

रसायनत्रिकी

Vision of the Department

To be the prime seat of quality education in chemical engineering that nurtures and promotes innovations, creative thinking and leadership.

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Mission of the Department

- ✦ To Provide quality education, to meet the changing needs of industry.
- ✦ To provide theoretical knowledge and hands-on experience through the classroom and laboratory sessions.
- ✦ To develop quest for research in the field of Chemical Engineering.
- ✦ To produce morally, ethically and socially responsible chemical engineering graduates.

Salient features of the Department

- ✦ State of art laboratories.
- ✦ Qualified and experienced faculty.
- ✦ Very effective teaching-learning process.
- ✦ Consistently good results.
- ✦ Consistently increasing placements.

Program Specific Objectives (PSOs)

- ✦ The student will demonstrate knowledge of various concepts by formulating and solving problems in advanced courses in chemical engineering.
- ✦ The student will show an ability to design experiments and analyze and interpret data which will enable them to be enterprising professionals.



From the HoD's Desk



Department of Chemical Engineering offers platform for students from the Konkan region to develop a career in various fields of chemical engineering. It continues to be the prime seat of chemical engineering education in the entire Konkan belt of Maharashtra. Many of our alumni are placed in various renowned industries while many of them are pursuing their higher studies. The department has developed a very strong association with its alumni and is always seeking feedback from them. The department also looks forward to the feedback of other stakeholders so that better policies can be implemented in the department for all-round progress of its students.

Thank You
Dr. N. G. Kanse, Head,

From the Editor's Desk



Dear readers,
रसायनत्रिकी has been serving as a platform where all of the departmental activities conducted during the semester are summarized. The newsletter also covers departmental news and achievement of faculty and students during the semester. It gives me immense pleasure to invite you to submit your articles for रसायनत्रिकी.

Regards
Prof. A. K. Bandsode, Assistant Professor

Crude oil contains multiple valuable hydrocarbons used for material synthesis, but their separation involves a laborious and energy-intensive multistep distillation process. Now, scientists introduce a simple two-step separation of important hydrocarbons from crude oil under ambient conditions using selective chemistry

Alexander Ershov & Razi Epsztein

News and Events

Alumni Meet of Chemical Engineering Department

The Department of Chemical Engineering organized an Alumni Meet of 2012 and 2013 batch on 11th January 2025. The objective of this Alumni Meet was to reconnect and engage former students with their alma mater, fostering a sense of community and continued involvement. Alumni meet serves to strengthen the alumni network, encourage knowledge sharing, and provide a platform for alumni to support current students. The event also helps build relationships for career opportunities, mentoring, and collaboration, while allowing alumni to celebrate their achievements and contribute to the institution's growth and development. The meet was arranged by the Chemical Engineering department and began in the presence of the Head of the Department, Dr Nitin Kanse and Dr P A Giri, Alumni In charge. Many alumni shared their experience with their alma mater, FAMT and cherished their classroom and academic memories. They also shared their professional experience and the current job opportunity status for chemical engineers. The meet was attended by 12 alumni, 8 faculty and successfully coordinated by Dr P A Giri.



Alumni of 2012 and 2013 Batch along with all faculty members

Chemical Engineering News

Researchers from the Indian Institute of Technology Guwahati (IIT Guwahati) led by Prof. Tamal Banerjee, Department of Chemical Engineering, IIT Guwahati, have successfully produced a novel heat transfer fluid based on nanofluids, which is capable of efficiently transferring heat generated using solar power to desalination systems.

