

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.11 No.02, pp 132-136, **2018**

ChemTech

A Comparative Analysis of Bacteria Made Bio Brick and Conventional Brick

Kumarappan N^{*1}, SudharsanP², Hubert Christopherl³

¹School of Civil Engineering, Sastra University, Tanjore-613401, Tamil Nadu, India ^{2,3}Department of Civil Engineering, K.Ramakrishnan College of Technology, Trichy-621112, Tamil Nadu, India

Abstract : All over the world brick manufactured nearly 1.3 trillion brick for each year, in this 10 percentages of bricks made through a hand in coal-fired ovens. Coal-fired brick emits 1.4 pounds of carbon per brick, which pollute the atmosphere severely all over the world. The large export countries like india & china facing the problem of carbon emission. On another side modernization took place in the construction industry, due to the modernization durability of the structures reduced. Brick is the most used construction material in the construction from the ancient time itself. The manufacturing of conventional brick requires a high temperature, hence this research focused on developing a biobrick with a help of bacteria named as bacillus pasteuri, which has characteristic of calcite precipitation. The present research helps the construction industry as well as public to increase the brick durability and reduce the carbon emission, which results pollution free environment. The brick manufactured by bacteria, which reduce the carbon emission nearly 800 million tonnes per year. **Key Words :** Sustainability, Bacteria, Calcite Precipitation, Compressive strength,

Environmental Protection.

Kumarappan N et al /International Journal of ChemTech Research, 2018,11(02): 132-136.

DOI= http://dx.doi.org/10.20902/IJCTR.2018.110215
