Synthesis of functional tetrathiafulvalene-terpyridine dyad for Metal Cation Recognition

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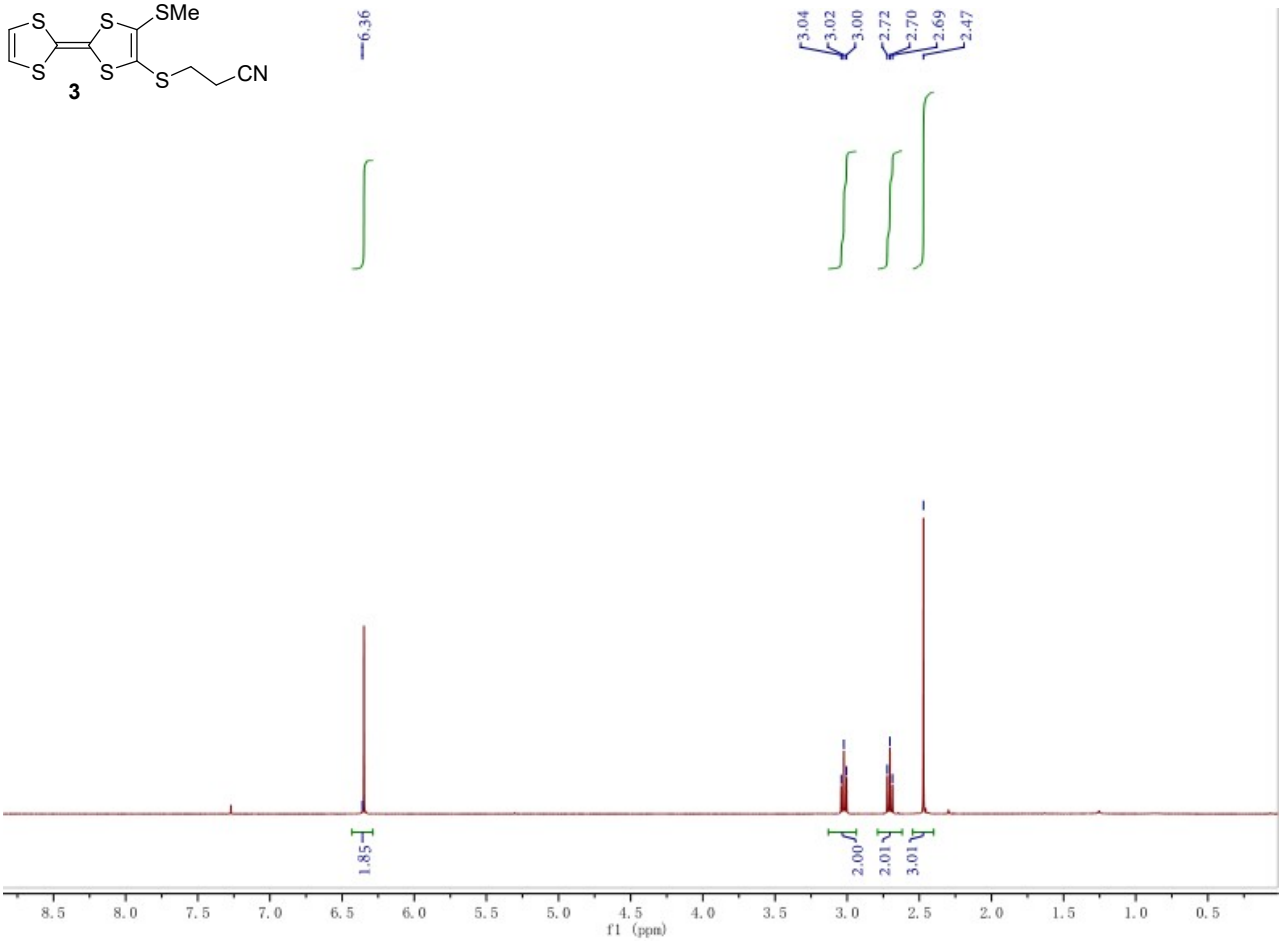

Figure S1 : ^{1}H NMR spectrum in $CDCl_3$ of **3**.

