

DEPARTMENT OF MECHANICAL ENGINEERING
MONTHLY NEWSLETTER, Volume1, ISSUE 1,
DECEMBER - 2022

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 January 2023 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. Two of our faculty members got their patents published and one faculty member received an Intramural research grant of Rs. One lakh from our management. Similar to the past years, our students performed well in the campus recruitment and got recruited by Tractor and Farm Equipment's, SONA Comstar, Saint Gobain, The Math Company, LTI, etc.

A group of students from third year organized a 24-hour event "Make-a-Thon". Two of our students exceled in the sports and received the accolades.

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

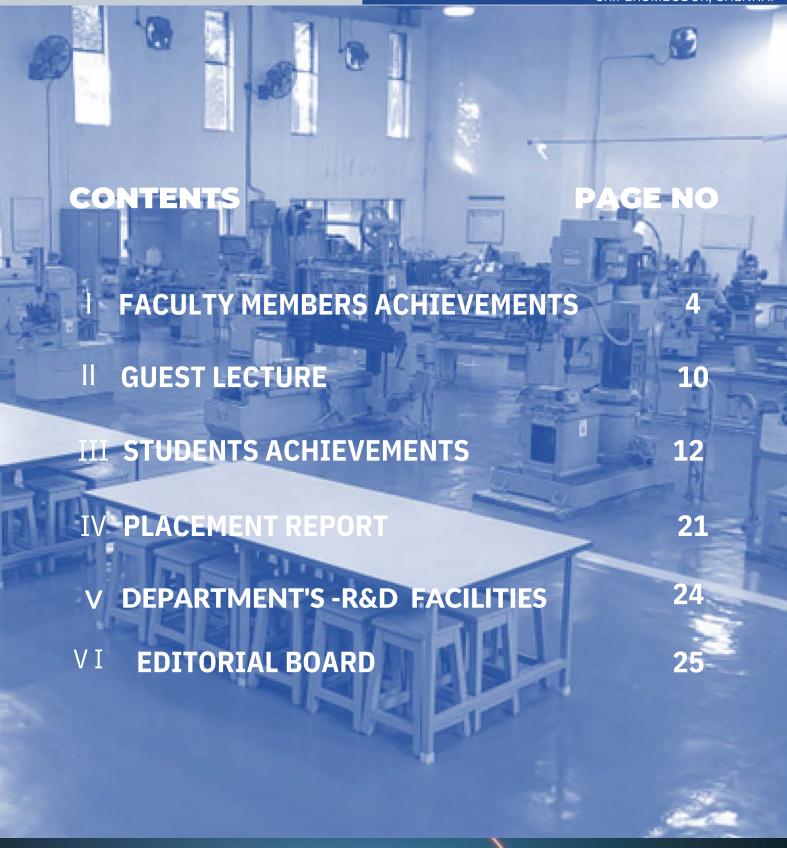
- 1. B.E. Mechanical Engineering
- 2. B.E. Mechanical and Automation Engineering
- 3. M.E. Industrial Automation and Robotics

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

FACULTY MEMBERS ACHIEVEMENTS

Intramural Research Grant

The Management sanctioned a seed money of Rs. 1,00,000 to the Project Supervisor Dr. M. Mohandass in the name of SVCE Intramural Research grant for the AY 2022-2023 for the project titled "Characterization of Cold Metal Transfer based Wire and Arc Additive Manufactured Nickel-Titanium Alloys".



Details of Conferences/ FDPs/Workshops/ Seminars

1. Dr. S Ponnuvel attended the "National Seminar on NAAC - Revised Assessment and Accreditation Frameworks" held from 24.11.22 to 25.11.22 at Sri Venkateswara College of Engineering. Dr. S Ponnuvel also attended the "Seminar on Innovative Practices for quality enhancement through IQAC" held on 28th and 29th October at RMK Engineering College.



2. Dr. S Natarajan organized the "Two Days workshop on EAT, TSA, CNA & SNA In PFMS E-GOVERNANCE" held on 31.10.22 & 01.11.22 at SVCE.



3. Mr. K Ramprasad attended the "Seminar on Innovative Practices for quality enhancement through IQAC" held from 28.10.22 to 29.10.22 at RMK Engg College.



