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Type of the Paper (Article)

Supplementary Information

Enhanced Solubility and Electron Transfer of Osmium-Based Mediators via Quaternized Poly(4-vinylpyridine) for Electrochemical Glucose detection

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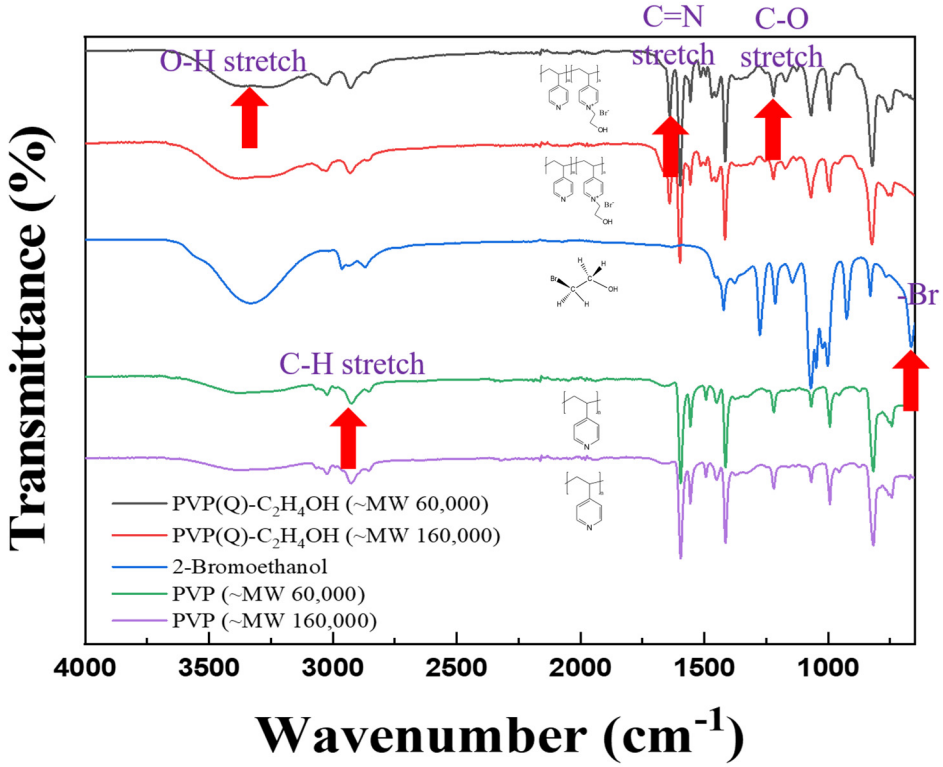
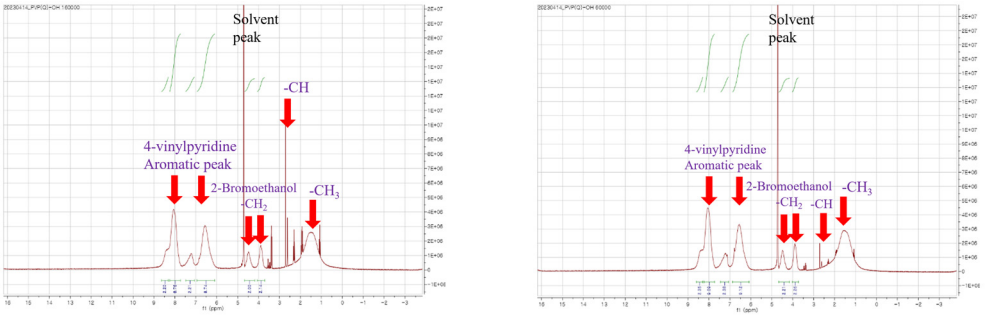


Figure S1. FT-IR spectrum PVP(Q)-C_2H_4OH (~MW 60,000), PVP(Q)-C_2H_4OH (~MW 160,000), 2-Bromoethanol, PVP (~MW 60,000), and PVP (~MW 160,000).



(**a**) (**b**)

Figure S2. ^{1}H-NMR spectrum of PVP(Q)-C_2H_4OH-Os(dmo-bpy)$_2$Cl (MW 60,000: (a); 160,000: (b)).

