

July 16 - Dec 16  
Volume 5 Issue 1

## MECH NEWS LETTER

### VISION

To inculcate in the young rural minds the aptitude to compete with the quality technocrats.

### MISSION

1. To instill technical skills to compete in the sustainable world
2. To impart holistic value based technical education.
3. To intensify research and development (R&D) activities in technological development.
4. To imbibe core values of love for motherland, performance of duty, compassion, tolerance, honesty and integrity.

### About the College

Priyadarshini Engineering College, the flagship of Jai Barath Charitable Trust, was established in 1995 at Vaniyambadi in Vellore District of Tamil Nadu. The college has been approved by All India Council for Technical Education, New Delhi & affiliated to Anna University, Chennai. Priyadarshini Engineering College situated in the rural area of Vaniyambadi, Vellore District is committed to the vision of developing itself into

a multi-campus, Inter-disciplinary Institution of Excellence through symbiotic efforts and innovative practices of management and faculty to provide the student

ic environment, ideal for the pursuit of knowledge and development carrier.



with an ambient academ-

### MOTTO

**PERSEVERANCE, ENDURANCE, COMMITMENT**

“கற்றலும், கற்றவை கேட்டலும், கேட்டதன்கண் நின்றலும்”

## About the Department

### VISION

To produce competent Mechanical Engineers specifically from rural based population to confront the latest technological innovations.

### MISSION:

1. Imparting quality education and training to nurture competitive Mechanical Engineers.
2. Motivating innovations in the various fields of Mechanical Engineering with better infrastructure to meet the industrial and societal requirements.
3. Inculcating ethical values in their careers for their successful life.

The Department of Mechanical Engineering came into being in the year 1999 and the first batch of Mechanical Engineers graduated in the year 2003. The department was first started with the intake strength of 40 seats in 1999. After, the intake was increased to 60 seats in 2004. At present the department offers 120 seats from 2014. The department has both undergraduate and postgraduate courses in Mechanical Engineering and Engineering Design. In the year 2013 Post Graduate Programme in Engineering Design was launched. The department has laboratory and workshop facilities with modern sophisticated equipment to carry out research in all areas related to Mechanical Engineering. Throughout its history, the department has provided a strong technical foundation to



## POs and PEOs

### Programme Educational Objectives( PEOs):

#### PEO1. Core Competence:

Graduates will Excel in their Professional Career with Strong Fundamental Technical Background.

#### PEO 2. Breadth:

Graduates will be able to demonstrate their Technical Skills in Designing, Fabrication and Installation of New Mechanical Components.

#### PEO 3. Professionalism:

Graduates will be Competent to Exhibit their Multidisciplinary Skills in Related Fields of Mechanical Engineering.

#### PEO 4. Teaching & Research:

Graduates will Pursue Higher Studies in Mechanical Related Disciplines to work in the field of Teaching and Research

### Programme Outcomes (POs):

#### PO 1: Engineering Knowledge:

Apply the knowledge of mathematics, science, engineering fundamentals and core engineering for complex engineering problems.

#### PO 2: Problem Analysis:

Identify, formulate and analyze complex engineering problems.

#### PO 3: Design & Development of Solutions:

Design and develop solutions for complex engineering problems.

#### PO 4: Investigations of complex problems:

Use research based knowledge to conduct investigations of complex problems.

#### PO 5: Modern Tool Usage:

Apply appropriate modern tools and techniques to tackle Mechanical Engineering problems.

#### PO 6: Engineer and Society:

Provide solutions to Mechanical Engineering problems relevant to societal needs.

#### PO 7: Environment and Sustainability:

Acquire contemporary knowledge to sustain in the ever changing environment.

#### PO 8: Ethics:

Apply professional ethics.

#### PO 9: Individual and Team work:

Exhibit individual and leadership qualities in multidisciplinary group.

#### PO 10: Communication:

Comprehend and communicate effectively in a team.

#### PO 11: Lifelong Learning:

Engage independently in lifelong learning.

