

Newsletter

The Catalyst

(Accelerating your Growth rate)

Issue - IV, February, 2023

Department of Chemical Engineering

Vision

To be a leader in Chemical Engineering Education and Research by providing balanced learning and fostering research to enable the learners to meet the challenges of process industries and societal needs.

Mission

The Department of Chemical Engineering strives to produce graduates who practice Chemical Engineering professionally and ethically in a competitive global environment and contribute to the betterment of society, thereby focusing on the development of engineers to foster innovation through proficiency and effective communication.

Motivation: Alumni page



- Proud alumnus

Shri.Sriram N

**B.Tech Chemical engg, (2001-2005)
MBA - IITM.**

**Senior Vice President -
Digital Banking Governance
Citi Bank, Singapore.**

Dear students,

It gives me immense pride and pleasure to be talking to you through this section. It's a great honour for all of us to be a part of one of the greatest institutions in India, which has been nurtured over the years by many great hands. The four years I have spent at this esteemed institution has made me learn and unlearn many things, develop my skills and personality and more importantly built values and relationships that would last a life time. There is no doubt that academics and excelling it in continuously is indeed important, but what is more important is how we develop ourselves as a well rounded personality by the time we step out of this esteemed institution. Do not hesitate to grab every big or small opportunity that comes your way, to develop yourselves and work hard in this direction. Do talk to your professors, peers, seniors, juniors and everyone else I've always discovered that they do have a wealth of wisdom that we can benefit from. Always be hungry to learn, leverage all the resources that is around you and put in your best effort in whatever you may do. No doubt it wouldn't be an easy journey, but do remember that whatever breaks you, makes you. Please continue to face everything with a positive attitude and drive forward with courage and conviction. Many of you might be preparing for your term exams and year end placement tests, all the very best and may you achieve whatever you aspire for. My prayers and best wishes are always with you all.

Memorandum of Understanding (MoU): strengthening the roots

On 21.02.2023, a Memorandum of Understanding (MoU) was signed between Sri Venkateswara College of Engineering, Sriperumbudur, and M/s. Kothari Petrochemicals Limited, Chennai.

Under this MoU for training and research corporation, the following disciplines are identified.

1. Chemical Technology
2. Process Plant Simulation
3. Computational Fluid Dynamics Studies
4. Debottlenecking studies
5. Process Equipment Design
6. Process Plant Safety Studies
7. Environmental Sciences



Funded Project: Collaborative Research with IITM

Principal Investigators: Mr. V.K. Vignesh, III year B.Tech, Chemical Engineering
Dr. N.P. Kavitha, Assistant Professor, Dept. of Chemical Engineering
Dr. G. Sudha, Associate Professor, Dept. of Chemical Engineering

Research Collaborator: Dr. Omkar S. Kushwaha, Principal Project Scientist,
Department of Chemical Engineering, IIT Madras.

Title of the Project : Design and Development of Reactive Electrochemical Hybrid
Membrane Systems for onsite Decentralized Wastewater treatment.

This Project is funded under the scheme Research Grant for collaborative research with Indian Institute of Technology Madras, is recommended by review committee Sri Venkateswara College of Engineering, Sriperumbudur and the Management pleased to sanctioned an amount of Rs. 70,000, and duration of the project is 6 months (January 2023 to June 2023).



Fostering Research: Funded project:

The following U.G Innovative Student Project is awarded fund for the academic year 2022-2023.

Sl. No.	Name of the Faculty / Student	Research topic	Amount Rs.
1	Student Group: Ms. K. Swetha Mr. M Syed Zeeshan Mr. M Umar Farook Final year, B sec Mentor: Dr. R.Palani, Associate Professor/CHE	Extraction of biocolours from plant species for application in food, pharmaceutical and cosmetics	10,000
2	Student Group: Mr. S. Vasudevan, Mr. M. Rohith Narayan Final year, B sec Mentor: Mr. S. Jai Ganesh Assistant Professor/CHE	Design and experimental validation of Cavitation reactor	10,000

Journal Publication

Dr. N.P. Kavitha, Assistant Professor, has published a paper entitled " Thermophysical properties and molecular interactions of fuel oxygenate mixture at different temperatures via Jouyban–Acree model " in " AIP Conference Proceedings" on 07 February, 2023.

Dr. R. Palani, Associate Professor, has reported the published paper titled, "Synthesis and performance of a cathode catalyst derived from areca nut husk in microbial fuel cell", in Chemosphere, 2013, 312, 137303.

Dr. R. Palani, Associate Professor, has reported the published paper titled, "Experimental investigation on the thermo-physical properties and tribological performance of acidic functionalized graphene dispersed VG-68 hydraulic oil-based nanolubricant", in Diamond & Related Materials, 2023, 133, 109740.

Sponsored Industrial Visit: Balanced Learning

INDUSTRY: the bottling plant of IOCL (located near Chengalpattu).

Sponsored by: PALS.

Associated Faculty and Students: Dr. R. Rajesh @ Nithyanandam, Associate Professor, IInd year Chemical Engineering students – Mr. Balaji (2127210301007), Mr. Arjun (2127210301004) ; III rd year Chemical Student – Mr. D.S. Paveen Raj (2127200301032)



Feedback: “we learned the bottling process and safety protocol adopted by IOCL for accident free zone. It was also a great opportunity to communicate with other college faculties and students to share the knowledge and IOCL staffs clarified all our doubts about the process and operation with smiling face”.

Recent Campus Placement:

Total two students (Mr. Madhan kumar and Mr. Viswa Gangadhar) of final year B.Tech Chemical Engineering, have secured campus placement in M/s.Thrumalai Chemicals Limited, after a rigorous campus placement activity on 14.02.2023



Best Recognition: Upcoming Abroad Student Internship

Ms Shrima M, from III year B Tech (Chemical Engineering) got a Globalink Research Internship (GRI) Award Letter from University of Alberta, Mitacs for 12 weeks.

Her Research Project Title : Novel Thermally stable membranes for recycle and reuse of high temperature water.

The Award includes the living expenses and internship amount of 9000 CAD, and internship will be undertaken during June - September 2023.

Programmes run by the Department of Chemical Engineering are,

- **B.Tech Chemical Engineering**
- **M.Tech Chemical Engineering**
- **Ph.D**

B.Tech CHEMICAL Engineering – PROGRAMME SPECIFIC OUTCOME's

PS01: Apply the knowledge of science and mathematics in the field of various transport processes to accomplish the contemporary needs of chemical and allied industries.

PS02: Execute the chemical engineering principles and modern engineering tools to conduct experiments or design a system for developing quality chemical processes by considering the cost, safety and environmental aspects.

M.Tech CHEMICAL Engineering - PROGRAMME SPECIFIC OUTCOME's

PS01: Apply the knowledge of science and mathematics in the field of various transport processes to accomplish the contemporary needs of chemical and allied industries.

PS02: Execute the chemical engineering principles and modern engineering tools to conduct experiments or design a system for developing quality chemical processes by considering the cost, safety and environmental aspects.