SSBT's College of Engineering & Technology, Bambhori, Jalgaon
(Included under section 2 (f) and 12(B)of the UGC Act, 1956)
Grade A (3.14) NAAC Accredited
Department of Chemical Engineering

MOMENTUM

News Letter Vol. No. XXIV July 2023– Dec.2023

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

Tree Plantation Program @ Chemical Engineering Department

Programme Educational Objectives (PEOs) 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.

Programme Outcomes (POs) of Chemical Engineering Department

PO1 Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 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.

PO3 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.

PO4 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.

PO5 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.

PO6 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.

PO7 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.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 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.

PO11 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.

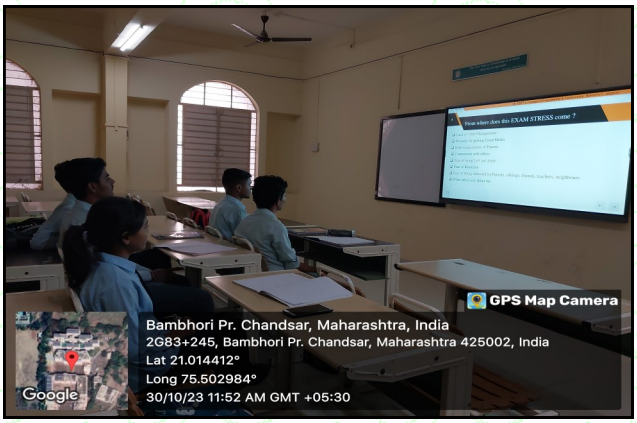
PO12 Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

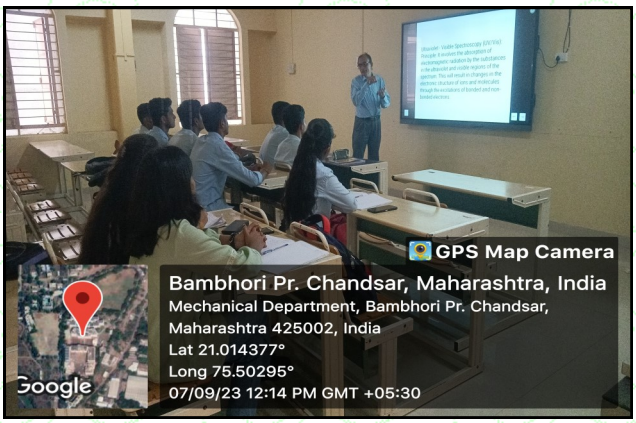
Programme Specific Outcomes (PSOs) of Chemical Engineering Department

PSO1 How are you able to apply basic principles of science, mathematics and chemical engineering skills in interpreting and analyzing experimental data for societal development?
PSO2 How are you able to design and provide solutions to problems in the development of chemical and allied industries?
PSO3 How are you able to display multidisciplinary approach for providing techno-economical and eco-friendly solutions?

Activities Conducted by Chemical Engineering Department in Academic Year 2023-24 (Term-I)

DATE	EVENT NAME	EVENT DESCRIPTION
29/08/2023	Grand Salute to ISRO	To admire ISRO's Chandrayaan 3's flawless moon landing which makes India the first nation to do so close to the moon's south pole, a Grand Salute program organized by the department which was attended by the students of chemical & biotechnology engineering.
01/09/2023 - 07/09/2023	Add-on Course	Department conducted one week (30 Hours) add on course on "Instrumental Chemical Analysis", for the students of second and third year chemical engineering.
05/09/2023	Teacher's Day celebration	Teachers' Day celebrated on 5th September to commemorate the birthday of Dr. Sarvepalli Radhakrishnan, the country's first Vice President and former President, scholar, philosopher, and Bharat Ratna awardee.
15/09/2023	Engineer's Day celebration	National Engineers' Day was celebrated on the theme 'Engineering for a Sustainable Future'.
26/09/2023	Tree Plantation	Tree plantation program was conducted at SSBT'COET Campus. Students of the department actively participated in the program.
16/10/2023	National Innovation Day	Department celebrated National Innovation Day to commemorate the birth anniversary of the former President of India, Bharat Ratna APJ Abdul Kalam and the day was dedicated to the spirit of innovation, entrepreneurship, and intellectual curiosity. Students, faculty members were present on the occasion.
30/10/2023	Stress & Copy Free Exam	A session of the faculty members of the department was organized to overcome the exam stresses on students. Speakers discussed several strategies that can help the students to manage exam stress.
02/12/2023	National Pollution Control Day	National Pollution Control Day, observed on December 2, to commemorates the tragic Bhopal Gas incident. This day serves as a vital reminder of the catastrophic consequences of pollution and aims to raise awareness about the urgent need for pollution control.
02/12/2023	Expert Lecture	The expert from SEPADU, Pune gives insights about design, analysis, and layout of piping systems used for transporting fluids or gases in various industries. The expert talk also covered aspects like material selection, stress analysis, piping codes and standards, equipment sizing, and safety considerations.
08/12/2023	Technical Lecture	A online technical lecture on "New World Energy" was organized of Prof. (Dr.) Joseph D. Smith from Missouri University of Science & Technology, USA at 07.00 am to 08.30 am (UST); 06.30 pm to 08.00 pm (IST.)





