



**AISSMS**  
**COLLEGE OF ENGINEERING**

ज्ञानम् सकलजनहिताय  
Accredited by NAAC with "A+" Grade



## ***CHEMIXIR NEWSLETTER***

**Principal: Dr. D. S. Bormane**

**July 2024 to Dec 2024**

**Head of Dept: Dr. M. Y. Naniwadekar**

**Month of Release: Jan 2024**

### **Department Vision:**

To be a leader in Chemical Engineering education providing service to society

### **Department Mission:**

1. To prepare graduates for **responsible positions** in chemical industry, academia and research
2. To prepare graduates to **analyze and solve problems** of chemical industry, academia and research
3. To strengthen industry-institute interaction to develop **industry oriented attributes** like attitude, soft skills, team work and leadership

### **Program Educational Objectives (PEOs)**

1. **Competency:** To prepare competent graduates in Chemical Engineering so that they are successful in their professional career in industry, academia or research
2. **Problem Solving Skills:** To prepare graduates who can identify, analyze, research and solve Chemical Engineering problems of practical importance to industry, academia or research
3. **Leadership Skills:** To prepare graduates with effective communication, teamwork and leadership skills so that they can play effective role in industry, academia and research institutes.

### **Program Specific Outcomes (PSO)**

Chemical Engineering graduates will be able to

1. Identify, analyze, design and develop solutions to Chemical Engineering problems of practical importance to industry and society.
2. Demonstrate sound understanding of Chemical engineering fundamentals to solve problems through the use of modern experimental methods, computer aided design and simulation software



**Dr. D S Bormane**

***From Principal's Desk...***

It is a matter of great pride and satisfaction for AISSMS COLLEGE OF ENGINEERING to bring out the News Letter 'CHEMIXIR' Released from the Department of Chemical Engineering. The College has made tremendous progress in all areas of academic, non-academic, and capacity-building relevant to staff and students. I am confident that this issue of the Department News Letter will send a positive signal to the staff, students and the person who are interested in Technical education and Technology based activities. A News Letter is like a mirror that reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general my heartfelt Congratulations to staff members and Students for their fruitful effort. With Best Wishes.



**Dr M Y Naniwadekar**

***From HOD's Desk...***

Department of Chemical Engineering was established in the year 1996, with an intake capacity of 40 students for UG which was increased to 60 students in 1997. The PG program was started in 2011 with an intake of 18 students. The Department has well-qualified and experienced faculty with an average experience of 8-10 years. Faculty is also involved in research & professional activities inside & outside the campus. They are encouraged to upgrade their knowledge and qualifications. The department was successful in giving consistently good academic results in the last three years and motivating the students to be involved in extracurricular and co-curricular activities like paper presentations and project competitions leading towards all-around development of our students. The Department has well-equipped laboratories with sophisticated equipment. We have organized many workshops and seminars for the students and staff.

***From the Editor's Desk....***

It gives us great pleasure to hand over to you "CHEMIXIR" the newsletter of the Chemical Engineering department. The department has 18 staff members and more than 180 students. All of us are involved in number of activities and working for development of the department. The Newsletter is a common platform to showcase the talents of the department. It also provides for showcasing of achievements and efforts taken by one and all which contribute towards department strengths. It is our attempt to get maximum contribution from staff and students to come together and interact through this newsletter. We try to pick the moments of guest lectures conducted by department, various industry visits carried out, competitions organized, achievements and participation by students and staff. We hope this newsletter will help in its own way to achieve our goal & realize our vision progressively. Hope you will find this newsletter informative. Your suggestions for improvement in the newsletter are welcome

## **Chemixir, Chemical Department Newsletter**

### **Editorial Board**

Published at: Department of Chemical Engg, All India Shri Shivaji Memorial  
Society's College Of Engineering, Pune - 411001



***Prof. Ms. P.S. Tadkar***



**Ms.Sfurti Kaduskar**



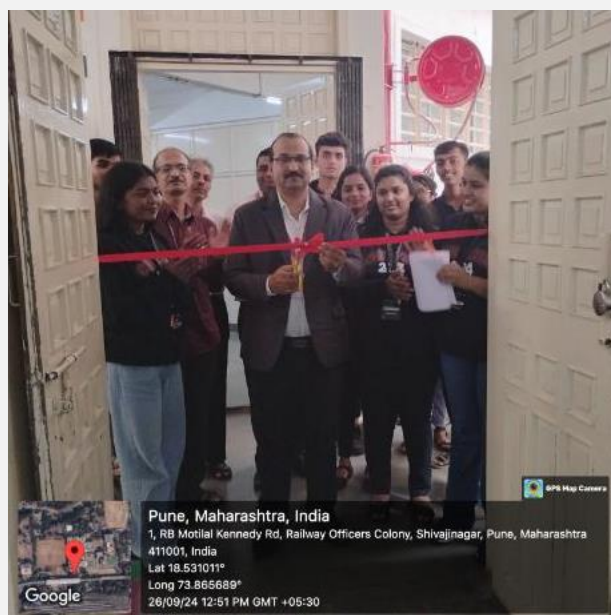
**Mr.Yogeshwar Ingale**



**Mr.Kumar Gome**

## Department of Chemical Engineering- ET 2024

The inauguration of the CHEMIXIR, Dept. of Chemical Engg., ET-2024 was done in room number 306 at the hands of Dr. M Y Naniwadekar, Head, Department of Chemical Engineering at 12:30 pm on 26 September 2024. The Department of Chemical Engineering hosted three technical events, which were conducted successfully by the respective event coordinators. Various students from Pune and other regions participated in these events.



