone | |
| CSR- GHRDC | **Category** | **Rank** |
| Top Engineering Colleges   of Super Excellence. | 5th amongst top 11colleges |
| Top Govt. Engineering    Colleges | 8th amongst top 16 colleges |
| Top Engineering Colleges ranked by State. | 1st amongst top 12 colleges |
| Top 25 Engineering Colleges ranked by Faculty, Research, Consultancy, EDP, other program. | 9th amongst top 25 colleges |
| Top 25 Engineering  Colleges ranked by  Placement,   Industry  Interface, USP. | 9th amongst top 25 colleges |
| The Week’s Hansa Research Survey | 20th amongst top 75 Govt. Engineering Institutes in India | |
| 2nd amongst top 15 Engineering Institutes in the West Zone. | |

|  |  |  |
| --- | --- | --- |
| **Organization** | **Institute Ranking** | |
| Go Getter Survey | **Category** | **​ Rank** |
| ​Top Institutes in India | ​ 1st in West Zone, ahead of all NITs |
| ​Institutes participating in surveys and sharing factual data | ​1st amongst top 15 Engg. institutes |
| ​Infrastructure | ​1st amongst top 5 Engg. institutes |
| ​Placements | ​1st amongst top 5 Engg. institutes |
| ​Quality of Faculty | ​2nd amongst to 5 Engg. institutes |
| ​Industry interface | ​ 1st amongst top 5 Engg. Institutes |
| Chronicle- All India Engineering Survey | ​Top 10 Engineering Institutes in terms of Infrastructure | ​3rd  amongst top 10 institutes |
| ​Top 10 Engineering Institutes in terms of Admission & Selection Process | ​4th  amongst top 10 institutes |
| ​Top 10 Engineering Institutes in terms of academic Excellence | ​4th  amongst top 10 institutes |
| Top 10 Engineering Institutes in terms of Placement | ​5th  amongst top 10 institutes |
| ​Top 10 Engineering Institutes in terms of Industry Interface | ​5th  amongst top 10 institutes |
| Top 10 Engineering Institutes in terms of Intellectual Capital | 6th  amongst top 10 institu |

Many top colleges and universities have recognised the transformation achieved by COEP though a decade of autonomy and have been seeking guidance. Some of these institutes and universities include Cummins College of Engineering, Pune, Punjab University Institute of Technology, TEQIP SPFU units of Gujrath and Karnataka and NPIU, IUCEE, VIIT, Pune, SDM College Dharwad, Veltech University Chennai among others.

We have continued our efforts in getting faculty from abroad on Sabbatical. So far three faculty have spent a semester and offered a state of the art course leading to collaborative work and research.

College of Engineering, Pune has grown from a mono disciplinary certificate awarding school into a multi disciplinary institute and now after its successful stint as an autonomous institute poised to become a University with excellence as its motto.

Thank you.

Jai Hind and Jai Maharashtra

A.D. Sahasrabudhe

Director

College of Engineering, Pune

**DEPARTMENT OF APPLIED SCIENCE**

* **INTRODUCTION**

Applied Science is a bridge that connects pure science with engineering practices. It aims to provide a strong foundation for students of engineering and is one of the indispensable departments of the institute. Chemistry and Biology, along with Advanced Engineering Materials, Professional Ethics, Humanities, Psychology, Environmental Awareness and Entrepreneurship Development are taught at the undergraduate level. The Department has well equipped laboratories which enable faculty and students to employ fundamental principles to create innovative new technologies. These novel solutions are then handed off to engineering disciplines to be refined, enhanced and used to address important problems. Guidance and Psychological counseling sessions are provided to the students by Faculty of Psychology at the Department.

Department has started the activity called GRAMODYOG to help the existing rural based industries and to create entrepreneurship among the students from village background to start his own venture with appropriate technology.

* **ACADEMIC PROGRAMS (B. TECH/ M. TECH/ PH. D)**

Our department is taking care of all the subjects which are required to strengthen the basic knowledge in fundamental Sciences and Humanities.

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No.**  **of Faculty** |
| 1 | Professor | 1 |
| 2 | Associate Professor | 1 |
| 3 | Assistant Professor | 9 |
| 4 | Adjunct Professor | 2 |
| Total | | 13 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |
| --- | --- |
| **Name of the Lab** | **Facilities** |
| **Chemistry Laboratory** | The department has all the basic Instruments required for Chemistry, Environmental Science laboratory classes as well as for material synthesis, characterization and industrial testing. The facilities include Water Analyzer Kit, Water Demineralization Plant, Microprocessor Based pH System, R O based Water Purifier, Afcoset Mp Control Electronic Balance, Lab Guard Fume hood, Inert high temperature work platform, Ball mill, Hydraulic Pellet press and die set, Flame photometer, Colorimeter, 979 VA Computrace – Cyclic voltameter, High temperature furnace, Muffle Furnace, Thermogravimetry analyzer, Differential thermal analyzer. Autoclave , Incubator, Hot air oven, |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 03 |
| 2 | No of Seminars/ Talks conducted | 04 |
| 3 | No of National Conferences held | 01 |
| 4 | No. of publications in International Journals | 06 |
| 5 | No. of Government Sponsored Projects(ISRO UOP STC) | 01 |
| **Sr. No** | **Research Activities** | **Total No.** |
| 6 | Value of the Government Sponsored Projects (In Lakhs) | 03 |
| 7 | No. of Consultancy Projects | 03 |
| 8 | No of Ongoing PhDs | 10 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned (In Lakhs)** |
| 01. | Assessment of floral and faunal diversity at knowledge City Education Pvt. Ltd., Lavle, Tal.-Mulshi, Pune | Mahesh Shindikar | 2010 | Oxford Properties, Pune | Three years | 1.30 |
| 02. | Compensatory plantation of mangroves at the designated site in Navi-Mumbai for L&T Seawoods Pvt. Ltd., Mumbai | Mahesh Shindikar | 2013 | L&T Seawoods Pvt. Ltd., Mumbai | Three months | 0.15 |
| 03. | Study of feasibility of relocating places of pind dan, Kal-sarp vidhi and removal of concrete flooring at Trimbakeshwar | Mahesh Shindikar | 2014 | Maharashtra Pollution Control Board | Two months | 1.09 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Whether Sponsored by Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today**  **(In Lakhs)** | **Year in which the Grant was received)** |
| 1. | National Medicinal Plant Board, New Delhi | Mahesh Shindikar | 3 | Herbal Garden | 2.10 | 2012 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | **Total** |
| **1** | **Applied Science** | **National Journal** | **International Journal** | **National Conference** | **International Conference** |
| ***-*** | 1 | 6 | 7 | 14 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Electrical Conductivity of Binary Lanthanum Cuprate | Dr.J.A.Kher,Dr. M.Y.Khaladkar,Mrs N.V.Iyer | IJIRSET | Vol. 2 Issue 8 August 2013 ISSN 2319-8753 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 1 | Preparation of arbon-carbon composite using natural graphite and novolac phenolic resin | Dr. K.S.Suranje  Prof. V.S.Galphade,  Mr. Janakiram | National conference on Materials for electronic application (NCMEA-14) | January 30,31, February 1 2014,COEP | National |
| 2 | Development of Bipolar plates using expanded graphite as raw material | Dr. K.S.Suranje  Prof. V.S.Galphade, | National conference on Materials for electronic application (NCMEA-14) | January 30,31 & February 1, 2014,COEP | National |
| 3 | Communication & Personality: Exploring Mother-Daughter relationship | Kshipra Moghe, Dr. Anagha Lavalekar | Family at Crossroads: 21st Century, organized by Bombay Psychological Association | December 1-3, 2013 | International |
| 4 | Type A personality and counseling | Tanuja Kher | National conference on counseling | December 6-7 2013 | National |
| 5 | Use of test based on Johari window for personality development | Tanuja Kher | State level conference on professional testing. | February 8-9, 2013 | National |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 6 | Effect of addition of B2O3 on dielectric properties of BMN, BZN, BMNT and BZNT | M. Y. Khaladkar  Rucha Purandare  N S Saraf | National conference on Materials for electronic application (NCMEA-14) | January 30,31 & February 1, 2014,COEP | National |
| 7 | Systematic study of reactions involved in formation of Barium Magnesium Tantalate when synthesized by solid state route | M. Y. Khaladkar  I S Mulla  R V Kashalkar  N S Saraf | National conference on Materials for electronic application (NCMEA-14) | January 30,31 & February 1, 2014,COEP | National |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event** **organized by the dept.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** | **Income (In Lakhs)** |
| 1 | National Conference on Materials for Electronic Applications | January 30,31 & February 1, 2014 | Dr. Jayant A. Kher and Dr. Mrs. M. Y. Khaladkar | Faculty/ Students/ Industry people | 110 | DST and IET | 1.08 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** | **Income (In Lakhs)** |
| 2 | Feeling Good and Doing Well | October, 26-27, 2013 | Kshipra Moghe | Students | 12 | TEQIP | -- |
| 3 | Feeling Good and Doing Well | January 2014 | Dr.Mahesh Shindikar, Conducted by: Kshipra Moghe | Students (Vinod Doshi Scholarship) | 20 | Vinod Doshi Scholarship Fund | -- |
| 4 | Motivation and stress management | May 16-18 | Tanuja Kher | Support staff- class III | 60 | TEQIP | 0.75 |

* **Details of the Workshop/ Seminar/ Conference/ Event** **attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty/Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 1. | ‘Modern Analytical Methods in Microbiology’ | January 17-18, 2014. | Dr. M.K.Ranjekar | Faculty/ Students/ Industry people | 80 | Fergusson College, Pune |
| 2. | ‘Eco-treatment of open drain’ | April 22, 2014. | Dr. M.K.Ranjekar | Faculty/ Students/ Industry people | 90 | SERI |
| 3. | Corrosion and Surface engineering’ | January  3-8,  2014. | Dr. M.K.Ranjekar  Dr. K.S. Suranje  Dr. J.A.Kher | Faculty/ Students/ Industry people | 150 | TEQIP and NSA |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty/Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 5. | Nanomaterials and nanocomposite | December 2-6,2013 | Dr. J.A.Kher | Faculty | 40 | TEQIP |
| 6. | NCMEA 14 | January 30,31 & 1stFebruary 2014 | Dr. J.A.Kher  Dr. M Y Khaladkar | Faculty/ Students/ Industry people | 45 | DST and IET |
| 7 | “Feeling Good and Doing Well”: Trainer’s programs organized by NIMHANS, Bangalore | June 24th – 26th , 2013 | Attended by Kshipra Moghe | Faculty | 40 | TEQIP |
| 8 | National Conference on Cultivating the Reading Skill: A Classroom Challenge at Symbiosis | February , 7 & 8, 2014 | Mr. Atul Patil | Faculty | 120 | - |
| 9 | Neuro Linguistic Program by School of Excellence, chennai | 16-21 September2013 | Tanuja Kher | All | 30 | TEQIP |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty/Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 10 | IET PATW Competition (Present Around the World) | March 9, 2014 | Ms Aparna khandekar,  Mr. Atul Patil | Judge | 100 | -- |
| 11 | Cambridge BEC Examr at SILC, Pune | September 2013 December 2013 | Ms Aparna khandekar | Examiner | 150 | -- |
| 12. | Orientation Workshop for AVISHKAR – 2013 | December 12, 2013 | Mahesh Shindikar | Students & Faculty | 103 | BCUD, University of Pune |
| 13. | Zonal Level Workshop for AVISHKAR – 2013 | December 26, 2013 | Mahesh Shindikar | Students & Faculty | 110 | BCUD, University of Pune |
| 14 | Nanomaterials: Science & Technology | June 10-14, 2013 | Mahesh Shindikar | Students & Faculty | 50 | Institute of Chemical Technology, Mumbai |

* **Details of the** **Lectures/Talks organized by the department**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker , designation etc** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1. | From ME to US: The WHY and HOW – A view | Dr. Sumita Kale | Students / Faculties | 250 | 24th September 2013,COEP |
| 2. | Electronic Waste Disposal | Mrs Pratiha Sharma | Students / Faculties | 250 | 15th -16th January 2014,  COEP |
| 3. | Gender Diversity at the Workplace | Mrs. Sunita Shetty | Students / Faculties | 250 | 11th March 2014, COEP |

* **Details of the** **Lectures/Talks delivered by the department faculty**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1. | Lecture on opportunities in Indian Defense forces | Dr. M.K.Ranjekar | Students | 70 | NSS Camp, Ranje Village , Pune |
| 2. | Lecture on “Marital Issues” | Kshipra Moghe | Wives of Army Jawans | 50 | Family Welfare Centre at Army Station Workshop EME, Kirkee |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 3. | Conducted a workshop on ‘Effective Communication Skills’ at KEM Hospital Research Centre on Sept. 7 & 8, 2013 | Mr. Atul Patil | Doctors, Medical Officers, Project Co-ordinators, Administrators and Lab Managers | 40 | KEM Hospital Research Centre |
| 4. | Conducted Training Sessions on Soft Skills at International Students’ Centre, University of Pune | Mr. Atul Patil | Post graduate students | 80 | International Students’ Centre, University of Pune |
| 5 | Workshop on premarital counseling | Tanuja Kher | Undergraduate girl students | 75 | Sharadanagar college, Baramati |
| 6 | Emotional Intelligence | Tanuja Kher | Primary teachers in Pune | 50 | CFI,Pune |
| 7 | Personality development | Tanuja Kher | College students | 60 | Modern college |
| 8 | Student, parent and teacher relationship | Tanuja Kher | Pune Muncipal corporation school teachers | 130  And  60 | Bhartiya Vidya Bhavan school, Renuka Swaroop school |
| 9 | Rain water harvesting, Electricity conservation in urban areas, stressful family relations and waysto reduce stress , | M Y Khaladkar | Vigyan Katta –an activity by Sharada Shakti maharashtra | 34, 120, 56 respectively | Gynana prabodhini  Pune |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 10 | Effectiveness in teaching and Evaluation for Engineering teachers | M Y Khaladkar | Engineering college Teachers | 30,32 | AISSMS COE Pune |
| 11. | Introduction to BEC Exams | Ms Aparna Khandekar | Teachers of MCA University of Pune | 60 | University of Pune |
| 12. | Insight into Resume Writing, Placement Preparation | Ms Aparna Khandekar | Teachers and Students of MCA | 100 | D Y patil College of Arts, Com, Sci, Pimpri |
| 13. | Resume Writing and Placement Training | Ms Aparna Khandekar | Students of MBA and MCA | 125 | Indira College of management |
| 14. | Presentation Skills | Ms Aparna Khandekar | Teachers and Students for Avishkar | 60 | CoEP for Uni Pune |
| 15. | Legal regimes of Environmental issues in India (January 14, 2014) | Mahesh Shindikar | Students & Faculty | 50 | AISSMS’s College of Engineering, Pune |
| 16. | Orientation for AVISHKAR competition | Mahesh Shindikar | Students & Faculty | 100 | Shri. Chhatrapati Shivaji College of Engineering, Rahuri |
| 17. | Coastal Regulation Zone (CRZ) | Mahesh Shindikar | Industrial consultant | 55 | Science & Technology Park |
| 18. | Plant Ecology & Mangrove Ecosystem | Mahesh Shindikar | All | 25 | Agharkar Research institute, Pune |

* **BOOKS PUBLISHED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the author** | **Title of the book** | **Name of the publisher** | **Date of publication** |
| 1 | Mr. Atul Patil (Editor) | Aspects of ELLT  (ISBN:978-81-906869-2-1) | English and Foreign Languages University (EFLU) | July 2013 |
| 2. | Mr. Atul Patil  (Co-author) | English Textbook Manual for Teachers (9th & 10th Std.) | SSC Board | May 2014 |
| 3. | Dr. M Y. Khaladkar | Textbook of Engineering Chemistry | F Y B Tech. | July 2013 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 1 | Applied Science | ICT, Mumbai | February 2013 | Utilizing the facility at both the ends. |

* **MOUs**
* **AWARDS & HONORS**
* **For Faculty**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No** | **Name of the Faculty** | **Name of the Award** | **Description** | **No. of Awards** |
| 1 | Mrs. Nandini Iyer | COEP Star Award | Best Teacher Award | 1 |

* **MEMBERSHIPS OF SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty** |
| 1 | SAEST | Dr. J. A. Kher  Dr. K. S. Suranje  Mrs. N. V. Iyer  Dr. M. Y. Khaladkar |
| 2 | Children’s’ Future India, Pune chapter appointed as a expert on Local advisory board | Tanuja Kher |
| 3 | IET - UK | Dr. M. Y. Khaladkar  Dr. J. A. Kher  Dr. M. K. Ranjekar |
| 4. | Indian Institute of Metals , Calcutta | Dr. J. A. Kher |
| 5. | Materials Research Society of India |
| 6. | Instruments Society of India |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Areas of Interest** |
| 1 | Dr. M. K. Ranjekar | Ph.D.(Biology) | Professor | Agricultural Biotechnology  Fertilizer Technology |
| 2 | Dr. (Mrs.) M. Y. Khaladkar | Ph.D.(Chemistry) | Associate Professor | Material Science-  Superconducting ceramics, ferrites, non linear dielectrics, High energy material, Fabrication of analytical instruments related to thermal analysis. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Areas of Interest** |
| 3 | Dr. J. A. Kher | Ph.D (Chemistry) | Assistant Professor & Head | Material Science- Superconducting ceramics, ferrites, non linear dielectrics, High energy material, Fabrication of analytical instruments related to thermal analysis and Conducting Polymers. Expert in Metal and alloy analysis. |
| 3 | Dr. J. A. Kher | Ph.D (Chemistry) | Assistant Professor & Head | Material Science- Superconducting ceramics, ferrites, non linear dielectrics, High energy material, Fabrication of analytical instruments related to thermal analysis and Conducting Polymers. Expert in Metal and alloy analysis. |
| 4 | Dr. (Mrs.) Kavita Suranje | Ph.D.  (Chemistry) | Assistant Professor | Synthesis, Antimicrobial activities and physicochemical study of  3,5-diaryl-4-aroyl-1-substituted Pyrazolines and Pyrazoles. |
| 5 | Dr. Mahesh Shindikar | Ph.D.(Botany) | Assistant Professor | Biodiversity conservation, reforestations, Environmental Science. |
| 6 | Mrs. N. V. Iyer | M.Sc.  (Biochemistry) | Assistant Professor | Environmental Bio Chemistry. |
| 7 | Mrs. V. M. Karve | M. Sc (Zoology) | Assistant Professor | Biology, Biodynamic, Biotechnology. |
| 8 | Mrs. T. J. Kher | M. Phil. B.Ed. | Assistant Professor | Working as Counselor, facilitator, group discussion and interview  Techniques. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Areas of Interest** |
| 9 | Mrs. K. V. Moghe | M. A (Psychology) | Assistant Professor | Working as Counselor, facilitator, group discussion and interpersonal  skills. |
| 10 | Mrs. A. S. Khandekar | M.A. (Engliish) MPM (pursuing) | Assistant Professor | Phonetics, Assessment and Language testing, Soft Skills Development, Business English, Human Resource Development |
| 11 | Prof. A. B. Patil | M.A. (Engliish) Pursuing Ph.D. | Assistant Professor | Computer assisted language learning (CALL), language laboratories, online teaching |

**DEPARTMENT OF CIVIL ENGINEERING**

* **INTRODUCTION**

This department was established in the year 1854. Civil Engineering Department is the Pioneering department in the Institute. The Department has well equipped laboratories of Survey, Fluid Mechanics, Geotechnical Engineering, Environmental Engineering, Plumbing, Transportation Engineering, Strength of Materials, Concrete Technology, Non Destructive Testing, Structural Dynamics and Computational Laboratory.

Besides high quality teaching and instruction at both UG and PG levels, the Department is actively involved in research, consultancy and testing work. The department offers testing and consultancy services in Structural Engineering, Geotechnical Engineering, Transportation, Environmental Engineering, Building Construction, Surveying and Quantity Surveying. The Department also provides technical advisory support to various Government, Semi Government and Non Government Organizations. The department is also actively involved in offering guidance courses for MPSC, GATE which will be beneficial to our students as well as others. The department also organizes short term courses to enrich the knowledge of faculties and practicing civil engineers.

* **ACADEMIC PROGRAMS**

|  |
| --- |
| B. Tech CIVIL Engineering  B. Tech Planning  M. Tech Structural Engineering  M. Tech Geotechnical Engineering  M.Tech Construction & Management  M. Tech Town & Country Planning  M. Tech Environmental & Water Resources Engineering  Ph. D. Civil Engineering |

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 06 |
| 2 | Associate Professor | 11 |
| 3 | Assistant Professor | 12 |
| 4 | Professor Emeritus | 01 |
| 5 | Adjunct Professor | 19 |
| Total | | 49 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Name of the Lab** | **Facilities** | **Other departmental facilities (if any)** |
| 1 | Geotechnical Engineering Laboratory | AIMIL Extractor Frame Universal | Carbon dioxide cylinder -1 |
| AIMIL Infra red moisture meter |  |
| Unconfined Compression Tester |
| CBR Mould, Gun Metal 150mm heightx 175mm. |
| 2 | Computer Laboratory | Air conditioner | CCTV Cameras - 4 + 4 |
| Automatic 35 mm slide projector | Carbon dioxide cylinder -1+1 |
| Compact overhead projector 24V/250W halogen lamp colur fringing lever |  |
| Laser Printer make : HP 1015 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Name of the Lab** | **Facilities** | **Other departmental facilities (if any)** |
| 3 | Environmental Lab | Laboratory Flocculator | CCTV Cameras - 0 |
| Air Compressor | Carbon dioxide cylinder -1 |
| Laboratory Flocculator |  |
| Muffle Furnace |  |
| 4 | Town Planning | Printer H-P Laserjet and UPS backup | CCTV Cameras - 4 |
| Auto Cad - Software | Carbon dioxide cylinder -1 |
| Printer H-P Laserjet |  |
| DVR 4 Ch Make Gobbler German |
| 5 | Survey Laboratory | Pocket Laser Level | CCTV Cameras - 0 |
| Digital Planimeter, | Carbon dioxide cylinder -1 |
| Fiber glass Tape, |  |
| Trough compass |
| 6 | Transportation Lab | Shape test thickness guage | CCTV Cameras - 0 |
| Cetrifuge Bitumen Apparatus | Carbon dioxide cylinder -1 |
| Aggregate Impact Test Apparatus |  |
| Crushing Strength Mould |
| 7 | Eng.Mac. Laboratory | Parallel Force Table | CCTV Cameras - 2 |
| Universal Force Table | Carbon dioxide cylinder -1 |
| Combined Coil |  |
| 10,15 kg Balance |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Name of the Lab** | **Facilities** | **Other departmental facilities (if any)** |
| 8 | Concrete Technology Lab | Concrete Permeability Apparatus | CCTV Cameras - 2 |
| Lab Concrete mixer-Pan type Sr.no.AIM-9891 | Carbon dioxide cylinder -1 |
| Creep Apparatus AIM-239 |  |
| AIMIL Longitudinal Compressometer AIM-372 |
| Rebound Hammer | CCTV Cameras - 3 |
| Steel Bar Detector | Carbon dioxide cylinder -1 |
| 10 | FM Laboratory | 10 HP Centrifugal Pump | CCTV Cameras - 0 |
| Frictional Losses in pipes and valve | Carbon dioxide cylinder -0 |
| Tilting Flume |  |
| Impact of Jet Apparatus |
| 11 | Som Laboratory | Electronic Moisture Meter | CCTV Cameras - 0 |
| Tile abrasion Testing machine | Carbon dioxide cylinder -0 |
| Mechanical Extensometer |  |
| Lateral Extensometer |

* **EQUIPMENT PURCHASED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the Lab / Section** | **Module Description** | **Date of Purchase/ development** | **Resource consumed (Amt in Lakhs)** |
| 1 | Geotechnical Engineering Laboratory | 1.Cyclic Triaxial Apparatus | 18/7/2013 | 35.96 |
| 2.Bender Element Kit | 18/7/2013 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the Lab / Section** | **Module Description** | **Date of Purchase/ development** | **Resource consumed (Amt in Lakhs)** |
| 2 | Computer Laboratory | HP Laptop model 4440s | 7/6/2013 | 0.38 |
| HP Desktop 6300 SFF computers | 24/6/2013 | 0.33 |
| DLP Projector Make: Optima | 25/7/2013 | 0.45 |
| Manual Insta Lock Screen | 17/10/13 | 0.1 |
| Gate Exam Practise Paper Software | 26/11/13 | 0.23 |
| 8 GB RAM DDR3 | 28/11/2013 | 0.06 |
| OPTICON EDU PLUS Software | 7/1/2014 | 4 |
| HP laserjet Printer | 27/2/2014 | 0.07 |
| 8 GB RAM DDR3 | 13/2/2014 | 0.06 |
| 8 GB RAM DDR3 | 7/3/2014 | 0.06 |
| 3 | Environmental Laboratory | Digital Colorimeter | 3/1/2014 | 0.12 |
| Peristatic Pump | 15/01/2014 | 0.31 |
| 4 | Town Planning | HP Lesarjet Printer all in one | 4/9/2013 | 0.13 |
| Desktop System (Computers) | 25/03/2014 | 0.45 |
| 5 | Survey Laboratory | Pocket Laser Level | 3/5/2013 | 0.29 |
| Digital Planimeter, Fiber glass Tape, Trough compass, Ranging Rod, Laser Digital Tape, Binocular. | 17/5/2013 | 1.37 |
| **Sr. No.** | **Name of the Lab / Section** | **Module Description** | **Date of Purchase/ development** | **Resource consumed (Amt in Lakhs)** |
| 6 | Transportation Laboratory | Universal Pentrometer with Automatic time Controller | July 2013 | 0.79 |
| Flash and Fire Point Apparatus | -- | 0.25 |
| Crushing Strength Mould | -- | 0.13 |
| Aggregate Impact Test Apparatus | -- | 0.22 |
| Cetrifuge Bitumen Apparatus | -- | 0.24 |
| Shape test thickness guage | -- | 0.024 |
| 7 | Engg. Mech. Laboratory | Electronic Balance 15 Kg | 22/01/2014 | 0.10 |
| Electronic Balance 10 Kg | 22/01/2014 | 0.10 |
| 8 | Concrete Technology Laboratory | AIMIL Longitudinal Compressometer AIM-372 | 17/06/2013 | 0.19 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No of Seminars/ Talks conducted | 12 |
| 2 | No. of publications in National Journals | 03 |
| 3 | No. of publications in International Journals | 06 |
| 4 | No. of Industry Sponsored Projects | 01 |
| 5 | Value of the Industry Sponsored Projects (In Lakhs) | 1.2 |
| **Sr. No** | **Research Activities** | **Total No.** |
| 6 | No. of Government Sponsored Projects | 02 |
| 7 | Value of the Government Sponsored Projects (In Lakhs) | 31.10 |
| 8 | No. of Consultancy Projects | 58 |
| 9 | No of Ongoing Ph. Ds | 20 |
| 10 | No of Ph. Ds awarded | 03 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 1 | Technical Adviser | B. G. Birajdar | 02.04.2013 | M/s. J. K. Engineers, airport road, Pune | 2012-2013 | 0.33708 |
| 2 | Structural stability of Air Force Building Chandanagar | B. G. Birajdar | 02.04.2013 | Executive Engineer, zp (s), A'nagar | 2012-2013 | 0.5618 |
| 3 | Technical Adviser | B. G. Birajdar | 27.03.2013 | Secretary stateboard, Pune | 2012-2013 | 9.89656 |
| 4 | Structural stability of school building | B. G. Birajdar | 03.05.2013 | Secretary, pratibha mahila pratishtan, navi sanghavi, Pune | 2012-2013 | 0.67416 |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 5 | Third party infraction of subhas market | B. G. Birajdar | 26.04.2013 | Chief officer, TDMC Talegaon Pune | 2012-2013 | 1.32871 |
| 6 | Structural stability of school building | B. G. Birajdar | 23.04.2013 | M/s. Shri Maruti wind power park developer, Pune | 2012-2013 | 4.75503 |
| 7 | Structural stability of school building | B. G. Birajdar | 04.05.2013 | Chairperson DSK frangipani chsl Pune | 2012-2013 | 0.67416 |
| 8 | Structural stability of foundation for 1.5 M.W. | B. G. Birajdar | 04.05.2013 | M/ S Aditya Engineers Karad | 2012-2013 | 2.75309 |
| 9 | Structural stability of foundation WTO | B. G. Birajdar | 21.05.2013 | Executive Engineer, PWD(s) Pune | 2012-2013 | 2.47192 |
| 10 | Inspection of ESR | B. G. Birajdar | 21.05.2013 | Sarpanch gram panchayat sadesatara nali Hadapasar, Pune | 2012-2013 | 0.33708 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 11 | Structural stability of foundation for 1.6 mW wind turbine genrator | B. G. Birajdar | 15.05.2013 | M/s. panama wind energy,pvt ltd Pune | 2012-2013 | 4.32586 |
| 12 | Proof checking pile load arrangement | B. G. Birajdar | 27.05.2013 | M/s. ITD Cementation India Ltd, Mumbai | 2012-2013 | 0.11236 |
| 13 | Proof checking of GSR | B. G. Birajdar | 27.05.2013 | M/s. S. S. Sathe Govt contractor, Pune | 2012-2013 | 0.39326 |
| 14 | Structural stability with extra floor on TV build | B. G. Birajdar | 29.05.2013 | Execitove emgomeer © Prasar bharti civil constructs wing AFR, Pune | 2012-2013 | 1.00787 |
| 15 | Proof checking of bearing for ROB | B. G. Birajdar | 06.06.2013 | M/s. ADEN/ S/ PA office of the central railway, Pune | 2012-2013 | 0.33708 |
| 16 | Structural Audit and Design of Bridge | B. G. Birajdar | 06.06.2013 | Executive engineer kolkewadi dam maintanance division, Alore | 2012-2013 | 0.513837 |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 17 | Third Party Inspection Lotus Mall Mangatore | B. G. Birajdar | 20.06.2013 | Vijaynath interiors- exteriors pvt. Ltd | 2012-2013 | 1.17978 |
| 18 | Proof checking of 10 MLD WTP Alandi | B. G. Birajdar | 21.06.2013 | M/s. Das offshore engg. Pvt ltd, Pune | 2012-2013 | 1.45 |
| 19 | Proof checking of foundation for WTG Gamesha | B. G. Birajdar | 25.06.2013 | M/s. Shri Maruti wind park developer, pvt ltd, Pune | 2012-2013 | 12.18 |
| 20 | Proof checking of staging design | B. G. Birajdar | 4.07.2013 | M/s Arwade infrastructure ltd Pune | 2012-2013 | 0.2809 |
| 21 | Proof checking of EWs Building | B. G. Birajdar | 28.06.2013 | Landmark design group, Nigdi, Pune | 2012-2013 | 1.74158 |
| 22 | Inspection of ESR | B. G. Birajdar | 10.7.2013 | Sarpanch gram panchayat Mandavgan pharata, shirur, Pune | 2012-2013 | 0.35 |
| 23 | Proof check of poor plant structure RIL project Navoda | B. G. Birajdar | 15.07.2013 | M/s. Clarke Energy India Pvt. Ltd, Pune | 2012-2013 | 1.9663 |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 24 | Structural stability of foundation WTO | B. G. Birajdar | 16.07.2013 | M/S. Shri maruti wind park developer, Pune | 2012-2013 | 2.69102 |
| 25 | Inspection of ESR | B. G. Birajdar | 25.07.2013 | Chief officer Lonawala municipal council Lonawala | 2012-2013 | 1.1236 |
| 26 | Proof check of Mess Building | B. G. Birajdar | 20.7.2013 | Dy. General manager, NBCC, Nagpur | 2012-2013 | 0.5618 |
| 27 | Proof checking of ROB at Baramati | B. G. Birajdar | 3.8.2013 | Chief officer baramati municipal council, Baramati | 2012-2013 | 3.47192 |
| 28 | Third party inspection of shoping centre | B. G. Birajdar | 8.8.2013 | Chief officer, alandi muncipal council, Alandi | 2012-2013 | 0.37613 |
| 29 | Structure stability of school building | B. G. Birajdar | 12.8.2013 | Chief officer,TDMC Talegaon Pune | 2012-2013 | 0.67416 |
| 30 | Structural stability of foundation Balwad WTG | B. G. Birajdar | 14.08.2013 | M/S. Aditya power project karad | 2012-2013 | 6.26322 |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 31 | Structural Audit of Remedical Measures to control Room. | B. G. Birajdar | 26.08.2013 | M/S. HPCL, Loni, pune | 2012-2013 | 2.6 |
| 32 | Structural stability of foundation WTO | B. G. Birajdar | 27.08.2013 | M/s. Gamesa wind turbines pvt ltd, Pune 1 | 2012-2013 | 3.03372 |
| 33 | Proof check of Mess Building | B. G. Birajdar | 17.09.2013 | Project mangt group, engineers consultant, Pune | 2012-2013 | 0.8427 |
| 34 | Proof checking of structural design and drawings for panchgani hill station municipal council, Panchagani | B. M. Dawari | 07.06.2013 | Chief Officer municipal council, panchagani | 2012-2013 | 0.35 |
| 35 | Structural scrutiny of RCC ESR/Pump House at Pandarpur | N. A. Hedaoo | 18.06.2013 | The divisional commissioner, Pune | 2012-2013 | 0.44944 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 36 | Third party technical appraisal report of proposed underground drainage scheme of Beed Town under UIDSSMT | N. A. Hedaoo | 10.06.2013 | The chief officer, beed municipal council, Beed | 2012-2013 | 2.2472 |
| 37 | Structural scrutiny of RCC design and drawings of ESR at Mhada Colony Thane. | N. A. Hedaoo | 12.07.2013 | Yogesh Pawar, associate planning (water SBU), KEC international ltd., ceat mahal, 1st floor, 463, Mumbai-30 | 2012-2013 | 0.68821 |
| 38 | Structural scrutiny of RCC design and drawing of Consumer Redressal Centre at Ambernath | N. A. Hedaoo | 22.07.2013 | The executive engineer, MJP, water management division, ambernath | 2012-2013 | 0.15731 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 39 | Structural scrutiny of RCC design and drawings | N. A. Hedaoo | 31.07.2013 | The executive engineer, water supply department, mira bhayandar municipal corporation, bhayandar, Thane | 2012-2013 | 0.50563 |
| 40 | Structural scrutiny of RCC design and drawings | N. A. Hedaoo | 21.08.2013 | AE Infra project pvt. Ltd., Thane | 2012-2013 | 1.08146 |
| 41 | Preparation for DPR for rainwater harvesting | P. M. Raval, Y. M. Keskar | 13.05.2013 | Bhart Petroleum Corporation Limited., | 2012-2013 | 0.562 |
| 42 | Testing of Auto CAD map 3D software | P. M. Raval, Y. M. Keskar | 13.05.2013 | Twon Planning Department M.S. Govt. | 2012-2013 | 0.13607 |
| 43 | Verification of load carrying capacity of first floor slab | R. R. Joshi, S. D. Kulkarni | 09.04.2013 | Verification of load carrying capacity of first floor slab | 2012-2013 | 0.25 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 44 | 3rd party technical appraisal Report for Detailed Project Report submitted by Ahmednagar Muncipal Corporation for Swerege scheme | R. P. Thanedar | 12.06.2013 | The commissioner Malegaon municipal corporation malegaon | 2012-2013 | 3.3708 |
| 45 | Vetting of structural design and drawing for industrial PEB shed for MES at Ambarnath | R. R. Joshi, S. D. Kulkarni | 23.04.2013 | MES at ambarnath | 2012-2013 | 0.25000 |
| 46 | Praposed reconstructing of existing old JF Muilding | R. R. Joshi, S. D. Kulkarni | 18.06.203 | Prashant Kulkarni & Associates Consulting Architects & Interior Designers Pune | 2012-2013 | 1.4 |
| 47 | Periodiacal inspection of buildings/structures and issuing stability certificates | R. R. Joshi, S. D. Kulkarni | 13.06.2013 | Ordnance Factories Institute of Learning Ambarnath 421502. | 2012-2013 | 0.505 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 48 | Proof checking of foundation design | R. R. Joshi, S. D. Kulkarni | 19.06.2013 | Sunrise Instuments Pvt. Limited Pune. | 2012-2013 | 0.16688 |
| 49 | Proof checking of structural design and drawing multistorey ware house building at taloja MIDC | R. R. Joshi, S. D. Kulkarni | 27.08.2013 | Talegaon MIDC | 2012-2013 | 8.5 |
| 50 | Inspection of water tank, Urali devachi | R. R. Joshi, S. D. Kulkarni | 28.08.2013 | Grampanchyat Devachi Uruli Pune | 2012-2013 | 0.15 |
| 51 | Inspection of water tank, Morgaon | R. R. Joshi, S. D. Kulkarni | 06.09.2013 | Grampanchyat Shri Shetra Morgoan Pune | 2012-2013 | 0.12 |
| 52 | Proof checking of design and guidance | R. R. Joshi, S. D. Kulkarni | 21.12.2013 | Gem Engserv Pvt. Limited | 2012-2013 | 0.85000 |
| 53 | Core logging of cores of the trial bores at site | S. A. Meshram | 25.06.2013 | Assistant Engineer PWD Sub Division Pune. | 2012-2013 | 0.2 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 54 | Periodiacal Inspection of Buildings at high explosives factory, pune | S. R. Sathe, N. B. Chaphalkar | 21.05.2013 | High Explosiives Factory Khadki Pune 411003. | 2012-2013 | 8 |
| 55 | Periodical inspection of buildings at ordnance factory Dehuroad | S. R. Sathe,  N. B. Chaphalkar | 25.06.2013 | Ordnance Factory Dehuroad Pune . | 2012-2013 | 9 |
| 56 | Safe bearing capacity for the proposed viral vaccine and poultry vaccine laboratories at institute of vaterrinary bilolgical products, Pune | S. S. Bhosale | 06.05.2013 | institute of vaterrinary bilolgical products, aundh, pune 7 | 2012-2013 | 0.22 |
| 57 | Suggesting remedial measures for leakages of balancing tank of 309 MLD, at panodi RR water supply scheme for MJP urban and rural division, sangamner. | S. S. Bhosale | 03.01.2014 | sangamner, district ahmednagar | 2012-2013 | 0.997 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned(In Lakhs)** |
| 58 | Development of integrated solid waste management system for paithan town | T. M. Parchure | 15.04.2013 | -- | 2012-2013 | 4.955 |
|  |  |  |  | TOTAL IN LAKHS | | 115.28 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponso red by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the Sanctioned project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 1 | Research Promotional Scheme (RPS) | AICTE /Govt. | Dr. Balkrishna Dawari | 13.6 | Non-Linear Finite Element Studies on Stainless steel Using Continuum Damage Mechanics | -- | 2012-2013  Amount received dated 31.03.2013 |
| 2 | MODROB | AICTE / Govt. | Dr. S. R. Sathe | 17.5 | Modernization of Fluid Mechanics Laboratory in Civil Engineering Department | -- | 2012-2013 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | **Total** |
| **National Journal** | **International Journal** | **National Conference** | **International Conference** |
| 1 | Civil Engineering | 1 | 5 | 0 | 4 | 10 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Entropy Analysis for Identifying Significant Parameters for Seismic Soil Liquefaction | Prof.Dr.Mrs.Pathak & Dalvi, Rajhans | Geomechanics and Geo Engg. | http : //dx.doi.org/10.1080/17486025.2013.805255,July 13. |
| 2 | Mathematical Regression Model for Predicting the Compressive | Dr. Mrs Pathak | International Journal of Research Review in Engineering Science and Tech | March 2014 |
| 3 | Identification of Crack Damage in Reinforced Concrete Beams Using Mode Shape Based Methods | V. B. Dawari, G. R. Vesmawala | Civil and Environmental Research | December 2013 |
| 4 | Application of Modal Strain Energy Based Method for Structural Damage Identification | V. B. Dawari, P. P. Kamble, G. R. Vesmawala | Proceedings of ICRTET 2014, Elsevier Publications | March2014 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 5 | Surfactant Adsorption on Solid surfcaes and further Application to Adsolubilization: A Comprehensive Review | M.U.Khobragade, A. Pal | Recent Patents on Engineering | December 2013 |

