



Padmashree Dr D Y Patil Institute of  
Engineering, Management and  
Research, Akurdi, Pune-44

PAD. DR. D. Y. PATIL  
INSTITUTE OF ENGINEERING,  
MANAGEMENT & RESEARCH, AKURDI

RECOGNIZED BY AICTE & APPROVED BY DTE  
AFFILIATED TO SAVTRIBAI PHULE PUNE UNIVERSITY  
(Formerly Known as University of Pune)

# KALEIDOSCOPE



**DEDICATED  
YOUTHFUL  
PROGRESSIVE  
INTELLIGENCE  
EXCELLENCE  
MAGESTIC  
REVOLUTIONARY**

## VISION

“EMPOWERMENT THROUGH KNOWLEDGE”

## MISSION

“To educate the students to transform them as professionally competent & quality engineers by providing conducive environment for teachin, learning, & overall personality development,culmintaing the institute into an International seat of excellence.”



**Hon. Dr. Sanjay D. Patil**  
**President**  
**Dr. D. Y. Patil Educational Complex, Akurdi**

Dr. Sanjay D. Patil is an educationist, agriculturist and a Civil Engineer. He is the architect of Padmashree Dr. D. Y. Patil Educational Institutions of Kolhapur complex. He holds positions of Chancellor of Padmashree Dr. D. Y. Patil University and Chairman of Kasaba Bavada Shikshan Mandal, Kolhapur.

He has to his credit various awards. The Government of Maharashtra has awarded him with “Vanashree Puraskar” in 1991. He is recipient of “Indira Priyadarshini Vrukshamitra” award in 1993. He has been also awarded by “Kolhapur Bhushan” in 2001 for his achievement in educational field, Rashtriya Shikshan Sanman Puraskar”, “Krishinishtha Puraskar” awarded by Government of Maharashtra in 2004 and he has won first prize in “All India Mango Show ” held at Bangalore in 1996.

Dr. Sanjay D. Patil believes in nurturing the potential of the students, giving them exposure to the latest developments and enabling them to become competent and quality conscious engineers, the world class infrastructure and environment in the institutes reflects the meticulous care taken in maintaining high academicians and most ultra-modern laboratories. His humane and calm approach towards addressing the problems and his quick decision making ability is responsible for the rapid progress and growth of the educational institutes.



Hon. Shri Satej alias Bunty D. Patil

Vice President & Chairman

Dr. D. Y. Patil Educational Complex, Akurdi

Shri Satej alias Bunty D. Patil, Ex. Minister of State Home (Urban & Rural), Rural Development, Food & Drug Administration, Govt. of Maharashtra is a renowned educationist, social worker and an agriculturist. A young man with tremendous energy, he has translated the vision of Padmashree Dr. D. Y. Patil into reality by establishing various quality institutions within a short span.

He is president of Shri. Mouni Vidyapeeth Gargoti, Kolhapur and Chairman of Padmashree Dr. D.Y. Patil Sahakari Karkhana Ltd., Gaganbavda, Kolhapur. He is Director of Kolhapur District Central Cooperative Bank and Kolhapur Chamber of Commerce and Industries. He is also members of World Wide Fund for Nature India, Indian Red Cross Society, Kolhapur, Shree Saibaba Sansthan Shirdi, Shree Parampujya Sant Gajanan Maharaj Sansthan, Shegaon and member Shivaji University Senate.

He takes personal interests in all the facets of efficient functioning and growth of the institutes. His zeal and untiring efforts are behind the creation of conducive environment for teaching, learning and overall personality development of student to elevate the educational institutions to international standards.



Col. S. K. Joshi (Retd.)  
Campus Director

Dr. D. Y. Patil Educational Complex, Akurdi

Col. S. K. Joshi (Retd.) is the Campus Director of Dr. D. Y. Patil Educational Complex, Akurdi. He is the chord who has woven all the members of this campus into a beautiful necklace to work as team to elevate the educational institutions of this campus to international standards. He has always accorded priority to reform initiatives and bring about revolutionary changes in the Pratishthan on all the fronts stated above. A highly cherished personality of the campus, without whom, we cannot spell SUCCESS. He has served the Indian army for 33 years, wherein he was commissioned at ARMORED CORE and his unit was THE SINDH HORSE, which is one of the prestigious units of Indian army. He took voluntary retirement in March 2006 and joined the D.Y.Patil Group at Kolhapur and is currently leading the D.Y. Patil Group at Akurdi. He is dynamic leader of mankind, who has combined in himself the introspection of the man of learning and the boldness of the man of action. His astute, visionary and transformational leadership has catapulted this educational complex from its humble status to a state of art infrastructure, highly qualified intellectual capital and an enriching academic set up. Besides, he reigns supreme in the hearts of all the faculties, staff members and students of all the institutes under the aegis of the Akurdi campus as an avuncular support.

AND RESEARCH



Dr. Mrs. Anupama V. Patil  
Principal

Padmashree Dr. D. Y. Patil Institute of Engineering Management & Research, Akurdi, Pune

Padmashree Dr. D.Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune, Maharashtra, India is established under Prestigious Dr. D. Y. Patil Pratishthan, one of the pioneers of Education in Maharashtra. It is approved by All India Council of Technical Education & offers Bachelor of Engineering degree in Mechanical, Electronic & Telecommunication, Civil, Computer & Chemical Engineering.

In view of the demands from Industry, service sector & Society, our Institute aims at providing conducive environment for Teaching- Learning, Character building & overall personality development of the student. We have well planned & well-structured academics along with co curricular & extracurricular activities for the students. State of the art infrastructure, well equipped class rooms, laboratories & experienced qualified faculty members are the backbone of the Institute. The students are provided with well-equipped Computer Center, Library & other amenities like Hostels, Playground, Gymkhana, Amphitheatre etc.

The Centralized Training & Placement Cell of Dr. D. Y. Patil Pratishthan assures placement to all eligible students in reputed Industries & organizations. Along with placements, this cell also organizes Training sessions for Personality development, aptitude tests, interview techniques & communication skills.

I assure all my students & parent the most creative & conducive environment required for transformation of a student into an all-round Engineering Professional which will empower him to face the challenges of the Professional world.



### **DYPIEMR: At A Glance**

Dr. D.Y. Patil Pratishthan Educational complex, Akurdi is in proximity to Pimpri Chinchwad Industrial belt, IT Park of Hinjewadi & Automobile hub of Talegaon. The Pratishthan is spread over 29 acres of land at Akurdi, which is in the vicinity of Akurdi Railway station & Mumbai - Pune Express highway.

The Pratishthan introduced new engineering college “Padmashree Dr. D. Y. Patil Institute of Engineering, Management and Research” (DYPIEMR) from the Academic Year 2012-13. DYPIEMR offers Bachelor of Engineering course in Mechanical engineering, Computer Engineering, Electronics and Telecommunication, Civil engineering and Chemical Engineering.

Spacious buildings, lush green lawns, well equipped laboratories, good library with e-resources for scholarly studies, and more over a peaceful atmosphere make learning a pleasure here. The teaching faculty members are experienced, caring and devoted to teaching. With a longstanding commitment towards quality teaching and learning, the Institute has nurtured values that go into the making of successful careers of the young generation of our country.

The basic purpose of the Institute is to transform a young, enthusiastic student into a professionally competent engineer, capable of accepting the challenges of the industry. The focus is on 'creative learning' based on the prescribed syllabus of the University of Pune, which the college is affiliated to. Ample opportunities are provided for interaction with the experts from the industry through guest lectures, field visits, vacation training, activities of the student chapters of international professional bodies, sponsorships to technical paper presentation competitions etc.

Participation in sports, cultural and spiritual activities, environmental and social drives, is encouraged to develop a high level of emotional quotient and a team spirit in the students. We feel that such qualities and skills over and above the professional inputs are essential for along prospective career in the rapidly changing global scenario.

## Distinguished Activities:-

### Innovation-2015:

“INNOVATION” was launched as a conference first of its kind organized at university level. BCUD, Savitribai Phule Pune University has decided to organize faculty-wise regional research conference entitled ‘INNOVATION’ at various places in month of May-June, 2015. This activity has emerged as a platform for academic interaction and an opportunity



for knowing about the latest happenings in different areas. Dr. D. Y. Patil Pratishthan's, Padmashree Dr. D.Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune organized ‘Innovation 2015’ - a Regional Research conference in liaison with Board of Colleges and University Development (BCUD) Savitribai Phule Pune University (SPPU) on Monday, 6th July, 2015. Total No. of 240 Researches from various Engineering Colleges under Savitribai Phule Pune University participated in the conference.

### INNOVISION 2k15:



During the Academic Year 2014-15 to explore the students talent institute organised Technical event- Innovision 2k15. 800 Students from DYPIEMR & other engineering institutes participated in various Technical Events. The events were conducted efficiently throughout the departments by ‘Team-INNOVISION’.

### KURUKSHETRA:

The sports event ‘KURUKSHETRA’ is organized every year for students at the Institute by Sports Section. During the Academic Year 2014-15, 900 Students from DYPIEMR participated in various Inter-college & Intra-College Sports Competitions. Competitions for various sports like Cricket, Football, Volleyball, Basketball, Kabaddi, Box Cricket, Table-Tennis, Carom, Table tennis, Badminton were held at our institute.



### MRUDANG:



We at DYPIEMR focus on overall development of our students. To motivate and cater the hidden talents in our students every year DYPIEMR organizes Mrudang- the cultural events. During the Academic Year 2014-15 Students from DYPIEMR participated in various Cultural Events like Dancing, Singing, and Fashion Shows & Plays enthusiastically.

## Soft Skills: A Tool for Personal and Professional Competence

### (Two Days Faculty Development Workshop)

In today's world, in order to gain a global competitive advantage, they need to ensure that their workforce, especially the faculty members, know how to handle themselves at work and how to relate with their students, authorities, colleagues and peers. Technical competence or a good IQ alone is not enough to become a good professional; it has to be supported by a host of soft skills viz: Emotional Intelligence, Time Management, Stress Management, Motivation, Creativity, Problem Solving, Team Building, Leadership etc. So, to cultivate soft skills among the faculty members, we opted to groom the faculty members in acquiring a few soft skills in this two day workshop from 19<sup>th</sup> to 20<sup>th</sup> June, 2014.



### Training and Placement Cell

Prof. Hareesh Khatri, T&P Officer

- DYPIEMR students got 64 selections and still going in various reputed companies in academic year 2015-16
- The companies like TCS, Tech Mahindra, TATA Elxsi, Persistent Systems, Zycus Infotech, Innoeye Technologies, Newgen Technologies, Infostretch, Nihilent Technologies, Indian Navy, Amura Technologies, Polycab Wires, Quickheal, Dimentrix, Constrologix, Bentley Systems, iResearch Services, Borm Bruckmeier, Concept Sphere, Webtech Developers, Rohan Builders, Prototech Solutions, Quickheal Xoriant Technologies, Varahii Infotech, Bitwise Technologies, Bombardier Transportation, Mphasis, Mithi Software, Eternus Solution, CDK Global, Amazon India, NTT Data, Realmile, Asahi Glass, MUST Garment, Rudder Analytics, Crest, Godrej & Boyce, Feelberry Media, Verdantis Technologies, Sanmar Group visited and hired students from first batch of the college for the academic year 2015-16
- Some major recruiters – TCS-11, Tech Mahindra-12, iResearch Services-7, Persistent -2, Amazon-1, etc

### Expert Lecture for Faculty Members & Students



#### Managing Your Personal Finances

Money is an integral aspect of our life. Earning money is not enough but to invest it intelligently is also important. To realize the value of money and importance of investment for better future Dr. D.Y. Patil Educational Complex organized an expert talk on “Managing Your Personal Finances” by Mr. Narayan Krishnamurti from outlook Money. The session aimed on Managing money effectively, Importance of money management. The session emphasized on importance of investment and insurance policies to the students and how it helps students in their grooming to become responsible citizens of the country.

### ROADMAP TO ACADEMIC EXCELLENCE

Academic excellence is the demonstrated ability to perform, achieve, and/or excel in scholastic activities. Academic excellence has been identified with achieving high grades and superior performance. But academic excellence is more than just making good grades. It is the maximum development of one's intellectual capacities and skills in service to humanity.

In view of this Dr. D. Y. Patil Educational Complex organized a motivational talk in the form of guest lecture by Dr. B.B. Ahuja, titled, “Roadmap to Academic Excellence”. Dr. Ahuja talked about a lot of different aspects that needs to be worked on to achieve academic excellence; he mentions some issues that need to be addressed by the institutions to achieve their goal. He talks about quality benchmarks and how can an institution achieve these benchmarks. An institution should strive to acquire recognition not only in the National circle but also in the International circle



#### • “CHUK DE”



The Non-teaching Staff and the Librarian play a very important in every institute. It is very essential to encourage them to maintain a productive workplace and stress free environment. Moreover, it is also important to make them aware about their duties. At the same time it is also a way to appreciate them whatever they are doing at their level till today.

In view of the above, a day’s Training Programme, titled: “CHUK DE” by Col. Sudhir Sinha, Founder, Inspiring Soul, Pune was organized for the non teaching staffs at the campus level.

The key objective of this workshop was to help the non teaching staff and the librarians to develop a strong self-esteem among them, which would involve, functioning independently. The workshop was conducted to motivate them to work honestly. It was meant to inculcate aspects like belongingness, loyalty, enthusiasm, honesty and so on in Non - technical staff and the Librarians.

#### • Image Management



With an understanding of the need for the qualitative development of our students, it was decided by Shri. Satej D. Patil, Campus Chairman, Dr. D. Y. Patil Educational Complex, Akurdi and Col. S. K. Joshi (Retd.), Campus Director to organize three consecutive guest lecturers on “Image Management” by Ms. Kuljeet Uppaal, Founder of Krea Enterprise, The key objective of

these lectures were to impart knowledge about how to manage one’s image, one step at a time, thereby, increasing the students self esteem, while projecting credibility, capability and productivity. The focus was purely on teaching the students how to exert an appropriate and more convincing image and the art and science of presenting oneself right in personal, professional and social life.

#### • Women Empowerment Programme



The development of Girl Students is crucial for the qualitative growth and survival of any educational institution in today’s globalized era. In accordance with this, Shri. Satej D. Patil, Chairman, Dr. D.Y. Patil Educational Complex, Akurdi, felt the requirement of Women Empowerment Programmes at the Campus Level with an overall view of enhancing their personal and professional skills and also to develop in them a strong sense of responsibility, accountability and belongingness towards the Institute & Society. The session was conducted

by Dr. Sapna Sharma, President, and Association of Counsellors & Psychotherapists.

- **Faculty Development Programme**

Venue: Chinmaya Vibhooti Ashram, Post Kolwan, Taluka-Mulshi,  
District - Pune, 412108, Maharashtra.

