# YANTRA Magazine

**VOLUME – V ISSUE – 2 (Dec – May) 2021-2022** 

## **Department of Mechanical Engineering**



## ABOUT MECHANICAL DEPARTMENT

Managing moving machines of the world! It is this catchy phrase that has made Mechanical Engineering the thriving branch for being an integral part in shaping our world run on machines. The Mechanical Engineering department at Aditya has earned a place of high repute through its quality teaching rendered by highly qualified and experienced faculty with remarkable number of research publications in reputed journals like ASME, ELSEVIER etc. and rigorous practical training creating an ambience of excitement in all the stages of study. The department lays impetus on hands-on training with the support of simulation packages such as CATIA, ANSYS, IDEAS, PRO-E, UNIGRAPHICS and SOLID WORDS. The academic activities include guest lectures, industrial visits, workshops, seminars, technical festivals VEDA and programs under Mechanical Engineering Students Association (MESA), collegiate club of the Society of Automotive Engineers (SAE) and Auto gear club.

The projects that received appreciation in various events organized at state and national level are Go- Kart, Quad bike, Solar powered wheelchair, LPG bike, Reaping Machine, and many more such highly relevant contraptions. Students are encouraged to do internships in reputed industries like TATA Motors PVT. LTD., Hindustan Shipyard, BHEL PVT. LTD., Bhilai Steel Plant, Bokaro Thermal Power Station, Nalco Mining Division etc

### VISION OF THE DEPARTMENT

To be a preferred knowledge hub in Mechanical Engineering towards critical thinking, quality research and innovation

## MISSION OF THE DEPARTMENT

M1: Provide infrastructure for design and development of modern-day solutions.

M2: Impart leadership & interpersonal skills for the stake holders

M3: Collaborate with industry, academia, & R&D organizations for excellence in teaching, research and consultancy services.

# **Invited lecturers**

SL. No.	Name of the faculty	Name of the event	Date	Invited Organization/ institute	
1	Dr. P. S. Ranjit	Webinar	9th to 11th May2022.	Ideal Institute of Technology, Kakinada,	
			7111 to 11111 May 2022.	Andhra Pradesh	
2	Dr. P.S. Ranjit	Guest Lecture	02nd to 06th March2020	Karnavati University	

## **Member of External Bodies**

Sl. No.	Name of the Faculty	Name of the external body/Agency	Position	Duration/Tenure
1	Dr. P.V. Elumalai	Energies MDPI	Guest Editor	2021-2022
2	Dr. P. S. Ranjit	JNTUK, Kakinada	Member of BoS	2021-2022
3	Dr. P. S. Ranjit	SAE India	Member of Management Committee for Faculty Development Programme	2021-2022
4	Dr. P. S. Ranjit	SAE India, Amaravati Division	Member of Management Committee	2021-2022

## **List of Patents**

Sl. No.	Name of the Faculty	Patent details	Area of the patents files/obtained	Status (filed/published/ granted)	Filing agency
1	Dr. P. S. Ranjit	Title of patent- Automatic Dimming Circuit for Automobile Headlights, Patent Application No.: 202041027643	Mechanical Engineering	Published	Indian Patent Office
2	Dr. M S Reddy	Title of patent: Nutritional HealthAssessment and Diet Plan Prediction Systemfor Children, Patent ApplicationNo.: 202041024261, Publication Date:17-12-2021	Bio-Medical Engineering	Published	Indian Patent Office
3	Dr. M S Reddy	Title of patent: Agri-Tech Farming Revolution for using Plc Solar water, and Fertilizer's Pump with New Altered-Nozzle, Patent Application No: 202141049447, Publication Date:05-11-2021	Computer Science	Published	Indian Patent Office
4	Dr. Sandip Kunar	Title of patent: Portable incense burner with automatic ash disposal, Patent Application No: IN202141033818A, Publication Date: 2022-02-04	Mechanical Engineering	Published	Indian Patent Office

**Students Participation** 

S. No	Name of the students	Name of the event	Presented Topic	Venue	Date	Award/ Reward
1	Mr. Chelluri Raviteja	Intellectium 2021	Twin-Turbo or Biturbo	Sinhgad Institute of Technology Lonavala	29-10-21 to 30-10-21	Participation
2	Mr. Gadhi Gangadhar	Intellectium 2021	Twin-Turbo or Biturbo	Sinhgad Institute of Technology Lonavala	29-10-21 to 30-10-21	Participation
3	Mr. Kommu Raj Kumar	Impetus and Concepts 2021 (InC) 2021	Blended Winged Aircraft	Pune Instituteof Computer Technology, Pune	24-09-21 to 25-09-21	Participation
4	Mr. Kondru Naga Sandeep	Impetus and Concepts 2021 (InC) 2021	BlendedWinged Aircraft	Pune Instituteof Computer Technology, Pune	24-09-21 to 25-09-21	Participation
5	Mr. Manepalli Vardhan Kumar	TechExibit 2021	CompressedAir Cars	Sinhgad Institute of Technology Lonavala	23-07-21 to 24-07-21	Participation
6	Mr. Palivela Rajesh	TechExibit 2021	CompressedAir Cars	Sinhgad Institute of Technology Lonavala	23-07-21 to 24-07-21	Participation

