SSBT's College of Engineering & Technology, Bambhori, Jalgaon
(Included under section 2 (f) and 12(B)of the UGC Act, 1956)
Grade A (3.14) NAAC Accredited
Department of Chemical Engineering

MOMENTUM

News Letter Vol. No. XXVIII July.2025 – Dec.2025

VISION

Today we carry the flame of quality education, knowledge and progressive technology for global societal development; tomorrow the flame will glow even brighter.

MISSION

To provide conducive environment for preparing competent, value added and patriotic chemical engineers of integrity of par excellence to meet global standards for societal development.

Salient Features of Chemical Engineering Programme:

- ***Experienced, Qualified & Research Oriented Faculty***
- ***Program Accredited Thrice by NBA***
- ***Modern and Well Equipped Laboratories***
- ***Excellent Results***
- ***Research Facilities***
- ***Departmental Library with Internet Facility***
- ***Long Tradition of Gold Medalist in University Exams***
- ***Consultancy for Chemical Engineering & Allied Processes***
- ***Teacher Guardian Scheme***
- ***Excellent Self-Study Material***

Freshers' Welcome

Programme Educational Objectives (PEOs) of Chemical Engineering Department

1. Core Knowledge
To provide the quality education in the field of basic sciences, mathematics, chemical engineering and allied technologies to pursue higher education and research for global socioeconomic development.
2. Employment
To motivate the students for gaining value added knowledge and real world exposure by industrial training, visits and workshops.
3. Professional Competency
To build a chemical engineer of integrity and par excellence with professional and ethical values.

Programme Outcomes (POs) of Chemical Engineering Department

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 team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary 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 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 Outcomes (PSOs) of Chemical Engineering Department

PSO1 How are you able to apply basic principles of science, mathematics and chemical engineering skills in interpreting and analyzing experimental data for societal development?
PSO2 How are you able to design and provide solutions to problems in the development of chemical and allied industries?
PSO3 How are you able to display multidisciplinary approach for providing techno-economical and eco-friendly solutions?

Activities Conducted by Chemical Engineering Department in Academic Year 2025-26 (Term-I)

DATE	EVENT NAME	EVENT DESCRIPTION
28/08/2025 To 03/09/2025	Add-on Course	Department conducted one week (30 Hours) add on course on **"Environmental Pollution Control Techniques"**, for the students of chemical engineering.
15/09/2025	Engineers' Day Celebration	Engineers' Day celebrated on 15th September to commemorate the birth anniversary of Sir Mokshagundam Visvesvaraya.
15/09/2025	Tree Plantation	Tree plantation program was conducted at SSBT'COET Campus. Students of the department actively participated in the program.
23/09/2025	Ayurveda Day	The 10th Ayurveda Day, celebrated on September 23, 2025, features the theme **"Ayurveda for People & Planet".** The event jointly organized by Chemical Engineering department & NSS Unit of College.
27/09/2025	Fresher's Welcome	A freshers' welcome for First Year (FE) Chemical engineering students was organized to help them transition into college life through a mix of orientation, introductions, cultural performances, and networking.
15/10/2025	Guest Lecture	On the occasion of **National Innovation Day** an online guest talk on **"Innovations in Li-CO_2 Batteries"** of Mrs. Shubhangi Bajad from Institute of Advanced Research, The University for Innovation, Gandhinagar, Gujarat was conducted.
13/12/2025	National Energy Conservation Day	**National Energy Conservation Day** was celebrated on the theme "**Sustainability Energy Innovation and Citizen Partnership"** for the students of FE. The event Jointly organized by Chemical and Electrical Engineering under SSBT Energy Club.
26/12/2025	Alumni Lecture	Expert Lecture of Mr. Vilas Patil, Lead Carbon Management and Energy Efficiency Engineer at Maaden, Saudi Arabia on the topic **"How to Prepare for Online and Face to Face Interview"**

Tree Plantation

A tree plantation program was organized at the SSBT's College of Engineering and Technology campus to promote environmental awareness and sustainability. Students actively participated in planting saplings across the campus, contributing to enhanced greenery and ecological balance. The initiative also encouraged students to take responsibility for nurturing the plants, fostering environmental consciousness and a sense of social responsibility.

