

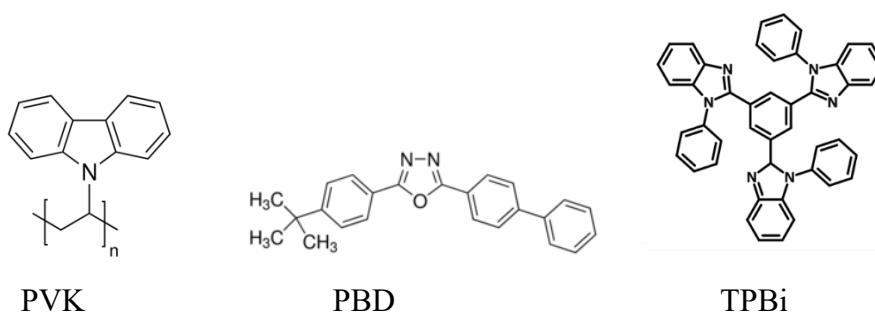
# Photoconduction and Electroluminescence of Copper (II) protoporphyrin and chlorin Cu-C-e6

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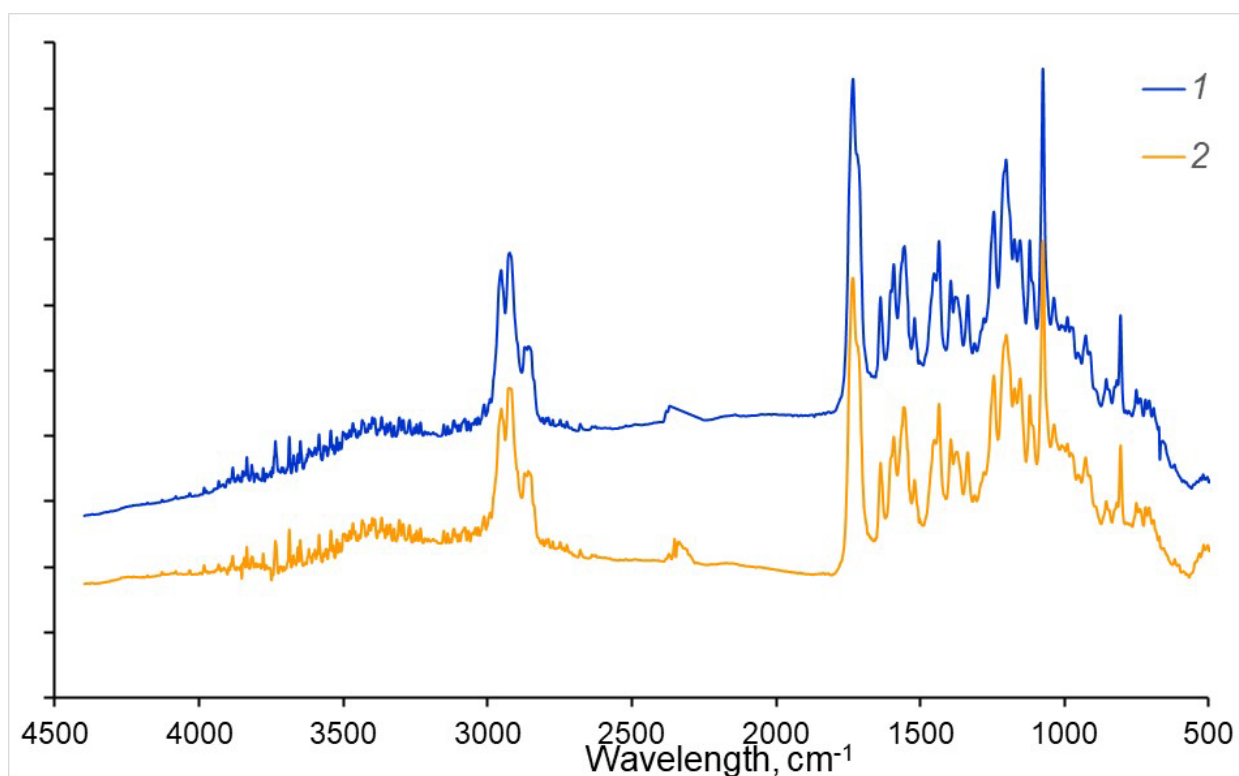
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## Supporting Information

