

Bioelectricity Production from Nanocomposite Anode Microbial Fuel Cell Using *Shewanella oneidensis*

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Microbial fuel cells (MFCs) emerge as a promising technology for sustainable wastewater treatment with direct bioelectricity production from wastewater through microbial oxidation of organic matter. The anode-respiring bacteria can conduct extracellular electron transfer via direct electron transfer and mediated electron transfer, whose rate determines the performances of specific MFCs. In this study a *Shewanella oneidensis* was used as the inoculum for the anodic compartment to start up a MFC equipped with nanocomposite anode. The experimental results confirmed that nanocomposite modified electrodes are well-suited as an anode in *Shewanella oneidensis* catalyzed MFC.