

DEPARTMENT OF MECHANICAL ENGINEERING
MONTHLY NEWS LETTER, Volume 1, ISSUE 2,
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Sri Venkateswara College of Engineering Post Bag No.1, Pennalur Village

Chennai - Bengaluru Highways

Sriperumbudur (off Chennai) Tk. - 602 117, Tamil Nadu, India

## HoD's Message...,



Warm Greetings from the Department of Mechanical Engineering

I am delighted to present the December edition of our department newsletter "Ignition". This newsletter highlights the major achievements of the faculty members and students in the aspect of curricular and co-curricular activities. Four faculty members have successfully completed the "Universal Human Value" (UHV) course conducted by AICTE. One faculty member published a book in the filed of manufacturing. An international workshop with hands on training was organized for two days. It is worth to mention that a new experiment setup "IOT Based Conveyor Tracking System with the Integration of Mitsubishi Six Axis Robot" was completed with a cost of around Thirteen lakhs. Similar to the past years, our students performed well in the campus recruitment and got recruited by Tractor and Farm Equipments, SONA Comstar, Saint Gobain, The Math Company, LTI, etc.

Three of our students excelled first level of "Naan Mudhalvan" scheme in the design area which was conducted by M/s.Autodesk in association with Anna University.

Warm regards

Dr. S. Ramesh babu

HoD/Mechanical Engineering

## **About the Department**

The department of Mechanical Engineering started its successful journey in 1985 and has been accredited by the NBA since 1998. It is recognized as a research centre approved by Anna University, as well. The UG/PG courses offered by the department cover the thrust areas such as Thermal, Design, Manufacturing and Industrial Engineering and is supplemented by well – equipped laboratories, reputed research supervisors and dedicated faculty members. The department has the privilege of housing research cells – namely the Fibre Reinforced Composite (FRP) Cell, Engine Testing and Bio – Fuel Research cell, Tribology research cell, Welding research cell which are used extensively for research and consultancy projects. The department has completed sponsored research projects for a worth of more than 1.5 crore and consultancy projects for more than 75 lakhs. The department has established a centre of excellence in Additive Manufacturing and Computer Integrated Manufacturing, which houses the facilities such as Digital Manufacturing, Robotics and HMI based Automation and 3D printers. The department has published more than 150 papers in peer reviewed journals during the last 4 years.

The following programs are offered by the department

- 1. B.E. Mechanical Engineering
- 2. B.E. Mechanical and Automation Engineering
- 3. M.E. Industrial Automation and Robotics

## Vision

To be a leader in Higher Technical Education and Research by providing the state of the art facilities to transform the learners into global contributors and achievers.

## **Mission**

- 1. To be renowned for offering Programs in the field of Mechanical Engineering that imparts competent technical knowledge along with skill, research & innovation, leadership and life skills needed for the students to contribute and achieve at global level.
- 2. To provide quality education encompassing recent technological developments by continuously upgrading the academic infrastructure thereby enhancing the technical knowledge of students, teachers and supporting staff which facilitates technical assistance to industrial and societal needs.
- 3. To offer need based training to the students in tools relevant to mechanical engineering.
- 4. To continuously upgrade the research facility and provide a conducive environment leading to continuous learning, development and transfer of knowledge.
- 5. To inculcate in students minds about Professional ethics, Human Values and Environmental issues in Engineering.



Engineering is the closest thing to magic that exists in the world.

Flon Musk

## **Details of Conferences/ FDPs/Workshops/ Seminars**

The AICTE has given a clarion call for holistic value-based education to prepare our youth and develop our Nation, "Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development". The steps taken by the All-India Council for Technical Education in the direction of imbibing universal human values education among teachers and students have proved to be transformational. In this regard, the following faculties has participated and successfully completed the 5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 05th December to 09th December 2022.





Dr. M. Gajendiran, Assistant Professor





Mr. M. Balakumar, Assistant Professor

## **Details of Conferences/ FDPs/Workshops/ Seminars**





Mr. S. Saravanan. **Assistant Professor** 

Dr. R Ramesh participated and successfully completed 5days FDP on Outcome Based education and Accreditation Process from 12.12.2022 to 16.12.2022 at SSN College of **Engineering**, Chennai



Mr. G Kirubakaran participated and successfully completed 5-days **FDP** on Workshop/Karyashala on "Creative methods and tools for effective research dissemination" from 12.12.2022 to 16.12.2022 at IIITDM Kancheepuram, Chennai



Mr. M. Maheswaran, and Mr. G. Kirubakaran, Assistant Professors coordinated the event" Naan Mudhalavan", scheme in the college as a Mentor and communicator to the Anna University. The goal is to encourage the students to involve in Design challenge and to mentor them. Also they lead the students to get success in the first level of the design competition.



Dr. R Ramesh, Professor/Department of Mechanical Engineering jointly organized a workshop titled "Disaster Awareness and Management Training" with the Sri Sathya Sai Seva Organization Trust as DRGs (DISASTER RESPONSE GUARDS) for the first-year students of academic year 2022-23. 200 Number of students participated in the training program across various disciplines, faculty members and 10 supporting staff also get trained and get benefited.