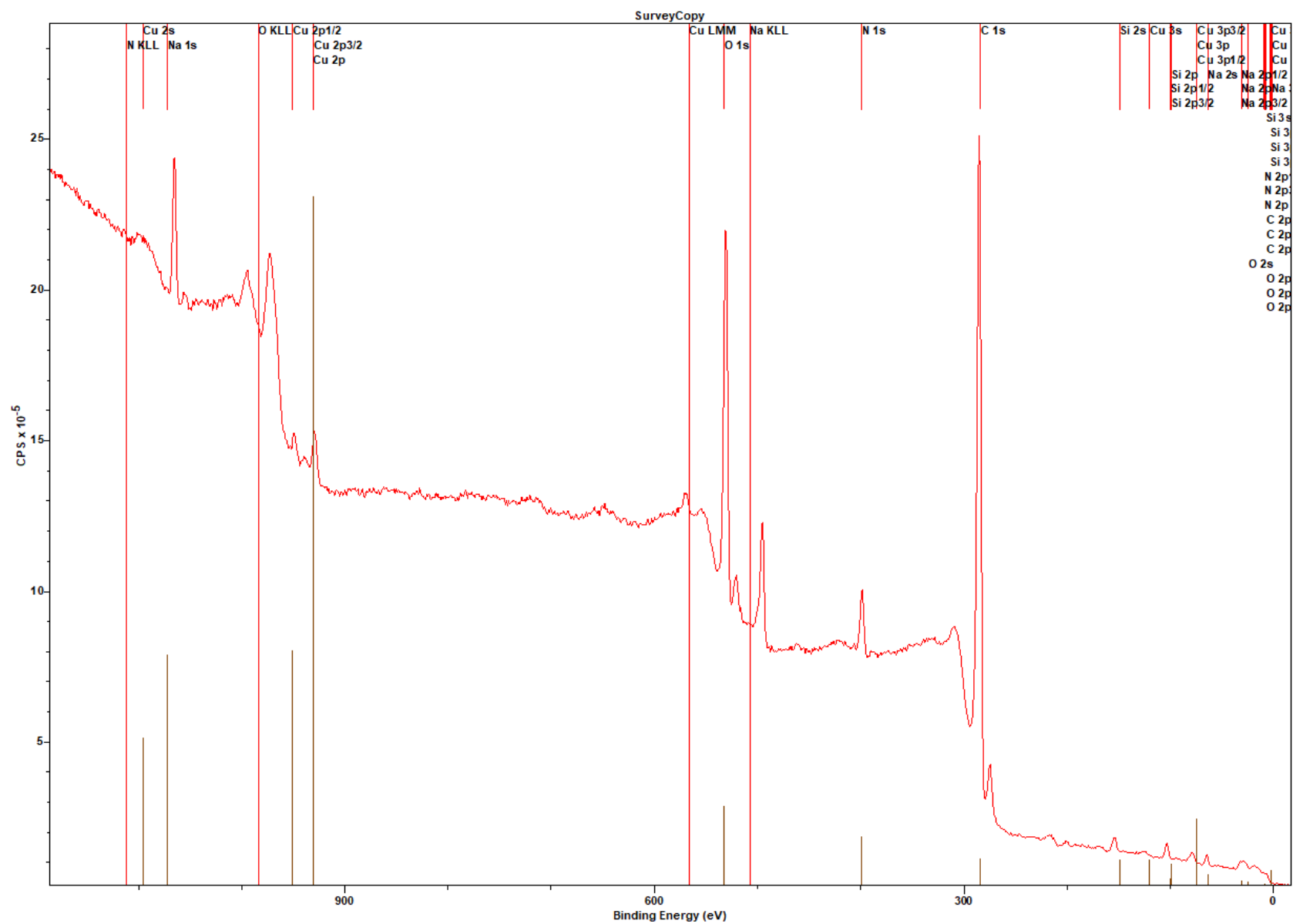


**Figure S1.** Chemical structure of poly-N-vinylcarbazole (PVK) served as a matrix, 2-(4-tert-Butylphenyl)-5-(4-biphenyl)-1,3,4-oxadiazole (PBD), and 2,2',2''-(1,3,5-Benzinetriyl)-tris(1-phenyl-1-H-benzimidazole) (TPBi) served as electron transporting components.