* **National Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National Journals** | | | | |
| **Sr.**  **No.** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Application of Modal Curvature Method for Damage Identification in Reinforced Concrete Beams | V. B. Dawari, G. R. Vesmawala | Proceedings of ICRTET 2014, Elsevier Publications | Oct 2013 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No.** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type (National/ International)** |
| 1 | Identification of parameters affecting liquefaction of fine grain ed soil using AHP | Rajhans, Purandare & Pathak | Advancsed Engg optimization through Intelligent Techniqes | July2013 | International Conference at SVNIT Surat |
| **Sr.**  **No.** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type (National/ International)** |
| 2 | Liquefaction susceptibility of fine grained soils | Pathak & Purandare | Indian Geotechnical  Conference Roorkee | December 2013 | International Conference |
| 3 | Logistic Regression Liquefaction Model using Dynamic response | Pathak & Dalvi | Indian Geotechnical  Conference  Roorkee | Dec2013 | International Conference |
| 4 | Application for Reducing Waiting Time Of RMS Trucks. | N. M. Mohite | WRE Conference | Feb2014 | International Conference |

* **PATENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of the Faculty/Students** | **Title** | **Application No. &Date** | **Application Status** |
| 1 | Mrs H.K.Munot | Material for Construction Industry | 1957/MUM/2014  17 June 2014 | Applied |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS /EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event** **organized by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** |
| 1 | Two Day Workshop On Civil Engg Projects and machinery through case studies and legal ruling | 27-28.07.2013 | Dr. S. R. Sathe  Dr. N.B. Chaphalkar | All | 30 | AICTE |
| 2 | MATLAB for structural Engg | 5-16.08.2013 | Dr. S.D. Kulkarni | Faculty/ Students | 60 | Alumni Association of COEP |
| 3 | Seminar on Limit State Methods for design of reinforcement concrete structure | 12-14.09.2013 | Mrs. V.B.Dawari Dr.Mrs S.N. Madhekar | All | 109 | TEQIP |
| 4 | Two Day workshop on Concrete Mix Design in Concrete Technology | 16.10.2013 | Prof. Mrs. H. K.Munot | Students | 72 | Aditya Brila Cement Ltd. |
| 5 | One Day Workshop on FEM Application | 27.10.2013 | Prof. Y.A. Kolekar Dr. B.M. Dawari | All | 30 | TEQIP |
| 6 | Blast Resistant Design of Structure | 10-12.01.2014 | Dr. Mrs. S. N. Madhekar | All | 65 | Alumni Association of COEP |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** |
| 7 | Limit State Design Of Steel Structure | 18.01.2014 | Dr. Mrs. S. N. Madhekar | All | 145 | Alumni Association of COEP |
| 8 | Steel Structure and Pre-Engineered Buildings | 20.01.2014 Onward Every Monday | Dr. Mrs. S. N. Madhekar | All | 50 | COEP |
| 9 | Two Day National Workshop on Current Practices in Construction Contracts and Pile foundation | 7-8.02.2014 | Dr. N.B. Chaphalkar Prof. Y.A. Kolekar Prof. G.S. Vyas | All | 120 | TEQIP |
| 10 | Workshop On Primavera: 6-Project Management Software | 23-24.02.2014 | Prof. G.S. Vyas Prof. M.S. Randive. V.B.Dawari | Students | 60 | COEP |
| 11 | Success Stories of outstanding Bridges | 22.03.2014 | Dr. Mrs. S. N. Madhekar | Students | 42 | COEP |
| 12 | Training for “OBE based accreditation for Master Trainers and evaluators” | 5.3.2014 & 14-16.03.2014 | Prof R. R. Joshi | Faculty | 55 | NBA |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Particip**  **ants** | **Sponsoring Agency**  **(if any)** |
| 1. | Advances in Geotechnical and Geoenviromental Engineering | 24-28.6.2013 | Prof. Y.A. Kolekar | ALL | 35 | IIT Bombay |
| 2. | Structural Diagnosis, Repair And Retrofitting Of RCC Structures | 28.6.2013 | Prof. Mrs. V.B. Dawari | ALL | 40 | Dr. Fixit Institute of Structural Protection |
| 3. | Water Resource Management Studies using Geospatial techniques and Numerical Modeling | 08-12.7.2013 | Prof. Y.A. Kolekar | ALL | 35 | IIT Bombay |
| 4. | Finite Element Methods & Applications in Civil Engineering | 01-05.7.2013 | Prof. Y.A. Kolekar | ALL | 30 | IIT Bombay |
| 5. | Finite Element Methods & Applications in Civil Engineering | 01-05.7/.2013 | Prof. S.N. Madhekar | ALL | 30 | IIT Bombay |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Particip**  **ants** | **Sponsoring Agency**  **(if any)** |
| 6. | Advanced Engineering Optimization Through Intelligent Techniques | 23-27.9.2013 | Prof. Mrs. V.B. Dawari | ALL | 45 | Sardar Vallabhai National Institute of Technology |
| 7. | Engineering Mechanics | 26 .11- 06 .12.2013 | Dr. N. M. Mohite | Faculty | 30 | IIT Bombay |
| 8. | Corrosion and Surface Engineering | 3-8 .1.2014 | Mrs. H. K. Munot | ALL | 50 | COEP |
| 9. | Geotechnical Investigation, Interpretations And Improvement. | 17-21.2.2014 | Prof. Y.A. Kolekar | ALL | 40 | GP Amravati |

* **Details of the Lectures/Talks delivered by the department faculty**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Date** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** | |
| 1 | Geo Tech Engg | 20-07-2013 | Prof. Y. A. Kolekar | Students | 55 | RMD Sinhgad School of engg. Pune | |
| 2 | Laboratory and Field Tests of soil Exploration for bridge foundation | 22-07-2013 | Dr. S. S. Bhosale | all | 63 | Border Road Organization, General Reserved Engg Force Center Dighi Camp | |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Date** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | | **Venue** | |
| 3 | Recent developments in Civil Engg | 15-9-2013 | Dr. I. P. Sonar | Industry people/ | 40 | | CREDAI, Kolhapur | |
| 4 | White Topping – A prospective urban road rehabilitation technique | 23-10-2013 | Dr. S. S. Bhosale | Students/ Faculty | 55 | | G.H.Raisoni Institute Of Engg. Pune | |
| 5 | Repairs and rehabilitations of concrete Structures | 23-10-2013 | Prof. R. R. Joshi | Faculty | 50 | | Engineering Staff college of India, Hyderabad | |
| 6 | “Quality Initiatives in Technical and Higher Educational Institutes” NBA Accreditation | 26-10-2013 | Prof. R. R. Joshi | Faculty | 75 | | Dr D Y Patil School of Engg & Tech , Pune | |
| 7 | Application of Solid Mechanics | 20-11-2013 | Dr. B. M. Dawari | Faculty and Students | 25 | | AISSMS College of Engg. Pune | |
| 8 | Finite Element Applications in Civil Engg | 09-12-2013 | Dr. B. M. Dawari | Faculty | 30 | | Sinhgad College of Engineering, Pune | |
| 9 | Introduction to Concrete Technology | 30-12-2013 | Dr. I. P. Sonar | Students | 60 | | Indira College of Engineering & Management | |
| 10 | Eco Friendly Materials | 4-02-2014 | Dr. I. P. Sonar | Students | 23 | | SMT. Kashibai Navale College Of Engg. Pune | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Date** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 11 | Lab and Field Tests for Soil Exploration | 12-02-2014 | Dr. S. S. Bhosale | Faculty and Students | 75 | Padamshri Dr.Vithalrao Vikhepatil College Of Engg.Pune |
| 12 | Design of Concrete Structures | 17-02-2014 | Dr. I. P. Sonar | Students | 60 | Pimpri Chinchwad Polytechnic.Pune |
| 13 | Use of Influence lines in Structural Analysis | 24-02-2014 | Dr. B. M. Dawari | Faculty and Students | 240 | JSPM Group of Institutes, Katraj, Pune |

* **AWARDS & HONORS**
* **For Faculty**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Name of the Award** | **Description** | **No. of Awards** |
| 1 | Dr. Mrs. S. N. Madhekar | COEP Best Teacher Award | Best Teacher in the Institute | 01 |
| 2 | Prof. S. A. Mershram | Performing Minds Award | For the performer who strives to draw recruiters to college for campus placements | 01 |

* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 1 | Sachin Panchal | Selected for IES exam conducted in the year 2013-14 | He is the only person selected from entire Maharashtra state. | 1 |
| 2 | Gaurav Rai | II nd rank in GATE 2014 examination |  | 1 |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 3 | Kshipra Agre | 29 th rank in UPSC 2013 |  | 1 |
| 4 | T.Y. B.Tech students | 1st prize | 1. Technocrat booth project competition 2014. | 1 |

* **MEMBERSHIPS OF SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1 | Council of Architecture, India | Ms. A. S. Petkar |
| 2 | Institute of Town Planners, India | Dr. P. M. Raval |
| Dr. S. G. Sonar |
| Ms. A. S.Petkar |
| 3 | Indian Institute of Architect | Mrs. A. S. Petkar |
| 4 | Indian Water Research Society | Mr. S. Mukhopadhay |
| Mr. S. A. Meshram |
| Dr. S. G. Sonar |
| 5 | Indian Water Research Society | Mr. S. Mukhopadhay |
| Mr. S. A. Meshram |
| Dr. S. G. Sonar |
| 6 | Indian Society of Hydraullics | Dr. S. R. Sathe |
| Mr. S. Mukhopadhay |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 7 | Indian Society of Technical Education | Dr. S. R. Sathe |
| Dr. N. B. Chaphalkar |
| Mr. S. Mukhopadhay |
| Dr. P. M. Raval |
| Dr.B. M. Dawari |
| Dr. (Mrs.) S. R. Pathak |
| Dr. M. S. Randive |
| Mrs. G. S. Vyas |
| Mrs. H. K. Munot |
| Mr. M. U. Khobragade |
| Dr. I. P. Sonar |
| Mr. R. P. Thanedar |
| Mrs. R. S. Dalvi |
| Mr. S. A. Meshram |
| Dr. S. D. Kulkarni |
| Dr. (Mrs.) S. N. Madhekar |
| Dr. S. S. Bhosale |
| Mrs. Y. T. LomtePatil |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 8 | Indian Society of Theoretical Applied Mechanics | Mr. S. Mukhopadhay |
| 9 | Indian Society of Computational Mechanics | Dr. B. M. Dawari |
| 10 | Institution of Smart structures and Materials, Bangalore | Dr. B. M. Dawari |
| 11 | International Water Association (IWA), London | Dr. P. M. Raval |
| 12 | Institute of Engineer | Dr. P. M. Raval |
| Dr. (Mrs.) S. R. Pathak |
| Mrs. H. K. Munot |
| Dr. I. P. Sonar |
| Mr. M. U. Khobragade |
| Dr. (Mrs.) S.N. Madhekar |
| Dr. M. S. Randive |
| Dr. S. G. Sonar |
| Dr. S. S. Bhosale |
| Dr. N. B. Chaphalkar |
| 13 | Indian Society for Construction Materials and Structures (ISCMS), New Delhi, India | Dr. P. M. Raval |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 14 | Indian Geotechnical Society | Dr. (Mrs.) S. R. Pathak |
| Dr. M. S. Randive |
| Dr. S. S. Bhosale |
| 15 | Institution of Valuers | Mrs. H. K. Munot |
| 16 | Member of International Tunnelling Association, 2003 | Dr. M. S. Randive |
| 17 | Indian Roads Congress | Dr. M. S. Randive |
| Dr. S. S. Bhosale |
| 18 | Association of Consulting Civil Engineers (India) | Dr. M. S. Randive |
| 19 | Indian Geological Congress | Mr. S. A. Meshram |
| 20 | Gondwana Geological Society | Mr. S. A. Meshram |
| 21 | Geological Association and Research Center. (Honorary) | Mr. S. A. Meshram |
| 22 | Indian Concrete Institute | Dr. M. S. Randive |
| Dr. (Mrs.) S. N. Madhekar |
| 23 | American Society of Civil Engineering (ASCE) | Mr. N. M. Mohite |
| 24 | International Association of Computer Science and Information Technology | Mr. N. M. Mohite |
| 25 | Indian Plumbing Association (IPA) | Mr. N. M. Mohite |
| 26 | Indian Environmental Association Pune & India | Mr. R. P. Thanedar |
| 27 | Water Environment Federation U. S. A. | Mr. R. P. Thanedar |
| 28 | Institute of Urban Transport (India) | Dr. S. G. Sonar |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 29 | Indian Society for Wind Engineering | Dr. S. G. Sonar |
| 30 | Alumni Association of COE | Dr. I. P. Sonar |
| 31 | Indian Society of Structural Engineers | Dr. (Mrs.) S. N. Madhekar |
| 32 | Maharashtra India Chapter of ACI | Dr. (Mrs.) S. N. Madhekar |
| 33 | Founder member, Ferrocement Society, Pune | Dr. (Mrs.) S. N. Madhekar |
| 34 | Indian Association of Structural Rehabilitation | Dr. (Mrs.) S. N. Madhekar |
| 35 | Chartered Engineer (INDIA). | Dr. N. B. Chaphalkar |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name Of The Student** | **Name of The University/ Institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Hiray Udit Shashikant | -- | NIT  Agartala | 2013 |
| Mohite Namrata R | - | Imperial Collge of Enginnering and Research Pune | 2013 |
| Kapile Shriramg Dilip | - | IIT  Delhi | 2013 |
| Shetkar Rohan Rajeev | - | IIT  Bombay | 2013 |
| Bora Sandeep Harish | -- | NICMAR  Pune | 2013 |
| Mishra Pooja Mangalprasad | - | COEP  Pune | 2013 |
| Somani Vaishakhi Ravindra | - | COEP  Pune | 2013 |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of Faculty** | **Highest Qualification** | **Designation** | **Areas of Interest** |
| 1 | Dr. S. R. Sathe | PhD  Swansea, U.K | Professor | Construction Mngt. & Fluid Mechanics |
| 2 | Dr. R. R. Joshi | PhD  SGSITS, RGPV, Bhopal | Professor | Structures |
| 3 | Prof. B. G. Birajdar | M.E. (Geo-Tech)  UoP | Professor | Structures |
| 4 | Dr. (Mrs.) S. R. Pathak | PhD  IIT Bombay | Professor | Geotechnical Engg. |
| 5 | Dr. S. S. Bhosale | PhD  IIT Bombay | Professor | Geotechnical Engg. |
| 6 | Dr. P. M. Raval | PhD, University of Newcastle upon Tyne, U.K. | Professor | Town Planning |
| 7 | Dr. Mrs. S. N. Madhekar | PhD  IIT Bombay, | Associate Professor | Structures |
| 8 | Dr. Mrs. A. D. Thube | PhD  IIT Roorkee, | Associate Professor | Water Resources Engg. |
| 9 | Dr. M. S. Ranadive | PhD  UoP , | Associate Professor | Construction Mngt. and Transportation |
| 10 | Dr. N. B. Chaphalkar | PhD  IIT Delhi 2008 | Associate Professor | Construction Mngt. |
| 11 | Mr. R. P. Thanedar | M.E. (Civil -T & CP)  UoP, | Associate Professor | Environmental Engg. |
| **Sr. No.** | **Name of Faculty** | **Highest Qualification** | **Designation** | **Areas of Interest** |
| 12 | Mr. S. Mukhopadhyay | M.E. (Civil) Calcutta University, | Associate Professor | Fluid Mechanics |
| 13 | Mr. S. A. Meshram | MSc. (Tech)  (Applied Geology)  Nagpur Uni | Associate Professor | Geology |
| 14 | Dr. B. M. Dawari | PhD  IISc Bangalore | Associate Professor | Structures |
| 15 | Mr. Y. A. Kolekar | M.E. (Civil-Geotech) | Associate Professor | Geotechnical Engg. |
| 16 | Dr. S. D. Kulkarni | Ph D  IIT Delhi | Associate Professor | Structures |
| 17 | Dr. N. A. Hedaoo | PhD Structures  VNIT, Nagpur | Associate Professor | Structures |
| 18 | Dr. K. K. Tripathi | PhD  IIT Bombay | Assist. Professor | Geotechnical Engg. |
| 19 | Dr. I. P. Sonar | PhD  UoP | Assist. Professor | Structures |
| 20 | Dr. S.G. Sonar | PhD  IIT Roorkee | Assist. Professor | Town Planning |
| 21 | Mrs. V. B. Dawari | M.E. (Structures)  UoP | Assist. Professor | Structures |
| 22 | Mrs. R. S. Dalvi | M.E. (Civil-Geotech)  UoP | Assist. Professor | Geotechnical Engg. |
| 23 | Mrs. H. K. Munot | M.E. (Structures) UoP, | Assist. Professor | Structures |
| 24 | Mr. M. U. Khobragade | M-Tech (civil)  IIT Roorkee, 2002 | Assist. Professor | Environmental Engg. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of Faculty** | **Highest Qualification** | **Designation** | **Areas of Interest** |
| 25 | Mrs. A. S. Petkar | M. Tech (T & CP)  UoP | Assist. Professor | Town Planning |
| 26 | Mrs. Y. T. LomtePatil | M.E. (Civil-Structures)  Shivaji Uni | Assist. Professor | Structures |
| 27 | Mrs. G. S. Vyas | M.E. (Civil-Construction Management) Shivaji University | Assist. Professor | Construction Mngt. |
| 28 | Dr. N. M. Mohite | PhD,  SGSITS, RGPV, Bhopal | Assist. Professor | Water Resources Engg. |
| 29 | Mr. S. D. Jagtap | M. Tech.  IIT Kharagpur | Assist. Professor | Water Resources Engg. |

**DEPARTMENT OF COMPUTER ENGINEERING &**

**INFORMATION TECHNOLOGY**

* **INTRODUCTION**

The Department is established in the year 1992, with the Computer Engineering and Information Technology branches, is one of the youngest departments in the institute. The under graduate courses in Computer Engineering was started in 1992 and Information Technology in 2000. Both these courses have intake of 60 each. There is also timely introduction of postgraduate course in Computer Engineering since 1997 with the intake of 18. The department is also a recognized research centre under University of Pune for its PhD program. The department boasts of a highly qualified faculty who performs research according to the needs of the society and then teaches the students. It promotes open source software development and its students have been closely involved with such development projects. The students of this department have brought several laurels to this institute by actively participating and winning several technical competitions of international stature. Needless to mention, the placement records for the department have been nothing short of magnificent having students placed in renowned companies in India as well as out of India.

* **ACADEMIC PROGRAMS (B. TECH/ M. TECH/ PH. D)**

B. Tech (Computer Engineering)

B. Tech (Information Technology)

M. Tech (Computer Engineering)

Ph. D (Computer Engineering)

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 04 |
| 2 | Associate Professor | 05 |
| 3 | Assistant Professor | 19 |
| 4 | Professor Emeritus | 01 |
| 5 | Adjunct Professor | 07 |
| Total | | 36 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| 1 | Graphic's Lab | * Desktop PC HP Compaq 6200 pro small form factor-20 * LCD screen * AC's:02 | CCTV Cameras-02 |
| 2 | Programming Lab | * Desktop PC HP Compaq 6200   pro small form factor-21   * Projector:01 * AC's:02 | CCTV Cameras-02 |
| 3 | Advanced Software Lab | * Desktop PC HP Compaq 6200 pro small form factor-21 * Projector:01 * AC's:04 | CCTV Cameras-02 |
| 4 | Database Lab | * Desktop PC HP Compaq 6200 pro small form factor-19 * Projector:01 * AC's:02 | CCTV Cameras-02 |
| **Sr. No** | **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| 5 | System software (Linux ) lab | * Desktop PC HP Compaq 6200 pro small form factor-23 * Projector:01 * AC's:03 | CCTV Cameras-02 |
| 6 | Digital Systems Lab | * Desktop PC HP -13 | CCTV Cameras-02 |
| 7 | Internet Security Lab | * Desktop PC HP -04 * AC's:03 | CCTV Cameras-02 |
| 8 | Research Lab | * Worksation HP Z420 (2nos) * Tower server HP ML 350g8 | CCTV Cameras-02 |
| 9 | NVIDIA LAB | * Worksation HP -17 * AC's:02 | CCTV Cameras-02 |
| 10 | Data mining Lab | * Desktop PC HP-22 * Projector:01 * AC's:01(Ductable Central AC) * 850 Microtek Sinewave UPS   (2 nos.) | CCTV Cameras-02 |
| 11 | Central Computing Lab | * Desktop PC HP Compaq 6200 pro small form factor-180 * Projector:01 * AC's:01 * (Ductable Central AC) | CCTV Cameras-06 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| 12 | Cloud Computing Lab | * Memsic –wireless sensor network kits and RFID tags and readers sensor nodes with IRIS/Micaz Processor Board 868/916. MHz or 2.4GHzradio board, multi sensor board including temperature, humidity, barometric pressure, acceleration and ambient light sensing capabilities- 20 Nos. USB PC interface Programming board(gateways) – 4 nos.USB Base station with IRIS/MICA module and PC interface board- 4 nos. Data Acquistion board -3 nos Tiny OS based software platform – 5nos., Realtime sensing with active RFID devices with sensor tag, localizer /router gateway. * Tower server HP ML 350g8 (2 nos) * Desktop computers intel core * HP make i7 processor (10 nos) * Tower server Model Intel E52430 C to server * HP LJ printer M1136 (all in one lazer printer) * HP pro 3330 Desktop (2 nos.) |  |

* **EQUIPMENT PURCHASED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the lab/section** | **Module Description** | **Usage** | **Date of Purchase/**  **development** | **Resource consumed (amount in lakhs)** |
| BRNS Grant Dr.Vahida Attar. | LG Portable LED Projector | -- | 2/03/2013 | 0.45 |
| RPS grant  Dr. Vandana Inamdar | HP LJ-M475 multifunction printer | -- | 20/3/13 | 0.56 |
| IBM Grant  Dr. Jibi Abraham | Tower server HP ML 350g8 (2 nos) | Cloud Computing Research Lab | 20/2/2013 | 4.10 |
| BRNS Grant Dr.Vahida Attar. | Tower server HP ML 350g8 | Project lab | 18/4/13 | 3.87 |
| RPS grant  Dr. Jibi Abraham | Desktop computers intel core HP make i7 processor  (10 nos) | Cloud Computing Research Lab | 30/3/13 | 3.36 |
| IBM Grant  Dr. Jibi Abraham | LG ultra portable Projector | -- | 24/5/13 | 0.49 |
| BRNS Grant Dr.Vahida Attar. | laptop Apple make pro 13 i7 processor | -- | 27/8/13 | 0.95 |
| AICTE grant  Dr. Pachghare | laptop Apple make pro 13 i7 processor | -- | 27/9/13 | 0.95 |
| CDAC research grant  Dr. Jibi Abraham | Tower server Model Intel E52430 C to server | Cloud computing Research Lab | 27/8/13 | 1.86 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the lab/section** | **Module Description** | **Usage** | **Date of Purchase/**  **development** | **Resource consumed (amount in lakhs)** |
| CDAC research grant  Dr. Jibi Abraham | HP LJ printer M1136 (all in one lazer printer) | Cloud computing Research Lab | 27/8/13 | 0.10 |
| RPS grant  Dr.Vahida Attar | Worksation HP Z420 (2nos) | Project lab | 28/10/13 | 1.64 |
| BRNS Grant Dr.Vahida Attar. | HP LJ –M475 Multifunction printer | -- | 17/5/2013 | 0.56 |
| CDAC research grant  Dr. Jibi Abraham | HP pro 3330 Desktop | -- | 27/8/2013 | 0.45 |
| IBM Grant  Dr. Jibi Abraham | HP pro 3330 Desktop | -- | 27/8/2013 | 0.45 |
| AICTE grant  Dr. Pachghare | Qualnet –Network semulator software Licence with libraries | -- | 31/12/2013 | 4 |
| AICTE grant  Dr. Jibi Abraham | Qualnet –Network semulator software Licence with libraries with wireless sensor network zigbee | Cloud computing Research Lab | 31/12/2013 | 4.25 |
| AICTE grant  Dr. Pachghare | HP pro 3330 Desktop | -- | 27/8/2013 | 0.49 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the lab/section** | **Module Description** | **Usage** | **Date of Purchase/**  **development** | **Resource consumed (amount in lakhs)** |
| TEQIP Grant  Dr. J V Aghav. | A-Server **-** Server: Xeon E5-2630 (6 core, 2.3 GHz, 15MB), 32 GB (Up to 24 DIMM slots Max 768 GB) 4 TB SAS HDD, 1Gb Ethernet 4-port 331.  **(02 nos.)**  B-Server -Server: Xeon E 3 1220 (3.1 Ghz/ 4 Core/ 8MB)8 GB (Max 32 GB) 1 TB.  **(02 nos.)**  C-Desktop -Desktop: Intel i7-3770. 8 GB, 500 GB, DVD Writer Key board/Mouse  (**8 nos.)** | -- | 28/10/2013 | 9.53 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No of Seminars/ Talks conducted | 5 |
| 2 | No. of publications in International Journals | 15 |
| 3 | No. of Industry Sponsored Projects | 1 |
| 4 | No. of Government Sponsored Projects | 8 |
| 5 | Value of the Government Sponsored Projects (In Lakhs) | 68.9 |
| 6 | No. of Consultancy Projects | 2 |
| 7 | No of Ongoing Ph. Ds | 18 |
| 8 | No of Ph. Ds awarded | 2 |
| 9 | No. of Students participated in Student Exchange programs | 1 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(In Lakhs)** |
| 1 | SAS COEP Joint Research Project on, “Graph algorithms for community detection and usage based Insurance” | Prof J V Aghav | 2013 | SAS | 12 months | 6 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(In Lakhs)** |
| 2 | Tribal development, maharashtra (for Nasik region) | S. S. Kumbhar, S. N. Ghotkar | 2013 | Tribal developmentMaharashtra  (Nasik region) | -- | 0.71 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr No** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 1 | AICTE- RPS | Govt | P K Waychal | 5.00 | Increasing Effective  Employa  bility | -- | F. No. 8023/RID/RPS-35/2011-1215th February’12 |
| 2 | AICTE- RPS | Govt | Sachin  Deshmukh | 8.00 | Design and Development of system for appro  ximate string matching for Devn  agri text stored using UNICODE character | -- | F. No.8023/RID/RPS-33/(POLICY-III)/(GOVT)/2011-12  13th February’12 |
| **Sr No** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today**  **(Amount in Lakhs)** | **Year in which the Grant was received** |
| 3 | AICTE- RPS | Govt | J V Aghav | 14 | Design and Validation of Systems for Safety Critical Applications | -- | Ref. No. 8023/RID/RPS/4/11-12  15th May 2012 |
| 4 | MODROBS | Govt | J V Aghav | 7.50 | Scientific Computing and Projects laboratory | -- | Ref. No. 12/AICTE/RIFD/MOD(Policy-2)-26/2012- 13 4th February 2013 |
| 5 | AICTE- FDP | Govt | J.V.Aghav | 4.50 | Tool-assisted Software Analysis for Practical Applications | 4.50 | Ref. No. 12/AICTE/RIFD/MOD(Policy-2)-26/2012- 13 4th February 2013 |
| 6 | AICTE- FDP | Govt | Vahida Attar | 6.00 | Machine learning & Data Mining Approaches: A Research Perspective | 6.00 | F. No. 1-7/AICTE/ RIFD/ FDP/ Govt.(2)-25/ 2012-13  30th January 2013 |
| **Sr No** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today**  **(Amount in Lakhs)** | **Year in which the Grant was received** |
| 7 | AICTE RPS | Govt | Dr. Jibi Abraham | 13.90 | Design and Development of Energy Aware Security Solutions for Wireless Sensor Networks | 7.25 | 2013 |
| 8 | C-DAC Joint project | Industry | Dr. Jibi Abraham | 10.60 | Efficient Selection of Cryptographic Algorithm for Securing Health Data based on Various Parameters | 8.02 | 2013 |
| 9 | AICTE RPS | Govt | Dr. V. K. Pachghare | 10.00 | Wireless Intrusion Detection System | 6.00 | 2013 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | **Total** |
| **National Journal** | **International Journal** | **National Conference** | **International Conference** |
| 1 | Computer & IT | -- | 15 | 1 | 7 | 23 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | “A Holistic Approach to Autonomic Self-Healing Distributed Cloud System,” | Dr J V Aghav, AbhishekBhavsar, Ameya More, Chinmay Kulkarni, and Dheeraj Oswal | International Journal of Computer Applications | International Journal of Computer Applications, (ISBN: 973-93-80877-33-2) Vol. 76, No.3, Pages 25-30, August 2013. DOI: 10.5120/13228-0657 |
| 2 | Performance Analysis of Transport Layer Based Hybrid Covert Channel Detection Engine | Anjan K, Srinath N K, Jibi Abraham | [International Journal of Network Security & Its Applications](http://ijnsajournal.wordpress.com/) | Vol. 5 No. 6, November 2013, pp. 55-64 |
| 3 | Dual watermarking technique with multiple biometric watermarks | Vandana Inamdar, Preeti Rege | SADHANA,  Indian Academy of sciences springer | February 2014,  pp3-26 |
| 4. | A Clustering Protocol for Non- Uniformly distributed wireless sensor networks | Ashutosh S. Dube, Shailesh A. Shep, Shrikant M. Gavane, Soma Ghosh. | International journal of computer science trends and technology | Vol 2 issue 1 Jan-February 2014 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 5 | Concept Space Derivation and Its Application in Query Categorization | Y. V. Haribhakta, Dr. Parag Kulkarni | International Journal in Computer Applications | Vol. 70- No.6,  ISSN/ISBN/ACCN No**-**11966-780705/13 |
| 6 | An Efficient Approach ofBackup Reprovisioningfor Multiple Link Failures in WDM Optical Networks | Shashank S. Khasare, Yashkumar B. Joshi, Sanket M. Rathod, Dr. Amit Joshi | IEEE ANTS | December 2013 |
| 7 | Address Allocation in Manet | Aparna Santra,Radesh G. Chellu, Ashitosh Alwani, Pranav manghat, | International Journal on Advanced Computer Theory and Engineering IJACTE | Vol 3  ISSN(Print)2319-2526  February 2014 |
| 8 | Experience of Using Felder-Soloman Index of Learning Styles | Shaikh Vasim, Waychal Pradeep | First Annual International Conference on Transformations in Engineering Education, co-organized by IUCEE Hubli India | January 2014 |
| 9 | IT Education and Team Based Learning | Nathaniel G. Martin , Waychal Pradeep | International Conference on Transformations in Engineering Education, co-organized by IUCEE Hubli India | January 2014 |
| 10 | Impact and interaction of determinants on innovation as a competence: an empirical study | Waychal Pradeep and R P Mohanty | International Journal of Innovation in the Digital Economy, 4(3) | July 2013 |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 11 | A Framework for Liberal Learning in an Engineering College | Waychal Pradeep, Sahasrabudhe Anil | American Society of Engineering Education (ASEE) Annual Conference | June 2014 |
| 12 | The Calling of the Third Dimension | Waychal Pradeep | IEEE’s International conference on Software Engineering (ICSE) Collaborative and Human Aspects of Software Engineering (CHAS) Workshop, Hyderabad India | June 2014 |
| 13 | Developing Creativity Competency of Engineers | Waychal Pradeep | American Society of Engineering Education (ASEE) Annual Conference | June 2014 |
| 14 | Analysis of Students’ Feedback in a Faculty Award System | Waychal Pradeep | American Society of Engineering Education (ASEE) Annual Conference, Indianapolis | June 2014 |
| 15 | Educating the Educators for nurturing the 21stCentury Indian Engineers | Waychal Pradeep | American Society of Engineering Education (ASEE) Annual Conference, Indianapolis | June 2014 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 1 | Computational Methods that Infer Human Diseases | Dr J V Aghav, Preeti Kale | International Conference on Biology (IWBIO 2014) | April 2014 | International |
| 2 | Automated techniques and tools for program analysis : Survey Part II | Dr J V Aghav, Ashih Kulkarni | International Conference on Computing, Communications and Networking  Technologies (ICCCNT) | July 2013 | International |
| 3 | Job Classification for MapReduce Scheduler in Heterogeneous  Environment | Dr J V Aghav,ShyamDeshmukh, Rohan Chakravarthy | International Conference on Cloud and Ubiquitous  Computing and Emerging Technologies (CUBE’2013), ACM International  Conference Proceedings (ACPS) | November 15-16, 2013 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 4 | An Inter-VM Communication Model Supporting Live Migration | Apurva Patil, Pooja Toshniwal, Mrugani Kurtadikar, Jibi Abraham | International Conference on Cloud & Ubiquitous Computing & Emerging Technologies  (CUBE 2013), Pune | 15-16 Nov 2013, pg. 63-68 | International |
| 5 | A Threshold Band Based Model For Automatic Load Balancing in Cloud Environment | Akshay Jain, Anagha Yadav , Lohit Krishnan , Jibi Abraham | IEEE International Conference on Cloud Computing for Emerging Markets 2013 (CCEM 2013), Bangalore | pp. 40-46, October 16-18, 2013 | International |
| 6 | OBM - An Optimal Bandwidth Management Strategy to Virtual Machines in Cloud Environment using Predictive Analytics | Shahzeb Patel, Rohit Damkondwar, Abhijay Patne and Jibi Abraham | IEEE International Conference on Cloud Computing for Emerging Markets 2013 (CCEM 2013), Bangalore | October 16-18, 2013 | International |
| 7 | VM migration across heterogeneous hypervisors | Prof. Soma Ghosh, Pravinkumar Kokate, Abhijeet Gaikwad, Nitin Darekar | National conf on Advancement in communication, computing and electronic technology | March 28-29 2014 | National |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 8 | A Mathematical Model for Load Balancing in Cloud Environment | Akshay Jain, Anagha Yadav , Lohit Krishnan , Jibi Abraham | 2nd Springer International Conference on Eco-friendly Computing and Communication Systems (ICECCS), JUIT, Waknaghat, HP | 17-19 October 2013 | International |

* **PATENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of the Faculty/Students** | **Title** | **Application No. &Date** | **Application Status** |
| 1. | A Holistic Approach to Autonomic Self-Healing Distributed Cloud System | Dr J V Aghav, Abhishek Bhavsar, Ameya More, Chinmay Kulkarni, and Dheeraj Oswal | Submitted -January 2014 | Under review |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAININGPROGRAMS/ EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 1 | Database management system | 21st – 31st May, 2013 | Dr. Vahida Attar | Faculty | 34 | IITB |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 1 | NBA WOSA 2014 New Delhi | February 2014 | Prof J V Aghav | Industry experts and academicians | 30 | TEQIP-II COEP |
| 2 | Digital Signal Processing and its applications | March9-14 , 2014 | Vandana s Inamdar | Faculty | 25 | IIT Bombay |

* **Details of the Lectures/Talks organized by the department**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Date** | **Name of the Speaker** | **Category of the Participans** | **No. of Participans** | **Venue** |
| 1 | Rethinking security in commodity computing platforms | 23/09/2013 | Dr Prateek  Saxena, NUS,  Singapore | All | 60 | Mini Auditorium |
| 2 | Credit Suisse event at COEP | 9/10/2013 | Chandrasekhar ongole,Rupesh Rathi, Credit Suisse | All | 60 | Mini Auditorium |
| 3 | Project Management | 17/10/2013 | Hemal, Panara, Sarang, Eaton | All | 50 | Mini Auditorium |
| 4 | Onsite GRM global remote mentoring | 7/1/2014 | Dr Anuj Garg,Yogesh, IBM | All | 40 | Seminar Hall |
| 5 | Effective  Data visualization  on mobile  devices and  opportunities | 10/01/2014 | Alark Joshi, University of  San Francisco  USA. | All | 60 | Seminar  Hall |