Faculty development is crucial for the qualitative growth and survival of any educational institution in today's globalized era. In accordance with this, Faculty Development Programme for the Middle and Junior level faculty members is being organized. This FDP is being organized with an overall view of enhancing their personal and professional skills and also to develop in them a strong sense of responsibility, accountability and belongingness towards the Institute.



- **Students' Development Programme**

Synergy with Energy- Life Management Skills Workshop

Trainer - Mr. Dinesh Nathani, Founder, Synergy with Energy, Pune.

Students seeking higher education need a conducive and secure environment that fosters their personal and professional growth. Besides the academic coaching that they receive from their professors, guidance and mentoring



from soft skills professionals or trainers would help them to enhance their skill sets and develop important aspects of personality, knowledge and soft skills, viz: leadership, team spirit, sense of responsibility and accountability etc. and thus, groom them to become employable. This could be achieved by organizing, Student Development Programmes (SDPs) that provide comprehensive counselling and referral services to help students achieve their

educational goals, strengthen their problem-solving skills, develop healthy relationships, and reach their optimum potential for continuous growth.

- **STUDENT WELFARE CELL:**

More than a goal for DYPIEMR, it is a mandate of reducing mental imbalance, promoting sustainable development with harmony and building good governance.

From the establishment of DYPIEMR the student support governing council also accommodates students themselves as stakeholders. Here are the governing bodies of DYPIEMR to amend in student support.

- **Grievances Redresser**

“Whatever your grievances, we are sure we can address them without resorting conflicts.”

The Grievance Redresser council works without diplomacy, figuring out the reason for particular grievance as soon as it arrives. DYPIEMR has taken sincere efforts to train the members of council about how to handle grievances. We gather actual facts for an effective and correct decision making with alternative course of actions during this process. Such actions are examined on the existing and future management policies and analysed for keeping a sense of accuracy, doing justice to parties indulged in grievance.

- **Earn and Learn Scheme**

This scheme is basically undertaken for the benefit of students coming from the rural areas, which are economically backward, intelligent and meritorious but cannot afford higher education, needy and financially hard pressed. This will make higher education accessible and available to the poor, meritorious and the marginalized. It inculcates in the student the idea that no work is big or small and develops a work culture with the right aptitude.

The students enrolled under the scheme are given the following types of work namely – office work, technical work. Students working under this scheme are paid an honorarium of Rs. 30 per hour.

- **PARENT’S MEET:**

DYPIEMR organizes parents meet to improve the overall performance of students, technically as well as on personal front. Personal interaction with parents definitely imparts caring attitude that DYPIEMR believes in. The meets were successfully organized in departments and the response was informative. Interaction session was conducted where parents got an opportunity to discuss with faculties the progress of their wards.

- **Corporate Social Responsibility:**

As part of social and moral responsibility DYPIEMR has adopted two children named Mr. Jayesh Dhongade and Ms. Pooja from Nachiket Balashram, Akurdi, Pune, DYPIEMR donated Water cooler and Fridge to Sant Baba Moni Saheb Vriddha Anand Ashram



**About Department**

The department of Mechanical Engineering being one of the oldest and the finest departments of the college is having learned and experienced faculty, who with their rich experience in academics and industry are enlightening the students about the latest trends and practical aspects of engineering.

The department offers four years Degree course in Mechanical Engineering, the syllabus of which has been recently upgraded to meet the industries needs for up-to-date technical knowledge, managerial skills, and exposure to Quality management and computers. The department has excellent facilities for the students to enhance their skills in various fields of mechanical engineering. Our engineers are waiting for an opportunity to prove their mettle at work place that is equipped with their hard earned degrees. The Department was established in the year 2013 and offers undergraduate program (B.E.) in Mechanical Engineering with intake capacity of 120 (first shift) + 60 (Second shift)

**Vision**

To create competent Mechanical Engineers department to be recognized globally for outstanding education and research leading to well-qualified engineers, who are innovative, entrepreneurial and motivated for advanced studies.

**Mission**

- Imparting quality education to the students and enhancing their skills to make them competitive mechanical engineers.
- Provide an education that builds within students a solid foundation in mechanical engineering principles, expand the reasoning, communication and problem solving abilities of the students for designing, analysis, and research of engineering systems.
- Develop linkages with world class R & D organization and educational institutes in India and Abroad for excellence in teaching, research and consultancy practices and encourage them to become entrepreneur through lifelong learning process.

**Pos**

- Graduates will become the professional practitioner of engineering, concerned with applying scientific knowledge, mathematics and ingenuity to develop solution for technical social and commercial problems.
- Graduates will become effective collaborators and innovators, leading or participating in efforts to address social, technical and business challenges
- Graduates will be engaged in life-long learning and professional development through self-study, continuing education and professional studies in engineering, business and management.
- Graduates will lead in the conception, design, and implementation of new products, processes, services and other engineering systems.

**PEOs**

- Knowledge of science, mathematics, and engineering principles.
- Ability to apply knowledge of science, mathematics, and engineering principles for solving problems.
- Ability to identify, formulate and solve mechanical engineering problems in the broad areas like mechanical machines, production processes, mechanical designs etc.
- Ability to understand and use of different software tools in the domain of design, simulations, analysis etc
- Ability to design and conduct experiments and analyze and interpret data.
- Ability to exhibit management principles and function as a member of a multidisciplinary team

- Sensitivity towards professional and ethical responsibility.
- Ability to communicate effectively in writing as well as through public speaking.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and social context

### Best Practices of Department

Physical models based on principle of design have been made by students of third year as mini project to get better understanding of working principle of machine and mechanism.



### Academic Excellence

Highlights of Academic Excellence in SPPU Examination Results for Semester-II 2014-2015

#### Toppers:

Mr. Akash Dhore (TE) - 79.2%

Mr. Ronit Gadiya (SE) - 79.9%

### Research and Development

#### FDP/Workshop

- Mr. Solepatil Sandesh Babanrao attended workshop on “Innovation and new product development” on 19<sup>th</sup> & 20<sup>th</sup> Feb, 2015 at PCCOE Pune.
- Mr. Solepatil Sandesh Babanrao attended workshop on “Matlab and Simulink” on 27<sup>th</sup> & 28<sup>th</sup> April, 2015 at JSPMCOE Pune.
- Mr. Vikas P. Dive attended workshop on “Intellectual Property Rights” on 8<sup>th</sup> August, 2015 at MSME & Engineering Autocluster Pune.
- Mr. Keval Nikam attended workshop on “Ethics in Engineering, Engineering Education and Engineering Research” on 11<sup>th</sup> Sep 2015 at Rajarshi Shahu College of Engineering, Tathewade, Pune.
- Mr. Keval Nikam attended workshop on “Refrigeration and Air conditioning syllabus Implementation workshop” on 5<sup>th</sup> August, 2015 at MIT College of Engineering, Kothrud, Pune.
- Mr. Keval Nikam attended workshop on “Numerical Methods and Optimization Technique syllabus Implementation workshop” on 24<sup>th</sup> December, 2015 at Sinhgad College of Engineering, Ambegaon, Pune.
- Mr. Kolekar Aniket Bhanudas attended workshop on “Recent trends & advances in Forging industry workshop” on 12<sup>th</sup> September, 2015 at COEP, Pune.

### MOUs

Department of Mechanical Department has signed MoU with Engineering Cluster Pune for training, placement, projects, EDP (Entrepreneurship Development Program) and III (Industry Institution Interaction) Cell in November 2015

## Faculty Publications

- Prof. Narkar K.M published paper on “Steering System Optimization for Vehicle Drift” in, Int. Conf. on Mechanical and Industrial Engineering, Bangalore (2014), 94-98
- Prof. Narkar K.M published paper on “Structural Analysis and Thermal Analysis of Automotive Ventilated Brake Disc” in, Int. J. Scientific Research & Development, Vol. 2, Issue 03 (2014), 972-977
- Prof. Narkar K.M published paper on “Verification and Validation of Preliminary Results of CFD of Electrostatic Precipitator” in, Int. J. Scientific Research & Development, Vol. 3, Issue 01 (2015), 407-412
- Prof. Narkar K.M published paper on “Static Analysis of Coal Bunker and Validation and Validation of the Results using STAADPRO” in, Int. J. Recent Technologies in Mechanical and Electrical Engineering, Volume 2, Issue 10 (2015), 5-9
- Prof. Narkar K. M published paper on “Design and Finite Element Analysis of Rope Drum and Drum Shaft for Lifted Material Loading Condition” in, Mech-PGCON-2015, Pune.
- Prof. Narkar K. M published paper on “Design, Development and Testing of Electrically Powered Hybrid Suspension” in, Mech-PGCON-2015,Pune
- Prof. Narkar K. M published paper on “Design and Analysis of E-Glass/Epoxy Composite Monoleaf Spring for Light Vehicle” in, Int. J. Innovative Research in Science, Engineering and Technology, Vol. 4, Issue 3 (2015), 18801-18808
- Prof. Narkar K. M published paper on “Optimization of Rollover Protection Structure” in, Int. J. Scientific Research & Development, Vol. 2, Issue 03 (2014), 617-621
- Dr. Promod Salunkhe published book chapter on “Active flow control over a wing model using synthetic-jet-actuator arrays, Fluid-Structure-Sound Interactions and Control” in, pp. 115-122, Springer, 2014
- Dr. Promod Salunkhe published paper on “On the use of synthetic jet actuator arrays for active flow separation control” in, Experimental Thermal and Fluid Science, 2014, 57, pp. 1-10. (Ranked 16<sup>th</sup> among 25 most downloaded articles during April, 2014 – June, 2014)
- Dr. Promod Salunkhe published paper on “Investigation of heat storage materials for a temperature range of 50°C to 100°C” in, International Journal of Conceptions on Mechanical and Civil Engineering, 2013, 1(1), pp. 53-57
- Dr. Promod Salunkhe published paper on “A Review on Effect of Phase Change Material Encapsulation on the Thermal Performance of a System” in, Renewable and Sustainable Energy Reviews, 2012, 16(8), pp. 5603-16
- Dr. Promod Salunkhe presented paper on “PIV measurements on a wing model controlled by synthetic jets” in, The 16<sup>th</sup> International Symposium on Flow Visualization, June 24-28, 2014, Okinawa, Japan
- Dr. Promod Salunkhe presented paper on “Active Flow Control over a Wing Model using Synthetic Jet Arrays” in, 2<sup>nd</sup> Symposium on Fluid-Structure-Sound Interactions and Control, May 20-23, 2013, Hong Kong and Macau
- Dr. Promod Salunkhe presented paper on “Investigation of Heat Storage Materials for a Temperature range of 50°C to 100°C” in, International Conference on Engineering Technology and Management, 7<sup>th</sup> – 8<sup>th</sup> September 2012, Tirupati, India
- Mrs. Amruta Adwant published paper on “Optimization of Reaction Parameters by Response Surface Methodology, International Journal of Current Engineering and Technology” in, E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Accepted 22 March 2015, Available online 29 March 2015, Vol.5, No.2 (April 2015)
- Mr. Sandesh Solepatil published paper on “Transmissibility Analysis of Magnetorheological damper” in, International journal of latest technology in Engineering & Science, June 2014, pp.46-50. ISSN 2278-2540
- Mr. Sandesh Solepatil published paper on “Effect of Viscosity on a Magnetorheological Damper” in, International journal of Science and Research, June 2014, pp.206-209. ISSN 2319-7064
- Mr. Sandesh Solepatil presented paper on “Magnetic saturation Analysis of Magnetorheological damper” in, International Conference on science and technology (ICST-2014), Indapur, Pune Feb 2014
- Mr. Aniket Kolekar published paper on “Flexural properties of injection moulded PP/MoS<sub>2</sub> Polymer matrix composite” in, IJLTEMAS, Volume III, Issue VI, June 2014, ISSN 2278-2540, 141-144

- Mr. Aniket Kolekar presented paper on “Review on PP-BN composites containing flame retardant additive by TGA & LOI” in, International Conference on science and technology (ICST-2014), Indapur, Pune Feb 2014
- Mr. Sushil Gaikwad published paper on “Numerical simulation of gas turbine blade cooling for enhancement of heat transfer of the blade tip” in, IJRET: International Journal of Research in Engineering and Technology, Volume: 03 Issue: 09, Sep-2014, eISSN: 2319-1163, pISSN: 2321-7308
- Mr. Sushil Gaikwad published paper on “Review of heat transfer augmentation for cooling of turbine blade tip by geometrical modifications to the surfaces of blade” in, IJRET: International Journal of Research in Engineering and Technology, Volume: 03 Issue: 07, Jul-2014, eISSN: 2319-1163, pISSN: 2321-7308
- Mr. Sushil Gaikwad presented paper on “Review on heat transfer augmentation technique through turbulence/vortex for cooling of gas turbine blade tip” in, Science and Technology (ICST-2K14), 21 & 22 February 2014, S. B. Patil College of Engineering, Indapur, Maharashtra
- Mr. Paresh Kulkarni published paper on “Failure Mode Effect Analysis: Process Capability Enhancement-A Case Study” in, International Journal of Engineering Research & Technology (IJERT) Vol. 2 Issue 4, April - 2013 ISSN: 2278-0181
- Mr. Nitin Motgi published paper on “Impact Analysis of front bumper” in, 5 Dec 2013, International Journal of Engineering trends And technology (IJETT) Vol 6
- Mr. Nitin Motgi published paper on “Stress Analysis of Rotor Shaft of Electric Motor” in, 7 July 2013, IJAIEM Vol 2 Issue 7 Citation-1
- Mr. Nitin Motgi presented paper on “Design improvement in front bumper of passenger car by using impact analysis” in, 8 april 2012, International conference on Mechanical and industrial Engineering(ICMIE)
- Mr. Nitin Motgi published paper on “Design improvement in front bumper of a passenger car using impact analysis-A review” in, July 2012, ijica\_volliss3-4 Citation-1
- Mr. Amol Mali published paper on “Review on Effect of Hybrid Reinforcement on Mechanical Behaviour of Aluminium Matrix Composite” in, 2278-0181, International Journal of Engineering Research & Technology (IJERT)
- Mr. Amol Mali published paper on “Effect of Hybrid Reinforcement on Mechanical Behaviour of Aluminium Matrix Composite” in, 2278-0181 International Journal of Engineering Research & Technology (IJERT)
- Mr. Prafulla Nalawade published paper on “Cutting Parameter Optimization for Surface Finish and Hole Accuracy in Drilling of EN-31” in, 2278-1684, IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)
- Mr. Sourabh Borchate presented paper on “Design, Analysis and Performance Optimization of Disk Brake” in, National conference on Development and Innovation in Mechanical Engineering (DIME 2015), Tatyasaheb Kore Institute of Engineering and Technology, Warananagar, Kolhapur
- Mr. Sourabh Borchate published paper on “Design, Analysis and Performance Optimization of Disk Brake” in, International Journal of Advanced Engineering Research and Studies (IJAERS), 643/2014, (ISSN No.2249-8974)
- Mr. Sourabh Borchate published paper on “Medical Robotics and Automation” in, National Conference on Recent Advances in Science, Engineering and Management (NCRASEM), 2014
- Mr. Sourabh Borchate published paper on “Medical Robotics and Automation” in, International Conference on Recent Advances in Material Processing Technology (RAMPT), National Engineering Collage, Tamilnadu, 2013
- Mr. Sourabh Borchate published paper on “Medical Robotics and Automation” in, International Journal on Mechanical Engineering and Robotic Research (IJMERR), 2013
- Mr. Manoj Rajale presented paper on “Numerical Analysis of synthetic jet for electronics cooling” in, International Conference on ACME-2014
- Mr. Manoj Rajale presented paper on “Heat transfer enhancement using heat pipe” in, National Conference NCTR-2015
- Mr. Amol Dhumal presented paper on “Investigation of influence of the various expansion devices on the performance of a refrigerator using R407C refrigerant” in, International journal of Advanced Engineering Technology, Volume 5, Issue 2, April-June 2014

## Student Development and Activities

Mechanical Engineering Students Association (MESA) has been created in 2013 for giving platform for students to come up with new innovative ideas and develop practical understanding of engineering.



