

### Isolation of electroactive *Pseudomonas* strain using tungsten nanoparticle for enhanced bioelectricity generation in microbial fuel cell

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*Pseudomonas sp.* has been known to have diverse capability of feedstock conversion and bioremediation for recalcitrant organic contaminants, thus extensively studied for its metabolic pathway and recombination purposes. Recently, *Pseudomonas sp.* has been highlighted for production of valuable commodity, bioremediation, biosensor and wastewater treatment, therefore many *Pseudomonas* strains have been screened by various isolation strategies. Some *Pseudomonas sp.* showed an electrochemical activity which transfer their respiratory electron to carbon electrode with simultaneous electricity generation in a microbial fuel cell. Bacterial cells carry out direct electron transfer by forming biofilm and/or indirect transfer via electron shuttle to deliver respiratory electron. In this study, we isolated a novel *Pseudomonas* strain using blue white screening method using tungsten nanoparticle. The enrichment stage used a designed growth media to pose selective pressure for growth of *Pseudomonas* from mixed inoculum. *Pseudomonas aeruginosa sp.* [HK07] was isolated and was tested for electrochemical and bioconversion activity (Poster).