* **Details of the Lectures/Talks delivered by the department faculty**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Date** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | “Developing Software Tools for System Design and Analysis,” invited talk | May 28, 2013 | Dr J V Aghav | Faculty, Industry, and Students | 80 | School of Computing, National University of Singapore (NUS), Singapore |
| 2 | “Design and Validation of Embedded Systems in Esterel,” invited talk | May 27, 2013 | Dr J V Aghav | Faculty | 50 | School of Computer Engineering, Nayang Technological University (NTU), Singapore |
| 3 | "Restructuring Universities for coping with the Challenges of the 21sCentury" | January 8, 2014 | Dr J V Aghav | Faculty, University functionaries, educationists | 110 | Gujarat Technical University (GTU), Ahmadabad |
| 4 | Server Virtualization -On Going Research | June 11,2013 | Dr. Jibi Abraham | Faculty | 30 | SSPM College of Engineering, Kankavali |
| 5. | Basics of Cryptography and Encryption Techniques | June 24,2013 | Dr. V. K. Pachghare | Faculty  FDP on Security  Challenges inComputer  Science | 60 | Dept. of Computer Engineering, SGGS IET, Nanded |
| 6. | Information Security & Cryptography | July 24, 2013 | Dr. V. K. Pachghare | Faculty,  Students | 120 | Dept. of Information Technology,AVCOE,Sangamner |
| 7. | Introduction to Network Security | October 16, 2013 | Dr. V. K. Pachghare | Faculty | 40 | Dept. of Information Technology, TRINITY COE, Pune |

* **AWARDS & HONORS**
* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 1 | Shaswat Pradhan , Mayur More | $10,000 at Hong Kong, for mobile application | Angel Hack Black Berry Start up Challenge | 1 |
| 2 | Pooja K. Pathak, Sanket S. Mehta, Devwrat M. More, Lokesh S. Walase | first prize for best B.Tech project, | SVC Aiya award from Alumniassociation of COEP, 2013 | 1 |

* **MOUs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 1 | Comp IT | VMWare | June 2013 | Teaching joint course to third year students |
| 2 | Comp IT | CDAC | August 2013 | Sponsored project in the computer security |
| 3 | Comp IT | SAS | August1st , 2013 | Joint Research on graph algorithms for community detection and usage based Insurance |
| 4 | Comp IT | Cognizant | September, 25, 2013 | Internships, workshops, projects and scholarships to students |
| 5 | Comp IT | NUS Singapore | May 28, 2014 | Exchange of faculty and students in the Computer engineering and Information Technology area |

* **MEMBERSHIPS OF SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1 | ACM, IEEE, CSI, IETE, ISTE, IARCS, IET, IIPA, ISCB, and IEEE Computer India Vice- Chair | Dr J V Aghav |
| 2 | IEEE, IET | Dr. Jibi Abraham |
| 3 | IEEE signal Processing Society, IETE, ISTE | Dr. Vandana Inamdar |
| 4. | The institution of engineering and technology(IET)-annual member, ISTE life member | Soma Ghosh |
| 5 | IEEE | Dr. Vahida Attar |
| 6 | IEEE, CSI | Dr. Shashi Ghumbre |
| 7 | IEEE, CSI | Dr. V,K, Pachghare |
| 8 | IEEE, CSI | Sunil Mane |
| 9 | IEEE Member, Life Member- CSI | Dr. Pradeep Waychal |
| 10 | ISTE | Mr. Satish Shivaji Kumbhar |
| 11 | CSTA, IACSIT, CSI, ISTE, IARCS | Mr. Deepak Dashrath Kshirsagar |
| 12 | ISTE | Mr. Vaibhav Kashinath Khatavkar |
| 13 | ISTE | Mr. Vijay Motiram Khadse |
| 14 | CSTA, IACSIT, CSI, ISTE, IARCS, IAENG | Mr. Amit Dadarao Joshi |
| 15 | ISTE, AMIEE | Dr. Mrs. Yashodhara V. Haribhakta |
| 16 | ISTE | Mr. Santosh Nanarao Ghotkar |
| 17 | ISTE | Mr. Siddharth Kisan Gaikwad |
| 18 | CSI | Prof. Abhijit A. M. |

* **FACULTY & STUDENT EXCHANGE PROGRAMME**
* **Details of Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the Student** | **Name of the University** | **Duration** | **Details of the Course** |
| 1 | Ashish Dandekar | NUS | 2014-15 | Ph D program |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Sahil Patwardhan | Georgia Institute of Technology | **-** | 2012 |
| Ritika Khandeparkar | University of Pennsylvania | **-** | 2012 |
| Richa Kandlikar | University of North Carolina Charlotte | **-** | 2012 |
| Meetal Bhamre | University of Rochester | **-** | 2012 |
| Prachi Munde | University of Rochester | **-** | 2012 |
| Shravan Aras | University of Arizona | **-** | 2012 |
| Sachin Wathore | **-** | IIT Madras | 2012 |
| Prachi Patil | **-** | IIM Bangalore | 2012 |
| Aditya Padhye | Carnegie Mellon University Australia | **-** | 2012 |
| Pooja Sunder | **-** | IIM Kozhikode | 2012 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Varad Deshmukh | University of California Santa Barbara | - | 2011 |
| Akshay Nikam | Ohio State University | - | 2011 |
| Gaurish Chaudhari | **-** | IIM Bombay | 2011 |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No** | **Name of the faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 1 | Dr. J. V. Aghav | Ph.D, PDF | Professor & Head | Synchronous programming, System Verification, System biology, Software tools, and Cloud Computing. |
| 2 | Dr. (Mrs.) Jibi Abhram | Ph.D | Professor | Computer Networks, Sensor Networks, Network Security, Cloud Computing, Design of Algorithms |
| 3 | Dr. Pradeep Waychal | Ph.D | Professor | software engineering and IT enabled business transformations,innovation |
| 4 | Mr. A.A. Sawant | M.E | **Professor Emeritus** | System Architecture |
| 5 | Dr. (Mrs.) Vandana Inamdar | Ph.D | Associate Professor | Signal Processing,Multimedia security |
| 6 | Dr. S. U. Ghumbre | Ph.D | Associate Professor | Computer Networks,Data Communication,Cyber Laws,Machine Learning Artificial Intelligence,Software Engineering, DOS Object Oriented Modeling |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No** | **Name of the faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 7 | Dr. (Mrs.) V. Z Attar | Ph.D | Associate Professor | Data mining, Machine learning |
| 8 | Dr. Y.V. Haribhakta | Ph.D | Associate Professor | Text Mining, NLP, Sentiment Analysis |
| 9 | Dr. V.k. Pachaghare | Ph.D | Associate Professor | Security in Computing Graphics and Visualization |
| 10 | Mr. Sunil B. Mane | M.Tech | Assistant Professor | Network Security, Security in Computing |
| 11 | Mr. S. P. Gosavi | M.Tech | Assistant Professor | Computer Programming and algorithm |
| 12 | Mr. S. N. Ghotkar | B.E | Assistant Professor | System Programming , Programming Languages |
| 13 | Mr. D. D. Kshirsagar | M.Tech | Assistant Professor | Computer Networks and Network Security, Ontology & Multi-Agent Systems(MAS), Social Networks Security |
| 14 | Mr. S.S. Kumbhar | M.Tech | Assistant Professor | Data Communication and Networking |
| 15 | Mr. Abhijit A | M.Tech | Assistant Professor | Data Structures & Algorithms,Operating Systems |
| 16 | Mr. A. D. Joshi | M.Tech | Assistant Professor | Computer Programming, Advanced Computer Architecture |
| 17 | Mr. A. B. Patil | M.Tech | Assistant Professor | Computer Programming, Computer Graphics |
| 18 | Ms. Aparna Santra | M.Tech | Assistant Professor | Data communication |
| 19 | Mr. S.K. Gaikawad | M.Tech | Assistant Professor | Computer Programming, Data Communication, Computer Network |
| 20 | Mr. V.K. Khatavkar | M.Tech | Assistant Professor | Distributed Systems, Computer Programming |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No** | **Name of the faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 21 | Ms. S N Ghosh | M.Tech | Assistant Professor | System Programming, Computer Programming, ,Compiler Construction |
| 22 | Mrs. T R Pattanshetti | M.Tech | Assistant Professor | Service Oriented Architecture |
| 23 | Mr. V. M Khadse | M.Tech | Assistant Professor | Computer Networks,Network Security |
| 24 | Mr. Nishaya Mhatre | B.Tech | Assistant Professor | Computer programming |
| 25 | Ms. Deepali Gawali | M.Tech | Assistant Professor | Networking,Network security |
| 26 | Ms. Vibhavari Kamble | M.Tech | Assistant Professor | Computer programming |
| 27 | Ms. Payal Thakare | M.Tech | Assistant Professor | Computer programming |
| 28 | Mrs. Charulata Patil | M.Tech | Assistant Professor | Advanced Computing and Communication Technologies, |

**DEPARTMENT OF ELECTRICAL ENGINEERING**

* **INTRODUCTION**

This has been very positive and productive year for the faculty and staff of the Electrical Engineering Department. The department is contributing to the quality technical education through a team of dedicated, research oriented faculty and non-teaching staff. In order to increase the strength of the department, one faculty member Pratap Kumar Koppolu and six lab technicians Jaydatta More, Amey More, Ganesh Pawar, Gangamaslekar, Prashant Potdar and Ramdas Ghate are inducted in the department. Our students and faculty have received awards and recognitions; Prof. Srinivas Baka has received ‘Best Teaching Faculty – Special Jury Award’ from the institute. This year, NBA team has also visited the department for accreditation of UG programme.

In order to meet current industrial requirement and trends, department has signed several MoUs with leading industries like Texas Instruments (EdGate Technology), Inpods Inc. etc. New courses are being continuously added to the curriculum. Innovative teaching techniques such as Virtual Lab, Webinars, Ask a Question, IUCEE Courses, Web based Courses from IIT B, On-line assessments, availability of open source lectures such as NPTEL are being used by many of the faculty in their courses. The department is equipped with state of the art laboratories with modern, sophisticated, advanced instruments, machines and software. Students benefit from these facilities and develop experimental skills. Post graduate and doctoral research students have research laboratories with specialized facilities at their disposal. The departmental classrooms are well equipped with modern teaching aids viz., PC, OHP, CCTV, Wi-Fi connection, biometric attendance register for students.

The department is always enthusiastic in conducting various Courses/ Workshops for the faculty and students to permeate advances in technology. The major activities organized by the department in this year includes, Two week workshop on ‘Analog Electronics’ in association with IIT Kharagpur, one week workshop on ‘Advances on Control Systems’ in association with IIT Bombay, One day workshop on ‘Advance

DSP and Analog Electronics boards’ in association with Texas Instruments etc. The departmental faculty also attended the various workshops organized by institutes like IIT Bombay, IIT Kharagpur and industries. The eminent persons from institutions like IITs, IISC viz. Prof. Padiyar, Prof. Sukumar Mishra and industries like Ritu Sodhi form Fairchild Corporation, Mr. Prakash from Eaton are regularly invited for special talk/ guest lectures. The team of Royal University of Bhutan had visited the department and signed a MoU for design and development of their curriculum. Our staff is also frequently invited for the FDPs and lectures in national and international institutes of repute.

The department is an approved center for full time PhD under QIP. Currently we have six full time Research Assistants and Research Scholars. Apart from working at its own innovative research, the department works together with research and development in industries like ARDE, Eaton, MERC, Whirlpool, Cummins, TCS etc. As a result of this research work, various faculty members published their 29 papers in different reputed National, International Journals / Conferences / Magazines. Prof. S. S. Dambhare visited Canada, Prof. S. R. Kurode visited Germany and Prof. V. S. Bandal visited Malaysia for showcasing their research work. This year, department got 06 R&D projects funded by external agencies. In addition to this, department had fetched the consultancy work of around Rs. 25 Lakh/-. The department has been recently granted with permission under TEQIP – II to develop a Center of Excellence on ‘Smart Renewable Energy Systems’.

We have boost of a strong alumni who contribute largely in education, research and guidance. This year, many of our alumni got admitted for higher studies in the institutes of international repute (Akshay Thakur – Michigan University, Abhijit Datta – IIT Bombay etc.

* **ACADEMIC PROGRAMS**

B. Tech Electrical Engineering

M. Tech Power Systems

M. TechControl Systems

Ph. D. Electrical Engineering

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 03 |
| 2 | Associate Professor | 09 |
| 3 | Assistant Professor | 09 |
| 4 | Professor Emeritus | 02 |
| 5 | Adjunct Professor | 02 |
| Total | | 25 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| Basic Electrical Engineering Lab | * Trolley mounted Experimental   set up:14 No.s   * Electromagnetic set up:10 | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| Microcontroller, DSP and Embedded Systems Lab | * DSP Microcontrolle * Interfacing Kits * Logic Analyser | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| Computer Lab | Number of Machines: 40  SOFTWARES   * Maxwell * MagNet * MultiSim * PSim * LabView * PSCAD * ETAP * MATLAB | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |
| Control Systems Lab | * Rotary Control Modules along with software * A.C. Servomotor study * PLC Trainer Interface * AC Position control * PID Controller * Compensation Design * Potentiometer Error Detector | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |
| Electrical Machines Lab | * Modification in different Experimental Setups * All in one test bed for rotating machine setups * Gaussmeter and Fluxmeter * Tachometer * Earth resistivity tester * Luxmeter | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |
| Power Electronics Lab | * DSP Based Power Modules * 3 kVA Thyristor Convertor * Power supply * Power scope * Power analyser * Buck and Boost DC-DC Converters * Linear Triggering Control Circuits | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| HV Engineering Lab | * DC HV Digital Meter * Digital Power Meter * Impulse Capacitance and Accessories * Impulse Generator * Tan Delta Bridge with accessories * AC DC High voltage Test Set | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |
| Power Systems and Prortection Lab | * Relay Testing Kit * Electrical Power Transmission Line Training System * Power Station Simulation * Power meter, thermometer, Clamp on tester | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |
| Analog and Digital Electronics Lab | * Analog Kits and Digital Kits: 30 * DSO * MSO * AWG * CRO * DC Power Supply * Function generator * LCR Q Meter sorter | Fingerprint based attendance system for staff as well as students.  CCTV cameras  Fire extinguishers |
| Electrical Measurement Lab | * Power analyser * Transduser kit | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| Industrial Electrical Systems Lab  ( Electrical Workshop) | * M.C.B. * A.C.B. * L&T Contactor * Earth Tester | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| UG Project Lab | * Yokogawa 60 HZ D.S.O. * Regulated D.C. power supply * Power analyser * Power electronic power module | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| Electromagnetic Computational Lab | * Maxwell-2D&3D * Rmxprt * Magnet-2D &3D | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| Power System Computational Lab | * PSCAD * Dig-Silent Power Factory 15 Software * MATLAB | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| Control System Simulation Lab | * Matlab * LabView with Interfacing Cards | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| FACTS Lab | * dSPACE 1104 * Inverter Converter Module * Transmission Line Module * Resitive Load * DSO | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |
| Electrical Machines Lab | * Fractional HP Dynamometer (TEQIP II) * PM motor generator set * 3 Kw Wind mill (TEQIP II) * 3 Kw power converter module (AC-DC-AC Converter) (TEQIP II) | Fingerprint based attendance system for staff as well as students. CCTV cameras  Fire extinguishers |

* **EQUIPMENT PURCHASED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Usage** | **Date of purchase / development** | **Resource consumed**  **(Amount in Lakhs)** |
| ANLDL Lab | Texas Analog Starter Kit | UG purpose | 03/10/2013 | 1.05 |
| Microcontroller, DSP and Embedded Systems Lab | Experimental Boards   * TMS320LF28335 * MSP 430 * AVR ATMEGA 328 | UG purpose | 03/10/2013 | 0.89 |
| Real Time Control Lab | Magnetic Levitation | PG education &  Research | March 2014 | 3.82 Lakhs |
| Real Time Control Lab | Coupled tank system | PG education &  Research | March 2014 | 3.75 Lakhs |
| Real Time Control Lab | Industrial EMulator | PG education &  Research | March 2014 | 7.43 Lakhs |
| Real Time Control Lab | Double pendulum system | PG education &  Research | March 2014 | 7.0 Lakhs |
| Real Time Control Lab | dSPACE real time inter face | PG education &  Research | April 2014 | 5.41 Lakhs |
| NRB Project Lab | LabView interfacing Cards for Analog and Digital Signals | M. Tech., Ph.D work based NRB Project | April 2013 | 6.0 Lakhs |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 03 |
| 2 | No of Seminars/ Talks conducted | 19 |
| 3 | No. of publications in National Journals | 01 |
| 4 | No. of publications in International Journals | 13 |
| 5 | No. of Government Sponsored Projects | 7 |
| 6 | Value of the Government Sponsored Projects (In Lakhs) | 609.23 |
| 7 | No. of Consultancy Projects | 04 |
| 8 | No of Ongoing Ph. Ds | 19 |
| 9 | No of Ph. Ds awarded | 01 |
| 10 | No. of Students gone to foreign universities for further studies | 04 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(Amount in Lakhs)** |
| 1 | Development of PMSG | R. T. Ugale | 2014 | Luminious Renewable Energy Systems Pvt. Ltd. | 2 months, Feb & March 2014 | 0.27 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(Amount in Lakhs)** |
| 2 | Third party Technical audit of electrification works inAMC | S.S. Dambhare  R. T. Ugale, V.N. Pande | 2013 | Ahmadnagar Municipal Corporation (AMC) | 10 Months | 7 |
| 3 | Development of Corn Toaster | Dr. D.B. Talange | 2011-14 | Mr. Bipin  Deshpande, Pune | 3years | 9 |
| 4 | Third Party Technical Audit | Dr. S. S. Dambhare | 2013-  on goiong | Municipal corporation  Pune | -- | 7 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 1 | RPS | AICTE | Dr. V.S.Bandal | 11 | Modeling  and controller  design of UPFC  using sliding  mode control technique | Purchase from  Grants started | 2013 |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 2 | RPS | AICTE | Dr. A. A. Dharme, Dr. D. B. Talange | 17.95 | Analysis of Power Quality Problems and  Design of Advanced Power Quality  Assessment System for Smart Grids | Purchase from  Grants started | 2013 |
| 3 | RPS | AICTE | Dr. V. N. Pande, U. M. Mate | 16.2 | Investigation of discrete Sliding mode control  for direct real and reactive power regulation  of wind driven DFIG connected to power grid system | Purchase from  Grants started | 2013 |
| 4 | DST | Government of India | Meera Murali | 18.1 | Development of Laboratory Model  of Unified Power Flow Controller | Work is in final phase | 2010 |
| 5 | RPS | AICTE | Vinaya Ambekar  (PI) Dr. S.S.Dambhare(co-PI) | 12.2 | WAM based power system protection schemes | Purchase from  Grants started | 2013 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 6 | RPS | AICTE | R T Ugale | 10 | Development of novel, energy efficient field assisted brushless permanent magnet synchronous motor for agriculture pumps | Ongoing | 2012 |
| 7 | NRB (Naval Research Board) | NRB, New Delhi | Dr. D.B. Talange | 23.78 | Modeling and Robust Fault Tolerant Controller Design for Autonomous Underwater Vehicles | On going | 2011 |
| 8 | TEQIP | Govt. | Dr. B. N. Chaudhari | 500 | Smart Renewable Energy System | On going | 2013 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | **Total** |
| **National Journal** | **International Journal** | **National Conference** | **International Conference** |
| 1 | Electrical Engineering | 1 | 13 | 10 | 34 | 58 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | "A Novel Artificial Neural Network based Space Vector Modulated DTC and its Comparison with other Artificial Intelligence (AI) Control Techniques” | S. V. Jadhav, B. N. Chaudhari | Journal of Engineering Applications of Neural Networks, Springer Verlag | Volume 383, 2013, |
| 2 | Design, Fabrication,  Testing of Back to Back  converter for DFIG  based Wind Energy  Conversion System | A.P.Deshpande, B.N.Chaudhari, D.B.Talange, V.N.Pande | IJERIA | August-2013 |
| 3 | Real Time Temperature  Control System Using  PID Controller and  Supervisory Control  and Data Acquisition  System (SCADA) | A.R. Laware, D.B. Talange  and Vitthal Bandal | IJAIEM | 2013 |
| 4 | Isolated fly back converter designing , modeling and suitable control strategies | Sanjeevkumar Padey, Dr. S.L.Patil, Mrs Vijaya S. Rajguru | ACEEE | DOI;02.PEIE.2014.5.15 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 5 | Induced pole rotor structure  for line start permanent  magnet synchronous motors | R.T.Ugale, B.N.Chaudhari, S.Baka, S.S. Dambhare  A.Pramanik | IET Electric Power  Applications | Vol 8, Issue 4, pp.131-140, April-14 |
| 6 | Overview of research evolution in the field of line start permanent  magnet synchronous motors | R. T. Ugale, B. N. Chaudhari, A.Pramanik | IET Electric Power  Applications | Vol 8, Issue 4, pp.141-154, April-14 |
| 7 | Discrete sliding mode control strategy for direct real and reactive power regulation of wind driven DFIG", | V N Pande, UM Mate, S Kurode | Int. Journal of Electric Power Systems Research, Elsevier | Vol 100,PP.73-81  July-13 |
| 8 | A hybrid interior rotor high performance line start permanent magnet synchronous motor | R. T. Ugale, B. N. Chaudhari, S. Baka and A. Pramanik | Taylor -Francis journal on Electric Power Components and Systems | Vol 42, Issue.9, Online publication May 2014 |
| 9 | Adaptive distance protection of transmission line in presence of SVC | Singh, Arvind R and Dr. S S Dambhare | International Journal of Electrical Power & Energy Systems 53 | Dec 2013 |
| 10 | Detection of electromechanical wave propogation using synchronized phasor measurement | Prakash Suryawanshi, S S Dambhare, A.Pramanik | Emerging electric power systems | Jan 2014 |
| 11 | Low Voltage Ride through Capability Improvement of DFIG using Feed Forward Current Regulator | D.S.Bankar, D.B.Talange | International Conference on Computer Science and Engineering | July 1-2, 2013 at Los Angeles, CA, USA. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 12 | Fractional Order Modeling and Control of the Depth System of AUV | S.D.Joshi, D.B.Talange | International Conference on Computer Science and Engineering | July 1-2, 2013 at Los Angeles, CA, USA. |
| 13 | Control of Autonomous Underwater Vehicle using Fractional Order PI Controller, | D.B.Talange, S.D.Joshi, S.Gaikwad | IEEE MultiConference on Systems and Control, | August 28-30, 2013, Hyderabad, India, pp.1111-1116. |

* **National Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Observations on P-Q Characteristics of Uniﬁed Power FlowController Embedded Transmission System | Meera Murali V.N.Pande N.Gopalakrishnan | IEI PLC, Journal | Vol.37, Nov.2013 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 1 | “Studies on performance of Direct Self Control of Induction Motor in Field weakening region,” | S. V. Jadhav, Rashmi Talekar | Second International Conference on Electrical and Electronics Engineering & Technology 2013, ICEEET’13 Rasipuram, India | 25th April 2013 | International |
| 2 | “ANN based Control of Space Vector Modulated DTC drive systems and its training algorithms | S. V. Jadhav, Sneha Mehta | Conference on Electrical and Electronics Engineering & Technology 2013, ICEEET’13 Rasipuram, India | 25th April 2013 | International |
| 3 | “Direct Self Control of Induction Motor for Traction Applications” | S. V. Jadhav, Rashmi Talekar | National Conference on Recent Trends in Electrical Engineering,  SIT,Karnataka | September 2013 | National |
| 4 | "Fuzzy Sliding Mode Control applied to Induction Motor Drives based on Space Vector Modulated DTC” | S. V. Jadhav, B. N. Chaudhari | Accepted for IEEE International Conference on Fuzzy Systems, FUZZ-IEEE-2013 Hyderabad. | Accepted | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 5 | Fractional Order PID Controller for Position Control of a DC Motor" | S. Kurode and Amruta Mujumdar | Nat. Conf. on Advanced Elect. Engg at BVCOE Pune, | May 2013 | National |
| 6 | Discrete sliding mode control of seeker scan loop using adaptive reaching Law | S Kurode, S Balajiwale | IEEE Int. Conf. CCA, MSC 2013 at Hyderabad, India, | Aug.28-30, 2013 | International |
| 7 | Fractional order sliding mode control for single link flexible manipulator | A Mujumdar, S Kurode, B Tamhane | IEEE Int. Conf. CCA, MSC 2013 at Hyderabad, India, | Aug.28-30, 2013 | International |
| 8 | Observer based control of flexible link manipulator using discrete sliding modes | Shailaja Kurode, Mohammed Merchant, | IEEE Int. Conf. CCA, MSC 2013, during at Hyderabad, India, | Aug.28-30, 2013 | International |
| 9 | Gear Shift Schedule Optimization and Drive Line Modeling for Automatic Transmission | Chinmay Kirtane, Sachin Ghodke, Shailaja Kurode, Prakash A.K., D.N.Malkhede | Int. Conf. INACOMM 2013 at IIT Roorki, India | Dec.18-20, 2013 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 10 | Gear Shift Schedule Optimization and Drive Line Modeling for Automatic Transmission | Bhagyashri Tamhane and S R Kurode | Int. Conf. INACOMM 2013 | during Dec.18-20, 2013 at IIT Roorki, INDIA | International |
| 11 | Second Order Sliding Mode Control for Single Link Flexible Manipulator | Amruta Mujumdar and Shailaja Kurode, | Int. Conf. INACOMM 2013 at IIT Roorki, India | Dec.18-20, 2013 | International |
| 12 | Estimation of States of Seeker System of a Missile using Sliding Mode Observer and Kalman filter approaches - A Comparative Study- | Bhagyashri Tamhane and S R Kurode | Int. Conf. INACOMM 2013 at IIT Roorki, India | Dec.18-20, 2013 | International |
| 13 | Modeling of Electro-Hydraulic Servo Valve and Robust Position Control Using Sliding Mode Technique | S. R. Kurode, Prasad G. Desai, Ashpana Shiralkar | Int. Conf. INACOMM 2013 at IIT Roorki, India | Dec.18-20, 2013 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 14 | Proportional Actuator from on off Solenoid Valve using Sliding Modes | Sarang P Lunge, Shailaja Kurode, Bhaskar Chhibber | Int. Conf. INACOMM 2013 at IIT Roorki, India | Dec.18-20, 2013 | International |
| 15 | Output-Feedback Control for Stabilization of Slosh using Higher Order Sliding Modes | Joyotiprakash Mishra and Shailaja Kurode | Int. Conf on Advanced Control & Optimization of Dynamic Systems at I.I.T. Kanpur | March 12-14, 2014 | International |
| 16 | Control of Two Link Flexible Manipulator using Higher Order Sliding Modes and Disturbance Estimation | Amruta Mujumdar and Shailaja Kurode, | Int. Conf on Advanced Control and Optimization of Dynamic Systems ACODs 14 at I.I.T. Kanpur | March 12-14, 2014 | International |
| 17 | Protection and FaultIdentification in Presence of Power Swing Blocking/Unblocking Function | Prashant Gawande and Dr. S S Dambhare | Power Energy Society General Meeting -2013 | Jul-13 | International |
| 18 | Measurement-Based Impedance Estimation of Compensated Large power systems | Prachi Pawar and Dr. S S Dambhare | 5th International conference on Computer Applications in Electrical Engineering Recent Advances: SMART GRID Technologies | 02-Oct-13 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 19 | Detection of Wave Propagation Delays using Synchronized Phasor Measurements | Prakash Suryawanshi and Dr. S S Dambhare | 5th International conference on Computer Applications in Electrical Engineering Recent Advances: SMART GRID Technologies | 02-Oct-13 | International |
| 20 | Induction Motor Control for Hybrid Electric Vehicle Application using Hardware in Loop (HIL) Simulation | Samarpita Bakshi and Dr. S S Dambhare | 5th International conference on Computer Applications in Electrical Engineering Recent Advances: SMART GRID Technologies | 02-Oct-13 | International |
| 21 | Suppression of Capacitor Switching Transients Using Symmetrical Structure Transient Limiter (SSTL) and its applications | Tejas Mahurkar , Mrs. Meera Murali | IEEE Conference on Computing of Power, Energy and Communication | April 2014 | International |
| 22 | Testing of boost  rectification of back to back converter  for DFIG | A.Deshpande, B.N.Chaudhari,D.B.Talange, V.N.Pande | PEIE-2014 | Mar-14 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 23 | A Survey of Model Predictive Control in Perspective of Fractional Order Systems | Arti V. Tare, Vishwesh A. Vyawahare, Mandar M. Joshi | International Conference on Industrial Applications of Signal Processing (ICIASP-2013) | 25-27th November 2013 | International |
| 24 | Discrete Approximation Methods for Linear Fractional Order Systems : A Comparative Study | Arti V. Tare, Vishwesh A. Vyawahare, Mandar M. Joshi | Circuits, Systems, Communication and Information Technology Application -2014 | 4-5th April 2014 | International |
| 25 | Design of Model Predictive Control for Linear Fractional-order Systems | Arti V. Tare, Vishwesh A. Vyawahare, Mandar M. Joshi | 11th World Congress on Intelligent Control and Automation at China | Accepted. Presented on 29th June 2014 to 4th July 2014 | International |
| 26 | Design of Fractional-order PD Controller for Unstable   and Integrating Systems | Arti V. Tare, Vishwesh A. Vyawahare, Kamlesh Bhisikar | 11th World Congress on Intelligent Control and Automation at Shenyang, China | Accepted & presented on 29th June 2014 to 4th July 2014 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 27 | Torque ripple minimization techniques in direct torque induction motor drive | V.B.Bhole, B.N.ChaudhariArbind kumar | INACOMM\_2013,IIT Roorkee | 20th,  December 20 13 | ,International |
| 28 | 'Fractional-order Control of Voltage-Source Inverter Using Bode's Ideal Transfer Function | Vinodini V. Bhole, Pallavi Buchade Vishwesh A. Vyawahare | (CSCITA) 2014, Mumbai. | 4th and 5th April,2014 | International |
| 29 | Fractional-order Control of Z-Source Inverter Using Bode's Ideal Transfer     Function | Vinodini V. Bhole, Pallavi Buchade Vishwesh A. Vyawahare | (SCEECS-2014) MANIT Bhopal. | 1st and 2nd March,2014 | IEEE International Students' Conference |
| 30 | Hybrid Filter design for line start permanent magnet synchronous motor | G. S. Chingale and R. T.Ugale | ICAEE’14, VIT Vellore | 9-11, Jan 2014 | International |
| 31 | A new rotor for line start permanent magnet synchronous motor | R. T. Ugale B.N. Chaudhari | IEEE IEMDC 2014, Chicago, USA | 12-14 May 2013 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 32 | A literature survey of planning ,forecasting and reliability analysis of Wind power systems | V.N.Pande  U.M.Mate | Bharati Vidyapeeth | 17-18 May 2013 | National |
| 33 | PR-Delta Characteristics of Unified Power Flow Controller Placed anywhere in Transmission Line | Meera Murali  V.N.Pande  N. Gopalakrishnan | Bharati Vidyapeeth | May 2013 | National |
| 34 | Load Flow Analysis of Radial Distribution Systems | S P Ghanegaonkar  V N Pande | Bharati Vidyapeeth | May 2013 | National |
| 35 | Current Mode Control applied to active clamped forward fly-back converter | V.S. Rajguru  Pratap Koppulu | ICPEC-2013  Dindigul, Tamilnadu | 6-8 Feb 2013 | International |
| 36 | Isolated fly-back converter designing, modeling & suitable control strategy | Sanjeev Pandey (Instru)  V.S. Rajguru | PEIE-2014  Chandigarh, Punjab | 21st March 2014 | National |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 37 | Design, Modeling and analysis of type-III Compensator for two switch forward converter | Shashank Thawkar  V.S. Rajguru | ICAET-2014  Nagapattinam, TN | 2nd-3rd May 2014 | International |
| 38 | Design of auxiliary BLDC motor for 48 V EV/EHV environment | Shinto Antony, R. T. Ugale, M.M. Kane and Naga Chaithanya | 2014 ANSYS CONVERGENCE Conference, Pune, India | 6 May 2014 | National |
| 39 | Design and Development of Brushless DC Motor Textile Industry application | Ponnuru Ch K Chaitanya, R.T. Ugale and B.N. Chaudhari | 2014 ANSYS CONVERGENCE Conference, Pune, India | 6 May 2014 | National |
| 40 | Design and Development of Switched Reluctance Motor for Textile Mill application | Kadam Vaibhav, R.T. Ugale and B.N. Chaudhari | 2014 ANSYS CONVERGENCE Conference, Pune, India | 6 May 2014 | National |
| 41 | State and Disturbance Estimation using Higher Order Sliding Modes for Seeker System | Bhagyashri Tamhane ,Shailaja Kurode, Amruta Mujumdar | Int. Conference on advances on control and optimization of dynamical systems | During March 13-14, 2014 at I.I.T. Kanpur, INDIA | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 42 | Fractional Order Modeling and Control of a Flexible Manipulator using Sliding Modes | Amruta Mujumdar, Shailaja Kurode Bhagyashri Tamhane. | Int. Conf. on American Control Conference accepted | To be held during June At Portland USA, | International |
| 43 | Levant Differentiator Based Output-Feedback Control for Slosh Suppression using Super-Twisting Algorithm | Jyotiprakash Mishra, Shailaja. Kurode | Int. Conf. on Chinese decision and control CCDC 14 accepted | To be held during May 31-june 2, 2014 at Changsha, China | International |
| 44 | Robust Output Feedback Control for Sloshfree Motion using Variable Gain Supertwisting Algorithm | Jyotiprakash Mishra, Shailaja. Kurode | Int. Workshop on Variable Structure Systems(VSS 14,)  accepted | To be held during June 29, July2, 2014 at , Nantes , France | International |
| 45 | Mismatched Disturbance Estimation and Compensation for Seeker System using Higher Order Sliding Modes | Bhagyashri Tamhane ,Shailaja Kurode, Amruta Mujumdar | Int. Workshop on Variable Structure Systems  accepted | To be held during June 29, July2, 2014 at , Nantes , France | International |

* **PATENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of the Faculty/Students** | **Title** | **Application No. &Date** | **Application Status** |
| **1.** | B N Chaudhari, Priyanka Golatgaonkar, Reza M. Motiur | Double Stator double rotor permanent magnet synchronous machine with claw pole arrangement for inner rotor | 209/MUM/2014 | Applied with provisional specifications filed on 21 January 2014 |
| **2.** | B N Chaudhari, Reza M. Motiur, Priyanka Golatgaonkar, | Linear permanent magnet Machines | 208/MUM/2014 | Provisional specifications filed on 21 January 2014 |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 1 | Two week workshop on Analog Electronics | June 2013 | S. M. Kakade | Faculty | 19 | IIT Kharagpur |
| 2 | 1 day workshop on Introduction to Analog Electronics and DSP experimetal Boards | 06 December. 2013 | S. M. Kakade, Dr. S. S. Dambhare | Faculty | 25 | Texas Instruments |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 3 | Advances in Control Systems | 30th December 2013-3rd January 2004 | Dr. V.S.Bandal | Faculty, M.Tech. students and Research Scholar. | 25 | In collaboration with IIT Bombay |
| 4 | Indo-German Winter academy | 21-29 November 2013 | S S Dambhare and B N Chaudhari | UG students | 60 | Along with 4 other institutes |
| 5 | Energy Efficient Campuses | June, 1, 2013 | B. N. Chaudhari | Research students | 54 | Along with TERIE France |
| 6 | NC2E 2014, National conference on Energy and Environment | February 20-22 2014 | B. N. Chaudhari | Faculty and research students | 250 | University of Pune |
| 7 | Maharshtra State Distribution Company Ltd. Pune | October 2013 (1 day) | B. N. Chaudhari | Engineers from MSEDCL | 300 | COEP and MSDCL |
| 8 | Industry-Alumni-Parent Meet | February 7, 2014 | V.S.Rajguru& S.S. Dambhare | Faculty, Students, Industry people, Alumni and Parents | 200 | COEP |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 1 | Analog Electronics | April 2013 | IIT Kharagpur | Faculty | 200 | NMEICT, MHRD, GoI |
| 2 | Workshop on “Power Quality Issues and Remedies” | 15 June 2014 | Dr. G. A. Vaidya,  PVG’s COET, Pune | All | 150 | IEEE |
| 3 | National Conference on Pure & Applied mathematics | 17-19 December 2013 | Prof. R.P.More | All |  | TEQIP |
| 4 | Introduction to advanced analog electronics boards and DSP boards | 5 December2013 | Prof. Suhas Kakade | Faculty | 25 | TEQIP II |
| 5 | Two days CEP course on Simulation of Power System transients | 10-11 December 2013 | Prof. A.M.Kulkarni | Faculty | 20 | CE and QIP |
| 6 | Two days National Seminar on Power System Protection and Automation | 7-8 June 2013 | The Society of Power Engineers, Vadodara Chapter | All | 100 | The Society of Power Engineers, Vadodara Chapter |
| 7 | Two weeks Faculty Development Programme on “Embedded system development using DSP | 20th to 31st May 2013 | Prof. U.M.Chaskar | All | 50 | AICTE |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 8 | Brushless Motor Design, Technology, Control and Application | 06-10 January 2014 | -- | Faculty, Students and Industry people | 30 | TEQIP-II |
| 9 | Labview | 2013 | D.B.Talange | Faculty | 40 | COEP |
| 10 | NBA Workshop (Phase I and phase II ) | March 2014 (4 days) | R. T. Ugale | Faculty | 35 | COEP |
| 11 | AICTE sponsored STTP on “Advances in Power Electronics and Drives” | 9-19 Dec 2013 | R T Ugale | Faculty | 45 | WCE Sangali |
| 12 | International conference on Transformation in Engineering Education | 16th to 18th Jan 2014 | BVB College of Engineering and Technology, Hubli, Karnataka + IUCEE | B N Chaudhari and S S Dambhare | 200 | TEQIP |
| 13 | Eagle | One year  (July 2013- June 2014) | Dr.S.Agashe | SRK/AAD/SVU/SMK/BNC/SSD | 80 | Kirloskar |
| 14 | 5th International conference on computer applications in power system - IIT Roorkee | 3-5 October 2013 | Prof. N.P.Padhy | Dr. Sanjay S.Dambhare | 300 | Department of Electrical Engineering, IIT Roorkee |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 15 | IEEE Power Energy Society General Meeting 2013, | 21-25 July 2013 | Paula Traynor,  Cananda | Dr. Sanjay S.Dambhare | 2000 | IEEE |
| 16 | SOLARCON Exhibition | 1-3 August 2013 | R.T. Ugale | Researchers, industrial persons | 400 | SRES |
| 17 | Simulation of Power Electronics circuits | 8-9 October  2013 | IIT Bombay | Pratap Kumar | 200 | TEQIP |
| 18 | Simulation of Power Electronics circuits | 8-9 October  2013 | IIT Bombay | V.S. Rajguru | 200 | TEQIP |
| 19 | NC2E-2014 | 20th to 22nd Feb 2014 | University of Pune | V.S. rajguru | 500 | University of Pune |
| 20 | International Interactive Workshop on Effective Academia Leadership Strategies- A global perspective” | 12-14th December 2013 | SEGI University, Kuala Lumpur, Malaysia | V. S. Bandal | 400 |  |
| 21 | Workshop on “Innovations in Health, Immunization & Cold Chain System in India” | 20-21st March 2014 | Patana, Bihar | V. S. Bandal | 100 | UNICEF Bihar, /CIPS Hyderabad |

