



# ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

APPROVED BY AICTE, NEW DELHI AND PERMANENTLY AFFILIATED TO ANNA UNIVERSITY, CHENNAI  
ACCREDITED BY NBA, NEW DELHI, NAAC WITH GRADE "A", IE(I), KOLKATA



PERUNDURAI, ERODE - 638 057.

## CHEMICAL ENGINEERING NEWS LETTER

ACADEMIC YEAR 2022 - 2023

VOLUME - I



### ABOUT THE DEPARTMENT

The Department of Chemical Engineering has been successfully functioning since 1996. The courses offered are B.Tech. (Chemical Engineering) and M.Tech. (Chemical Engineering). It organizes Symposia, Exhibitions, Conferences, Seminars and Workshops for both students and Faculty belonging to various Technical Educational Institutions, Research Scholars, Research Institutes and Industries all over India.

The Department is Accredited by NBA, since 2009 and Institute is accredited by NAAC with "A" grade since 2015. The department has state-of-the-art laboratory facilities with sufficient modern day equipment. Our students are placed in various top MNCs like SPIC, Sanmar, Manali Petrochemicals Limited, Tuticorin Alkali Chemicals Private Limited, Wipro, etc.

The department is recognized as approved research centre for pursuing Ph.D by Anna University.

#### Vision of the Department:

To provide world class technical education in Chemical Engineering and to promote Scientific Research in Chemical Engineering and its allied areas

#### Mission of the Department:

- DM1** : To impart knowledge to enrich the innovative excellence and positive thinking of students through proper technical education in Chemical Engineering and allied fields.
- DM2** : To encourage students for creating value added products and commodities which serves the society irrespective of the socio-economic background.
- DM3** : To motivate the students to forecast the societal needs and build their research and development capabilities with open ended experiments and projects beyond the syllabus
- DM4** : To emphasize more on to develop the students to become highly qualified professionals with competency and ethical values.

## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

**I. Preparation:** To provide strong fundamental technical knowledge and professional skills to obtain positions in industrial, government, academic or other organizations.

**II. Core Competence and Professionalism:** To develop the students with contemporary knowledge and competency in Chemical Engineering and its diversified area such as Petrochemical, Pharmaceutical, Bio-chemical, and allied fields.

**III. Breadth:** To create the students with more interest on multi-disciplinary projects with active communication skills to effectively bridge Engineering and non-Engineering fields through a commitment to overall personality and career development.

**IV. Learning Environment:** To impart the students to gain interest on life-long learning, research, communication techniques pertaining to job-oriented skills with right attitude and ethics.

## PROGRAM OUTCOMES(POs) Engineering Graduates will be able to:

**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, review 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 teamwork:** Function effectively as an individual and as a member or leader in diverse teams, and in multi-disciplinary settings.

**PO10.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.

**PO11.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 multi-disciplinary environments.



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

### PROGRAM SPECIFIC OUTCOMES (PSOs)

**PSO1. Process modeling & simulation:** Developing applied knowledge through Process Modeling & Simulation in Chemical Process Industries.

**PSO2. Contemporary skills:** An ability to update knowledge on recent developments in Chemical Industries.

**PSO3: Core employability:** To produce efficient and specialized Engineers in the field of Fertilizers, Petroleum, Drugs & Pharmaceutical Technology and Specialty chemicals.

### DEPARTMENT ACTIVITIES



Mr.S.Sathyan , Assistant Engineer, Tamil Nadu Pollution Control Board, Ooty delivering Guest Lecture on the topic "Opportunities for Chemical Engineers in Government Sector" on 24.01.2023.



Dr.R.Kannan, Professor and Head, Department of Petrochemical Engineering, RVS College of Engineering and Technology, Coimbatore delivering Guest Lecture on the topic "Chemical Waste Management" on 03.02.2023.



Mr.L.Nagaraj, Assistant Engineer, India Cements Private Limited, Sankari delivering Leaders Talk on the topic "The Cement industry: The Challenges Faced and its Scope in the Future" on 14.02.2023.



Dr.S.Kavitha, Assistant Professor, Department of Petrochemical Engineering, JCT College of Engineering and Technology, Coimbatore delivering seminar on the topic "Global Warming and Climate Change" on 23.02.2023.

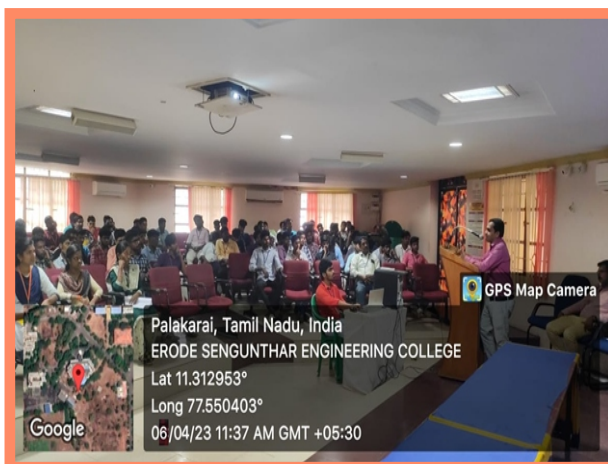




Mr.K.Kamalahasan, Technical Director, Fermion Energy and Engineering Solutions Private Limited, Coimbatore delivering Guest lecture on the topic "Recent Advancements in Process Modeling and Simulation" on 02.03.2023.