## Student Chapter

Institute of Engineering has been created so that student can have proper interaction with industry and will be well informed about new trends in industry.



## Technical Events

Model making competition was organised for third year students as a part of skill development. Roborace competition was held by department for developing engineering skills in students



## Guest Lectures/Workshops

- The Guest Lecture was organized by Mechanical Department on 13<sup>th</sup> July 2013. Mr. Mahesh Patil, Director, OFMAP Solutions, Akurdi, Pune successfully coordinated the event. The event was organized with an objective to introduce CAD/CAM/CAE modelling software.
- Mr. Sachin Wagh, Divisional Manager, TATA Motors Ltd., Pune successfully coordinated the event. The event was organized with an objective to talk about recent trends in automotive industries.



- The Guest Lecture was organized on 18th July, 2015. Dr. N. Vyas, "Spardhha", Pune successfully coordinated the event. The event was organized with an objective to discuss career opportunities after engineering.
- Mr. Sangram V. Patil, Director and Founder, Marvelous Engineering Pvt. Ltd. successfully coordinated the event. The event was organized with an objective to encourage students for entrepreneurship.
- The Guest Lecture was organized on 15th September, 2014. Dr. Mandar Lele, Professor, MIT, Pune successfully coordinated the event. The event was organized with an objective to introduce heat transfer applications and recent trends.

- The Workshop on OPENFOAM a Free Computational Fluid Dynamics Software was organized by Mechanical Department, JSPM's Rajarshi Shahu College of Engineering on from 9<sup>th</sup> October, 2015 and 10<sup>th</sup> October, 2015. Description of event: Basics of Fluid Mechanics were studied. Cases of flow of water through pipe were solved using Open Foam Software. Dr. Sachin Lotan Borse successfully coordinated the event. The event was organized with an objective to know the importance of the Open source Software. The outcome of the event was students are able to identify the problem and solve it by using Open Foam Software.

### Students Publications

- Mr. Rahul and Mr. Ashish Koushik presented paper titled "Air Car" in International/National conference on Technical Paper Presentation organized by AISSMS COE CAMPUS on 15<sup>th</sup> September, 2015

### Achievements

#### Student Patents

- Aakash Vijay Patil has filed a patent "A Portable Device for Static Testing of Low Impulse Rocket Engines.", (4014-MUMBAI PO-IN)
- Third Year student Ms. Prthana Kothi has been to National camp organized by NCC.
- Second Year students got 3<sup>rd</sup> rank in National level technical event "Dexterity 2k14" held at MMCOE, Karvenagar, Pune on 26<sup>th</sup> December, 2014.
- Competition organized by Savitribai Phule University, Pune on 22<sup>nd</sup> September, 2014 at JSPM's Bhivarbai Sawant Institute of Technology and Research (BSIOTR), Wagholi, Pune. DYPIEMR mechanical student got selected for ZONAL LEVEL out of 249 groups under UG level.
- Second Year students made a RC CAR and presented in various competitions at various colleges at university level and acquired ranks in National level technical events. Radio controlled (or R/C) cars are self-powered model cars or trucks that can be controlled from a distance using a specialized transmitter or remote.



### Industrial visits

- Industrial Visit Shri Sant Tukaram Sahakari Sakhar Karkhana Ltd., Mulshi, Pune for students was arranged on 3<sup>rd</sup> and 4<sup>th</sup> September, 2015 for Boiler Inspection.



- Industrial Visit to HA Oil Ltd. for (COURSE) students was arranged on 11<sup>th</sup> April, 2015 for Understanding different Automobile parts.



Visit to HA Oil Ltd.

Students understanding different parts in automobile

- Industrial Visit Wonder cars, Plot No. 52/1, Block F-2, MIDC, Pimpri, Pune 411018 for students was arranged on 31<sup>st</sup> July, 2015 for Demonstration of Balancing of Wheel on Computerized Balancing Machine.



# DYIP

PAD. DR. D. Y. PATIL  
INSTITUTE OF  
ENGINEERING,  
MANAGEMENT  
AND RESEARCH

### About Department

The Department is incepted in the Year 2013 with intake of 60 students. This is a 4 year fulltime course. To enhance the technical skill of students department has a team of experienced and qualified faculties who are committed to serve students with untiring zeal and enthusiasm. We provide well equipped laboratories to perform experiments and endeavor to provide better teaching facilities. Department is well set to provide excellent Civil engineers well trained in all aspects and adequately prepared to be accepted globally. The Department was established in the year 2012 and offers undergraduate program (B.E.) in Civil Engineering with intake capacity of 120.

### Vision

A leading centre of excellence for civil engineering which advances the state of knowledge in the education and learning experiences.

### Mission

Provide quality education to students to prepare competent engineers to serve the Nation.

### POs

- To have strong fundamental concepts in mathematics, basic sciences and engineering to meet challenges in the field of civil engineering.
- To motivate higher education and lifelong learning for developing their technical skill, management skill, and to become professional expertise.
- To utilize their soft skills in oral, written and graphical mode when working as team leader and actively participate in their profession.
- To produce skill for identifying and assessing alternative solutions related with social, economic, environmental and public safety.

### PEOs

- An ability to apply knowledge of mathematics, science and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- An ability to function on multidisciplinary teams.
- An ability to identify, formulate and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
- Recognition of the need for, and an ability to engage in life-long learning.

- A knowledge of contemporary issues and.

## Academic Excellence

Highlights of Academic Excellence in SPPU Examination Results for Semester-II 2014-2015

### Toppers:

Ms Kshitija Shinde (TE) scored 73%  
Ms. Heena Shaikh (SE) scored 71.53%

## Research and Development

### FDP/Workshop

- Mr. Shivkumar Hallale attended Interactive workshop on “Intellectual Property Rights” on 3<sup>rd</sup> and 4<sup>th</sup> September, 2015 at Engineering cluster, Pune.
- Mr. Sainand Khot attended Interactive one week FDP workshop on “Theory and Laboratory Experiments in Fluid Mechanics-1”, from 2<sup>nd</sup> to 6<sup>th</sup> November 2015 at VIIT, Kondhwa, Pune.

### Faculty Publications

- Mr. Pravin Gorde published paper on “Review On Application Of Basalt Fiber In Civil Engineering” Volume: II Issue XII Dec 2013 2015 ISSN 2278-2540
- Mr. Pravin Gorde published paper on “Performance Of Basalt Fiber In Concrete” in IJLTEMAS AND IJSR, Volume3 Issue 5 May, 2014 ISSN 2319-7064.
- Mr Bhushan Kalantre published paper on “Assessment Of Ground Water Quality” in Hatkanangle Taluk and District Kolhapur- A case study “Mr Water for future” in National conference.
- Mrs. Sneha Sawant published paper on “Applying Six Sigma principals in construction industry improvement” ICAET-2014.
- Mrs Poonam Kotulkar published paper on “Demolition of structure using implosion technology and reuse waste- A case study ” in IJAERS in 643/2014 ISSN 2249-8974.
- Mrs Neha Bagdiya published paper on “Defects And Post Construction Defects Effect In Residential Building” IJERT, Volume:4 ISSN 2278-0181
- Mrs Neha Bagdiya published paper on “Identify And Minimize Construction Defects In Residential Building” in IJAFRC volume 1
- Mrs Neha Bagdiya published paper on “Review Paper On Construction Defects” in IOSR, volume 12 issue 5 march-april 2015 ISSN 2320-334x
- Mrs Neha Bagdiya published paper on “Defects and Causes of Defects in the Construction Industry” in PG-CON National conference at MIT College, Pune.
- Mr. Rohit Deshmukh published paper on “Low Energy Green Material By Embodied Energy Analysis” in IOSR in volume 2 Issue 1, pp (58-65) ISSN 2348-7607.
- Mr Rohit Shinde published paper on “Seismic Behaviour Of Reinforced Concrete Slit Shear Walls Energy Dissipator” in IJCSE in volume 2 Issue 1, pp(58-65) ISSN 2348-7607.

- Mr. Ranjeet Sabale published paper on “Capping Technique to rapid sand filter” in IJAER Volume10 Issue XII Dec 2013 2015 ISSN 0973-4562
- Mr. Ranjeet Sabale published paper on “Improved rapid sand filter for performance enhancement.” in IJSR, Volume3 Issue 10<sup>th</sup> October, 2014 ISSN 2319-7064
- Mr. Sachin Nalawade published paper on “Building Information Modelling A New Tool Of Project Management For Construction Manager” in 3<sup>rd</sup> international conference on sustainable innovation techniques in architecture, civil and environmental engineering.
- Mr. Mithun Sawant published paper on
- “A New Hyperbolic Shear Deformation Theory For Analysis Of Thick Beam” in IJIRSET in VOLUME 3, ISSUE 2, ISSN 2319-8753.

### Student Development and Activities

#### Student Chapter

Student chapter inauguration by Mr. Ravi Ranade was arranged on Monday, 16<sup>th</sup> February, 2015. On topic “Civil Engineering Projects and NDT Technology”.

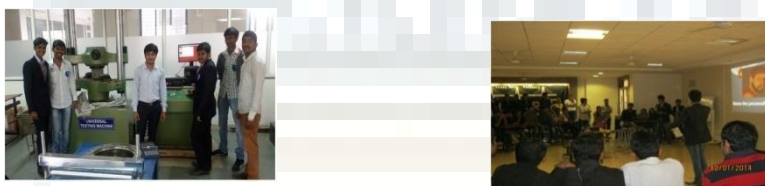


#### Technical Events:

- Model making event was arranged on Tuesday, 10<sup>th</sup> February, 2015.



- Quiz competition event was arranged on Wednesday, 11<sup>th</sup> February, 2015.
- Cube Crete competition event was arranged on Tuesday, 10<sup>th</sup> February, 2015



#### Guest Lectures/Workshops

Guest Lecture by Mr. Uday Kulkarni was arranged on Friday, 31<sup>st</sup> July 2015. on “Architectural Planning of Town with Their Rules and Regulation.”



## Publications

- Tarun Sarthak, Sangram Naik ,Karade Shekhar ,Abhijit Mandalik presented paper titled “light Wt Concrete using EPS” in International journal of science and research in the year 2014.

## Achievements

- Student from second year Vaibhav Navgire, Kedar Takaikar is awarded for rank 2<sup>nd</sup> in the event “Bridge Making under TECHNOSAV2015” conducted by Siddhant college of engineering for the year 2015.
- SE student, “Siddhesh Walunj” was awarded 1<sup>st</sup> prize in “Model Making Competition” in the event “NIRMAAN” (A National Level Technical Symposium) at Zeal education Society’s, Dynanganga College of Engineering and Research Narhe.
- SE Students civil Engineering was awarded First Prize in “Kabbadi Competition.”

## Industrial visits

- Industrial Visit to Mumbai Port trust for T.E. students was arranged on 30<sup>th</sup> September 2015, to bridge the gap between theoretical aspects learned and actual site requirements to provide objectives and outcome. Ports and Harbours are also a part of infrastructure system which plays vital role in water transportation. The agenda of this site visit was to observe and understand various elements and operations of Mumbai Port.



Serenity Ace Vessel



Dry dock

- Industrial Visit to Flyover near Empire Estate, Chinchawad, Pune, for B.E. students was arranged on 8<sup>th</sup> October, 2015, to bridge the gap between theoretical aspects learned and actual site requirements to provide objectives and outcome to reduce hurdles during high volume period. The Pimpri Chinchwad Municipal Corporation (PCMC) has constructed the Longest Flyover in Pune district near the Empire Estate in Chinchawad. The flyover is the part of Kalewadi to Dehu-Alandi BRTS corridor. The width of this stretch is 45 metre. The flyover starts from Kalewadi and crosses the Pavana River, Pimpri-Chinchwad link road, Pune-Lonavala railway line, old Pune-Mumbai highway and ends near Auto cluster in Chinchawad. The Project Cost will be around Rs 80 Crore.

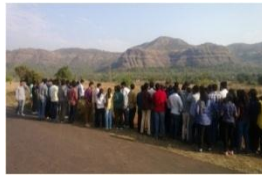


- Industrial Visit to Indian Meteorological Department for T.E. students was arranged on Tuesday, 12<sup>th</sup> August, 2014 for the subject Hydrology & Water Resources Engineering.



- Industrial Visit to Central Water Power Research Station, Pune for S.E. students was arranged on Wednesday, 5<sup>th</sup> February, 2014 for the subject Engineering Geology.
- Industrial Visit to Tamhini Ghat Section and Shikadi Beach for S.E. students was arranged on Saturday, 14<sup>th</sup> March,

2015 for the subject Engineering Geology.



- Industrial Visit to Capital city for S.E. students was arranged on 29<sup>th</sup> September 2015, to bridge the gap between theoretical aspects learned and actual site requirements to provide objectives and outcome. The prosperity of any nation depends upon the growth of building of the Nation; as such it demands the detailed knowledge about the various elements of Infrastructure.



Masonry work

Industrial Visit to Balaji Pride, in front of Hotel Orchid, Old Mumbai highway, Balewadi, Pune. For S.E. students was arranged on 28<sup>th</sup> August, 2015, to provide objectives and outcomes. Main aspect behind field visits is to provide the practical education to the students regarding the different components of building, techniques used in construction, types of components, etc.

### About Department

Department of Computer Engineering of DYPIEMR offers a broad undergraduate Pune university curriculum, based on theoretical foundations of computer engineering, practical applications and designing and implementation of the products and software's. A continued effort on building and improving infrastructure whether physical or intellectual is something that is a part of us. We have added a new building with well-equipped class rooms, laboratories and centralized computing facility. The Department aims at providing high quality training to students through the latest in computer technology. The process of learning is extremely important in life. What you learn, how you learn and where you learn play a crucial role in developing ones intellectual capability, besides career. Therefore we do not aim to make our students walking manuals of any language or package. Instead, they are given a strong foundation in computer science and problem-solving techniques, and are made adaptable to changes. The motto of our department is to provide quality education. Thus we are confident that our Engineers will emerge as assets not only to this institution and to the organization they belong, but also to the country at large.