B.E. Chemical Engineering Top Ten Students in KBCNMU Dec.2023 Exam. Sem.-VII (2023-24)

Merit No.	Name of the Student	SGPA
1	ZAMBARE DEVENDRANARENDRA	8.90
2	PATIL VAISHNAVI SANJAY	8.71
3	BHADANE NARENDRA DNYANESHWAR	8.43
4	MORIS VAIBHAV PRAKASH	8.14
5	PATIL HARSHAD RAJENDRA	8.14
6	CHAUDHARI PRAGATI PRAKASH	8.00
7	RAJPUT TANMAY SURESHSING	7.90
8	PAWAR HIMANSHU BHARATSING	7.76
9	SHENDE GAURAV SATISH	7.48
10	RAJPUT NIKHIL BHARATSING	7.33

T.E. Chemical Engineering Students Rank in KBCNMU Dec.2023 Exam. Sem.-V (2023-24)

Merit No.	Name of the Student	SGPA
1	PATEL DEV VASANT	8.10
2	PANJARDE RAHUL SUPADU	7.14
3	KAKUSTE PRATHAMESH SUNIL	6.90
4	YEOLE RAHUL RAMESH	6.81
5	KOLI PREM SANJAY	6.48

S.E. Chemical Engineering Students Rank in KBCNMU Dec.2023 Exam. Sem.-III (2023-24)

Merit No.	Name of the Student	SGPA
1	GOHIL MEETKUMAR VINODBHAI	7.20
2	THORAT HARSHAL HARISH	7.20
3	THORAT ROHAN SANJAY	7.05
4	PATIL DARSHAN RAMESH	6.95
5	THAKARE YUTI SAROJKUMAR	6.50

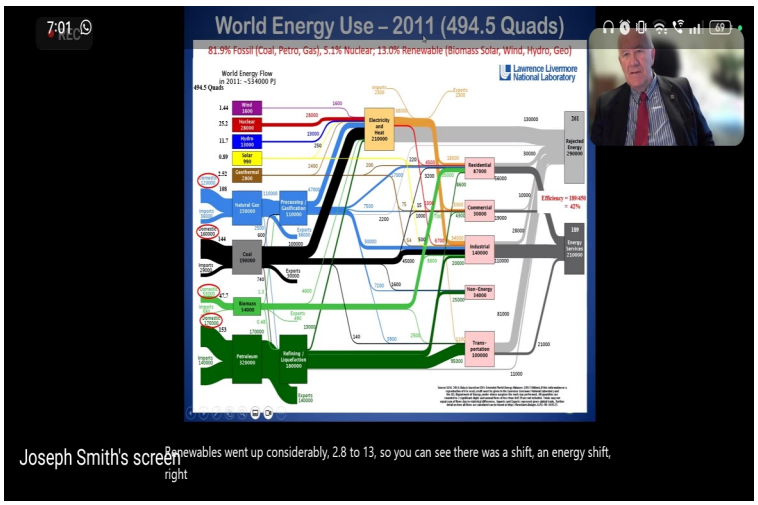
KBCNMU Dec.2023 Examination Result Analysis)

Class	No. of Students Appeared/ Result Declared	No. of Students ALL CLEAR	% of ALL CLEAR
S.E.Chemical Engineering	**8/8**	**5**	**62.50**
T.E.Chemical Engineering	**7/7**	**6**	**85.71**
B.E.Chemical Engineering	**16/15**	**12**	**80.00**

Online Technical Lecture on "New World Energy"

In today's developing world, it is necessary to use new energy technology for protectingthe environment and energy conservation. Department of Chemical Engineering provided distinct international exposure to students by organizing **Technical Lecture** on the topic **"New World Energy"** on zoom platform conducted by Prof. (Dr.) Joseph D. Smith from Missouri University of Science & Technology, USA on **08th December, 2023 during 07.00 am to 08.30 am (UST); 06.30 pm to 08.00 pm (IST.)**

New World energy plays a key role in decarbonizing the energy supply. It also reduces dependence on fossil fuels and has generated millions of jobs around the world. The lecture emphasized the importance of new world energy and provided what new world energy is, and what role it plays in our goal to trans-



Objectives:

To understand latest developments in energy on global level.

