

## Editor

**Bindu Swetha Pasuluri,**

**Daniel C,**

**D. S. Vijayan,**

**S. Arvindan,**

**S. Pradeep Kumar**



ISBN 978-93-89631-66-1

ISBN (eBook) 978-93-89631-67-8

<https://doi.org/10.34256/iorip203>

© IOR INTERNATIONAL PRESS. This book is an open access publication. **Open Access** This book is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this book are included in the book's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This IOR INTERNATIONAL PRESS imprint is published by the registered company IOR PRESS. The registered company address is: 5/11, Perumal Kovil Street, Naickenpalayam, Coimbatore-641020 Tamil Nadu, India.

  
Principal

GIET ENGINEERING COLLEGE,  
NH-16, Chaitanya Knowledge City,  
RAJAHMUNDRY-533 296.

## Scaling Online Teaching and Learning to Best Conventional Mode

Sripathi Vijaya Sailaja <sup>1</sup>, Addepalli Mallinadh Kashyap <sup>2,\*</sup>, Sivangi

Suryanarayana Raju <sup>3</sup>

<sup>1</sup> Department of Electrical & Electronics Engineering, GIET Engineering College, Rajahmundry

<sup>2</sup> Department of Civil Engineering, GIET Engineering College, Rajahmundry

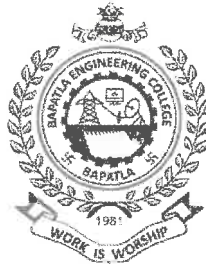
<sup>3</sup> GIET Engineering College, Rajahmundry.

\*Email: [mallinadhkashyap@gmail.com](mailto:mallinadhkashyap@gmail.com)

The impact of COVID 19 pandemic outbreak given a huge question to the entire globe towards its sustainment in several aspects starting at human health. Global economy come down to greater level in view of huge impact on the industry and other related sectors. Education sector is not an exception in this regard facing both direct and indirect impacts on the stake holders, viz., students, parents, academic fraternity. The entire educational industry is affected as a sudden forced closure with a prior precautionary measure as a part of implementation of non-expansion activities of corona virus. In keeping view of the un predicted severity, big challenges are still ahead. As the situation is uncertain and in keep in view of compensation to the forced loss to existing student fraternity, educational institutions started implementation of online teaching learning process, instead of direct and conventional teaching activities with an intention to avoid absolute physical contact where one to one personal interaction between the teachers and the learners is maximum than any other teaching and learning methodologies. Though the online learning is not a new version and exists since several years, majority portion is confined to special learning aspects rather than the conventional mode of teaching learning processes in particular in India. Though this alternative immediate adoption for best compensation to the existing loss, there are several challenges in effective dissemination of the knowledge, one among them is the full-fledged engagement by the learners as the online teaching & learning process witnessed lower extent in many cases in particular slow learners. In these constraints, effective attempts are more required to maximize the learner's engagement. As a part of our efforts to our efforts, we developed a typical strategy and deployed in the online process of teaching & learning with game play approach that the learners are well engaged actively throughout the session. Different learning management systems are available both in free and paid versions to cater the academic needs to a bet extent.

Gamified online teaching & learning process is one of the best concepts in augmenting the real engagement of the students. As a part of verification of our concept, two sessions were engaged in parallel with the same concept of teaching

**International Conference on Innovative and  
Sustainable Technologies in Civil Engineering  
(ISTCE-2021)**



**24<sup>th</sup> & 25<sup>th</sup> September 2021**

**Editors:**

Retd. Prof. K. Ganesh Babu


Dr. Heeralal Mudavath

Dr. Meena Murmu

Dr. Yeswanth Paluri

Dr. Kunamineni Vijay

Dr. Sri Ram Ravi Teja Prathipati

  
Principal  
GIET ENGINEERING COLLEGE,  
NH-16, Chaitanya Knowledge City,  
RAJAHMUNDRY-533 002.

**Organized by**

**Department of Civil Engineering, Bapatla Engineering College,  
Bapatla - 522101**



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

PAPER • OPEN ACCESS

## Pervious Concrete: An Overview and Experimental Study

To cite this article: T S S Hoshitha *et al* 2022 *IOP Conf. Ser.: Earth Environ. Sci.* **982** 012020

View the [article online](#) for updates and enhancements.

You may also like

- [Laboratory Investigation on the Effects of Natural Fine Aggregates and Recycled Waste Tire Rubber in Pervious Concrete to Develop More Sustainable Pavement Materials](#)  
Alessandra Bonicelli, Luis G Fuentes and Ibrahim Khalil Dawd Bermejo
- [Effect of Different Mineral Admixtures on the Properties of Pervious Concrete](#)  
Yu Bin
- [Experimental Study of Pervious Concrete Using Recycled Coarse Aggregate](#)  
Weidong Zhang and Yanan Gao

*Dur*

Principal  
GIET ENGINEERING COLLEGE  
NH-16, Chaitanya Knowledge City,  
RAJAHMUNDRY-533 296.



244th ECS Meeting

Gothenburg, Sweden • Oct 8 – 12, 2023

Early registration pricing ends  
September 11

Register and join us in advancing science!

Learn More & Register Now!