B.E. Chemical Engineering Students Rank in KBCNMU Dec.2025 Exam. Sem.-VII (2025-26)

Merit No.	Name of the Student	SGPA
1	Thorat Rohan Sanjay	8.48
2	Thorat Harshal Harish	8.19
3	Thakare Yuti Sarojkumar	8.14
4	Gohil Meetkumar Vinodbhai	7.86
5	Sandhanshiv Aakash Dilip	7.14

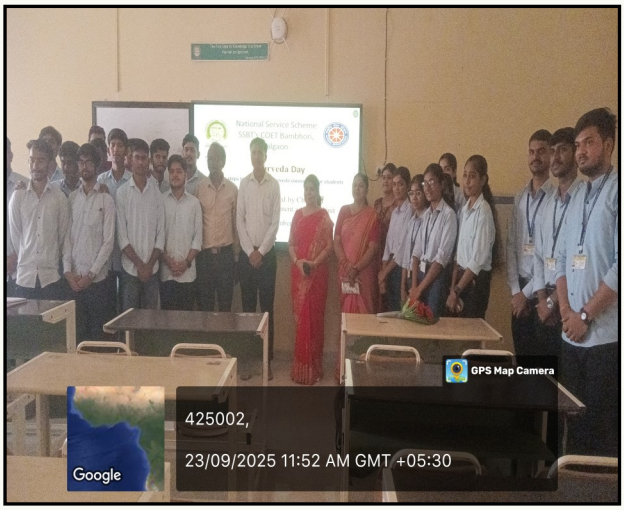
T.E. Chemical Engineering Students Rank in KBCNMU Dec.2025 Exam. Sem.-V (2025-26)

Merit No.	Name of the Student	SGPA
1	Mahajan Dilip Ishwar	7.00
2	Chavan Varun Vija	6.76
3	Pawar Lokesh Bhojusing	6.57
4	Pawar Shraddha Chandrakant	6.33
5	Patil Rushikesh Bharat Raghunath Pat	6.33

S.E. Chemical Engineering Students Rank in KBCNMU Dec.2025 Exam. Sem.-III (2025-26)

Merit No.	Name of the Student	SGPA
1	PAWAR MANASI MANOHAR	8.32
2	MAHAJAN LAWANYA KAILAS	8.04
2	CHITTE VINAYAK SANJAY	8.04
3	MAHALE YOGESHWAR SANTOSH	8.00
4	PATIL SHUBHANGI PRUTHVIRAJ	7.90
5	MISTRI TANVI RAJENDRA	7.86

Ayurveda Day Celebrations



Add on Course
on
"Environmental Pollution Control Techniques"

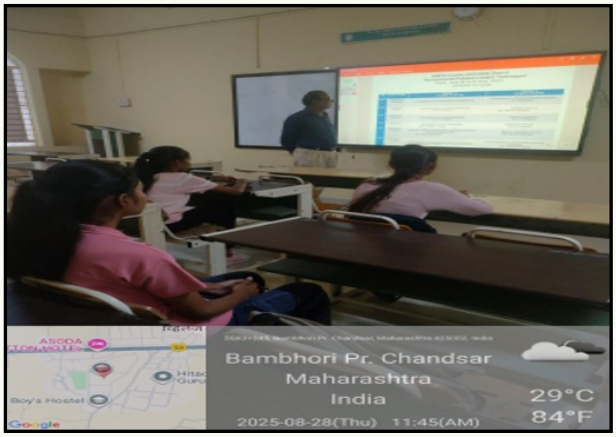
An add-on course on Environmental Pollution Control Techniques was organized to enhance students' understanding of modern methods used to monitor, prevent, and control environmental pollution. The course covered key areas such as air, water, and soil pollution, along with practical approaches for their mitigation. Topics included air pollution control devices (cyclones, scrubbers, electrostatic precipitators), wastewater treatment methods (primary, secondary, and tertiary treatments), solid waste management, and emerging technologies like bioremediation and phytoremediation. The course combined theoretical lectures with case studies and demonstrations to provide a comprehensive learning experience.