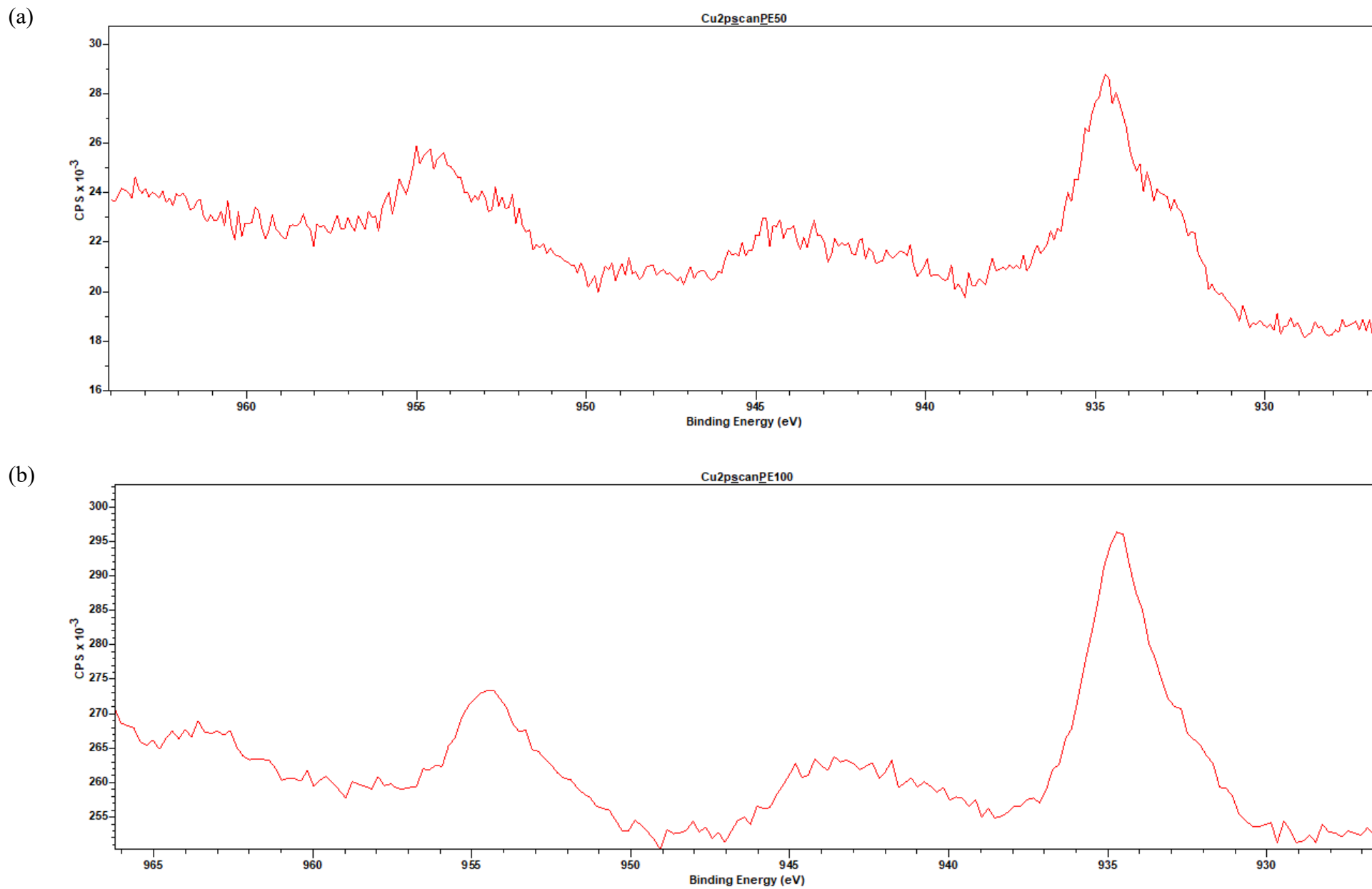


**Figure S2.** IR spectra of Cu-C-e6 (*I*) for the initial state (blue line) and (2) after the RTE deposition (brown line).

