

## **Environmental remediation full-scale implementation : back to simple microbial massive culture approaches**

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20328813&lokasi=lokal>

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### **Abstrak**

Using bioaugmentation and biostimulation approach for contaminated soil bioremediation were investigated and implemented on field scale. We combine those approaches by culturing massively the petrophilic indigenous microorganisms from chronically contaminated soil enriched by mixed manure. Through these methods, bioremediation performance revealed promising results in removing the petroleum hydrocarbons comparatively using metabolite by product such as biosurfactant, specific enzymes and other extra-cellular product which are considered as a difficult task and will impact on cost increase.