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# Strength Enhancement Potential of Spent Calcium Carbide on Fine Grained Lateritic Soil

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- Abstract
- References
- Citations
- Supplementary Data
- Article Media
- Metrics
- Suggestions

Effect of spent calcium carbide (SCC) on index and strength properties of lateritic soil at different compactive efforts was assessed in this study as potential means of improving the geotechnical properties of the subsoil as well as disposing of SCC as waste. SCC was admixed with the soil using 0 to 10 % by dry weight of soil at an incremental rate of 2%. The following tests were carried out on the samples: specific gravity, Atterberg limit, particle size distribution, compaction, and California bearing ratio (CBR). Compaction and California Bearing Ratio (CBR) tests were carried out using British Standard light (BSL), West African Standard (WAS), and British Standard heavy (BSH) on both the natural and stabilized soil samples. From the investigation, atterberg limits show a reduction in the plasticity index with increasing content of SCC. The maximum dry density of the soil decreased with increasing SCC content and increased with an increase in compactive energies (BSL

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