## Student Achievements

- K.Prabakaran of III<sup>rd</sup> year Student Won the Third Prize in the event of Badminton at C.Abdul Hakkem College of Engineering Vellore on 18<sup>th</sup> of August 2016.
- V.S Harikrishnan of 2<sup>nd</sup> Year Student participated in the Workshop on “Robotics and Automation ”at SSN Engineering College, in Chennai on 10<sup>th</sup> Sep 2016.
- U.Ajithkumar, M.Heman kumar, M.Srinath and B.Praveenkumar of 3<sup>rd</sup> Year Students won the Runners up in the Volleyball Match organized by Arunai College of Engineering, Tiruvannamalai on 19<sup>th</sup> and 20<sup>th</sup> Sep 2016.
- P.A Sethupathi and R.Sathishkumar of 2<sup>nd</sup> Year students won the winners up in Kabadi Match organized by Arulmigu Meenakshi Amman College of Engineering in Chennai from 31<sup>st</sup> Aug to 2<sup>nd</sup> Sep 2016.
- P.A.Sethupathi Won the First Prize in CAD Modelling organized by PSV College of Engineering ,Krishnagiri on 20<sup>th</sup> Aug 2016.
- P.A.Sethupathi Won the First Prize in CAD Modelling organized by AVS College of Engineering ,Salem on 10<sup>th</sup> Sep 2016.
- D.Thamaraiselvan and S.Suriyaprakash of 2<sup>nd</sup> Year Mechanical Engineering Students Participated in Technical Quiz organized by PSV College of Engineering ,Krishnagiri on 24<sup>th</sup> Oct 2016.
- S.Elakkiyan,K.Karthiyogan,G.Karthikyan and R.G Ragavan of Final Year Students Participated in Won Second Prize in “UTKRANTI 2017” Organized by IIT Delhi at Thanthai Periyar Engineering Collge on 27.09.16 and 28.09.16.
- P.Sivashankar and J.Vidhya sagar of Third Year Students Won Second Prize in “UTKRANTI 2017” Organized by IIT Delhi at Thanthai Periyar Engineering College on 27.09.16 and 28.09.16.

## Student Achievements

S.No	Name	Year	Event & Venue
1	M.Sudhakar	Final Year Me- chanical	One ay Power Seminar on “Employability skills for the future an career opportunities in IT/ITES Sector ” on 24 <sup>th</sup> Sep 2016
2	D.Prathap		
3	S.Prem Kumar		
4	R.Senthil Kumar		
5	S.Saravanan		
6	S.Pugazhmani		
7	S.Shalman		
8	M.Thangaraj		
9	S.Vaithiyanathan		
10	M.Jaganathan		
11	J.Sridhar		
12	S.Elakkiyan		
13	V.Thamoharan		
14	K.Karthiyogan		
15	S.Sathishkumar		
16	A.Mohamed Hussain		
17	T.Ezhilvannan		
18	C.Thirumal		
19	V.Jayapal		
20	P.Dineshkumar		
21	R.Ganesan		
22	G.Mohanbabu		
23	S.Prabakar		
24	M.Pradeesh		
25	G.Vediyappan		

## FACULTY PUBLICATIONS

### **Dr. P. NATARAJAN**

- Published a paper titled “Isolated AC/DC Offline High Power Factor Single-Switch LED Driver using Fuzzy Logic Controller”, in Middle-East Journal of Scientific Research, 24: 90-94, 2016, DOI: 10.5829/idosi.mejsr.2016.24.RIETMA115.
- Paper titled” Zigbee Based Energy Efficient Led Lighting System”, in Journal of Computational and Theoretical Nanoscience, (Communicated).
- Reviewed a manuscript titled” Simulations of flow behavior of particles in a liquid-solid fluidized bed using a second-order moments model” (Ms. Ref. No.: POWTEC-D-16-00585 & R1) to Powder Technology, Elsevier.
- Reviewed a manuscript titled” Hydrodynamics Of Two-Phase Fluidization In Liquid-Solid Circulating Fluidized Bed: Statistical Analysis (Ms. Ref. No.: UPST-2016-1138) to Particulate Science and Technology, Taylor & Francis.
- Reviewed a manuscript titled” Numerical Study on Impact Behavior of Nanoparticle Shapes on the Performance Improvement of Shell and Tube Heat Exchanger” (Ms. Ref. No. CHERD-D-16-00737) to Chemical Engineering Research and Design, Elsevier.
- Reviewed a manuscript titled”, Liquid-Solid Circulating Fluidized Bed Reactor Modeling using Multigene Genetic Programming: Scale-up Effect of Riser Height”, (Ms. Ref. No. POWTEC-D-16-02639), to Powder Technology, Elsevier.

