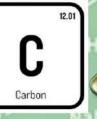


# DEPARTMENT OF CHEMICAL ENGINEERING





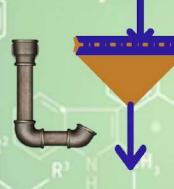
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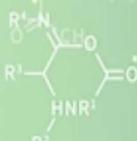
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### CATALYST

ACCELERATING YOUR GROWTH

Volume - 2, Issue - VIII, August, 2023







#### **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: Mr. S. Pandiyan, B.Tech Chemical Engineering (2009-2013)

Deputy Manager - Production Kothari Petrochemicals Limited, Manali, Chennai. I trust this letter finds you well and brimming with ambition as you embark on your educational journey at SVCE. As an alumnus of this esteemed institution, graduating in 2013 with a degree in Chemical Engineering, I am deeply honored to share my experiences and insights with the aspiring minds who are currently shaping their futures within these hallowed halls.

My career spanning over a decade in the Chemical and Petrochemical Industries has been a remarkable odyssey of learning, growth, and discovery. Throughout these years, I have accumulated a wealth of knowledge and honed my skills across various domains, including Manufacturing, Operations, Process Optimization, and Troubleshooting.

Your education at SVCE forms the bedrock upon which your careers will flourish. Embrace the wealth of knowledge, mentorship, and resources available here. Pledge yourselves to the pursuit of excellence, maintaining unwavering dedication.

In conclusion, my gratitude to SVCE is immeasurable for nurturing my potential and guiding me towards a fulfilling career. To the current students, I ardently encourage you to approach your academic journey with zeal, adaptability, and an unshakable commitment to excellence. Your dedication today is the crucible in which the leaders and innovators of tomorrow are forged

I wish each of you a fulfilling educational experience and a future filled with limitless opportunities. May you continue to shine as proud representatives of SVCE's Chemical Engineering Department.



#### NBA - Awareness and Preparedness: Guest Lecture

On 07th August 2023, an awareness lecture was conducted to emphasize the importance of NBA to students of II, III and IV year of Chemical Engineering students. Dr.E. Nakkeeran, Professor and HOD, Department of Biotechnology.







#### 5S - Implementation: 1st - S: Sort - SERI - 整理

IQAC through department coordinator, Dr. M. Srividhya, Assistant Professor has identified the Red tag materials, in order to implement 5S at Chemical Engineering Laboratories.







#### NBA - Expert Team Visit - 11th, 12th & 13th August 2023:

We wish to express our sincere gratitude to the Management, Secretary, Principal, Deans, HoDs, CoE, CPO, Faculty members, Supporting staff, Civil and Electrical Maintenance team, Canteen team, IMS department, Hostel, NBA Mock Inspection committee members, NBA expert accompanying teams, Stakeholders (Alumni, Parents, Employers, Students, Faculty and Supporting Staff); towards the successful completion of the ETV as scheduled.







#### Faculty Achievement: as Resource person

Dr. G. Sudha, Associate Professor and Mr. M. Ananda Boopathy, Assistant Professor, have mentored the participants in "Accelerators/Incubators - Opportunities for Student and Faculties - Early Stage Entrepreneurs", organized by IIC - SVCE on 25th August 2023.





#### **RED RIBBON CLUB: Competition and Award**

The Art of Living Foundation has instituted the Creatives Award for a music video contest to recognize and foster young talent to create awareness around the theme of Drug-Free India (DFI).

Total 149 Students have registered for this event across various departments from SVCE, scheduled at ANNA UNIVERSITY, Chennai on 26th August 2023 and SVCE has bagged 2nd prize with the cash award of Rs.15000/-, with the mentorship from Dr. G. Sudha, Associate Professor, RRC Coordinator, SVCE.





#### Internship/Inplant Training: Process Industries/ Societal needs

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

thirumalai chemicals Itd saranya s jothika d hindhuja b saint gobain india pvt Id



#### 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.



#### **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.

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