

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

**Department of Chemical Engineering** 



News Letter Vol. No.07, Jan 2015–June 2015

## 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



## 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.

#### **Expert Lectures**

Expert Lecture by **Dr.S.V.Naik, Professor, I.I.T. Delhi** was held on 09/01/2015 on the topic **Bio-lubricants.** During his speech he provided updated knowledge about the synthesis of bio-lubricants from variety of oils and their specific applications in the chemical process industries. He also commented on the advantageous characteristics of bio-lubricants compared to petroleum-based lubricants.

He visited the chemical engineering departmental laboratories & interacted with the faculty & students of the program.



Expert Lecture by **Dr.Ajay Dalai**, **Professor, Canada** was held on 10/01/2015 on the topic **Higher studies and research opportunities available in Canada**. During his speech he provided updated knowledge about the sponsorships available for the students to develop their skills and expertise, while at the same time, gaining valuable experience working with research groups or leaders in Canadian government laboratories and research institutions.

He also visited the chemical engineering departmental laboratories & interacted with the faculty & students of the program and express his satisfaction about the research projects carried out by the students.



Expert Lecture by Shri.S.V.Khadke, Director, Sharplex Filters, Mumbai, was held on 07/02/2015 on the topic Industrial Filtrations.



#### **Expert Lecture**

Expert Lecture by **Dr.D.J.Tidke**, **Professor**, **GHRCE**, **Jalgaon** was held on 16/03/2015 on the topic **Reserch Attitude** 



#### Milestone 2K15

The purpose of Milestone Students Paper Presentation is to encourage Undergraduate & Postgraduate students to prepare & present technical papers and to improve their skills in the techniques of presentation. Thus it provides a platform where students across various colleges & places are invited to share their information and ideas about various new concepts and technologies in engineering & technology. National Level Paper Presentation for students **Milestone 2k15** was held on Feb.6, 2015 on various topics. Technical Papers were presented by students of various institutes for Undergraduate and Post-graduate level & also by Research Scholars.

Mr.U.V.Mahajan, Director, KABATECH Industries, Jalgaon and Shri.N.Y.Ghare, Asst Prof. Chemical Engineering Dept. evaluated the research papers which were presented by participants through power point presentations.

Winners of this Milestone 2K15 National Level Conference for students are declared as :

Level	Rank	Name of Participants	Institute	Title of Paper
UG	Ι	Akshta Dhale Sushila Pawade	SSBT's COET	Alge-An Alternative Fuel
	Π	Bhagyashree Khetre Ruchita Joshi	SSBT's COET	Effective Recycling of Paper Waste
	III	Nirav Lekinwala	UICT,NMU	Algae-Its Use as Biofuel and Scope in India
PG	Ι	Rani Gupta	UICT,NMU	Design of Non Spherical Particle Mimicking Natural
Reserch Scholar	Ι	Devanad Patil	School of Chemical Sci- ences, N.M.U.	Synthesis, Characterization and Controlled Release Study of Polyurea Microcapsules of Metribuzin



#### **Group Discussion**

#### **Ready to Crack & Box Cricket**

To know the interactive skills, behavior, participation & contribution of students in a team, a group discussion was conducted on March.14,2015. The event was coordinate by faculty members, Shri.Y.D.Thakare & Miss.Neha Patil of the department. Ready to crack event was conducted by the department on April 1, 2015 which involved puzzles, logical problems and other enigmas. In a ultimate brain stroming session students from the other institutes and in house students participated in large numbers. Department also conducted Box Cricket event on April 1, 2015.



#### **Mock GATE Test**

Mock GATE exam for B.E.Chemical Engineering Students was conducted on Jan.24,2015. The practice tests for GATE 2015 has been conducted to analyse GATE preparation of the students.



#### ShodhPrakalp Pratiyogita

Institute annually organizes Shodhprakalp Pratiyogita, for motivating final year students of the department for research. For the academic year 2014-15,SHODHPRAKALP PRATIYOGITA 2015 was organized on April 11,2015 The objective, importance & usefulness of the project work carried out by students was judged by Dr. V. S. Patil , Professor, U.I.C.T., NMU, Jalgaon.

In SHODHPRAKALP PRATIYOGITA 2015, 34 students of B.E. Chemical Engineering with 11 projects participated with Experimental setup, PowerPoint presentations and Charts. They have been evaluated on different parameters by the judge.

First Prize was received by Jayesh Patil, Leena Patil & Sayali Joshi for their project entitled "Decolourisation of Dye using Photocatalytic based Hybrids Process". The project was carried out under the guidance of Dr.V.R.Diware. The Second Prize was received by Bhagyashree Khetre, Ruchita Joshi & Neerajkumar Yadav for their project entitled "Effective Recycling of the Paper Waste". This Project was guided by Dr.A.R.Kokhande. and Dr.S.A.Thakur.

The students of the Department visited project exhibition and gained knowledge about the selection, objectives and execution of Project. Shri. N.Y.Ghare coordinated the event.



Parents Meet on 18/01/15



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### 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.

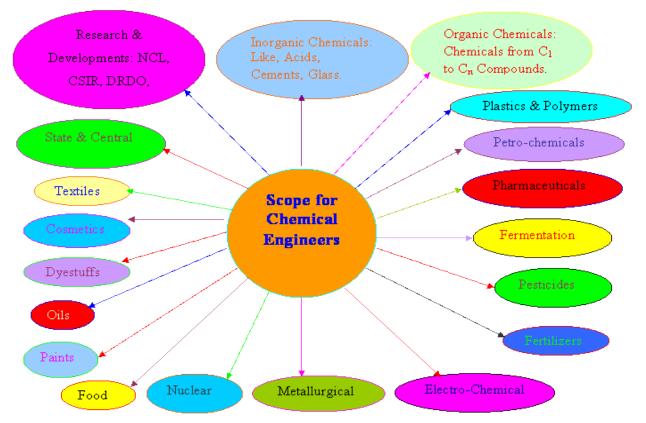
The Chemical Engineer is involved in raw materials extraction, intermediate materials processing, or production of pure chemical substances; in each activity, the minimization and management of waste stream will have important economic and environmental consequences.

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



Dr.Sanjay P. Shekhawat Director Academics



Prof. Dr. K. S. Wani Principal

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