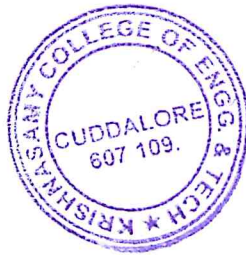


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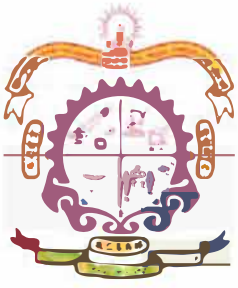
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☎ (04142) 285 601 - 604 🌐 www.kcet.in ✉ info@kcet.in

LIST OF RESEARCH GRANTS Academic Year (2020-2021)						
Name of the Research Project/ Endowment	Name of the Principal Investigator/ Co-investigator	Department of Principal Investigator	Amount Sanctioned INR in Lakhs	Duration of the Project	Name of the Funding Agency	Type (Government/non-Government)
EXPERIMENTAL ANALYSIS OF WASTE FOUNDRY SAND AS A PARTIAL REPLACEMENT OF FINE AGGREGATE IN CONCRETE	Er. PON SIVAMATHI	CIVIL ENGINEERING	0.075	6 Months	MAJESTIC BUILDERS	NON-GOVERNMENT
FOAM CONCRETE FULLY REPLACEMENT OF FINE AGGREGATE BY USING BOTTOM ASH WITH MIXING OF OYSTER AND PLASTIC FIBRES	Er. C. SURESH KUMAR	CIVIL ENGINEERING	0.075	6 Months	MAJESTIC BUILDERS	NON-GOVERNMENT
Total Amount			0.150			




Dr. G. ELANGO, M.E., Ph.D.,
PRINCIPAL
KRISHNASAMY COLLEGE OF
ENGINEERING & TECHNOLOGY,
S. Kumarapuram, Cuddalore



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Prof. Dr. G. ELANGO, M.E., Ph.D.,

Principal

Lr. No. KCET/2020-21/Trust/122

Date :15.02.2021

From

The Principal,

Krishnasamy College of Engineering and Technology,
S.Kumarapuram, Cuddalore-607109.

To

MAJESTIC BUILDERS,
5/12, Rajiv Gandhi Nagar,
Koothapakkam,
Cuddalore-2.

Respected Sir,

Sub. : Project Funding – Reg.

Ref. : MoU

The research project has been identified under the MoU of your esteemed organisation based on the recommendations of the Head of the Department and the Principal for the following batches. Thank you for your support and funding.

Academic Year 2020-2021				
Guide Name and Institution Address	Title of the Project	Students Name	Department of the Students	Amount (Rs)
Mrs.Pon Sivamathi Assistant professor Krishnasamy College of Engineering and Technology, Kumarapuram, Cuddalore-607109.	Experimental Analysis of waste foundry sand as a partial replacement of fine aggregate in concrete	Arun.E Kaviya Priya.R	Civil Engineering	7500/-
Mr.C.Sureshkumar Assistant professor Krishnasamy College of Engineering and Technology, Kumarapuram, Cuddalore-607109.	Foam concrete fully replacement of fine aggregate by using bottom ash with mixing of oyster and plastic fibres	Arivazhagan.A Jeganathan.A Raman Abdullah.L	Civil Engineering	7500/-



Yours Sincerely,


PRINCIPAL

Krishnasamy College of
Engineering & Technology,
Kumarapuram,
Cuddalore-607109.



MAJESTIC BUILDERS

5/12, Rajiv Gandhi Nagar, Koothapakkam, Cuddalore-2.
Email: cuddaloremajesticbuilders@gmail.com

Date :24.02.2021

From

MAJESTIC BUILDERS,
5/12, Rajiv Gandhi Nagar,
Koothapakkam,
Cuddalore-2.

To

The Principal,
Krishnasamy College of Engineering and Technology,
S.Kumarapuram, Cuddalore-607109.

Respected Sir,

Sub. : Project Funding – Reg

Ref. : Lr. No. KCET / 2020-21/Trust/122

We are pleased to inform you that we approve your proposal based on the letter cited above as it is a very nice thought and we feel it definitely need to be encouraged. We would grant you a sum of amount INR. 15000/-. We will support you throughout the execution of the idea.

The detailed report shall be forwarded to us and subsequent review discussions held by involving Engineers from Builders Association. It has been decided to sanction the funding as follows.

