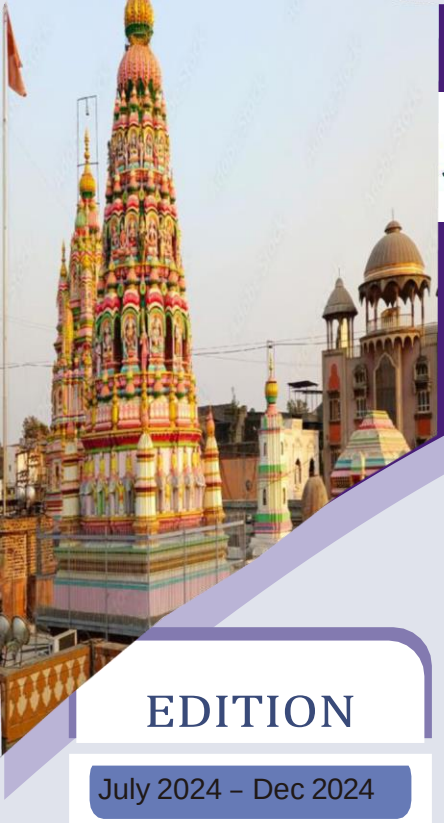


New Satara Samuh Mumbai's

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

News Letter

VOL-I

EDITION

July 2024 – Dec 2024

Editor in Chief
Mr. V. H. Londhe

Editor
Ms. S. S. Jagadale

INSIDE

Mr. V. M. Kumbhar
Head Of Department

HOD's Desk

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 July to December, 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 Engineering 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.

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 analyze 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.

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 on Advanced Surveying by Mr. S. V. Jagtap

On 10th October 2024 we have arranged this guest lecture to Civil Engineering students by Mr. S. V. Jagtap on "Advanced Surveying". This lecture covered knowledge about Surveying and process.

Expert Lecture on "Estimating & Costing"by Mr. C. R. Limkar

On 19th October 2024 we have arranged this guest lecture to Civil Engineering students by Mr. C. R. Limkar sir on "Estimating & Costing". This lecture covered Drawing& Detailed Process of Calculating Estimate & Its Application.

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 Sewage Treatment plant, Pandharpur

On 09 August 2024 an industrial visit was organized by departnment of Civil Eng. to Water Treartment plant, Pandharpur for Second & third year students as a part of curriculum. The visit was helpful to enhance the knowledge about the Public Health Engineering.

Industrial Visit at Building Construction, Pandharpur

On 22 August 2024 an industrial visit was organized by Civil Engg. to Buildinmg Construction for Second & third year students as a part of curriculum. During this visit Mr. Sameer Sakhare Sir introduced the information of various Components of Building.

Departmental Activities

Ganesh Utsav

Sport Participation

ED & PD Programme

Personality development Program

FACULTY ACHIEVEMENT

IEEE Paper published on subject *Sisal fiber reinforce concrete* , by ACCT publication –***Author name: Mr. Kumbhar V. M., Mr. Nirmal. S. B.***

IEEE Paper published on subject *Study of compressive strength of concrete replacing natural sand to the crushed sand with quarry dust*, IJCRT Publication ***Author name: Mr. Shendage S. D., Mr. Nirmal S. B.***

STUDENT ACHIEVEMENTS

Department Of Civil Engineering		
Second Year		
Sr. No	**Name of Student**	**Percentage**
1	Sarak Ganesh Kshiling	85.47
2	Waghmmare Vishwajit Rajendra	81.41
Third Year		
3	Rohit Bapu Lokhande	74.15
4	Priyanka Bajirao sakhre	76.05

Student Corner

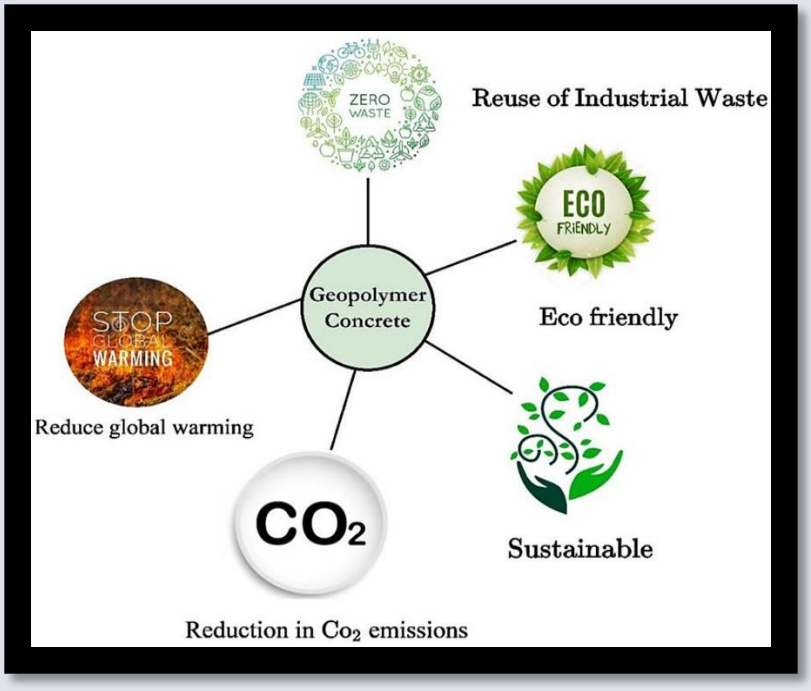
Geopolymer Concrete: An Eco-Friendly Alternative to OPC

By: [Your Name], Diploma Civil Engineering
Date: December 2024

Abstract:
Ordinary Portland Cement (OPC) production is energy-intensive and polluting. *Geopolymer concrete* made from industrial waste such as fly ash and slag—is a greener alternative.

Geopolymer concrete (GPC) is an innovative and sustainable alternative to Ordinary Portland Cement (OPC)-based concrete. Unlike traditional concrete, which relies on **carbon-intensive OPC**, geopolymer concrete utilizes **industrial by-products** like **fly ash**, **slag**, and **metakaolin**, reducing **CO_2 emissions by up to 80%**. It offers superior durability, fire resistance, and lower water demand, making it a key material for sustainable construction.

How It Works:
Alumino-silicate materials are activated with alkaline solutions to form a strong binder without the need for limestone.



Advantages:

- Up to 80% lower CO_2 emissions
- High resistance to chemicals and fire
- Excellent durability

Challenges:

- Limited availability of source materials
- Standardization issues

Applications:

- Sewer systems
- Marine construction
- Pavement blocks

Conclusion:
Geopolymer concrete represents a major step toward carbon-neutral construction and circular economy goals.

Editor's Desk

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

Hello Everyone!

We are pleased to share with you Newsletter Edition (July 2024 - December 2024) Vol- 1 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 succsfully.