

ISSN 2471-9838

2020 Vol.6 No.3

Development a new type of non-Portland Cement with significant lowcarbon footprint.

Morteza Khorami School of Energy, Construction & Environment, Faculty of Engineering & Computing, Coventry University. UK

Abstract

 C_{oncrete} is the second most consumable materials in the

world after water. Cement is the main ingredient of concrete, which has a significant role in climate changes and carbon dioxide emission. Based on carried out research

According to the Intergovernmental Panel on Climate Change, IPCC, for production of one tonne of cement, about one tone of Carbon dioxide is produced.

In this project, an innovative technology has been developed to make a novel cement that can be used in a broad range of construction applications.

This cement can be made out of several types of waste and industrial by-products which are normally available in both developed and developing countries.

In addition to competitive production costs, it can enhance engineering benefits such as increased strength, durability and sustainable revenue.

The results of the carried out tests show that the novel cement can satisfy the relevant standard requirements and

Biography:

Dr Morteza Khorami received is a lecturer in Civil Engineering at Coventry University and an associate member of the Faculty Research Centre for Built & Natural Environment. He has over fifty publications including books, patent, research reports, journal papers and international conferences. His main research interests include; Geopolymer cement to reduce carbon footprint and development of Low-carbon cement and concrete using by-products and waste materials.

Webinar on Materials Science & Engineering; September 28-29, 2020.