* **Details of the Lectures/Talks organized by the department**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 01 | SMART GRID in India | Mr. V. L. Sonavane | Member, MERC | 85students + 6faculty members | Room No. 101  (EED, COEP) |
| 2 | Numerical Chatter during the Simulation of Switching Events | Prof. Anil Kulkarni, Professor, Dept of Electrical Engg. IIT Bombay | Faculty/ M.Tech. Students | 35 | EED, Room no 104 |
| 3 | Power Plant Engineering | Mr. Aravind Paranjape, visiting faculty. | T. Y. B.Tech. | 40 | EED, Room no 104 |
| 4 | Smart Grid | Mr. Arvind Shinde | M. Tech. and T.Y. | 30 | EED ,Room no 104 |
| 5 | Solar PV | Prof. Maitee | SPG | 20 | EED ,Room no 104 |
| 6 | Wind Power | Dr. Prashant Shingare, Emerson, Mumbai. | UMM | 60 | EED |
| 7 | Plasma Technology | Prof. Max Babi | B. Tech. and M. Tech. students | 42 | EED |
| 8 | Power Plant Electrical systems | Mr. Dinesh Junghare,  Black and Veach Co., Pune | TY and final year B Tech students | 78 | EED |
| 9 | Ask a question (every Thursday ) | All IIT Bombay Faculty | Faculty/students | 80 | EED conference Hall |
| 10 | QEE pilot program | Dr. Deepa Venkitesh | Second year Electrical Students | 80 | Mini auditorium |
| 11 | Webinar on Research in Power System | Dr. Sharma Mulukutla | Faculty, Research Scholars and UG&PG students | 30 | EED Room-04 |

* **Details of the Lectures/Talks delivered by the department faculty**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | Energy Efficient PM synchronous motor- Case study at COEP | R. T. Ugale | UG and research students | 60 | Mini auditorium |
| 2 | Smart Grid : Wide area measurement Based Control, Protection and Automation | Sanjay S.Dambhare | Faculty and Research Scholars | 35 | K. K. Wagh Institute of Engg Education and Research, Nashik |
| 3 | Smart Grid Issues and challenges | Sanjay S.Dambhare | Faculty and Research Scholars | 30 | Dr. Babasaheb Ambedkar Technological University, Lonere Raigad (MS) India(Dec.2013) |
| 4 | Power electronics in Smart Grids, HVDC and FACTS and Grid Integration | Sanjay S.Dambhare | Faculty and Research Scholars | 32 | RVCE, Bangalore-59 |
| 5 | Resource person for one day workshop on “Innovation | Sanjay S. Dambhare | Faculty and Research Scholars | 30 | Padmashri Dr. Vithalrao Vikhe Patil College of Engg,Ahmednagar |
| 6 | Resource Person for AICTE sponsored Two Days Workshop on “Emerging Trends and Applications of Solar Systems- Solar Energy &Smart Grid | Sanjay S.Dambhare | Faculty and Research Scholars | 40 | YCCE, Nagpur |
| 7 | Resource person for National Level Workshop on “Smart Grid Technologies | Dr. Sanjay S.Dambhare | Faculty and Research Scholars | 31 | PES’s Modern college of Engineering , Pune |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 8 | Resource Person for AICTE sponsored National level seminar on “Artificial Intelligence and its Application in Transmission line Protection | Sanjay S.Dambhare | Faculty and Research Scholars | 35 | G. H. Raisoni Institute of Engg and Technology Pune |
| 9 | Resource person for “A state Level Two Days Workshop on PSCAD | Dr. Sanjay S.Dambhare | Faculty and Research Scholars | 36 | S. B. Patil College of Engineering , Indapur, Dist: Pune |
| 10 | Resource person for Two days workshop on “Smart Grid Issues and Challenges | Dr. Sanjay S.Dambhare | Faculty and Research Scholars | 45 | Dr. Babasaheb Ambedkar Technological University, Lonere Raigad (MS) |
| 11 | Resource person for A six week customized course on Communication systems: Inverters, Resonant Pulse Converters, Cycloconverters, AC voltage controllers in power systems | Dr. Sanjay S.Dambhare | Faculty and Research Scholars | 42 | DIAT, Girinagar, Pune |
| 12 | FDP on Virtual Lab | Srinivas Baka | Faculty and Research Scholars | 60 | Mini auditorium |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 13 | Maths in Latex | S. R. Kurode | Students and faculty | 33 | AISSPMS IOIT FDP on " Advanced Control " jointly organized by COEP and IITB during Dec 30, 13- Jan4’14 |
| 14 | Control of Underactuated Systems using Sliding Modes | S. R. Kurode | Faculty | 30 | FDP on " Advanced Control " jointly organized by COEP and IITB under TEQIP at COE Pune during Dec30, 13- Jan4, 2014  COE Pune |
| 15 | Slosh-free motion using SMC | S. R. Kurode | Faculty | 30 | FDP on " Advanced Control " jointly organized by COEP and IITB under TEQIP at COE Pune during Dec30, 13- Jan4, 2014 COE Pune |
| 16 | Maths made simple in LaTex | S. R. Kurode | Students and faculty | 28 | AISSPMS COE Pune |
| 17 | Keynote speech on utility of d-SPACE | S. R. Kurode | Students and faculty | 29 | SAE COE Pune |
| 18 | Digital Control Systems | S. R. Kurode | Students and faculty | 32 | PCOE Kondhva, Pune |
| 19 | Introduction to Variable structure control and SMC | S. R. Kurode | Students and faculty | 28 | AISSPMS COE Pune |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 20 | Expert lecture on “NBA-An Outcome Based Education Philosophy” on 25th July 2013. | Dr. Vitthal S. Bandal | Faculty | 40 | YASHADA Pune, |
| 21 | Expert lecture on “NBA-An Outcome Based Education Philosophy” on 24th August 2013. | Dr. Vitthal S. Bandal | Faculty | 45 | Jayam College of Engineering, Dharampuri (Tamilnadu), |
| 22 | 1. Expert lecture on “NBA-An Outcome Based Education Philosophy” on 28th September 2013. | Dr. Vitthal S. Bandal | Faculty | 45 | KJ’s Educational institutes Trinity college of Engineering, Pune, |
| 23 | 1. Expert lecture on “NBA-An Outcome Based Education Philosophy” on 4th October 2013. | Dr. Vitthal S. Bandal | Faculty | 50 | YASHADA Pune, |
| 24 | 1. Expert lecture on “Discrete PID Controller” in Two-Days Workshop on “Applications of Microcontroller in Electrical Engineering” held during 10-11th October 2013. | Dr. Vitthal S. Bandal | Faculty | 55 | B.S. College of Engineering, Narhe, Pune |
| 25 | 1. Expert lecture on “NBA-An Outcome Based Education Philosophy” on 8-9th November 2013. | Dr. Vitthal S. Bandal | Faculty | 40 | Jayam College of Engineering, Dharampuri (Tamilnadu), |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 26 | 1. Expert lecture on “NBA-An Outcome Based Education Philosophy” on 27th November 2013. | Dr. Vitthal S. Bandal | Faculty | 45 | Zeal College of Engineering Pune, |
| 27 | 1. Expert lecture on “PSS design based on Multirate sliding mode Control Strategies” on 13th December 2013. | Dr. Vitthal S. Bandal | Faculty and Research Scholars | 40 | University of Putra Malaysia Kuala Lumpur, Malaysia, |
| 28 | 1. Expert lecture on “PSS design using Mulirate Sliding Mode Control Strategies” during One week CEP/QIP course on “Advances in Control-System" during 19- 23 December 2013. | Dr. Vitthal S. Bandal | Faculty and Research Scholars | 30 | IIT Bombay, |
| 29 | 1. Expert lecture on “PSS design using Mulirate Sliding Mode Control Strategies” during One week CEP/QIP course on “Advances in Control-System" conducted by IIT Bombay, (Maharashtra) during 30th December 2013 to 3rd January 2014. | Dr. Vitthal S. Bandal | Faculty and Research Scholars | 35 | COE Pune |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 30 | 1. Expert lecture on 2. “Research Methodology” on 18th January 2014. | Dr. Vitthal S. Bandal | Faculty and Research Scholars | 35 | Bharati Vidypeeth’s College of Engineering Kolhapur |
| 31 | 1. Expert lecture on “Electrical Systems” in SNCU training conducted by NHSRC, New Delhi during 17-23 February 2014. | Dr. Vitthal S. Bandal | -- | 40 | Bangalore |
| 32 | 1. Expert Lecture on “Solar Photovoltaic Systems- A project Under NRHM Maharashtra” in two days Workshop on “Innovations in Health, Immunization & Cold Chain System in India” conducted during 20-21st March 2014. | Dr. Vitthal S. Bandal | Cold chain officers/ Researchers/ Medical Doctors |  | Patana, Bihar |
| 33 | 1. Expert lecture on “Electrical Systems” during International training of Cold chain officers conducted by UNICEF, New Delhi during 21st April to 3rd May 2014. | Dr. Vitthal S. Bandal | Cold chain officers of Afghanistan |  | DDHS Pune (India) |

* **BOOKS PUBLISHED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the author** | **Title of the book** | **Name of the publisher** | **Date of publication** |
| 1. | Dr. A. Pramanik | Electromagnetism (Volume-1) | PHI Learning Private Limited | 07/01/2014 |
| 2. | Dr. A. Pramanik | Electromagnetism (Volume-2) | PHI Learning Private Limited | 07/01/2014 |
| 3. | Dr. A. Pramanik | Electromagnetism Problems with Solutions(Third Edition) | PHI Learning Private Limited | 15/10/2013 |

* **AWARDS & HONORS**
* **For Faculty**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Name of the Award** | **Description** | **No. of Awards** |
| 1 | Dr. B. N. Chaudhari | Cognizant Best Teacher Award | Cognizant | 01 |
| 2 | Srinivas Baka | Best Teacher  Special Jury Award- | COEP | 01 |
| 3 | Mrs. Meera Murali | 2nd prize for best paper at Annual Technical Meet | -- | 01 |
| 4 | U.M. Mate | Nominated for Eni Awards, Italy. | -- | -- |
| 5 | Vinaya A Ambekar | Nominated for Institute best teacher award | COEP | -- |
| 6 | S. R. Kurode | Session Chair,IITK | -- | -- |
| **Sr.**  **No** | **Name of the Faculty** | **Name of the Award** | **Description** | **No. of Awards** |
| 7 | Dr. Sanjay S. Dambhare | Session co chair IIT-Roorkee | 5th international conference on computer applications in Electrical Engineering, Recent advances : Smart Grid technologies | -- |
| 8 | S. R. Kurode | Biography Published in Marquis’s Who’s Who in the world | 31 st Edition July 2013 | -- |
| 9. | U.M.Mate | Invited as a reviewer for the international journal, Elsevier. | -- | -- |

* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 1 | Pawar Pralesh Balu | * Gold medal at Cumins * Gold medal at COEP ZEST’14 * Bronze medal at AISSMS | Member of COEP Kho-kho team won | 03 |
| 2 | Palkar Tushar Prakash | winner | Boat Club :86 the regatta Kayak-Ballet Organiser | -- |
| 3 | ZAMBARE NIKHIL MADHUKAR – Team Captain | Runner up | HANDBALL | 01 |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 4 | Dhongade Yuvraj Madhukar | -- | * Won 1st prize for the Direction of Karandak winning play in Firodiya Karandak 2014 * Member of COEP Cultural Team for last 4 years | 01 |
| 5 | Sawant Abhijit Dayanand | -- | * Won 1st prize for the Script Writing of Karandak winning play in Firodiya Karandak 2014 (held in Feb-March 2014) * Member of COEP Cultural Team for last 4 years | 01 |
| 6 | Piyush B Umre | Won 1st prize for Choreography and Tron dance | Member of Firodiya Karandak 2014 (held in Feb-March 2014) | 01 |
| 7 | Vaibhav Nikam | Gold medal | ATHLETICS(100m hurdles) September 2014 | 01 |
| 8 | Ajeet U Wankhede  Sameer Deshmukh  Vinaya Jadhav  Jyotiprakash  Pandaarchit Moghe Ajeet U Wankhede | Best innovative idea award | Robocon March 2014 Balewadi | 01 |
| 9 | Vishal Zope | 2nd prize | Mindspark 13 Feb 2013,Technocraft Booth Project Competition, March 2014 | 01 |
| 10 | Kaustubh Daware  Sameer Deshmukh  Nilesh Dhoot  Lekhraj Desai | 2nd prize | Technocraft Booth Project Competition Mar 2014 | 01 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 11 | Karan Agrawal | Head Of Event In Mindspark’13-14 | Circuit Fixer2 ,Eesa Representative | 01 |
| 12 | Yadav Girish Ashok | COEP KHO-KHO Team (Boys) | * Gold Medal(Zest’14) * Gold Medal Cummins * Bronze Medal (AISSMS) | 03 |

* **MOUs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 1 | EED | MULTISCOPE | 7th May 2013 | Joint development to set up and enrich new experiments |
| 2 | EED | Inpod Inc. | 27th January 2014 | For development of software for online teaching and assessment |
| 3 | EED | Duale Hochschule Baden Wuerttemberg  (DHBW) | 12th June, 2013 | Exchange of faculty members for lecture, joint research and sharing of experience, exchange of publications in fields of interest of both universities and exchange of students for study aboard, internship and participation in education programs and other activities as mutual agreed |
| 4 | EED | National University of Singapore | 25th June, 2013 | To identify opportunities for academic faculty/student exchange and joint research and development in discipline of mutual interest. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 5 | EED | Mondragon Unibertsitatea/Mondragon  University –Spain | 24th July, 2013 | Development of mutually beneficial academic programs and courses, coordination of academic staff mobility for purpose of teaching, research and training, mobility programs for study and research, joint supervision of research students, collaboration in international master’s and Ph D programs between both institutions |
| 6 | EED | Council of Scientific and Industrial  Research | 6th August, 2013 | Exchange of scholars and professional staff members, exchange of students for study and research at both institutions, promotion of joint research projects in the field of interest, exchange of research materials and information’s and joint conference/workshop courses. |
| 7 | EED | Eaton Industries Pvt Ltd | 16th September, 2013 | Sponsoring COEP and Bhau Institute Igniting Innovators of India |
| 8 | EED | EdGATE Technologies | 17th September, 2013 | To establish and develop Embedded Systems Lab |
| 9 | EED | Association Of Indian Forging Industry  (AIFI) | 17th October, 2013 | Introduce necessary curricula changes as proposed between the parties to start various courses such as graduation with forging as elective subject, certificate course in Forging Technology, Post graduation inForging Technology, etc. |
| 10 | EED | Illinois Institute &Technology, USA | 24th October, 2013 | Facilitate the admission of qualified students, encourage visit of faculty, foster exchange of academic publications, promote other academic activities etc |
| 11 | EED | Purdue University | 28th October, 2013 | Establish Letter of Intent to foster international cooperation in education and research |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 12 | EED | Tennessee Tech University | 1st November, 2013 | Exchange of faculty members for lectures , joint research, exchange of publication, exchange of students to studying, internship etc |
| 13 | EED | Seneca College of Applied Arts &  Technology (Seneca) Canada | 1st November, 2013 | Promote cooperation in the fields of teaching and research, exchange of faculty and students, organizing seminars, conference etc |
| 14 | EED | Royal University Bhutan | In process | To design their curriculum  ( in Process) |

* **MEMBERSHIPS OF SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1 | IET, IEEE | Dr. D. B. Talange |
| 2 | IE,IEEE,IETE,ISTE | Dr. S. S. Dambhare |
| 3 | ISTE, IE(I), SSI | Dr. V. S. Bandal |
| 4 | IET, ISTE, IE(I) | Dr. V. N. Pande |
| 4 | IET, IEED, IE(I), ISTE | Dr. A. A. Dharme |
| 5 | IET, IEED | Dr. S. R. Kurode |
| 6 | IET | S. M. Kakade |
| 7 | ISTE | S. V. Jadhav, R. T. Ugale, A. P. Deshpande, B. N. Chaudhari |
| 8 | IEEE | R.T.Ugale, A. P. Deshpande |
| 9 | IEEE | Snehal V Unde |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 10 | IEEE, ISTE | V S Rajguru |
| 11 | ISTE | Meera Murali |
| 12 | ISTE | S P Ghanegaonkar |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Mr. Rohit Joshi | Georgia Tech. Atlanta, USA | -- | May 2013 |
| Ms. Ankita Patil | Univ. of Illinois, USA | -- | May 2013 |
| Mr. Atre Mrunmay | Arizona State University, Phoenix, USA | -- | August 2013 |
| Mr. Dhamradhikari | Arizona State University, Phoenix, USA | -- | August 2013 |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Areas of Interest** |
| 01 | Dr. D. B. Talange | Ph.D. (System and Control) | Professor | Control of large scale systems, Fast output feedback controls, Control of autonomous vehicles. Power Electronics |
| **Sr. No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Areas of Interest** |
| 02 | Dr. B. N. Chaudhari | Ph.D. (Elect.Engg.) | Professor | Permanent Magnet Machines and Drives, Energy Systems. |
| 03 | Dr. S. S. Dambhare | Ph.D. (Elect.Engg.) | Professor | Power System Protection, Analysis, FACTs and HVDC, Transient Studies, Smart Grid, Real Time Simulation, Energy Audit. |
| 04 | Mrs. V. S. Rajguru | M.E. (Control System) | Associate Professor | Power electronics converters |
| 05 | Dr. (Mrs.) A. A. Dharme | Ph.D. (Elect.Engg.) | Associate Professor | Demand side energy management, High Voltage Engineering |
| 06 | Dr. S. R. Kurode | Ph.D. (System and Control) | Associate Professor | Sliding mode control, Robust control of under-actuated systems, Output feedback control. |
| 07 | Mrs. S. P. Ghanegaonkar | M.E. (Power System) | Associate Professor | Power System analysis, Power distribution Systems, Engineering Optimization . |
| 08 | Mr. R. T. Ugale | M.E. (Power System) | Associate Professor | Permanent magnet Machines |
| 09 | Mrs. U. M. Mate | M.E. (Power System) | Assistant Professor | Power Systems, Wind Power, Wind Estimation |
| 10 | Dr. V. S. Bandal | Ph.D. (System & Control) | Assistant Professor | Sliding mode Control, Stabilizing Control of power system. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Areas of Interest** |
| 11 | Dr. V. N. Pande | Ph.D. (Elect.Engg.) | Assistant Professor | Power system analysis, Optimization, Power system stability |
| 12 | Mrs. S. V. Jadhav | M.E. (Control System) | Assistant Professor | Sliding mode control of drives, Direct torque control. |
| 13 | Mr. A. P. Deshpande | M.E. (Control System) M.E. (Instrumentation) | Assistant Professor | Power quality analysis. |
| 14 | Mrs. Meera Murali | M.E. (Power System) | Assistant Professor | Power Systems, FACTS |
| 15 | Mrs. V. B. Bhole | M.E. (Control System) | Assistant Professor | Drives. |
| 16 | Mrs. A. V. Tare | M.E. (Control System) | Assistant Professor | Control Systems |
| 17 | Mr. Srinivas S. Baka | M.Tech (Power System) | Assistant Professor | Power Electronics and Drives |
| 18 | Mr. Suhas S. Kakde | M.Tech (Electronics) | Assistant Professor | Image Processing, Pattern Recognition, Signal Processing, Embedded systems, Electronic Circuit Design |
| 19 | Ms. Snehal Unde | M.Tech (Power System) | Assistant Professor | Power System Protection, Analysis, FACTs and HVDC, transient studies. |
| 20 | Mrs. Vinaya Ambekar | M.Tech (Power System) | Assistant Professor | Power System Protection, Analysis, FACTs and HVDC, transient studies, Switch Gear, Industrial Systems. |
| 21 | Mr. Pratap Koppulu | M.Tech. (Control System) | Assistant Professor | Control Systems. |

**DEPARTMENT OF ELECTRONICS & TELECOMMUNICATIONS**

* **INTRODUCTION**

Established in 1948, the department has always remained on forefront in producing quality engineers/technocrats who brought laurels to the department and institute. Department has excellent infrastructure facilities and resources in the form of modern equipments, faculty, library & references which always prove useful to our UG and PG students and to other technical institutes or industries in and around. Department has maintained a rapport with the industries and R & D organizations. The department plays a pivotal role in laying down road maps in the area like signal processing, communication, machine vision, microelectronics etc.

Department of E and TC, over the years, has been the destination of best students across Maharashtra both at UG and PG levels. This year 11 new research scholars admitted under Ph.D. program affiliated to University of Pune and 8 are awarded Ph.D. ,the number of outgoing Ph.D.s in the department has gone to 50, the highest in the Institute.

Prof. Mrs. P.P. Rege and Dr. S.P. Mahajan are working as faculty mentor for EAGLE program of the institute. Mrs. V.N. More and Mr. P.P. Tasgaonkar are working as coordinators for Training program for T.Y. (E & TC) students under AICTE- BSNL MoU to enhance core competency in the field of Telecommunications.

Department of E & TC received center of Excellence from TEQIP Phase-II worth Rs. 5 crore in the area of Signal and Image Processing under leadership of Prof. M. S. Sutaone and Prof. Mrs.M. A. Joshi.

State of the art equipments are purchased in Measurement, Analog and Digital Communication, Mobile Communication, Project Lab, Internet Lab, VLSI and Embedded System Lab worth Rs. One Crore Fifty Two Lacs through Institute and TEQIP-Phase II funding.

Department has ongoing eight R & D research projects from various organizations like BRNS, DST, Rajeev Gandhi Research Scheme, BCUD, UGC, ISRO, and AICTE worth Rs. One Crore Thirty Eight Lacs.

Department of E & TC have setup the Center for Calibration of Electronic

Auto Rickshaw Meter and Calibrated 9500 meters. Prof. Mrs. M. A. Joshi is

currently Chair of IET, Pune LN. She is also instrumental in making COEP,

An Academic Affiliate Partner of The IET, UK. Dr. Ms. Metkar is also

working as the treasurer of the IET Pune Network.

Students of E&TC Dept. are engaged in curricular as well as extra-curricular activities apart from participation in national and international conferences, E&TC students are equally involved in sports and athletics. E&TC Kayaking students have won more than 10 medals in Kayaking (AIU, MACK) and rowing competitions. E & TC athletes have won around 7 medals in state, zonal and national races. E&TC students have also exhibited great skill and ability in technical fests- PULSE’14, MINDSPARK’13, TECHFEST’14 & cultural events such as Purushottam Karandak, Firodiya,. E&TC students were also a part of the college team for Robocon’14, where the team won several awards.

All-in-all, the department of Electronics and Telecommunication, students and faculty, is the intellectual hub, well-involved in extracurricular activities and hence remain the foremost choice of fresher’s.

* **ACADEMIC PROGRAMS (B. TECH/ M. TECH/ PH. D)**

B.Tech. Electronics & Telecommunications

M.Tech Electronics & Telecommunications-Signal Processing

M.Tech Electronics &Telecommunications-Wired & Wireles Communications

M.Tech Electronics -Digital Systems

M.Tech Electronics -VLSI & Embedded Systems

Ph.D. - Electronics & Telecommunications

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 05 |
| 2 | Associate Professor | 04 |
| 3 | Assistant Professor | 12 |
| 4 | Professor Emeritus | 01 |
| 5 | Adjunct Professor | 02 |
| Total | | 24 |

* **MAJOR EQUIPMENTS & FACILITIES**
* Cadence full suite for backend and front end ( 10 license copy) analog and Digital and Mixed Signal Design
* Mentor Graphics Tools for synthesis tool ( 5 license)
* 8051 development board universal development board peripherals
* Kintex -7 FPGA development board
* ISE suite 14.2 software ( server based license 25)
* Test and Measurement equipments in the domain of RF/Microwave/optical Communication, Audio/Video Engineering
* Xilinx and Altera Electronics Design Suite for Digital Systems with Reconfigurable Platforms
* Device and Process level VLSI Design Software platform
* Embedded and DSP Processor Platforms of various architectures
* Vector Network Analyzer
* Vector Signal Generator
* Signal and Spectrum Analyzer
* EMI Test Receiver
* SDR and Receiver, 3G Communication Systems
* Analog and Digital Communication Equipments
* **EQUIPMENT PURCHASED**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Date of purchase / development** | **Resource consumed**  **(Amount in Lakhs)** |
| VLSI | * 1 Mentor Graphics Software Front End Bundle + ARTIX and ZYNQ Development Boards * Cortex –M3 Development Kit | 26/03/2014  18/02/2014 | 4.42  0.49 |
| Communication Lab | * SDR & Receiver , 3 G Communication System , Dual SIM Mobile Phone * Desktop Computers * Desktop Computers * Analog /Digital Communication Kit * 20 MHz Analog CRO * 30MHz Analog CRO * 10 MHz AM-FM Function Generator * Arbitrary 20 MHz Function generator | 19/07/2013  03/03/2013  03/03/2013  05/03/2014  02/01/2014  02/01/2014  17/01/2014  02/01/2014 | 6.42  10.08  24.86  8.98  0.42  0.44  0.33  0.39 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 01 |
| 2 | No of Seminars/ Talks conducted | 09 |
| 3 | No. of publications in National Journals | 05 |
| 4 | No. of publications in International Journals | 18 |
| 5 | No. of Government Sponsored Projects | 06 |
| 6 | Value of the Government Sponsored Projects (In Lakhs) | 600 |
| 7 | No. of Consultancy Projects | 02 |
| 8 | No of Ongoing Ph. Ds | 50 |
| 9 | No of Ph. Ds awarded | 08 |
| 10 | No. of Students gone to foreign universities for further studies | 08 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(Amount in Lakhs)** |
| 1 | Verification of technical specifications of Equipments in RTO, Pune | Dr. A.M.Sapkal  Dr. S.P.Mohani, Dr. R.A.Patil | 10th March, 2014 | RTO, Pune Branch | 06 Months | 3 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(Amount in Lakhs)** |
| 2 | Mobile Jammers | Dr. A.M.Sapkal,  Dr. Mrs. Radhika D. Joshi, Swapnil Mali | Nov-13 | Central Jail Authority, Maharashtra State | 01 Year | 2 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/**  **Government** | **Name of coordinator** | **Amount sanctioned**  **In Lakhs** | **Title of the project** | **Funds Utilization**  **Position as on today**  **(In Lakhs)** | **Year in which the Grant was received** |
| 1. | TEQIP-II | World Bank / Govt. | Dr. M. S. Sutaone  Dr. Mrs. M. A. Joshi | 500 | COE in Signal and Image Processing | 12 | 2013 |
| 2. | BRNS | Govt. | Dr. M.A. Joshi(PI), Dr. A.M. Sapkal(Co-PI) | 22 | Development of system for authentication of personal identity based on fusion of face & palm images | 14 | 2010-2013,Ongoing |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/**  **Government** | **Name of coordinator** | **Amount sanctioned**  **In Lakhs** | **Title of the project** | **Funds Utilization**  **Position as on today**  **(In Lakhs)** | **Year in which the Grant was received** |
| 3. | DST | Govt. | Dr. (Mrs.)P.P.Rege | 45 | Investigation into laser hardening of C.I.cylinder liner & process assessment through thermography | 45 | 2011 |
| 4. | DRDO-ISRO-STC Cell, University Pune. | Govt. | Dr. Pratibha Shgingare | 11.54 | Digital Elevation Model (DEM) Fusion | 07 | Jan.2013  Ongoing |
| 5. | AICTE | Govt. | Dr. P. P. Bartakke | 16 | Machine Vision System for Material Surface Inspection in Industrial Applications | 13 | May 2013  Ongoing |
| 6. | AICTE | Govt. | Dr. Metkar Shilpa P. | 6.2 | Security Techniques in Speech , Iamge and Video Signal | 4 | May 2013  Ongoing |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | **Total** |
| **National Journal** | **International Journal** | **National Conference** | **International Conference** |
| 1 | Electronics & Telecommunications | 05 | 18 | 06 | 15 | 44 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Title of Paper** | **Authors Name** | **Name of Journal** | **Publication Details** |
| 1 | Detection and Classification of Microcalcification Using discrete Wavelet Transform | Anuradha Phadke ,Dr. Priti Rege | International Journal of Trends and Technology in Computer Science (IJETTCS) | Vol 2,pg.130-134,8/1/2013 |
| 2 | Literature Survey on Digital Elevation Model | Dr. Pratibha shingare, Mr. Sumit Kale | International Journal of Modern Engineering Research | 2413,2249-6645,7/31/2013 |
| 3 | Improved Active Contour Model for Boundary Detection | Dr. Pratibha shingare, Madhuri Nagare, Chaitrali Joshi | International Journal of Enhanced Research In Science Technology and Engineering. | -- |
| 4 | Image Fusion Methods and Quality Assessment Parameters | Deepali Sale, Dr. M.A.Joshi | Asian Journal of Engineering and Applied Technology | pp.41-46,ISSN 2249-068X,January-June, 2013 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Title of Paper** | **Authors Name** | **Name of Journal** | **Publication Details** |
| 5 | Mobile Service Implementation for the Blind Using ARM | Dr. Pratibha Shingare, Kajal Brahmkstri, Rachana Sane and tanweer Shemna | Institute of Research and Jourals SCIEI- International Academic Conference on Electrical, Electronics and Communication Engineering , Published in edited vol for Springer, Inderscience, Cambridge | -- |
| 6 | Image Fusion for Medical Image Retrieval | Deepali Sale, Dr. M.A.Joshi | International Journal of Computational Engineering Research | ISSN 2250-3005,8/1/2013 |
| 7 | Multispectral Palm Image Fusion: A Critical Res View | Deepali Sale, Dr. M.A.Joshi | International Journal of Advances in Engineering & Technology | ISSN: 2278 – 1323,JUNE2013 |
| 8 | Image Fusion Techniques for Multispectral Palm Image Enhancement | Deepali Sale, Dr. M.A.Joshi | International Journal of Electronics Communication and Computer Engineering | ISSN 2249 - 071X, ISSN (Print): 2278 – 4209,6/1/2013 |
| 9 | A Novel Approach for Efficient Extrication of Overlapping Chromosomes in Automated Karyotyping | Mousami Munot, Dr. Jayanta Mukhopadhyay, Dr. Madhuri Joshi | Springer Journal of Medical and Biological Engineering and Computing | pp. 1- 14,August 2013 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Title of Paper** | **Authors Name** | **Name of Journal** | **Publication Details** |
| 10 | Efficient Karyotyping of Metaphase Chromosomes Using Incremental Learning | Prachi Joshi, Mousami Munot, Dr. Parag Kulkarni, Dr. Madhuri Joshi | The IET Journal of Science Measurement and Technology | pp. 287 – 295,9/1/2013 |
| 11 | Video Based Real Time Face Recognition System | Aditya Gupta, Madhuri Joshi, Dr.Shilpa Metkar | InternatIonal Journal of Computer Science and technology | ISSN : 0976-8491 (Online) | ISSN : 2229-4333 (Print),Jan - March 2014 |
| 12 | Feature-level Fusion of Palm Print and Palm Vein for Person Authentication Based on Entropy Technique | Dhanashree Vaidya, Sheetal Pawar, Dr. Madhuri A. Joshi, Dr. A. M. Sapkal, Dr. S. Kar | International Journal of electronics & communication technology | ISSN : 2230-7109 (Online) | ISSN : 2230-9543 (Print),Jan - March 2014 |
| 13 | Delay Reduction Techniques for Dynamic MANET on-demand Routing Protocol | Dr.Radhika Joshi, Azad Sharma | International Journal of Advanced Research in Electrical, Electronics and Information Engineering (IJAREEIE) | pg.2278-2284,ISSN (print): 2320 - 3765, ISSN (online): 2278 - 8875,6/1/2013 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Title of Paper** | **Authors Name** | **Name of Journal** | **Publication Details** |
| 14 | Efficient FFT/IFFT Implementation Technique for OFDM on FPGA | Dr.S. P. Mohani, Shreyas Deshmukh, M. S. Sutaone | International Journal of Electronics and Communication Technology (IJECT) | pp. 270-272,ISSN: 2230-7109 (online), 2230-9543 (Print),April-June 2013 |
| 15 | Adaptive Amplitude Clipping PAPR Reduction Technique using Extended Peak Reduction Tone Set | Dr.S. P. Mohani, Shipra Sarkar, Dr.M. S. Sutaone | CiiT International Journal of Networking and Communication Engineering | pp. 256-259,Print: ISSN 0974 – 9713 & Online: ISSN 0974 – 9616,May, 2013 |
| 16 | Distortion Compensated Optimized ICF Technique for PAPR Reduction in OFDM | Dr.S. P. Mohani, M.S. Bhandarkar, Dr.M. S. Sutaone | International Journal of Advanced Computer Engineering and Communication Technology (IJACECT) | pp.79-83,ISSN: 2278-5140,August, 2013 |
| 17 | A New Approach in Distortionless Techniques For PAPR Reduction in Multicarrier Transmission Systems | Ms. Shraddha Waghmare, Dr.S. P. Mohani | International Journal of Electronics and Communication Enginneering and Technology (IJECET) | pp.207-213,ISSN (Print): 0976-6464, ISSN (online):0976-6472,September – October, 2013 |
| 18 | FPGA Implementation of Linear LDPC Encoder | Dr. A. M. Sapkal, Mr. M. M. Jadhav | International Journal of Research in Engineering and Technology Journal | Janauary,11, 2013 |