News and Events

Educational Tour of Smt. G. D. Tatkare Polytechnic Students to Chemical Engineering Department

An educational tour was organized for the students of Smt. G. D. Tatkare Polytechnic to the Chemical Engineering Department of FAMT, Ratnagiri on 25th January 2025. The main objective of the tour was to provide students of Diploma Engineering with practical exposure to the field of chemical engineering and enhance their understanding of its industrial applications. During the visit, students explored various laboratories, including the Reaction Engineering Lab and the Environmental Engineering Lab, where they observed real-time experiments and demonstrations. The tour helped students gain insight into processes such as distillation, filtration, and wastewater treatment, all of which are integral to chemical engineering. In addition to laboratory visits, the students had an opportunity to interact with faculty members, who shared valuable knowledge about the department's ongoing student projects and career opportunities in the field. The session highlighted the diverse applications of chemical engineering in industries like petrochemicals, pharmaceuticals, and energy, while also emphasizing the importance of research and innovation. Overall, the tour provided students with a deeper understanding of chemical engineering principles and their practical applications, motivating them to pursue further studies and careers in this dynamic field. The visit was arranged by the Head of the Department, Dr Nitin Kanse and Dr P A Giri, Coordinator. The educational visit was attended by 40 students and 5 faculty of Smt. G. D. Tatkare Polytechnic and successfully coordinated by Dr P A Giri.



Smt. G. D. Tatkare Polytechnic Diploma Students with Faculty members

News and Events

Seminar on Career Opportunities in Chemical Engineering for Smt. G. D. Tatkare Polytechnic Students

A seminar on Career Opportunities in Chemical Engineering was organized for Smt. G. D. Tatkare Polytechnic students on 25th January 2025 at FAMT, Ratnagiri. The session was conducted by Dr. P. A. Giri, Associate Professor in Chemical Engineering, FAMT, Ratnagiri, who provided valuable insights into career opportunities in the chemical engineering field. He discussed various career paths in industries such as petrochemicals, pharmaceuticals, environmental engineering, food processing, and research & development. He also emphasized the importance of technical skills, industry-oriented knowledge, and continuous learning for professional growth. Dr. Giri guided students on higher education prospects, certification programs, internships, and job market trends. He shared tips on resume building, interview preparation, and professional networking, highlighting the significance of these skills in professional organizations. The session included real-world case studies and success stories, inspiring students to plan their careers strategically. An interactive Q&A session allowed students to clarify doubts and seek career guidance. The seminar was highly informative and beneficial, helping students make well-informed decisions about their future in chemical engineering. The seminar was arranged by the Head of the Department, Dr Nitin Kanse and Dr P A Giri. The event was attended by 40 students and 5 faculty of Smt. G. D. Tatkare Polytechnic and successfully coordinated by Prof S B Bobde.



Dr. P. A. Giri interacting with diploma Students and Faculty members

News and Events

ACES Organized 'Fusion 2K25'

The Department of Chemical Engineering, in collaboration with the Association of Chemical Engineering Students (ACES), organized 'Fusion 2K25' at the Finolex Academy of Management & Technology on 17th and 18th February 2025. Dr. Kaushal Prasad, Principal FAMT, Dr. Nitin G. Kanse, Head of the Chemical Engineering Department, and Prof. R. K. Marag, ACES Faculty Advisor, inaugurated the function. The objective of the events organized under 'Fusion 2K25' was to provide a common platform for students to showcase their skills, explore their ideas, and make them feasible in real life. It also helped inculcate technical knowledge among students and enhance their interest in academic and extracurricular activities. ACES successfully organized the events under the leadership of ACES Head Mr. Atharv Mayekar, Ladies Representative Ms. Shravani Madake, and student coordinators of various committees, making the event a grand success. The events organized under the theme 'Fusion 2K25' included a Science Project Exhibition, Paper Presentation, Unbox Mystery, Chem Quiz, Fun games and Tug of war. All these events received an overwhelming response from FAMT students and nearby school and college students.



