Supplementary Information

<table>
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<th>Compound</th>
<th>$\lambda_{ex}$ (nm)</th>
<th>$\lambda_{em}$ (nm)</th>
<th>$\tau$ (nS)</th>
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Table S1. Details of Life time study of Complex 1.

Fig. S1. 2D supramolecular sheet of complex 1 showing CH…π and π-hole interactions. Hydrogen atoms of least interest are omitted for clarity.
Fig. S2. 2D supramolecular sheet of complex 2 propagating along the $bc$ plane showing CH–π and H-bonding interaction. Hydrogen atoms of least interest are omitted for clarity.
Fig. S3. $^1$HNMR spectrum of complex 1 in DMSO-d$_6$. 
Fig. S4. $^{13}$CNMR spectrum of complex 1 in DMSO-$d_6$.

Fig. S5. $^{13}$CNMR-DEPT90 spectrum of complex 1 in DMSO-$d_6$. 
Fig. S6. $^{13}$CNMR-DEPT135 spectrum of complex 1 in DMSO-d$_6$. 
Fig. S7. Hirshfeld Surface mapped over Shape Index (top) and Curvedness(bottom) for complexes 1 (left) and 2 (right).
Fig. S8. Fingerprint plot of Complex 1 (Left) and 2 (Right) showing total interactions (Top), only X….H/H….X contacts (middle) and O….H/H….O contacts (bottom) respectively.