The Department regularly organizes a series of lectures by academicians and professionals of the highest repute, which lay stress on the latest innovative technologies in the field of Computer Engineering.

The Department has a team of highly experienced and motivated faculty members who are in the process of tuning the young minds to make them globally competitive.

### Vision

To become centre of excellence in field of computer engineering in academics and research

### Mission

The Department of Computer Engineering endeavors to train students for their professional career and higher studies by providing innovative teaching aids, state-of-the-art research environment and opportunities for learning in Computer Engineering with leadership skills, empowering them to serve needs of industry and society.

### Pos

- Apply the knowledge of computing, mathematics, engineering fundamentals, and an engineering specialization to the solution of various engineering problems.
- Ability to identify, formulate and analyze the problems and reach the conclusions using principals of engineering science.
- An ability to design, implement and evaluate a system, process, component and programme to meet desired needs within realistic constraints with suitable consideration for the public health and safety, and the cultural , societal and environmental considerations
- An ability to investigate, formulate, analyze and provide appropriate solutions to the engineering problems by interpreting data using research based knowledge and research methods
- An ability to use modern engineering tools and technologies including prediction and modelling necessary for complex engineering practices.
- An ability to identify and assess the local and global impact of professional engineering practices on individuals, organizations, society and environment.
- An ability to understand the environmental issues and provide sustainable solutions.
- Ability to fulfil professional and ethical responsibilities.

- An ability to function effectively as an individual or as a team member to accomplish a goal in multidisciplinary setting.
- Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentations, make effective presentations and give and receive clear instructions.
- Demonstrate knowledge and understanding of the engineering and management principals to manage projects in multidisciplinary environment.
- An ability to keep abreast with contemporary technologies through lifelong learning.

## PEOs

**PEO 1:** To Adapt to technological advancements by engaging in lifelong learning with leadership qualities, professional ethics and soft skills.

**PEO 2:** To promote students to have the ability to specify, design, develop and maintain reliable and efficient software.

**PEO 3:** To prepare graduates to become effective technical communicators in multidisciplinary teams providing technical leadership to create innovative computing solutions for challenging real life problems

## Best Practices of Department

- Academic planning and monitoring with well-organized academic structure.
- Special care and concern for students through Teacher Guardian scheme. (1 teacher guardian per 30 students)
- Counselling and career guidance through add-on technical and soft skill courses for preparing students for T&P activities and higher studies
- Overall technical development of students through CSI student chapter activities.
- Interaction with parents through parent meetings and with industry through industrial visits.
- Indigenously developed system for online examinations.
- Preparing students for their professional career through special training programs such as IBNC - networking program, PC assembly workshop, latex training etc.

## Academic Excellence

Highlights of Academic Excellence in SPPU Examination Results for Semester-II 2014-2015

Ms. Divya Patel (TE) - 68.53%

Ms. Tanisha Sarraf (TE) - 68.53%

Mr. Sakaar Thaploo (SE) - 67.99%

Ms. Minakshee Bangale (SE) - 67.99%

## Research and Development

### FDP/Workshop Organized

- The IBNC Cisco Networking Workshop was organized by Computer Department on 8<sup>th</sup> and 9<sup>th</sup> September 2015. This two days' workshop covered all the essential topics that a student needs to understand in order to build a small network. For example: basic network design of their colleges. The event was organized with an objective of giving

hands-on experience with the latest networking practices. The outcome of the event was that the students were able to successfully install, configure, operate, and troubleshoot medium-size routed and switched networks using CCNA routers and switches.



(IBNC Cisco Networking Workshop)



(IBNC Cisco Networking Workshop)

- The LATEX Workshop was organized by Computer Department on 13<sup>th</sup> July 2015

Latex workshop was specially organized for SE students. The topics in the workshops ranged from introductory to advanced, and the sessions included topics such as compiling, mathematical typesetting, equations, generating reports, and more. The event was organized with an objective to give our students knowledge about creating scientific and technical documents. The outcome of the event was that students were able to successfully create elegant technical documents containing mathematical equations, tables, and figures.



(Latex Workshop For SE students)

- A guest lecture on Cloud computing was organized by Computer Department on 3<sup>rd</sup> August, 2015

Cloud computing, also known as on-demand computing, is a kind of internet-based computing, where shared resources and information are provided to computers and other devices on-demand. Resource person for guest lecture was Mr. Prashant Tiwari IT Head –Riquezant. Objective of guest lecture was to make students aware about various aspects of cloud computing. The outcome of the event was that the students were able to incorporate concepts of cloud computing in their final year projects.



(GUEST LECTURE ON "CLOUD COMPUTING")

- The Quantitative aptitude, reasoning and resume building was organized by Computer Department on 8<sup>th</sup> August, 2015. Quantitative aptitude and reasoning is very important for placement. Resource person for lecture was Mr. Ronak Shaha Proton Training Centre. Objective of guest lecture was to provide knowledge of quantitative aptitude and reasoning and basic information about placement which will help the students in solving the aptitude tests during placement activities.
- Guest lecture on “Cloud Computing” for TE & BE Students on 3<sup>rd</sup> August, 2015 by Mr. Prashant Tiwari, Riquezant Technologies.
- Guest lecture on “Latest Industrial Trends in Databases and Its Administrations” on 10<sup>th</sup> January, 2015 by Mr. Nagesh Suryawanshi and Mr. Kamal Dixit.
- Guest lecture on “Big Data and Hadoop” on 6<sup>th</sup> January, 2015 by Mr. Amol Patil.
- Guest lecture on “Mobile Repairing” on 5<sup>th</sup> January, 2015 by Mr. Mahendra Barmukh CEO of Mahendra Technica.
- Guest lecture on “Databases” on 28<sup>th</sup> June, 2014 by Mr. Ronak Shah.

### **FDP/Workshop Attended**

- Mrs. Mily Lal attended CL- I FDP on 7<sup>th</sup> July, 2015 at G. H. Raisoni College of Engineering, Wagholi
- Mrs. Nalini Yadav attended CL-I FDP on 7<sup>th</sup> July, 2015 at G. H. Raisoni College of Engineering, Wagholi
- Mrs. Akanksha Goel attended CL-II on 16<sup>th</sup> July, 2015 at JSPM Narhe.
- Mrs. Akanksha Goel attended Workshop on Smart System Programming on 24<sup>th</sup> to 26<sup>th</sup> July, 2015 at Sinhgad.
- Mrs. Amruta Chore attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Mily Lal attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Sarika Patil attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Sandhya Gundare attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Akanksha Goel attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mr. Ishwar Kalbandi attended DAA on 8<sup>th</sup> to 12<sup>th</sup> June at PCCOE, Akurdi
- Mrs. Tanuja Lonhari attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Ketki Bhoyar attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Shivganga Udhan attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Mohini Avtade attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Suvarna Patil attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi
- Mrs. Nalini Yadav attended IBNC CCNA Networking on 8<sup>th</sup> and 9<sup>th</sup> Sept, 2015 at DYPIEMR, Akurdi

### **Patents Filed by Faculty:**

- Mrs. Sarika Patil has filed a patent titled “Managing Grape Yard” on 15<sup>th</sup> June, 2014. Application No: 1981/MUM/2014. Patent CBR No: 9814

### **Faculty Publications**

- Prof. P. P. Shevatekar published paper on “Development of Authentication of User Applications using smart security” in International conference on advances in Computing and management (ICACM), 2012.
- Mrs. Suvarna Patil published paper on “A Survey on Genetic Algorithm in Wireless Sensor Network” in National conference on “Recent Trends in Management and Computing” IJACM-2014.
- Mrs. Suvarna Patil published paper on “Comparison and Analysis of Different Mutation Strategies to improve the Performance of Genetic Algorithm” in IJCSIT-2014.
- Mrs. Suvarna Patil published paper on “Increasing Lifetime of Heterogeneous Wireless Sensor Network Using Improved Ant Colony Optimization” in Elsevier-2014.

- Mrs. Suvarna Patil published paper on “Genetic Algorithm : A Survey” in National conference on “Emerging Trends and Applications in Machine Learning” -2013.
- Mrs. Shivganga Gavhane published paper on “Hand motion tracking for Alphabet Recognition using ANN” in National conference on “Emerging Trends and Applications in Machine Learning” -2013.
- Mrs. Shivganga Gavhane published paper on “Alphabet recognition using hand motion track” in IJERA, JUNE 2013.
- Ms. Ketaki Bhoyar published paper on “Folder Locking System using Fuzzy Vault for Face” in ETCSIT, Nashik, 2012.
- Ms. Ketaki Bhoyar published paper on “Feature Level Fusion based Multibiometric Cryptosystem using Fuzzy Vault for Wired Network” in ICRTESM, JNU, 2015.
- Ms. Ketaki Bhoyar published paper on “Feature Level Fusion based Multibiometric Cryptosystem using Fuzzy Vault for Wired Network” in IJARSE, JNU, 2015.
- Ms. Ketaki Bhoyar published paper on “Review for Multibiometric Cryptosystem using Fuzzy Vault for Wired Network” in IJCSIT, 2014.
- Ms. Ketaki Bhoyar published paper on “Folder Locking System using Fuzzy Vault for Face” in IJCA, 2012.
- Mrs. Mohini Avatade published paper on “Speech Signal De-noising using Negative Entropy based Independent Component Analysis and Adaptive Wavelet Packet Thresholding” in CIIT International Journal.
- Mrs. Mohini Avatade published paper on “Performance Evaluation of Noise estimation techniques for blind source separation in non stationary noise environment” in IJCSI.
- Mrs. Mohini Avatade published paper on “Enhancement of speech signal based on Improved Minima Controlled recursive Averaging and independent component analysis” in ITSI international Conference.
- Mrs. Akanksha Goel published paper on “Research analysis of single sign on security mechanism for distributed computer networks” in IJMRD.
- Mrs. Akanksha Goel published paper on “Issues in Database Designing through XML” in IJSR.
- Mrs. Sarika Patil published paper on “Wineyard Management for Downy Mildew Disease using WSN” in IJCA.
- Mrs. Sarika Patil published paper on “Monitoring and detection of Agricultural Disease using WSN” in IJCA.
- Mrs. Tanuja Lonhari published paper on “Repository Filter with Semantic Heterogeneity Reconciliation Using WordNet for Efficient Semantic Web Service Discovery” in ICRTES, 2014.
- Mrs. Tanuja Lonhari published paper on “Improving Performance of SPARQL-based Repository Filtering Using WordNet for SWS Discovery” in Elsevier, 2014.
- Mr. Ishwar Kalbandi published paper on “IPTV Software Process and Workflow” in Elsevier.
- Mr. Ishwar Kalbandi published paper on “A Brief Introduction to bigdata 5 Vs and Characteristics” in Elsevier.
- Mr. Naresh kumar Mustry published paper on “Indoor Navigation for Android Devices” in IJMTER.
- Mr. Naresh kumar Mustry published paper on “Re-innovation and Comparison of Mobility Management Approaches for Mobile IP Networks” in IJICSE.
- Mr. Naresh kumar Mustry published paper on “A Performance Evaluation of VANET for ITS” in WJST.
- Mr. Naresh kumar Mustry published paper on “Beacon-based clustering algorithm for prolonging the cluster lifetime in VANET’s” in WJST.
- Mr. Naresh kumar Mustry published paper on “Implementation of a novel optimized trust based search approach for the peer to peer (P2P) platform” in WJST.
- Mrs. Mily Lal published paper on “Aspect Extraction & Segmentation In Opinion Mining” in IJECS.
- Mrs. Nalini Yadav published paper on “Usage of classification based association for removal of noisy attributes” in IJCA – 2015.
- Mrs. Nalini Yadav published paper on “Assessment of Similarity Measurement Criteria in Thepade’s Sorted Ternary Block Truncation Coding (TSTBTC) for Content Based Video Retrieval” in IEEE-ICCICT -2015.
- Mrs. Nalini Yadav published paper on “Novel Efficient Content Based Video Retrieval Method using Cosine-Haar Hybrid Wavelet Transform with Energy Compaction” in IEEE-ICCUBAE-2015.

- Mrs. Nalini Yadav published paper on “Partial Energy of Hybrid Wavelet Transformed Videos for Content Based Video Retrieval with various Similarity measures using Cosine, Haar and Walsh Transforms” in IEEE-GCCT-2015.
- Mrs. Nalini Yadav published paper on “Comprehensive Performance Comparison of Fourier, Walsh, Haar, Sine and Cosine Transforms for Video Retrieval with Partial Coefficients of Transformed Video” in IJCA-2015.
- Mrs. Nalini Yadav published paper on “Self Mutation of Hybrid Wavelet Transform with Cosine-Kekre, Cosine-Haar, Cosine-Walsh, Walsh-Cosine, Haar-Cosine and Kekre-Cosine for Content Based Video Retrieval” in IJICAR-2015.
- Mrs. Nalini Yadav published paper on “Novel Approach of classification based Indian Sign Language Recognition using Transform Features” in IEEE-International Conference on Information Processing – 2015.
- Mrs. Nalini Yadav published paper on “Content Based Video Retrieval using Hybrid Wavelet Transform with Energy Compaction” in CPGCon– 2015.
- Mrs. Nalini Yadav published paper on “Novel Approach of classification based cartoon recognition using Thepade's Sorted Ternary Block Truncation Coding and assorted Color Spaces” in IJCA– 2015.
- Ms. Amruta Chore published paper on “Low power fractional -N PLL frequency Synthesizer using 45nm VLSI technology” in IJAREEIE.
- Ms. Amruta Chore published paper on “VLSI Implementation of Fractional -N Phase locked loop frequency synthesizer” in IJERA.
- Ms. Amruta Chore published paper on “VLSI based low power fractional -N Phase locked loop frequency synthesizer for Bluetooth” in IJPRET.

#### **Invited Talks/Judge/Resource:**

- Prof. P. P. Shevatekar was invited to chair a national conference NCRTIT – 2015 on Inter disciplinary research on recent trends in information technology and computer engineering.
- Prof. P. P. Shevatekar was invited as a Resource person for Teachers training program for Mathematics teachers in Mhalasakant College , Akurdi.
- Prof. P. P. Shevatekar worked as member of Curriculum Development Program of Bharati Vidyapeeth.
- Prof. P. P. Shevatekar worked as Subject Chairman at SPPU.
- Mrs. Suvarna Patil was invited to chair a national conference NCRTIT – 2015 on Inter disciplinary research on recent trends in information technology and computer engineering.

#### **Faculties Remarkable Achievements:**

- Mrs. Nalini Yadav is awarded with Best paper presentation award in IEEE conference ICCUBAE -2015 on 24 Feb 2015 at Pune.