# Pervious Concrete: An Overview and Experimental Study

T S S Hoshitha<sup>1</sup>, A Mallinadh Kashyap<sup>2</sup> and T Chandrasekhar Rao<sup>3</sup>

<sup>1</sup> Masters Student, Department of Transportation Engineering, Sapienza University, Italy

<sup>2</sup> Assistant Professor, Department of Civil Engineering, GIET Engineering College, Rajahmundry, India

<sup>3</sup> Professor, Department of Civil Engineering, Bapatla Engineering College, Bapatla, India

Corresponding Author Email: [mallinadhkashyap@gmail.com](mailto:mallinadhkashyap@gmail.com)

**Abstract.** The present climatic changes are occurring because of the various activities of the humans such as urbanization and increasing threat of green-house gas (GHG) emissions resulted in precipitation increase in many geographical areas. In view of this, OPC based pervious concrete (PC) was developed in order to enhance the sustainability of the urban drainage systems (UDS). No fines concrete also coined as OPC based pervious concrete (PC) which is a versatile material with high porosity content applicable in flat work applications which allows the water from various sources such as precipitation and other sources to flow through and in turn recharges the ground water levels. Apart from these aspects, PC can significantly decrease the solar radiation absorption and urban heat storing potential which leads to the protection of the environment as well as the health and safety of the human beings. Generally, no fines concrete generally consists of cementitious paste to overlay the coarse aggregate which relates the vanderwall bond between the coarse aggregate and the cement. However, PC requires periodical maintenance in order to prevent any sort of clogging within the voids by the vegetation and sediments. In the present investigation, the overview of PC as well as the experimentation to study the mechanical strength characteristics by the utilization of industrial waste exhausts materials like fly ash. The study conferred that addition of fly ash to pervious concrete significantly enhances the mechanical strength characteristics of PC. An equation is proposed to establish a correlation between split-tensile strength and flexural strength of PC and it is in good agreement with the previous studies.

**Key words:** Pervious Concrete, Coarse Aggregate, Industrial Waste Exhausts, Mechanical Strength Characteristics

## 1. Introduction

By the continuous urbanization and rapid growth in population, the increase in the OPC based pervious surfaces was observed. The percolation of runoff water from various sources was being disturbed, results in causing the increase in surface runoff which lead to flooding of human localities and erosion etc., Regarding this aspect, pervious or no fines concrete has the ability to pass the runoff water through it and recharge the ground water levels. Keeping in this in regard, extensive research was being done on pervious concrete for the storm water control measures. Such pavement systems with relative permeability can surely contribute to resolve the various problems in terms of drainage



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

# Face recognition system using adaptive neurofuzzy inference system

Publisher: IEEE

Cite This

PDF

Tadi Chandrasekhar ; Ch. Sumanth Kumar All Authors

1 Paper Citation 149 Full Text Views

## Abstract

Document Sections

- I. Introduction
- II. Related Work
- III. Proposed Methodology
- IV. Result and Discussion
- V. Conclusion



**Abstract:**Biometric verification using Face Recognition (FR) is one of the most emerging trait in the field of image analysis. The steps involved in FR are classified into two type... [View more](#)

### Metadata

#### Abstract:

Biometric verification using Face Recognition (FR) is one of the most emerging trait in the field of image analysis. The steps involved in FR are classified into two types: 1) face verification and 2) face classification. In recent years, the face verification systems are well-developed, but still face classification algorithms are facing problems like poor outcome in severe lighting variations, illuminance, face pose variation, etc. In order to overcome these difficulties, we propose Adaptive Neuro-Fuzzy Inference System (ANFIS) with Principal Component Analysis (PCA) by considering different contributions of the training samples (ORL and YALE B dataset). At first, the facial images are enhanced by using DualTree Complex Wavelet Transform (DTCWT) approach. The preprocessed facial image features are extracted by employing PCA method. Using the feature information, the facial classification is achieved by using ANFIS classifier. Experimental outcome shows that the proposed approach improved accuracy in face detection up to 0.2-0.8% compared to the neural network (existing method).

Authors

Figures

References

Citations

Keywords

Metrics

More Like This

**Published in:** 2017 International Conference on Electrical, Electronics, Communication, Computer, and Optimization Techniques (ICEECCOT)

**Date of Conference:** 15-16 December 2017

**INSPEC Accession Number:** 17576808

**Date Added to IEEE Xplore:** 08 February 2018

**DOI:** 10.1109/ICEECCOT.2017.8284546

**ISBN Information:**

**Publisher:** IEEE

**Conference Location:** Mysuru, India


Principal  
GIET ENGINEERING COLLEGE,  
NH-16, Chaitanya Knowledge City,  
RAJAHMUNDRY-533 296.



**Proceedings of 1st International Conference on Structural Damage Modelling and Assessment** pp 191–207

[Home](#) > [Proceedings of 1st International Conference on Structural Damage Modelling and Assessment](#) > Conference paper

## Durability Performance of Binary Blended Geopolymer Concrete

[Addepalli Mallinadh Kashyap](#) , [T. Chandra Sekhar Rao](#) & [N. V. Ramana Rao](#)

Conference paper | [First Online: 13 December 2020](#)

**404** Accesses

Part of the [Lecture Notes in Civil Engineering](#) book series (LNCE, volume 110)

### Abstract

The present study is the investigation of durability constraints of geopolymer concrete made up of binary blending of industrial waste exhaust materials viz., Class F fly ash, GGBS under alkali activation. Two grades of concrete M30 and M70 were developed for OPC and GPC concretes. The developed concretes were tested for durability under sulphate, chloride attacks and also tested for

  
Principal  
GIET ENGINEERING COLLEGE,  
NH-16, Chaitanya Knowledge City,  
RAJAHMUNDRY-533 296.