Supplementary Material (ESI) for Dalton Transactions

Supporting Information for

Tuning of the Excitation Wavelength from UV to Visible Region in Eu^{3+}-β-Diketonate Complexes: Comparison of Theoretical and Experimental Photophysical Properties

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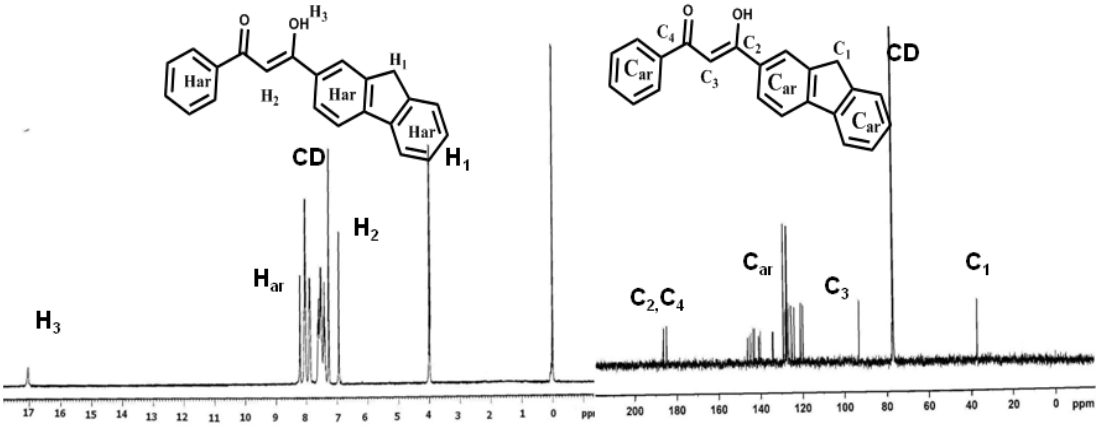

Fig. S1 ^{1}H NMR and ^{13}C NMR spectrum of the ligand HBFPD.

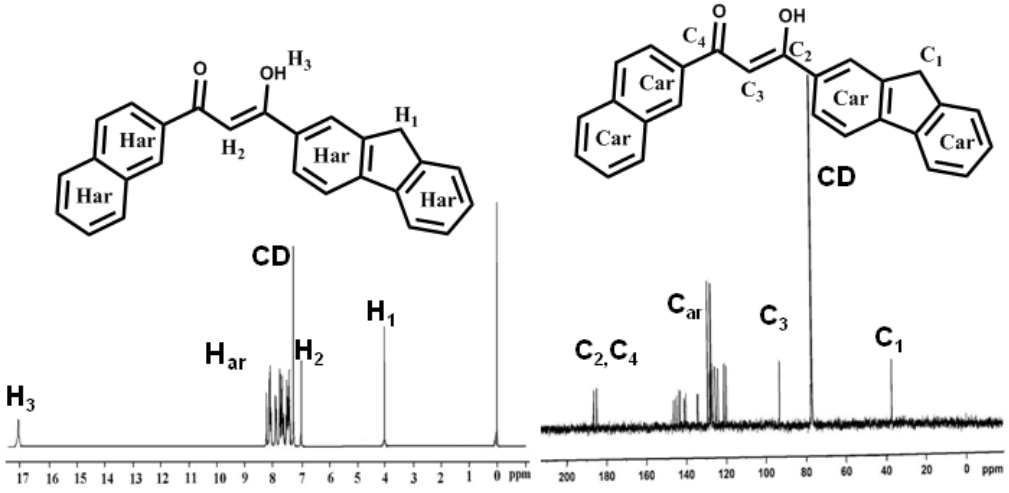

Fig. S2 ^{1}H NMR and ^{13}C NMR spectrum of the ligand HNFPD.