#### **T & P Activities:**

**Following add-on courses were conducted to improve the employability of the students.**

Add-On course	Company name
Core java	Seed Infotech
Advance java	Seed Infotech
Project seminar	Unfurl Minds
Project seminar	Calsoft

## Placement details:

**Total students placed: 17/31**

**Total percentage of placed students: 53%**

Name of company visited	No. of placed students
T.C.S	9
Persistent systems	2
I-research services	3
Tech Mahindra	1
Varahii InfoTech	2

## Student Development and Activities

### Students Association (COMPSA)

The mission of COMPSA is to provide an accredited dynamic scholarly environment, where in students learn independently and in collaboration with others to develop professional, communications and leadership abilities to prepare them for a career as a professional computer engineer.

### Student Chapter

On 13<sup>th</sup> January, Tuesday 2015 “CSI Students chapter” was inaugurated in Computer Engineering Department. We had Mr. V. P. Kulkarni as guest of honor and Mr. Mayur Tendulkar, Mr. Anand T as guest and Dr. Mrs. A. V. Patil Principal of DYPIEMR, Prof. P. P. Shevatekar HOD Computer Engineering as the host of Inaugural Ceremony.



### Achievements

- Mr. Saad Memon, student of 3<sup>rd</sup> year, won the Second Prize at All India Level at Chennai.
- Mr. Saad Memon, student of 3<sup>rd</sup> year, won the First Prize in Maharashtra & Goa region conducted by CSI Students chapter
- Mr. Saad Memon, student of 3<sup>rd</sup> year, won the First Prize in Bharti Vidyapeeth, Pune., Alard College of Engineering, DYPIEMR Akurdi
- Mr. Saad Memon, student of 3<sup>rd</sup> year, won the First Prize in National Technical Event in Nashik held by Sandip Foundation.
- Ms. Sushma Khadase, student of 3<sup>rd</sup> year won the First Prize in Vihaan 2K15 in DYPIEMR, Akurdi.
- Mr. Ajay Khandekar, student of 2<sup>nd</sup> year won the First Prize for event code genesis in Vihaan 2K15 at Paramyuva 2K15 in DYPIEMR, Akurdi.
- Mr. Dhananjay More, student of 2<sup>nd</sup> year won the First Prize for event code genesis in Vihaan 2K15 at Paramyuva 2K15 in DYPIEMR, Akurdi.
- Mr. Akash Yanpure, Student of 2<sup>nd</sup> year won the First Prize for event Picasso at DY Patil, Pimpri.

- Mr. Yash Shukla, Student of 2<sup>nd</sup> year won the First prize for event Paper Presentation at DY Patil, Pimpri.



### Students Patents

Mr. Saad Memon has filed a patent titled “Rather an Intelligent System in Hydra / Integrated system”, on 14/09/2015.

### Industrial Visits

- Industrial Visit to Eaglet Gateways, Deccan for 3<sup>rd</sup> and 4<sup>th</sup> year students was arranged on 17<sup>th</sup> August 2014.
- Industrial Visit to C-DAC, Shivajinagar for 2<sup>nd</sup> year students was arranged on 17<sup>th</sup> August 2015.
- Industrial Visit to Seamless Education Academy School of Media Baner, Pune for 3<sup>rd</sup> year students
- Visit to Tech Fest – IIT Bombay for 2<sup>nd</sup> year students
- Industrial Visit to Persistent Systems, Pune for 3<sup>rd</sup> year students



(Industrial Visit to Eaglet Gateways, Deccan)



(Industrial Visit to Eaglet Gateways, Deccan)



(Industrial visit to C-DAC, Shivaji Nagar)



(Industrial visit to C-DAC, Shivaji Nagar)



(Industrial visit to C-DAC, Shivaji Nagar)



(Industrial visit to IIT Mumbai)

PAD. DR. D. Y. PATIL  
INSTITUTE OF  
ENGINEERING,  
MANAGEMENT  
AND RESEARCH

About Department

Prof. B. Laxmiprabha, Head of the Department

The Electronics & Telecommunication Department is established in the Year 2013 to meet the needs of increasing demands of E&TC Engineers in Industry, Telecom Sector, and Embedded Technologies & VLSI.

The department is having highly qualified, experienced & dedicated staff along with State of Art Infrastructure & well equipped Labs. The teaching learning process is made Student centric using the latest technologies. The academics go hand in hand with Guest Lectures by Eminent Personalities from the Industry, Alumni students, & Subject Experts from Pune University. The theory is well explained with the help of practical & Industrial Visits to various Industries. Department runs student centric schemes like Teacher Guardian, University of Pune initiated Earn & Learn scheme. To increase the social awareness of the students, the department has initiated Retract club activities. The department also took initiative for Chess club at Campus level.

**Vision**

To facilitate the Techno Social development of electronics and telecommunication engineering students by nurturing the innovation and creativity of the students to lead the industry.

**Mission**

- To produce social, competent, professional E&TC engineers by imparting the quality education with the inner strength of ethical values
- To cultivate the spirit of the innovation and creativity of the students.

**Pos**

- An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to Electronics and Telecommunication.
- An ability to define the problems and provide solutions by designing and conducting experiments, interpreting and analyzing data.
- An ability to design, implement and evaluate a system, process, component and program to meet desired needs within realistic constraints.
- An ability to investigate, formulate, analyze and provide an appropriate solution to the engineering problems.
- An ability to use modern engineering tools and technologies necessary for engineering practices.
- An ability to analyze the local and global impact of computing on individuals, organizations, and society.
- An ability to understand the environmental issues and provide the sustainable system.
- An ability to understand professional and ethical responsibility.
- An ability to function effectively as an individual or as a team member to accomplish the goal.
- An ability to communicate effectively at different levels.
- An ability to keep abreast with contemporary technologies through lifelong learning.
- An ability to apply knowledge of principles of resource management and economics to provide better services in the field of Electronics and Telecommunication.

**PEOs**

- To provide Conductive educational environment for student of E&TC by setting state of art infrastructure.
- To impart quality education through a team of qualified & dedicated faculty members.

- To motivate the students to apply their technical knowledge & skills to solve the real life problems with ethics.

### Academic Excellence

Results of TE (E&TC) of Semester-II is excellent with 100%

Results of SE (E&TC) of Semester-II is excellent with 92%

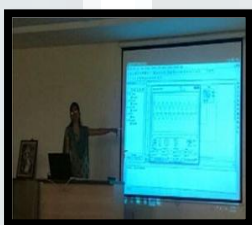
### Toppers:

Ms. Runi Gawade (TE) scored 73%

Mr. Govind Kumar (SE) scored 69.87%

### FDP/Workshop Organised

- The workshop on “Multisim” was organized by E & TC on 29<sup>th</sup> July 2013 in software lab. Prof. Mr. M.H. Thigale successfully coordinated the event. The event was organized with an objective of electronic design & simulation. The outcome of the event was multisim electronic design.



- The workshop on coordinated the event. The event was organized with an objective to get knowledge of digital Electronics. The outcome of the event was software knowledge. Xilinx was organized by E & TC on 10<sup>th</sup> July, 2013 in software lab. Prof. Mrs. Lakshmipraba B. successfully.



- The workshop on “Embedded System” was organized by E & TC on 12<sup>th</sup> July, 2014 in the Seminar Hall. Prof. Prashant Chaudary & Parthasarathi Chhotaray successfully coordinated the event. The event was organized with an objective to get knowledge of embedded system. The outcome of the event was embedded knowledge.



- The workshop on multisim was organized by E & TC on 12<sup>th</sup> July, 2014 in software lab. Prof. Ms. Snehlata Bhokare successfully coordinated the event. The event was organized with an objective of electronic design & simulation. The outcome of the event was multisim electronic design.

- The workshop on Multisim was organized by E & TC on 22<sup>nd</sup> August, 2015 in EDC Lab. Mr. Ashish Mishra Miss. Apurwa Jannawar & Mr. Atharva Saswade successfully coordinated the event. The event was organized with an objective to get knowledge of Multisim design. The outcome of the event was designing of electronic circuits.



- The workshop on PIC Microcontroller was organized by E & TC on 10<sup>th</sup> September, 2015. Mr. Niraj Kumar successfully coordinated the event. The event was organized with an objective to get knowledge of embedded system. The outcome of the event was practical knowledge of embedded system.
- The workshop on PLC automation was organized by E & TC on 14/9/15. Mr. Himanshu Kumar successfully coordinated the event. The event was organized with an objective to get knowledge of PLC programming. The outcome of the event was practical knowledge of PLC automation.



- The seminar on Labview was organized by E&TC Department on 12<sup>th</sup> September 2015.
- The Guest lecture on Mobile App's was organized by E&TC Department on 13<sup>th</sup> July 2013.
- The Guest lecture on Entrepreneurship was organized by E&TC Department on 17<sup>th</sup> January 2014.
- The Guest lecture on Robotics was organized by E&TC Department on 25<sup>th</sup> August 2013.
- The Guest lecture on "Let's talk Innovation" was organized by E&TC Department on 6<sup>th</sup> August 2015.

### **FDP/Workshop Attended**

- Prof. B. Lakshmipraba attended 6 days FDP on "Digital Electronics (SE 2012 revised syllabus)" from 17<sup>th</sup> to 22<sup>nd</sup> June 2013 at SCOE, Pune.
- Prof. B. Lakshmipraba attended 1 day FDP on "Digital Electronics and Logic Design" (SE 2012 revised syllabus) on 27<sup>th</sup> July 2013 at VIIT, Pune.
- Prof. B. Lakshmipraba attended 2 days FDP on "Mathematical Modeling for Programmers and Advanced Microprocessor Techniques" (SE 2012 revised syllabus) from 3<sup>rd</sup> to 4<sup>th</sup> January 2014 at PK Technical Campus, Pune.
- Prof. B. Lakshmipraba attended 3 days FDP on "Microcontroller and Applications" (TE 2013 revised syllabus) from 12<sup>th</sup> to 14<sup>th</sup> June 2014 at MIT, Pune.
- Prof. B. Lakshmipraba attended 3 days FDP on "Embedded Processors" (TE 2013 revised syllabus) from 11<sup>th</sup> to 13<sup>th</sup> December 2014 at NBN Sinhgad School of Engineering, Pune.
- Ms. Shraddha S. Suratkar attended Two Week workshop on "Design of Algorithms" on 25<sup>th</sup> -30<sup>th</sup> May 2015 at PVG, COET's PUNE.
- Ms. Shraddha S. Suratkar attended one day state level workshop on "Network, Design and Modeling & Algorithms" on 28<sup>th</sup> November 2013 at MMCOE, Pune.
- Ms. Shraddha S. Suratkar attended two days National level workshop on "LATEX" on 13<sup>th</sup> – 14<sup>th</sup> August 2014 at A.G. Awate College of Engineering, Hadapsar, Pune.
- Mrs. Shweta B. Suryawanshi attended 6 days FDP on "Signals and System" (SE revised syllabus) on 17<sup>th</sup> to 22<sup>th</sup> June 2012 at PICT, Pune.

- Mrs. Shweta B. Suryawanshi attended 2 days National level workshop on “Research Methodology” on 29<sup>th</sup> to 30<sup>th</sup> April 2-014 at MMIT, Pune
- Mrs. Shweta B. Suryawanshi attended 3 days FDP on Employability Skills in “Electronic Design”(TE revised syllabus) on 12<sup>th</sup> to 14<sup>th</sup> June 2-014 at VIIT, Pune.
- Mrs. Snehlata V. Bhokare attended 6 days FDP on “Electronic Devices and Circuits” (SE revised syllabus) on 17<sup>th</sup> to 22<sup>th</sup> June 2-012 at SIT&S, Pune.
- Mrs. Snehlata V. Bhokare attended 2 days National level workshop on “Research Methodology” on 29<sup>th</sup> to 30<sup>th</sup> April 2-014 at MMIT, Pune
- Mrs. Snehlata V. Bhokare attended 3 days State level workshop on “Machine Learning and Computer Vision” on 30<sup>th</sup> to 31<sup>th</sup> Jan 2-014 at PES’s Modern COE, Pune.
- Mrs. Snehlata V. Bhokare attended 3 days FDP on “Digital Signal Processing” (TE revised syllabus) on 12<sup>th</sup> to 14<sup>th</sup> June 2-014 at JSPM’s BSIOTR Wagholi, Pune.
- Prof. Snehlata V. Bhokare attended 3 days FDP on “Information Theory and Coding Techniques” (TE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> Dec 2-014 at Cummins COE, Pune.
- Mrs. Snehlata V. Bhokare attended 3 days FDP on “Digital Image Processing” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> June 2015 at AISSM’s COE Pune.
- Mrs. Dnyanda N. Hire attended 2 days National level workshop on “Research Methodology” on 9<sup>th</sup> to 10<sup>th</sup> March 2012 at AVCOE, Sangamner.
- Mrs. Dnyanda N. Hire attended 3 days FDP on “Digital Communication” (TE revised syllabus) on 12<sup>th</sup> to 14<sup>th</sup> June 2014 at MES College of Engg., Pune.
- Mrs. Dnyanda N. Hire attended 3 days FDP on “Power Electronics” (TE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> Dec 2014 at RSCOE, Tathawade, Pune.
- Mrs. Dnyanda N. Hire attended 2 days FDP on “Digital Signal Processing Applications” (TE revised syllabus) on 24<sup>th</sup> to 25<sup>th</sup> Dec 2014 at KKWIER, Nashik.
- Mrs. Dnyanda N. Hire attended 3 days FDP on “Computer Network” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> Jun 2015 at AISSMS’s IOIT, Pune.
- Prof. M. H. Thigale attended 3 days FDP on “Electronic Product Design” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> Jun 2015 at PCCOE, Pune.
- Mrs. Prajakta D. Jadhav attended 3 days FDP on “Electromagnetics & Transmission Lines” (TE revised syllabus) from 12<sup>th</sup> to 14<sup>th</sup> June 2014 at K.J. College of Engineering, Management & Research, Pune
- Mrs. Prajakta D. Jadhav attended 1 day FDP on “Mini Project & Seminar” (TE revised syllabus) from 17<sup>th</sup> Janaury, 2015 at VIIT, Pune-48
- Mrs. Prajakta D. Jadhav attended 5 days STTP on “Numerical methods for engineers with Matlab” on 17<sup>th</sup> & 21<sup>th</sup> December, 2012 at A.D.C.E.T, Ashta.
- Mr. Lokesh M. Giripunje attended 1 day workshop on “Hands on Digital System Design Using VHDL” on 19<sup>th</sup> December 2012 at SDMP, Nagpur.
- Mr. Lokesh M. Giripunje attended 1 day workshop on “Subject Advancement & Learning Accomplishment” on 02<sup>nd</sup> February 2014 by RAHE(RGI) at GHRAET, Nagpur.
- Mr. Lokesh M. Giripunje attended 1 week STTP on “Challenges in ASIC Design” at VIIT, Pune by E & TC dept. Pune University, from 15<sup>th</sup> June, 2015 to 19<sup>th</sup> June, 2015
- Mrs. Neha P. Patil attended 3 days FDP on “Microwave Engg.” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> June 2015 at JSPM’s RSCOE, Pune.
- Mrs. Aparna Deshmukh attended 3 days FDP on “Microwave Engg.” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> June 2-015 at JSPM’s RSCOE, Pune.
- Mr. Anilkumar Patil attended 3 days FDP on “VLSI Design & Technology” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup> June 2015 at SIT Vadagaon, Pune.
- Mr. Anilkumar Patil attended 3 days FDP on “Antenna and wave propagation” (BE revised syllabus) on 11<sup>th</sup> to 13<sup>th</sup>

December 2014 at BVCOE, Pune.

