

ELECTRONIC SUPPLEMENTARY INFORMATION

Polarization induced dynamic photoluminescence in carbon quantum dot-based ionic fluid[†]

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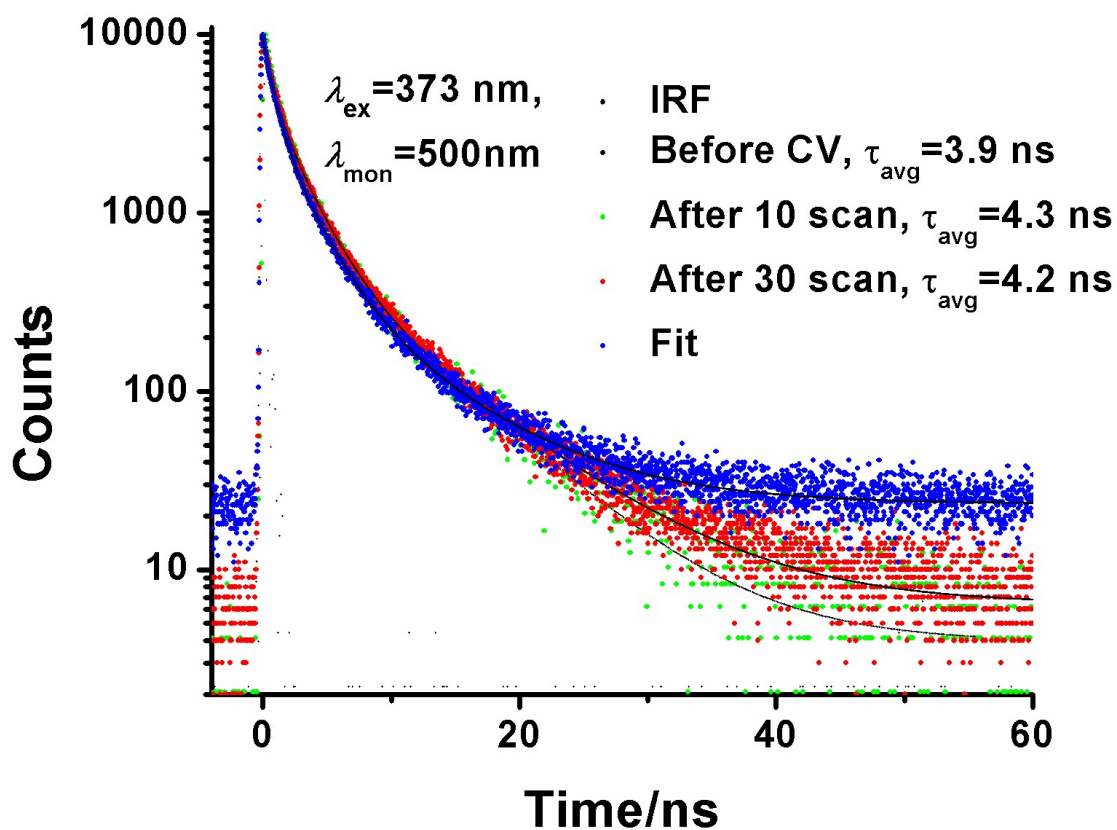


Fig. ESI 1: Life-time measurement data of CQD-NIMs before CV and after CV scan. Data shows life-time values obtained after 10 and 30 scans.

Solubility studies:



Fig. ESI 2: PSS-CQD suspension in Dichloromethane (S1), Chloroform (S2), Petroleum ether (S3), Hexane (S4), Ethylene glycol (S5), DMF (S6), DMSO (S7), Ethanol (S8), Methanol (S9), Acetone (S10) and water (S11)

CQD-NIMs is dispersed nicely in almost all the solvents except in S3 and S4. This suggests CQD-NIMs has both ionic and covalent part in its structure. Stabilization of the species can occur through any of the different non-covalent interactions with the solvent such as H-bonding, dipole-dipole interactions, Van der Waals interactions *etc* and also by formation of solvation sphere in case of covalent structure.