Academic Year 2020-2021				
Guide Name and Institution Address	Title of the Project	Students Name	Department of the Students	Amount (Rs)
Mrs.Pon Sivamathi Assistant professor Krishnasamy College of Engineering and Technology, Kumarapuram, Cuddalore-607109.	Experimental Analysis of waste foundry sand as a partial replacement of fine aggregate in concrete	Arun.E Kaviya Priya.R	Civil Engineering	7500/-
Mr.C.Sureshkumar Assistant professor Krishnasamy College of Engineering and Technology, Kumarapuram, Cuddalore-607109.	Foam concrete fully replacement of fine aggregate by using bottom ash with mixing of oyster and plastic fibres	Arivazhagan.A Jeganathan.A Raman Abdullah.L	Civil Engineering	7500/-

With Regards

R. Priya



MAJESTIC BUILDERS

5/12, Rajiv Gandhi Nagar, Koothapakkam, Cuddalore-2.
Email: cuddaloremajesticbuilders@gmail.com

Research/Project Grant 2020-2021

UTILISATION CERTIFICATE

- 1 Name of the guide & Address : Mrs. Pon. Siva Mathi
Assistant Professor
Department of Civil Engineering
- 2 Name of the student(s) : Anu. E.
Kaviya Priya .R.
- 3 Title of the project : Experimental Analysis of waste foundry
Sand as a partial replacement of fine
aggregate Concrete.
- 4 Department/Institution Name & Address : Civil Engineering /
Krishnamachary College of Engineering and
Technology,
S. Kumarapuram, Cuddalore-607109.

It is certified that a sum of Rs 75000 (Seven Thousand and five hundred only)
sanctioned by the Trust for carrying out above mentioned project has been utilized for the purpose for which
it was sanctioned.

Pon. Siva Mathi
Signature of the Guide

P. Priya
Signature of the HOD

[Signature]
Signature of the Principal

**EXPERIMENTAL ANALYSIS OF WASTE FOUNDRY
SAND AS A PARTIAL REPLACEMENT OF FINE
AGGREGATE IN CONCRETE**

A PROJECT REPORT

Submitted by

ARUN.E 421317103002

KAVIYA PRIYA.R 421317103005

In partial fulfilment for the award of the degree

Of

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING



**KRISHNASAMY COLLEGE OF ENGINEERING & TECHNOLOGY
S.KUMARAPURAM, CUDDALORE-607 109**



ANNA UNIVERSITY CHENNAI - 600 025

APRIL - 2021

ABSTRACT

This project describes the usage of Waste Foundry Sand in Concrete as a Partial Replacement of Fine Aggregate. As an attempt to reuse the Waste Foundry Sand as building Material, this experimental analysis would give its strength. In this project, initially we have prepared the standard conventional concrete of cubic and prismatic specimens with M30 grade and its Compressive Strength & Flexural Strength were determined. Then we have partially replaced the Fine Aggregate with 0%, 15%, 30% & 45% of Waste Foundry Sand in the concrete and the Compressive Strength & Flexural Strength of the respective cubic and prismatic specimens were determined. Finally, the strengths of standard conventional concrete specimens and partially replaced concrete specimens were compared to find out the usage of Waste Foundry Sand in concrete and its effects.

All the relevant details pertaining to this project are included from different IS Code Practice and Reference Journals. Experiments have been done in accordance with the Laws and Code Provisions.

Keywords: *Compressive Strength, Flexural Strength, Foundry Sand and Waste Foundry Sand.*



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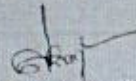
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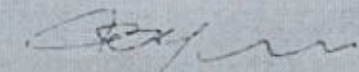
This is to certify that Mr. / Ms. Arun.E (CE - IV year) of

Krishnasamy College of Engineering and Technology, Cuddalore has successfully completed the

project titled Experimental Analysis of Waste foundry sand as a Partial Replacement of fine Aggregate in Concrete

under Research / Project grant sponsored by the Majestic Builders during the academic year 2020-2021


Principal


Dr. K. Rajendran
Chairman



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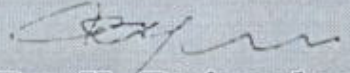
This is to certify that Mr. / Ms. R. Kaviya Priya (CE - IV year) of

Krishnasamy College of Engineering and Technology, Cuddalore has successfully completed the

project titled Experimental Analysis of Waste foundry sand as a Partial Replacement of fine Aggregate in concrete

under Research / Project grant sponsored by the Majestic Builders during the academic year 2020-2021