### **Dr. M. RAJAGOPAL**

- Published a paper entitled “Experimental Investigation on the phase change material-based modular heat exchanger for thermal management of a building” in International Journal of Green Energy Vol.13, Issue No 11, pp. 1109-1119, 2016.
- Published a paper entitled “Investigation on Phase change material-based flat plate heat exchanger modules for free cooling applications in energy-efficient Building” in Advances in Building Energy Research, Published online on 12<sup>th</sup> Oct 2016.
- Published a paper entitled “Experimental Investigation of Free cooling using PCM filled air heat exchanger for energy efficiency in Building” in Advances in Building Energy Research, Published Online on 11<sup>th</sup> Nov 2016.
- Organized one day workshop on "Writing Research papers and Research proposals & Awareness on unding Agencies and their Funding Mechanisms" on 11.11.2016 at Priyadarshini Engineering College, Vaniyambadi.

## FACULTY PUBLICATIONS

### Mr. M. BALACHANDAR

- Published a paper entitled “Experimental investigation of solar flat plate collector with inner grooved copper tube” in International Journal of Engineering Research and Technology, Vol. 5 Issue 09, September 2016.

### Mr. S. ASHFAQUE AHMED

- Presented a paper entitled “Preparation and Performance Analysis of CI Engine with Tallow Methyl Ester in Single cylinder Kirloskar 4 Stroke CI Engine” in International Conference at C. Abdul Hakem College of Engineering Vellore on 27<sup>th</sup>& 28<sup>th</sup> July 2016.
- Participated in two 2 Days Workshop on “Synthesis an Applications of Smart materials” in Prathiyusha Engineering College, Chennai on 18<sup>th</sup>& 19<sup>th</sup> Nov 2016.

### FACULTY ACHIEVEMENTS:

- Mr. M. Vinoth AP, and Mr. M. Nithiyanandam AP, participated in one week Workshop on “Manufacturing of Advanced Materials (MAM 2016)” in Visvesvaraya National Institute of Technology, Nagpur from 27<sup>th</sup> June to 1<sup>st</sup> July 2016.
- The Following Faculty members are participated in one day workshop on ‘Writing Research papers and Research proposals & Awareness on Funding Agencies and their funding Mechanisms’ on 11<sup>th</sup> Nov 2016 at Priyadarshini Engineering College, Vaniyambadi. M. Vinoth, AP, Prabhakaran, AP, Ashfaque Ahmed, AP, .Nithiyanandam, AP, M. Thamaraiselvan, AP, U. Dhivagar, AP, M. Deepak kumar. AP.

### EVENTS ORGANIZED BY MECHNAICAL ENGINEERING

S.NO	NATURE OF CONTEST	RESOURCE PERSON	DURATION
1	Guest Lecture on “Image Processing”	Dr.N.R.Shankar, Chase Technologies Avadi,Chennai	3 <sup>rd</sup> Sep 2016
2	Inauguration of Society of Automotive Engineers	Dr.K.Karthikeyan, Professor, Karpagam College of Engineering, Coimbatore	17 <sup>th</sup> Sep 2016

# PHOTO GALLERY



Gathering Address given by HOD/MECH



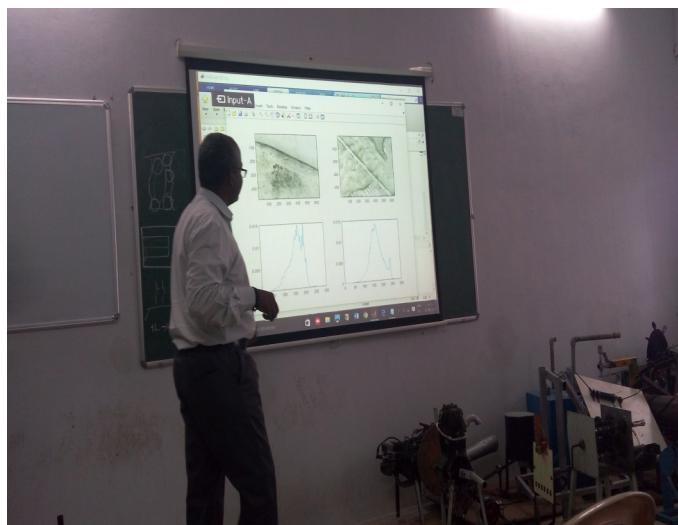
Students Gathering for SAE Inauguration



Honouring the Chief Guest by Principal



Special Lecture given by Dr. K. Karhikeyan Prof/Mech-KCE



Presentation given by Dr. N.R. Shankar-Chase Technologies



Interaction with Students by Dr. N.R. Shankar