- Mr. Anilkumar Patil attended 2 days Workshop on “Knowledge++” on 20<sup>th</sup> to 21<sup>th</sup> December 2014 at L&T Mumbai.

## MOUs

Department of Electronics & Telecommunication has signed MOU with BSNL for Extension of AICTE – BSNL Employability enhancement training program (EETP) for the session 2014-2015 on 8<sup>th</sup> April 2013.

## Faculty Publications

- Mrs. B. Lakshmipraba published paper on “Drive By Wireless System for Vehicle Control using Wireless Sensor – Actuator Network” in International Journal of Inventions in Computer Science and Engineering, ISSN (online): 2348 – 3539 Volume No.02 Issue No. 02.
- Ms. Shraddha S. Suratkar published paper on “Mining Text Data With Suitable Data Mining Tool Using Efficient Classification Techniques ” in International Journal of Research In Science & Engineering (IJRISE), e-ISSN: 2394-8299, p-ISSN: 2394-8280, Volume: 1 Issue: 6, pp: 19-23, Nov. 2015
- Ms. Shraddha S. Suratkar published paper on “On The Role of Log Based Metadata in Forensic Analysis of Database Attacks” published in International Journal of Engineering Research and Applications (IJERA), ISSN (online): 2248-9622 Volume No.09, pp: 35-41, on 12<sup>th</sup> April 2014.
- Ms. Shraddha S. Suratkar published paper on “On the Role of Log Centralized Database in the Design of an Open Source Database Forensics Tool” in Elsevier Journal, 28<sup>th</sup> & 29<sup>th</sup> March 2014.
- Ms. Shraddha S. Suratkar published paper on “Role of Metadata in Forensic Analysis of Database Attacks” published in IEEE Xplore Digital Library, IEEE Catalog Number: CFP1439F-POD, ISBN: 978-1-4799-2573-5 ,pp: 457 – 462, 21<sup>st</sup> & 22<sup>nd</sup> Feb 2014.
- Ms. Shraddha S. Suratkar published paper on “A Survey On Database Forensics Tools, Challenges And Metadata” published in International Journal of Innovative Research & Studies, ISSN: 2319-9725, Volume: 2, Issue -12, pp: 434 – 445, December 2013.
- Mrs. S. B. Suryawanshi published paper on “Neural Network For Cryptography” published in International Journal of Advanced Technology in Engineering and Science, ISSN (online): 2348 - 7550 Volume No.03, Issue No. 04., pp: 128-135, April 2015.
- Ms. Snehlata V. Bhokare published paper on “Neural Network For Cryptography” published in International Journal of Advanced Technology in Engineering and Science, , ISSN (online): 2348 - 7550 Volume No.03, Issue No. 04., pp: 128-135, April 2015.
- Mrs. Dnyanda N. Hire published paper on “Content Based Image Retrieval Using Color And Texture” published in International Journal of Electronics, Communication & Instrumentation Engineering Research & Development, , ISSN (online): 2249-7951 Volume No.05, Issue No. 03., pp: 81-88, June 2015.
- Mrs. Dnyanda N. Hire published paper on “Color And Texture Based Image Retrieval Using Discrete Curvelet Transform’ in International Journal of Electronics, Communication & Instrumentation Engineering Research & Development, ISSN (online): 2249 – 684X Volume No.3 Issue No. 01. pp: 211-218, March 2013.
- Mrs. Dnyanda N. Hire published paper on “Color And Shape Based Image Retrieval” in International Journal of Computer Science Engineering & Information Technology Research, , ISSN (online): 2249 – 6831 Volume No.2 Issue No. 04., pp: 39-44, Dec 2012.
- Mrs. Dnyanda N. Hire published paper on “Secured Wireless Data Communication” in International Journal of Computer Applications, ISSN (online): 0975 – 8887 Volume No.54 Issue No. 01., pp: 27-30, Sep 2012.
- Mrs. Dnyanda N. Hire attended conference on “ePGCON 2013” in MITAOE, Pune, 23<sup>rd</sup> & 24<sup>th</sup> April 2013.
- Mrs. Prajakta D. Jadhav published paper in “Content Based Image Retrieval Using Color And Texture” in International Journal of Electronics, Communication & Instrumentation Engineering Research & Development, ,

ISSN (online): 2249-7951 Volume No.05, Issue No. 03., pp: 81-88, June 2015.

- Mrs. Prajakta D. Jadhav published paper on “An Effective Skin Color Detection Technique using Color spaces in Color Images” in International Conference on Electronics and Communication Engineering (ECE 2012) ISBN-978-93-81693-73-5, July 15th, 2012. Pune, INDIA, June 2012.
- Ms. Prajakta D. Jadhav published paper on “Robust Skin Color Detection and Tracking Algorithm”, in International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181, October 2012 issue, October 2012.
- Mr. Lokesh M. Giripunje published paper on “Survey on Security Systems for Mobile Network”, International Journal of Science & Research, India Online ISSN: 2319-7064 Volume 2, Issue 1, January 2013.
- Mr. Lokesh M. Giripunje published paper on “Securing Mobile Communications Using Elliptic Curve Cryptography over GF (p)”, International Journal of Advance Computational Engineering and Networking (IJACEN), India (Print) ISSN: 2320-2106 Volume 1, Issue 1, April 2013.
- Mr. Lokesh M. Giripunje published paper on “Comprehensive Security System for Mobile Network Using Elliptic Curve Cryptography over GF (p)”, International Journal Of Advance Research In Computer Science And Software Engineering, (IJARCSSE) India (Print) ISSN: 2277-128x Volume 3, Issue 5, May 2013.
- Mr. Lokesh M. Giripunje published paper on “Secure System of Short Message Service (SMS) For GSM Networks”, International Journal of Soft Computing and Artificial Intelligence, ISSN: 2321-404X, Volume-1, Issue-2, November 2013.
- Mr. Anilkumar Patil published paper on “A Survey and Review on Gain Enhancement Methods of Microstrip Patch Antenna”, in International Journal on Emerging Technologies (Special Issue on NCRIET-2015) 6(2): 98-104(2015), ISSN No. (Print): 0975-8364 ISSN No. (Online): 2249-3255, 7<sup>th</sup> & 8<sup>th</sup> Nov 2015.
- Mr. Anilkumar Patil published paper on “Efficient Vertical Hand Over Decision in 4G Networks for Multiple Attributes”, PID-1581, National Conference on “Emerging Trends in Advanced Communication Technologies”- NCETACT-15, DYPCOE, Pune, 9<sup>th</sup> & 10<sup>th</sup> Jan 2015.
- Mr. Anilkumar Patil published paper on “Comparative Analyses of Enhancing Bandwidth of Microstrip Patch Antennas: A Survey and an Idea”, IJRET: International Journal of Research in Engineering and Technology EISSN: 2319-1163 | PISSN: 2321-7308, May 2014.
- Mr. Anilkumar Patil published paper on “FPGA Implementation of Digital Modulators for SDR”, National Conference on Recent trends in Science and technology NCST-14 held in BKIT Bhalki, May 2014.
- Mr. Anilkumar Patil published paper on “Design & Implementation of Low Power DFS using FPGA”, National Conference on Recent trends in Electronics and Communication NCRTEC-13 held in KSIT Bangalore, June 2013.
- Mr. Anilkumar Patil published paper on “VLSI Design & Implementation of Communication System to Avoid Data Hacking using DS-CDMA Technology.”, National Conference on “VLSI & Communication”-VCS-2012, BIT, Bangalore, 30<sup>th</sup> Oct 2012.
- Mrs. Aparna Deshmukh published paper on “Gain Enhancement of Microstrip Patch Antenna with Metamaterial Cover” 5<sup>th</sup> International Symposium on ‘Microwave’ held in Bangalore, 5<sup>th</sup> December 2012.

### Faculty Remarkable Achievements

- Mrs. B. Lakshmipraba delivered expert talk on “Digital Electronics” at Rajashri Shahu College of Engineering, Polytechnic on 29<sup>th</sup> July 2015.
- Mr. Lokesh M. Giripunje delivered expert talk on “Digital Communication” in KDKCE, Nagpur on 24<sup>th</sup> September 2014.
- Mr. Anilkumar Patil Successfully Registered for PhD under the Guidance of Dr. B. Suryakanth, Professor at BKIT Bhalki in VTU Belgaum, Karnataka in 2014.

### Student Development and Activities

**Training and Placement:**

**Total students placed: 10**

**Total percentage of placed students: 40%**

Name of company visited	No. of placed students
Tech Mahindra	4
Tata Elxsi	2
Zycus	1
IRearch Services	2
VarahiInfotech	1

### **Interaction with Outside World**

- Mr. Lokesh M. Giripunje worked as Reviewer for International Journal of Research in Science & Engineering (IJRISE).

### **Student Chapter**

We have successfully established The Institution of Engineers (India) Students' Chapter of Professional Bodies in Electronics & Telecommunication Department in 2014-15.

### **Technical Events**

- The "TECHNIFIERS 2K15" was organized on 9th, 10th and 18th Feb, 2015.

### **Industrial visits**

- Industrial Visit to Seamedu School of Pro-Expressionism, 15/ 1A, Baner Road, Balewadi, Pune for S.E. students was arranged on 2<sup>nd</sup> September, 2015 for raising the interest of students in research in the field of audio-video engineering & fulfils the gap between industry & academics.



- Industrial Visit to Centre For Electronics Test Engineering (Cete), Pune for T.E. students was arranged on 28<sup>th</sup> July, 2014. The objective of this Industrial Visit was to clear the ideas of the theoretical concepts practically used in industries.



- Industrial Visit to GMRT Khodad, located near Pune in India for S.E. students was arranged on 27<sup>th</sup> December, 2013 for raising the interest of students in research in the field of audio-video engineering & fulfils the gap between industry & academics.



- Industrial Visit to Mitsubishi Electric India Pvt., located near Pune in India for S.E. students was arranged on 2<sup>nd</sup> September, 2013 for raising the interest of students in research in the field of audio-video engineering & fulfils the gap between industry & academics.

# DYIP

PAD. DR. D. Y. PATIL  
INSTITUTE OF  
ENGINEERING,  
MANAGEMENT  
AND RESEARCH

### About Department

The Department of Chemical Engineering at Padmashree Dr. D Y Patil Institute of Engineering, Management and Research was started in the year 2013 with an intake of 60 students. The Chemical Engineering Department is proud to have a team of energetic and hardworking faculties with expertise in the area of Unit Operations & Unit Processes, Reaction Engineering, Process Dynamics & Control, Process Design, and Modelling & Simulation. The department strives to give an environment where students can develop critical thinking and problem-solving skills as they advance through the programme. In addition to classroom teaching, the students are guided and motivated to practically implement the principles learnt in classrooms through experiments in the laboratories which help students to gain confidence and become skilled engineering professionals.

### Vision

Develop a nationally recognized chemical engineering graduate program coupled with research strengths in process safety, process systems engineering, applied thermodynamics, polymers, mineral processing, and biochemical engineering.

### Mission

We provide a high-quality education experience that will prepare graduates to assume leadership positions within chemical and other associated industries. We foster and encourage the pursuit of new knowledge and innovative scholarship in chemical sciences and engineering. We teach in modern classrooms and carry out research in state-of-the-art laboratory facilities. We provide leadership to the chemical engineering profession through scholarship, teaching, and service.

### PEOs

- **Breadth:** To enable student to get / create employment in Petroleum, Petrochemical, Polymer, Pharmaceutical and Chemical related industries with appropriate title and compensation.
- **Depth:** To enable student to analyze and solve Chemical Engineering problems by applying the basic principles of engineering, mathematics & sciences and also able to use modern engineering techniques, tools and skills to fulfil societal needs.
- **Core Competence:** To provide students experience in, planning and conducting experiments in the modern engineering laboratory and innovate, design and develop Chemical Engineering processes.
- **Professionalism:** To nurture students to be sensitive, to be ethical and concerned about socio-economical, safety, health and environmental issues while performing their professional work using emerging technologies.
- **Learning Environment:** To impart strong fundamental and technical knowledge among students to pursue graduation and augment (improve) communication skills to continue professional development in Chemical as well as multidisciplinary fields and demonstrate a commitment to life-long learning.

### POs

- Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

- Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

### Best Practices of Department

- Teacher-Guardian System

For every 20 students one faculty has been allocated to take the responsibility of personal and academic aspects. Department dispatches the letters to the parents regarding their attendance and unit test performance of their wards every month. Faculties personally contact parents for the same. TG meetings are conducted every month in which the discussion on attendance, unit test performance, etc.

- Internal & External feedback

The department is very particular in executing the academic performance. Regular internal & external feedback of the students for all subjects is taken which helps in understanding the difficulty of the students. Remedial lectures and question paper solution will be given from the faculty for the same.

- Laboratory Visit for Theoretical Subjects to Renowned Institutions

The department takes keen interest to visit the laboratories in the campus and outside like NCL for the theoretical subjects like Process Instrumentation and Control and Environmental Engineering, etc. where students learn and have hands on feel experience on HPLC, GC, LVDT etc.

- Technical Brush Up Session

The department conducts technical brush up session in the subjects like Fluid Mechanics, Heat Transfer, Mass Transfer, Chemical Reaction Engineering, Thermodynamics, Design, Process Control and Dynamics, Simulation where the thorough knowledge of these subjects are required for each leading Chemical Process Industries. It also followed by tests which boost the confidence level in the students.

