Supporting Information

# Highly-phosphorescent Tungsten(0) Carbonyl Pyridyl-imidazole complexes as photosensitisers

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Content :

- I. IR and NMR Data for Complex 1
- II. IR and NMR Data for Complex 2
- III. IR and NMR Data for Complex 3
- IV. NMR data for ligands
- V. Emission spectra of I, II and their free ligands

#### I. IR, NMR and Elemental Analysis Data for Complex 1





#### II. IR, NMR and Elemental Analysis Data for Complex 2



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1H NMR of W(CO)4L2
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#### III. IR and NMR Data for Complex 3





# IV. NMR data for ligands

# 2-(1H-Imidazol-2-yl)pyridine ligand



# 2-(2'-Pyridyl)benzimidazole



14 13 12 11 10 9 8 7 6 5 4 3 2 1 ppm

# 2,2'-Bipyridine



#### V. Emission spectra of complexes I and II and their free ligands



Emission spectra of complex 1 (full red,  $\lambda_{ex}$  = 460 nm) and its corresponding ligand (dashed red,  $\lambda_{ex}$  = 460 nm), and of complex 2 (full purple,  $\lambda_{ex}$  = 480 nm) and its corresponding ligand (dashed purple,  $\lambda_{ex}$  = 480 nm)