**Faculty PhD Guiding** 

Sl.	Name of	Name of	Name of	Title of Ph.D. topic	Date of	Date of
No.	Faculty	Student	University	Title of Fil.D. topic	Enrolment	Award
1	Dr. P.V. Elumalai	Ms. S. Anjani	Annamalai	Experimentalinvestigation of HCCI	11.01.2022	Pursuing
		Devi	University	engine operated with lemon grass oil		C
2	Dr. P.V. Elumalai	Mr. Rakesh	Annamalai	Effects of graphite oxide on PCCI	11.01.2022	Pursuing
2	Di. i . v . Liumana	Verma	University	Engine of operated with biodiesel	11.01.2022	1 disding
3	Dr. P.V. Elumalai	Mr. Sartaj	Annamalai	Analysis ofbio- composite	11.01.2022	Pursuing
3	Di. i . v . Elullialai	Patel	University	material	11.01.2022	1 ursuing

#### **Students Achievements**



## **Industrial Visit:**

Students participated in industrial visits and training to bridge the gap between academic learning and practical training in the real world. Field trips will provide students with an understanding of organisational hierarchy and industrial practises. Students will have the opportunity to participate in hands-on learning activities outside of the classroom setting through industrial visits



Students of Mechanical Engineering visit to L & T Company, Kakinada

# Quiz:

Quiz is a learning platform that offers multiple tools to make a classroom fun, interactive and engaging. The teacher can create lessons, conduct formative assessments, assign homework, and have other interactions with the students in a captivating way. The teachers are used to determine whether students have learned what they were expected to learn or to level or degree to which students have learned the material. They may be used to measure learning progress and achievement and to evaluate the effectiveness of educational programs.

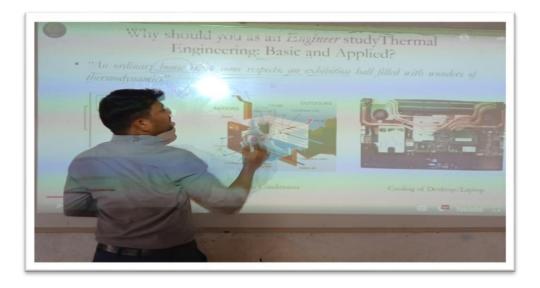
# **Learning from Experts:**

- The University was informed of the deficiencies and asked to take them into account when revising the curriculum. Aside from that, the department has taken the necessary steps to close knowledge gaps by teaching the ideas through content other than the syllabus.
- Experts routinely organize seminars.
- Guest lectures are organized by industry professionals to bridge the gap between industry and academia.
- Practical hands-on workshops are set up to expose participants to contemporary tools.
- Students are taken on trips to various sectors of the industry.
- To improve their abilities, they constantly take aptitude tests, value-added classes, employability improvement programmes and so on.
- Students are encouraged to participate in in-plant training during their semester breaks.



Student activity participated in Guest lectures.

## **NPTEL Videos Demonstration:**

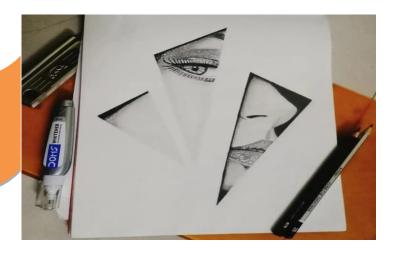


Mr. S. Ganapathi delivering lectures using NPTEL video

• The students will be shown the NPTEL Videos on the lecture topics of the resource persons from IITs, NITs, etc.,

# **Student architectures:**

Art by
Akhil 2 nd year



Art by

Karunakar 2 nd year

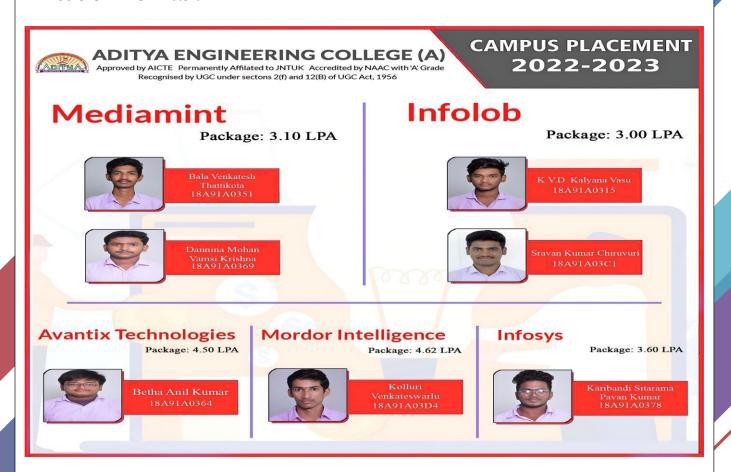


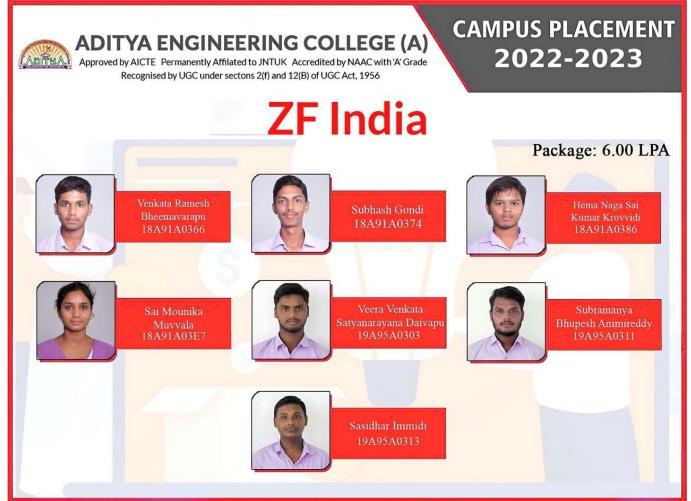
Art by

Samuel 2 nd year



#### **Placements:**





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