* **National Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Title of Paper** | **Authors Name** | **Name of Journal** | **Publication Details** |
| 1 | Performance Enhancement of AODV Routing Protocol for Small scale Networks | Dr.Radhika Joshi, Mayank Sahu | IETE, National Journal of Innovation and Research (NJIR), | 79-83,ISSN 2320-8961,6/1/2013 |
| 2 | Hybrid Combination of RP-IP Separation and T-PTS Technique for PAPR Reduction in OFDM | Dr.S. P. Mohani, S.R. Khandare, Dr.M. S. Sutaone | IETE National Journal of Innovation and Research | pp. 30-34,ISSN: 2320-8961,June, 2013 |
| 3 | Application of Image Fusion in Image Enhancement | Deepali Sale, Dr. M.A.Joshi | Institution of Electronics and Telecommunication Engineering(IETE) National Journal of Innovation and Research | ISSN: 2278 – 1323,JUNE-JULY 2013 |
| 4 | The role of Transform in Image Compression | V. K. Bairagi,Dr. A. M. Sapkal, M. S. Gaikwad | Journal of the Institution of Engineers (India) | Series B , ISSN 2250-2106,9/1/2013 |
| 5 | Dual wartermarking technique with multiple biometric watermarks | Vandana S. Inamdar, Dr.Priti P. Rege | Journal of Indian Academy of Science, Sadhana: | Vol 39,3/26/2014 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 1 | Digital Image Watermarking Techniques | Tejashri Pathrikar, Sneha Chavan and Shilpa Metkar, | International Conference on Advances in Electrical, Electronics, Mechanical & Computer Sci | pg.63-68,April 21, 2013. | International |
| 2 | Digital Image Security Improve  ment By Integrating Watermarking & Encryption Technique | Shilpa P Metkar, and Milind V. Lichade | IEEE International Conference on Signal Proce  ssing,Comp  uting & Control | pg.1-6,ISBN 978-1-4673-6188-0 ,26- 28 September 2013. | International |
| 3 | Constant Dimensionality Reduction For Large Databases Using Localized PCA With An Application To Face Recognition Image” | Tanuj N. Palghamol Shilpa P Metkar | IEEE Second International Conference on Image Information Processing | pg.560-565,978-1-4673-6099-9,Dec. 2013. | International |
| 4 | Humanizing The Interface : Voice Activated Devices | Vaibhav Rekhate, Pritesh Chhajed, Mugdha Bondre, Pushkar Chaudhari, Priyanka Aher, Shilpa Metkar | Texas Instruments India Educators' Conference | pg.243-247,10.1109/TIIEC.2013.49 ,March 2013 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 5 | Flexible Luminance Thresholding for Detecting Eyes in Color Images”, | Tanuj N. Palghamol Shilpa P Metkar | International Conference on Control, Instrumentation, Energy & Communication | pg.635-639,ISBN 978-1-4799-2044-0/14,,Jan/Feb-2014. | International |
| 6 | Reconfigurable Viterbi Decoder on FPGA with Multi-boot and Data Memory Support | Dr. Pratibha Shingare, Pawan Gholap, Sanket Naik and Satish Rathod | 7th IEEE International Advanced Computing and Communication Technologies (ICACCT™-2013) at Asia Pacific Institute of Information Technology SD India, Panipat (Haryana) | -- | International |
| 7 | An Interpolation of Digital Elevation Model using Cartosat-1 Image | Dr. Pratibha shingare, Mr. Sumit Kale | IEEE EMS2013, UK Sim-AMSS 7th European modeling Symposium on Mathematical Modelling and Computer Simulation, Manchester | -- | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 8 | Implementation of Active Contour Model and applications for satellite image | Dr. Pratibha shingare, Mr. Sumit Kale | International Conference on VLSI and Signal Processing (ICVSP) 2014 | -- | International |
| 9 | Feature level fusion of face and fingerprint modalities using Gabor filter bank | Deshmukh, Amit ; ; Pawar, Sheetal ; Joshi, Madhuri | Signal Processing, Computing and Control (ISPCC), 2013 IEEE International Conference on,Solan | pages 1 – 5,ISBN No.978-1-4673-6188-0,26-28 Sept. 2013 | International |
| 10 | A Novel and Cost Effective Resistive Rain Sensor for Automatic Wiper Control: Circuit Modelling and Implementation | Mukul Joshi, Dayanand Sonawane, Vinayak Sagare, Vinayak Sagare, Madhuri Joshi | 2013 Seventh International Conference on Sensing Technology | December 3 - 5, 2013 | International |
| 11 | PRINTED BOOK TO AUDIO BOOK CONVERTER FOR VISUALLY IMPAIRED | Ajinkya Domale, Bhimsen Padalkar, Raj Parekh, M.A. Joshi | 2013 Texas Instruments India Educators' Conference | 10.1109/TIIEC.2013.274-6 April 2013 | International |
| 12 | Ultra-Low Cost Vehicle Data Acquisition and Transfer System from Analog and Digital Sensors to | Ajinkya Bari Shraddhesh Bhandari a, Rajesh Krishnan b, Rohit Pandharkar | The 16 th International Conference on Advanced Communication Technology | Feb. 16~19, 2014 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 13 | Reversible Watermarking Technique to Enhance Security of a Biometric Authentication System | Vaibhav B. Joshi, Mehul S. Ravaly, Suman Mitra\_, Priti P. Rege and S. K. Parulkar | Proceedings of National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG) | 18-21 December 2013 | International |
| 14 | Automatic License Plate Recognition for Parking Authentication | Piyush Shekdar, Suraj Patil, Pranav Bijwar and Shilpa Metkar | National Conference on Communication , Computing and Networking Technologies, | pg.105-108,March 15-16, 2013. | International |
| 15 | Improved Active Contour Model for Satellite Images, | Dr. Pratibha shingare, Madhuri Nagare, Chaitrali Joshi | Second IEEE conference on Image Information Processing, Jaypee University of Information Technology Waknaghat, Shimla, | November 2013 | International |
| 16 | Automated Detection of Cut-points for Disentangling Overlapping Chromosomes | Mousami Munot, Dr. Madhuri Joshi, Nikhil Sharma, Gulsheen Ahuja | Point of Health care Technologies, Bangalore | pp: 120 - 123. ,Jan. 2013 | National |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 17 | A modified watermarking algorithm using SVD-DWT | Rashmi U Hirve ,Dr .Mrs. Madhuri Joshi, Kirtimalini B.Chaudhari | National Conference on Communication, Computing and Networking Technologie | March 15 - 16, 2013 | National |
| 18 | Compressed Sensing For Image Representation and Reconstruction | Kamlesh Pujari, Dr. M A Joshi, Dr. A M Sapkal | National Conference on Communication, Computing and Networking Technologies | March 15 - 16, 2013 | National |
| 19 | Throughput improvement in Relay Network, | Dr. R. A. Patil and Ms. Harshala Khedalekar | NCET2K2 | July 2013 | National |
| 20 | TCP Congestion Control with the help of Receiver | Dr. R. A. Patil and Ms. Neha Amale | NCET2K2 | September 2013 | National |
| 21 | Performance Improvement of DSR Protocol by Limiting Route Reply in MANET | Radhika Joshi, Swapnil Nimbalkar | National Conference on Information Theory and Communication Networks (NCITCN-2014) | January 2014 | National |

* **PATENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of the Faculty/Students** | **Title** | **Application No. &Date** | **Application Status** |
| 1 | Prof. A. M Sapkal Prof. Mrs. M.A. Joshi | Multimodal Biometric Verification system using palm feature in visible and IR domain. | Application No.1267/MUM 2013 | Applied |
| 2 | Prof. A. M Sapkal Mrs. Anjali Chandawale | System to measure strength of text based CAPTCHA | 934/MUM2013 CBR no. 3658 Docket no. 4992 | Applied |
| 3 | Prof. A. M. Sapkal Shreyas Kulkarni, Sarang Junghare, Urjit Khadilkar | Passive Compliant System with Modified Rocker Bogie Mechanism for All Terrain Navigation | **---** | Permitted to apply by College Authority |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS /EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** | **Income (if any)** |
| 1 | One week The IET Design Workshop | July 8-12 2013 | Dr. Mrs. Prof. M. A. Joshi  Dr. Metkar S P | Students | 50 | The IET | Nil |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Particip**  **ants** | **No. of Particip**  **ants** | **Sponsoring Agency** |
| 1 | Embedded system development using DSP’s | 20-31 May 2013 | Dr. A.M. Sapkal | Faculty | 50 | AICTE |
| 2 | Embedded system development using DSP’s | 20-31 May 2013 | Dr. S. P. Mahajan | Faculty | 50 | AICTE |
| 3 | Embedded system development using DSP’s | 20-31 May 2013 | Dr. Mrs V. S. Vyas | Faculty | 50 | AICTE |
| 4 | Embedded system development using DSP’s | 20-31 May 2013 | Dr.Mrs.P.P.Shingare | Faculty | 50 | AICTE |
| 5 | Embedded system development using DSP’s | 20-31 May 2013 | Dr.Ms.S.P.Metkar | Faculty | 50 | AICTE |
| 6 | Embedded system development using DSP’s | 20-31 May 2013 | Mrs.Y.M.Vaidya | Faculty | 50 | AICTE |
| 7 | Embedded system development using DSP’s | 20-31 May 2013 | Mr.P.P.Tasgaonkar | Faculty | 50 | AICTE |
| 8 | Analog Electronics | 4-14 June 2013 | Dr.Ms.S.P.Metkar | Faculty | 30 | ISTE |
| 9 | Analog Electronics | 4-14 June 2013 | Mr.P.P.Tasgaonkar | Faculty | 30 | ISTE |
| 10 | Analog Electronics | 4-14 June 2013 | Mrs.D.V.Niture | Faculty | 30 | ISTE |
| 11 | Signals and Systems | 2- 12 Jan 2014 | Dr.Ms.S.P.Metkar | Faculty | 30 | ISTE |
| 12 | Signals and Systems | 2- 12 Jan 2014 | Mrs.D.V.Niture | Faculty | 30 | ISTE |

* **Details of the Lectures/Talks organized by the dept.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | A seminar on Graduate Advantage Program & College Affiliated Academy Program | Mr. Rajesh Bhat | Faculty/Students 07 January 2014 | 50 | Mini Auditorium |
| 2 | How to write good technical Paper | Dr. Dandwate | Faculty/Students  02 April 2014 | 80 | Seminar Hall –I  Dept of E & TC |
| 3 | Android Applications and Mobile Design | Prof. Tom Meyer ( Brown University USA) | Faculty/Students | 100 | Mini Auditorium |
| 4 | Microwave Radiation Hazards’ | Prof. Girish Kumar from IIT, Bombay. | Faculty/Students | 50 | Seminar Hall –I  Dept of E & TC |
| 5 | Artificial Neural Networks | Dr. S. N. Londhe | Faculty/Students  21 April 2014 | 50 | Seminar Hall –I  Dept of E & TC |
| 6 | The IET Academic publishing | Mr. Srujan Shekhar | Faculty/Students  05 April 2014 | 50 | Seminar Hall –I  Dept of E & TC |
| 7 | The IET Academic publishing | Mr. Srujan Shekhar | Faculty/Students  05 May 2014 | 50 | Mini Auditorium |
| 8 | Workshop on Professional Registration | Mr. Ketan Gandhi | Faculty  24th April 2014 | 25 | Main Building Conference Hall |

* **Details of the Lectures/Talks delivered by the department faculty**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 01 | Fiber Optic Communication Systems | Dr. S P Mahajan | YCMOU online Teaching | 200 | YCMOU Studio Pune |
| 02 | ARM based Embedded Systems | Dr. P. P.Bartakke | Third Year E & TC | 75 | AISSMS Pune |
| 03 | Advances in Communications | Dr. A. M. Sapkal | Third Year / Final YearE & TC | 140 | College of Engineering JSPM Narhe Pune |

* **BOOKS PUBLISHED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the author** | **Title of the book** | **Name of the publisher** | **Date of publication** |
| 1. | Ms. Metkar S. P. & Talbar S. N | Motion Estimation Techniques for Digital Video Coding | Springer Briefs in Applied Sciences and Technology Computational Intelligence | ISBN 978-81-322-1096-2 ISBN 978-81-322-1097-9 (eBook)  2013 |

* **AWARDS & HONORS**
* **For Faculty**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Name of the Award** | **Description**  **(awards given by)** | **No. of Awards** |
| 1 | Prof. Dr. Mrs. P. P. Rege | Best Teacher Award | Congnizant | 01 |
| 2 | Dr. Ms. Metkar S. P. | Career Award for Young Teachers 2013-14 | AICTE | 01 |
| 3 | Dr. Ms. Metkar S .P. | IEI Young Engineers Award 2013-2014 | Institution of Engineers (India) | 01 |
| 4 | Prof. S. P. Mohani | Awarded Ph.D. degree | University of Pune. | 01 |

* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description**  **(awards given by)** | **No. of Awards** |
| 1 | Shreyas Kulkarni | Best Popular Award | By TCS | 01 |
| 2 | Chinmayee Sadhu, Rituja Rane and Nandini Waghmare | 3rd prize in NES Innovation Awards 2014 held on 5th March 2014 for their B. Tech Project titled "Stock Market Prediction Model using Fuzzy Logic" has received | NES | 01 |

* **MOUs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 1 | E & TC | Ifm Engineering Pvt. Ltd. Pune | February 2013 | UG/PG Dissertation |
| 2 | E & TC | FREE SCALE Semiconductor India Pvt. Ltd Noida India | In process | Students training , facilities for Development of Products and Solutions, teaching assignment |

* **MEMBERSHIPS OF SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1 | The IET (UK) | Prof. A. M. Sapkal, Prof. M. A. Joshi, Prof. P. P. Rege, Dr. S. P. Mohani, Dr. Metkar S. P., P. P. Tasgaonkar, D.V. Niture, Patole R, Mali S., Prof. Vaishali Ingale |
| 2 | IEEE | Prof. A. M. Sapkal, Prof. M. A. Joshi, Prof. P. P. Rege |
| 3 | ISTE | Prof. A. M. Sapkal, Prof. M. A. Joshi, Prof. P. P. Rege, , Dr. Mrs. R. D. Joshi, Dr. Metkar S. P., Prof. Vaishali Ingale, Prof. S. P. Mahajan |
| 4 | IETE (India) | Prof. A. M. Sapkal, Prof. M. A. Joshi, Prof. P. P. Rege, Dr. M. S. Sutaone, Prof. P. P. Bartakke, Prof. S. P. Mahajan |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Gaurav Keskar | **--** | IIM Ahmedabad | June 2013 |
| Titar Pratik | **--** | IIM Ahmedabad | June 2013 |
| Karnawat Suyog | **--** | IIM Bangalore | June 2013 |
| Kokane Karan | **--** | IIM Bangalore | June 2013 |
| Piyush Shekdar | **--** | MTech(IIT KGP) | June 2013 |
| Madhuri Nagare | **--** | MTech IITB | June 2013 |

* **SPECIAL MENTION**
* Students and faculty member of the Department are actively involved in Designing PICO Satellite to be launched by COEP along with ISRO.
* Department is running HAM clubs for students.
* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No** | **Name of the faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 01 | Dr. (Mrs.) M. A. Joshi | Ph.D. (E&TC Engg) | Professor | Advanced DSP, Image Processing and Machine Vision |
| 02 | Dr. (Mrs.) P. P. Rege | Ph.D. (E&TC Engg) | Professor | Image Processing, Systems Programming, Artificial Intelligence |
| 03 | Dr. P. W. Wani | Ph.D. (E&TC Engg) | Professor | Systems on Chip, Reconfigurable Computing |
| 04 | Dr. M. S. Sutaone | Ph.D. (E&TC Engg) | Professor & Dean-Alumni &International Affairs | Multimedia Signal Processing, Digital Communication |
| 05 | Dr. A. M. Sapkal | Ph.D. (E&TC Engg) | Professor & Head | Power Electronics, Image Analysis |
| 06 | Dr. R. A. Patil | Ph.D. (Comm.Engg) | Associate Professor | Wireless Networks |
| 07 | Dr. S. P. Mahajan | Ph.D. (E&TC Engg) | Associate Professor | Speech Processing, Microwaves |
| 08 | Dr. S. P. Mohani | Ph.D. (E&TC Engg) | Associate Professor | Digital Broadband Communication |
| 09 | Dr. P. P. Bartakke | Ph.D. (E&TC Engg) | Associate Professor | Image Processing, Embedded Systems, Computer Networks |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 10 | Dr. (Mrs.) P. P. Shingare | Ph.D. (E&TC Engg) | Assistant Professor | Digital Control Systems |
| 11 | Dr. (Mrs.) V. S. Vyas | Ph.D. (E&TC Engg) | Assistant Professor | Digital Signal Processing, Medical Image Analysis |
| 12 | Dr.(Mrs.) R. D. Joshi | Ph.D. (E&TC Engg) | Assistant Professor | Telecommunication Networks |
| 13 | Mrs. V. N. More | M.E. (Electronics) | Assistant Professor | Audio Video engineering, Digital Systems |
| 14 | Dr.(Ms.) S. P. Metkar | Ph.D. (E&TC Engg) | Assistant Professor | Video Processing, Embedded Systems |
| 15 | Mrs. Y. M. Vaidya | M.E. (E&TC) | Assistant Professor | Digital Logic Design |
| 16 | Mr. Pankaj Tasgaonkar | M.Tech. (Electronics) | Assistant Professor | Embedded Systems, Computer Networks, Wireless Communications. |
| 17 | Mrs. Niture Deeplakshmi | M.Tech. (Electronics) | Assistant Professor | Electromagnetic Waves and radiating Systems |
| 18 | Ms. Vanita Agarwal | M.Tech. (Electronics) | Assistant Professor | Microelectronics |
| 19 | Mrs. V. R. Ingale | M.Tech. (Electronics) | Assistant Professor | Embedded Systems |
| 20 | Mr. S.G. Mali | M.Tech.( E&TC) | Assistant Professor | Wired and Wireless Communications. |
| 21 | Ms. R.K. Patole | M.Tech.( E&TC) | Assistant Professor | Image Processing |

**DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING**

* **INTRODUCTION**

**The Department of Instrumentation and Control**started in the year 1965 with the support of the Central Government. The Undergraduate and Postgraduate programmes offered by the department are accredited by the National Board of Accreditation (NBA) in 2007 and 2009 resp. In the month of Feb. 14 NBA committee has visited department for evaluation of undergraduate program as per new format of NBA(OBE) & the result of the same is awaited, also PG NBA online submission is underway and likely to finish soon. The department boasts qualified, experienced and dedicated faculty to impart fundamental and applied knowledge in the field of Industrial Automation, Process Systems Engineering, Instrumentation Systems Engineering and Biomedical Instrumentation. The department focuses on preparing the students to meet global industrial challenges. The ultimate goal is to make them aware of the recent advances taking place in the technological field.

The department enjoys long standing relationships with industry, academia, and research organizations of national importance to pursue teaching, training and research agenda. The industry / research organization members that play active participation in departmental activities are Bhabha Atomic Research Centre, Indian Air Force, Armed Forces Medical College Pune, Emerson Process Systems, Rockwell Automation, Honeywell, Forbes Marshall, Hella India Pvt. Ltd, Tata Consultancy Services Pune, Mitsubishielectric pvt. Ltd.,iGate Etc.

* **ACADEMIC PROGRAMS (B. TECH/ M. TECH/ PH. D)**

B. Tech Instrumentation & Control engineering

M. Tech Process Instrumentation

M. Tech Biomedical Instrumentation

Ph. D Instrumentation & Control engineering

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 01 |
| 2 | Associate Professor | 06 |
| 3 | Assistant Professor | 04 |
| 4 | Professor Emeritus | 01 |
| 5 | Adjunct Professor | 05 |
| Total | | 17 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other facilities** |
| Analytical Lab | * Trace Oxygen Analyzer |  |
| Hybrid Electronics Lab | * Arbitary Function Generator * Mixed Signal Oscilloscope |  |
| Advanced Control Lab | * Qube Rotary Servo with Rotary Pendulam 'Quanser' * Three DOF Gyroscope 'Quanser' |  |
| Embedded Lab | * Video Processing Development Setup * PIC Development Board cherry PICV1.2 |  |
| PLC Lab | * Rockwell Automation Toolkit |  |
| Process Lab | * Product Packing and Storage System * Evaporator System & accessories * Quarduple Tank System | CCTV Camera |
| Digital Signal Processing Lab | * Nano Board NB 3000 FPGA Kit * Altium Designer Custom Board |  |
| Biomedical Lab | * Medical Development kit * Iris Image Processing System * Patient Simulator-Vital Signs Simulator * Electrical Safety Analyser | CCTV Camera |

* **EQUIPMENT PURCHASED**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Date of purchase / development** | **Resource consumed**  **(amount in lakhs.)** |
| Analytical Lab | Laptop-HP,Model-ENVY4-1202TX ,Sr.no-CND3111N3M | 8/5/2013 | 0.56 |
| Netbook 'ACER',Model no-A0756 Sr.no-NUSG2S1004252025913400 | 31/05/2013 | 0.21 |
| Apple' Macbook Pro 13" 17-2.9/750,i7-2.9GHz,8GB,750GB,13.3" WLED Web cam | 10/12/2013 | 0.95 |
| Trace Oxygen Analyzer | 2013-14 | 3.90 |
| Biomedical Lab | Medical Development kit'Texas Instruments' | 29/5/2013 | 0.85 |
| Spectrum Analyzer 3.6GHz Model-FSH4 Sr.no-115792, Direct Power Sensor Model-FSH-Z44 Sr.no-102575 | 5/7/2013 | 4.34 |
| Iris Image Processing System | 31/7/2013 | 2.30 |
| NI myDAQ-Student Kit with LabVIEW & Multisim Student Edition |  | 0.13 |
| Printer hp Model-M1218nfsMFP | 16/1/2014 | 0.17 |
| Motion Controllers & Motor Drives | 2013-14 | 8.11 |
| Patient Simulator-Vital Signs Simulator | 2013-14 | 5.96 |
| Resistivity Test Fixture, Electrometer high resistance meter, Interlock cable, 3 slot triax cable, 1KV sourc banana cables, Humidity Probe | 27/5/2013 | 7.74 |
| Eletrical Safety Analyzer, Nano Board NB 3000 FPGA Kit, Altium Designer Custom Board Implementation, Samsung Galaxy Note 800 | 2013-14 | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Date of purchase / development** | **Resource consumed**  **(Amount in Lakhs.)** |
| Advanced control Lab | ABS System include mechanical unit,power supply unit RT-DAC/USB 2.0 | 4/2/2014 | 6.65 |
| 3 DOF Gyroscope 'Quanser' | 2013-14 | 12 |
| Hybrid Electronics Lab | NI ELVIS II with digital electronics FPGA board, NI Digital electronics FPGA board, Power Cord 240V,10A, NI Elvis II hardware(academic use) | 2/5/2013 | 4.78 |
| Zed board ZYnq -7000 development Board with accessories, Genesys Virtex 5 FPGA Development Kit, Spartan 6 FPGA Development Board with accessories ,Cool Runner-II CPLD Starter Board with accessories Spartan 3E FPGA Board with 1600K with accessories Spartan 6 FPGA development Board with accessories  Xilinx ISE System Edition 14.3 (25 Perpetual Licenses ) | 27/5/2013 | 2.22 |
| Programmable DC Power Supply 'Tektronix' Model-PWS 4305,sr.no-C011044 | 23/5/2013 | 0.57 |
| Mixed Signal Oscilloscope Make-Agilent Mode-MSOC3052A Sr.no-MY53160105 | 19/6/2013 | 4.86 |
| Embedded Lab | Zedboard ZYnq -7000 development Board with accessories, Spartan 3E FPGA Board with 1600K with accessories , Xilinx Virtex 6 Development Board with accessories | 27/5/2013 | 2.40 |
| Video Processing Development Setup | 2013-14 | 4.46 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Date of purchase / development** | **Resource consumed**  **(Amount in Lakhs.)** |
| Process Lab | Desktop Computer System 'HP' 18.5" LECLCD Monitor | 30/5/2013 | 12.09 |
| Ultrasonic Level Transmitter, Capacitance type level transmitter, Magnetrostive level probe, Pulse rader level transmitter, Guided wave rader leve trans, Magnetic Float Switch | 5/6/2013 | 3.85 |
| Digital Indicator | 5/6/2013 | 0.18 |
| Supply of Remote Triggered Flow Sensor System with Control Panel and Workstation | 6/5/2013 | 5.85 |
| Supply of Remote Triggered Level System with Control Panel and Workstation | 6/5/2013 | 6.16 |
| S.S.Water Tank with M.S Stand | 9/7/2013 | 0.78 |
| Supply of Remote Triggered Temperature System with Control Panel and Workstation | 12/7/2013 | 5 |
| Product Packing and Storage System | 10/10/2013 | 17.87 |
| Power Supply 40kV,50mA DC Power Supply | 2/12/2013 | 3.67 |
| Quarduple Tank System | 6/1/2014 | 80 |
| Chair Make-Bluebell,Model-Ebuz mid back | 20/3/2014 | 20.5 |
| Programmable controller 'GEIPL' & accessories | 29/3/2014 | 5.70 |
| Evaporator System & accessories | 24/5/2013 | 7.68 |
| Split AC 2.35TR 'Toshiba' Hiwall | 16/1/2014 | 3.96 |
| Spilt AC 2.5TR 'Toshiba' Hiwall | 16/1/2014 | 3.96 |
| Printer hp M1218 nfs MFP | 16/1/2014 | 17 |
| Integrated Automation Lab | Rockwell Automation Toolkit-9398-EDCTK1T3B, 9298-EDCTK1T5B | 16/9/2013 | 88 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of publications in International Journals | 04 |
| 2 | No. of Government Sponsored Projects | 13 |
| 3 | No. of Consultancy Projects | 06 |
| 4 | No of Ongoing Ph. Ds | 15 |
| 5 | No. of Students gone to foreign universities for further studies | 02 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(In Lakhs)** |
| 1. | Water treatment automation PDS systems for pcmc | S. D. Agashe | 15/10/2013 | PCMC | Three Months | 0.22 |
| 2. | Sewrage plant automation for pcmc chets systems pvt. Ltd | S. D. Agashe | 15/10/2013 | PCMC | Three Months | 3.91 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(In Lakhs)** |
| 3. | Validation and confirmation of insturments mechatronics systems pvt ltd | S. D. Agashe | 15/10/2013 | PCMC | Three Months | 0.57 |
| 4. | conduction practicals for process instrumentation for students fo Govt college of awasari | K. A. Ghodinde, A. S. Deshpande | 6/10/2013 | Govt . College of Engineering, Awasari | 3 Days | 0.12 |
| 5. | conduction practicals for analytical instrumentation for students fo Govt college of awasari | R. P. Mudhalwadkar | 7/10/2013 | Govt . College of Engineering, Awasari | 3 Days | 0.12 |
| 6. | Third party inspection for PLC based systems | K. A. Ghodinde, A. S. Deshpande | 20/11/2013 | IOCL | 3 Days | 0.30 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the project** | **Funds Utilization**  **Position as on today**  **(In Lakhs)** | **Year in which the Grant was received** |
| 1 | MHRD | Govt. | S. D. Agashe ,  S. L. Patil, U. M. Chaskar, D. N. Sonawane | 339 | Virtual Lab | -- | 2010 |
| 2. | BRNS | Govt. | U. M. Chaskar, S. L. Patil | 20.78 | Development of Iris Recognition – An Biometric Application | 18.25 | 2011 |
| 3. | BRNS | Govt. | P. D. Shendge, S. B. Phadke | 21.28 | Observer Controller Design for uncertain system in application with snake robot | 17.65 | 2011 |
| 4. | UGC | Govt. | .C.Y.Patil, U.M.  Chaskar | 8.42 | Design and Development of Wireless Sensor Network for Green Agriculture | 6.83 Lakhs | 2011 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordin**  **ator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today**  **(In Lakhs)** | **Year in which the Grant was received** |
| 5. | UGC | Govt. | D. N. Sonawane, K. A. Bhole | 7.71 | Subcutaneous vein detection system for durg delivery assistance | 4.46 Lakhs | 2011 |
| 6. | MHRD | Govt. | Dr. S. D. Agashe ,  D. N. Sonawane | 160 | Remote Trigger Lab | -- | 2011 |
| 7. | BRNS | Govt. | Dr. S .L. Patil | 24.37 | DC-DC converter power management for lower-power embedded system | 10 | 2011 |
| 8. | AICTE MODROB | Govt. | Dr. S .L. Patil | 12 | Modernization of Biomedical Instrumen  tation | 12 | 2011 |
| 9. | UGC MRP | Govt. | Dr.R.P. Mudhalwadkar | 7.39 | Development of electronic olfaction  system for disease detection | 0 | 2012 |
| 10. | BRNS | Govt. | Dr. R. P. Mudhalwadkar | 19.54 | Development of electronic nose for homeland security | 0 | 2013 |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordi**  **nator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today**  **(In Lakhs)** | **Year in which the Grant was received** |
| 11. | UGC MRP | Govt. | Mrs. A. S. Deshpande,  Dr. U.M. Chaskar | 8.69 | Design and development of control strategies for solar panel automatic tracking system | 0 | 2013 |
| 12 | AICTE | Govt. | Dr.R.P. Mudhalwadkar | 8.2 | Development of artificial sensor system for food quality detection | 0 | 2013 |
| 13. | AICTE | Govt. | Dr. U. M. Chaskar | 12.05 | Design and development of a system for measurement of blood glucose and haemoglobin noninvasively | 0 | 2013 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | | **Total** |
| **National Journal** | **International Journal** | | **National Conference** | **International Conference** |
| 1 | Department of Instrumentation & Control | 0 | | 4 | 2 | 11 | 17 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Fuzzy Control based solar tracker using Arduino Uno | Dipti Bawa, C.Y. Patil | International Journal of Engineering and Innovative Technology(IJEIT) | Vol. 2, Issue 13, July 2013 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 2 | Boundary Layer Sliding Mode Control Design for Chatter Reduction using Inertial Delay Control | P.V.Suryanwashi P.D.Shendge, S.B. Phadke | International Journal of Applied Mathematics | China, August 2013 |
| 3 | Metal Oxide Semiconductor Based Exhaled Breath Pellet Sensor. | Pauroosh Kaushal, Tapan Dhalsamanta, Rohini Prashant Mudhalwadkar | International Journal of Advanced Research in Engineering and Technology (IJARET) | Volume:4, Issue:6, Pages:175-184, Sept. 2013 |
| 4 | Vowel recognition for hearing impaired person | Sheetal Bhogle, Dr. C. Y. Patil | International Journal of Enhanced Research in Science & Technology & Engineering | Vo. 22, Issue 12,PP 8-11, Dec.2013 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 1 | FPGA implementation of type 1 fuzzy inference system for intravenous anesthesia | Ms. Kalyani Bhole, Dr. Sudhir Agashe, Dr. Ashok Deshpande | IEEE International Conference on [Fuzzy Systems (FUZZ),](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6612844) | pp. no. 1 – 6, 7-10 July 2013 | International |
| 2 | Model Predictive Control of DC Servomotor Using Active Set Method | Vihangkumar Naik, D. N. Sonawane, Deepak Ingole | 2013 IEEE Multi Conference on Systems and Controls (MSC-2013), Hyderabad, | 28th ~ 30th August 2013 | International |
| 3 | Application of Model Following Sliding Mode Control Based on Inertial Delay Control in Tank Gun Control System | Rahul Bendale, Divyesh Ginoya, P. D. Shendge, S. B. Phadke | National Conference on Instrumentation Control and Signal Processing  Shri Guru Gobind Singhji Institute of Engineering and Technology,  Nanded, India | Jul 08, 2013 to Jul 09, 2013 | National |
| 4 | Experimental Validation of Time Delay Controller and Inertial Delay Controller based Sliding Mode Control for QET DC Motor Position Control | Chitra Patil, Divyesh Ginoya, P. D. Shendge, S. B. Phadke | National Conference on Instrumentation Control and Signal Processing  Shri Guru Gobind Singhji Institute of Engineering and Technology,  Nanded, India | Jul 08, 2013 to Jul 09, 2013 | National |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 5 | System Prototype of A Non-invasive Low cost  Subcutaneous Vein Detection Device | Ashwini Kolar, D. N. Sonawane, Prashant Basargi | 7th International Conference on Signal and Image Processing (ICISP 2013), Bangalore, | India, 9th ~ 11th August 2013 | International |
| 6 | Improved Iris Segmentation using  Circular Hough Transform | Sagar sanap, U.M. Chaskar | International Conference on Signal and Image | *Processing* ICIP-2013 Elsevier Page no: 153 – 161 | International |
| 7 | Design and Optimization of Fractional PID Controller for Higher Order Control System | Pritesh Shah, sudhir agashe | IEEE international Conference on Advanced Research in Engg. &Technology (ICARET), K L University at Vijayawada, | Feb. 2013 | International |
| 8 | Design and Tuning of Fractional Order Controller for Undamped Control System | Pritesh Shah, sudhir agashe | 4th Nirma University International Conference on Engineering,  NUiCONE , Ahmedabad, | Nov. 2013 | International |
| 9 | Rice Quality Analysis Using Image Processing Techniques | Bhagyashree Mahale, Sapana Korade | IEEE International Conference on Convergence of Technology(I2CT), | 6-8 April, Pune | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 10 | Isolated Flyback Converter Designing, Modeling and  Suitable Control Strategies | Sanjeev Kumar Pandey1, Dr. S.L.Patil2, and Mrs. Vijaya S. Rajguru2 | ACEEE International Conference on Advances in power electronics and instrumentation Engineering, Chandigarh, | 21st march 2014 | International |
| 11 | Segmentation of Iris image in non -ideal condition | Yogita Parikh, Uttam Chaskar,Harshal Khakole | IEEE Tech sym2014 at IIT Karagpur | March 2014 | International |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Category of**  **the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 1 | FDP on Nanomaterials and Nanocomposites | 2/12/2013 | Faculty | 20 | TEQIP |
| 2 | One week CEP course on Advances in control system | 30/12/2013 | Faculty | 22 | CE&QIP |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Category of**  **the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 3. | One Week STTP on “Role of power electronics in modern electrical system” | 23/12/2013 | Faculty | 50 | TEQIP II |
| 4. | Three days workshop on TI MSP 430 & TI Tiva Processor | 20/11/2014 | Faculty, industry,Students | 40 | BRNS Project |

* **Details of the Lectures/Talks organized by the department**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | ISA Pune Chapter | Mr. K. V. Rehani (President ISA Pune Chapter), Mr. R. R. Iyer(Past Chairman IISA India) , Mr. A. G. Dani(Consultant Instrumentation), Mr. Sriniwasan(V. P. Emerson Process control), J. G. Bapat (Consultant Instrumentation) | Students | 40 | COEP |
| 2 | Power Plant | Aravind Paranjape (Consultant Instrumentation) | Students | 38 | COEP |
| 3 | Motors & its Construction | Kishor.M. Joshi (G. M. Design & Development Lawkin Motors), C. D. Vaidya (Manager Lawkin Motors) | Students | 35 | COEP |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 4 | Biomechanics | Dr. Bhushan S. Borotikar (Postdoctoral Research Fellow) | Students | 32 | COEP |
| 5 | Higher Education at University Abroad | Mr. Abhishek Ambede (PhD Student at NTU) | Students | 50 | COEP |
| 6 | Beckhoff products and development | Shweta Kambe, Praveen Jadhav (Trainers at Beckhoff) | Students | 25 | COEP |

* **Details of the Lectures/Talks delivered by the department faculty**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1. | MATLAB Use and Applications | Dr. C. Y. Patil | Students | 20 | Shram Sadhana Bombay Trst’s College of Engineering & Technology, Jalagaon |
| 2. | MATLAB Use and Applications | Dr. P. D. Shendge | Students | 20 | Shram Sadhana Bombay Trst’s College of Engineering & Technology, Jalagaon |

* **AWARDS & HONORS**
* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 1 | Ali sagar Zaidy  Rajesh Krishnan  Pooja Pokharkar | Best Project Award | by TCS | 1 |
| 2 | Neelam Tathawadekar | GATE2014 AIR -1 | GATE | 1 |
| 3 | Kaushik Gadre, Rajesh Krishanan, | CG-Corel Project competition stood in one among four projects | By CG-corel | 1 |
| 4 | Pranjal Dugwekar | Silver Medal | Zest’14 | 1 |
| 5 | Vinod Khare | Best hockey player of the year | COEP | 1 |
| 6 | Snehal Kulkarni | Represented as Janeev club secretory for the year 2013-14 | Janeev Club COEP | 1 |
| 7 | BhushanJarode | College representative for annual social gathering 2014 | University of Pune | 1 |
| 8 | Rohit Karande | Core team member for Mindspark’13 | COEP | 1 |
| 9 | ShivkumarPawar | ZEST’14 KHO-KHO winner, PENTACLE KHO-KHO winner | COEP, Cummins | 2 |
| 10 | Gaurav Tale | ZEST’14 publicity head, Kayak Ballet participant for 86th Regatta | COEP | 2 |
| 11 | Pranali Kulkarni | Gold medal in Zest for women’s cricket, Best ambassador award in Bhau’s institute | COEP | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 12 | Swati Tarwade | Bronze medal at MACK(State level kayaking), Gold medal at ZEST’a4 athletics-500m running, GOLD medal at ZEST’14 women’s cricket, Runner up at BITS Goa for carom, and Best outgoing sportsperson award | Maharashtra state government, COEP, BITS Goa | 5 |
| 13 | Radhika Jaju | Gold Medal- ZEST’14 in Women’s cricket, Team member of bhau’s institute project collaboration with Japanese tottori university | COEP | 2 |
| 14 | Pooja Rangarajan | 4th position at AIU rowing nationals held at Kolkata, Participation and semifinals in rowing open nationals in 2km and sprint events held at CME rowing node, Gold medal in ZEST’14 hockey, Best outgoing girl in rowing award by alumni association | National level, COEP | 4 |

* **MOUs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 1. | Dept. Of Instrumentation & Control | Mitsubishi Electric | 7 Feb 2014 | To spread awareness about automation amoungst young engineer and contribute to Indian market |

* **MEMBERSHIPS TO SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1. | IEEE -Instrumentation and Measurement society | Prof. S. L. Patil, Prof. C. Y. Patil, Prof.S. D. Agashe, Dr. P. D. Shendge, Dr. R.P. Mudhalwadkar, Mrs. M.A. Khandekar, Ms. K. A. Bhole, Mrs. K. A. Ghodinde, Dr. U. M. Chaskar, Mrs. A.S. Deshpande |
| 2. | The IET | Prof. S. L. Patil, Dr. R.P. Mudhalwadkar, Dr. U. M. Chaskar, Dr. P. D. Shendge, Dr. D. N. Sonawane |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Mukul Joshi | University of Minnesota | - | 2012-13 |
| Madhura Mujumdar | University of Cincinati Ohio | - | 2012-13 |

* **SPECIAL MENTION**
* One of the faculty from the department Dr. D. N. Sonawane went for pursuing Post Doctoral study at Washington University in St. Louis.
* Following UG students published their work in conferences.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the student** | **Title** | **Conference /Journal** | **Details** |
| 1. | Rohit Karande, Omkar Bhagwat, Nitin Patil, Sumit Jotrao | Simulink Analysis of Active Suspension System for different Road Profiles | Conference Paper | NCEOTA |
| 2. | Shyam Dahiwal, Pooja Mane, Amitkumar  Birajdar, Pranjali  Dugwekar | Magnetic Levitation using Simple Analog Circuit | Conference Paper | NCEOTA |
| 3. | Priyanka Aher, Rutvij Mahajan, Shantanu Thakurdesai, Bhushan Jarode, Nilesh Jain | Regulation of Wheel Slip in Antilock Breaking System using Classical Control | Conference Paper | NCEOTA |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the Faculty** | **Highest Qualification** | **Associate Professor** | **Areas of Interest** |
| 01 | Dr. S. D. Agashe | Ph.D.  (Instru.& Control Engg) | Professor | Process Instrumentation |
| 02 | Dr. (Mrs.) R. P. Mudhalwadkar | Ph.D.  (Instru.& Control Engg) | Associate Professor | Sensor and Analytical Instrumentation |
| 03 | Dr. C. Y. Patil | Ph.D.  (Instru.& Control Engg) | Associate Professor | Artificial Intelligence, Digital Signal Processing |
| 04 | Dr. S. L. Patil | Ph.D. (Elect.) | Associate Professor & Head | Power Electronics |
| 05 | Dr. D. N. Sonawane | Ph.D.  (Instru.& Control Engg) | Associate Professor | Embedded System |
| 06 | Dr. U. M. Chaskar | Ph.D.  (Instru.& Control Engg) | Associate Professor | Biomedical Instrumentation |
| **Sr. No.** | **Name of the Faculty** | **Highest Qualification** | **Associate Professor** | **Areas of Interest** |
| 07 | Dr. P. D. Shendge | Ph.D.  (Instru.& Control Engg) | Associate Professor | Control System |
| 08 | Mrs. M. A. Khandekar | M. Tech.  (Biomedical Instrumentation) | Assistant Professor | Process Control |
| 09 | Mrs. K. A. Ghodinde | M. Tech. (Process Instrumentation) | Assistant Professor | Process Automation |
| 10 | Mrs. Amruta S. Deshpande | M.Tech (Biomedical) | Assistant Professor | Process Instrumentation |
| 11 | Ms. Kalyani A. Bhole | M.Tech (Biomedical) | Assistant Professor | Biomedical Instrumentation |

* **ANY OTHER INFORMATION**

Instrumentation and Control Engineering Student Association is departmental student level association and the hosts for the association are students from Third Year B. Tech. Students perform different technical and social activities throughout the year. The activities start with inauguration of ICESA every year. Many expert lectures and talks are arranged for departmental and students. These lectures are arranged in support with Instrument Society of India (ISOI) and International Society for Automation (ISA). Department level sports competitions; Fresher and Farewell are also arranged every year. Departmental magazine by student is also a unique activity in department. This explores the creativity of the students. Social activities are also carried out such as visit to orphanage, old age home. Students conducts science workshop for the school students. The association activities enhance the students’ skills such as event and time management, technical competencies and also develop binding with social issues and responsibilities for society.