4. Mr. S Saravanan attended 4 Days workshop on "Walkthrough from AI & ML to XAI" held from 26.10.22 to 29.10.22 at SVCE.



5. Mr. J Sivaramapandian attended 4 Days workshop on "Walkthrough from AI & ML to XAI" held from 26.10.22 to 29.10.22 at SVCE.



6. Dr. Arun Prasad Raja attended ICT - 3 Days FDP on "Emotional Intelligence" conducted by ICT Academy from 19.09.2022 to 21.09.2022 at Guru Nanak College, Chennai.



FACULTY MEMBERS ACHIEVEMENTS

- 1. Dr. Prem Ananth M, Associate Professor, Mr. Risikesh J & Mr. Sidheswaren J, filed a patent titled, "Dual Shaft Leaf Shredder", on 31st October 2022 with application no. :202241061116 and the same is published on 4th November, 2022
- 2. Mr. J. Sivaramapandian, D. Karthick thangaraj, and R. Dhanasekaran filed a patent titled, "Bund Forming Machine", on 27th October 2022 and the same is published on 1st July, 2022.
- 3. Mr. K. RamPrasad, Mr. M. Nishal, Mr. M. Maheswaran and Prashanna Rangan R ME Scholar / IAR Passive published a patent titled,"Ankle prosthetic for below knee amputee" on 23rd September, 2022.



The following faculty members have completed the NPTEL course.

- 1.Mr. M Nishal completed two NPTEL Courses in "Artificial Intelligence"- during the period July to Oct 2022., and "Introduction to Industry 4.0 & Industrial Internet of Things" held from July to Oct 2022.
- 2. Mr. G Kirubakaran completed an NPTEL Course on "Fundamentals of Additive Manufacturing Technologies" at IIT Guwahati from July to Oct 2022

RESOURCING TO OTHER INSTITUTES/ INDUSTRY

- 1. Dr. C Senthamarai Kannan acted as a Chief Guest Speaker for one week online FDP on "ME8593 Design of Machine Elements", held on 26.10.22 to 31.10.22 at Mailam Engineering College.
- 2. Dr. K. Pitchandi, professor & COE, presented a lecture titled "Improving the efficiency of Thermal Power Plant by Optimization of Fluid Flow in the Heat Exchangers", on 1st December 2022, at Thermal power station, *Mettur*.















INDUSTRY- INSTITUTE INTERACTION

CONSULTANCY

Mr. M. Maheswaran, Assistant Professor / Mechanical Engineering, and Dr. S. RameshBabu, Professor and Head / Mechanical Engineering, performed consultancy work on CFD analysis of the Thermostat for M/s. Western Thomson India. The consultancy dealing with the J D Thermostat Housing CFD Analysis" to re-design the current thermostat housing under certain loading conditions and to check the variation in flow with the current.



Mr. M. Maheswaran

This consultancy has carried out in the field of, CFD analysis on JD-Thermostat to the M/s Western Thomson (India) Ltd. worth about 1,69,509/- (One lakh, sixty-nine thousand, five hundred and nine)

PALS/ INDUSTRIAL VISIT

Mr. R. Kaliyansundar, Assistant Professor had undergone industrial training in M/s .Ashok Leyland, Hosur Plant at Hosur. The plants visited are manufacturing of various parts of IC engines, engine assembly, research and development of IC Engines





Mr. R. Kaliyansundar

As a part of Industry consultancy work, Dr.S. Natarajan, Associate Professor, Mr. A. Lakshmanan, Instructor.Mech.Enggg.Dept. interacted with Mr. Mark Winburn, Supply Base manager, Electronics Division, John Deere, USA as a Part of Expert members visit at Western Thomson India Private Limited, Gummidipoondi, Chennai to discuss about Electric Operated rotary valve fitted in RITZ Car on 14th November 2022.





INDUSTRY- INSTITUTE INTERACTION

Dr. P. Raghu and Dr. S. Arumugam conducted a "Three-Day Workshop on Engine Cooling Systems", jointly organised with Western Thomson India Private Limited, from 13th to 15th October 2022. During the three day workshop the employees of Western Thomson Group had a good understanding of Fundamentals of Engine Cooling System. Totally 12 members were enrolled for this workshop from Western Thomson Group.