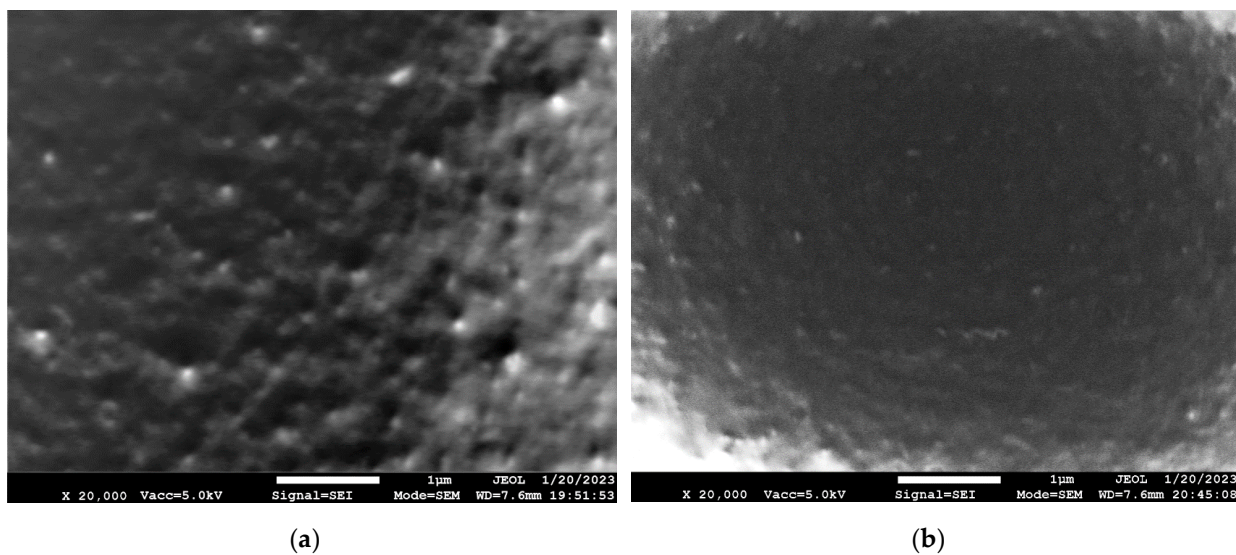




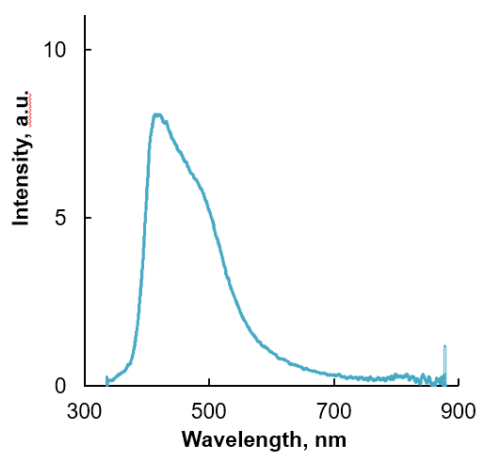
**Figure S4.** XPS spectrum of the chlorin Cu-C-e6 after the RTE deposition



**Figure S5.** XPS spectra of the chlorin Cu2p band for (a) the initial and (b) after the RTE deposition of the dye



**Figure S6.** SEM microphotographs of the RTE deposited layers of (a) Cu-PP-IX and (b) Cu-C-e6.



**Figure S7.** EL spectrum of the ITO/PEDOT: PSS/PVK: PBD/TPBi/LiF/Al device without Cu (II) porphyrinate recorded at 15 V.