**DEPARTMENT OF MATHEMATICS**

* **INTRODUCTION**

Mathematics is a backbone of all engineering sciences. Hence a lot of stress is given on Mathematics in engineering education. The Department of Mathematics is established in the year 1960. The department is situated on the north campus of the institute having nice view of river Mula Mutha. To cater the needs of different engineering branches, we have a young and enthusiastic team of 12 faculty members. We also have one Adjunct Professor ( Retired from IITB ). The department is well equipped with 24 hours internet facility. Engineering Mathematics is taught to first and second year of B.Tech. course as well as to M.Tech. course. Research on various aspects of Graph theory, Matroid theory, Lattice theory, Commutative algebra, Coding theory and Fractional calculus with pure and engineering applications are carried out by the faculty. Our vision is to develop the department as a research center for pure and applied mathematics with applications to engineering.

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Associate Professor | 01 |
| 2 | Assistant Professor | 11 |
| 3 | Adjunct Professor | 01 |
| Total | | 13 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**

* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No of Seminars/ Talks conducted | 02 |
| 2 | No of National Conference held | 01 |
| 3 | No of Ongoing Ph. Ds | 05 (Faculty) |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | **Total** |
| **National Journal** | **International Journal** | **National Conference** | **International Conference** |
| 1 | Mathematics | -- | -- | -- | 01 | 01 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 1 | Splitting off operation for binary matroids and its applications | K.V. Dalvi,  M.M. Shikare, &  S.D. Dhotre | ‘3rd International Conference on Discrete Mathematics-2013’ University of Karnataka Dharwad | -- | International |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ EVENTS**

* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** | **Income (if any)** |
| 1 | ‘National Conference on Pure & Applied Mathematics’ (NCPAM-2013) | 17-19 December 2013 | Ms. R.P. More | Faculty/  Students | 80 | TEQIP, CSIR, TCS,SBI,Alumni accociation CoEP | Nil |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 1 | ‘3rd International Conference on Discrete Mathematics (ICDM-2013)’ University of Karnataka Dharwad | 10-14 June 2013 | K.V. Dalvi, C.M. Deshpande & B.P. Athawale | Faculty/Students | 200 | -- |
| 2 | ‘Goal setting’ organized by Cognizant academy Pune | 31 August 2013 | R.P. More | Faculty | 20 | TEQIP |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 3 | ‘Innovative Techniques of Teaching Mathematics & Science’ NITTTR Ext. Center  Pune | 7-11 October 2013 | S.P. Kavishwar | Faculty | 35 | -- |
| 4 | ‘ATM School on Algeraic Graph Theory’ Kumaon University Almora | 13-23 October 2013 | C.M. Deshpande | Faculty/Student | 20 | NBHM |
| 5 | ‘Teachers Enrichment workshop on Multivariable Calculus’ Bhaskaracharya Pratishthan Pune | 18-23 November 2013 | A.S. Deshpande | Faculty | 30 | -- |
| 6 | ‘Bioiformatics’ IIT Bombay | 29 Dec 2013-02 January 2014 | K.V. Dalvi & R.P. More | Faculty | 40 | AICTE |
| 7 | ‘International Conference on Transformations in Engg Education’ BVB College of Engg and Technology Hubli | 17-19 January 2014 | C. M. Deshpande | Faculty | 400 | IUCEE |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 8 | ‘Personality Development Through Positive Thinking’ NITTTR Ext. Center Pune | 20-24 January 2014 | K.V. Dalvi, S.P. Kavishwar & A.B. Dhere | Faculty | 35 | -- |
| 9 | ‘National Meet of Research Scholars in Mathematical Sciences’ Dept of Maths & Statistics University of Pune | 24-28 February 2014 | N.V. Shinde & J.B. Saraf | Faculty | 50 | Science & Engg Research Board, DST, Govt. of India |

* **Details of the Lectures/Talks organized by the department**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Date** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | Quadratic Reciprocity Law | September 21, 2013 | Dr. Dilip Patil Dept of Mathematics IISc Bangalore | Faculty/Students | 50 | COEP |
| 2 | How to run a Casino | April 04, 2014 | Dr. K.D. Joshi Adjunct Professor CoEP | Faculty/Students | 25 | COEP |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Area of Interest** |
| 1 | Dr. (Mrs.) C. M. Deshpande | Ph.D. (Maths.) | Associate  Professor | Discrete Mathematics & Graph theory |
| 2 | Dr. K. V. Dalvi | Ph.D. (Maths.) | Assistant Professor | Graph theory & Matroid theory |
| 3 | Mrs. S. P. Kavishwar | M.Sc. (Maths.) | Assistant Professor | Lattice theory |
| 4 | Ms. R. P. More | M.Sc. (Maths.),M.C.A | Assistant Professor | Computational & Discrete Mathematics |
| 5 | Mrs. A. B. Dhere | M.Sc. (Maths.) | Assistant Professor | Diff. Eqns., Transforms & Special functions |
| 6 | Ms. A. M. Abhyankar | M.Sc. (Maths.) | Assistant Professor | Commutative Algebra |
| 7 | Mrs. N. V. Shinde | M.Sc. (Maths.) | Assistant Professor | Coding theory & Algebra |
| 8 | Dr.(Mrs.) B. P. Athavale | Ph.D. (Maths.) | Assistant Professor | Discrete Mathematics & Graph Theory |
| 9 | Ms. Y. V. Sukale | M.Sc. (Maths.) | Assistant Professor | Fractional Differential Equations |
| 10 | Ms. J. B. Saraf | M.Sc. (Maths.) | Assistant Professor | Graph Theory |
| 11 | Mr. A. S. Deshpande | M.Sc. (Maths.) | Assistant Professor | Fractional Differential Equations |
| 12 | Mr. A. V. Sonawane | M.Sc. (Maths.) | Assistant Professor | Graph Theory |

**DEPARTMENT OF MECHANICAL ENGINEERING**

* **INTRODUCTION**

Mechanical Engineering is a broad ranging and intellectually demanding discipline involving advanced technology and professional skills. The department of mechanical engineering at COEP provides high-quality learning opportunities that fully prepare students for a career as a professional engineer. It offers two-year masters program in ‘Thermal Engineering”, Design Engineering and ‘Automotive Technology’ to prepare students for research and professional practice. There is a factual balance between research and teaching in the department. We are ready with real-world learning, industry-savvy faculty, and a knowledgeable, caring, and supportive staff.

The Mechanical Engineering Department along with the Production department has been conferred as the “Best Industry – Linked institute” in Mechanical Engg by AICTE New Delhi and the Confederation of Indian Industry (CII) for the year 2013.

Over the past 10 years, the department has seen a dramatic improvement in the academic standard of incoming students of high level entry grades. There is a strong support for change from the governing body. The classic example is setting up of a rare kind micro machine lab with investment of above 2 crores. The steam engineering laboratory fully donated by Forbes Marshall Ltd Pune is a unique facility available in the department. There is a clear sense amongst department faculty that the institute is actively committed to the new educational vision. The Vibration and Acoustics lab is also another state-of-the-art lab established recently in the department. Funds received from the Institute under equipments-grant, and those from AICTE, Virtual lab project of MHRD under national Mission on education through ICT, and Alumni Association of COEP were utilized to procure modern equipments for the lab. The department has undertaken the refurbishment of Heat engines laboratory wherein three storied building comprising of new laboratories, seminar halls etc. are proposed. Our alumni Mr. Rajiv Bajaj, joint MD, Bajaj Auto Limited, has agreed to donate four and half crore rupees for this project.

* **ACADEMIC PROGRAMMES**

B Tech (Mechanical Engineering)

M Tech (Mechanical – Design Engineering)

M Tech (Mechanical – Thermal Engineering)

M Tech (Mechanical – Automotive Technology)

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 06 |
| 2 | Associate Professor | 15 |
| 3 | Assistant Professor | 10 |
| 4 | Professor Emeritus | 04 |
| 5 | Adjunct Professor | 03 |
| Total | | 38 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of Laboratory** | **Facilities** |
|  | **CAD/CAM/CAE Laboratory** | * Auto CAD * CATIA * Ansys * TK Solver Rel.5.0 Software * CFD * Optistruct * ProEnginners * Comsol * LMS Virtual Lab for Noise |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of Laboratory** | **Facilities** |
|  | **Fluid Machinery Laboratory** | * Pelton Wheel * Francis Turbine * Kaplan Turbine * Gear Pump * Centrifugal Pump Test Rig * Hydraulic Jack * Torque Convertor * Hydraulic Press * Pneumatic Trainer * Hydraulic Trainer |
|  | **Fuels and Testing Laboratory** | * Variable Compression Ricardo Engine Test Rig * Computerized Single Cylinder Diesel Engine with Eddy Current Dynamometer * Data Acquisition System for Engine Testing * 5 Gas Exhaust Analyzer * Smoke Meter * Calorimeters * Carbon Residue Apparatus * Redwood Viscometer * Saybolt Viscometer |
|  | Major Equipment: | * 4-Axis CNC Wire Cut EDM along with Software * Nd:YAG Pulse Laser System along with 4-Axis CNC Gantry * 4-Axis CNC Milling Machine * Fiber Laser System * Laser Alignment System * Micro-Hardness Tester * Laser Micrometer * Mikrotool Multi-Purpose Machining Centre |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of Laboratory** | **Facilities** |
|  | **Heat Transfer Laboratory** | * Pin Fin Apparatus * Stefan Boltzmann Apparatus * Forced convection Apparatus * Emissivity Measurement Apparatus * Thermal Conductivity of Insulating Powder Apparatus * Thermal Conductivity of Liquid Apparatus * Thermal Conductivity of Metal Rod Apparatus * Heat Exchanger Apparatus * Dropwise & Filmwise Condensation Apparatus * Heat Pipe Apparatus |
| 6. | **Non-Conventional Energy Sources Laboratory** | * Parabolic & Flat Plate Collector Solar Panels * Wind Mill * Solar Cooker & Solar Still * Vacuum Tube Solar Water Heater * Pyranometer * SPV Panels (80W) |
| 7. | **Refrigeration and Air Conditioning Laboratory** | * Ice Plant * Air Conditioning Plant * Split AC Test Rig * Cryo-Pump Test Set-Up * Vapor Compression Test Rig * Cooling Tower Test Rig * Air Cooler Test Rig |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of Laboratory** | **Facilities** |
| 8. | **Steam Technology Centre** | * Babcock & Wilcox Boiler (1957) * Impulse Reaction Turbine * Surface Condenser * Resistance Load Cell * Vaporax Boiler * Spiral Heat Exchanger * Plate Heat Exchanger * Shell Heat Exchanger * Tube Type Heat Exchanger * Packaged Type Boiler (Forbes Marshall) |
| 9. | **Stress Analysis Laboratory** | * 2T Universal Testing Machine with Computerized Data Acquisition System * Diffused Light Polariscope * Strain Indicator |
| 10. | **Theory of Machines Laboratory** | * Gyroscope * Brake Test Rig * Balancing of Reciprocating Masses * Wear Test Rig |
| 11. | **Vibration and Acoustics Laboratory** | * Electro-Dynamic Vibration Shaker with Controller and Power Amplifier * Modal Shaker * 4-Channel Vibration Analyzer * Impulse Hammers * Miniature Tri-Axial Accelerometers * Pressure Field Microphones * Vibration Analysis Software * Modal Analysis Software * Non-Contacting Type Tachometer |

* **EQUIPMENT PURCHASED/ DONATED BY THE INDUSTRY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **List of Equipment Procured** | **Cost**  **(In lakhs)** | **Funded received from** | **Investigator** |
| 1 | Computational Cluster named VARUN as a part of PG computational laboratory | 22 | TEQUIP-Phase-II | C. M. Sewatkar |
| 2 | Experimental set up of Particle Image Velocimetry (PIV) with water tunnel for flow visualization | 42 | TEQUIP-Phase-II | C. M. Sewatkar |
| 3 | IC Engine laboratory and the computational laboratory as below. | 135 | Kirloskar Oil Engines | D. N. Malkhede |
| 4 | Diesel Engine of Tata Manza car having EGR and Variable Geometry Turbine. | 4.5 | Tata Motors | D. N. Malkhede |
| 5 | Computational Laboratory Development: Software AVL Boost, AVL Fire etc. | 105 | AVL India, Gurgaon | D. N. Malkhede |
| 6 | Software Ricardo Wave, Vectis, Valdyn, Engdyn etc | 100 | Ricardo | D. N. Malkhede |
| 7 | Sound and Vibration Analyzer with PULSE Software for FFT & CPB, B&K, Denmark make, under Virtual lab Project | 22.93 | Virtual Laboratory | D. W. Pande |

* **RESEARCH & DEVELOPMENT ACTIVITIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 2 |
| 2 | No of Seminars/ Talks conducted | 5 |
| 3 | No of National Conference held | 2 |
| 4 | No of International Conference held | 2 |
| 5 | No. of publications in National Journals | 2 |
| 6 | No. of publications in International Journals | 8 |
| 7 | No. of Government Sponsored Projects | 2 |
| 8 | Value of the Government Sponsored Projects (In Lakhs) | 20.92 |
| 9 | No. of Consultancy Projects | 3 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | Amount sanctioned **(In lakhs)** |
| 1 | Study results on grain handling equipments | D. W. Pande,  G. V. Parishwad | 2013-14 | M/s Eminence Equipments Pvt Ltd, Ckakan, Pune | One day | 0.25 |
| 2 | Vibration measurements on Piston Ring Tester | D. W. Pande | 2013-14 | M/s Kudale Instruments Pvt Ltd, Pune | One day | 0.03 |
| 3 | Design verification of an elevator | V K Tripathi  S N sapali | 2013-14 | M/S Universal Company Ltd | One day | 0.25 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today**  **(Amount in Lakhs)** | **Year in which the Grant was received** |
| 1 | RPS | Govt. | S. N. Sapali | 17.26 | Design and development of co-axial series rotors pico wind turbine | 8.00 | 20/AICTE/RIFD/RPS (POLICY-II) 49/2012-13 |
| 2 | Research Grant | Govt. | P. Kumar,  P. S. Shinde,  V. K. Tripathi | 17.70 | Optimum Design of Composite patches to arrest a crack in thin sheets | 12.92 | DADO/08/1051569/M/I/2011 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | | **Total** |
| **National Journal** | **International Journal** | | **National Conference** | **International Conference** |
| 1 | Mechanical Engineering | 1 | | 9 | 2 | 16 | 28 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Comparison and Evaluation of Wear, Performance and Emission of Diesel, Karanja Oil Biodiesel and JP-8 in a Military 585 kW CIDI Engine | M. R. Nandgaonkar | SAE International Journal | Published in SAE International Journal, 2013-01-2658, ISSN 0148-7191, 14th Oct 2013, doi: 10.4271/2013-01-2658. |
| 2 | Development and Field Test Performance of a Nonconventional Unidirectional Co-Axial Two Series Rotors Micro Wind Turbine | S. A. Kale,  S. N. Sapali | Energy Efficient Technologies for Sustainability’ in Advanced Materials Research, | Volume 768, ‘Energy Efficient Technologies for Sustainability’ in Advanced Materials Research, Print ISSN No.:1022-6680, (Switzerland) (Indexed by Elsevier: SCOPUS and Ei-Compendex (CPX), Cambridge Scientific Abstracts)doi:10.4028/www.scientific.net/AMR.768.119, |
| 3 | A review of multi-rotor wind turbine systems | S. A. Kale,  S. N. Sapali | Journal of Sustainable Manufacturing and Renewable Energy | Journal of Sustainable Manufacturing and Renewable Energy, Volume 2 Issue 1-2, 2013 (USA) |
| 4 | Reduction in Stress Intensity Factor of a Compact Tension Specimen by Bonding Symmetrical GFRP Patches | P. S. Shinde,  K. K. Singh,  V. K. Tropathi,  P. Kumar | Journal of Institution of Engineers | Journal of Institution of Engineers, series C, Vol. 94, Issue 6, July 2013, pp. 239-244. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 5 | Repair of a SENT specimen through CFRP patches- an experimental study | P. S Shinde,  P. Kumar,  K. K Singh,  V. K. Tripathi | Journal of Composite materials | Journal of Composite materials, Sage Publications, USA, April 2014 |
| 6 | Kinematic analysis to generate trajectory for six degree of freedom Humanoid Arm | S. S. Ohol  S. S. Kapse | International Journal of Innovative Technology Research | International Journal of Innovative Technology Research. Volume 2, Issue 1. Jan 2014, pp. 722-725 |
| 7 | Design and Development of Modular Humanoid Arm based on RC servo motor | S. S. Ohol  S. S. Kapse | International Journal of Advanced Research in Engineering & Technology | International Journal of Advanced Research in Engineering & Technology. Volume 4, Issue 7, Nov-Dec 2013, pp. 156-160 |
| 8 | Performance Improvisation of SCORBOT-ER 4u Robot Arm by Simulation | P. V. Patil  S. S. Ohol | International Journal of Materials Science and Engineering | International Journal of Materials Science and Engineering, Vol. 2, No. 1st March, 2014. |
| 9 | Analysis of hydrodynamic journal bearing using fluid structure interaction approach | Dinesh Dhande,  D W Pande,  Vikas Chatarkar | International Journal of Engineering Trends and Technology (IJETT) | International Journal of Engineering Trends and Technology (IJETT), Volume 4, issue 8 |
| 10 | FEM Analysis and Optimization of Two Chamber Reactive Muffler by using Taguchi Method | S. S. Patil,  S. M. Patil,  A. P. Bhattu,  A. D.  Sahasrabudhe | American International Journal of Research in Science, Technology, Engg. & Mathematics | American International Journal of Research in Science, Technology, Engineering & Mathematics}, Vol. 3, No. 1pp. 21-28, June-August 2013, ISSN: 2328-3580 |

* **Papers Presented in International/ national conferences/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 1 | Performance Improvisation of SCORBOT-ER 4u Robot Arm by Simulation | P. V. Patil,  S. S. Ohol | International Conference on Robotics, Mechanics and Mechatronics (ICRMM 2014) held on 22th March to 23th March 2014 at Bali, Indonesia | 22th March to 23th March 2014 | International |
| 2 | Development of Autonomous Hydro Quad Rotor Robot | S. S. Ohol,  Subodh Bhosle,  Lalit Palve,  Sagar Jadhav | International Conference on Mechanical and Production Engineering conducted by Institute of Research and Journal (IRAJ) Bhubaneswar, 751030, Odisha, India, held at Pune | 19th January 2014. | International |
| 3 | The mechanism of Electrochemical discharge | M. G. Karnik | 5th International conference on Advance Design and Manufacture, held at Valencia , Spain, Published in Key Engineering Materials, Trans Tech Publications, Switzerland | Vol 572, (2014), pp 295-299 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 4 | Comparison & Evaluation of Performance, Emission and Wear analysis of Diesel, JP-8, Pure karanja biodiesel in a military 780 hp CIDI engine. | M. R. Nandgaonkar | In ASME 2013, International Mechanical Engineering Congress & Exposition, IMECE2013, San Diego, California, USA | November 13-21, 2013 | International |
| 5 | Prediction of Combustion Pressure, NOx & Soot for D.I. Diesel Engine by Simplified Model. | M. R. Nandgaonkar | In ASME 2013, International Mechanical Engineering Congress & Exposition, IMECE2013, November 13 | November 13, 2013 | International |
| 6 | Design & Computational Validation of In-line Bare Tube Economizer for 210 MW Pulverized Coal Fired Boiler. | M. R. Nandgaonkar | In ASME 2013, International Mechanical Engineering Congress & Exposition, IMECE2013, November 13 | November 13, 2013 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 7 | Numerical Investigation of Multijet Air Impingement on Pin Fin Heat Sink with Effusion Slots | N. K. Chougule,  G. V. Parishwad,  A. Nadgire | ICMSC\_28 (International Conference on Modeling, Simulation and Control 2013) Volume 2, 23-25 Oct. 2013. University of California, Berkeley, San Francisco, USA | Volume 2, 23-25 Oct. 2013. | International |
| 8 | Classical Approach of Sound Source Localization and Adoption of Noise Control Strategy for Diesel Engine | D. N. Malkhede | International Conference on Smart Technologies for Mechanical Engineering, Oct. 25-26, 2013 | October, 25-26, 2013 | International |
| 9 | Gear Shift Schedule Optimization & Drive Line Modeling for Automatic Transmission | D. N. Malkhede | 1st International &16th National Conference on Machines and Mechanisms, at Indian Institute of Technology Roorkee, India and the same is accepted for International Journal of Machines & Mechanisms. | December 18 – 20, 2013 | International |
| 10 | State Feedback Speed Controller For Turbocharged Diesel Engine and It’s Robustness | D. N. Malkhede | International Conference held at Madrid, Spain, March 2014. | March 2014. | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 11 | Development of a Four bar Compliant Mechanism using Pseudo Rigid Body Model (PRBM) | B. Deshmukh  S. S. Pardeshi,  R. Mistry,  S. Kandharkar,  S. V. Wagh | 3rd International Conference on Material Processing and Characterization, 8-9 March 2014, GRIET Hyderabad. | 8-9 March 2014 | International |
| 12 | Exergy Analysis of Cryogenic Air Separation Unit Integrated with Biomass Gasifier | S. N. Sapali,  V. N. Raibhole | World Congress on Engineering and Computer Science 2013 (WCECS 2013), 23-25 October, 2013, San Francisco, USA. | 23-25 October, 2013, | International |
| 13 | Energetic and Exergetic Performance analysis of Vapour Compression Refrigeration using Refrigerant 22 and R161, | S. N. Sapali,  C. S. Chaoudhary | International conference on “Emerging Trends in Technology & its Applications”, at Yadavrao Tasgaonkar College of Engineering and Management, Karjat, | March 7-8, 2014 | International |
| 14 | CFD Analysis of Heat Recovery System for Window Air conditioning | S. N. Sapali,  Sagar Kalokhe | International conference on Emerging Trends in Technology & its Applications”, at Yadavrao Tasgaonkar College of Engineering and Management, Karjat, | March 7-8, 2014. | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 15 | Power output prediction and Primary Evaluation of a Unidirectional Co-axial Series Rotors Wind Turbine | S. A. Kale,  S. N. Sapali | IEEE Xplore Digital Library, Print ISBN: 978-1-4673-5150-8,DOI[10.1109/AICERAICMiCR.2013.6576030](http://dx.doi.org/10.1109/AICERA-ICMiCR.2013.6576030) | INSPEC Accession Number: 13698267 , pp. 1 – 3, 2013 | National |
| 16 | Interior Noise Reduction of Cab using Radioss | K. Peddamallu,  Manoj Purohit,  D. W. Pande | 2013 Altair India Technology Conference, Chennai, July 16, 2013 | July 16, 2013 | National |
| 17 | Optimization of Sound Transmission Loss of Single Chamber Perforated Muffler with Straight Duct | A. P. Bhattu,  Shantanu Kanade,  A.D. Sahasrabudhe | International Conference on Advances in Mechanical Engineering, COEP, Pune, Maharashtra, India, | ICAME2013 S16/O14, May 29-31, 2013 | International |
| 18 | Role of Three Dimensional Computations in Di Diesel Engine Combustion and Emission Optimization” National Conferences | P. R. Dhamangaonkar | International Conference on Advances in Mechanical Engineering, May 29-31, 2013, COEP, Pune | May 29-31, 2013 | International |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS /EVENTS**

* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 1 | International Conference on Advances in Mechanical Engineering (ICAME-2014), during 29-31 May 2013, COEP | S. N. Sapali  G. N. Kulkarni  S. S. Pardeshi  C. M. Sewatkar | Faculty, Students and Industry people | 400 | COEP, |
| 2 | International Simulation Conference of India- 2014 | S. N. Sapali  V. K. Tripathi | Faculty, Students and Industry people | 125 | COEP in association with P.M.C., USA and P.M.I. India |
| 3 | One day seminar on “Advances in Cryocooler Technology” by Prof. Milind Atrey IIT Bombay on 20th Aug.2013 | S. N. Sapali | Faculty/students | 180 | -- |
| 4 | ISHRAE Students chapter –TechnoCHILL -2014 on 8th March 2014. | S. N. Sapali  N. D. Shikalgar | Students | 150 | ISHRAE Pune |
| 5 | Design Automation using CAD software- Creo 2.0 | N. K. Chougule | Faculty, Students and Industry people | 200 | COEP |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the faculty.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 1 | CEP Short term course on “Advances in Cryocooler Technology” on 21st to 25th October 2013 at IIT Bombay. | N. D. Shikalgar | Faculty/ Industry People. | 40 | One Week STTP IIT Bombay |
| 2 | Two Day Workshop “ACR Trendz 2013” on 18th and 19th October 2013. | S. N. Sapali,  C. M. Shewatkar,  M. P. Khond,  P. S. Shinde,  N. D. Dhote  P. V. Patil | Faculty/ Students/ Industry people | 50 | TEQUIP-II |
| 3 | International Symposium on Engineering and Technology Pune at Trinity COE Pune, on 9-10 Jan 2014. | N. K. Chougule | Faculty/ Students/ Industry people | 150 | -- |
| 4 | ICMSC\_28 (International Conference on Modeling,Simulation and Control) University of California, Berkeley, San Francisco, USA, on 23-25 Oct. 2013. | N. K. Chougule | Faculty/ Students/ Industry people | 600 | TEQUIP-II |
| 5 | Workshops and Training programs conducted on Applications of MATLAB, Simulink and its Toolboxes for research. | D. N. Malkhede | Students/ Industry Professionals/ Faculty | Students(546), Industry Professionals (88),  Faculty (127) | COEP |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 6 | As a session chair, “World congress on Engineering and Computer science 2013, at San Francisco, USA, 23-25, 2013. | S. N. Sapali | Students, Industry Professionals, Faculty | 150 | TEQIP-II |
| 7 | As a session chair in International Symposium on Engineering and Technology Pune at Trinity COE Pune, on 9-10 Jan 2014. | S. N. Sapali | Faculty/ Students/ Industry people | 150 | -- |
| 8 | Validation of Experimental-Cum-Numerical technique for Critical J-Integral of thin Sheet through and approach. | P. S. Shinde,  K. K. Singh,  V. K. Tripathi,  P. Kumar | Students, Industry Professionals, Faculty | 400 | TEQIP-II |
| 9 | Engineering Education for the 21st Century,  17th and 18th May 2013, at COEP | S. S. Ohol  S. S. Mundra | Industry Professionals, Faculty | 45 | COEP |
| 10 | International Conference on Advances in Robotics - 2013, 04th – 06 July 2013 at R & DE (Engrs), DRDO, Digi, Pune | S. S. Ohol | Scientist of DRDO labs., Industry Professionals, Faculty | 250 | DRDO labs and Industries |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 11 | One week FDP on Nanomaterial and Nanocomposites from 2nd to 6th December, 2013, organized by Metallurgy Department, COEP | S. S. Mundra | Faculty/ Students/ Industry people | 25 | TEQIP-II |
| 12 | Academic Leadership Programme, March 10-15, 2014, organized by Department of Management Studies, IIT Delhi | D. W. Pande | Faculty and Industry people | 30 | TEQIP-II |
| 13 | One week FDP on “ Corrosion and Surface Engineering” from 3rd to 8th January, 2014, organized by COEP | S. V. Wagh,  N. D. Dhote | Faculty/ Students/ Industry people | 30 | TEQIP-II |
| 14 | International Conference on Sustainable Innovation and successful product development for a turbulent Global Market, organized by PDMA IIT Madras, on  16th – 17th December’13 | S. S. Pardeshi,  S. B. Patil | Faculty/ Students/ Industry people | 200 | IIT Madras |

* **Details of the Lectures delivered in various programs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Name of the faculty** | **Title of the Lecture** | **Category of the Participants** | **No. of Participants** |
| 1 | Expert Lecture at KBP college of Engg. & Polytechnic, Satara | N. D. Shikalgar | Industrial Hydraulics and Pneumatics | Students | 68 |
| 2 | Expert Lecture at Dnyashree Institute of Technology,Satara | N. D. Shikalgar | Theory of Machine | Students | 120 |
| 3 | Universal College of Engg. Pune | N. K. Chougule | Design Automation, Analysis and Optimisation & CNC  programming | Faculty/ students | 78 |
| 4 | Expert lecture at Raisoni College of Engg. Pune | N. K. Chougule | “Design Automation using CAD software” | Faculty/ UG, PG students | 110 |
| 5 | Two Days Workshop on Pro-Engineering for Computer Aided Machine Drawing at AISSM COE | N. K. Chougule | Design Automation using CAD software | Faculty | 25 |
| 6 | RSS’s COE, Satara | D. W. Pande | Theory & applications of FEM | Faculty and Students | 45 |
| 7 | Modern College of Engineering, Pune, | S. N. Sapali | Ad Heat Transfer | ME students | 20 |
| 8 | Anand College of Engineering Agra | S. N. Sapali | Cryogenic Air Separation Technology | Faculty and engineers from industries | 40 |
| 9 | Prestigue Institute of Engg. & Research Indore, on 8th May 2014. | S. N. Sapali | Micro Wind Turbine | Faculty and Students | 60 |

* **BOOKS PUBLISHED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the author** | **Title of the book** | **Name of the publisher** | **Date of publication** |
| 1 | S. N. Sapali | Refrigeration and Air Conditioning, II Edition | PHI New Delhi | January 2014 |
| 2 | V. M. Domkundwar | Automobile Engineering | Dhanpat Rai & Co.(P) Ltd., Delhi | November 2013 |

* **AWARDS & HONORS**
* **For Faculty & Teaching staff**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Name of the Award** | **Description** | **No. of Awards** |
| 1 | S. N. Sapali | Best Teacher Award | Best Teacher Award for Year 2012-13 by Government of Maharashtra in December 2013. | 1 |
| 2 | V. K. Tripathi | Scholar of the Year Award | International conference on advances in Engineering and Technology (ICAET-2013) at SKN Singhgad Institute of Technology, Lonavala, Pune. | 1 |
| 3 | S. S. Ohol | Excellent Paper Award | International conference on Mechanical and Production Engineering, organized by IRAJ, Feb, 2014, Odisha. | 2 |
| Excellent Paper Award | International Conference on Robotics, Mechanics and Mechatronics (ICRMM 2014) held on 22th March to 23th March 2014 at Bali, Indonesia. |
| 4 | Ganesh Pawar | Best Employee Award of COEP | Best employee Award-2013, given by COEP. | 1 |

* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award** | **Description** | **No. of Awards** |
| 1 | Preetam Gharate | CAT Rank Holder- 2014 | CAT Rank holder- 2014 (Percentile score-99-99)  First Rank | 1 |
| 2 | Siddharth Banerejee | Dr S R Kajale- Best Mechanical Engineering Student Award-2014 | Dr S R Kajale ‘Best Mechanical Engineering student’ Award for year -2013-14 | 1 |
| 3 | Nihar Deshpande | Best outgoing Student Sward-Year: 2013-14, of COEP | Best outgoing studentof Year:2013-14 of the COEP | 1 |
| 4 | Joanne Rodriges | IInd prize at Firodiya Karandak-2014 for best violinist | Firodiya Karandak-2014 | 1 |
| 5 | Ankur Prajapati ,  Mr. Saarish Kareer | Best music overall award at Firodiya Karandak  2014. | Firodiya Karandak-2014. | 2 |
| 6 | Siddharth Banerejee | Most popular project Award | Most popular project award from TCS | 1 |
| 7 | Mr. Nipun Patil | GATE-2014, AIR- 206 | GATE-2014, All India Ranking | 1 |
| 8 | BAJA Team | All India BAJA-2013 Championship. | All India BAJA-2013 Championship with six additional awards. | 7 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award** | **Description** | **No. of Awards** |
| 9 | BAJA Team | All India Second Best BAJA-2014 Championship with award in seven categories | * 1st Place in CAE * 1st Place in Acceleration * 1st Place in Maneuverability * 2nd Place in Suspension and traction * 2nd Place in Hill Climbing * 2nd Place in RFTAR * 2nd Place in Built Quality. | 8 |
| 10 | Team Robocon | Robot Study Circle | Best Idea Award in National Robotics Competition, ROBOCON 2014 at Pune | 1 |
| 11 | BAJA Team | SAE BAJA competition at International level held in South Africa, on 25th to 26thOctober 2013 and won the overall-3rd Prize | SAE Team COEP has participated in the SAE BAJA competition at International level held in South Africa, on 25th to 26thOctober 2013 and won the overall-3rd Prize.   * 1st Place in Endurance race. * 1st Prize for the cost report of their project. | 3 |

* **MOUS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **COEP(Dept)** | **MOU Signed**  **with** | **Date** | **Description** |
| 1 | Mechanical Engineering Department and Metallurgy Department, COEP | Association of Indian Forging Industry (AIFI) | 17th October  2013 | For the common benefit of students of COEP becoming “Industry ready” while learning at the College of Engineering Pune and the Industry needing employable graduates and post graduates. |

* **SPECIAL MENTION**
* Prof. G. V. Parishwad, faculty member of Mechanical Engineering Department has joined as ‘Director, Walchand College of Engineering, Sangli, in February 2014.
* S. N. Sapali, has received the Best Oral Presentation for a research paper in ICPEE Thailand along with Dr V N Raibhole.
* P R Dhamangaonkar, completed his Ph. D title “To Develop predictive tool for Boiler Tube Failure” from Pune University on 25th September 2013 under the guidance of Late Dr. S. R. Kajale and Dr. M R Nandgaonkar.
* S. S. Bhavikatti, completed her Ph. D title “A Laser Transformation Hardening of Cast Iron Cylinder Liner” from Pune University on 15th January 2014, under the guidance of Late Dr. S. R. Kajale and Dr. S S Pardeshi.
* M. G. Karnik Visited Cummins Research Center at Nottingham University, UK, presented about research avenues in COEP, 2013.
* N. K. Chougule, developed software for Department Information System using MS Excel.
* P. R. Dhamangaonkar has attended International summer school at Ostfalia University, Wolfenbattle, Germany.
* C. M. Sewatkar’s research work appeared on the cover page of Journal of Fluid Mechanics of Cambridge University Press.
* Mr. Mayuresh Vaidya student of Mechanical Engineering Department won 22 awards for street play and 13 overall kho-kho competitions.
* Miss. Nikita Dakhare, Mr. Rohit Khadilkar, Mr. Nikhil Ghodke are the students of B. Tech Mechanical are completing their project work at Ostfalia University, Germany.
* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Areas of interest** |
| 1 | Dr. A.D. Sahasrabudhe | Ph.D. (Mech.Engg.) | Professor & Director | Vibration & Noise Control, Operation Research and Optimization |
| 2 | Dr. G. V. Parishwad | Ph.D. (Mech.Engg.) | Professor | Advanced Heat Transfer |
| 3 | Dr. S. N. Sapali | Ph.D. (Mech.Engg.) | Professor & Head | Refrigeration and Air Conditioning |
| 4 | Dr. D. W. Pande | Ph.D. (Mech.Engg.) | Professor | Vibro-Acoustics, Finite and Boundary Element Methods |
| 5 | Dr. D. N. Malkhede | Ph.D. (Mech.Engg.) | Professor | Internal Combustion Engines |
| 6 | Dr. V. K. Tripathi | Ph.D (Mech.Engg.) | Professor | Design Optimization |
| 7 | Dr. A. A. Latey | Ph.D (Mech.Engg.) | Associate Professors | Internal Combustion Engines |
| 8 | Dr. M. P. Khond | Ph.D. (Mech.Engg.) | Associate Professors | Fluid Mechanics |
| 9 | Dr. M. R. Nandgaonkar | Ph.D. (Mech.Engg.) | Associate Professors | Internal Combustion Engines, Computational Fluid Dynamics |
| 10 | Dr. Madhuri G Karnik | Ph.D.(Mech.Engg.) | Associate Professors | Design Engg, Micro-Fabrication Engg |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Areas of interest** |
| 11 | Dr. S. S. Pardeshi | Ph.D. (Mech.Engg.) | Associate Professors | Wire EDM |
| 12 | Dr. S. S. Ohol | Ph.D (Mech.Engg.) | Associate Professors | Robotics |
| 13 | Dr. S. D. Suryavanshi | Ph.D. (Mech.Engg.) | Associate Professors | Non Conventional Energy |
| 14 | Dr. G. N. Kulkarni | Ph.D. (Mech.Engg.) | Associate Professors | Solar Equipments, Non-Conventional Energy |
| 15 | Mr. R .N. Ladhwe | M.Tech.(Design) | Associate Professors | Design Engg |
| 16 | Mr. V. K. Haribhakta | M.Tech(Production) | Associate Professors | Micro-Machining |
| 17 | Mr. P. R. Dhamangaonkar | M.E.(Thermal) | Associate Professors | Steam Engg, Boiler Design |
| 18 | Mr. A P. Bhattu | M.E. (Design) | Associate Professors | Vibration and Acoustics |
| 19 | Dr. C.M. Sewatkar | Ph. D (Mechanical) | Associate Professors | Fluid Mechanics, Computational Fluid Dynamics |
| 20 | Mr. N. K. Chougule | Ph. D (Mechanical) | Associate Professors | CAD/CAM/CAE and Heat Transfer |
| 21 | Mrs. S. S. Bhavikatti | M.Tech.(Design) | Associate Professors | Micro-Machining |
| 22 | Dr. S. B. Patil | Ph.D. (Mech.Engg.) | Assistant Professor | Micro Machining, Industrial Engg |
| 23 | Mrs. P. J. Mulay | M.E. (Design) | Assistant Professor | Micro-Machining |
| 24 | Mr. N. P. Dale | B.E. (M echanical) | Assistant Professor | Thermal Engg |
| **Sr.**  **No** | **Name of the Faculty** | **Highest**  **Qualification** | **Designation** | **Areas of interest** |
| 25 | Mr. N. D. Dhote | M.E. (Design) | Assistant Professor | Design Engg |
| 26 | Mr. S. V. Wagh | M. Tech. (Mech.) & M.E. (Prod.) | Assistant Professor | Micro-Machining |
| 27 | Mr. P. S. Shinde | M.E. (Design) | Assistant Professor | Vibration and Noise Control |
| 28 | Mr. H. P. Shinde | M.Tech.(Design) | Assistant Professor | Design Engg |
| 29 | Mrs. S. S. Mundra | M.Tech.(Design) | Assistant Professor | Design Engg |
| 30 | Mr. N. D. Shikalgar | M.E.(Heat Power) | Assistant Professor | Thermal Engg |
| 31 | Mr. P. V. Patil | M.Tech.(Mech- Mechatronics) | Assistant Professor | Robotics, Automobile, Mechatronics |

**DEPARTMENT OF METALLURGY & MATERIAL SCIENCE**

* **INTRODUCTION**

The department is a unique establishment in and around western Maharashtra in educating students as Materials Engineers. Day by day, the demand of this skilled human resource in the industry is rising sharply due to the globalization of Indian economy. The department strives hard in fulfilling these requirements. The active support of eminent members of alumni in India and abroad - ranging from research scientists in developing computer chips to the managing directors - has helped the department in training the students in state of the art technology. There is an intake of 60 students for B.Tech course. Additional six students are admitted through Diploma stream. The total intake capacity for M. Tech programme is 36 with specializations in Process Metallurgy and Physical Metallurgy.