Dr. P Raghu



Dr. S. Arumugam

HONORS RECEIEVED





Dr. C Senthamarai kannan

DATE: 21st November 2022

"National Innovation Foundation -India, Reviewer of innovative ideas received under the INSPIRE Awards-MANAK for the year 2022-23"

DATE: 23rd-25th September 2022

"Outstanding Oral Presentation Award for the Digital twin of robot manipulator using ROS, at the International Conference on Robotics, Intelligent Automation and Control technologies, VIT, Chennai"



The Department of Mechanical Engineering Organized a "24-hour MAKE-A-THON - BUG TO BUSINESS

This event is a 24hr Make-a-thon, where the participants build /design their products from the given domains during the first 12hrs of the event and e judged by industry experts on the same day. In the next 12hrs, the team prepared an innovative pitch to market their product and presented it in front of the marketing experts who evaluated their marketing skills and strategies









STUDENTS ORGANIZERS



Tushit Dev, Sanjay Kumar, Akash, Charan, Kalyan, Adhithya Rajarathinam, Gokul Krishnan, Rishab Sethuraman & Tharun Rajan





Presentation by Dr. K. Pitchandi at M/s. THERMAL POWER STATION, Mettur

Dr. K. Pitchandi, professor & COE, was invited by M/s. THERMAL POWER STATION_I, Training Division, Mettur., to deliver a lecture titled "Improving Efficiency of Thermal Power Plant by Optimization of Fluid Flow in the Heat Exchangers", on 1st, December,2022 at Thermal PowerStation, Mettur. The information was well received by 50 engineers from the training division of the TPS-I engineers.





Dr. K. Pitchandi, Professor/COE, & The Principal - Dr. S. Ganesh Vaidyanathan at NATIONAL CREDIT FRAMEWORK., IITM, Chennai

Dr.K.Pitchandi, Professor & COE, along with The Principal Dr.S.Ganesh Vaidyanathan participated in a work shop titled "National Credit Frame Work", organisezd by IITM, Chennai, on 29th November 2022.

GUEST LECTURE

1. M.S. SUBATHRA RAJENDRAN - Founder & CEO AATRAL Energy Solutions Provider (ESP)

TOPIC: Electric Mobility and its Energy Storage System

M.S. Subathra delivered a lecture about the recent developments in energy storage and electric mobility. More than 120 students participated in this lecture. The speaker expressed technical notes on the electric vehicle battery systems. Also, she elaborated on Lithium batteries



2. Mr. Devanand, M.TECH Quality Management (BITS)

TOPIC: VDA 6.3 German Audit System Impact in current Auto Sectors

•

Mr. Devanand provided knowledge on the subject of German Audit procedures used in the auto industries. In this program, more than 110 students participated. He explained the importance of audit systems for process monitoring in the industries.



3. Mr. Vinay D - Academic Program Manager (Ansys Academic Programs)

TOPIC: Introduction to IIT Madras Pravarthak- Hybrid and Electric Vehicle Engineering Program

Mr. Vinay delivered a talk on the current thrust area in mechanical engineering, in particular the hybrid and electrical vehicle systems, and the importance of the course. He also mentioned the engineering students' access to courses at IIT Chennai. He spoke about the course outcomes and the implementation of ANSYS in this field.



GUEST LECTURE

4. Mr. Sudershan S Gusain (Head) & Mr. Vinay Vijayvargia (Deputy Director), Indian Tyre Technical Advisory Committee (ITTAC).

TOPIC: Tyre Care and Safety

Mr. Sudershan S. Gusain and Mr. Vinay Vijayvargia delivered the information and statistical data on tyre safety. He also discussed the various basic characteristics of a tyre, such as carrying load, rotation direction, friction, wear and rolling resistance, high braking efficiency, and the absorption of shock waves produced by the road. He highlighted the maintenance of the tyres and stated that 2% of road accidents are caused by improper tyre care. In this event, more than three hundred students participated.





