VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)



(Approved by AICTE NEW Delhi, Affiliated to Anna University Chennai, Accredited by NAAC with 'A+' Grade & Accredited by NBA)

DEPARTMENT OF MECHANICAL ENGINEERING "VCET-MECHMERIZE" NEWSLETTER - EVEN SEMESTER 2022-23



Issue: 2



MESSAGE FROM THE SECRETARY

It gives me immense pleasure for releasing the "VCET MECHMERIZE" newsletter for the Mechanical Engineering Department. The emerging science and technology have made drastic changes in the way we lead our life. The department magazine always provides a platform for the staff and students to showcase their talents and achievements. I extend my hearty congratulations to the staff and students of Mechanical Engineering for their efforts. On this occasion I convey my good wishes to staff and students of Mechanical Engineering in their endeavors.

- S. D. CHANDRASEKAR

Volume: 8

MESSAGE FROM THE PRINCIPAL

I feel immensely pleased in registering my deepest thoughts in the 8th volume of newsletter "VCET MECHMERIZE" 2022-23. I am very fortunate to work with such dedicated, innovative and caring staff members and students. It congratulates the students for the active participation in various co-curricular and extracurricular activities. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort. With Best Wishes.



- Dr. M. JAYARAMAN

MESSAGE FROM THE HEAD OF THE DEPARTMENT



It's immense pleasure to present the "VCET MECHMERIZE 2022-23" newsletter. Mechanical Engineering department is the dynamic and vibrant department with the blend of young and experienced Faculty. The department has well equipped labs with the state of art software, hardware and machineries. The faculty members are constantly publishing conference papers, patents, copyrights and delivered a keynote address. The department is fortunate to have dedicated teachers, devoted students, and committed supporting staff and expert technical staff. And also, I congratulate my students to participate various cocurricular and extra-curricular activities. My best wishes to all for their bright carrier and successful life.

-Dr. R. KUMARAVELAN

SAE Lecture Meeting

Organized a SAE Lecture Meeting on "Modelling and Drafting using Unigraphics" on 03.02.2023. Mr.R.Alaguvel Armstrong, Director, RAAA(OPC) Pvt Ltd., Chennai delivered NX CAD and recent automobile technologies. Students from SAEINDIA VCET Collegiate club actively participated and benefited.



1



Workshop

As a part of curriculum enrichment, a workshop is organized on Industrial Design and Practice using CATIA on 10.02.2023 for the third year students. Mr. Sathiya Moorthi, Lead Technical, SAN Technovation, Perundurai gave training on CATIA software to the students.

Guest Lecture

As a part of curriculum enrichment, a guest lecture is organized on Design Practice using CATIA on 10.02.2023 (FN) for the second-year students. Mr. Livingston, Sr. Design Engineer, SAN Technovation, Perundurai is the guest speaker. In his lecture, he clearly explained the roles of Design Engineers in Industry, Basics of CAD and the importance of CATIA software.



Workshop

A two days' workshop is organized on MEP-HVAC from 27.03.2023 to 28.03.2023 for the third year students as a part of curriculum enrichment. Mr. V. Muthu Prakash. MEP & HVAC Trainner. Innovative Engineering Solutions, Chennai gave training on REVIT MEP software to the students. The entire two days gone well, and students learned new fields and got some ideas for their upcoming project works.





Alumni Interaction Session

An Interaction session on 'Team building in a start-up' is organized on 22.02.2023. Mr.S.Raghul, Engineer, EFKON India Pvt Ltd, Maharashtra is the resource person, who is our renowned alumni of 2015-19 batch. He interacted with first year students about the benefits of team building, communication, planning skills, employee motivation, and employee collaboration etc.



Workshop

STUDENTS ACHIEVEMENTS Academic Toppers - Odd Semester 2022-23

Organized a workshop on Electrical Vehicle Design on 01.04.2023 for the second-year students. Er. M. Harry Andrews, CAD Engineer, C-Cube Technologies, Erode gave training on CREO software to the students. Students eagerly participated and learnt basics of CAD, New trends in EV Design and Importance of EV in future.

(2019-2023 Batch - Final Year



NAVINKUMAAR S 9.62 CGPA



PRAVEEN D 9.60 CGPA



SAPNAA N 9.92 CGPA



SANTHIYA R

9.69 CGPA

(2021-2025) Batch - Second Year



BHARANI S 9.16 CGPA



JAYA SHREE S 8.97 CGPA

CO- CURRICULAR AND EXTRA- CURRICULAR ACTIVITIES

(i) Participation in various events

- Third year students Sapnaa N and Sandhiya R won First prize in the Paper presentation titled "Investigations on various thread designs & materials for dental implants - A 3D finite element study" at Dr. N.G.P Institute of Technology, Coimbatore on 25.02.2023.
- Third year students Harshene S R and Sandhiya R attended Paper presentation titled "3D printed battery protective shield for EV's" at M.P.Nachimuthu M.Jaganathan Engineering College, Chennimalai, Erode on 03.03.2023.
- Second Year Students Arvinth K, Bharani S, Karuppanan J, Manikandan V attended Workshop titled "Electric Vehicle" at Knowledge Institute of Technology, Salem on 29.03.2023.
- 15 students attended Technical Quiz conducted by various institutions.