* **ACADEMIC PROGRAMS (B. TECH/ M. TECH/ PH. D)**

B. Tech Metallurgy & Material Science

M. Tech Physical Metallurgy

M. Tech Process Metallurgy

Ph. D Metallurgy & Material Science

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 03 |
| 2 | Associate Professor | 03 |
| 3 | Assistant Professor | 11 |
| Total | | 17 |

* **MAJOR EQUIPMENTS & FACILITIES**

The department has excellent characterization facilities as well as various laboratories with state of the art technical equipment. The main laboratories are: Chemical Analysis, Heat Treatment, Physical Metallurgy, Powder Metallurgy, Mechanical Testing, Mechanical Working, Computer, Modeling and Simulation, Tribology, Foundry, Cryogenic Treatment, Workshop, Corrosion and surface protection, Polymer Nano-Composites, Advanced Material Technology Laboratory.

The major equipment/instrument in the department are: Plastic injection molding machine, X-Ray stress analyzer, XRD, Salt spray corrosion testing chamber unit, Cryogenic treatment chamber, Sheet rolling mill, Automatic Polishing Machine, Automatic Mounting Machine, 1600 oC Tube Furnace, Fluidized bed furnace, Stationary and Portable Image Analyzer, Induction Furnace with low vacuum attachment, Keithely high resistivity meter (Keithely 6517B), Compression molding machine up to 350 °C, Impedance Analyzer (Wayne Kerr, UK), Pin-on-Disc tribometer, Vacuum oven, Jar mill with cooling system, DC drive of rolling machine, Thermogravitymetry analyzer (TGA 4000 PerkinElmer), Differential Scanning Calorimeter, FTIR Spectrometer, UV Spectrometer, Anodic Polarization Set Up, Galvanostat/ Potentiostat Interface 1000, Gas Nitriding Furnace, Wire Flame Spray System with Spray Booth, Powder Flame Spray System with Portable Grit Blasting etc.

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| Nanocomposite Lab | * Thermogravimetry analyzer (TGA 4000, PerkinElmer) * Differential scanning calorimeter (Q20 MDSC, TA Instruments) | CCTV Camera |

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| Paint Coating (Advanced Material Technology Lab) | * FTIR spectrometer * UV spectrophotometer * Anodic Polarization set up * Galvanostat/ Potentiostat Interface 1000 | CCTV Camera |
| Heat Treatment Lab | * Gas Nitriding Furnace | CCTV Camera |
| Surface Engineering lab | * Wire Flame Spray System with Spray Booth * Powder Flame Spray System with Portable Grit Blasting | CCTV Camera |
| Ceramic Lab | * Planatary ball mill * Muffle furnace * BET Surface area analyzer | CCTV Camera |
| Corrosion & Surface Protection | * Weatherometer | CCTV Camera |

* **EQUIPMENT PURCHASED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Usage** | **Date of purchase / development** | **Resource consumed**  **(amount in Lakhs)** |
| Surface Engineering | Powder Flame Spray System with Portable Grit Blasting | SERB Project, UG/PG students | August-2013 | 4.10 |
| Laser Material Processing | X-Y CNC Table | For about 9 months in MTech and BTech projects | 3 September 2013 | 7 |
| **Name of the Lab/ section** | **Module Description** | **Usage** | **Date of purchase / development** | **Resource consumed**  **(amount in Lakhs)** |
| Paint coating | Galvanostat/ Potentiostat Interface 1000 | Corrosion studies | 30 October 2013 | 15.54 |
| Nanocomposite Lab | Differential scanning calorimeter (Q20 MDSC, TA Instruments) | Transition temperatures and % crystallinity of polymer | 11 February 2014 | 18 |
| Paint coating | FTIR spectrometer | Polymer characterization | 28January 2014 | 7.05 |
| Paint coating | UV spectrophotometer | Polymer characterization | 28January 2014 | 2.81 |
| Paint coating | Anodic Polarization set up | High temperature corrosion studies | 26 February 2014 | 0.42 |
| Heat Treatment Lab | Gas Nitriding Furnace | AICTE-RPS project, UG/PG students | March-2014 | 1.08 |
| Surface Engineering | Wire Flame Spray System with Spray Booth | SERB Project, UG/PG students | February-2014 | 3.80 |
| Ceramic Lab | Muffle furnace | UG/PG students | Decemeber 2013 | 1.30 |
| 3 BET Surface area analyzer | UG/PG students | April 2014 | 5.80 |
| Corrosion & Surface Protection | Weatherometer | UG/PG students | January 2014 | 6.30 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 02 |
| 2 | No of Seminars/ Talks conducted | 11 |
| 3 | No. of publications in National Journals | 02 |
| 4 | No. of publications in International Journals | 15 |
| 5 | No. of Industry Sponsored Projects | 02 |
| 6 | Value of the Industry Sponsored Projects (In Lakhs) | 0.20 |
| 7 | No. of Government Sponsored Projects | 15 |
| 8 | Value of the Government Sponsored Projects (In Lakhs) (Including sanctioned & ongoing from previous years) | 230 |
| 9 | No. of Consultancy Projects | 04 |
| 10 | No of Ongoing Ph. Ds | 06 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(Amount in Lakhs)** |
| 1 | Synthesis, characterization and testing of polymer based nano composite coatings for corrosion protection and antifouling applications | P.P. Deshpande and S.T.Vagge | March 2013 –November 2013 | EATON, USA | Eight months | 6,000 USD |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(Amount in Lakhs)** |
| 2 | Correlating wear behavior for cutting blade: Laboratory pin-on-disk and custom build rig | N.B. Dhokey | 2013 | John Deere | One year | 3.50 |
| 3 | Metallurgical investigation of sliver contact materials | N.B. Dhokey | 2013-2014 | Cummins India | One year | 8 |
| 4 | Environmental salt spray corrosion resistance testing of proto type pressed steel door frame and door shutter | S.T.Vagge | September 2013 | BG Shirke construction pvt. Ltd.pune | September-November 2013. | 0.40 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received)** |
| 1 | UGC, New Delhi Major Research Project | Govt. | M.G. Kulthe | 10.50 | Study on Thermal & Electrical Properties of Polymer Matrix Composites | Satisfactory | 2011 |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 2 | AICTE, New Delhi Research Promotion scheme | Govt. | M.G. Kulthe | 22.50 | Study on thermal and flammability properties of polymer nanocomposites | Satisfactory | 2013 |
| 3 | AICTE, New Delhi  Research Promotion scheme | Govt. | R.K. Goyal | 20 | Fabrication and Characterization of Low Cost Novel Three-Phase Polymer Nanocomposites for Embedded Capacitors Applications | Satisfactory | 2013 |
| 4 | UGC, New Delhi  Major Research Project | Govt. | P.P. Deshpande | 5.51 | Electro deposition of Conducting Co polymers on steel | 5.51 | 2012 |
| 5 | AICTE, New Delhi  Research Promotion scheme | Govt. | P.P. Deshpande | 18.70 | Electrochemical investigations of conducting Polyaniline- Nano Zn0 composite based paint coatings ( FTIR Studies ) | 8.26 | 2013 |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 6 | ISRO-DRDO | Govt. | P.P. Deshpande | 9.50 | Development of conducting polyaniline-ZnO nano particle composite paint coating for corrosion protection | Satisfactory | 2013 |
| 7 | ISRO-DRDO | Govt. | P.P.  Deshpande | 9.50 | Development of conducting polyaniline-ZnO nano particle composite paint coating for corrosion protection | Satisfactory | 2013 |
| 8 | AICTE -RPS | Govt. | V S Galphade | 16 | Development of carbon based bipolar plate material for proton exchange membrane fuel cell | 0.31 | 2013 |
| 9 | BRNS | Govt. | N.B.Dhokey  S.P.Butee | 30 | Synthesis of high temperature beta FeSi2 by mechanical milling | Satisfactory | 2014 |
| 10 | AICTE-RPS | Govt. | N.B.Dhokey | 18.50 | Influence of cryogenic treatment on fatigue and wear properties of Gear material | Satisfactory | 2013 |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 11 | SERB/  DST  Young Scientists Scheme | Govt. | S.S. Hosmani | 16.66 | Functionally Graded and Composite Coatings by Twin-Gun Thermal Spraying | 9.02 | 2013 |
| 12 | AICTE-RPS | Govt. | S.S. Hosmani | 10 | Effect of Surface Deformation Obtained by Mechanical Attrition on Nitriding Behavior of Low Alloy High Strength Steel | 1.64 | 2013 |
| 13 | AICTE-RPS | Govt. | S.P. Butee | 14 | Microstructure Engineering of Microwave Dielectric ZnNb2O6 Ceramics | 1.3 lakh (orders placed for 11.5 lakh) | 2012 |
| 14 | AICTE-MODROB | Govt. | S.P. Butee | 17.75 | Synthesis of Novel Electroceramics for Microwave Communication Devices | 5.2 lakh  (orders placed for 9.3 lakh) | 2013 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| 15 | AICTE-RPS | Govt. | V.T. Thavale | 15.20 | Development of Nanostructures by Cryomilling of AL-Si-Cu-Mg Premix Alloy Powder and its Response to Mechanical Properties | Satisfactory | 2013 |
| 16 | Industry Spons  ored | Vishay Components | S.T.Vagge | Nil | Electroless Ni plating | NA | NA |
| 17 | N D Gupta Industries, Bhosari | Industry | M.J.Rathod | 0.20 | Laser Surface Hardening of Ductile Iron | Satisfactory | 2013 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | | **Total** |
| **National Journal** | **International Journal** | | **National Conference** | **International Conference** |
| 1 | Metallurgy and Materials Science | 02 | | 15 | 02 | 15 | 34 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Thermal &Dielectric Behaviour of flexible Polycarbonate/ Lead Zirconate Titanate Composite System. | P.K. Sain, R.K. Goyal, A.K. Bhargava, Y.V.S.S. Prasad | Journal of Applied Polymer Science | [Vol. 131, Issue 4,](http://onlinelibrary.wiley.com/doi/10.1002/app.v131.4/issuetoc) February 15, 2014, 39913-39919, DOI: 10.1002/app.39913 |
| 2 | Thermal & Electronic Behaviour of Polycarbonate/ Copper nanocomposites | P.K. Sain, R.K. Goyal, A.K. Bhargava, Y.V.S.S. Prasad | Journal of Physics D: Applied Physics | 46 (2013) 455501-8  [doi:10.1088/0022-3727/46/45/455501](http://dx.doi.org/10.1088/0022-3727/46/45/455501) |
| 3 | The wear and friction behavior of Novel PTFE/expanded graphite nanocomposites for Tribology Application | R. K. Goyal, M. Yadav | Journal of Tribology | 136(2), 021601 (Dec 27, 2013) (5 pages) doi:10.1115/1.4025655 |
| 4 | Wear instability in AISI T42 tool steel and its relevance to microstructural features | N.B.Dhokey A.Hake | Tribology - Materials, Surfaces & Interfaces | 2013  In press |
| 5 | Influence of Cryoprocessing on mechanism of carbide development in cobalt bearing high speed steel (M35) | N.B.Dhokey, A. Hake, S.Kadu, I.Bhoskar, G.K.Dey | Metallurgical and Materials Transactions | No. 3, 45:  1508-1516 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 6 | Role of ceramic coating on electrical and Magnetic properties of Soft magnetic composite | N.B.Dhokey, S.Dhandhare, S.Patil, V.S.Bandal | Electronic Material letters | 2014  In press |
| 7 | Study of Wire Saw Beads for granite cutting | N.B.Dhokey, P.Nimbalakar, P.Dhoka | Diamante: Technology and Applications | Sept 2013, ISSN 1824-5765, |
| 8 | Influence of water pressure and apex angle on prediction of particle size for atomization of copper powder | N. B. Dhokey, M. Walunj, U. Chaudhari | Advanced Powder Technology | 25 (2014) 795–800 |
| 9 | Study on electrical properties of Polymer/EG nanocomposites for EMI Shielding applications | R.K. Goyal | Materials Chemistry and Physics | Vol. 142, Issue 1, 15 October 2013, 195-198, [Doi.org/10.1016/j.matchemphys.2013.07.005](http://dx.doi.org/10.1016/j.matchemphys.2013.07.005) |
| 10 | Surface Engineering of Stainless Steels: Role of Surface Mechanical Attrition Treatment (SMAT) | A.M. Gatey, S.S. Hosmani, R.K.P. Singh and S. Suwas | Advanced Materials Research, | Vol. 794, Pages 238-247 (2013). DOI: 10.4028/www.scientific.net/AMR.794.238 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 11 | Concepts in Surface Alloying of Metals | S.S. Hosmani | Metallurgical & Materials Engineering (former Journal Metalurgija), | Vol. 19, No. 1, Pages 65-84 (2013), UDC: 669.14.018.8:667.61  (Published by AMES - Association of Metallurgical Engineers of Serbia) |
| 12 | Galvanic corrosion investigations on conducting poly ( o -anisidine) coated low carbon steel by using zero resistance ammeter | Prathmesh Deshpande,  P.P.Deshpande S.T.Vagge | UPB Science Bulletin | ,Series B, Vol 75, issue 4, 2013, ISSN 1454-2331 |
| 13 | Dissimilar Metal Joining by Using Friction Stir Spot Welding | M. J. Rathod, Rohit Rithe | SAE Database 2014-28-0020 (AM&M2014) | 28-30 April 2014 |
| 14 | Laser Surface Hardening of Ductile Irons | M. J. Rathod, Hemant Deore | SAE Database 2014-28-0021 (AM&M2014) | 28-30 April 2014 |
| 15 | Friction stir welding of Aluminium-alloys | M. J. Rathod, Tejal Karale | SAE Database 2014-28-0015 (AM&M2014) | 28-30 April 2014 |

* **National Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Effect of Duplex Surface Treatment on the Microstructure and Properties of Mild Steel | S. Hosmani, V. Ajesh, | Proceedings of the Indian National Science Academy | National  Vol. 79, No. 3, Pages 327-331 (2013).  ISSN 0370- 0046 |
| 2 | Comparative study of addition of REM, Ni,and TiO2 on hot dip zinc coatings : a review | Pritee Purohit, S.T.Vagge | The Institution of Engineers (I) | 2013, 37, pp 261-265 ISBN no.978-81 -924990-1-7 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | |  |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 1 | Production and Study of Cast-Iron Dispersed Steel Matrix Materials | S.S. Hosmani, R.V. Potdar and T.B. Chaudhari, | Proceedings of Second International Conference on Advances in Materials Processing and Characterisation (AMPC 2013), Chennai, India, February 6-8, 2013; Editors: S. Balasivanandha Prabhu, S. Senthil Kumaran, L.Karunamoorthy; K.A. Padmanabhan; | Publisher: Allied Publishers Pvt. Ltd., New Delhi, Vol. I of II, Pages 256-260 (2013). | International |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 2 | Synthesis of Nanopowder Using Planetary Ball Milling Process | A.N. Walimbe, R. K. Goyal | International Conference on Powder Metallurgy & Particulate Materials | Chennai, India, 23–25 Jan, 2014 | International |
| 3 | Fabrication of Polycarbonate-ZnNb2O6 Nanocomposites | N. P. Silam, S. P. Butee, R.K. Goyal, S. G. Upadhyay | International Conference on Powder Metallurgy & Particulate Materials | Chennai, India, 23–25 Jan, 2014 | International |
| 4 | Fabrication and Properties of High Performance Polymer Nanocomposites Prepared by Planetary Ball Milling Process | R. K. Goyal, R.D. Gadve | International Conference on Powder Metallurgy & Particulate Materials | Chennai, India, 23–25 Jan, 2014 | International |
| 5 | Study on High Performance Polymer/ZnO Nanocomposites for Electronic Applications | Divij P Vaishnav  R K Goyal | Int Conf on Structural Nanocomposites (NANOSTRUC2014), | 20-21 May 2014, Madrid, Spain | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 6 | Improvement in Wear Resistance of High Performance Polymer Composites | R. K. Goyal, M. D. Joshi | International Conference on Functional Materials (ICFM-2014), | IIT Kharagpur (W.B.), Feb 5-7, 2014 | International |
| 7 | Study on High Performance Polymer/ZnO Nanocomposites for Electronic Applications | R. K. Goyal, D. P. Vaishnav | International Conference on Functional Materials (ICFM-2014),. | IIT Kharagpur (W.B.), Feb 5-7, 2014 | International |
| 8 | Dielectric and Thermal Properties of Polymer/BaTiO3 Nanocomposites for the Application of Embedded Capacitors | R. K. Goyal, A. A. Thanki | International Conference on Functional Materials (ICFM-2014), | IIT Kharagpur (W.B.), Feb 5-7, 2014 | International |
| 9 | Polymer/Nickel Composites for Electromagnetic Interference (EMI) Shielding Applications | R. K. Goyal, R. Deshpande | International Conference on Functional Materials (ICFM-2014), | IIT Kharagpur (W.B.), Feb 5-7, 2014 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 10 | Electrical properties of flexible polymer/BaTiO3 nanocomposite | R. K. Goyal, A. A. Thanki | 6th National Symposium for Materials Research Scholars”, | IIT Bombay, Mumbai, May 12-14, 2014. | National |
| 11 | Electrochemical corrosion behavior of different wt. % ZnO nano composite epoxy coating on galvanized steel | S. T. Vagge, R.Kanhe | NMD-ATM 2013 held at IIT BHU Varanasi from 12-15th November 2013. | 12-15th November 2013 | International |
| 12 | Fabrication of Polycarbonate-ZnNb2O6 Nanocomposite | N. P. Silam, S. P. Butee\*, R.K. Goyal and S. G. Upadhyay | 14International Conference on Powder Metallurgy &Particulate Materials + Exhibition | Thursday 23rd to Saturday 25th January 2014 | International |
| 13 | Dissimilar Metal Joining by Using Friction Stir Spot Welding (Included in Proceedings) | M. J. Rathod, Rohit Rithe | Automotive Materials and Manufacturing 2014 (AM&M2014) | 28-30 April 2014 | International |
| 14 | Laser Surface Hardening of Ductile Irons (Included in Proceedings) | M. J. Rathod, Hemant Deore | Automotive Materials and Manufacturing 2014 (AM&M2014) | 28-30 April 2014 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 15 | Friction stir welding of Aluminium-alloys (Presented) | M. J. Rathod, Tejal Karale | Automotive Materials and Manufacturing 2014 (AM&M2014) | 28-30 April 2014 | International |
| 16 | Synthesis of barium titanate powder using nano sized titania | K.R. Kambale, A.R. Kulkarni and N. Venkataramani | National Conference on Materials for Electronic Applications (NCMEA) organized by COEP | February 2014 | National |
| 17 | Comparative study of sintering of barium titanate using master sintering curve and isothermal grain growth kinetics volume | K.R. Kambale, A.R. Kulkarni and N. Venkataramani | International conference on advanced functional materials (ICAFM 2014) | -------------- | International |

* **PATENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of the Faculty/Students** | **Title** | **Application No. &Date** | **Application Status** |
| 1 | S.T.Vagge | An improved protective coating composition for hot-dip galvanization of steel | Patent no. 256103 dated 2nd May 2013 | Granted |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ /EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** | **Income (if any)** |
| 1 | Training-cum-workshop in Metallurgy- Materials Science | 29 march , 19 April,  9 , 10, 23, 24 May,  13, 14,27,28 June 2014 | V S Galphade  N patel | Industry | 20 | John Deere Pvt Ltd. Pune | 2.18 Lacc |
| 2 | TEQIP Phase-II Sponsored One Week Faculty Development Program (FDP) on Nanomaterials and Nanocomposites | Dec. 2-6, 2013  (5 working days) | Prof. R.K. Goyal | Faculty and research scholars | 55 | TEQIP | 1.2 lakhs |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** | **Income (if any)** |
| 3 | FDP on “Corrosion & Surface Engineering | 3-8 January 2014 | S.T.Vagge & P.P Deshpande | Faculty | 25 | TEQIP- | No |
| 4 | Lecture workshop on recent advances in Corrosion Engg | 6-8 January 2014 | S.T.Vagge | Faculty, Students, Industry people | 150 | sponsored by Science Academy | No |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 1 | Recent Trends in Manufacturing Technology Walchand College of Engg, Sangli | 12-26th June 2013 | Dr. Uday A. Dabade | Faculty | 40 | AICTE , New Delhi |
| 2 | Electrochemistry winter school University of Bath , United Kingdom | 13-18th January 2014 | Prof. Frank Marken | Faculty + industry professionals | 56 | TEQIP II |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 3 | FDP on “NanomaterialsCharacterization and Application In Devices”. | April 7-11, 2014 (1 Week) | Dr Jagdish Dadge | Faculty | 40 | TEQIP |
| 4 | faculty development program on “corrosion & surface engineering” | December. 10-15, 2013 (1 Week) | Dr. P.P. Deshpande | Faculty | 20 | TEQIP |
| 5 | Short term course (STC) on “Materials Engineering and Industrial Applications: Hybrid Nanocomposites for Photonics, Energy and Electronic Devices” | November.11-22, 2013  (2 Weeks) | Dr. Rao | Faculty | 40 | AICTE |
| 6 | Half day workshop on “National Programme on Technology Enhanced Learning” | 26th September. 2013 | Dr S T vagge | Faculty | 20 | COEP |
| 7 | Latest trends in heat treatment and advanced surface engg. | 30-31st August 2013 | IMTMA TECHNOLOGY Centre | All | 25 | TEQIP |
| 8 | “Recent Trends in Manufacturing Technology”, | 12-22 June, 2013 at Walchand College of Engineering, Sangli, Maharashtra, India | Attended by: Dr. S.S. Hosmani | Two Weeks Faculty Development Programme (FDP) | 30 | AICTE sponsored |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency**  **(if any)** |
| 9 | Workshop on NBA at COEP (14-16 March 2014) | March 2014 | Dr.Joshi |  |  | TEQIP |
| 10 | International Interactive workshop on Effective Academia Leadership Strategies a global Perspective Malaysia | December 2013 | Dr. Kapoor |  |  | TEQIP |
| 11 | Corrosion Science and Engineering | 3/1/2014 – 8/1/2014 | Dr. S.T. Vagge | Faculty, industry people | 150 | TEQIP |
| 12 | TEQIP sponsored 1 week training programme on Corrosion Engg and surface protection | 2-6 Dec2013 | Dr. S.T. Vagge, Dr. P.P. Deshpande | All | 25 | TEQIP |
| 13 | National Conference on Materials for Electronic Applications (NCMEA-14) | 30, 31 Jan and 1 Feb 2014 | Prof. Ms. M. Khaladkar and Prof. J A Kher | Faculty | 40 | TEQIP,DST,IET |

* **Details of the Lectures/Talks organized by the department**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker ,** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | Forging Technology | Mr. Satish Shah | All Indian Forging Association Pune | 45 | COEP |
| 2 | Multifold application of Tribology | Dr. Har Prashad, Consultant for Tribology and Technical adviser Rtec Instruments USA | Faculty | 30 | COEP |
| 3 | “Refractory Metals Introduction, Recent Developments and Application” | Dr. Prabhat Kumar | Faculty, Students | 60 | COEP |
| 4 | New Generation Nanocrystalline Ultra-soft Magnetic Materials for Energy Savings - DMRL perspective | Dr. Bhaskar Majumdar  Defence Metallurgical Research Laboratory, Hyderabad 500058 | Faculty | 40 | COEP |
| 5 | 3 D printing | Dr. Steve , Cummins US | Faculty Students | 45 | COEP |
| 6 | Tribological Characterization for Automotive and Metal Applications | Dr. Steve Shaffer and Dr. A. K. Sikder Bruker Nano Surfaces | Faculty | 50 | COEP |
| 7 | Failure Analysis of Railway components | Mr. Umesh Kulkarni Central Railway Lab, Parel, Mumbai | B.Tech / M.Tech Students & P.P.Deshpande, S.T. Vagge | 70 | Meta Deptt. TEQIP Sponsored |

* **Details of the Lectures/Talks delivered by the department**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | Introduction to Nanomaterials and Magnetic Materials | R.K. Goyal | Faculty/ Students | 150 | VIIT, Kondhwa, Pune, September. 2013, |
| 2 | “Polymeric Nanocomposites: Their Preparation, Properties and Applications” | R.K. Goyal | Faculty | 40 | College of Engineering, Pune during 7-11 April, 2014. |
| 3 | Nanomaterials and Their Applications | R.K. Goyal | Faculty | 50 | Indian Institute of technology Kharagpur during 9-22 November’13, |
| 4 | “Surface Engineering of Iron-based Alloys” | S.S. Hosmani | Faculty  AICTE sponsored Faculty Development Programme (FDP) on Recent Trends in Manufacturing Technology  (18 June, 2013) | 30 | Department of Mechanical Engineering, Walchand College of Engineering, Sangli, Maharashtra, India |
| 5 | Metallic coating | S.T.Vagge | Faculty, Students, Industry people | 150 | COEP |
| 6 | Technical Talk on ‘Laser Material Processing’ at the Inaugural function of IIW Pune Chapter | M. J. Rathod | Welding related industry | 350 | Shri Mahalaxmi Sabhagrah Parvati Pune |

* **BOOKS PUBLISHED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the author** | **Title of the book** | **Name of the publisher** | **Date of publication** |
| 1 | Dr. P.P.Deshpande | Metallurgy in  Ancient and  Medieval India | Rajya Marathi Vikas Sanstha Mumbai | 27 February 2014 |
| 2 | S S Hosmani,  P. Kuppusami,  R K Goyal | An introduction to surface alloying of metals | Springer | May-June 2014 |

* **AWARDS & HONORS**
* **For Faculty**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Name of the Award** | **Description** | **No. of Awards/ Honours** |
| 1 | R.K. Goyal | Chairperson: | Chaired a session on “Materials for electronics applications” in the National Conference on Materials for Electronic applications (NCMA-14) held from 30 Jan to 1 Feb., 2014 at College of Engineering Pune | 1 |
| 2 | R.K. Goyal | Member of Editorial Board | “Journal of Materials Science & Surface Engineering (JMSSE)” | 1 |
| 3 | Dr. S.S. Hosmani | Best Teacher Award, 2nd runner-up | COEP Star Program | 1 |

* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 1 | Ms. Chaitali Patil | 2nd AIR | GATE 2014 | 1 |
| 2 | Pradip Kudagi | 8th AIR | GATE 2014 | 1 |
| 3 | Bawane | 70th AIR | GATE 2014 | 1 |
| 4 | Sumit Gahlyn | 205th AIR | GATE 2014 | 1 |
| 5 | Mangesh Pantawane | 429th AIR | GATE 2014 | 1 |
| 6 | Akshay Rajankar | 479th AIR | GATE 2014 | 1 |
| 7 | Pravin Varade | 581 AIR | GATE 2014 | 1 |
| 8 | Chavan | 197th AIR | GATE 2014 | 1 |
| 9 | Rahul Pawar | 920th AIR | GATE 2014 | 1 |
| 10 | Akashi Arun Chavan | “ZEST 14”-Gold Medal | Won Gold Medal in KHO-KHO | 4 |
| “University of Pune”  -Silver Medal | Won silver Medal in KHO-KHO “Inter collegiate sports of University of Pune” |
| “PENTACLE”-Silver Medal | Won silver medal in KHO-KHO in the event of COMMINS college of engg. |
| “MELANGE14”-Silver Medal | Won silver medal in KHO-KHO in the event of VIT college of engg. Pune |
| 11 | Kulkarni Pranav Vivek | cultural solo acting competition (Aarohan) in MITCOE,Pune | First Prize | 1 |
| Mind-spark13Nano quiz | Second prize | 1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 12 | Bhakti Kishore Gupte | “ZEST 14” | Winner of Women's Cricket | 6 |
| MetaVista-13 | Winner of Tug of War |
| Pratyush | Winner of Beyond the Pixels |
| Runner up Women's Cricket |
| Runner up Tug of War |
| Runner up Lagori |
| 13 | Shreyas jajoo | |  | | --- | | Rowing | | Dragon Boat Racing | | Bronze medal in the Mens 2- category | 2 |
| Silver Medal in the Mixed 500m category |
| 14 | Nilam Kumar Sagare | Mind-Spark | 2nd place | 1 |
| 15 | Dhiraj Suresh Nevare | cricket (PRATYUSH) | 2nd place | 1 |
| 16 | Pradnya Patole | Volleyball, | University Level, 3rd rank | 3 |
| 1st Palce, COEP, ZEST 2013-14 |
| 2nd Place, ISBM |

* **MOU**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **COEP**  **(Dept)** | **MOU Signed with** | **Date** | **Description** |
| 1 | Metallurgy & Material science | Association of Indian Forging Industry | 17/10/2013 | Collaborative R & D work, floating elective in Forging Technology, student internship & placement |

* **MEMBERSHIPS OFSOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1 | Life member of “The Indian Institute of Metals (IIM)” Pune chapter (PO1-LM-41528) | Prof. R.K. Goyal |
| 2 | Life member of “Society of Polymer Science” Pune chapter |
| 3 | Life member of “Powder Metallurgy Association of India (PMAI) [No.: LM 79812]”. |
| 4 | Life Member of "Materials Research Society of India (MRSI)" LM B849 | Prof. M. G. Kulthe |
| 5 | Life Member of "Powder Metallurgy Association of India (PMAI)" LM-00156 |
| 6 | Institution of Engineering and Technology (IET) (Membership No. 1100315967) | Dr. S.S. Hosmani |
| 7 | Institute of Engineering & Technology (IET) | Dr.S.T.Vagge |
| 8 | Life member of “The Indian Institute of Metals (IIM)” Pune chapter | Prof. R.S.Ranade |
| 9 | Life member of “The Indian Institute of Metals (IIM)” Pune chapter (LM01-37736) | Prof. M. J. Rathod |
| 10 | Life member of “[Indian Institute of Welding](http://www.iiwindia.com/) (IIW)” Pune chapter (PUNE/M/R-10732/L) |
| 11 | Life member of “Indian Society for Technical Educatio (ISTE)” Pune chapter (LM5235) |
| 12 | Life member of IE Pune chapter (M-1331269) |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Mr. Shubham Badjade | - | IIT-B | 2013 |
| Mr. Ashish A. Birhare | - | IIT-B | 2013 |
| Sophiya vhora | North Carolina state university | - | 2013-14 |
| Aditya Walimbe | Cincinnati university | - | 2013-14 |
| Siddarth Deshpande | WPI university | - | 2013-14 |

* **SPECIAL MENTION**
* Development of Eaton sponsored laboratory, Modeling & Simulation laboratory. Received Seminar grant on Lecture workshop on recent advances in Corrosion Engg from Science Academy, Bengaluru worth Rs. 1.42 Lac
* Prof. Rathod selected as one of the top 12 faculty members of COEP for year 2013-14
* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 01 | Dr. S. T. Vagge | Ph.D. (Metallurgy) | Professor & Head | Corrosion and Surface Engg |
| 02 | Dr. M. J. Rathod | Ph.D. (Metallurgy) | Professor | Material joining and Laser material processing |
| 03 | Dr. N. B. Dhokey | Ph.D. (Metallurgy) | Professor | Tribology, Powder metallurgy, Energy Materials, Soft Magnetic materials , Cryotreatment of materials |
| 04 | Dr. S. P. Butee | Ph.D. (Metallurgy) | Associate Professor | Electro-Ceramics |
| 05 | Dr. R. K. Goyal | Ph.D. (Metallurgy) | Associate Professor | Nanotechnology, polymer matrix nanocomposites, composites, electronic materials and materials characterization |
| 06 | Mrs. N. R. Anand | M.E. (Metallurgy) | Associate Professor | Heat Treatment |
| 07 | Dr. P. P. Deshpande | Ph.D. (Metallurgy) | Assistant Professor | Conducting polymers and corrosion control of Steels |
| 08 | Dr. S. S. Hosmani | Ph.D. (Metallurgy) | Assistant Professor | Physical Metallurgy - Heat Treatment, Surface Engineering |
| 09 | Mrs. S. U. Dangarikar | M. E. (Metallurgy) | Assistant Professor | Heat Treatment, Metal Working |
| 10 | Mr. V. T. Thavale | M. E. (Metallurgy) | Assistant Professor | Powder Metallurgy |
| **Sr. No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 11 | Mr. R. S. Ranade | M. E. (Metallurgy) | Assistant Professor | Foundry Technology, Extractive Metallurgy |
| 12 | Mrs. M. G. Kulthe | M. E. (Metallurgy) | Assistant Professor | Polymer matrix micro and nano composites |
| 13 | Mr. V. S. Galphade | M. Tech. (Metallurgy) | Assistant Professor | Thermomechnical Processing and Severe plastic deformation of metals, Carbon-Carbon composites |
| 14 | Mr. A. M. More | M. Tech. (Metallurgy) | Assistant Professor | Physical Metallurgy |
| 15 | Ms. Nazia Patel | M. Tech. (Metallurgy) | Assistant Professor | Thermal Spray Coating |
| 16 | Mr.Kaustubh Kamble | M. Tech. (Metallurgy) | Assistant Professor | Ceramic/Composites |
| 17 | Ms. U. S. R. Nandiminti | M. Tech. (Metallurgy) | Assistant Professor | Metal Matrix Composites |

**DEPARTMENT OF PHYSICS**

* **INTRODUCTION**

Physical Sciences are the foundation for all the Engineering disciplines therefore a sound and application-oriented understanding in the Physics is a pre-requisite for the study of any branch of Engineering. Physics departments vision centers around the following ideas, To make the department excel in the area of Physics teaching relevant to Engineering disciplines and To actively participate in research projects of inter-disciplinary nature.

The Department has well-educated, motivated and dedicated faculty. The faculties have experience of working with International universities and have produced high quality research. The subjects taught by the department are of leading significance for strengthening the fundamental understanding and development of budding engineers so as to make them compatible for the present and future scenario.

* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Assistant Professor | 09 |
| Total | | 09 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |
| --- | --- |
| **Name of the Lab** | **Facilities** |
| Physics Research lab | * Programmable High Temperature Vacuum Furnace * Spin Coating Unit * Sonicator |

* **EQUIPMENT PURCHASED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Usage** | **Date of purchase / development** | **Resource consumed**  **(Amount in Lakhs)** |
| Physics Lab | Travelling Microscopes | First Year Physics Experiment | March 2014 | 0.50 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**

* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No of Seminars/ Talks conducted | 1 |
| 2 | No. of publications in International Journals | 2 |
| 3 | No. of Government Sponsored Projects | 1 |
| 4 | Value of the Government Sponsored Projects (In Lakhs) | 14 |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned**  **(In Lakhs)** | **Title of the (Sanctioned) project** | **Funds Utilization**  **Position as on today** | **Year in which the Grant was received** |
| **1** | UGC MRP | Govt. | Dr. R.S.Chhatrala | 14 | “Grain size effects on transport, magnetic & magnetoresistance properties in manganites” | * Nonrecurring grant : 5 lakh * Recurring grant : 1.5 lakh | August 2012 |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | | **Total** |
| **National Journal** | **International Journal** | | **National Conference** | **International Conference** |
| 1 | Physics | -- | | 2 | 2 | -- | 4 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Enhancement of Temperature and Field Coefficient of Resistance in CSD Grown Nanostructure La0.7Ca0.3MnO3Thin Films. | Tejas M.Tank, Chetan M.Thaker, Rohini S.Chhatrala, V. Ganesan, and Sankar P. Sanyal, | Journal of Nano Research | Vol. 24 (2013) pp 155-162 |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 2 | Role of defects in enhancing room temperature ferromagnetism of Mn doped ZnO nanoparticles' | L. V. Ekhande, V. V. Dhas, Y. D. Kolekar, K. Ghosh, S. K.Date, S. I. Patil | Physical status solidi (b) | [Volume 250, Issue 7,](http://onlinelibrary.wiley.com/doi/10.1002/pssb.v250.7/issuetoc)pages 1389–1397, July 2013 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | |  |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **(National/ International)** |
| 1 | Electric and Magnetotransport Studies of La0.7A0.3MnO3 (A = Sr, Ba) Thin Films Grown Using Chemical Solution  Deposition | P. R. Yadav1, D. G. Kuberkar2, D. S. Rana4, S. K. Malik5 and Rohini. S. Chhatrala | Nation Conference on Materials for Electronic Applications (NCMEA-2014) during 31st january to  2 nd February, 2014 | February 2014 | National |
| 2 | Phase evolution in Zn*1−x*Fe*x*O system synthesized via low temperature wet chemical (citrate) route | L.V.Ekhande | Nation Conference on Materials for Electronic Applications (NCMEA-2014) during 31st January to 2nd February, 2014 | February 2014 | National |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** | **Income (if any)**  **(In Lakhs)** |
| 1 | Nanomaterials Characterization and application in devices | 7th to 11th April 2014 | Dr. J. W. Dadge | faculty | 33 | TEQIP | 0.98 |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** |
| 1 | Low cost designing of Experiments in Physics and Chemistry | 17th to 21st March 2014 | Dr. P.K.Purohit | Faculty | 26 | NITTTR Bhopal |
| 2 | Innovative Methods of Science Teaching and Assessment | 25th-29th November 2013 | -- | Faculty | 35 | Extn Centre (Pune) of NITTR, Bhopal |
| 3 | Corrosion And Surface Engineering | 3rd- 8th January 2014 | Prof Deshpande | Faculty | 30 | TEQIP sponsored FDP  conducted by Dept. of Metallurgy Engg,.COEP |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** |
| 4 | Nanomaterials and nanocomposites | 2nd to 6th December 2013 | Dr. R.K.Goyal | Faculty | 30 | TEQIP sponsored FDP  conducted by Dept. of Metallurgy Engg, COEP |
| 5 | Nanomaterials: Science and Technology, | 10th -14th June 2013, | Dr. R.K.Goyal | All | 70 | organized by ICT, Mumbai |
| 6 | Engineering Education for the 21st Century | 17th-18th May  2013 | -- | Faculty/ students | 60 | organized by COEP |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 1 | Dr. (Mrs.) Shweta Chaure | Ph.D.( Physics) | Assistant Professor & Head | Nanotechnology, Photovoltaics |
| 2 | Mrs. L. V. Ekhande | Ph.D. (Physics) | Assistant Professor | Materials Science ZnO nanomaterial |
| 3 | Mr. R. B. Kamble | M. Phil. (Physics) | Assistant Professor | Materials Science ferrites, Astro Physics. |
| 4 | Dr. J. W. Dadge | Ph.D (Physics). | Assistant Professor | Experimental Physics Non linear optical properties of metal |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the Faculty** | **Highest Qualification** | **Designation** | **Area of Interest** |
| 5 | Mr. Y. J. Pitkar | M. Sc (Physics) | Assistant Professor | Solid state Electronics. |
| 6 | Mrs. N. A. Patil | M. Sc (Physics) | Assistant Professor | Materials Science |
| 7 | Dr. R S Chhatrala | Ph.D.( Physics) | Assistant Professor | Functional perovskites, Colossal Magnetoresistance materials (CMR), Neutron Diffraction, Chemical synthesis. |
| 8 | Mr. V. C. Mandke | M.Sc Physics | Assistant Professor | Biophysics. |
| 9 | Dr. S. R. Patil | Ph.D.( Physics) | Assistant Professor | Nanoelectronics, Condensed Matter Physics. |

**DEPARTMENT OF PRODUCTION ENGINEERING**

* **INTRODUCTION**

Academic year 2013-2014 has been a great year in terms of achievements of faculty and students. Name of the department has been revised as “Department of Production Engineering & Industrial Management”. Department has started New one year ERP diploma course started this year. The department has been further strengthened with the induction of Prof. P. P. Chikate and Prof. H. Bagchi as Professor Emeritus and Prof. M. R. Dhanvijay and Prof. M. N. Shaikh as Assistant Professor. Mr. S.S. Anasane was deputed under QIP, for Ph.D. at Jadhavpur Univeristy, Kolkota. Dr. P.D. Pantawane attended 9th FAB Lab conference at Yokohama Japan. Faculty conducted FDP for other institutes. Most of the faculty participated in Faculty Development Programs and upgraded their knowledge. Students have participated in various competitions and brought glory to the department by securing prizes at various state and national level events in co-curricular and extra-curricular activities. Department has filed four patents based on the work carried out by M. Tech and Ph.D. students. Mr. S.M. Patil and Mr. P.D. Pantawane were awarded Ph.D. degree.

* **ACADEMIC PROGRAMS**
* B. Tech Production-Sandwich
* M. Tech Manufacturing Engineering and Automation
* M. Tech Mechatronics
* M. Tech Project Management
* SAP- ERP certification (one year post-graduate diploma course)
* **FACULTY STRENGTH**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Designation** | **No. of Faculty** |
| 1 | Professor | 02 |
| 2 | Associate Professor | 05 |
| 3 | Assistant Professor | 06 |
| 4 | Professor Emeritus | 03 |
| 5 | Adjunct Professor | 08 |
| Total | | 24 |

* **MAJOR EQUIPMENTS & FACILITIES**

|  |  |  |
| --- | --- | --- |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| Central Workshop | Lathe |  |
| CNC-Lathe |
| VMC |
| Radial Drilling Machine |
| Wood cutting lathe |
| FAB Lab | Vinyl cutting machine | CCTV Camera: 4 nos |
| Modela mini mill machine |
| Shopbot CNC router |
| Epilog Laser cutter |
| Scroll Saw |
| Bench Grinder |
| Manual Lathe |
| Machine |
| Heat Gun |
| Master appliance pro heat gun |
| Weller Soldering station |
| **Name of the Lab** | **Facilities** | **Other departmental facilities** |
| CAD/CAM Lab | CATIA | CCTV Camera: 2 nos |
| PRO-E |
| FESTO FLUID SIM |
| MATLAB |
| AUTOCAD |
| Robotics and Automation  Lab. | Industrial Robots |  |
| Transducers |
| Training Kit |
| Terotechnology lab. | PC controlled Atomic Absorption Spectrometer |  |
| Ducom Pin on Disc Machine |
| Direct Reading Ferrograph, Model: DR5 |
| Dual Slide Ferrogram Maker Model: FMIII |
| Bi-chromatic Optical Microscope (Olympus BX 51) |
| Ultrasonic Flaw Detector FD 350 |
| Dry Bearing Test Rig |
| Research Lab | ESPIN Nano |  |
| Metal Forming Lab | Hydraulic power pack machine |  |
| Simu-Fact Forming and Festo Software |
| Rapid Prototyping Lab. | FDM machine with laser scanner |  |
| MODELA-3D Plotter |
| Non-conventional  machining lab | ECM |  |
| EDM |
| Rapid Drill EDM |
| Metrology Lab | Profile projector  3D coordinator Measuring Machine |  |
| Slip gauge Set |
| Tool makers microscope |
| Laser Scan Micrometer |

* **EQUIPMENT PURCHASED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Lab/ section** | **Module Description** | **Usage** | **Date  of purchase / development** | **Resource consumed**  **(amount in Lakhs)** |
| Metal Forming Lab. | Simufact (Forming software), | 20(Network)+1(Faculty) | 16/11/2013 | 6.00213 |
| Reliability | ReliaSoft’s RAM Essential Suite (Reliability software) | 1 | 19/11/2013 | 5.37269 |
| Metrology Lab | Surface roughness tester Sj410, Laser Interferometer | UG and PG students for their lab and research work | 25/10/2013  06/01/2014 | 5  14.5 |

* **RESEARCH & DEVELOPMENT ACTIVITIES**
* **Research Productivity Statistics of the Department for Year 2013-14.**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 1 | No. of Books Authored | 1 |
| 2 | No of Seminars/ Talks conducted | 13 |
| 3 | No. of publications in National Journals | 2 |
| 4 | No. of publications in International Journals | 8 |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Research Activities** | **Total No.** |
| 5 | No. of Industry Sponsored Projects | 5 |
| 6 | Value of the Industry Sponsored Projects (In Lakhs) | 12.5 |
| 7 | No. of Government Sponsored Projects | 1 |
| 8 | Value of the Government Sponsored Projects (In Lakhs) | 250 |
| 9 | No. of Consultancy Projects | 2 |
| 10 | No of Ongoing Ph. Ds | 14 |
| 11 | No of Ph.Ds awarded | 2 |
| 12 | No. of Students participated in Student Exchange programs | 1 |
| 13 | No. of Students gone to foreign universities for further studies | 3 |

* **DETAILS OF CONSULTANCY PROJECTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Title** | **Name of the Project Leader** | **Year in which started** | **Funding agency** | **Duration** | **Amount sanctioned**  **(In Lakhs)** |
| **1** | Biomedical Engineering and Technology Centre Incubation | Dr. B. B. Ahuja &  Mr. S.S. Anasane | 2013 | Rajiv Gandhi Science & Technology Commission | 5 Year | 250 |
| **2** | Quantitative Risk Assessment & determination of Residual Life of TCT Vehicle | Dr. S.K. Basu | 2013 | DRDO | 1 Year |  |

* **DETAILS OF RESEARCH (ONGOING) PROJECTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the Sanctioned project** | **Funds Utilization**  **Position as on today (in lakhs)** | **Year in which the Grant was received)** |
| 1 | Industry | Bharat Forge | Dr. S.K. Basu  Dr. Rajiv B.  Mr. M.R. Dhanvijay | 2.5 | Ultrasonic Turning | -- | 2013 -14 |
| 2 | Industry | Bharat Forge | Dr. P.P. Chikate,  Dr. P.D. Pantawane & Mr. J. S. Karajagikar | 2.5 | Vibration Assisted Drilling | -- | 2013 -14 |
| 3 | Industry | Bharat Forge | Dr. (Mrs.) N.R. Rajhans, Dr. M.D. Jaybhaye & Mr. S.U. Ghunage | 2.5 | Cryogenic Machining | -- | 2013 -14 |
| 4 | Industry | Bharat Forge | H. Bagachi  Dr. S.M. Patil  Mr. M.N. Shaikh | 2.5 | Effect of Heat Treatment on Machinability | **--** | 2013 -14 |
| 5 | Industry | Bharat Forge | Dr. A.V. Mulay | 2.5 | 3D Printing | **--** | 2013 -14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. no** | **Scheme** | **Whether Sponsored by**  **Industry/ Government** | **Name of coordinator** | **Amount sanctioned,**  **(In Lakhs)** | **Title of the Sanctioned project** | **Funds Utilization**  **Position as on today**  **(In lakhs)** | **Year in which the Grant was received** |
| 6 | Assitance for S & T Application | Rajiv Gandhi Science & Technology Commission, Govt. of Maharashtra | Mr. S.S. Anasane | 250 | Bio-  medical Engineering and Technology Center Incubation | 0.3 | -- |

* **PUBLICATIONS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of Department** | **Research Publications** | | | | | **Total** |
| **National Journal** | **International Journal** | | **National Conference** | **International Conference** |
| 1 | Production Engineering | 2 | | 8 | 1 | 22 | 31 |

* **International Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **International Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Profile Modification of Adhesively Bonded Cylindrical Joint for Maximum Torque Transmission Capability | M.V.Walame, Prof. B.B.Ahuja | International Journal of Modern Engineering Research (IJMER) | Vol.3, Issue 4, August 2013  ISSN:2278-0181 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 2 | “Finding a Best Fit Plane to Non-coplanar Point-cloud Data Using Non Linear and Linear Equations” | A V Mulay and B B Ahuja | Asian International Journal of Science and Technology in Production and Manufacturing Engineering | Vol.6, No.2, May-August 2013 |
| 3 | FEM Analysis and Optimization of Two Chamber Reactive Muffler by using Taguchi Method. | Patil Sandip S.  Patil Sudhir M.  Bhattu Ajay P.  Sahasrabudhe A. D. | American International Journal of Research in Science, Technology, Engineering and Mathematics (AIJRSTEM) published by International Association of Scientific Innovation and Research (IASIR), USA | Volume 1, Issue 3, June-August 2013 |
| 4 | Prediction of Repair & Maintenance costs of Diesel Engine | D R Dolas  M D Jaybhaye  S D Deshmukh | International Journal of Recent advances in Mechanical Engineering (IJMECH) | Vol.3, No.1, February 2014  ISSN 2200-5854 |
| 5 | Estimation the System reliability using Weibull Distribution | D R Dolas  M D Jaybhaye  S D Deshmukh | International Proceeding Of Economics Development And Research | Vol. 75  2014  Page no. 144-148 |
| 6 | Risk Quantification and Evaluation Modelling | Manmohan Singh  M D Jaybhaye  S K Basu | Defense Science Journal. | July 2014 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 7 | Parametric analysis and modeling of friction drilling process on AISI 1015 | P. D. Pantawane  B. B. Ahuja | International J. of Mechatronics and Manufacturing Systems | Vol 7 No. 1, Inderscience Publishers |
| 8 | Tribological Behavior of PTFE Under Variable Loading Dry Sliding Condition | S. M. Patil  B. B. Ahuja | Journal of The Institution of Engineers (India) – Series C, a Springer Publication | Volume 95, Issue – 2, April – June 2014 |

* **National Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National Journals** | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the Journal** | **Other Publication Details** |
| 1 | Selecting Best layout using TOPSIS for different criteria | P.A. Khandeshe, N. R. Rajhans, | The Institution of Engineers (I) | ISBN 978-81-924990-1-7, Dec 2013 |
| 2 | Productivity improvement in a bakery”, | N.R. Rajhans, S.M. Mehta, T.M. Jawale, D.R. Shas, P.V. Mahanwar | The Institution of Engineers (I) | ISBN 978-81-924990-1-7, Dec 2013 |

* **Papers Presented in conferences/seminars/ workshops/Symposia.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Seminars/ Conferences** | | | | | |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 1 | Three Dimensional Point Cloud Generations from CT SCAN Images for Bio-Cad Modeling | Vikas N. Chougule, Dr. (Mrs.) Arati V. Mulay, Dr. B. B. Ahuja | 3rd International Conference on ‘Rapid Prototyping & Manufacturing Technologies’ (Additive Manufacturing Technologies – AM 2013) scheduled at Nimhans Convention Centre, Bangalore. | October 7-8, 2013  Page no. | International |
| 2 | Experimental Analysis of High Speed Drilling of Titanium Alloy | Abhaysinh H Gaikwad M.D.Jaybhaye | International Conference on PRECISION, MESO, MICRO AND NANO ENGINEERING, held at NIT Calicut, Kerala, | December 13-15, 2013  Page no. 388-393 | International |
| 3 | Multi-attribute Decision Making of Thread Tapping on Friction Drilling Holes using the Relative Reliability Risk Index (R3I) Methodology | P.D.Pantawane , B.B.Ahuja | International Conference on PRECISION, MESO, MICRO AND NANO ENGINEERING, held at NIT Calicut, Kerala, India. | December 13-15, 2013  Page no. 823-828 | International |
| 4 | Analysis of Micromachining of Ceramic Material by Powder Mixed Electrochemical Discharge Machining (PM – ECDM) | Nilesh Mahajan and B. B. Ahuja | International Conference on PRECISION, MESO, MICRO AND NANO ENGINEERING, held at NIT Calicut, Kerala, India. | December 13-15, 2013  Page no. 304-309 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 5 | Micro-machining of ceramics by Electrochemical Discharge Process | Anjesh H. Sahasrabudhe and B. B. Ahuja | International Conference on Precision, Meso, Micro And Nano Engineering, held at NIT Calicut | December 13-15, 2013  Page no. 269-273 | International |
| 6 | Conversion of CT Scan images into 3D point cloud data for the development of 3D solid model using B-rep Scheme | Chougule N. V, Mulay A V, Ahuja B.B | International Conference on PRECISION, MESO, MICRO AND NANO ENGINEERING, held at NIT Calicut, Kerala, India. | December 13-15, 2013  Page no. 630-635 | International |
| 7 | Criticality Analysis of Barge Loader Using FMECA | M.N.Shaikh, Rajiv B, B.B.Ahuja | International Symposium on Engineering and Technology, Pune. | January 9-10, 2014  Pg No. 62 | International |
| 8 | Electrochemical Discharge Machining of ceramics considering stagnant and electrolyte flow method | M R Dhanvijay and  B B Ahuja | 2nd International Conference on Innovations in Automation and Mechatronics Engineering (ICIAME) 2014. | March 7- 8, 2014  Page no. | International |
| 9 | Reliability Analysis of Cooling System Water Pump –A Case Study | D R Dolas  M D Jaybhaye  S D Deshmukh | International Conference on Modeling and Simulation in Engineering & Technology2014, Godavari College of Engineering, Jalgaon. | 15-16 February 2014  Page no.297-300 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 10 | An Analysis of Diesel Engine Systems Using Pareto Lorenz Method | D R Dolas  M D Jaybhaye  S D Deshmukh | International Conference On Innovation In Design, Manufacturing & Concurrent Engineering ’14 NIT Rourkela. | 1-3 March 2014  Page no. | International |
| 11 | Estimation the system reliability using Weibull distribution | D R Dolas  M D Jaybhaye  S D Deshmukh | International conference on quality & management(ICQM 2014) , SAISE & NIT, Raipur. | ,21-22 March 2014  Page no. | International |
| 12 | Combining AHP and TOPSIS Approaches to Support Rubble Filling Method Selection for a Construction Firm | Prerana Jakhotia, N. R. Rajhans | International Conference On Advanced Engineering Optimization Through Intelligent Techniques AEOTIT . | July 01 – 03, 2013, p 269-273. (IC) | International |
| 13 | Identification of Parameters Affecting Liquefaction of Fine Grained Soils using AHP | Rajhans N.R., Purandare A. S., Pathak S.R. | International Conference On Advanced Engineering Optimization Through Intelligent Techniques | July  1 – 3, 2013  Page no. 274 -279 | International |
| 14 | Suppliers Delivery Performance Evaluation & Improvement using AHP | Rajesh Dhake, N.R. Rajhans, | International Conference On Advanced Engineering Optimization Through Intelligent Techniques | July 1 – 3, 2013  Page no. 295- 299 | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 15 | Application of TOPSIS Analysis for Selection of Nozzle in Mechanical Deterioration Test Rig | N. R. Rajhans, R. S. Garodi, Jyoti Kirve | International Conference On Advanced Engineering Optimization Through Intelligent Techniques AEOTIT . | July 01 – 03, 2013  Page no. 310- 314 | International |
| 16 | Selection of Media using R3I(Entropy, Standard Deviation) and TOPSIS | Savita Choundhe, Purva Khandeshe, N. R. Rajhans | International Conference On Advanced Engineering Optimization Through Intelligent Techniques | July 01 – 03, 2013  Page no. 363 – 367 | International |
| 17 | Application of AHP-TOPSIS for Comparison of Layouts | S. M. Samak, N.R. Rajhans | International Conference On Advanced Engineering Optimization Through Intelligent Techniques AEOTIT . | July 01 – 03, 2013  Page no. 383 -387 | International |
| 18 | Lean Performance Assessment of Manufacturing Cells using AHP | Rajesh.Dhake, Pavan.Bhoyar, Akshay.Shekhar, N.R.  Rajhans | International Conference on Industrial Engineering (ICIE-2013), SVNIT SURAT . | Nov. 2013  Page no. | International |
| 19 | Vendor Selection Using Analytical Hierarchy Process | Dr. (Mrs)Neela R. Rajhans, Shantanu R. Barshikar | 43rd International Conference on Computers & Industrial Engineering CIE43 Proceedings, , The University of Hong Kong. | 16-18October 2013  Page no. | International |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Title of the Paper** | **Authors** | **Name of the conference/ Seminar** | **Other Publication Details** | **Type**  **National/ International** |
| 20 | Air Mattresses as Prevention for Pressure Ulcer – An Interdisciplinary Overview | Sachin Shravan Shinde and Dr. Mrs. N. R. Rajhans | 11th ISE Annual Conference HWWE International Conference On Ergonomics And Human Factors “Ergo 2013: Ergonomics For Rural Development” Organized By :Department of Human Physiology With Community Health, Vidyasagar University, Midnapore -721102, West Bengal | -- | International |
| 21 | Use of Simulation for Selecting a layout | P.A. Khandeshe , N.R. Rajhans, | 3rd International Simulation Conference of India, COEP | 11 -12 January 2014 | International |
| 22 | Design of Underactuated Mechanism for Humanoid Hand | Satpute Ravindra,  M D Jaybhaye | 3rd National Conference on Recent Developments in Mechanical Engineering (RDME-2014), M.E.S.College of Engineering, Pune. | Page no. 213-217 | National |
| 23 | Performance Analysis of EDM process using Si powder as additive in dielectric fluid | Dr. Rajiv B. Dr. B.B. Ahuja,  Dr. S.K.Basu and  Ms. Amruta Gaikwad | Proceedings of International Conference on Advances in Mechanical Engineering | Paper code S11/O12, May 29-31, 2013. | International |

* **PATENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Name of the Faculty/Students** | **Title** | **Application No. &Date** | **Application Status** |
| 1 | Dr. Bharatkumar Bhagatraj Ahuja ,  Mr. Sudhir Madhav Patil,  Mr. Anandkumar Pandurang Patil | Development of Novel Variable Loading Wear and Friction Monitor (VLWAFM) Pin-on-disc Sliding Tribometer | No.: 1521/MUM/2012  Date: May 18, 2012 | Applied |
| 2 | Dr. Bharatkumar Bhagatraj Ahuja ,  Mr. Sudhir Madhav Patil  Mr. Sachin Hiraji Mhatre | Variable Loading Pin-On-Plate Reciprocating Sliding Tribometer [VLPOPRST] | No.: 84/MUM/2013  Date: January 10, 2013 | Applied |
| 3 | Dr. Bharatkumar Bhagatraj Ahuja,  Mr. Purushottam Madhukar Amrutkar | A System for Hydro-Dynamic Polishing | No.: 466/MUM/2013  Date: February 18, 2013 | Applied |
| 4 | Dr. Bharatkumar Bhagatraj Ahuja, Mr. S. R. Bahulikar | Variable Speed Drive System with Ball Cluster | No.: 3781/MUM/2013  Date:December 3, 2013 | Applied |

* **SEMINARS/ WORKSHOPS/ CONFERENCE/TRAINING PROGRAMS/ EVENTS**
* **Details of the Workshop/ Seminar/ Conference/ Event organized by the dept.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency (if any)** | **Income (if any)** |
| **1** | Statistics  Quality Control | 30th Dec. 2013 to 11 Jan 2014 (two weeks) | -- | all | 65 | - | - |

* **Details of the Workshop/ Seminar/ Conference/ Event attended by the dept.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the workshop/ seminar** | **Date** | **Name of the faculty Coordinator** | **Category of the Participants** | **No. of Participants** | **Sponsoring Agency** |
| 1 | 9th FAB Lab conference at Yokohama Japan. | 21-28, August 2013 | Dr. P.D. Pantawane | all | 170 | Fab Japan was hosted by The Social Fabrication Laboratory at Keio University SFC , in conjunction with the Centre for Bits and Atoms at MIT, Yokohama Creativecity Center (YCC) |
| 2 | Workshop on Latest trends in Heat Treatment and Advanced Surface Engineering | 30-31, August 2013 | Mr. M. R. Dhanvijay & Mr. S.U.Ghunage | all | 25 | Organized by IMTMA, SKF College campus, Chinchwad, Pune |
| 3 | Engineers Conclave 2013 | September 17-19, 2013 | Dr. B. B. Ahuja | Faculty &Industry people | 35 | Organised by DRDO and INAE |
| 4 | FDP on Nanomaterials and Nanocomposites | Dec 2-6, 2013 | Mr. M. R. Dhanvijay &  Mr. M. N. Shaikh | all | 40 | Dept of Metallurgy and Material Sciences, COEP |
| 5 | STTP on Advances in Computational Methods in Science and Engineering | 9-13 Decem ber, 2013 | Mr. M. R. Dhanvijay | all | 30 | Department of Mathematics, VNIT, Nagpur |
| 6 | Strategies and Leadership global prospective, SEGI University, Kualalumpur Malaysia | Decem ber 12-14 2013 | Dr. Rajiv B. | all | 105 | Organized by Meghe Group Institutes |

* **Details of the Lectures/Talks organized by the department**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | Manage your Finance | Prof. Giles Boothway faculty at St. Bonaveture, USA | Faculty and students | 65 | Production Engineering Department |
| 2 | Application of Statistics | Prof. Giles Boothway faculty at St. Bonaveture, USA | Faculty and students | 70 | Production Engineering Department |
| 3 | Micro and Nano Scale Metrology | Dr. V. Radhakrishnan, Professor Emeritus, Indian Institute of Space Science and Technology Trivandrum | Faculty and students | 60 | Production Engineering Department |
| 4 | Skills in Management | Dr. S. C. Pathak | Faculty and students | 65 | Production Engineering Department |
| 5 | Precision Engineering and Metrology | Dr. Ranjan Sen, Chief Scientist and Head, Precision Engineering and Metrology, CSIR-CMERI, Durgapur | Faculty and students | 68 | Production Engineering Department |
| 6 | Green Manufacturing – Role of Materials and Processes | Dr. Alagamurthi | Faculty and students | 50 | Production Engineering Department |
| 7 | Innovative Research,  Publication of research findings | Dr. V. Radhakrishnan | Faculty and students | 120 | Academic Complex Mini Auditorium |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 8 | Relationship between the Supervisor and the Supervised, in academic research. | Dr. V. Radhakrishnan | Faculty and students | 60 | Production Engineering Department |
| 9 | Light interference - Method of coincidence - Slip gauge calibration - Measurement errors. | Dr. V. Radhakrishnan | Faculty and students | 65 | Production Engineering Department |
| 10 | Computer Aided Metrology - Principles and interfacing, software metrology. | Dr. V. Radhakrishnan | Faculty and students | 65 | Production Engineering Department |
| 11 | Laser metrology - Applications of Lasers in precision measurements - Laser interferometer, speckle           measurements, laser scanners. | Dr. V. Radhakrishnan | Faculty and students | 65 | Production Engineering Department |
| 12 | Coordinate Measuring Machine - Types of CMM - Probes used - Applications | Dr. V. Radhakrishnan | Faculty and students | 65 | Production Engineering Department |
| 13 | Non contact CMM using Electro optical sensors for dimensional metrology - Non contact sensors for surface finish measurements. Image processing and its application in Metrology. | Dr. V. Radhakrishnan | Faculty and students | 65 | Production Engineering Department |

* **Details of the Lectures/Talks delivered by the department.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the faculty Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 1 | Quality & Reliability and FMEA, FTA & FMECA | Dr. S. K. Basu | Faculty | 25 | Vehicle Research and Development Establishment (VRDE),Ahmednagar |
| 2 | Reliability Analysis and Allocation | Dr. Rajiv B. | Faculty | 25 | Vehicle Research and Development Establishment (VRDE), Ahmednagar |
| 3 | Accelerated Life Testing | Dr. M. D. Jaybhaye | Faculty | 25 | Vehicle Research and Development Establishment (VRDE),Ahmednagar |
| 4 | Greener pastures in DFMA | Dr. S. K. Basu | Faculty | 25 | Research & Development Establishment, Dighi, Pune |
| 5 | Selection of Materials and Processes | Dr. Rajiv B. | Faculty | 25 | Research & Development Establishment, Dighi, Pune |
| 6 | Product Design Considerations in DFMA | Mr. J.S. Karajagikar | Faculty | 25 | Research & Development Establishment, Dighi, Pune |
| 7 | Design for Testability | Dr. M. D. Jaybhaye | Faculty | 25 | Research & Development Establishment, Dighi, Pune |
| 8 | Tribology | Dr. H. Bagchi | Faculty | 25 | Research & Development Establishment, Dighi, Pune |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker , designation etc** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 9 | Heat and Surface Treatment of Metal and Quality Control | Dr. B. B. Ahuja | Faculty | 25 | Research & Development Establishment, Dighi, Pune |
| 10 | Statistical Quality Control | Dr. P. D. Pantawane | Faculty | 30 | Research & Development Establishment, Dighi, Pune |
| 11 | Quality Assurance and Quality Control to Enhance Reliability | Dr. S. K. Basu | Faculty | 30 | Research & Development Establishment, Dighi, Pune |
| 12 | Advanced & Micro Manufacturing | Dr. B. B. Ahuja | Faculty | 60 | Department of Mechanical Engineering, PEC University of Technology, Chandigarh |
| 13 | Developing Program Educational Objectives (PEOs) | Dr. B. B. Ahuja | Faculty | 70 | SVNIT Surat |
| 14 | Academia Perspective on how Industry can support Academic programs | Dr. B. B. Ahuja | Faculty and Industry people | 85 | CII-Ador Welding Academy, Pune |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 15 | Operations Research and Its Industrial Applications | Dr. Rajiv B. | Faculty | 15 | Institution of Engineers (Pune Local Centre) |
| 16 | Process Planning and Tool Selection | Dr. Rajiv B. | Faculty | 120 | Sinhagad College of Engineering Pune |
| 17 | Success story of transformation through good governance and autonomy. | Dr. B. B. Ahuja | Faculty | 200 | Government College of Engineering, Karad |
| 18 | Role of Robotics in Academics | Dr B.B.Ahuja | Faculty | 95 | Smt. Kashibai COE, Pune |
| 19 | Institution’s Best Practice | Dr. B.B. Ahuja | Faculty | 120 | International Institute of Information Technology, Hinjewadi, Pune |
| 20 | Failure Tree Analysis (FTA) in Reliability Engineering | Dr. Rajiv B | Faculty | 120 | D Y Patil COE,Pune |
| 21 | Reliability Engineering & Maintenance management | Dr. M.D.Jaybhaye | Faculty | 120 | D Y Patil COE,Pune |
| 22 | Mechanical and Automobile Engineering | Dr. B.B. Ahuja | Faculty | 75 | Merchant Education Campus, Basna Dist –Mehsana, Gujarat. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name/title of the Lecture/ Talk** | **Name of the Speaker** | **Category of the Participants** | **No. of Participants** | **Venue** |
| 23 | Special Course on Tribology | Dr. S.K. Basu, Dr. B.U. Sonawane and Dr. H. Bagchi | Faculty | 1 | Production Engineering COEP |
| 24 | Operations efficiency | Dr.Rajiv B. | Faculty | 40 | Symbiosis International University’s Teaching Learning Resource |
| 25 | Basic statistics for Researchers | Dr. (Mrs.) N.R. Rajhans | Faculty | 30 | Symbiosis International University’s Teaching Learning Resource |
| 26 | Keynote Address on How to publish paper | Dr. (Mrs.) N.R. Rajhans | Faculty | 30 | Gourishankar Polytechnic Satara |

* **BOOKS PUBLISHED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the author** | **Title of the book** | **Name of the publisher** | **Date of publication** |
| 1 | S. K. Basu, K. C. Sahu, B. Rajiv | Industrial Organisation and  Management | PHI learning Pvt. Ltd.2012 | 2012 |

* **AWARDS & HONORS**
* **For Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No** | **Name of the student** | **Name of the Award/Achievement** | **Description** | **No. of Awards** |
| 1 | Mr. Shantanu Korde | * Gold Medal in K1 200m relay * Silver Medal in K2 * 200 m * Bronze Medal in k 4 1000m | State level competition organized by Maharashtra Association of Canoeing and Kayaking Championship at Beed, June 28-30, 2013. | 3 |
| 2 | Mr. Akshay Mate | 1st Price in sculling competition | Sculling competition organized by Rowing Federation of India held at Bangalore, 11-14 Oct’13 | 1 |
| 3 | Mr. Akshay Bairagi | 1st prize for the project “Punching machine for flanges” | During his Sandwich Training programme in his 5th semester at Thermax | 1 |
| 4 | Ms.Nutan Patil  Ms. Kshitija Gaikwad  Mr. Sushant Shinde  Mr. Shreyas Shete | 1st prize | Firodia 2014 | 1 |
| 5 | Mr. Suraj Aru  Mr. Roshan Arute  Mr. Sandeep Sutar  Mr. Vinay Gundecha  Mr. Jagdish Salunke  Mr. Sagar Devsthali | Secured Overall 2nd position | In Championship of BAJA 2014 competition held at Indore, 20th - 23rd February 2014. | 1 |
| 6 | Mr. Suraj Aru  Mr. Roshan Arute  Mr. Sandeep Sutar  Mr. Vinay Gundecha  Mr. Jagdish Salunke  Mr. Sagar Devsthali | Secured Overall 3rd position | BAJA Competition held at Pretoria, 20th – 25th October 2013. | **1** |

* **SPECIAL MENTION**
* Department of Production Engineering and Industrial Management along with Mechanical Engineering Department has received CII Award for Best Industry–Institute Interaction for the year 2013.
* Recently department has been honored with 'Academic Research Award of Excellence' for year 2013 by Additive Manufacturing Society of India, in recognition for all the Research & Development activities carried by the department in the field of Additive Manufacturing Technologies.
* **MEMBERSHIPS OF SOCIETIES**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 1 | Life Member Tribology Society of India (LMTSI) | Dr. B.U. Sonawane  Dr. S.M. Patil |
| 2 | Life Member  The Institution of Engineering and Technology (IET) | Dr. B.B. Ahuja  Dr. (Mrs) N.R. Rajhans  Dr. B.U. Sonawane |
| 3 | Life Member Indian Society for Technical Education ( ISTE) | Mr. S.U. Ghunage  Dr. M.D. Jaybhaye |
| 4 | Life Member Operation Research Society Of India | Dr. M.D. Jaybhaye  Dr. B.U. Sonawane  Dr. (Mrs) N.R. Rajhans |
| 5 | Institution Of Engineers (India)  (Associate Member) | Dr. Rajiv B.  Dr. M.D. Jaybhaye  Dr. B.U. Sonawane  Dr. S.M. Patil |

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Name of the Society** | **Name of the faculty/s** |
| 6 | Indian Society Of Ergonomics | Dr. (Mrs) N.R. Rajhans |
| 7 | Indian Institute Of Industrial Engineering | Dr. (Mrs) N.R. Rajhans |

* **FACULTY & STUDENT EXCHANGE PROGRAMME**
* **Details of Students**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of the Student** | **Name of the University** | **Duration** | **Details of the Course** |
| **1** | Ms. Sonia Shah | Ostfalia University, Germany | Six months | DAAD student exchange program |

* **DETAILS OF STUDENTS GONE FOR HIGHER STUDIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Student** | **Name of the University/ institute** | | **Year of Passing** |
| **Foreign** | **Indian** |
| Ms. Prerana Jakhotia | Cornell University | **-** | 2013 |
| Mr. Nachiket Deshpande | Ohio State university | **-** | 2013 |
| Mr. Pranav Deshpande | Duke university | **-** | 2013 |

* **FACULTY MEMBERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No.** | **Name of Faculty** | **Highest**  **Qualification** | **Designation** | **Area/s of interest** |
| 1 | Dr. Ahuja B.B. | Ph.D. | Professor & Deputy Director | Manufacturing Engineering, Robotics, CAD/CAM |
| 2 | Dr. (Mrs. ) Rajhans N.R. | Ph.D. | Professor & Head | Industrial Engineering and Operations Research |
| 3 | Dr. Basu S.K. | Ph.D | Professor Emeritus | Machine Tool Design, Reliability and Maintenance Management, Tribology |
| 4 | Dr. Chikate P.P. | Ph.D | Professor Emeritus | Advanced Machine Tool Design, Mechanical Vibrations |
| 5 | Dr. Bagchi H. | Ph.D | Professor Emeritus | Machine Tool Design, Tribology, Manufacturing Engineering |
| 6 | Dr. Rajiv B. | Ph.D. | Associate Professor | Reliability Engineering,  Manufacturing Engineering  Operations Research |
| 7 | Dr. (Mrs.) Mulay A.V. | Ph.D. | Associate Professor | CAD/CAM, Reverse Engineering |
| 8 | Dr. Jaybhaye M.D. | Ph.D. | Associate Professor | Reliability Engineering, Robotics, Manufacturing Automation |
| 9 | Dr. Sonawane B.U. | Ph.D. | Associate Professor | Tribology, Reliability Engineering, Material Forming |
| 10 | Dr. Patil S.M. | Ph.D. | Associate Professor | Manufacturing Automation  Tribology,  Hydraulics & Pneumatics |
| 11 | Dr. Pantawane P.D. | Ph.D. | Assistant Professor | Manufacturing Engineering,Metrology  Optimization |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No.** | **Name of Faculty** | **Highest**  **Qualification** | **Designation** | **Area/s of interest** |
| 12 | Mr. Ghunage S.U. | M.Tech. | Assistant Professor | Manufacturing Engineering,  Design and Analysis |
| 13 | Mr. Karajagikar J.S. | M.Tech | Assistant Professor | Manufacturing Engineering, Industrial Engineering |
| 14 | Mr. Anasane S.S. | M.E. | Assistant Professor | CAD/CAM, Manufacturing,  Rapid Prototyping |
| 15 | Mr. Dhanvijay M.R. | M.E., M.B.A | Assistant Professor | Non-conventional Machining, Mechatronics, Supply Chain Management |
| 16 | Mr. Shaikh M.N. | M.Tech | Assistant Professor | Manufacturing Engineering and Rapid Prototyping |