5. Mr. KS. Ravindran, Vice president -Purchase, M/s,SANMAR Engineering Pvt.LTD

Topic: Career Prospects in Industry for Mechanical Engineers

Mr. KS. Ravindran interacted with the students and shared his tremendous knowledge about the various career prospects in mechanical engineering. He investigated the critical competition between the IT sector and mechanical engineering, and how everyone must focus on the current trend in order to sustain or grasp the carrier. He also looked at various competitive exams such as GATE, ICRB, IES, and DRDO for career opportunities in government sectors development.



Bug To Business (24hr Make-A-Thon) Date: (5th & 6th Nov)

Team MOBOCART has won the first place with a cash prize of Rs.15,000 in the Make-A-Thon Event.

The team members are

- 1. Vinish U (Third year)
- 2. Akshara B S (Bio-Tech, Third year)
- 3. Sai Kumar R V (Third year)





Team GOLDEN GEARS has won the second place with a cash prize of Rs.10,000 in the Make-A-Thon Event. The team members are

- 1. Vignesh D (Third year)
- 2. Muthuselvam N (Third year)
- 3. Palanivel G (Third year)

Team SIGMA has won the third place with a cash prize of Rs.5,000 The team members are

- 1. Joushua Praveen R (Final year)
- 2. Jithesh Bharathi K (Final year)
- 3. Aravind M (Final year)





Mr shrudin S, final year student of mechanical engineering and his Interdisciplinary team won the Best Marketing Strategist

DATE: 22-25 August 2022

In the 9th GKDC competition, which was held at Aruani Grid in Bangalore, Karnataka, and was organised by ISNEE MOTORSPORTS PRIVATE LIMITED, the team displayed their own design and fabricated go-kart. The cart completed Endurance test and also secured third place in Fuel Economy. The cart has attained an overall national ranking of 15. Additionally, our kart is the fourth in the CV category to pass the event's technical inspection. A Go-Kart that can easily complete 20 laps is required for this competition's design and construction.

Faculty Mentor:

Mr. J. Sivaramapandian Assistant Professor, Dept. of Mec. Engg







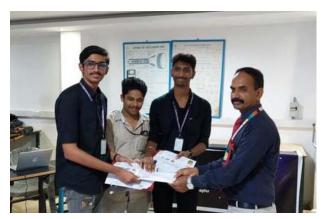
PARTICIPANTS

- 1. Sanjay Kumar S
- 2. Tharun Rajan S
- 3. Roshan Benni Philip
- 4. Rahul Karuppiah B
- 5. Raaghav V
- 6. Pradep Sreenivasan R
- 7. Varadharajan C N
- 8. Shashang G
- 9. Gokulakrishnan R
- 10. Vishal CB
- 11. Sriram K
- 12. Sudharshan
- 13. Ramanathan
- 14. Kumar JB
- 15. Gokulakrishnan



A team comprising Sanjay Kumar S, Rishab Sethuraman, Tharun Raja participated in the competition called "QUAD SQUAD - JETSIGNUM 2K22" organized by the Electronics and Communication Engineering department of St. Joseph's College of Engineering. Out of the 13 teams that were chosen for round 2, the team earned the third-best spot overall and were awarded a cash prize of Rs. 800.





N. Muthu selvam, third year mechanical engineering has won the Gold Medal in the 15th Tamil Nadu state Archery Meet in Junior - Compound - Boys Team category and Junior - Compound - Mixed Team category.



NPTEL CERTIFICATION



Lakshmanan K-second year and S B Charan-second year have completed NPTEL Course in "Introduction to Internet of Things" offered by Indian Institute of Technology, Kharagpur.



G. Boobalan, R. Gokula Krishnan have completed NPTEL Course in "Automation in Manufacturing" offered by Indian Institute of Technology, Guwahati.





I-CUBE 2nd edition

Date: 17th & 18th November, 2022



As the President of the Science club, Bhavesh, Final year student organized the 2-days Hack-A-Thon event to a grand success.



Mr. A. Ramanathan of IV year MECHANICAL department, Mr. Irfan Abdulla of IV year EEE and Mr. Ashiq Mohamed Illahi of IV year EEE secured the First position with a cash prize of Rs. 25000 in Icube Hackathon (Interdisciplinary team) - conducted by Students council in association with SVCE Science Club - A national level intercollegiate technical event, Sriperumbudur on 18th November 2022.

