



DEPARTMENT OF CIVIL ENGINEERING ACADEMIC YEAR 2023 – 2024(even) CIRCULAR

DATE: 07.03.2024

This is to inform our department faculty that there will be an internal staff seminar. The details of the staff seminar are given below.

Name of the faculty : Mr.A.SAGAYA ALBERT

Date

: 08.03.2024

Venue

: Smart classroom (Hall no 236)

Time

: 12:30 PM

DRC MEMBER P7103/20024

HOD/CIVIL OT | 03/2024.



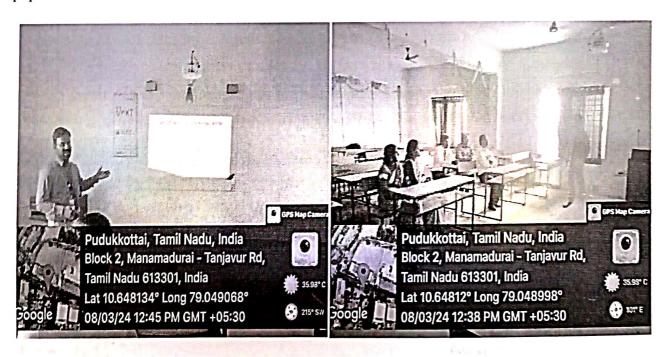
DEPARTMENT OF CIVIL ENGINEERING ACADEMIC YEAR 2023-2024/EVEN SEMESTER INTERNAL STAFF SEMINAR – REPORT

08/03/2024

Background & Objective

Department of Civil Engineering had organized an Internal Seminar for the Department staff members for accessing online journals. The purpose of this seminar is to equip the faculty in new techniques through accessing online journals like MAT, Springer etc. Seminar Session

This Seminar session was held at the Department of Civil Engineering on 08th March, 2024 at 12:30pm. Mr. SAGAYA ALBERT A, AP/CIVIL was delivered his seminar talk on Cellular concrete: Utilization of plastic and glass waste as a replacement of fine aggregate .The paper was referred from Construction and Building Materials, Volume 200 Pages 637-647.



Internal Seminar Session by Mr. SAGAYA ALBERT AP/CIVIL

Theme:

This article presents a complete review with the main aspects that influence the application of cellular concrete: raw materials, production methods and expected properties based on density. This paper aims at identifying the possibility of using recycled materials such as crushed glass and plastic wastes in foam concrete as substitute filler material for fine river sand. A protein based foaming agent was adopt for this study. In this research study foam concrete blocks were prepared according to the designed proportions to attain the maximum density of 1900kg/m^3. In this project, the mixing of recycled glass wastes 5%, 10%, 15% and recycled plastic wastes 1%, 3% & 5% were added as a filler in foam concrete. The 7, 14 and 28 days compressive strength, flexural strength, split tensile strength of each batch of concrete were studied and compared with conventional foam concrete. The study showed that the incorporation of recycled glass and plastic waste in conventional foam concrete is effective and it will useful for load bearing wall applications.

Scope for future work:

- In this study, the concept of foam concrete have studied. The fabrication technique of foam concrete studied.
- The physical and mechanical properties, advantage, application of foam concrete studied.
- ❖ The density value decreased with increasing the percentage the percentage of PET content. The decreasing ratio of density close to 14% especially at 10% of PET.

Outcome:

- From this study, the compressive strength and durability of foam concrete increases with the age. But the compressive strength of this concrete mixes (i.e. CFPG-1, CFPG-2& CFPG-3) was 41 to 44% lower than conventional concrete at 28 days.
- The tensile strength and flexural strength of this concrete mixes increases with age
- Finally, Staff members shared their views regarding seminar and gave their valuable feedback.

-5~68 pg 2024 HOD/CIVIL

PRINCIPAL



DEPARTMENT OF CIVIL ENGINEERING

INTERNAL STAFF SEMINAR – ATTENDANCE AND FEED BACK

S.NO	NAME	FEEDBACK	SIGN
1	Dr.R.Saravanan	Excellent Presentation.	F 5 mon 2 24
2	Mr. R.Sundharam	Informative and Innovative segroon	R. Tolalan
3	Mr.K.Arun	Much need topic with excellent presentation	813/64
4	Mr. D.Nandha Kumar	Excellent Presentation.	D1819124
5	Mrs.A.Suganya	useful poesentation	A8/3/27.
6	Mr. A .Sri Ram Gopal	Nice communication, Topic is innovative	Langard 103 be
7	Mrs.K.Kanimozhi.	Excellent presentation with Innovative topic.	St. 61103/24