Objectives:

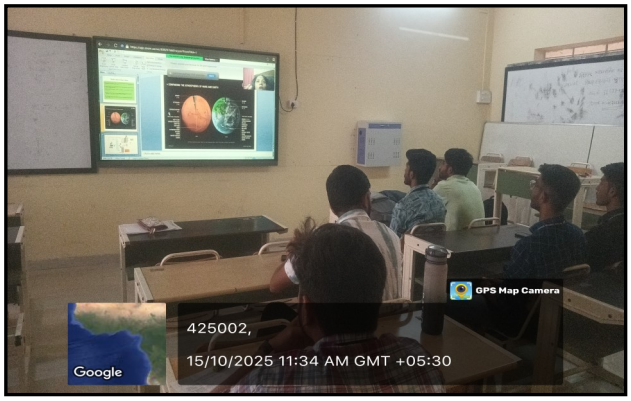
- To create awareness about different types and sources of environmental pollution.
- To understand various pollution control techniques used in industries and urban systems.
- To introduce students to modern and sustainable environmental management practices.
- To develop analytical and problem-solving skills related to environmental issues.
- To bridge the gap between academic knowledge and practical applications in pollution control.

Outcomes:

- Students gained in-depth knowledge of pollution sources and their environmental impacts.
- Participants became familiar with standard pollution control technologies and their working principles.
- Students developed the ability to suggest suitable pollution control measures for real-life situations.
- Awareness regarding environmental protection and sustainability was significantly enhanced.
- The course improved students' readiness for careers in environmental engineering, research, and regulatory sectors.