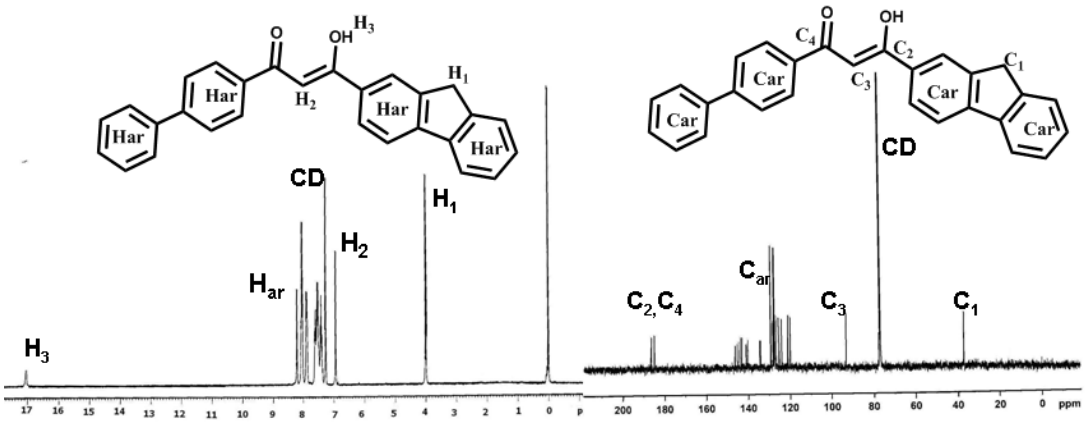

Fig. S3 ^{1}H NMR and ^{13}C NMR spectrum of the ligand HBPFPD.

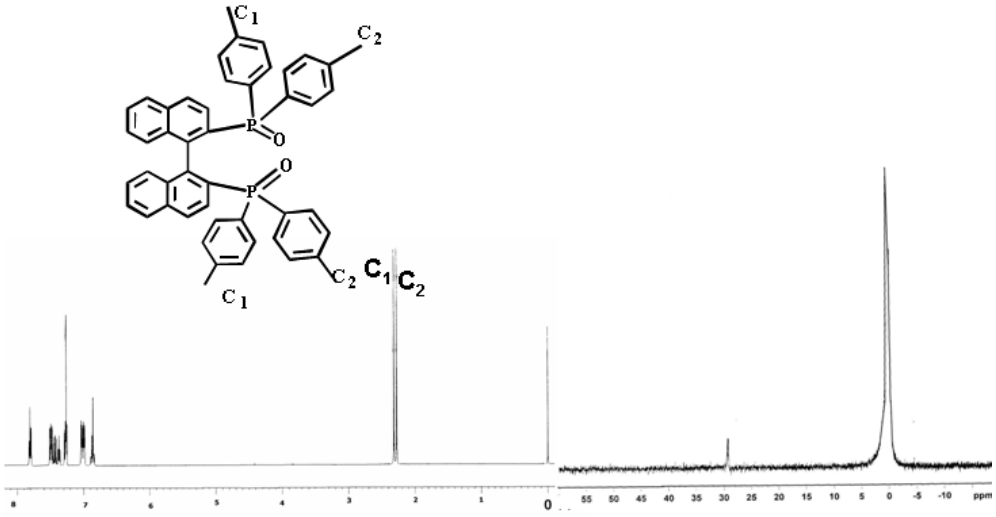

Fig. S4 ^{1}H NMR and ^{31}P NMR spectrum of the ligand TBNPO.

