



Thiagarajar
College of Engineering

where quality and ethics matter



DEPARTMENT OF CHEMISTRY



Vision

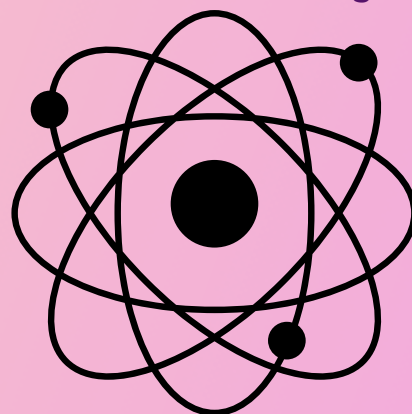
To excel in chemistry and interdisciplinary research, with a commitment to sustainability and socially responsible innovation.

Mission

- Provide a strong foundation in chemistry principles that supports and enhances the understanding of engineering problems.
- Promote interdisciplinary learning and research, bridging chemistry with engineering fields to solve real-world technological and environmental challenges.
- Adopt sustainable methods for addressing societal and industrial needs through innovative and collaborative research.

Programmes Offered

- Research Programme (Ph.D.)



Department Overview

The Department of Chemistry at Thiagarajar College of Engineering, established in 1957, is approved by AICTE and accredited by NAAC, and serves as a recognized research Centre for Ph.D. programs under Anna university Chennai. With a team of fifteen highly qualified faculty members, all holding Ph.D. degrees, the department plays a vital academic role by offering courses in Engineering Chemistry, Applied Chemistry, Textile Chemistry, and Environmental Science for first-year students, along with six interdisciplinary elective courses for higher semesters. It promotes collaborative and interdisciplinary research, with students from various engineering branches undertaking project work in its well-equipped laboratories. The department provides industrial consultancy and testing services and is credited with obtaining the institution's first patent for the innovative "Plastic Tar Road" technology, followed by a second patent related to alternative fuel development using waste plastics.

HIGHLIGHTS

- Established in 1957, alongside the founding of Thiagarajar College of Engineering.
- Recognized Research Centre under Anna University.
- Dedicated research theme in Solid Waste Management, Materials for Energy, and Environmental Applications.
- Strong research focus on Green Chemistry, Sustainable Technologies, Nanomaterials, Functional Materials, Solar Cells, Water Technology, and Waste Management.
- Offers Engineering Chemistry and Environmental Science courses for undergraduate engineering students.
- Offers advanced foundation electives in Battery Science and Technology, Materials Characterization, Green Chemistry and Technology, Chemical and Electrochemical Sensors, and Sustainable Waste Management.
- Provides project guidance and research support for UG, PG, and Ph.D. scholars.
- Research supported by reputed agencies including DST, SERB, MOEF & CC, and Government of India.
- Equipped with specialized research facilities in polymer/plastic tar road technology, advanced materials, functional materials, and chemistry laboratory.
- Notable contributions to plastic waste recycling and sustainable road technology, including the pioneering Plastic Tar Road technology associated with Padma Shri awardee Dr. R. Vasudevan.
- Active engagement in interdisciplinary research, innovation, sustainability, and industry-oriented applications

Faculty Strength 15

Faculty with Ph.D 15

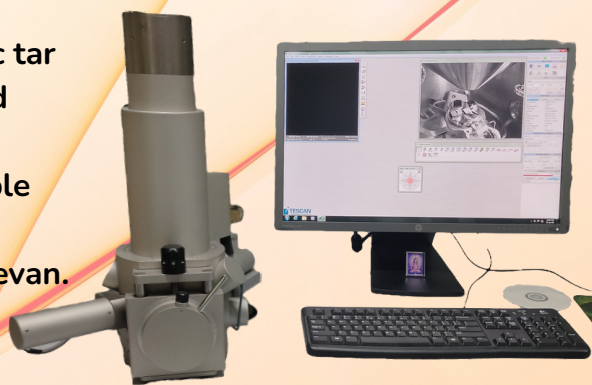
**Anna University
recognized supervisors** 8