INDUSTRY FUNDED PROJECT



Mr. J. Risikesh, Final year student whose inhouse project titled "Design of Heat Control Valve of BMW Car X Series" is funded by M/s .Western Thomson India Pvt Ltd.

Mentor: Mr. A. Kumaraswamy

Team mates : Yokesh, Tanari Sai Vignesh

Startup Surge program conducted by Entrepreneurship Promotion and Incubation Centre SVCE (EPIC-SVCE)

Justin Kiran and Bharath, third year mechanical students were the part of CaWID which has been funded a sum of Rs.10000 in the Startup Surge program conducted by the Entrepreneurship Promotion and Incubation Centre of SVCE (EPIC-SVCE).



E. Gurunathraj, second year mechanical student is the part of Metal Protection Pvt Ltd., which has been funded a sum of Rs.10000 in the Startup Surge program conducted by the Entrepreneurship Promotion and Incubation Centre of SVCE (EPIC-SVCE).



PATENT PUBLISHED

S.Sakthi Balaji, Final year student filed and published a patent titled, "DEVICE AND METHOD TO MEASURE ROTATIONAL SPEED OF EARTH", on 22/09/2022.



STUDENTS SCHOLARSHIP

Alumni Scholarship from 1985-89 Batch Students

M. Jayashree, third year and Pooja. S, second year received a scholarship of Rs. 55,000 each from 1985-89 batch alumnus.



NAME: M Jayashree Third year REG: 2127201001024



NAME: Pooja S Second year REG: 2127211001056

Management Scholarship Awardee

The following students have received the management scholarship



NAME: Tannari Sai Vignesh Final year REG: 191001061



NAME: Darshan Arunachala J Third year REG: 2127201001014

Sports Scholarship Awardee

The following students have received the sports scholarship



NAME: Abinanthan S Final year REG: 191001002



NAME: N Muthu Selvam Third year REG: 2127201001046

Merit Cum Means Scholarship

The following students have received the merit cum means scholarship.



NAME: K P Yokesh Final year REG: 191001069



NAME: J. M. Ramesh Aravind Third year REG: 2127211001055

Books and Instrumentation Scholarship

The following students have received the books and instrumentation scholarship.



NAME: Prawin D Third year REG: 2127201001313

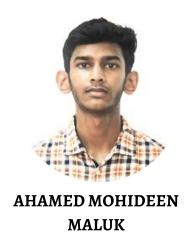


NAME: Devaraj S Second year REG: 2127211001012

STUDENTS SPORTS ACTIVITY

Mr. AHAMED MOHIDEEN MALUK, second year and his team played Table Tennis (Men) rocked and secured the Winners trophy in the Anna University zonal tournament organized in our campus on 19/11/2022.





INNOVATIVE PROJECTS - INTRAMURAL FUNDING

Title: Smart wearable knee comforter and wrist assist

Name of the Supervisor: Dr. S. Ramesh Babu Name of the Student: Mr. R Prashanna Rangan

Amount Received: Rs. 10,000

Title: Design and Fabrication of an individual actuated Three Fingers Modular

Gripper fort Industrial Application

Name of the Supervisor : Dr. M. Mohandass
Name of the Student : Mr. R Vishnu Chandran

Amount Received: Rs. 10,000

Title: Vision based Smart Stacking System
Name of the Supervisor: Mr. M. Arul Kumar
Name of the Student: Mr. P Sudharsan

Amount Received: Rs. 10,000

Title: Smart motorized flow control value for hydraulic Application

Name of the Supervisor : Mr. A. Kumarasamy Name of the Student : Mr. R Prashanna Rangan