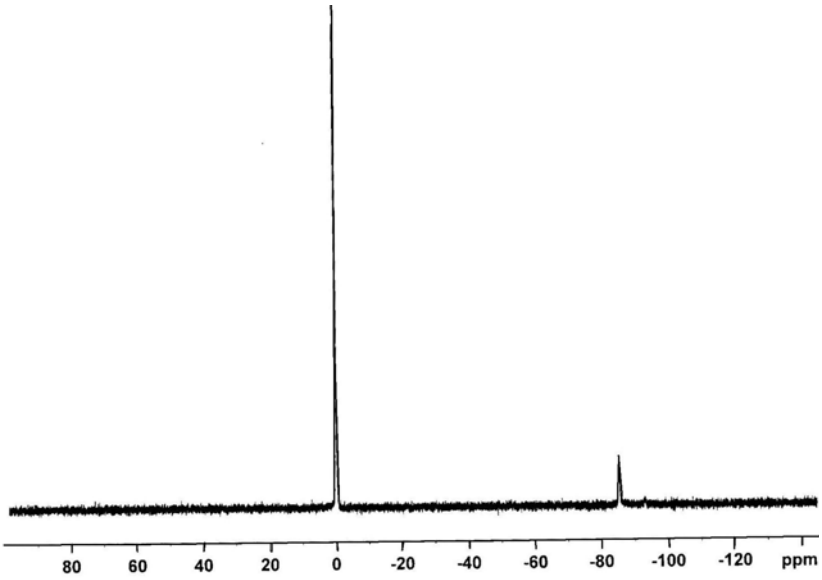

Fig. S5 ^{31}P NMR spectrum of the complex **4**

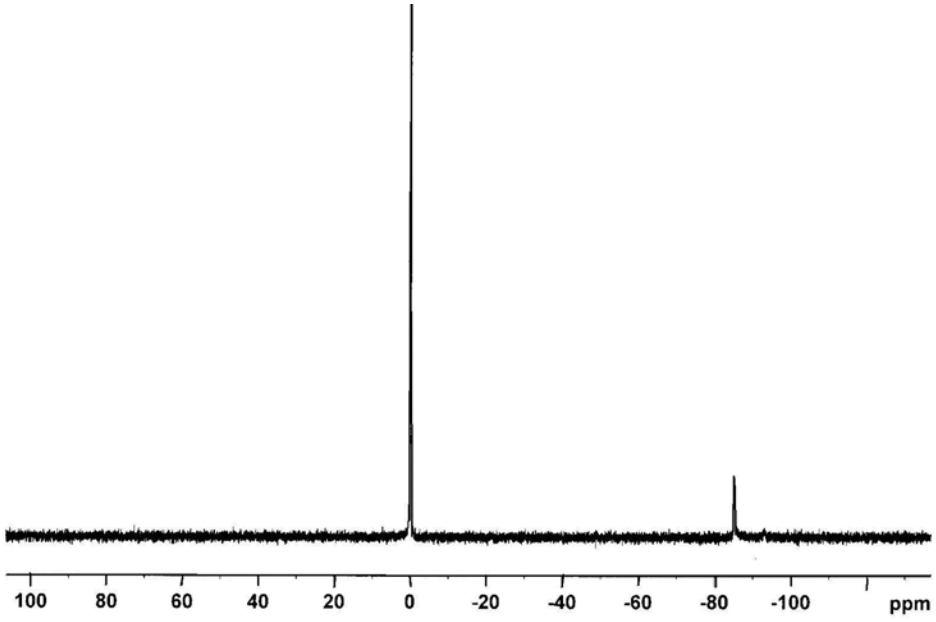

Fig. S6 ^{31}P NMR spectrum of the complex **5**

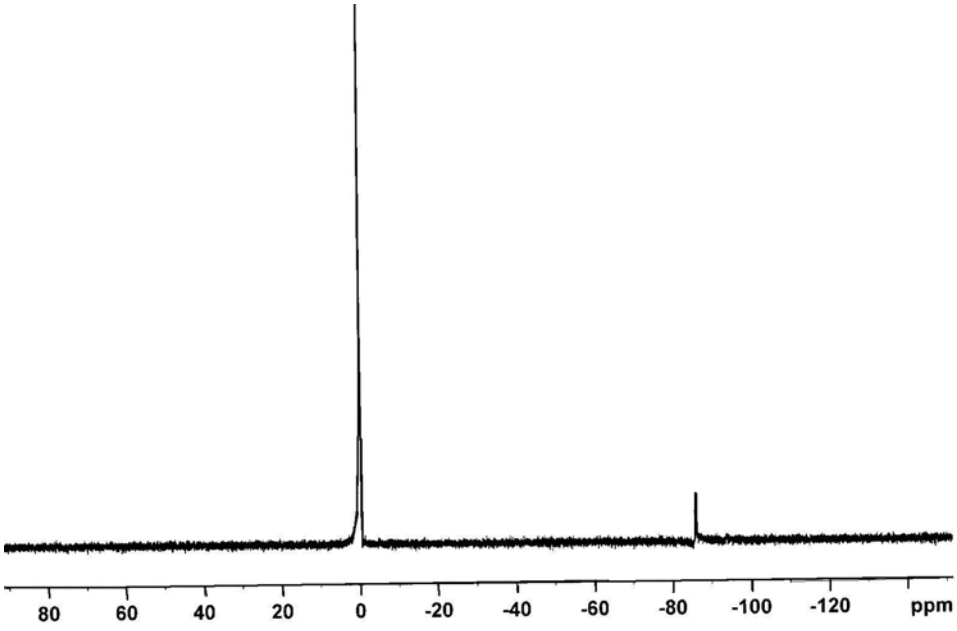

Fig. S7 ^{31}P NMR spectrum of the complex **6**