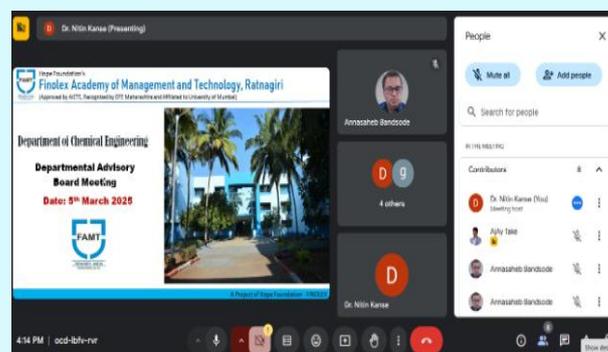
Dr Kaushal Prasad, Principal FAMT along with faculty members at the inauguration of 'Fusion 2K25'

"If you look at a tree and think of it as a design assignment, it would be like asking you to make something that makes oxygen, sequesters carbon, fixes nitrogen, distills water, provides habitat for hundreds of species, accrues solar energy's"

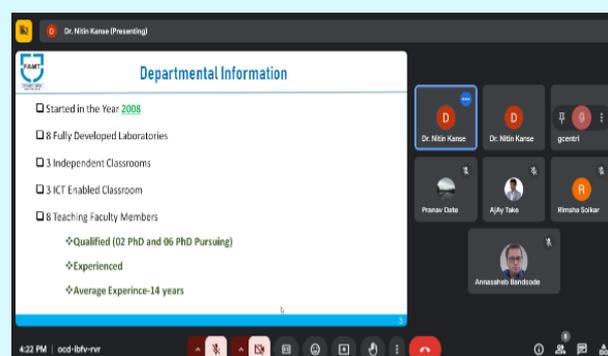
News and Events

Departmental Advisory Board (DAB) Meeting

The Departmental Advisory Board of the Chemical Engineering Department held its annual meeting on 5th March 2025 through a Google Meet. The agenda of the meeting was to review the progress of the department and discuss future road map. The meeting was chaired by Dr. N. G. Kanse, the Head of the Department. Prof. A. K. Bandsode, the faculty member on the board, welcomed and introduced the advisory board members. This was followed by an overview of the infrastructure, activities, achievements of faculty and students, placements, and results in the department which was presented by Dr N. G. Kanse, the Head of the Chemical Engineering Department. Mr Ajay Take, the industry representative on the board, appreciated the efforts taken by the department for the benefit of the students. He emphasized the importance of internship and industrial training for the students. Dr N. G. Kanse appreciated the suggestions and assured the members to implement them. The meeting concluded with a vote of thanks by Prof. A. K. Bandsode.



DAB members in the meeting



Dr N. G. Kanse, HoD presenting an Overview of the Department

News and Events

Chemical Engineering Department Held Parents Meet

The department of Chemical Engineering organized Parents Meet of Second Year, Third Year and Final Year Chemical Engineering on Friday 7th March 2025. The meeting was attended by parents, Dr. N. G. Kanse, Head of the Department, Dr. P. A. Giri, Class Teacher of SE, Prof. Y. A Landge, Class Teacher of TE and Prof S B Bobde, Class Teacher of BE along with all concerned Subject Teachers and Mentors of SE, TE and BE. Dr N. G. Kanse welcomed the parents and presented the department profile i.e. highlights of the department, faculty and staff, academics, co-curricular and extra-curricular programs conducted/organized, plans of department, training and placement details and alumni association. He also elaborated on the importance of courses available on an online platform like Coursera and Infosys Springboard etc. He also interacted with parents on various workshops, course enrichments and add-on courses from the placement point of view. He emphasized the importance of parents' involvement in students' academic progress and discussed the department's expectations from parents. The meeting was attended by 08 parents along with students and ended with a vote of thanks by Dr. P. A. Giri.



All parents and faculty members interaction

Chemical Engineering News

Skoltech researchers have developed a method to produce hydrogen directly at natural gas fields with an efficiency of 45%. The process involves injecting steam and a catalyst into a gas well, followed by the addition of oxygen to initiate combustion.

This catalyst-assisted reaction generates a mixture of hydrogen and carbon monoxide, from which hydrogen can be efficiently separated. The breakthrough, published in the journal *Fuel* and supported by a grant from the Russian Science Foundation (RSF), offers a promising step toward large-scale hydrogen production at the source