**Lab
Technicians** 3

Laboratories 4

Centre of Excellence 3

**Innov Chem Club
students** 105



Scanning Electron Microscope (SEM)

Advanced Laboratories

- Polymer/Plastic tar road research laboratory
- Advanced Material laboratory
- Functional Materials laboratory
- Chemistry laboratory

Centres of Excellence

- Environmental Information, Awareness, Capacity Building and Livelihood Program- Program Centre (EIACP – PC RP, TCE)
- Centre of excellence in Hydrogen Energy Research
- Centre for Sustainability

Research & Development



Notable Alumni



S. ANANDHAN

Professor & Former Head,
Department of Metallurgical and Materials
Engineering,
National Institute of Technology Karnataka,
Surathkal, Srinivasnagar, Mangaluru -
575025, India



Vignesh kumar Thoomatti Haridass

Post Doctoral Research Associate
University of Georgia
Athens, Georgia 30602
USA.

Total Ph.D. Awarded - 9

Total number of scholars- 11

Sponsored project fund - 3.5Cr

Industry Interface Projects with Industry Collaborations



FACULTY AWARDS & ACHIEVEMENTS

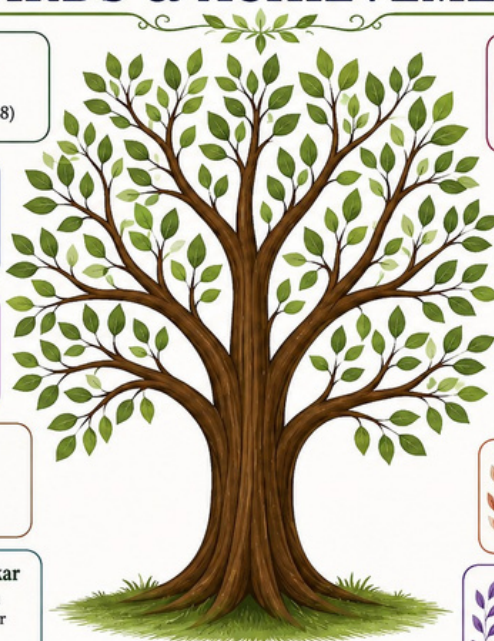
Dr. R. Vasudevan
Padma Shri Award -
Government of India (2018)

Dr. V. Velkannan
Quality Research Paper
Appreciation Award,
TCE, Madurai (2024)

Dr. S. Sivallango
Best NSS Program Officer -
Anna University,
Chennai (2024)

Dr. M. Velayudham
Elite + Silver -
NPTEL Introduction to
Biomimicry (2024)

Dr. A. Ramalinga Chandrasekar
Signed an International MoU at
Democratic Republic of Congo for
Plastic Tar Road Technology.
Obtained three Design Patent
during the year (2025)



Dr. B. Shankar
Quality Research Paper
Appreciation Award -
2023 & 2024.

Dr. R. Sivakumar
Best Lab Maintenance Award -
Chemistry Laboratory
2nd Prize (2024)

Dr. A. J. Sunija
Best Paper Award -
HSSRC Conclave,
NIT Warangal (2024)

Dr. P. Ramkumar
Young Researcher Award,
LKB Academy, Madurai
(2026)

Dr. R. Raj Kumar
Best Teaching and Research
Excellence Award,
LKB Academy, Madurai (2026)

Dr. B. Sundarakannan
Environmental Sustainably Award,
LKB Academy, Madurai (2026)

EVENTS, EXCELLENCE AND RECOGNITION



Padma Shri conferred on Dr. Vasudevan



CSIR SPONSERED ICISTEEH -26



Inauguration of Innov-Chem club



**Centre for Hydrogen energy research-
Inauguration of the Centre**



Chemistry laboratory



5s (2nd price for Chemistry laboratory)



Students program



TN Govt Sponsored FDP @ GCT Coimbatore

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For more details:

