



New Satara Samuh Mumbai's

New Satara College of Engineering & Management (Polytechnic) Korti, Pandharpur

News Letter VOL-II



HOD's Desk

EDITION

Jan 2024–Jun 2024

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Editor
Ms.S.S.Jagadale

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Mr. V. M. Kumbhar

I am very happy to bring out the first issue of the Civil Engineering Departmental Newsletter. This newsletter outlines various activities that have taken place during the period of January to June, 2024 and the achievements of faculty and students. Various guest lectures and industrial visits are organized this semester to improve knowledge of the students. Pre-placement training is offered to the final year students to make them prepared for the job interviews.

The Department of Civil is putting all efforts to ensure the overall progress of the students. Any suggestions for further improvement will be greatly appreciated.

Vision

“To be a leader in the field of civil Engineering by imparting quality Based technical education to serve industry and society.”

Mission

- To provide value based technical education in civil engineering.
- To train the student so enhance professional skills and competencies by Providing various training programs.
- To mentor students in pursuit of higher education, entrepreneurship and global professionalism.

EXPERT LECTURES

Expert lecturers provide an important educational experience for students based on their real-world life experiences. Students get to see the insight and perspective of the guest lecturers' specific field. The format can enable students to interact with professionals in formal and informal settings.



Expert lecture by Mr.D.B.Borkar on "Maintenance & Repairs of Structure"

On 17th February 2024 we have arranged this guest lecture to Civil Engineering students by Mr.D.B.Borkar on "Maintenance & Repairs of Structure". This lecture covered knowledge about Non Destructive Testing.



Expert Lecture by Mr. S.S.Godase on "Carrier Guidance"

On 29 February 2024 we have arranged this guest lecture to Civil Engineering students by Mr.S.S.Godse, sir on "Carrier Guidance". This lecture covered Opportunities in government Sector.

Expert Lecture by Mr. S.D.Jagdale on "Hydraulics"

On 1 March 2024 we have arranged this guest lecture to Civil Engineering students by Mr.S.D.Jagdale on "Hydraulics". This lecture covered Application used in hydraulics.



INDUSTRIAL VISIT

Industrial visits provide the students with an opportunity to learn practically through interaction, working methods and employment practices. It gives the students an exposure to current work practices as opposed to theoretical knowledge being taught at their college classrooms.



Industrial Visit at Radhanagri Dam, Kolhapur

On 17th February 2024 an industrial visit was organized by department of Civil Eng. To Radhanagari Dam, Kolhapur for Second & third year students as a part of curriculum. The visit was helpful to enhance the knowledge about the Water Resource Engineering.



Industrial Visit at Sewage Treatment Plant, Pandharpur

On 5th March 2024 an industrial visit was organized by Civil Engg. to Sewage Treatment Plant, Pandharpur for Second & third year students as a part of curriculum. During this visit Mr. Shinde Sir introduced the information of various process of sewage treatment.

Carbon Capture in Cement Industry: A Path to Net-Zero

By: [Sarak Ganesh], Diploma in Civil Engineering

Date: June 2024

Abstract:

Cement production accounts for over 8% of global CO₂ emissions. Carbon capture and storage (CCS) technologies can drastically reduce this impact, making the construction industry more climate-resilient.

The cement industry is one of the largest contributors to global carbon dioxide (CO₂) emissions, responsible for approximately **7-8% of global CO₂ emissions**. Achieving **net-zero emissions** in cement production is a major challenge due to the process's inherent reliance on fossil fuels and limestone calcination. Carbon capture technologies provide a promising pathway to decarbonizing the cement industry by capturing CO₂ emissions before they are released to the atmosphere.

Techniques in Use:

- **Post-combustion capture**
- **Oxy-fuel combustion**
- **Calcium looping**

Real-World Projects:

- Norcem Cement Plant in Norway
- Carbon Clean Solutions in India

Benefits:

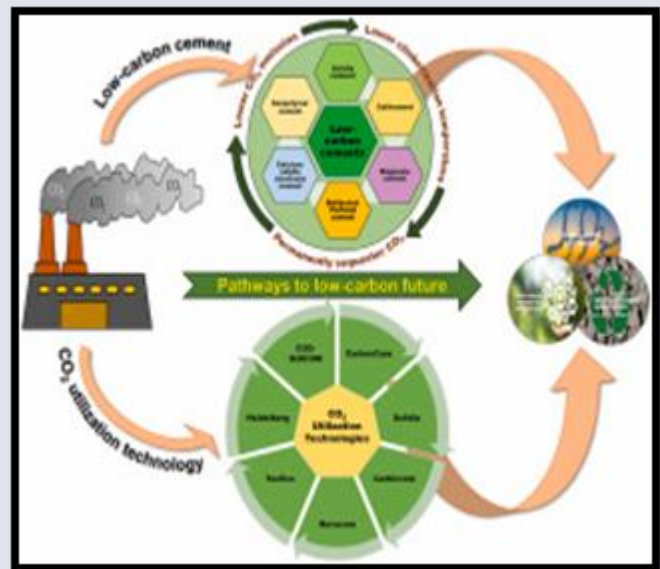
- Reduces emissions by up to 90%
- Aligns with international climate goals

Limitations:

- High cost
- Complex integration into existing plants

Conclusion:

Adopting CCS in cement plants is crucial to achieving sustainability in construction.



Program Outcome's (PO's)

PO1. Basic and discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2. Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

PO3. Design/Development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

PO4. Engineering tools, experimentation and testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5. Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices

PO6. Project management: Use engineering management principles individually, as a team member or leader to manage projects and effectively communicate about well-defined engineering activities.

PO7. Life-long learning: An ability to analyse individual needs and engage in updating in the context of technological changes. effectively in the world of work.

Program Educational Objectives (PEO's)

PEO1.Provide socially responsible environment friendly solution to Civil Engineering related broad based problems adapting professional ethics.

PEO2.Adopt state of the art Civil Engineering broad based technologies to work in multidisciplinary work environments.

PEO3.Solve Broad Based Problems individually and as a team member communicating effectively in the world of work.



IEEE Paper published on subject *Advance Cement & concrete*, by HBRPpublication

– **Author name: Mr. Kumbhar V.M., Mr. Nirmal.S.B**

IEEE Paper Publish on Subject *Application of Drone And Unmanned Aerial Vehical (UAV) Surveying For Planning For Cities* by ISRASET Publication.

– **Author name: Mr.Kumbhar V. M**

STUDENT ACHIEVEMENTS

Department Of Mechanical Engineering		
Second year		
Sr. no.	Name of student	Percentage
1	Bagal Dipali Nagnath	85.22
2	Patale Aaditya Uddhav	82.44
Third Year		
3	Sarak Ganesh Kshiling	92.20
4	Waghmmare Vishwajit Rajendra	87.60

Editor's Desk

Ms. S. S. Jagadale
Lecturer in
Civil Engineering Department



Hello Everyone!

We are pleased to share with you Newsletter Edition (Jan 2024 – June 2024) Vol- II of Civil Engineering Department. This edition includes the various Technical, Cultural events, NSS activities, Student & Staff achievements & technical article by faculty The editorial desk is thankful to all those who contributed to publish this edition successful.