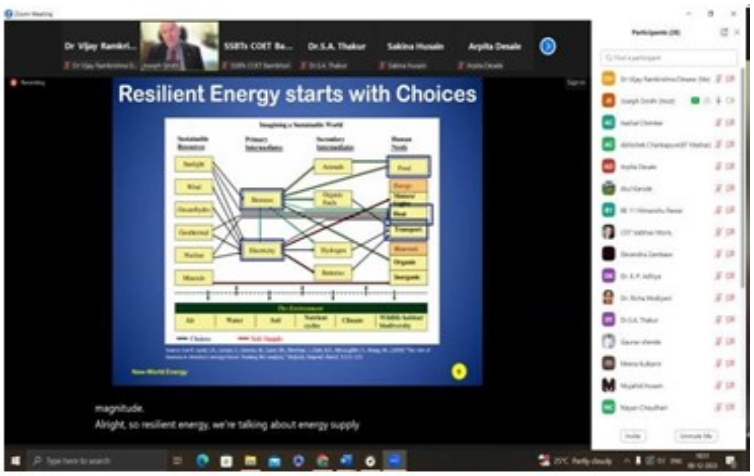
To update the knowledge about world energy scenario.

Outcomes:

Define and understand new world energy.

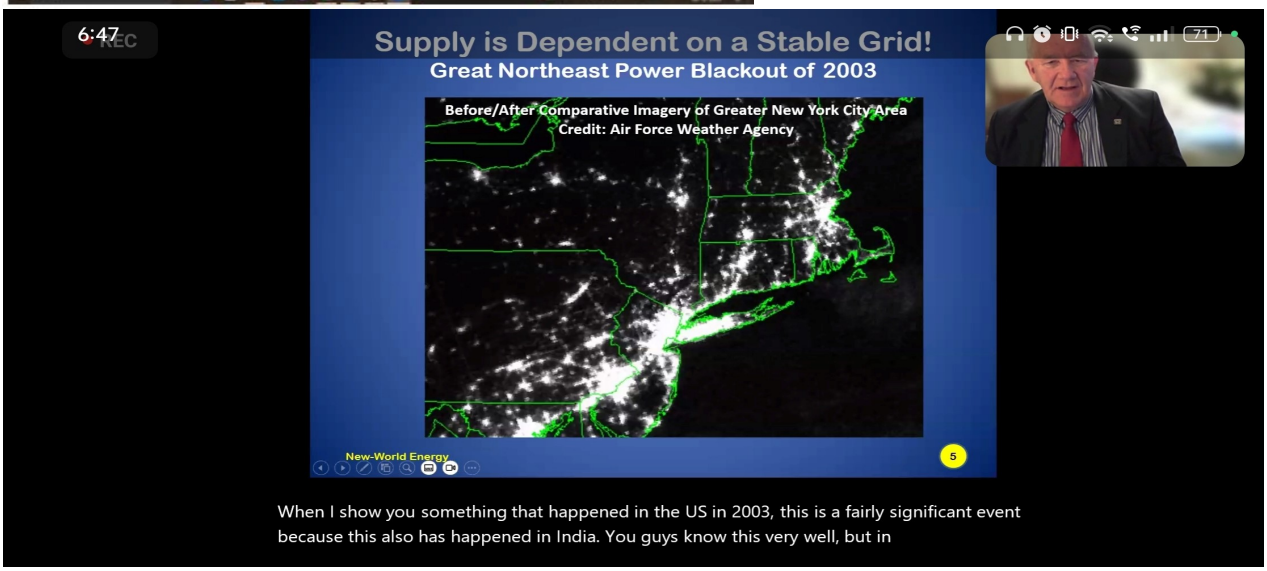
Understand the need of environment and energy conservation.

Identify methods of designing resilient energy.