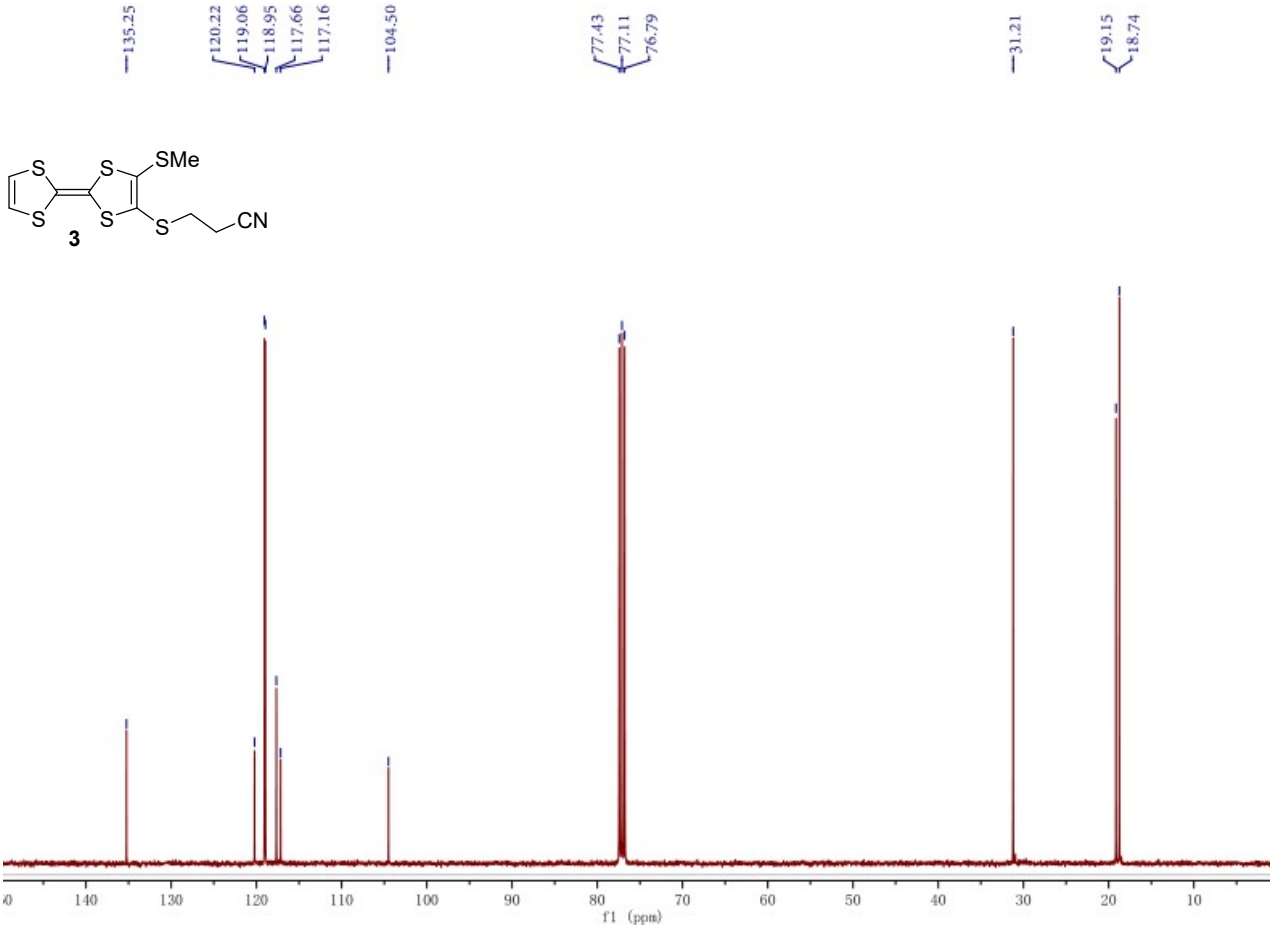

Figure S2 : ^{13}C NMR spectrum in $CDCl_3$ of **3**.

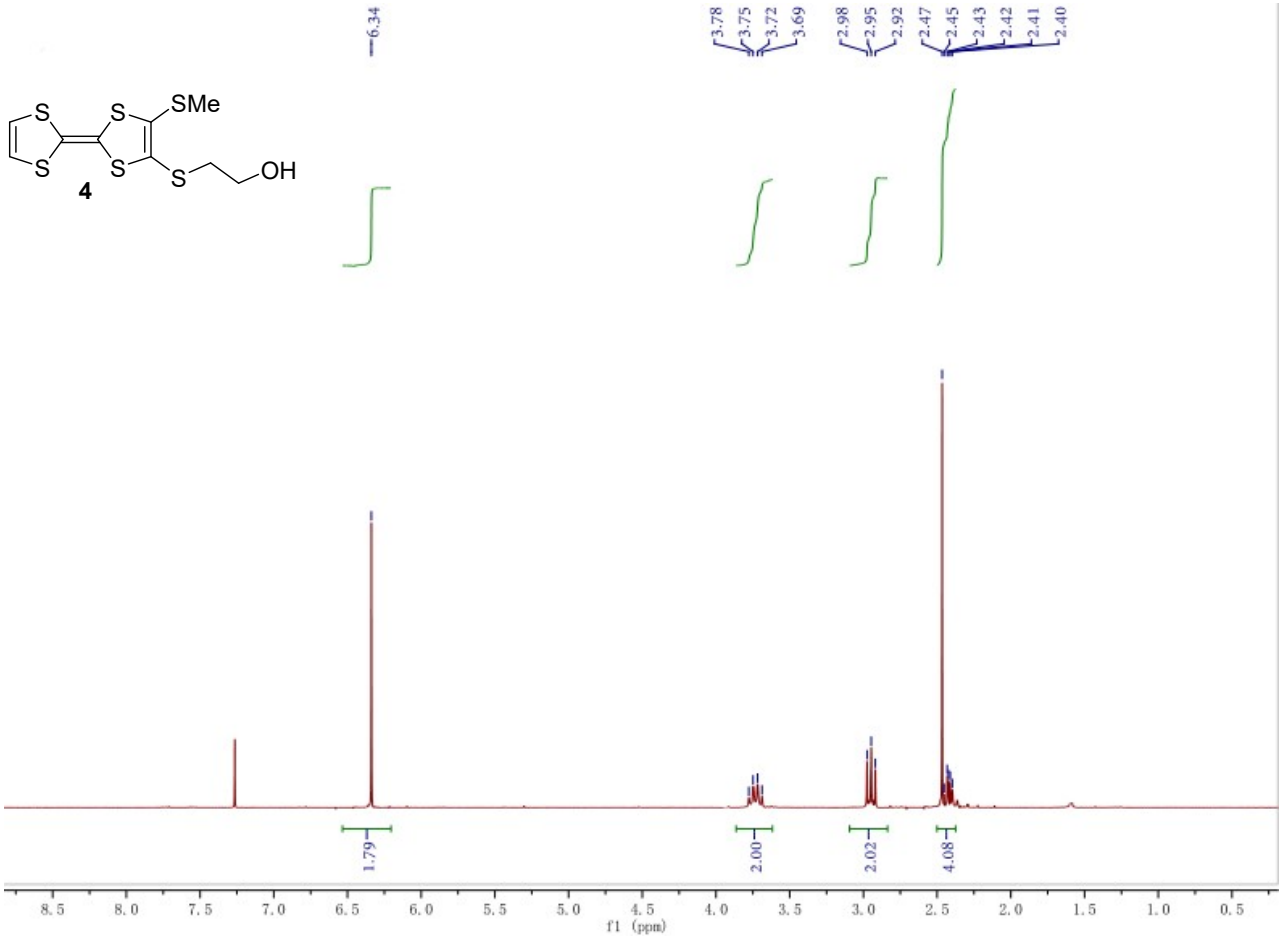

Figure S3 : ^{1}H NMR spectrum in $CDCl_3$ of **4**.