Mr.B.Sridharan, Lead Thermo Mechanical Engineer, Baker Hughes, Bangalore delivering Leaders talk on the topic "Opportunities for Chemical Engineers in Oil and Gas Sector" on 16.03.2023



Mr.P.Babu, Academic Coordinator, TIMES Institute, Erode conducting career guidance program on the topic "How to crack UPSC Examinations" on 06.04.2023.



Mr.G.Aswin, Supervisor, Biostarch Plastics, Chennai delivering a leaders talk on the topic "Plastic Waste Management" on 18.04.2023.



Mr.S.Sarvana Kumar, Assistant Manager, Tamil Nadu Newsprint and Papers Limited, Karur delivering leaders talk on the topic "Fundamentals involved in Paper Production" on 28.10.2022.



### Papers published by faculty members in Conferences / Journals

Mrs.S.Vaishnavi	Phyto remediation potential of Elodea canadensis for reduction of chromium – optimization using response surface methodology	Desalination and Water Treatment	Published on May 2023 293 (2023) 192–199 May DOI:10.5004/dwt.2023.29514
Dr.R.Perumal	Effectiveness of Ladies Finger on blood Glucose	International Journal of Intellectual Advances and Research in Engineering Computation	Published on March 2023 Vol-11(1) 2023 [17-23] ISSN: 2348-2079
Dr.P.Akila mudhan	Carbon-Based Nano Adsorbents for the Removal of Emerging Pollutants	Adsorption Science and Technology	Published on 15 Apr 2023 <a href="https://doi.org/10.1155/2023/3579165">https://doi.org/10.1155/2023/3579165</a>
Dr.P.Akila mudhan	Journal of Chemistry	Statistical Optimization of Bioleaching for Simultaneous Recovery of Cu, Sn, Pb, and Zn from Computer-Printed Circuit Boards	Published on 13 may 2023 <a href="https://doi.org/10.1155/2023/3432694">https://doi.org/10.1155/2023/3432694</a>
Mr. V. Santhosh	Bio - mass Conversion and Bio-refinery	Qualitative improvement of bio-oil derived from hydrothermal liquefaction of liquid fertilizer drained Kappaphycus alvarezii	Published on Jan 2023 <a href="https://doi.org/10.1007/s13399-023-03749-1">https://doi.org/10.1007/s13399-023-03749-1</a> Impact Factor: 4.987
Dr. M. Aynul Rifaya	Bulletin of Environment, Pharmacology and Life Sciences (BEPLS)	Identification of Lead Moiety to Inhibit Catechol – O- Methyl, Transferase in the Treatment of Parkinson's Disease: A Computational Approach	Published on May 2023 Volume 12 [6/7] 2023
Dr. M. Aynul Rifaya	Bulletin of Environment, Pharmacology and Life Sciences (BEPLS)	Discovering New Lead Moieties as Ace Inhibitors: A Computational Approach	Published on May 2023 Volume 12 [6/7] 2023

### Participation in inter-institute events by students of the program of study

Academic Year	Paper, Poster, Project & Conference			Seminar, Workshop, Webinar, Hands on Training & Quiz etc.,		Extra-Curricular Activities	
	No. of Paper	No. of Participants	No. of Awards	No. of Participants	No. of Awards	No. of Participants	No. of Prize
2022-2023	42	134	15	130	6	48	10

## PLACEMENT DETAILS 2022-23

- ❖ Southern Petrochemical Industries Corporation Ltd, Tutucorin.
- ❖ Tuticorin Alkali Chemicals and Fertilizers Limited (TFL), Tutucorin.
- ❖ The Sanmar Group, Chennai.
- ❖ Tamil Nadu Petro-products Limited, Chennai.
- ❖ Cipla Limited, Bengaluru.
- ❖ Tagros Chemicals India Limited, Cuddalore.
- ❖ Biocon Limited, Bengaluru.
- ❖ Divi's Laboratories Limited, Hyderabad.
- ❖ Global Calcium Private Limited, Hosur.
- ❖ Anjan Drug Private Limited, Chennai.
- ❖ Anabond Limited, Chennai.
- ❖ Bannari Amman Group, Coimbatore.
- ❖ Wafe Auxillary Chemicals Pvt. Ltd, Coimbatore.
- ❖ United Heat Exchangers, Coimbatore.



**CHANDRU D**  
SPIC  
2.64 LPA



**SARAVANAN R K**  
SPIC  
2.64 LPA



**SANTHOSH KUMAR**  
SANMAR  
2.4 LPA



**VISHAL P**  
Technook  
6 LPA



**HARISUDHAN C**  
CTS  
4LPA



**ROOHULLA S**  
CTS  
4 LPA



**SUNDAR R**  
CTS  
4 LPA



**ANANDHAKRISHNAN G**  
PPG Asian Paints  
3.12 LPA



**HARIRAM**  
PPG Asian Paints  
3.12 LPA



**SAKTHIVEL B**  
PPG Asian Paints  
3.12 LPA



**AJAY VARSHAN M F**  
WAFE Auxillary  
Chemicals Pvt Ltd  
3.09 LPA



**AVANI PRAVEEN**  
WAFE Auxillary  
Chemicals  
3.09 LPA