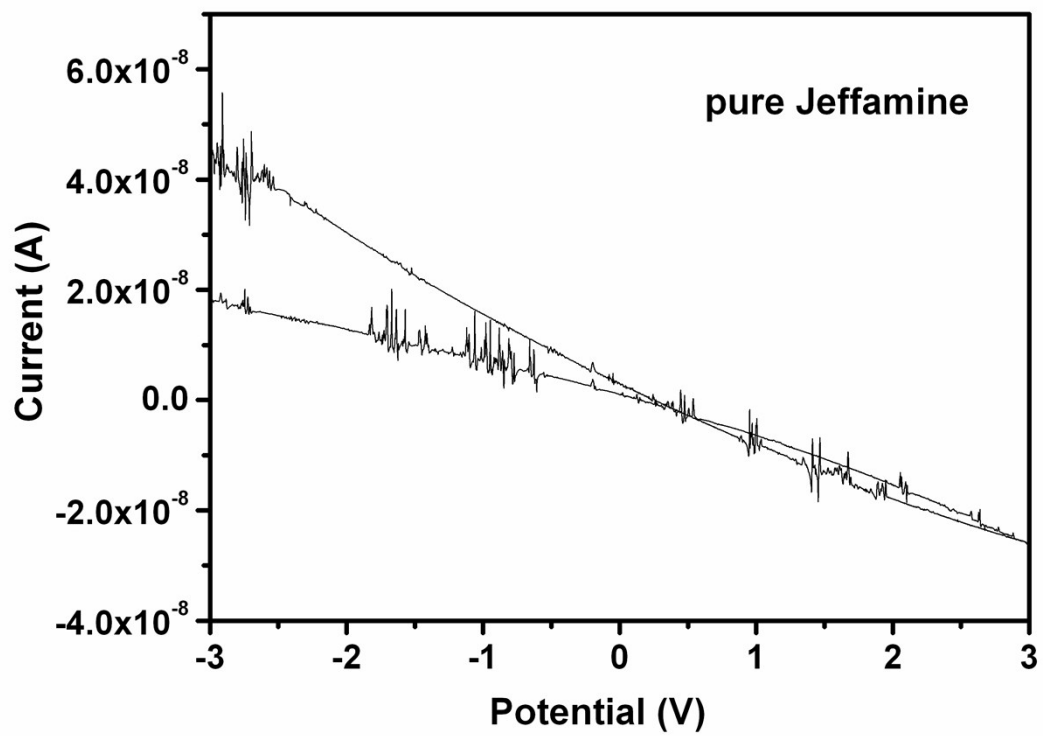


Fig. ESI 3: CV of pure Jeffamine®.

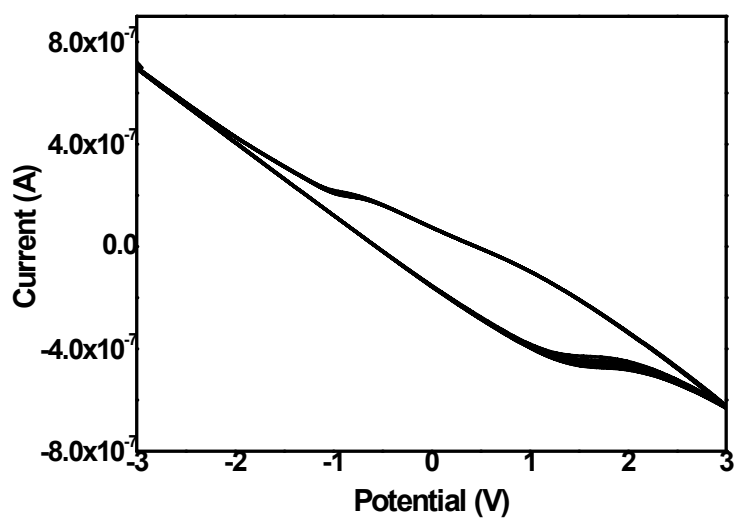


Fig. ESI 4: CV of CQD-NIMs showing second and consecutive 10 cycles.