### Academic Excellence

## Highlights of Academic Excellence in SPPU Examination Results for Semester-I & II 2014-2015

### Toppers:

Mr. Mahto Lokeshwar (TE) scored 74.2%

Mr. Vallabh Prabhudesai (SE) scored 75.26%

## Research and Development

### FDP/Workshop

- Mr. D. P. Deshpande attended one day workshop on NPTEL on 8<sup>th</sup> Oct 2015 at MITAOE, Alandi, Pune.
- Mr. V. S. Hakke, Mr. D. P. Deshpande, Mrs. S. T. Powar & Mrs. P. Binnal attended two days FDP on Chemical Reactor Design on 3<sup>rd</sup> & 4<sup>th</sup> December 2015 at Department of Chemical Engineering, MITAOE, Alandi, Pune
- Ms. V. K. Landge & Mr. D. P. Deshpande attended one day STTP on Unit Process with Plant Visit on 05<sup>th</sup> October 2015 at Rashtriya Chemical Fertilizers, Chembur.
- Mrs. P. Binnal & Mr. D. P. Deshpande attended one day STTP on Unit Process with Plant Visit on 26<sup>th</sup> September 2015 at Rashtriya Chemical Fertilizers, Chembur.
- Mr. D. P. Deshpande attended one day workshop on Process Simulation using Aspen Plus on 19<sup>th</sup> Sept 2015 at PVPIET, Budhgaon.
- Ms. Vividha K. Landge attended Technical Education Quality Improvement Programme (TEQIP) – II Sponsored One Week STTP on Application of Bioprocess & Nanotechnology in Chemical Engineering on 18<sup>th</sup> – 22<sup>nd</sup> December 2014 at Department of Chemical Engineering, SSGGSIE&T, Vishnupuri, Nanded.
- Mr. Vikas S. Hakke attended Technical Education Quality Improvement Programme (TEQIP) – II Sponsored One Week STTP on Application of Bioprocess & Nanotechnology in Chemical Engineering on 18<sup>th</sup> – 22<sup>nd</sup> December 2014 at Department of Chemical Engineering, SSGGSIE&T, Vishnupuri, Nanded.
- Ms. Vividha K. Landge attended Savitribai Phule Pune University Sponsored 3 Days Intensive Course on Process Equipment Design on 27<sup>th</sup> – 29<sup>th</sup> November 2014 at Department of Chemical & Mechanical Engineering, MITAOE, Alandi, Pune.
- Mrs. Shilpa B. Thorve attended two days FDP on A Tool for Personal & Professional Competency on 19<sup>th</sup> & 20<sup>th</sup> June 2014 at DYPIEMR, Akurdi, Pune.
- Mr. Vikas S. Hakke attended two days FDP on A Tool for Personal & Professional Competency on 19<sup>th</sup> & 20<sup>th</sup> June 2014 at DYPIEMR, Akurdi, Pune.
- Mr. Dhundiraj P. Deshpande attended two days FDP on A Tool for Personal & Professional Competency on 19<sup>th</sup> & 20<sup>th</sup> June 2014 at DYPIEMR, Akurdi, Pune.

### Research Proposal

Mrs. Shilpa B. Thorve had applied research grant of Rs. 2, 50,000/- from SPPU-BCUD for Academic Year 2015 – 2017 for the work entitled 'Extraction of Fuel from Waste Plastic'.

### MOUs in Pipeline

MOU in process with Taloja Industrial Association.

### Faculty Publications

- Mr. Vikas Hakke and Mr. D. P. Deshpande published paper on 2 March 2015 title “Conversion of Vegetable Waste in To Ethanol” in International Journal of Latest Trends in Engineering and Technology (IJLTET), Vol. 5 Issue 2 March 2015, ISSN: 2278-621X.
- Mr. Vikas Hakke and Mr. D. P. Deshpande published paper on 27-29, March (2015) title “Conversion of used Palm oil using  $\text{CaCO}_3$  as a Catalyst” in Research Journal of Chemical Sciences, Vol. 5(3), 27-29, March (2015) ISSN: 2231-606X.
- Mr. D. P. Deshpande published paper on April 2015 title “Optimization of Reaction Parameters by Response Surface Methodology” in International Journal of Current Engineering and Technology, Vol.5, No.2 (April 2015) E-ISSN 2277 – 4106, P-ISSN 2347 – 5161.
- Mr. D. P. Deshpande and Mr. V. S. Hakke presented paper on 24<sup>th</sup> Jan 2015 title “Castor Oil, Promising Fuel for Future” in National Conference on Emerging Trends in Engineering Technology & Architecture at D. Y. Patil College of Engineering and Technology, Kolhapur.
- Mr. V. S. Hakke presented paper on 24<sup>th</sup> Jan 2015 title “Energy Extraction from Agricultural Waste by using Fluidized Bed Combustion Process” in National Conference on Emerging Trends in Engineering Technology & Architecture at D. Y. Patil College of Engineering and Technology, Kolhapur.
- Mrs. Shubhangi Powar published paper on “23<sup>rd</sup> January 2014” title “Investigation and modelling of surface tension of power-law fluids” in RSC Advances, 2014,4, 9771-9776, Issue 19, 2014, DOI: 10.1039/C3RA46555A.
- Mr. D. P. Deshpande published paper on “15 March 2013” title “Conversion of Waste Frying Oil into Valuable Product Using Oscillatory Baffled Reactors (OBRs)” in International Journal of Engineering Science and Innovative Technology (IJESIT), Volume 2, Issue 2, 15 March 2013, ISSN: 2319-596.
- Mr. D. P. Deshpande published paper on “Nov – Dec 2013” title “Assessment of Accidental Releases Heavy Gas Dispersion from Chemical Industries Varying Wind Parameter” in International Journal of Advance and Applied Research (IJAAR), Vol. 1 No.2, Nov – Dec 2013, ISSN – 2347-7075.
- Mr. D. P. Deshpande published paper on “July 2013” title “Hydrocarbon Liquid from Castor Oil” in Research Journal of Chemical Sciences, Vol. 3(7), July (2013), ISSN 2231-606X.

### Faculty Achievements

- Mr. Vikas S. Hakke worked as a Convenor for the Regional Research Conference organized by BCUD, Savitribai Phule Pune University in association with Pad. Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune on 6<sup>th</sup> – 7<sup>th</sup> July 2015 at Pad. Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune.
- Mrs. Kirti Bhushan Zare was awarded with a Gold Medal for Exceptional Merit in M. Tech (Chemical Engg.) in Seventeenth Convocation on 28/02/2013 at Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad.

### Student Development and Activities

#### Guest Lectures

- Guest Lecture on Hydrogen Energy by Dr. Y. S. Mahajan, Associate Professor, Dr. BATU, Lonere for B.E Chemical Engineering students was arranged on 23<sup>rd</sup> Aug 2015 for recent trends in energy generation.
- Guest Lecture on Genetic Algorithm-A Non-traditional Optimization Technique using MATLAB by Dr. V. S. Sathe, Associate Professor, Dr. BATU, Lonere for T.E Chemical Engineering students was arranged on 22<sup>nd</sup> Aug 2015 for introducing the students with Genetic Algorithm & its importance in optimization.
- Guest lecture on ERP & Business Management by Mr. Naresh Dev, Sr. Consultant, Infosys



Ltd. for S.E. and T. E. Chemical Engineering students was arranged on January 10, 2015 for creating the awareness about the application of SAP in various industries.

- Guest Lecture on GATE preparation by Prof. Shastri, Vani Institute of Technology for S.E. and T.E. Chemical Engg student was arranged on 9<sup>th</sup> Aug 2014 for encouraging students to opt for higher studies.
- Guest lecture on Corporate Ethics by Mrs. S. S. Jadhav, Corporate Trainer for SE & TE students was arranged on July 12, 2014 to create awareness about the environment of corporate world and the importance of ethics that to be followed in professional life as a professional.
- Guest Lecture on Scope of Chemical Engineering by Mr. Pravin Bagal, Manager, Reliance Pvt. Ltd., Mumbai for S.E. students was arranged on 06.03.2014. The main theme of the lecture was current scenario of job opportunities for chemical engineers.
- Guest Lecture on Soft Skills by Dr. Veena Doss, SCOE, Pune for S.E. Chemical Engineering students was arranged on July 13, 2013. The main theme of the lecture was personality development and enhancement of presentation skills. The valuable tips along with the practical examples were given to the students to improve their presentation skills.



### Technical Events

- Annual Technical Event SPHATIKA 2K-15 was organized by the department on 11-13 Feb 2015. During Annual Event-2k15 between February 11, 2015 & February 13, 2015 various technical events namely Poster & Paper Presentation, Industry Defined Problem & AVISHKAR were organized.
- Annual Technical Event 2K-14 was organized by the department on 10 -14 Feb 2014. Technical events which helps students to improve presentation skills and enhance technical knowledge namely Poster Presentation, Chemquiz, AVISHKAR were organised.



### Students Achievements

#### Co-curricular

- Mr. Vallabh Prabhudesai, Mr. Sharad Survase & Mr. Aditya Lomte presented paper titled "Low Cost Natural Draft Cooling Tower" in National level paper presentation competition at 10th AISSMS ENGINEERING TODAY 2015 organized by AISSMSCOE, Pune on 14<sup>th</sup> – 16<sup>th</sup> September 2015.
- Mr. Vallabh Prabhudesai, Mr. Sharad Survase & Mr. Aditya Lomte presented paper titled "Low Cost Natural Draft Cooling Tower" in National level paper presentation competition SCHEMCON-2015 organized by MIT Academy of Engineering, Alandi, Pune on 12<sup>th</sup> -13<sup>th</sup> September 2015.
- Mr. Sameer Pawar & Ms. Akshata Waghukar presented paper titled "Synthesis of PVDF Modified Membrane & to develop Chitosen from Trash Crab for Whey Separation" in National level paper presentation competition SCHEMCON-2015 organized by MIT Academy of Engineering, Alandi, Pune on 12<sup>th</sup> -13<sup>th</sup> September 2015.
- Mr. Rajat Bahade & Mr. Aditya Lomte presented paper titled "Conversion of Waste Plastic into Fuel" in National level paper presentation competition SCHEMCON-2015 organized by MIT Academy of Engineering, Alandi, Pune on 12<sup>th</sup> -13<sup>th</sup> September 2015.
- Mr. Aditya Lomte presented paper titled "Effect of Welding on Health & its Minization" in National level paper presentation competition SCHEMCON-2015 organized by MIT Academy of Engineering, Alandi, Pune on 12<sup>th</sup> -13<sup>th</sup> September 2015.
- Mr. Sharad Survase, Mr. Suryaji Bhosale, Mr. Pravin Dhutade, Mr. Aditya Lomte and Mr. Hitesh Choudhary secured FIRST PRIZE in MODEL MAKING Competition in PETROVISION 2015 organized by MAEER's Maharashtra Institute of Technology, Pune on March 23<sup>rd</sup> - 24<sup>th</sup> 2015.
- Mr. Rajat Bahade, Mr. Ravi Pokharkar & Mr. Aditya Lomte presented paper & poster titled "Conversion of Waste Plastic into Fuel" in International Conference CHEMCON-2014 organized by Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology, Punjab University, Chandigarh on 27<sup>th</sup> – 30<sup>th</sup> December 2014.

- Ms. Bagmita Gogoi, Ms. Snehal Patil & Ms. Pranali Kamble presented poster titled “Graphene based Super-Capacitors: A New Way of Technology” in International Conference CHEMCON-2014 organized by Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology, Punjab University, Chandigarh on 27<sup>th</sup> – 30<sup>th</sup> December 2014.
- Ms. Anamika Choudhary, Ms. Amruta Nair & Ms. Yamini Mahajan presented poster titled “Amino functionalised Silica Nanoparticles: In Vitro Evaluation for Targeted Delivery & Therapy of Pancreatic Cancer” in International Conference CHEMCON-2014 organized by Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology, Punjab University, Chandigarh on 27<sup>th</sup> – 30<sup>th</sup> December 2014.
- Ms. Anamika Choudhary, Ms. Amruta Nair & Ms. Yamini Mahajan presented paper titled “Radioactive Waste Management: Development of Pyro-processing & Vitrification” in International Conference CHEMCON-2014 organized by Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology, Punjab University, Chandigarh on 27<sup>th</sup> – 30<sup>th</sup> December 2014.
- Mr. Akshay Bankhale, Mr. Rajesh Naik, Mr. Sandeep Jagtap & Mr. Sunil Gole presented paper titled “Electricity Generation from Human Pee” in National level paper presentation competition organized by TKIET, Warnanagar on 21<sup>st</sup> Sept 2014 and secured 3<sup>rd</sup> Prize.
- Mr. Rajat Bahade, Mr. Aditya Lomate & Mr. Ravi Pokharkar presented poster titled “Extraction of fuel from plastic Waste” in National level poster presentation competition at 9th AISSMS ENGINEERING TODAY 2014 organized by AISSMSCOE, Pune on 15<sup>th</sup> – 17<sup>th</sup> September 2014 and won FIRST Prize.



#### Extra-curricular

- Akshay Bankhele, Kapil Sonawane, Rohit Meshram, Pranay Dhote, Prashant Bhamre, Rajesh Naik, Sunil Gole, Md. Mustafa Ansari, Tushar Jukontwar and Tushar Sirsath secured First position in SATEJ KARANDAK 2K15 organized at D. Y. Patil College of Engineering, Akurdi, Pune - 44.
- Darshan Pradhan, Akshay Bankhele, Rohit Meshram, Sagar Bhoyar, Rajesh Naik, Kapil Sonawane, Yogesh Ghunnar, Sunil Gole and Nitesh Salunke participated and were runner up in volleyball held during 15<sup>th</sup>, 16<sup>th</sup> & 17<sup>th</sup> January 2015 in VIHAAN 2K15 at DYPIEMR, Akurdi.
- Darshan Pradhan, Akshay Bankhele, Rohit Meshram, Sagar Bhoyar, Rajesh Naik, Kapil Sonawane, Yogesh Ghunnar, Sanjay Biswas and Ashutosh Jadhav participated in volleyball competition and stood First at VIHAAN 2K14 held at DYPIEMR, Akurdi, on 11<sup>th</sup>, 12<sup>th</sup> & 13<sup>th</sup> February, 2014.
- Akshay Bankhele, Rohit Meshram, Pranay Dhote, Tushar Jukontwar, Sandip Nagargoje, Ashutosh Jadhav, Zakirsayyed Junaid, Kapil Kamble, Lokeshwar Mahto, Sujit Jadhav participated in Cricket Tournament and stood First at INNOVISION 2K13 organized on 13<sup>th</sup> – 15<sup>th</sup> February 2013 at DYPIEMR, Akurdi.
- Akshay Bankhele, Rohit Meshram, Yogesh Gunnar, Sakib Bade, Sanjay Biswas and Rahul Kumar Yadav participated in Volleyball Competition and stood Second at INNOVISION 2K13 organized on 13<sup>th</sup> – 15<sup>th</sup> February 2013 at DYPIEMR, Akurdi.



#### Industry Institute Interaction

##### Industrial visits

- Industrial Visit to “Rashtriya Chemical Fertilizer” Chembur East, Mumbai for B. E. Chemical Engineering students was arranged on 26-Sept-2015 and for T. E. Chemical Engineering students was arranged on 05-October-2015 for studying different aspects of Chemical Engineering.

- Industrial Visit to “Pimpri-Chinchwad Municipal Corporation Water purification Plant, Pradhikaran, Nigdi, Pune” for B. E. Chemical Engineering students was arranged on 09/09/15 for clearing the ideas of how the theoretical concepts are used practically in industries for the treatment of water.
- Industrial Visit to RR Petroplast Pvt. Ltd., Moshi-Chikhali Road, Pune for S. E. Chemical Engineering students was arranged on 15<sup>th</sup> and 28<sup>th</sup> Sept 2015 and for T. E. Chemical Engineering students was arranged on 21<sup>st</sup> and 23<sup>rd</sup> Sept 2015 for introduction to plastic industry and recycling process of oil and plastic.
- Industrial Visit to Shree Sant Tukaram Cooperative Sugar Factory for S. E. Chemical Engineering students was arranged on 3<sup>rd</sup> March 2014 and on 16<sup>th</sup> March 2015 for enhancing their practical knowledge.

