

# SSBT's College of Engineering & Technology, Bambhori, Jalgaon. (Included under section 2 (f) and 12(B)of the UGC Act, 1956 ISO-9001-2008 Certified)

**Department of Chemical Engineering** 

# MOMENTUM

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# 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 Twice by NBA
- Modern and Well Equipped Laboratories
- Excellent Results
- Research Facilities
- **♦ Departmental Library with Internet Facility**
- ◆ Long Tradition of Gold Medalist in University Exams
- ASPEN HYSYS Software
- ♦ Consultancy for Chemical Engineering & Allied Processes
- Teacher Guardian Scheme
- **♦ Excellent Self-Study Material**



# Program Educational Objectives (PEO's) 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.

# Program Outcomes (PO's) of Chemical Engineering Department

- An ability to execute knowledge of basic science, mathematics and engineering.
- An ability to display the research by designing, conducting, interpreting and analyzing experimental data for preparing reports.
- An ability to demonstrate the caliber of product designing according to the standards.
- An understanding to demonstrate the ability to perform the task with multidisciplinary teams.
- An ability to identify, formulate, design and provide the solution to various chemical engineering problems.
- An ability to demonstrate the understanding of professional and ethical responsibilities.
- An ability to communicate formally and informally.
- An ability of designing the product to meet economical and societal requirements.
- A commitment to reveal self education, social values by providing the services to society through lifelong learning.
- An ability to understand the environmental issues and to provide solutions for green and clean technologies.
- An ability to demonstrate the computational skills using engineering software.

#### **DEPARTMENTAL EVENTS**

## **Sketch Competition**

Various events are frequently organized by the department to inculcate awareness in students for social, economical and environmental issues. A Sketch Competition on the topic "Prevention & Control of Chemical Industry Waste" was organized on 03/08/2013 by Chemical Engineering Students Association (CHESA) of the Chemical Engineering Department. The objective of the competition was to aware the students about minimization of industry waste & thereby making them environmentally concerned.

Faculty of Chemical Engineering Department Shri.N.Y.Ghare and Shri. Sangharsh Dongre were the judges for the competition.

Winners of the competition:

I: Mr. Ravindra Langote (T.E. Chem.Engg.)

II: Harshal Thakur (S.E. Chem.Engg.)



Essay Competition was conducted on 24/8/2013 for S.E,T.E & B.E Chemical Engineering students on the topic "Responsibilities of Youth in Making India Superpower"



**Quiz Competition** 

A quiz competition on General & Technical topics was conducted on 24/08/2013.





**Group Discussion** 

Group discussion is an important tool which improve the employability of students, it helps in choosing suitable candidate among the academically superior achievers, with the same intent Group Discussion was conducted on 28-9-13







#### **DEPARTMENTAL EVENTS**

## **Teachers Day & Freshers' Welcome**

Teacher's Day was celebrated on 05/09/2013. The program started with garlanding photo of Dr. Sarvapalli Radhakrishnan by Head of the Department Dr.V.R. Diware. Faculty & Staff members of the Department were felicitated by the students on this occasion.









Fresher's Welcome CRESCENDO was also organized under CHESA on 05/09/2013. Students from F.E. are felicitated by the students of the department. Freshers introduced themselves to the audience about their native places, hobbies, ambitions etc.

Various games were also arranged for them. Mr. & Miss were judged as Mr.Fresher & Miss.Fresher. was judged on this occasion.

## **Engineers Day**

Engineers day was celebrated on 15/09/2013. The photo of Dr. M. Visvesvaraya was garlanded by Shri. A.R.Lokhande. Mr. Ganesh Chate from B.E.Chemical brifed the students about the life sketch of Sir M. Visvesvaraya and his contribution in the development of modern India. For the event all students of the Department along with faculty & staff members were present.







## Safety Awareness Workshop

A two day Technical workshop on Industrial Safety was conducted on October 18-19, 2013. for S.E.Chemical Enginerring students. The course was specially designed to make aware the students about the essence of safety in the Industrial environment. The course curriculum covered following topics.

- ♦ Need & Importance of Industrial Safety
- ♦ Hazards in Process Industry
- ♦ Hazards Analysis
- ♦ Safety Precautions & Measures

The workshop was arranged to introduce the students about importance of safety in Chemical Process Industries. Apart from that to adopt various safety practices used in Chemical Process Industries and to gainfully employ the knowledge to meet the Industrial Challenges.