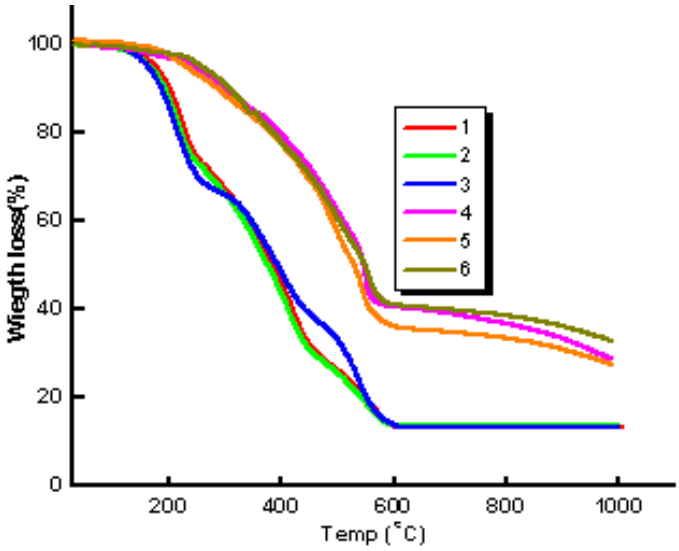

Fig. S8 TG curve for the complexes **1-6**

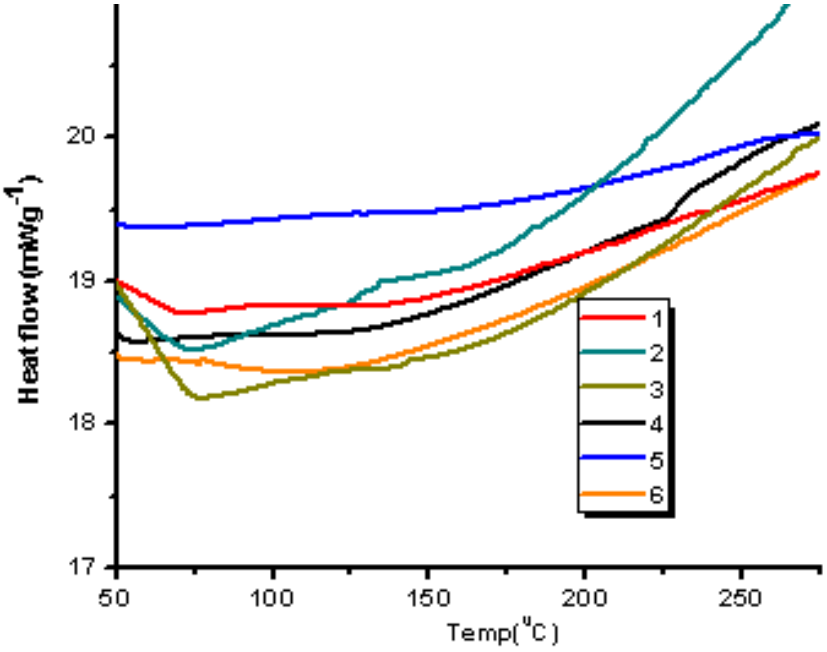

Fig. S9 DSC curve for the complexes **1-6**

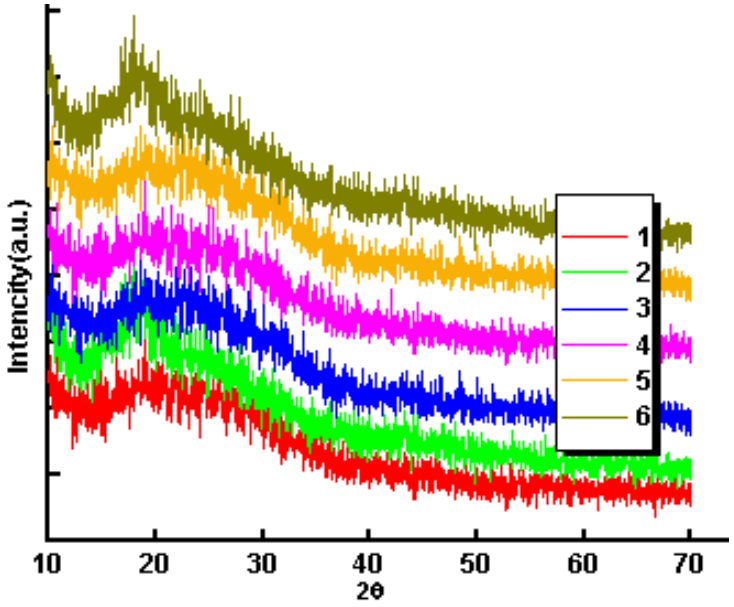

Fig. S10 XRD patterns for for the complexes **1-6**

