



Newsletter

The Catalyst (Accelerating your Growth rate)

Department **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

M1: To produce graduates practicing Chemical Engineering professionally and ethically.

M2: To produce Chemical Engineering graduates contributing to the betterment of society in the competitive global environment.

M3: To focus on the development of Chemical Engineers to foster innovation through proficiency and effective communication.





Motivation: Alumni page



Proud Alumnus: Dr. Sriraam R Chandrasekaran, B.Tech Chemical Engineering (2005-2009)

Principal Research Engineer Scale-up & Process Innovation Division, Eastman Chemical, USA We all have our reasons to pursue Chemical Engineering. For many that reason can be a job or a first step in going towards a higher education and a specialized area of study and to some it may even be just to get the degree. And trust me whatever the reason might be, it is the best reason for you. SVCE Chemical Engineering provides exactly what you seek.

The four years (2005-2009) I spent at SVCE, I had a strong appetite for research. SVCE chemical engineering department provided the opportunity and support to conduct research. I started my research at the beginning of 3rd semester working with the faculty and gained first-hand experience conducting research. This experience motivated me to pursue a master's and a PhD degree in the USA. I continued to conduct research in a world class university for 11 years post my PhD. Currently, I am a Principal Research Engineer for Eastman Chemical company helping build circularity and sustainability in chemical processes. During these 14 years of my journey there were several things that I have learned and still do learn something new everyday. I encourage you all to continue to learn beyond the 4 years. The learning can be as small as "adding salt to your dish" but that addition makes your food delicious. Continue to pursue what you want. No matter how hard the hurdles are, don't stop pursuing. Remember to have fun along the way. Step back and rethink your journey if you're not having fun. Nothing is worth your happiness and health. My prayers are always with you!





Annual - Alumni meet: - Sharing of Wisdom.



Madras Management Association has conducted an Annual meet for Alumni of Sri Venkateswara College of Engineering on 9th July 2023.

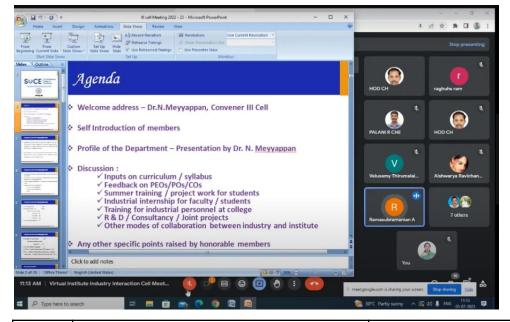






Industry - Institute - Interaction Cell:- Experts touch

The Department of Chemical Engineering has conducted a IIIC meeting (Online mode) on 5th July 2023, to appraise the academic activities and to receive the suggestions and well wishes from industry experts.

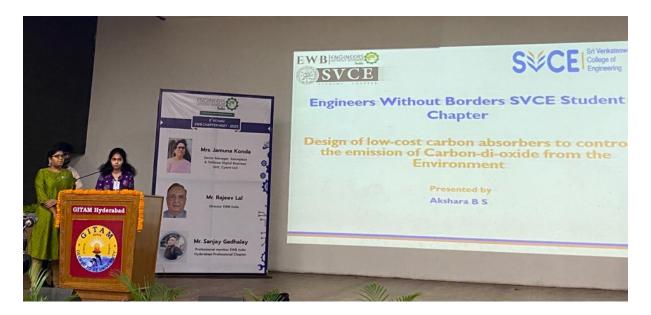


SI.No.	Industry Experts	Association
1.	Shri. Ramasubramanian A	Associate Vice President - PROCESS Technip, Chennai.
2.	Shri. Raman V	Director & CEO, Sim Infosystems Pvt Ltd, Chennai
3.	Shri. Prabhu Deva	Director, Precision Equipments (Chennai) Pvt Ltd. Sriperumbudur.
4.	Shri. Thirumalaisamy.V	Exec VP - Project & Engineering, Thirumalai Chemical Ltd, Ranipet.
5.	Shri. Sivakumar Muthiah	Sr. Manager - Production Parle Agro, Chennai



Engineers without Borders - Student Chapter: Awards

EWB - SVCE student chapter is happy to share that they won the 1st prize in the EWB - India, All India Meet - 23 (AIM - 23), SDG track 2 held at GITAM University, Hyderabad during 23 rd & 24th June 2023, under the mentorship of Dr R Palani, ASP/CHE. They presented a paper titled "Carbon FootPrint Accounting " which Won their first prize.







Internship/Inplant Training: Process Industries/ Societal needs

The decorated "Wall of Names" of third and fourth year students of B.Tech Chemical Engineering have reported for undertaking internships during their summer break, in the following institutions/organizations.

aravind u vanisuvathsala s v moksaa prasan p chemfab alkalis Itd spic santhosh kumar s dakshana k saipem india projects anusha prk tnpl oarkavi k haresh babu m nit trichy ethiraj v l arul murugan s kothari petrochemicals premium coatings



Programmes run by the Department of Chemical Engineering are,

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

B. Tech CHEMICAL Engineering

Programme Educational Objectives

PEO1: Understand and apply the basic principles of science and engineering to modern chemical technology.

PEO2: To inculcate problem solving skills, conduct experiments, analyze and interpret the data.

PEO3: To design processes within realistic constraints such as economic, social, ethical, environment, health and safety conditions.

PEO4: To provide opportunities to students to engage in professional societies, and help them to acquire new skills to stay connected with today's fast progressing environment.

PEO5: To provide awareness in critical thinking, environmental, ethical and professional practice including improving communication skills.

Programme Outcomes

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.



PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

P10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.





P11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOME's

PSO1: Apply the knowledge of science and mathematics in the field of various transport processes to accomplish the contemporary needs of chemical and allied industries.

PSO2: 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 Educational Objectives

PEO1: Acquire comprehensive knowledge in Chemical Engineering and research capabilities.

PEO2: Analyze and solve using Chemical Engineering principles and modern engineering tools to conduct experiments for improving the quality of the chemical processes.



PEO3: Design processes within realistic constraints such as economic, social, ethical, environment, health and safety conditions.

PEO4: Provide opportunities to students to engage in professional societies, and help them to acquire new skills to stay connected with today's fast progressing environment.

PEO5: Empower students to become entrepreneurs for Chemical industries.

Programme Outcomes

PO1: Independently carry out research /investigation and development work to solve practical problems.

PO2: Write and present a substantial technical report/document.

PO3: Demonstrate a degree of proficiency over the area as per the specialization of the program. The proficiency should be at a level higher than the requirements in the appropriate bachelor program

PO4: Potential to analyze solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety.

PO5: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO6: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.



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Editorial Team: Dr. N. Meyyappan, HOD/CHE & Mr. S. Jai Ganesh, AP/CHE. Student Team: Prerna Unnathe N, Ramapriyan A, Sanjana Shree P N. - II year CHE