## Live Memorandum of Understanding (MOU)

### TOTAL FUNCTIONAL / LIVE MOU INITIATED BY THE DEPARTMENT

Sl.No.	Name of the collaborating agency / institution / industry / corporate house with whom the MoU / collaboration / linkage is made	Year of signing MoU / collaboration / linkage	Duration of MoU / collaboration / linkage	Actual activities under each MOU
1	Super Aqua Services, Pune	14-08-2023	3 years	Placement and Internship in WTP and STP
2	Celestial Institute of Technology, Pune	08-06-2023	3 years	Interaction regarding Waste water treatment
3	Deccan Environmental Consultants Pvt Ltd Pune	11-05-2022	1 year	Internship , Expert lectures
4	Apptrain Systems, (Corporate Trainers) Vadodara (Gujarat)	11-05-2022	2 years	Expert Lectures, Assistance for Placement and Internship
5	Chemtrol Industries, Gujarat	11-05-2022	1 year	Placement and Internship
6	Bureau of Indian Standards, Pune Branch Office	04-05-2022	2 years	Activities under 'Standards' Club
7	SARBI Petroleum and Chemicals Pvt Ltd. Mumbai	23-03-2022	2 years	Expert Lectures
8	TKT Consultant , Pune	23-01-2022	1 year	Expert Lectures, MOU
9	Reva Process Technology, Baner, Pune	19-01-2021	10 years	Expert Lectures, MOU
10	Techpert Process Industries, Wakad, Pune	09-01-2020	2 years	Placement, MOU and Industrial Training to students
11	Fluid Technics, Kothrud, Pune	01-01-2020	2 years	Placement, MOU
12	Marcuras Water Treatment India Pvt. Ltd., MIDC, Bhosari, Pune	30-12-2019	2 years	Placement, Industrial Training to students, MOU and Industrial Visit

13	Synergy Process Systems, Baner, Pune	30-12-2019	2 years	Placement, Expert Lectures, Resource Person, Industrial Training to Students and Faculty Members, MOU, Industry Institute Interaction Program and Short Term Course proposal
14	Indian Biodiesel Corporation, Baramati, Dist. Pune	11-10-2016	10 years	Project work, Internship

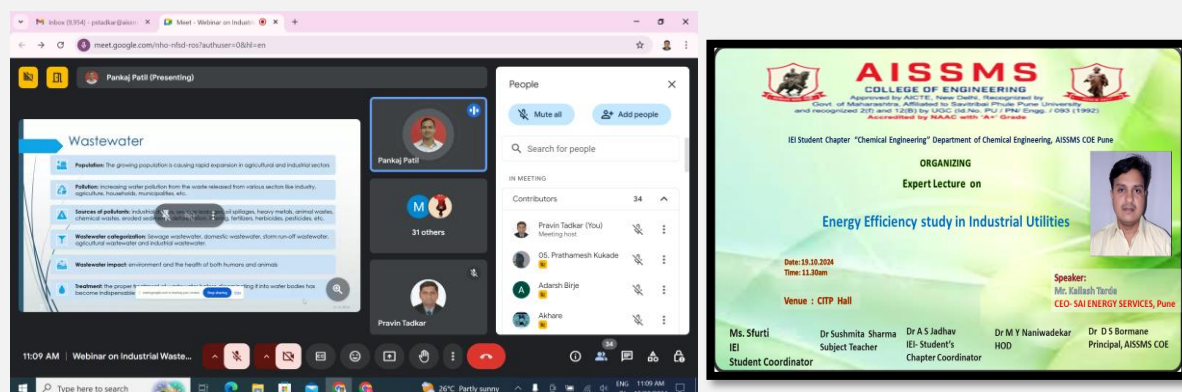
### Expert Lectures Organized: AY 2024-2025 (Term -I)

To bridge the gap between industry and academia and to ensure that students stay informed about current trends and practices in the industry, we organize expert lectures every term of the academic year. The list of guest lectures organized during Term I of the academic year 2024–25 is as follows:

S. N	Topic	Experts Organisation	Name of Expert	Date of Conduction	Name of Internal faculty
1	Process Control in Oil and Gas Industries	Cyient Engineering Services & Design, Mumbai	Mr. Bhushan Thakare	21/10/2024	Dr. S. B. Ghugare
2	Industrial Wastewater Treatment	Praj Industries Ltd Pune	Dr Pankaj Nandalal Patil	20/10/2024	Mr P S Tadkar
3	Energy Management in Chemical Industries	Sai Energy Services	Mr. Kailash Tarde	19-10-2024	Dr. A. S. Jadhav
4	Energy Efficiency study in industrial utilities	Sai Energy Services	Mr. Kailash Tarde	19-10-2024	Dr. S. Sharma
5	Integrating Science and Engineering for Sustainable Developments in Water and Wastewater Treatment	CSIR-National Chemical Laboratory, Pune	Dr. Vinay M. Bhandari	30-09-2024	Dr. M B. Mane
6	Fluid Moving Machinery for Oil and Gas Industry	Independent Consultant for Oil, Gas and Energy Industry	Shri Chandrakant Mohikar	14-08-2024	Prof. P. N. Dange



## Glimpses of the Expert Lecture



### List of Industrial Visits organized during A. Y. (2024-25)

Sr. No.	Name of the Industry	Faculty Coordinator	Class (No. of Students)	Date
1	Katraj Dairy Ltd, Katraj, Pune	Dr. A S Jadhav	TE and BE Chemical (29)	22/08/2024
2	Arista Chemicals Ltd, Lonand, Satara	Dr. A S Jadhav	TE Chemical (41)	28/08/2024
3	Magnesia Chemicals Ltd, Lonand, Satara	Dr. A S Jadhav	TE Chemical (41)	28/08/2024
4	Attaquant Enterprises Pvt Ltd, Alandi Bypass Road Ghat No 138, Near Grow Well Company, Post Dhanore, Tal Khed, Pune, MH - 412105	Dr. A S Jadhav	SE Chemical (47)	04/09/2024
5	Kani Overseas Corporation, Satara	Dr. A S Jadhav	SE and TE Chemical (58)	28/09/2024
6	Sewage Treatment Plant, Baner, Pune	Mrs Kanchan Bawankar	TE and BE Chemical (25)	15/10/2024
7	Baner Pune Municipal Corporation Water Treatment plant, Baner, Pune	Dr. M B Mane	BE Chemical (21)	21/10/2024



## AISSMS at IFAT 2024 Mumbai

Every year IFAT India 2025 organizes fair for Water, Sewage, Solid Waste and Recycling. IFAT is a leading international trade fair focused on water,

sewage, waste, and raw materials management. It attracts professionals and businesses from various industries looking for sustainable solutions, technology advancements, and partnerships.

- Total Footfall: Approximately 28000 visitors attended the exhibition.
- Key Participants: wastewater treatment companies, environmental technology providers
- Relevant Industry Trends: Increased interest in wastewater treatment, advanced filtration technologies.

I along with Mr. Prashant Walke, Ms. Apoorva Shelar, Ms. Asmi Attikeri, and Ms. Ishwari Pansare attended this event at Bombay Exhibition Centre, NESCO, Goregaon, Mumbai as exhibitor where we represented AISSMS and showcased our courses on Water and Waste water Management to the industry people. The event was scheduled between 16<sup>th</sup> October to 18<sup>th</sup> October 2024.



Pic. 1: AISSMS stall at IFAT India, Mumbai



Pic. 2: AISSMS team at IFAT India 2024. From left Mr. Abhijit Khatake, Mrs. Sasha Shelke, Mr. Prashant Walke, Shri. Dhaval Jitkar, Ms. Asmi Attikeri, Ms. Ishwari Pansare, Ms. Apoorva Shelar, Dr. Shailesh Varade,



The primary objective of our participation in the IFAT exhibition was to:

- Showcase our water and wastewater management courses
- Engage with potential industries
- Network with industry professionals, partners, and stakeholders.

### **Report of the Campus visit by Acharya Academy Wakad**

Campus visit of 11<sup>th</sup> and 12<sup>th</sup> students to Chemical - Central Research lab was organized by the central media committee of AISSMS on 17.12.2024, between 1.00 pm - 1.15 pm. The motive was is to provide students with an opportunity to educate them about water and waste water. They were also made aware about the several courses being run by the institute for waste water management for future academic and career path.

Following points were emphasised during the students visit:

1. Overview of water and waste water management courses
2. Brief explanation of various unit operations involves in the waste water treatment processes
3. Discussion on future scope and application of SCADA technology in waste water industry

Coordinator:

1. Dr. Shailesh Ravi Varade
2. Dr. Maya B. Mane



Photo 1: Lecture delivered by Dr. Shailesh Ravi Varade



Photo 2: Demonstration and discussion of water and wastewater management on SCADA Technology

## Social Visit

Prof. H. L. Kamble and Prof. P. S. Tadkar conducted visit on 19.10.2024 at Old Age Home Visit at Mother Teresa Home, Missionary of Charity Pune. The purpose of the visit: Educating students, Helping the under privileged, Building intergenerational connections, Stimulating the mind and Promoting self-reflection.



## Program Outcomes (PO)

Engineering Graduates will be able to:

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **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.
- **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.
- **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.
- **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.
- **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.
- **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.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

- **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.
- **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.
- **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.