### Industrial Training

Following is the list of industries where the students of Second and Third Year Chemical Engineering had completed their industrial training for the academic year 2013-14 & 2014-15.

### Industrial Projects

- **Company Name: Privi Organics Ltd., Mahad**

Name of the Students: Mr. Pranay Dhote & Mr. Rohit Yenare

Project Title: Energy optimisation and balance of condenser and reboiler for distillation column.

Internal Guide: Ms S. G. Kumbhar (Asst. Prof.)

External Guide: Mr. Avinash Dhane, G.M., Privi Organics Ltd.

- **Company Name: Privi Organics Ltd., Mahad**

Name of the Students: Mr. Suraj Gaikwad & Mr. Ganesh Waykule

Project Title: Design of Distillation Column

Internal Guide: Ms. S. G. Kumbhar (Asst. Prof.)

External Guide: Mr. Avinash Dhane, G.M., Privi Organics Ltd.

- **Company Name: National Chemical Laboratory, Pune**

Name of the Students: Mr. Rajesh Naik & Mr. Darshan Pradhan

Project Title: Gas Hydrate Inhibitors: an application in flow assurance

Internal Guide: Mrs. Kirti. B. Zare

External Guide: Dr. Rajnish Kumar, Senior Scientist, CEPD Division, NCL, Pune

- **Company Name: Mass Ambitech LLP., New Sanghvi**

Name of the Students: Mr. Sajit. B. Mujawar & Mr. Jabbar Sheikh

Project Title: Design of Portable Straw Water Purifier

Internal Guide: Mrs. Kirti. B. Zare

External Guide: Mr. Sandeep Mukane, Production Engineer, Mass Ambitech LLP. New Sanghvi

- **Company Name: PCMC Water Purification Plant, Pune**

Name of the Students: Mr. Wadavkar Shubham & Mr. Bankhele Akshay

Project Title: Quantum of Coagulants dosed in water balanced by different analysis methods.

Internal Guide: Mrs. Kirti. B. Zare

External Guide: Mr. Praveen Ladkat, Executive Engineer, PCMC Water Purification Plant, Pune

- **Company Name: National Chemical Laboratory, Pune**

Name of the Students: Ms. Akshata Waghukar

Project Title: Kinetic Modeling of Hydroxyalkylation of p-cresol in Batch Reactor and Plug Flow Reactor.

Internal Guide: Mrs. Prema Binnal

External Guide: Dr. Chandrashekhar V. Rode, Scientist F, CEPD Division, NCL, Pune



Sr. No.	Industry name	Sr. No.	Industry name
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1.	Sudarshan Chemicals, Roha.	23	HPCL LTD MUMBAI
2.	Rashtriya Chemical Fertilizers, Chembur, Mumbai	24	Megafine Pharma (P) LTD Lakhmapur, Dindori, Nashik
3.	Universal Chemicals Industries Ltd., Ambarnath. Maharashtra	25	Kisan-Veer Sahakari Sakhar Karkhana, Loni
4.	Wytewater Technologies PVT. LTD, Pune	26	Narayana Agro Oils Pvt Ltd
5.	Purna Sahakari Sakhar Karkhana LTD, Parbhani	27	Saint Sheromani Sugar Factory
6.	Raymond Uco YFL, Yavatmal	28	Fortune pharma, Aurangabad
7.	Rama Krushi Rasayana, Loni, Pune	29	BPCL Mumbai
8.	UltraTech, Chnadrapur	30	Gharda Chemical Chiplun
9.	Lupin Pharma Pvt Ltd, Aurangabad	31	Ganraj Fertilizer Pvt. Ltd. Yavatmal
10.	Pune Tectrol Pvt Ltd	32	ONGC, Mumbai
11.	Indroma Synthetic, Nagpur	33	Vipra Pharma pvt. Ltd., Pune
12.	Cipla, Goa	34	Safetec, Chakan
13.	Thomas Baker (chemicals) Pvt. Ltd., Ambarnath	35	High tensile fastnuts pvt ltd., Talawade
14.	Water plant BMT, Kanheri	36	Signet Ceramics, Morbi
15.	Katraj Dairy, Pune	37	SI-group India Ltd., Khopoli
16.	Bhansali M.P	38	Garware wall roaps Ltd., Chinchwad
17.	DBS CHEMICALS, Sangvi	39	Madhukar Sahakari Sakhar Karkhana
18.	Sunrise Elastomers, Chakan	40	Sharad Sahakari Sakhar Karkhana, Narande
19.	Auchtel product pvt ltd Ratnagiri	41	Mahananda Dairy
20.	Sar Senapati Santaji Ghorpade Sugar factory Ltd., Balewadi	42	Chikhholi Chemicals PVT. Ambarnath, Mumbai
21.	Anjali T. Precision, Chikhali	43	Vaidyanath SSK, Pangri
22.	Arti Drugs Ltd Tarapur	44	Manikgarh Cement, Gadchandur
23.	Magenta Colour & Coating, Talegaon-dabhade		

Mr. B. S. Gujar, Dean Academics

### About Department

The Department of Dean Academics is the largest department in the institute. It achieves the highest standards of teaching. The **Academics'** First-Year Engineering Program is the entry point for all beginning engineering students. It is one of the basic and important departments to establish the important link between pure sciences and engineering branches.

All engineering students must complete the First-Year Engineering requirements before entering departments of their choice. This core curriculum includes courses in engineering mathematics, engineering chemistry, engineering physics, electrical engineering, electronics engineering, engineering drawing, engineering mechanics, workshop practices and computer programming. The First-Year Engineering Program provides students with a firm foundation and initial understanding of engineering and career options.

This department is furnished by well equipped laboratories with sophisticated instruments, computer center and workshop, which gear up to ensure strong fundamentals.

The main backbone of the department consists of a team of highly qualified and experienced faculty members. Our faculties are dedicated to assist the beginning engineers with the first-year experience. We always strive for excellence. Our policy is to polish our students with new trends, as it becomes easy for them to accommodate themselves anywhere across the industries, in today's globalized world.

There is a paradigm shift in the industrial environment world over, which is complex, competitive and volatile. The fast technological changes, greater international competition, the deregulation of markets, an unstable capital-investment in industries and the changing demographics of the work-force; are among the many factors that have contributed towards this shift.

To succeed in such a dynamic business environment, there is a need to provide contemporary technical education and training for all aspiring professionals. This is our motto at First Year Department of Padmashree Dr. D. Y. Patil Institute of Engineering Management & Research. We focus on updated course curriculum, innovative and effective teaching methodologies, faculty development programs, research oriented academic work, practical inputs to students and other value additions are the necessities, besides good infrastructure, to bring excellence.

I extend a hearty welcome to all those coming to our fold and assure an enriching learning experience with us.

### Vision

Students building their foundation to create the future.

### Mission

"To produce technically competent graduates who understands their responsibilities in society."

### Best Practices of Department:

- We have teacher Guardian System for First year engineering students.
- Our faculties listen to student's problems and difficulties academic as well as personal.
- Faculties monitor and keep records of student's attendance, academic progress and other activities accurately and efficiently.
- Faculties communicate parents about attendance and academic progress of students regularly through phone call/letter/sms/email.

- Faculties make students aware of the strengths and weaknesses of his/her studies and do the counselling and ensure
- Students care at all fronts for the benefit and overall development of students.

Results of FE of Semester - II is excellent with 78.93%.

### Academic Excellence

#### Highlights of Academic Excellence in SPPU Examination Results for Semester-II 2014-2015

##### Toppers:

Ms. Khade Diptee Ramesh scored 78.93 %

Mr. Subhash Kumar Ray scored 78.14%

### Research and Development

- Miss Patil V.B participated in HK Firodiya Science quiz 2015 on 16<sup>th</sup> September, 2015 to 30<sup>th</sup> September, 2015.
- Miss Patil V.B. participated in Faculty Development Programme in Leadership and Life Reinvention Strategies on 31st August, 2013 at Chinmaya Vibhooti Ashram, Kolvan.
- Mr. Sachin Jadhav participated in Two Days National seminar On 'Research Methodology' organized by D.Y. Patil Institute of MCA in association with IEEE Students Chapter and Savitribai Phule Pune University. February 2015.
- Mr. Sachin Jadhav participated UGC Sponsored International conference on "Marginalization in Indian English Literature", convened by Bharati Vidyapeeth University's Y. M. College, Pune. February 2015.
- Mr. Sachin Jadhav attended Soft Skills Workshop on "A Tool for Personal & Professional Competency" at D. Y. Patil College of Engineering, Akurdi, Pune. 1 June 2014.
- Mr. Sachin Jadhav participated in Faculty Development Programme on "Leadership and Life Reinvention Strategies" at Chinmaya Vibhooti Ashram, Kolvan, Pune. August 2013.
- Mr. Sachin Jadhav participated in UGC Sponsored First World Conference on "Science Fiction Studies in India" convened by Bharati Vidyapeeth University's Y.M. College, Pune. January 2014.
- Mr. Sachin Jadhav participated in UGC Sponsored National seminar on "Rethinking Feminism: A Literary Perspective" convened by Bharati Vidyapeeth University's Y. M. College, Pune on February, 2013.
- Dr. Shilpi Sahana participated in Faculty Development Programme in "Leadership and Life Reinvention Strategies" on 31st August, 2013 at Chinmaya Vibhooti Ashram, Kolvan.
- Dr. Shilpi Sahana attended Soft Skills Workshop on "A Tool for Personal & Professional Competency" at D. Y. Patil College of Engineering, Akurdi, Pune. June 2014.
- Mrs. Ghutepatil Priti R. Participated in International Workshop On "Ph.D. Program For Medical Innovations" on 16th & 17th February, 2014 at D.Y. Patil university, Kolhapur.
- Mrs. Daddi Vanita R. participated in workshop on "Reforms in online Exam" held in coordination with Shivaji University, Kolhapur, on 17th September, 2012 at D.Y. Patil College of Engg. And Tech. Kolhapur.
- Mrs. Daddi Vanita R. Participated in a Two-week ISTE workshop on "Signals and Systems" Conducted by IIT Kharagpur from 2<sup>nd</sup> January, 2014 to 12<sup>th</sup> January, 2014.

- Mrs. Daddi Vanita R. Participated in organizing National Conference on “Emerging Trends in Engineering, Technology and Architecture” NCETETA 2014, held on 25<sup>th</sup> January, 2014.

### Faculty Publications

- Miss Patil V.B. published paper on “High performance single crystalline PbWO<sub>4</sub> nanorod field effect transistor” in J Mater Sci: Mater Electron DOI 10.1007/s10854-015-3685-9, 2013.
- Miss Patil V.B. published paper on “Hydrothermally synthesized tungsten trioxide nanorods as NO<sub>2</sub> gas sensors” in Ceramics International 41, 2015, 3845–3852.
- Miss Patil V.B. published paper on “Oxalic acid induced hydrothermal synthesis of single crystalline tungsten oxide nanorods” in Journal of Alloys and Compounds 590, 2014, 283–288.
- Mr. Sachin Jadhav published paper on “Strategies for Employee Retention in Indian Higher Education System” in International Journal of Education and Psychological Research Volume-3, Issue-4, Dec.2014, ISSN: 2279.
- Mr. Sachin Jadhav presented paper on “Marginalization in Indian English Literature” in UGC Sponsored International conference convened by Bharati Vidyapeeth University’s Y.M. College, Pune on the topic “Shifting From Periphery to Center: A Voyage Through the Works of Women Indian English Writers” Feb.2015.
- Mr. Sachin Jadhav published paper “Multicultural Classroom: An Emerging Trend in Indian Higher Education System” in International Journal of Multidisciplinary Research Academy, 2012, Volume 5, Issue 4, Apr., 2015, ISSN: 2249-2496.
- Mr. Sachin Jadhav published paper on “Spirit of Bengali Renaissance in Satyajit Ray’s Films” in International Journal Criterion, Volume-6, Issue-2, Apr. 2015.ISSN:0976-8165.
- Mr. Sachin Jadhav published paper on “Clashes of Womanhood: Concepts of True Woman and New Woman in Satyajit Ray’s Devi and Mahanagar” in National Journal Dialogue Volume - X No. 2, December 2014, ISSN:0974-5556.
- Dr. Shilpi Sahana published paper on “Environmentally benign syntheses of hexahydrocyclopenta(b)furan and 2-oxabicyclo[3.2.1]octane derivatives” in RSC advances, 2015, 5, 22951-22956.
- Mrs. Ghutepatil Priti R. published paper on “Magneto-separation of genomic deoxyribose nucleic acid using pH responsive Fe<sub>3</sub>O<sub>4</sub>@silica@chitosan nanoparticles in biological samples” in RSC advances, 2015, 5, 8463–8470.
- Mrs. Daddi Vanita R. published Research Paper on “Ideal Theory in Commutative Ternary A-Semirings” in International Mathematical Forum, Vol.7, no.42, 2012, 2085-2091, ISSN - 1312-7594.
- Mrs. Daddi Vanita R. published Research Paper on “On Ordered Ternary Semigroups”, in Kyungpook Mathematical Journal, Vol.52, issue 4, 2012, 375-381, ISSN - 04548124, 12256951.
- Mrs. Daddi Vanita R. published Paper on “Completely Regular Ternary Semirings” in NOVI. SAD. J. MATH. Vol.42. No.2, (2012),1-7, ISSN -1450-5444.
- Mrs. Daddi Vanita R. published Paper on “Special Types of Pseudo-ideals in Ternary Semigroups” in Bulletin of Calcutta Mathematical Society, 106, No. 1, (2014), 39-54, ISSN- 0970-8596.

## Industrial visits

Industrial Visit To Vigyan Ashram By Div D On Jan 2014.

Industrial visit to Vigyan Ashram organized for First year students on Jan 2014 were they learnt about use of Natural sources for the Industrial applications.

Industrial Visit To Science Park By Div A On Feb 2014



Industrial visit to Science Park was organized for First year students on Feb 2014 were they learnt about various types of machineries.



## Student Development and Welfare:

Guest lecture on green chemistry

Objectives:

Guest lecture on Green chemistry was conducted for First year students were they learn about Principles of green chemistry, Traditional and green pathway for the synthesis of industrially important compound.



## Technical Events:

On February, 2015 Technical Events were organized for First year students which consist of Debate Competition, Project/ Model making Competition, Paper presentation etc. It helps to improve their knowledge regarding current affairs, Technical skills etc. Mr. Sudhir Gupta (Vice President TATA Auto), discussing about projects with Students.