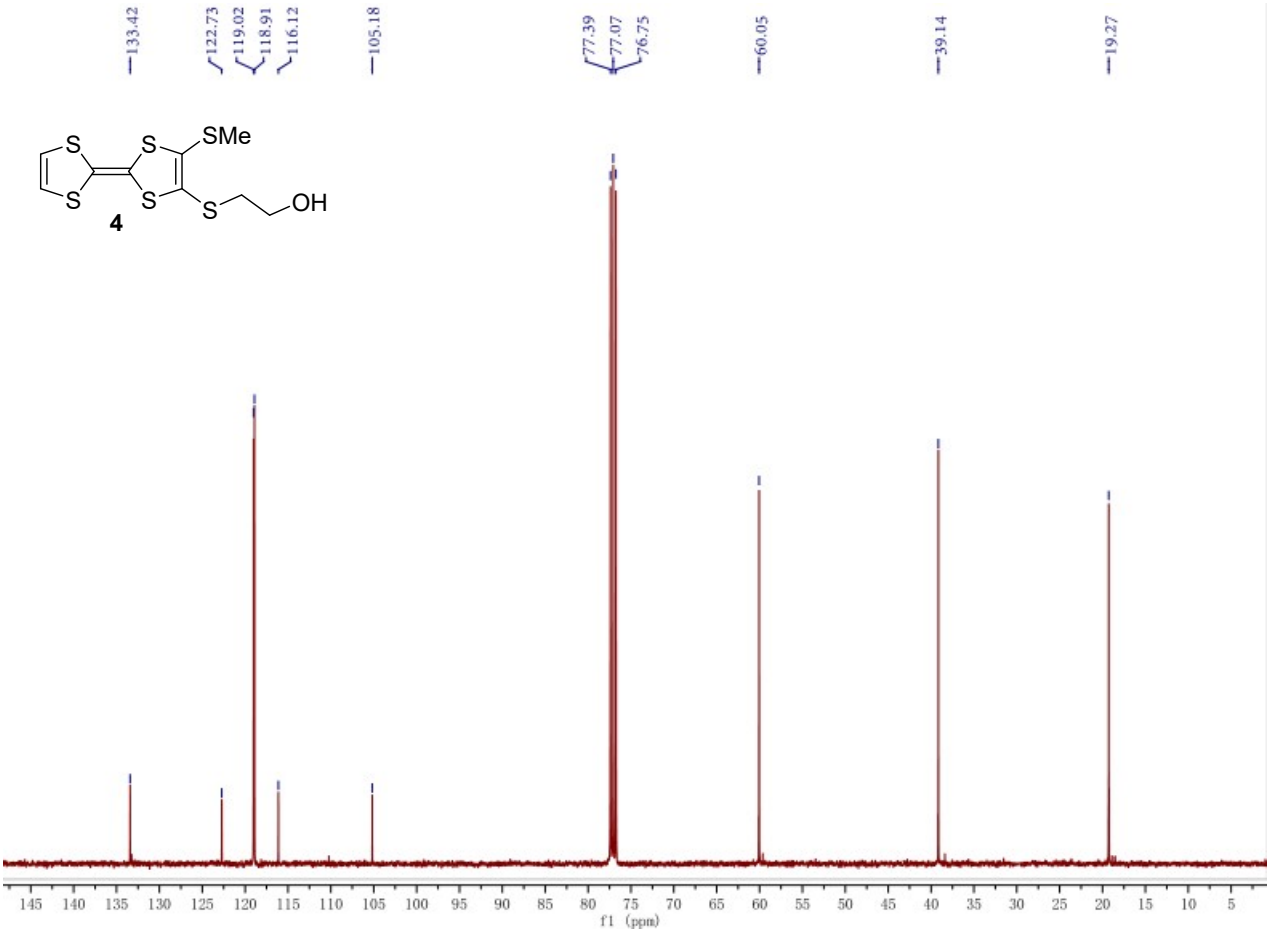

Figure S4 : ^{13}C NMR spectrum in $CDCl_3$ of **4**.