(ii) Academic Results

Odd Semester 2022-23 Pass %	
Final Year (Batch 2019-23)	98.63
Third Year (Batch 2020-24)	90.90
Second Year (Batch 2021-25)	80.00
Total	90.45

(iii) Special Awards

- Pranesh Kumar A & Arnesh S of III year B.E. Mechanical Engineering has been appreciated for Engagement and Volunteering towards SAE India Southern Section, Chennai Felicitated on 16.10.2022.
- 40 Students have participated in various competitions such as NX-CAD, Bicycle Design Challenge, Electric 2-Wheller Design Challenge, Trecking & Drone Design Challenge organized by SAE India @ Kerala, Chennai, Coimbatore, Salem. (Bicycle Design Challenge project is selected as the Best Project Team in competition conducted at KIOT, Salem)



(iv) Industrial Visit

• 57 students of Second Year B.E. Mech have undergone an Industrial Visit to M/s. Armstech Engineering Pvt. Ltd, Cochin on 04.03.2023.



(v) Placement Activities

- 3 Final year students Dilip Kumar B, Logesh M & Sadeesh J got placed in Macbro Technology, Erode.
- 3 Final year students Abishek S, Logesh V & Sreemalaikaruppanasamy S got placed in Mapals India Private Limited, Chennai.
- 2 Final year students Karthikeyan S & Ajith Kumar P got placed in Mitsuba India Pvt Ltd, Chennai.
- Nithish Kannan S got placed in Lakhmi Electrical Control Systems Pvt Ltd, Coimbatore.

(vi) Placement Statistics

- No. of Willing Students: 47
- No. of Students Placed: 35*
- % of Placement: 75%* (*As on 31.3.2023)

	No of
Name of the Company	Students
	Placed
Brakes India Limited, Chennai	01
Vinsinfo Pvt Ltd, Chennai	01
Delphi TVS Technologies Limited, Chennai	18
Mapals India Pvt Ltd, Coimbatore	03
Zuci Systems, Chennai	01
Tata Consultancy Services	01
Vuram Technologies	01
Renault Nissan Technology and Business Centre	01
Infiniti Software Solutions, Chennai	01
Cognizant	01
Macbro India Pvt Limited	03
Mitsuba India Pvt Ltd	02

FACULTY ACHIEVEMENTS

(i) Programme attended by Faculty members

No. of Events
14
01
15

(ii) Papers Presented in International Conferences

- A.T.Navin Prasad, Dr.R.Prakash & Dr.R.Kumaravelan 'An experimental study on the performance and emission characteristics of CI engines using bio-oil blends from Moringaoleifera', Materials Today: Proceedings, March 2023
- **D.Senthil Kumar** 'Investigation of vegetable oil as dielectric fluid in electric discharge machining, Materials Today: Proceedings, March 2023.

(iii) NPTEL Course Completion

- **Dr.S.Velumani** has successfully completed NPTEL course on "Accreditation and Outcome based Learning" with Gold+Elite during August- October 2022.
- **K.Ramakrishnan** has successfully completed NPTEL course on "Automation in Manufacturing" during July October 2022.

(iv) Books Authored

- G.Raja published book chapter "Role of IoT in Industry Predictive Maintenance" book title as Integration of Mechanical and Manufacturing Engineering with IoT: A Digital Transformation, in John Wiley & Sons, Inc. (ISBN: 978-1-119-86500-1)
- **G.Raja** published book chapter "Carbon Nanostructures" book title as Doping of Carbon Nanostructures for Energy Application, in Springer. (ISBN: 978-3-030-94374-5)

(vi) International Conference Organized (ICRAMM '22)

(v) Special Lecture Delivered

- **Dr.R.Kumaravelan** delivered a special lecture in FDP on "Design of Machine Elements" in SNS college of Technology, Coimbatore on 17.08.2022.
- **Dr.R.Kumaravelan** delivered guest lecture on National Energy Conservation Day in VET Institute of arts and science, Thindal on 14.11.2022.
- **Dr.R.Kumaravelan** delivered guest lecture on Newer Initiatives in Higher Education in 2 days NAAC sponsored National Seminar in Sri Ranganathar Institute of Engineering and Technology, Coimbatore on 17.12.2022.
- **Dr.R.Prakash** delivered a guest lecture on "Solar PV Thermal Technologies & Its Applications" in K.S.R. College of Engineering, Tiruchengode on 05.01.2023
- **Dr.R.Kumaravelan** delivered a special lecture on "Application of Finite Element Analysis" in Mangalam College of Engineering, Kottayam on 17.02.2023

(vi) Special Programme Conducted to Employees of Electric Loco Shed Erode

• Welders Training Program to the Employees of Electric Loco Shed Southern Railway, Erode as Phase -1 – September 1- 3, 2022 and Phase -2 – September 13- 15, 2022 - 17 Employees attended the programme



- International Conference on Recent Advances in Materials and Manufacturing (ICRAMM 2022) is conducted on 08.12.2022 & 09.12.2022 (2 days). This ICRAMM 2022 provides a platform to the research scholars, faculty, scientists and industry professionals to share their research findings, solutions to the domain problems and their valuable experience.
- The proceeding of ICRAMM 2022 is processed for publication in the Elsevier's Materials Today Proceedings (Scopus Indexed Journal).
- Keynote Speakers, 1. Dr. Naimah Binti Ibrahim, Universiti Malaysia Perlis, Malaysia, 2. Dr. B. Singaravel, Vignan Institute of Technology and Science, Telengana and 3. Dr. G. Rajamurugan, VIT University, Vellore.
- Manuscript, statistics, Received 568 | Accepted 232 | Registered 207.



Editor(s): Dr. R. Kumaravelan, Prof & Head Dr. R. Prakash, AP / Mech Associate Editor: R. Karthik Raj, IV Year / Mech D. Monish, III Year / Mech

4