



International Journal of ChemTech Research CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.12 No.06, pp 157-162, 2019

## Compaction Characteristics of Swelling Soil Stabilized with Bottom Ash and Geogrid

C.Rajakumar<sup>1</sup>, P. Kodanda Rama Rao<sup>2\*</sup>

<sup>1</sup>Associate Professor, Department of Civil Engineering, Gudlavalleru Engineering College, Gudlavalleru, Andhrapradesh, India <sup>2</sup>Professor & Head, Department of Civil Engineering, Gudlavalleru Engineering College, Gudlavalleru, Andhrapradesh, India

Abstract : This paper brings out the results of experimental work carried out in the laboratory to evaluate the effectiveness of using bottom ash with geogrid for soil stabilization by studying the compaction and strength characteristics for use as a sub-grade material. Bottom ash is a waste material which is obtained from thermal power plants. This waste imposes hazardous effect on environment and human health. This material cannot be disposed of properly and their disposal is not economical. Utilization by exploiting their inherent properties is the one of the way to solve the above stated problem. The effect of mixing different proportions of bottom ash with geogrid in clayey soil on compaction, UCS and California bearing ratio have been studied in this study.

Keywords : Compaction. UCC, California bearing ratio, bottom ash, geogrid.

## P. Kodanda Rama Rao et al / International Journal of ChemTech Research, 2019,12(6): 157-162.

DOI= <u>http://dx.doi.org/10.20902/IJCTR.2019.120620</u>

\*\*\*\*\*