Principal


Dr. K. Rajendran
Chairman



MAJESTIC BUILDERS


5/12, Rajiv Gandhi Nagar, Koothapakkam, Cuddalore-2.
Email: cuddaloremajesticbuilders@gmail.com

Research/Project Grant 2020-2021

UTILISATION CERTIFICATE

- 1 Name of the guide & Address : Mr. C Suresh Kumar
Assistant Professor
Department of Civil Engineering
- 2 Name of the student(s) : Arivazhagan, A
Jegansathan, A
Raman Abdulshahid.
- 3 Title of the project : Foam Concrete hollow Replacement of fine
Aggregate by using bottom Ash with
lining of oxiter and plastic fibres.
- 4 Department/Institution Name & Address : Civil Engineering)
Krishnasamy College of Engineering and
Technology , S. Kuppanpattinam,
Cuddalore - 607109.

It is certified that a sum of Rs 7500 (Seven Thousand and five hundred only)
sanctioned by the Trust for carrying out above mentioned project has been utilized for the purpose for which
it was sanctioned.


Signature of the Guide


Signature of the HOD


Signature of the Principal

**FOAM CONCRETE FULLY REPLACEMENT OF FINE
AGGREGATE BY USING BOTTOM ASH WITH
MIXING OF OYSTER AND PLASTIC FIBRES**

A PROJECT REPORT

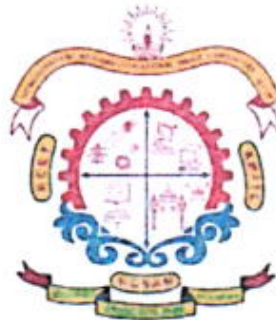
Submitted by

A.ARIVAZHAGAN	421317103001
A.JEGANATHAN	421317103004
L.RAMAN ABDHULLAH	421317103302

In partial fulfilment for the award of the degree

of

**BACHELOR OF ENGINEERING
IN
CIVIL ENGINEERING**



**KRISHNASAMY COLLEGE OF ENGINEERING AND TECHNOLOGY
S.KUMARAPURAM, CUDDALORE-607 109**



ANNA UNIVERSITY: CHENNAI - 600 025

APRIL 2021

ABSTRACT

This project researches the Foam Concrete in which the fine aggregate was fully replaced by Bottom Ash in addition to Plastic Fibre and Oyster. To use the light weight concrete as a good construction material, we have attempted to check its compressive and flexural strength with the addition of plastic fibre & oyster and reuse the Bottom ash as a fully replacement of fine aggregate.

In this project, we have collected the required materials, calculated mix design for M30 grade of concrete and mix proportioning. Then the concrete materials were weighed and mixed in according to the general process of concreting. The concrete cubes and beams were casted and cured for 7days and 28 days and their strengths were calculated respectively. Thus, the materials such as Bottom ash, plastic fibre, foaming agent, oyster and their influence in concrete was observed and studied in this project

Keywords: Bottom ash, Foam concrete, Plastic Fibre, Oyster.



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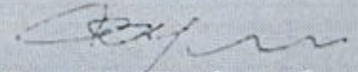
This is to certify that Mr. / Ms. A. Arivazhagan (CE - IV year) of

Krishnasamy College of Engineering and Technology, Cuddalore has successfully completed the

project titled Foam Concrete fully Replacement of fine Aggregate by using bottom ash with mixing of oyster and

under Research / Project grant sponsored by the Majestic Builders during the academic year 2020-2021 ^{plastic fibres}


Principal


Dr. K. Rajendran
Chairman



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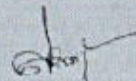
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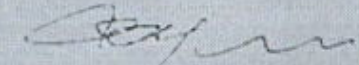
This is to certify that Mr. / Ms. A. Jaganathan (CCE - IV year) of

Krishnasamy College of Engineering and Technology, Cuddalore has successfully completed the

project titled Foam Concrete fully Replacement of fine Aggregate by using bottom ash with mixing of oyster and plastic fibres

under Research / Project grant sponsored by the Majestic Builders during the academic year 2020-2021


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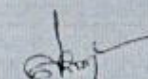
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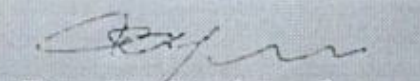
This is to certify that Mr. / Ms. L. Raman Abdullah (CCE-IV year) of

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under Research / Project grant sponsored by the Majestic Builders during the academic year 2020-2021 ^{plastic fibres}


Principal


Dr. K. Rajendran
Chairman