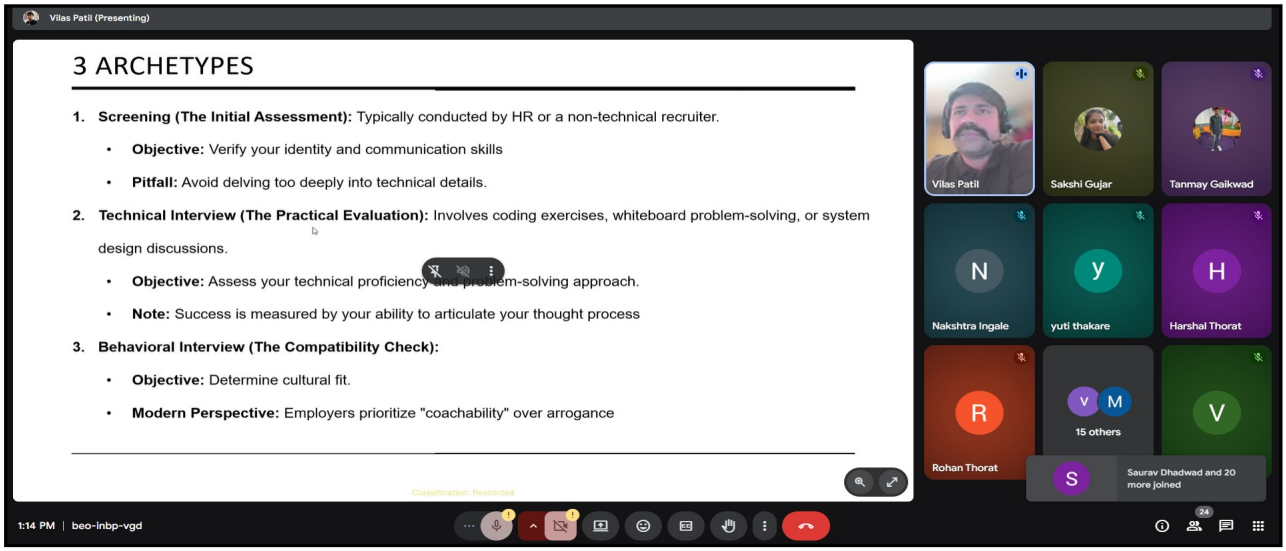
Guest Lecture



On the occasion of National Innovation Day, an online guest lecture on "Innovations in Li–CO_2 Batteries" was conducted. The session was delivered by Mrs. Shubhangi Bajad from Institute of Advanced Research, Gandhinagar, Gujarat. During the lecture, the speaker elaborated on recent advancements in lithium–carbon dioxide battery technology. She explained that Li–CO_2 batteries utilize carbon dioxide as a reactant, offering the dual advantage of energy storage and carbon capture. The speaker highlighted their potential for achieving higher energy density compared to conventional batteries. She further discussed the importance of advanced catalysts, innovative electrode materials, and optimized electrolytes in enhancing battery performance. Key challenges related to efficiency, stability, and rechargeability were also addressed. The lecture provided valuable insights into the role of such emerging technologies in sustainable energy development.

Alumni Lecture

An expert lecture on *"**How to Prepare for Online and Face-to-Face Interview**"* was conducted by the institution on the occasion of National Innovation Day. The session was delivered by Mr. Vilas Patil, Lead Carbon Management and Energy Efficiency Engineer at Ma'aden, Saudi Arabia. During the lecture, the speaker provided detailed guidance on effective interview preparation strategies. He emphasized the importance of understanding job requirements, researching the organization, and building a strong resume. The speaker highlighted key aspects of communication skills, confidence, and professional etiquette during interviews. He also discussed specific tips for online interviews, including technical setup, body language, and virtual presence. For face-to-face interviews, he stressed the importance of punctuality, attire, and interpersonal skills. Common interview questions and appropriate ways to respond were also explained. The session proved to be highly informative and beneficial for students in enhancing their employability skills.



Freshers Welcome

A freshers' welcome program for First Year (FE) Chemical Engineering students was organized to help them smoothly transition into college life. The event included orientation sessions, student and faculty introductions, and interactive activities. Cultural performances added enthusiasm and engagement to the program. It also provided an opportunity for networking and building connections among students, creating a welcoming and inclusive environment. . Miss Arpita Patil was selected as Miss. Fresher & Abhishek Patil was selected as Mr. Fresher. Dr. Sunita Patil and Dr. P. N. Ulhe were the judges for selecting Mr. Fresher and Miss Fresher.

Appointment of Dr.S.A.Thakur as HOD Chemical Engineering

After 26 years of dedicated service to the institute, Dr. V.R.Diware superannuated from the post of Head of the Chemical Engineering Department. Subsequently, Dr. S.A.Thakur was appointed as the Head of the Department by the institute. During his service, Dr. V.R.Diware consistently upheld a high standard of academic and administrative responsibility as the Head of the Chemical Engineering Department. He played a pivotal role in curriculum development, departmental planning, and maintaining academic excellence. Dr. V.R.Diware maintained strong and positive interactions with students, mentoring them academically and guiding them in their professional growth. His approachable nature and commitment fostered a supportive learning environment. Additionally, he actively developed and maintained healthy relations with other colleges and institutions, promoting academic collaboration, knowledge exchange, and departmental growth.

National Energy Conservation Day

National Energy Conservation Day celebrated on 13th Dec. 2025 themed "Sustainability, Energy Innovation and Citizen Participation," focused on the importance of collective efforts in promoting energy conservation and building a greener future. The event, attended by 120 participants, aimed to create awareness about rising energy demands and encourage the adoption of sustainable and energy-efficient practices. It emphasized responsible energy consumption, the use of renewable energy sources, and reducing dependence on fossil fuels while supporting India's climate goals. The program also highlighted the significance of recognizing contributions through energy conservation awards. As an outcome, participants developed an understanding of the current energy scenario and the need for conservation from social and environmental perspectives. They gained knowledge of energy audits, energy management techniques, and the use of IT tools for data analysis, prediction, and demand-side management. Additionally, they learned to analyze energy consumption in various systems such as motors, lighting, heating, and cooling, and to apply appropriate techniques for performance assessment and financial analysis to achieve effective and sustainable energy solutions.

Students Participation in Technical Events (Outside College)

06 students from SE Class participated in District level "Aavishkar 2026" Phase –I , on 8 th December 2025,which is organized by KBCNMU held at Arts, Commerce and Science College Dharangaon, Dist: Jalgaon.
The student list is as follows.