A keynote speech was delivered by Prof. Raipurkar from Government College of Engineering , Jalgaon on the theme "Industrial Safety". The workshop ended with distribution of certificates to the participants.





## **Expert Lecture**

A expert lecture on the topic "An Overview of Environmental Pollution: Chemical Engineering Perspectives" was delivered by Dr. A.N. Vaidya, Dy. Director, and Head, Solid Waste Management Division, NEERI (National nvironmental Engineering Research Institute), Nagpur on Oct.03, 2013. Dr. A.N. Vaidya was felicitated by Senior Journalist & LMC Member Shri. V. R. Phadnis. Principal Dr. K.S.Wani was also present on the dias. The program started with deep—praiwalan by the guest & dignitaries.

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#### **Industrial Visit**

To bridge the gap between theory and actual unit operations carried out in industries it is essential to visit chemical process industries. This year also Industrial Visit for final year students of Chemical Engineering Department was conducted on 20 Dec.2013. Thirty two students visited following industries along with Dr. S.A.Thakur & Shri. V.P.Sangore as accompanying faculty.

- ♦ Jalgaon Jillha Sahakari Dudh Utpadak Sangh Maryadit, Jalgaon
- S.K.Oil Industries, Shivaji Nagar, Jalgaon.

The students minutely observed the unit operations and processes carried out in both the industries, the raw material storage division, boiler division, processing vessels, and packaging division and interacted with the supervisors, and supporting staff to gain knowledge about blending, and other unit operations.





# Memorandum of Understanding (MoU)

Memorandum of Understanding was signed between Department of Chemical Engineering, C.O.E. T., Bambhori and Suhans Chemicals Pvt. Ltd., M.I.D.C., Jalgaon on Dec.11,2013. Mr. Sandeep Kabra on behalf of Suhans Chemicals & Dr. V.R.Diware on behalf of Shrama Sadhana's College of Engineering & Technology signed the MoU.

By signing MoU, the Chemical Engineerinmg Department and Industry desires to promote consultancy & research activities in Chemical Engineering & Allied branches. Through MoU, various Short Term & Long Term Goals are identified for the benefit of Industry, Faculty & Students in particular & Society at large. The MoU will remain will be in force for a period of three years.





#### The Roles and Responsibilities of Chemical Engineers

Chemical Engineers are considered to be "Universal Engineers." They use chemistry, physics, biology, microbiology, biochemistry and mathematics to design programs, machines and processes that turn raw materials into valuable products for human use and for use in the environment.

Chemical Engineers play a very important role in making modern society. Many Chemical Engineers design and operate large-scale and complex chemical production facilities to supplying diverse chemical products to society. In performing these functions, a Chemical Engineer will likely assume a number of roles during a career.

The Chemical Engineer is involved in raw materials extraction, intermediate materials processing, or production of pure chemical substances; in each activity, the minimization and management of waste stream will have important economic and environmental consequences.

Chemical Engineers are involved in the production of bulk and specialty chemicals, petrochemicals, integrated circuits, pulp and paper, consumer products, minerals, and pharmaceuticals.

Chemical Engineers also find employment in research, consulting organizations, and educational activities. The Engineer may perform functions such as process and production engineering, process design, process control, technical sales and marketing, community relations, and management. As Chemical Engineers assume such diverse roles, it is increasingly important that they should be aware of their responsibilities to the general public, colleagues and employers, the environment, and also to their profession.

One of the central role of Chemical Engineers is to design and operate chemical processes yielding chemical products that meet customer specifications and that are profitable, another important role is to maintain safe conditions for operating personnel and for residents in the immediate vicinity of a production facility.

Finally, chemical process designs need to be protective of the environment and of human health. Environmental issues must be considered not only within the context of chemical production but also during other stages of a chemical's life cycle, such as transportation, the use of chemicals by customers, recycling activities, and ultimate disposal.

#### **Scope for Chemical Engineers in Various Industries & Organizations**



# **Photo Gallery**





**Dr.V.R.Diware**Head, Chemical Engineering



Shri Sanjay P. Shekhawat
Director Academics



Prof. Dr. K. S. Wani
Principal