Amount Received: Rs. 10,000









PLACEMENT REPORT OF BATCH 2019-2023



AJAY T (191001003) SUTHERLAND GLOBAL



AJITH A (191001004) COGNIZANT TAFE LTI



AKSHAY KUMAR R (191001005) STRATEGIC RESEARCH INSIGHTS SUTHERLAND GLOBAL



ARVIND M (191001006) COGNIZANT



ASHWIN KUMAR V (191001007) **ZOHO**



BALAJI M (191001008) SUTHERLAND GLOBAL NEWGEN



BALAKRISHNAN D R (191001009) TAFE



BHAVESH B (191001010) SUTHERLAND GLOBAL NEWGEN



HEMANTH VIGNESH M P (191001016) JOY TECHNOLOGIES



KENNY PHILIP FERNANDEZ (191001022) TESTSIGMA



LAKSHMI KANTHAN M (191001025) ACCENTURE



MANOJ KUMAR B (191001028) COGNIZANT



MOHAN RAJ E (191001029) DELIUM TECHNOLOGIES SONA COMSTAR



MUSTHAQ AHAMED K (191001030)



NITHIN R (191001034) COGNIZANT



AKASH S (191001302) SUTHERLAND GLOBAL



BHARATH KUMAR V (191001304) SUTHERLAND GLOBAL



GOWTHAM S (191001308) SUTHERLAND GLOBAL



JEEVANANDAN S (191001313) SUTHERLAND GLOBAL



JEEVANANDHAM H (191001314) COGNIZANT



JEYA PRASATH M S (191001315) COGNIZANT



KARTHIKEYAN S (191001316) TATA CONSULTANCY SERVICES



LOGESHWARAN S (191001319) SUTHERLAND GLOBAL



PRANAV K (191001038) ZOHO



PRATIC M (191001039) ZOHO COGNIZANT

PLACEMENT REPORT OF BATCH 2019-2023



RAJASUBRAMANYAM K (191001040) LTI SONA COMSTAR SUTHERLAND GLOBAL



RAMANATHAN A (191001041) TAFE



RISHI RAHUL M (191001044) COGNIZANT



RISIKESH J (191001045) SAINT-GOBAIN



ROHIT NARAYAN V (191001046) TAFE



SIDDHESHKUMAAR S (191001053) THEMATHCOMPANY SONA COMSTAR



SIDDHESHKUMAAR S (191001055) ACCENTURE SUTHERLAND GLOBAL NEWGEN



SIDHESWAREN J (191001056) SUTHERLAND GLOBAL



SRISANJAY K (191001057) SUTHERLAND GLOBAL



TANARI SAI VIGNESH (191001061) COGNIZANT



VENKAT KOWSIK K (191001065) SAINT-GOBAIN



VISHAL C B (191001067) ACCENTURE



YOKESH K P (191001069) **EUROFINS**



MOHAMED KAMIL A (191001320) THEMATHCOMPANY



NITHISH VASAND C D (191001321) SUTHERLAND GLOBAL



PRAVIN A P (191001323) SUTHERLAND GLOBAL



RAGUL S (191001324) SUTHERLAND GLOBAL



REVANTH AKILAN J M (191001325) SUTHERLAND GLOBAL



SATHISH SUNDAR (191001328) SUTHERLAND GLOBAL



SHRIDHARAN A V (191001329) COGNIZANT



SIVAPRASATH S (191001330) SUTHERLAND GLOBAL



VASANTHARAGAVAN J (191001334)

SUTHERLAND GLOBAL



VIGNESH A (191001335)

SUTHERLAND GLOBAL



(191001338)

GAVS TECHNOLOGIES,
LTI
SUTHERLAND GLOBAL

MAJOR RECRUITERS

CORE COMPANIES















TATA STEEL











































SOFTWARE COMPANIES



































DEPARTMENT'S - R & D FACILITIES



Reciprocating type -Tribometer



Welding robot



3D printing



Advanced Metrology



Advanced Welding Lab



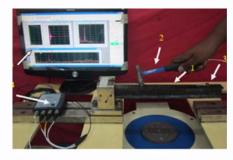
Nano Composites Lab



Advanced Manufacturing - CNC



AVL - Engine Setup



Vibration R & D Lab





Tribology Research Lab



Fiber Reinforced Plastics - Research Lab

EDITORIAL BOARD



EDITOR IN CHIEF

Dr. S. RAMESH BABU, Professor & Head – Mechanical Engineering Dept.SVCE.

EDITORS



Dr. M. Mohandass Professor & AHoD



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