- Lawanya Mahajan and TanviMistri presented a poster entitle "Nanotechnology in Chemical Engineering".
- Ayush Sahare and Nakshtra Ingale presented a poster entitle "Hydrogen Fuel Cell Vehicles".
- Vinayak Chitte and Arsalan Mohammad Akhtar Siddiqui presented a poster entitle "Artificial Photo synthesis for Clean energy".

Research Paper Publications by Students

- Mr. Aakash Sandhanshiv published a research paper entitle "Synthesis of Biofertilizer from Cateen \ Food Waste" in IJERT ,Volume 14 ,Issue 11, November 2025, ISSN: 2278-0181
- Mr. Aakash Sandhanshiv published a research paper entitle" "A gravity Based Energy system using Buoancy–Assisted Mass Repositioning "in IJRASET, Volume 14, Issue I ,January 2026 ISSN No:2321-9653

Details of Outstanding Achievements by Faculty Members (Awards / Prizes)

- Mrs. Sarika S. Pawar won best poster presentation award at International Conference ACTAS 2026 held at UICT, KBCNMU, Jalgaon on 7th January 2026.
- Mrs. Sarika S. Pawar presented a poster entitle "Production of Biofertiliser from Organic waste" under category of Teacher (TH) in Phase-I , District Level Research Convention AVISHKAR-2025 organized by Arts, Commerce and Science College , Dharangaon on 8th December , 2025.
- Mr. V. P. Sangore and Mrs. Sarika Pawar rendered valuable services as Mentor in for Research Covention AAVISHKAR -2025,convened by KBC NMU Jalgaon

Students Participation in Sports (Outside College)

Class	Name of Student	Event	Level	Position	Date
SE	Saurav Somnath Dhadwad	Fencing	Inter-Collegiate tournaments	Winner	11/09/2025
TE	Gurav Bhavesh Narayan	Volleyball	Inter-Collegiate tournaments	Participation	20/09/2025
SE	Yash L Patil	Kho-Kho	Inter-Collegiate tournaments	Participation	01/10/2025
SE	Patil Yash Laxman	Chess	Inter-Collegiate tournaments	Winner	08/11/2025
SE	Chitte Vinayak Sanjay	Hockey	Inter-Collegiate tournaments	Runner	10/11/2025
SE	Mahale Yogeshwar Santosh	Hockey	Inter-Collegiate tournaments	Runner	10/11/2025
SE	Dhadwad Saurav Somnath	Softball	Inter-Collegiate tournaments	Runner	01/01/2026
SE	Chitte Vinayak Sanjay	Softball	Inter-Collegiate tournaments	Runner	01/01/2026
SE	Shinde Vishal Prakash	Softball	Inter-Collegiate tournaments	Runner	01/01/2026
SE	Saurav Somnath Dhadwad	Fencing	Inter-Group tournaments	Participation	22/09/2025
SE	Yash Laxman Patil	Kho-Kho	Inter-Group tournaments	Participation	03/10/2025
SE	Patil Yash Laxman	Chess	Inter-Group tournaments	Selected For University	23/11/2025
SE	Chitte Vinayak Sanjay	Hockey	Inter-Group tournaments	Runner	28/11/2025 to 29/11/2025