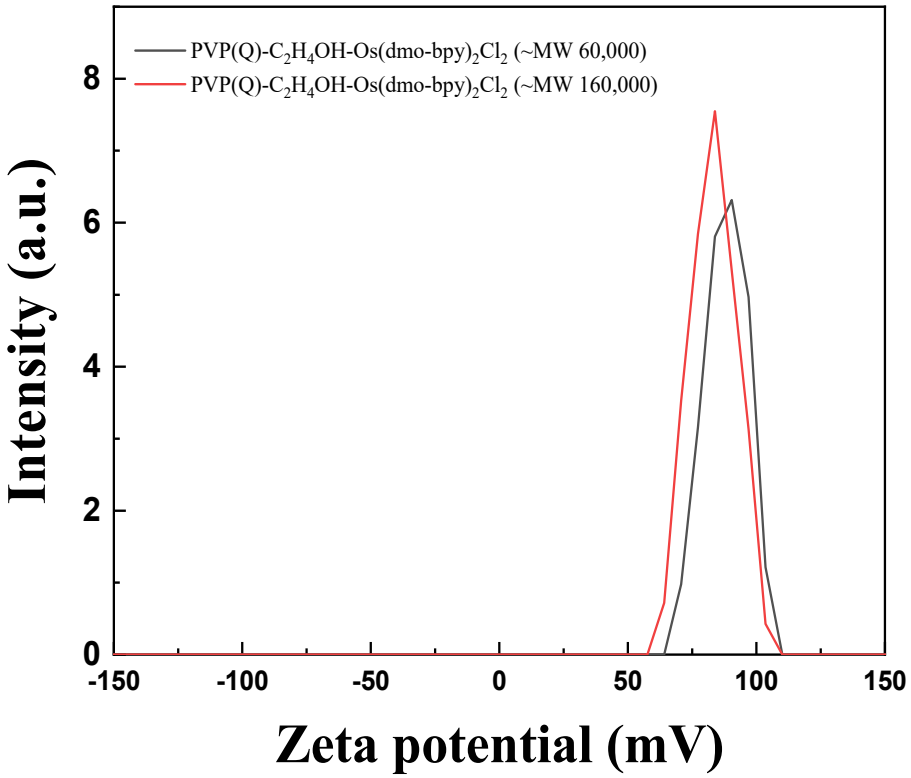


Figure S3. Zeta-potential of PVP(Q)-C_2H_4OH-Os(dmo-bpy)$_2$Cl (MW 60,000 Black line), PVP(Q)-C_2H_4OH-Os(dmo-bpy)$_2$Cl (MW 160,000 Red line).

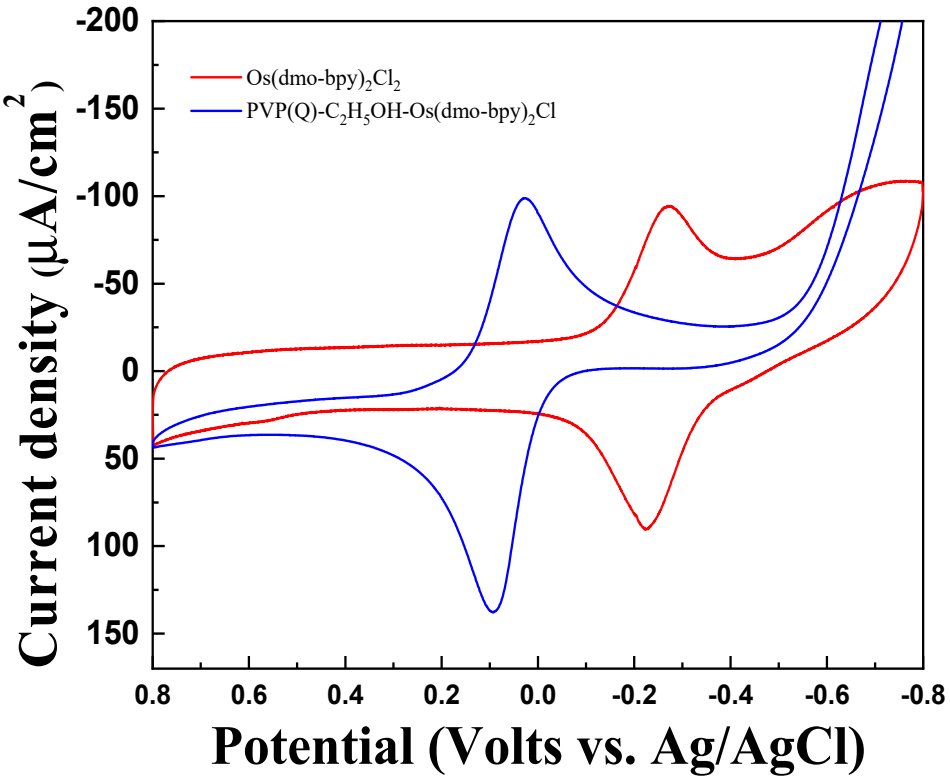
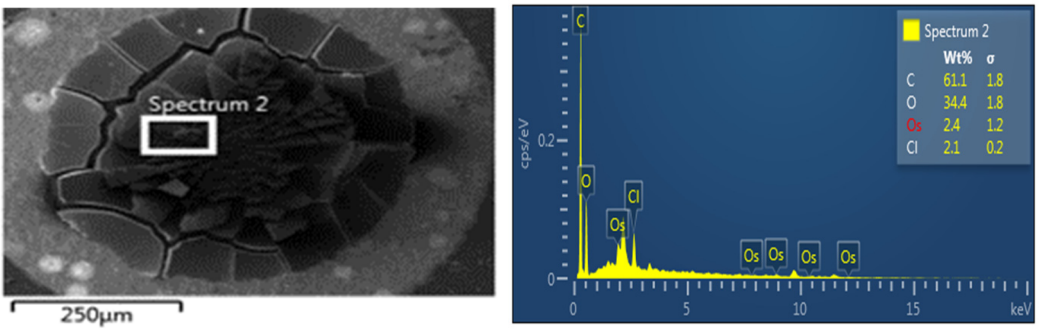


Figure S4. Cyclic voltammogram (vs. Ag/AgCl) of $Os(dmo\text{-}bpy)_2Cl_2$ (red line), PVP(Q)-C_2H_4OH-$Os(dmo\text{-}bpy)_2Cl$ (blue line).



(a) (b)

Figure S5. SEM(a) and EDS(b) of Mediators@GDH@X-linker/SPCEs