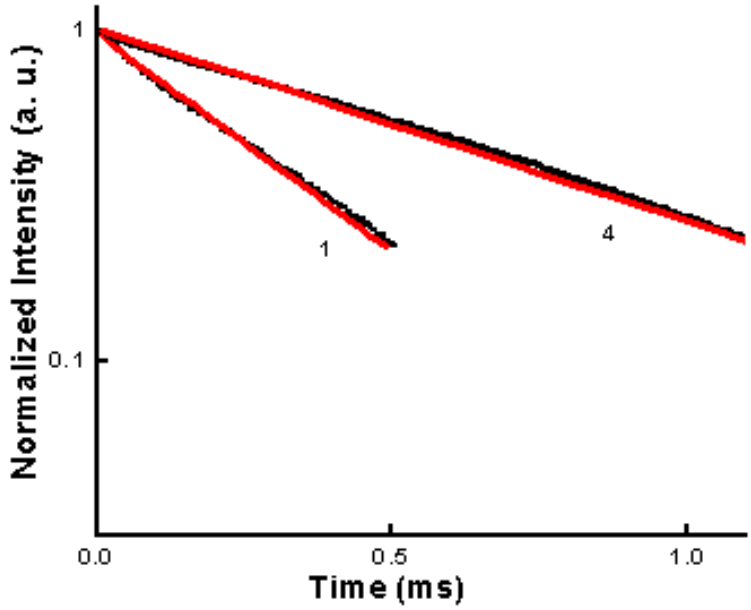

Fig. S11 $^5D_0$ decay profiles for complexes **1** and **4** (solid-state) excited at 400 nm and emission monitored around 612 nm. The straight lines are the best fits (r^2 = 0.99) considering single-exponential behaviour.