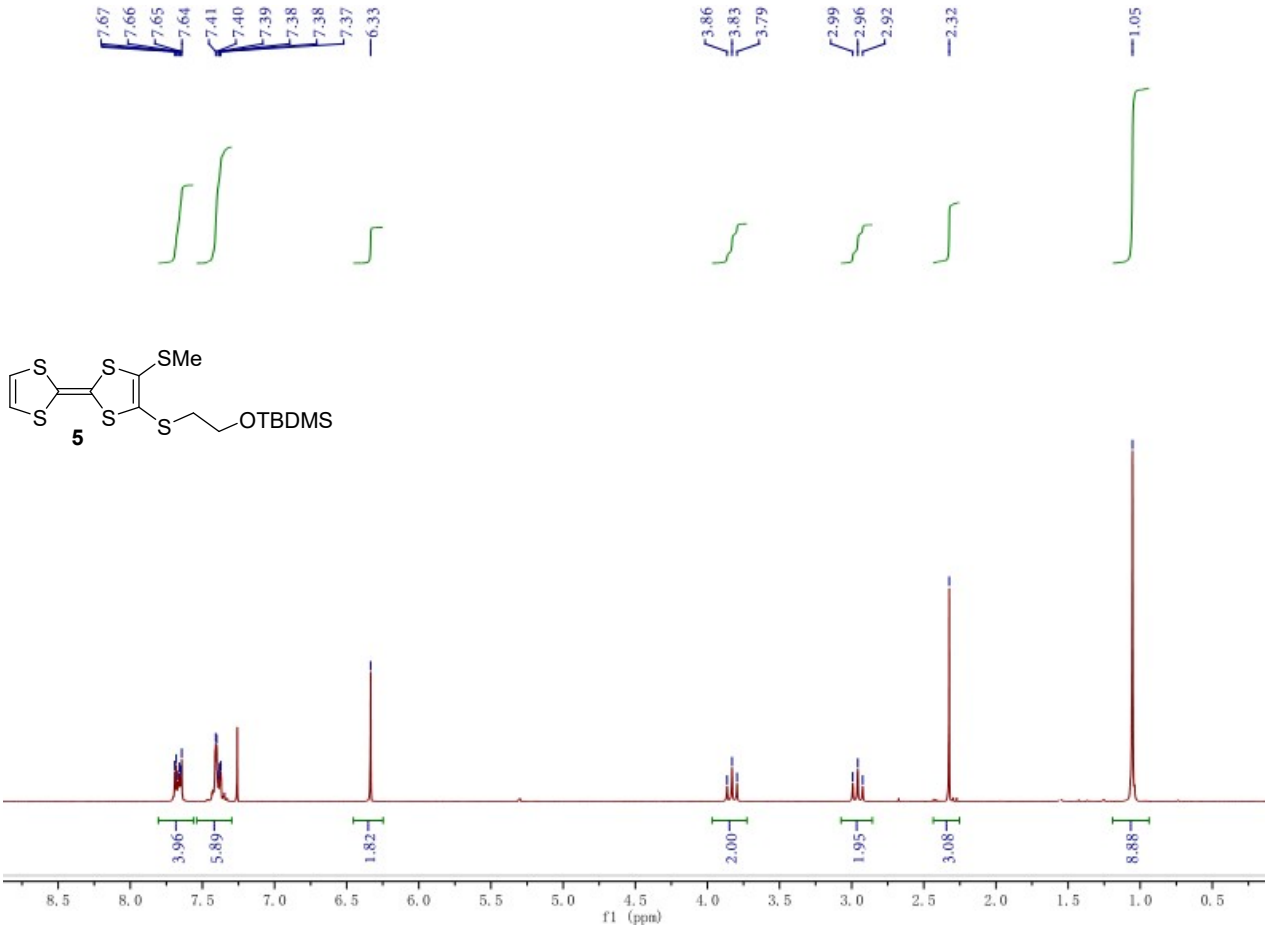

Figure S5 : ^{1}H NMR spectrum in $CDCl_3$ of **5**.

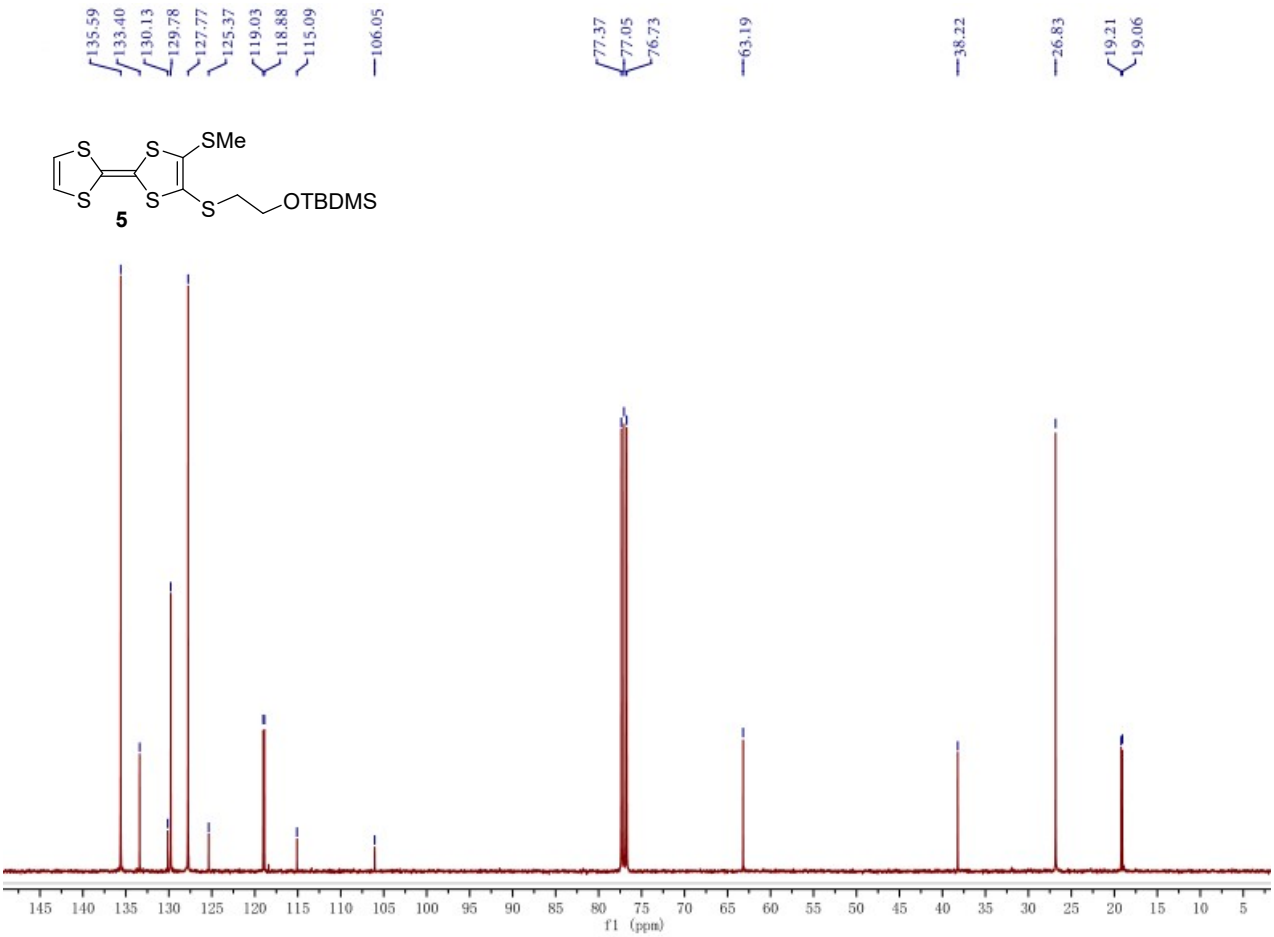

Figure S6 : ^{13}C NMR spectrum in $CDCl_3$ of **5**.

