Abstract

Emerging trend of using waste material in soil stabilizing or soil strengthening is being working out all over the world in present days. The main reason behind this trend is the excessive production of waste like fly ash, plastics, rice husk ash (RHA) which is not only hazards but also creating deposition problems. Using some of these waste materials in construction practice will reduce the problem in a great extent. However before using these materials in practice, systematic analysis of the experimental result is a must so that it should not create a new problem. With this objective, in the present paper describes some results with probable analytical discussion of starting of a new research programme. RHA has been used with a small
amount of lime of different quantity to stabilize a highly plastic soil. The percentage by weight of virgin soil has been partially replaced by RHA and lime to improve its strength property as CBR value. Series of laboratory tests like soaked and un-soaked CBR; compaction has been performed to evaluate the effects of the foreign materials on virgin soil. Result showed that only use of RHA decreases the strength whereas in addition of RHA with soil, a very little amount of lime improves the soil property to a great extent. Subsequently, result shows that for the mix, the optimum moisture content (OMC) increases and the maximum dry density (MDD) decreases.

References

- Yulianto, F. E., Mochtar, N. E. (2010). "Mixing of rice husk ash (RHA) and lime for peat soil stabilization". Proceedings of the First Makassar International Conference on Civil Engineering, March

Index Terms

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