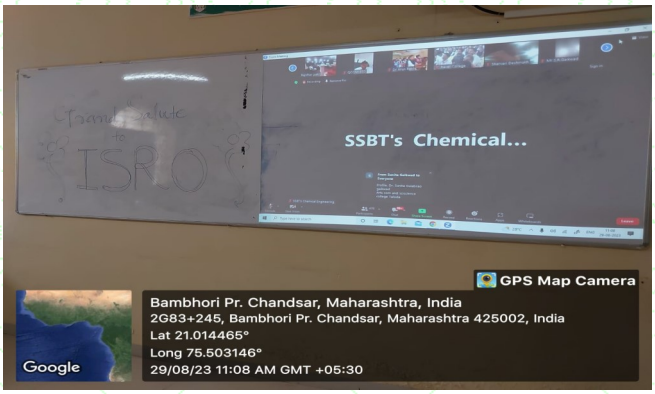
Participant's Feedback:

Feedback was received from 30 participants. As per the feedback received from most of the participants all the content of the technical lecture was interesting. The technical lecture was helpful in updating the knowledge about energy scenario. The mix of presentations and knowledge sharing was appropriate**.**



Glimpses of Activities

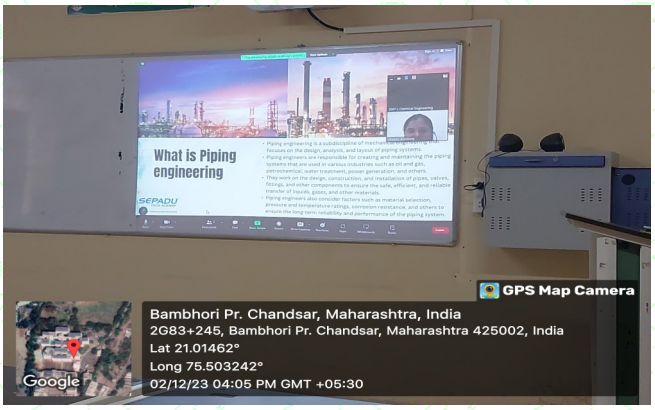
Grand Salute To ISRO



National Pollution Control Day

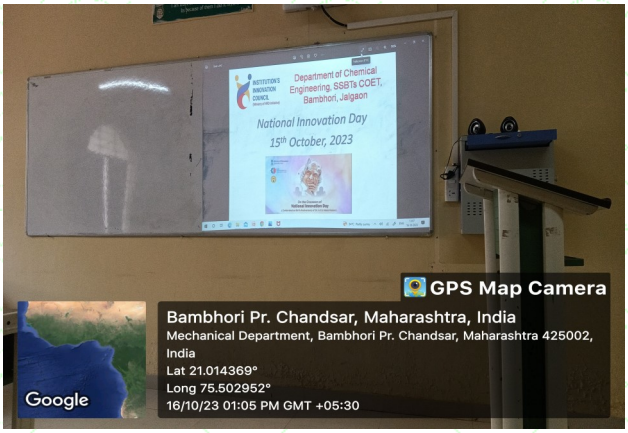
Engineer's Day Celebration

Expert Lecture



Teacher's Day Celebration

National Innovation Day



Chemical Industry Outlook 2024

Achieving US $1 Tn by 2040

The Indian Chemical industry has a huge role to play to make India a US $30 trillion economy by 2047 by contributing around US $1 trillion by 2040. The industry is currently pegged at US $220 billion and is growing at a CAGR of 9.3%. As the sector plays a significant role in enabling the growth of the Indian economy, the country needs to build a competitive landscape for the chemical industry.

Be it China-Plus-One strategy that seeks to develop alternate manufacturing hub, and India is pitted to be its biggest beneficiary, countries, and companies are seeking to diversify and de-risk their supply chains, changing geopolitics, trade war, increasingly stringent environmental norms, and increasing compliance and labour costs for manufacturers in China, or demand driven by growth in domestic chemical consumption in India, the Indian Chemical industry is in massive tailwind for unprecedented growth in the coming years.

Besides, the critical growth support that Chemical industry extends to a vast number of other industries helping produce almost 100,000 products, strengthens sector's untapped potential and massive growth opportunity in India in the coming years. The sector will be integral to Government's aspiration of developing an 'Aatmanirbhar Bharat' as well as growth aspirations of making India a US $30 Trillion economy by 2047.

Source: The Indian Chemical News

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