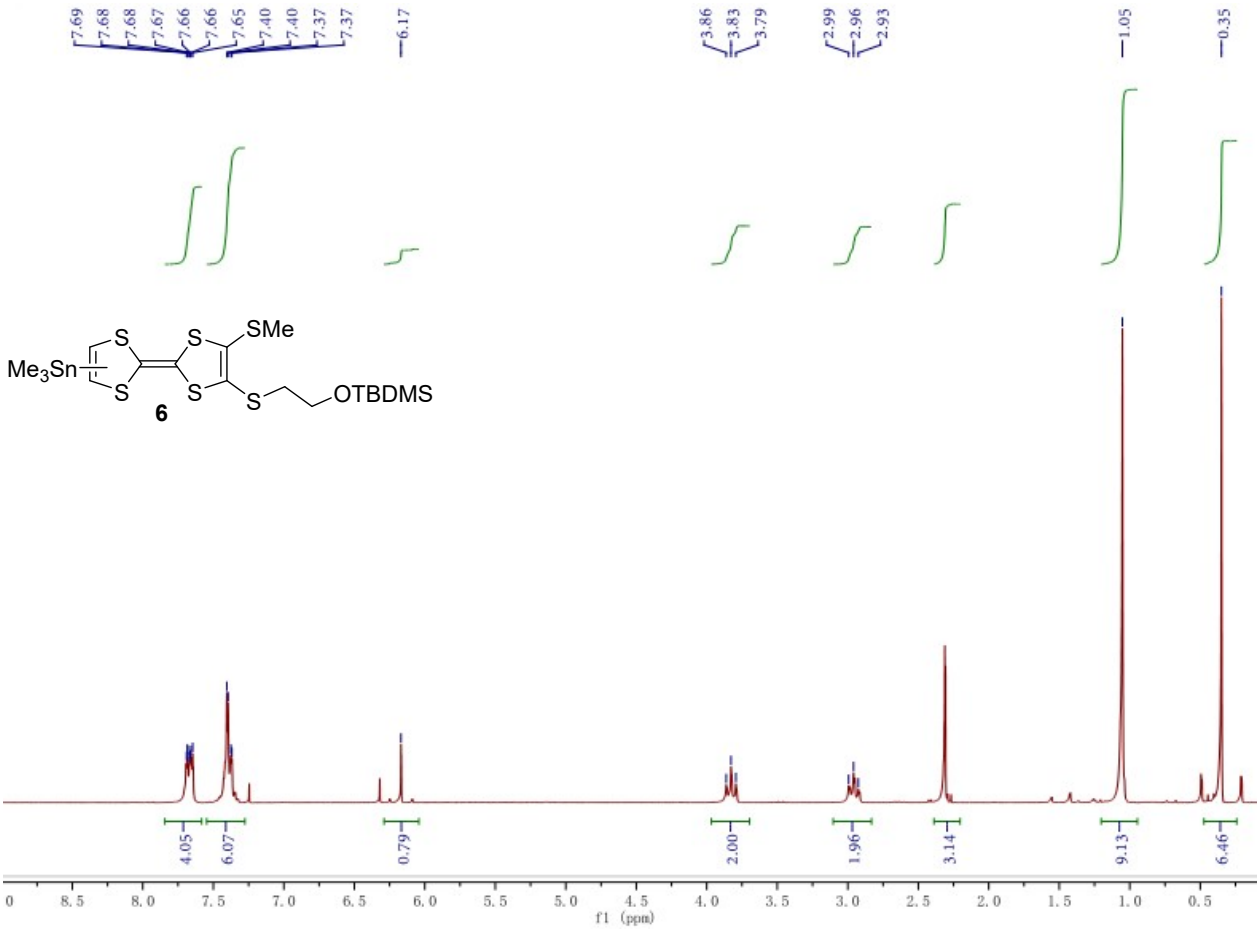

Figure S7 : ^{1}H NMR spectrum in $CDCl_3$ of **6**.

