



AISSMS
COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय
Accredited by NAAC with "A+" Grade



CHEMIXIR NEWSLETTER

Principal: Dr. D. S. Bormane

Dec 2022 to May 2023

Head of Dept: Dr. M. Y. Naniwadekar

Month of Release June 2023

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

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Mr. P. S. Tadkar



Ms. Siddhali Shegar



Mr. Kanak R. Oswal



The boundaries separating art and engineering are mere constructs of our imagination. Therefore, refrain from overthinking, as it stifles creativity. Instead, take action and strive for the optimal outcome without hesitation.

The AIChE Student Chapter, Department of Chemical Engineering, AISSMS COE Pune, organised a webinar on “Industrial Waste Water” on 04 March 2023, where a great professional personality with a vast knowledge and experience Victor Komolafe was invited as a resource person, the webinar was organised by Faculty Advisor Prof. P. S. Tadkar. The webinar started sharp at 06:00 pm which lasted till 07:00 pm and about more than 20 participants attended the webinar.

STAGES OF WASTEWATER TREATMENT

Wastewater from factories

Oil Trap: Suspends greasy liquid on the surface

Bar Screen: Filters solid undissolved objects. E.g. plastics

Sumps: Hold wastewater before treatment

Greasy liquid

Participants: Kanak Oswal, Mike Awoyemi, Victor Komolafe, Tanvi Naik, Siddhali Shegar, BOLUWATIFE OMOTAYO, Abhishek Kajarekar, Asiyah Dolamu, 19 others, You.

What is not a source of pollution in surface water?

Options: Agriculture, Industrial Facilities, Yard Waste, Human Waste

Chat messages:

- Himanshu Lanke: 14:10 what will be the role of engineers in waste water management?
- You: 14:10 we can use this treatment plant:
- Kanak Oswal: 14:10 in industries making mass production of fertilizers, paints, chemicals, lubricants, etc.

Department of Chemical Engineering organizes a Parent Meet: 2022-23 on Saturday, May 6 th, 2023 at 11:00 am via Google Meet (Online). The purpose of this meet is to initiate the Parent Teacher Interaction so that the process becomes smooth and efficient.



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.