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(57) Abstract :

The present invention relates to a process for nanobioremediation of an industrial waste red mud in which a nanoscale zerovalent iron solution is used in conjunction with a waste decomposer and a bioleaching medium to regulate the alkalinity and sodicity (Na+) of red mud. The process significantly improves the geotechnical and other engineering features, such as particle size, specific gravity, compacted dry density and unconfined compressive strength of red mud for it to be utilized as sustainable geomaterial.

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