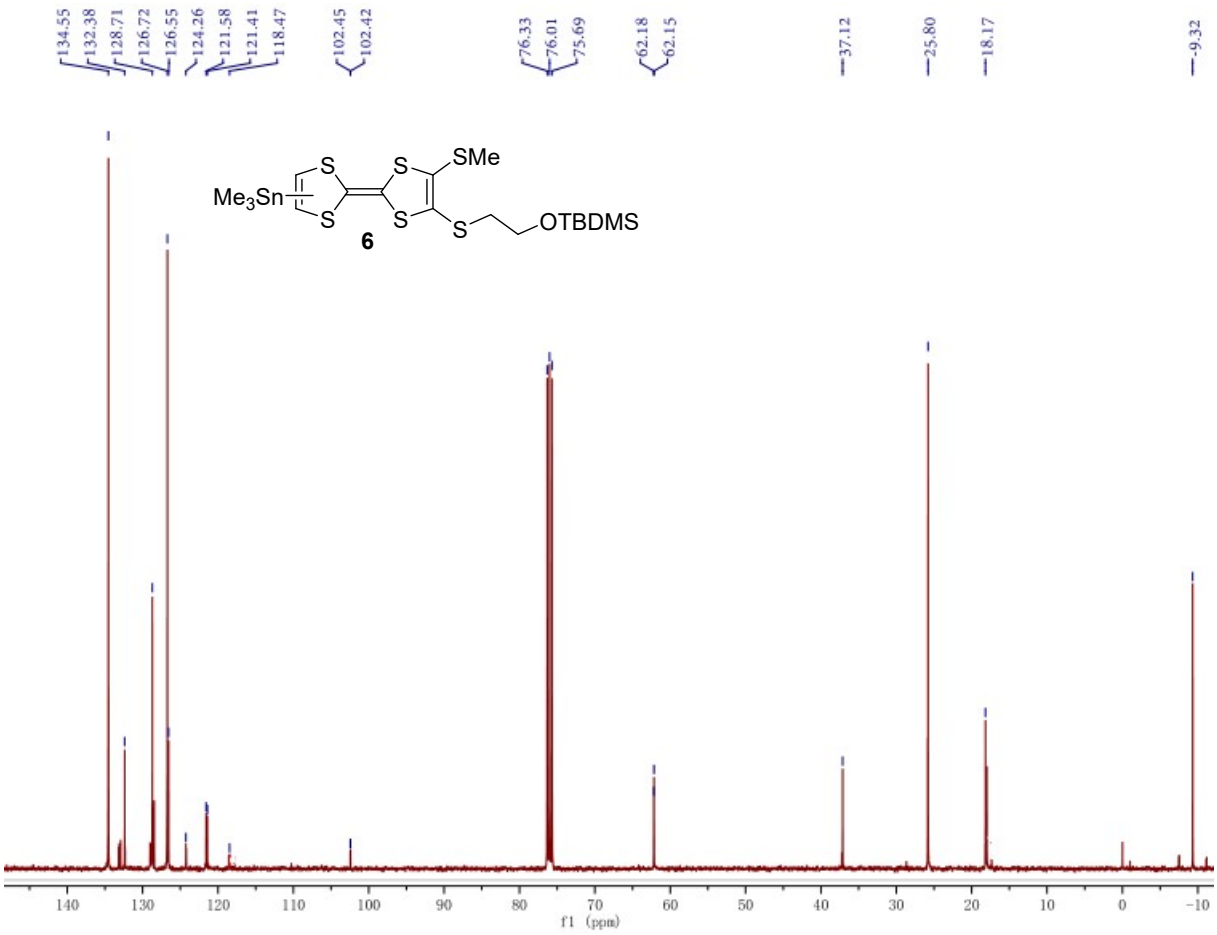

Figure S8 : ^{13}C NMR spectrum in $CDCl_3$ of **6**.

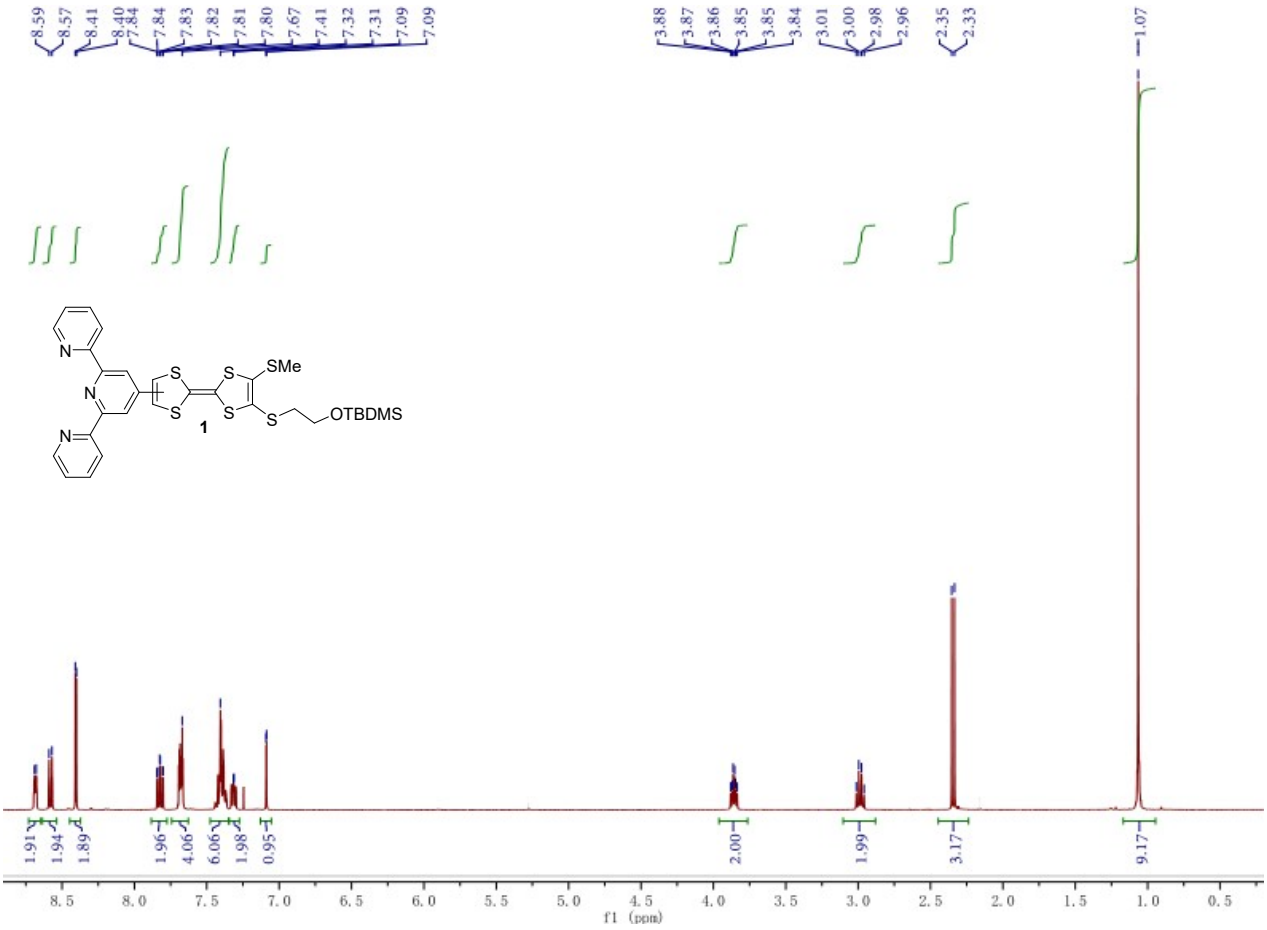

Figure S9 : ^{1}H NMR spectrum in $CDCl_3$ of **1**.

