Supporting Information

Improved Electrical Wiring of Glucose Oxidase Enzyme with an *In-Situ* Immobilized Mn(1,10 Phenanthroline)$_2$Cl$_2$-Complex/MWCNT Modified Electrode Better than Os-Complex for High-Current Sensitivity Bioelectrocatalytic and Biofuel Cell Applications

Natarajan Saravanan[1], Pinapeddavari Mayuri,[1] and Annamalai Senthil Kumar*[1,2]

[1]*Nano and Bioelectrochemistry Research Laboratory, Department of Chemistry, School of Advanced Sciences, Vellore Institute of Technology University, Vellore-632 014, India*

[2]*Carbon dioxide Research and Green Technology Centre, Vellore Institute of Technology University, Vellore-632 014, India*

E-mail addresses: askumarchem@yahoo.com, askumar@vit.ac.in (A.S. Kumar)

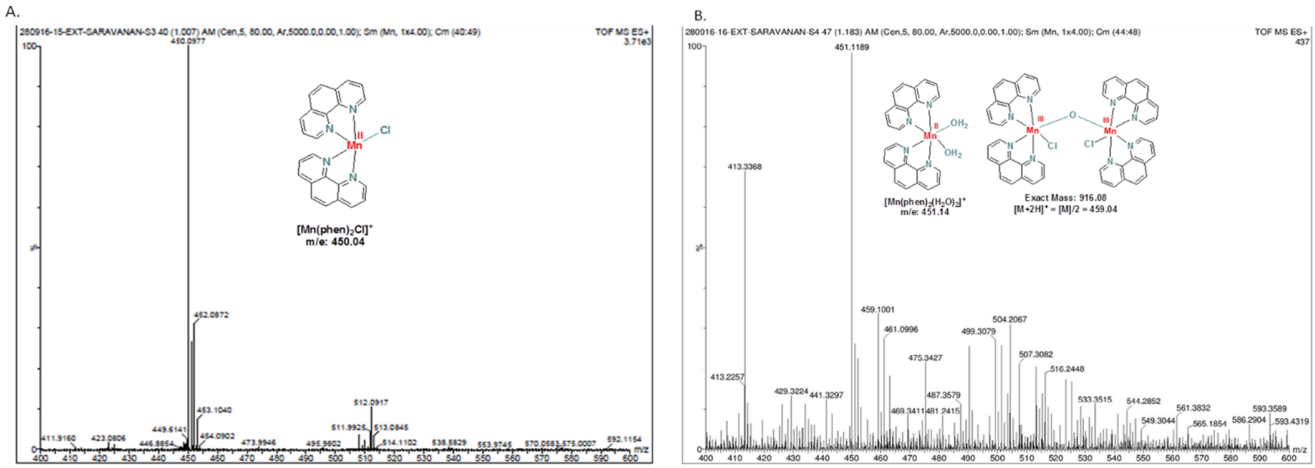

Figure S1. ESI-Mass of response of ethanolic solution of (A) $Mn(Phen)_2Cl_2$ and (B) f-MWCNT@$Mn_2(phen)_4(O)(Cl)_2$.

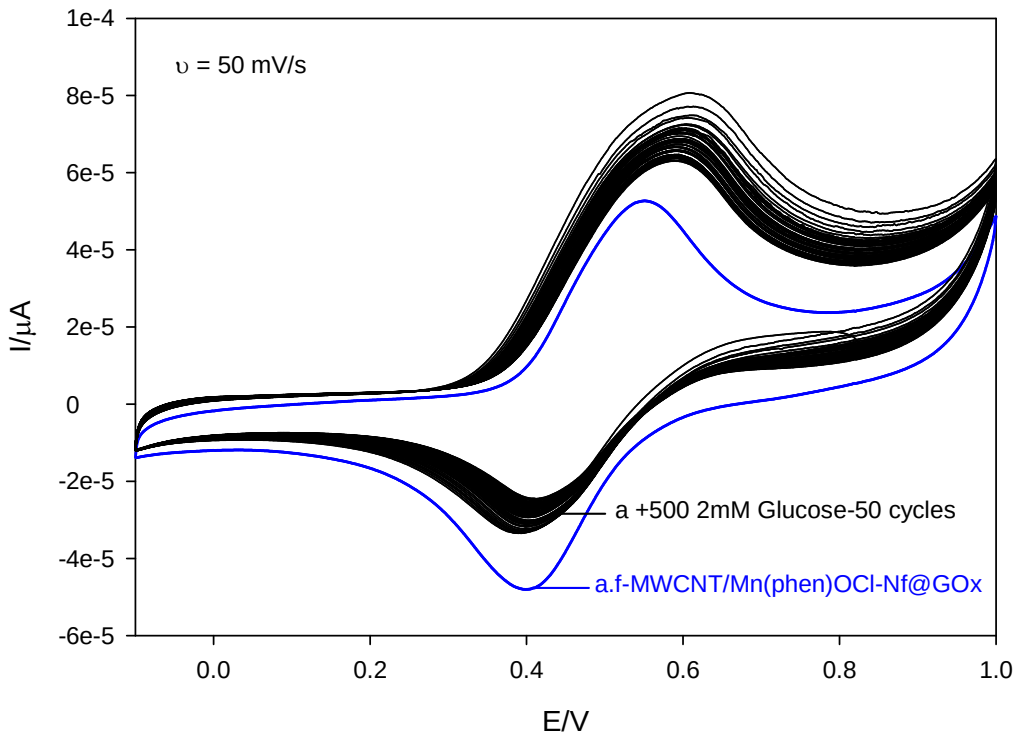

Figure S2. CV responses of GCE/f-MWCNT@Mn(phen)OCl_2-Nf@GOx showing the good stability with 2 mM Glucose at v = 50 mVs^{-1}.

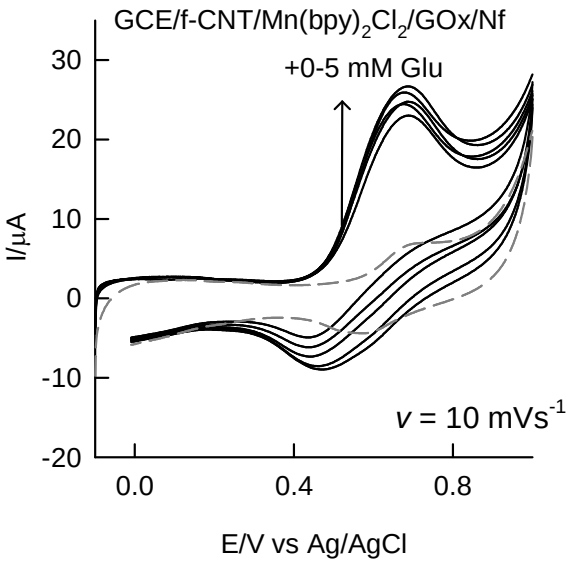

Figure S3. CV responses of GCE/f-MWCNT@$Mn(bpy)_2(H_2O)_2$-Nf@GOx with various concentrations of glucose from 0 to 5 mM at v = 10 mVs^{-1}.