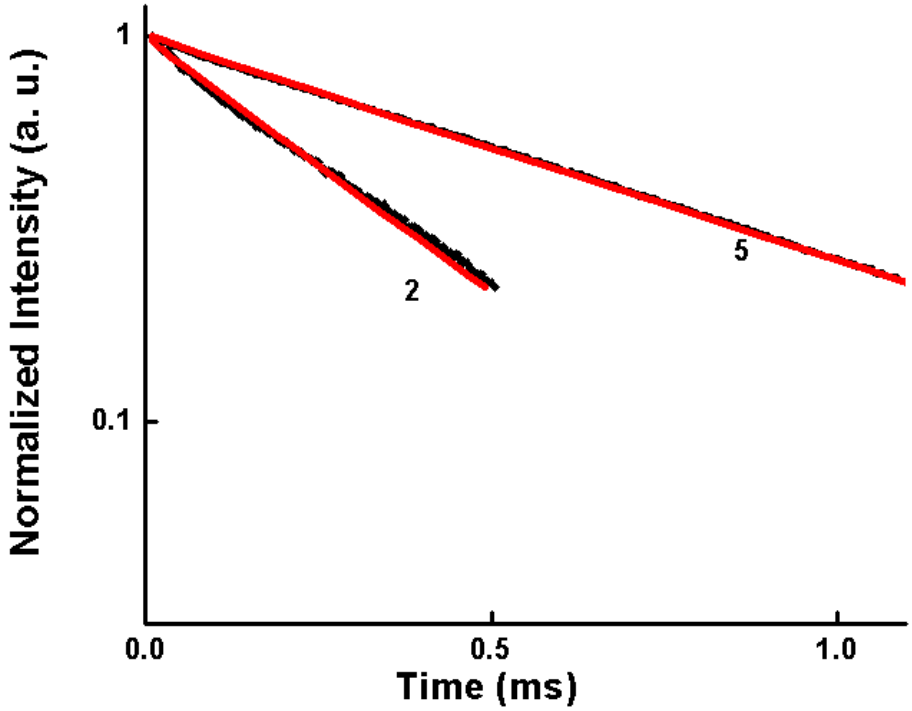

Fig. S12 $^5D_0$ decay profiles for complexes **2** and **5** (solid-state) excited at 430 nm and emission monitored around 612 nm. The straight lines are the best fits (r^2 = 0.99) considering single-exponential behaviour.

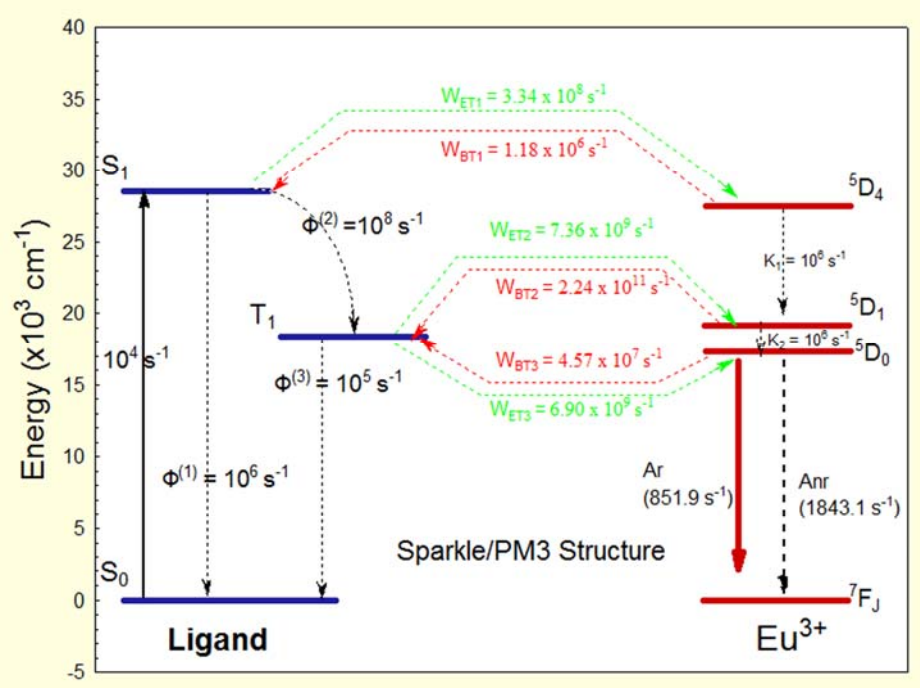

Fig. S13 Energy level diagram for complex **3** showing the most probable channels for the intramolecular energy transfer process.