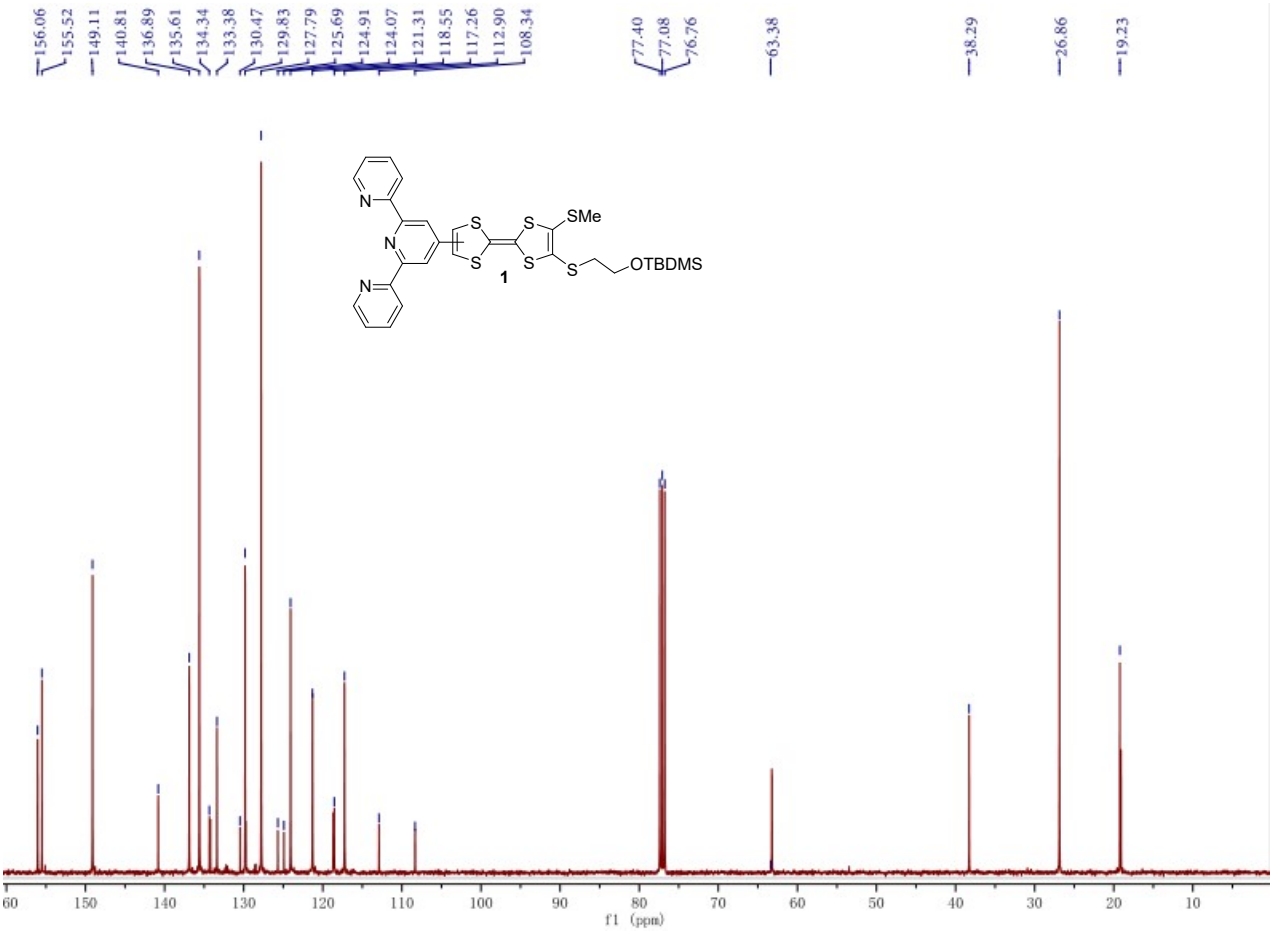

Figure S10 : ^{13}C NMR spectrum in $CDCl_3$ of **1**.

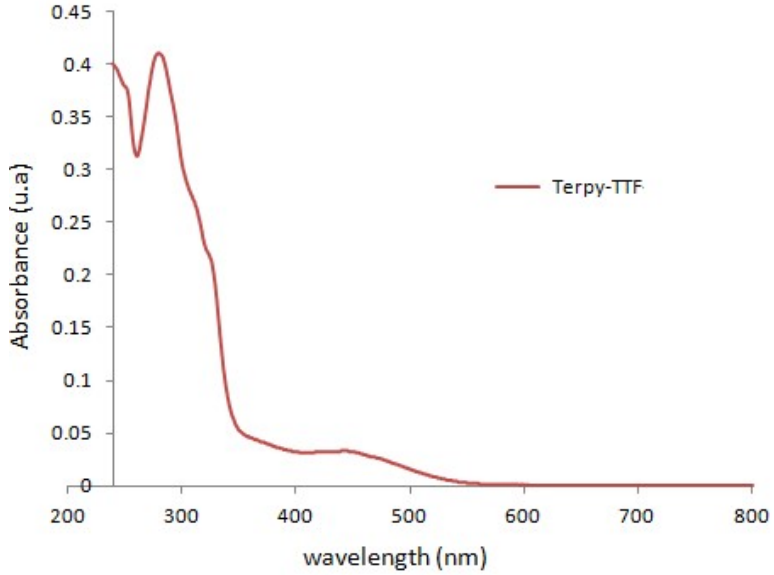

Figure S11 : UV-Visible experiment of dyad **1** (10^{-5} M) in CH_2Cl_2/CH_3CN (1/1, v/v).

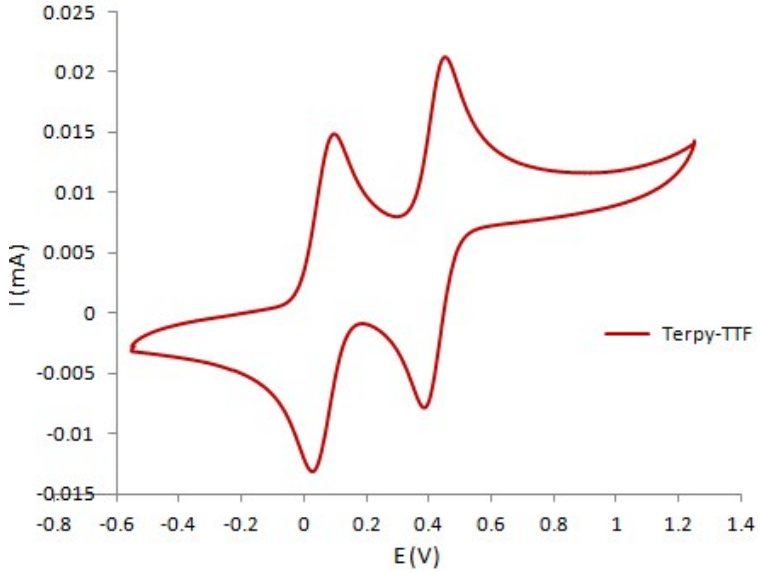

Figure S12 : CV experiment of dyad **1** (10^{-3} M) in CH_2Cl_2/CH_3CN (1/1, v/v); 100 mV/s, $n$$Bu_4BF_6$ (10^{-1} M), vs Ag/AgCl, (vs Fc/Fc^+).