The objective of this workshop is to create awareness of various natural disasters and how to handle the situation through disaster management methods. This workshop was jointly organized with the Sri Sathya Sai Seva Organization.

The workshop began with a presentation on the different sorts of catastrophes and their effects, including how to handle scenarios including floods and earthquakes. First aid, making a gunny sack stretcher, conducting a fire exercise, and tying different kinds of knots that will be used during crisis management are all demonstrated in a hands-on manner.





Innaguration of The Programm SAi Seva members, Principal and Dr.R. Ramesh

## Event: Two days International workshop titled "PLC and Automation



Inaugural Address by Chief Guest Dr. Ravindra Thamma, Central Connecticut, State University, USA

Dr. S. Ramesh Babu, Professor & Head, Dr C.Senthamarai Kannan and Mr.Arul kumar organized a two days international work shop on "PLC and Automation" during 27 &28 December 2022 at Sri Venkateswara college of engineering.

The resource person is Dr. Ravindra Thamma, Professor & Department Chair, Manufacturing & Construction Management Central Connecticut State University, USA who delivered both the theoretical and practical knowledge to the participants.

Participants are from different engineering Colleges, also from Industries such as Dinesh Industries, Western Thomson group and Delphi TVS. There are totally 51 participants, 10 industrial participants, 25 external faculty members, 10 internal faculty members and 6 PG students.

Demonstration and training was given by the resource person to the Participants automation programs for few applications, further he trained all the participants to individually simulate the above automation exercises in RSLogix Software

Dr. S.Saravanan professor, is acquired a tremendous position in his research and he is listed in top 2% of scientist in the scientific publications. This is based on his citation index on his research publications. This recognition is evidenced with "September 2022 data update for "Up dated Science-wide author data bases of standardized citation indicaors by Elsiever BV.

DR.M.Mohan dass AHOD7 Associate professor along with his research scholars and Mr.V.Gurusamy Associate prof, Marien Engineering deaprtment have published a book titled "Metal Shaping Process". This book is published through AGPH publications with ISBN No.- 978-93-94339-88-0

Dr.K.Pitchandi invited by M/s. Thermal Training Institute & Research centre, -TANGEDCO, Chennai division, to deliver a guest lecture titled, "-Improving Efficiency of Thermal Powerplant- by Optimization of fluid flow"-" on 22/12/2022 at Valluvar Nagaram North chennai Thermal Power Station-I. Chennai.

In this programm, around 10 engineers attended and benefitted through his lectures.



Dr. S. Saravanan
Professor & TC



Dr. M. Mohandass Professor & AHoD



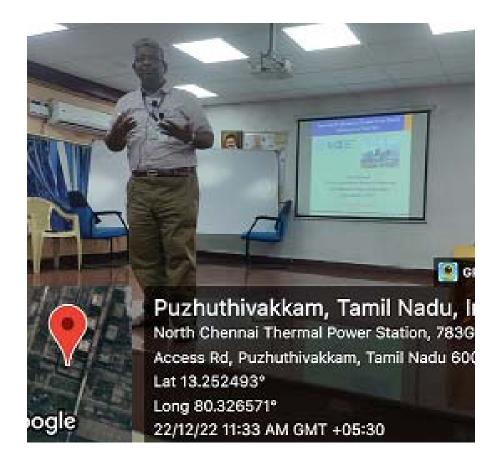
Dr. K.Pitchandi Professor & COE, TAlk at TTI& RC
CHennai.

D.S.Natarajan associate professor, invited by SMK FORMA Institute of Technology Chennai. for a specilal talk titled,"Automobile Emissions and its Controlling Techniques" on 02-12-2022. This talk is delivered to 50 students and faculty members of the institute.



Dr.K.Pitchandi invited by M/s. Thermal Training Institute & Research centre, -TANGEDCO, Chennai division, to deliver a guest lecture titled, "-Improving Efficiency of Thermal Powerplant- by Optimization of fluid flow"-" on 22/12/2022 at Valluvar Nagaram North chennai Thermal Power Station-I, Chennai.





## **STUDENTS ACHIEVEMENTS**

The Centre for Excellence in Automobile Technology (CEAT), Anna University in association with Tamil Nadu Skill Development Corporation (TNSDC) launched TNSDC – AU – Autodesk Fusion 360 Mega Challenge powered by Autodesk Inc., This is a Skill Development Initiative event under the aegis of 'Naan Mudhalvan' programme.

The event is conducted at 5 zones viz., Chennai, Coimbatore, Madurai, Tirunelveli and Trichy. Second year to final year Engineering and Diploma students are invited to register and participate. The challenge has 3 Levels and culminate into a Mega challenge for top teams to compete in the grand finale. Level – 1 and Level – 2 involves the application of fundamental Fusion 360 to build the product and Level – 3 brings more industry workflows to solve the problem statement and build the product.

Two Teams have won Second Runner up in Level 1 challenge. Below is the details of the Team member and design.