FDP /SSTP attended by Faculty Members

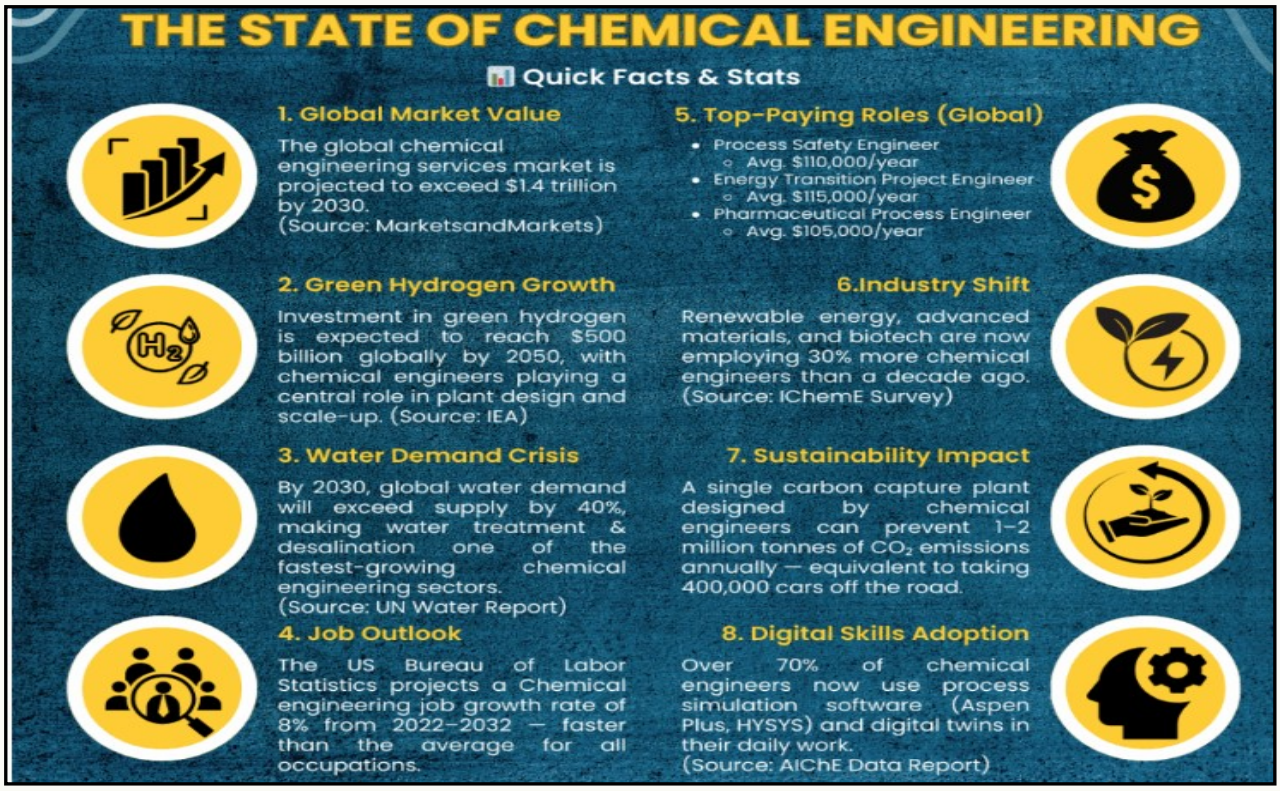
Sr. No.	Name of faculty	No of FDP/STTP attended
1	Dr. V. R. Diware	02
2	Dr. S. A. Thakur	02
3	Mr. V. P. Sangore	02
4	Mrs. Sarika S. Pawar	02

MoUs with Industry

Sr. No.	Name of Organization	Date of MoU	Duration
1	Acme Sujan Chemicals, Jalgaon	23 – 01 - 2023	3 years
2	Marty India Engineering and Consultancy Services, Nagpur	13 – 02 - 2023	3 years
3	V B Engineers, Nashik	10 – 04 - 2023	3 years
4	Moraya Global Ltd, Jalgaon	06 – 11 - 2023	3 years

CSR Activities / Outreach Activities by the Department

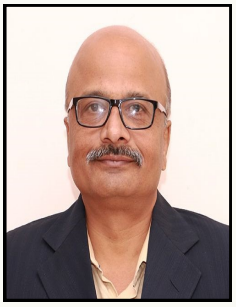
- Carrier Counselling Sessions conducted at colleges and coaching institutes at various places.
- Community Engagement Programme conducted in nearby villages, schools and in NGOs.



News Letter Committee

Faculty Members: Dr. S.A.Thakur (Editor) **Mr. V.P.Sangore (Content Organizer)**

Student Coordinators : Manasi Pawar (SE) **Rushikesh Patil (TE)** **Yuti Thakare (BE)**



Dr.S.A.Thakur
Head, Chemical Engineering

Prof. (Dr). G. K. Patnaik
Principal