**Group ID: AUFDC10484** 

Title of the Design: Smart walker- Smart Walking aid assistance Team Members

Name: Subash chandra bose Anuradha

Reg No: 2127211001501

Name: Ramvel RadhaKrishnan

Reg No: 2127211001316

**Design Objective:** 

Design Theme: To design user friendly and smart walking aid for the elder people and stroke victims

- To monitor the safety of the user, (IOT system) is used.
- To Design a comfortable and ergonomic walker for elderly and stroke victims
- To design a walking assistive device for medium-level hemiplegic stroke victims to help them walk & get up from sitting position on their own so as to reduce the risk of fall.

Video link: https://drive.google.com/file/d/1EMFNHkLCpz\_sO1ZrJoAt5sY1AkHjeeVN/view?usp=sharing





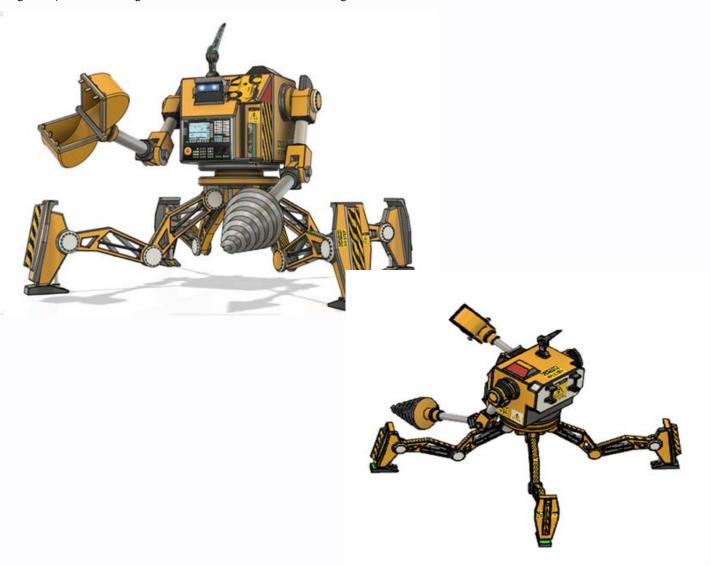
## **STUDENTS ACHIEVEMENTS**

Group ID: AUFDC20225316

Title of the Design: Design of a Coal-Mining Robot

Design Theme: Smart Technology

Design Objective: Design a robot with tools for working in Coal-Mines





Name: S. Ravikrishnan Reg No: 191001042



Name: N.Nittish Reg No: 191001037



Name: K. P. Yokesh Reg No: 191001069

## **GUEST LECTURE**

Dr.K.Pitchandi delivered a letctute titled ," Energy Conservation in house hold Appliances", to all department students , This programm is organagaaized by IIC -SVCE Dr. S.Nataraj & Dr.S.Muniraj ,on account of "National Energy Conservation Day2022" 14 th december 2022 at Sri venkateswrar colleg of engineering.

Dr. K.Pitchandi presented a lecture on National Energy Conservation Day, 14-12-2022 at SVCE.

## **PLACEMENT REPORT OF BATCH 2019-2023**



JEYA PRASATH M S (191001315) COGNIZANT



KARTHIKEYAN S
(191001316)

TATA CONSULTANCY
SERVICES



LOGESHWARAN S (191001319) SUTHERLAND GLOBAL



PRANAV K (191001038) ZOHO COGNIZANT



PRATIC M (191001039) **ZOHO** 

## **MAJOR RECRUITERS**

#### **CORE COMPANIES**















TATA STEEL











































## **SOFTWARE COMPANIES**





























## **DEPARTMENT'S - R & D FACILITIES**

# IOT Based Conveyor Tracking System with the Integration of Mitsubishi Six Axis Robot





Dr. Ravindra Thamma, Professor of Robotics and Mechatronics at Central Connecticut State University, USA. visited to the Center of Excellence, Robotics and Automation, department of mechanical engineering, SVCE

## **DEPARTMENT'S - R & D FACILITIES**



**Reciprocating type -Tribometer** 



Welding robot Welding robot



3D printing



**Advanced Metrology** 



**Advanced Welding Lab** 



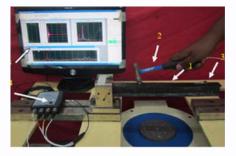
Nano Composites Lab



**Advanced Manufacturing - CNC** 



AVL - Engine Setup



Vibration R & D Lab





Tribology Research Lab



Fiber Reinforced Plastics – Research Lab

## **EDITORIAL BOARD**



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Dr. S. RAMESH BABU,

Professor & Head, Department of Mechanical Engineering, SVCE

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Dr. S. Saravanan
Professor & TC



Dr. S. Muniraj Assistant professor



Mr. M. Nishal Assistant Professor



Mr. S. Saravanan Assistant Professor

#### **STUDENT MEMBERS**



Mr. Joshua praveen R, Final year



Mr. Tanari sai vignesh, Final year



Mr. Shrudin, Final year



Mr. Gokul krishnan A, Third year



Mr. Bharath P, Third year



Mr. Rishab S, Third year



Mr. Akash R, Third year



Mr. Rajesh Kumar, Third year



Mr. Shreeram, Third year