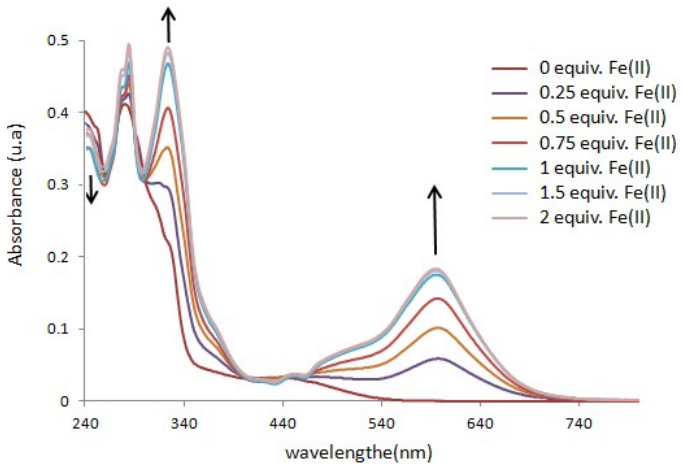

Figure S13 : UV-Visible titration experiment of dyad **1** (10^{-5} M) in CH_2Cl_2/CH_3CN (1/1, v/v) in presence of $Fe(ClO_4)_2$.

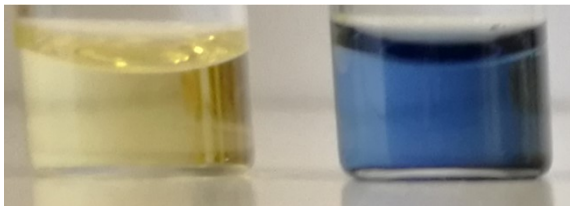

Figure S14 : Color evolution before (left) and after (right) titration of dyad **1** (10^{-5} M) in presence of 2 equiv. $Fe(ClO_4)_2$ in CH_2Cl_2/CH_3CN (1/1, v/v).

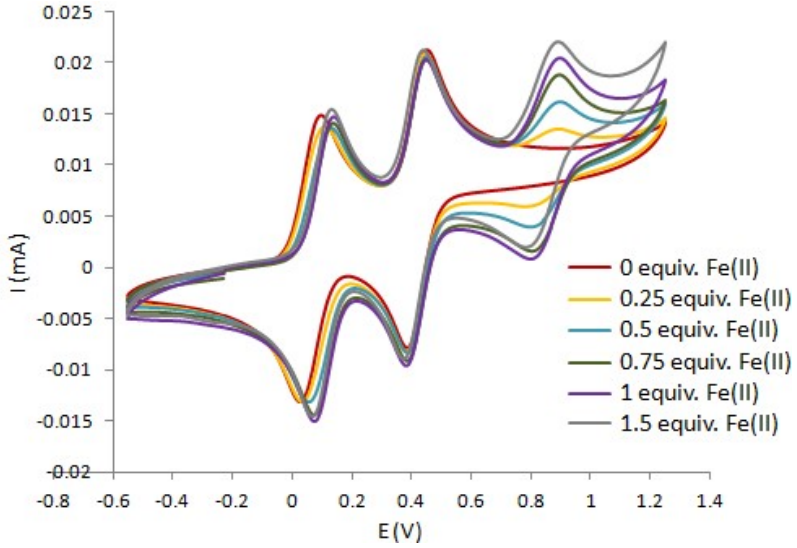

Figure S15 : CV titration experiment of dyad **1** (10^{-3} M) in CH_2Cl_2/CH_3CN (1/1, v/v) in presence of $Fe(ClO_4)_2$; 100 mV/s, nBu$_4$BF$_6$ (10^{-1} M), vs Ag/AgCl, (vs Fc/Fc^+).

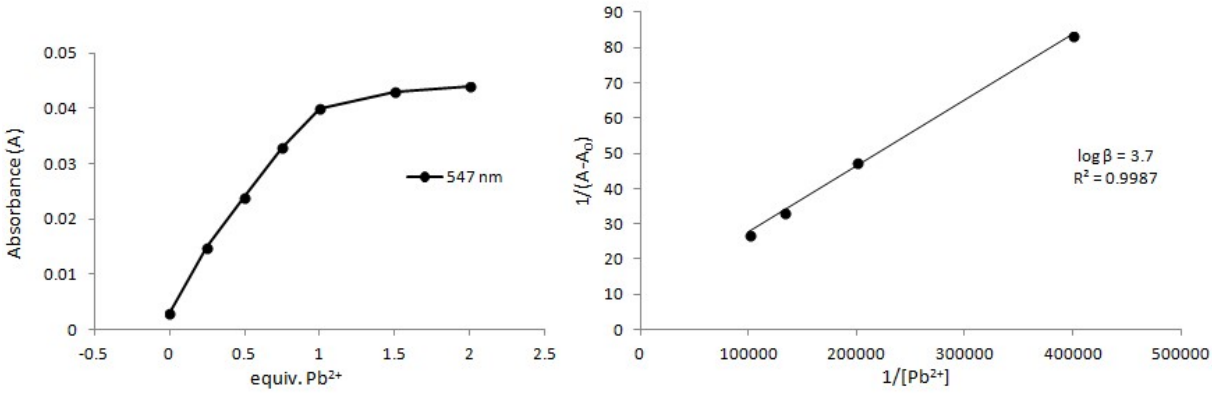

Figure S16 : Further study of UV-Visible titration of dyad **1** (10^{-5} M) in CH_2Cl_2/CH_3CN (1/1, v/v) in presence of $Pb(ClO_4)_2$

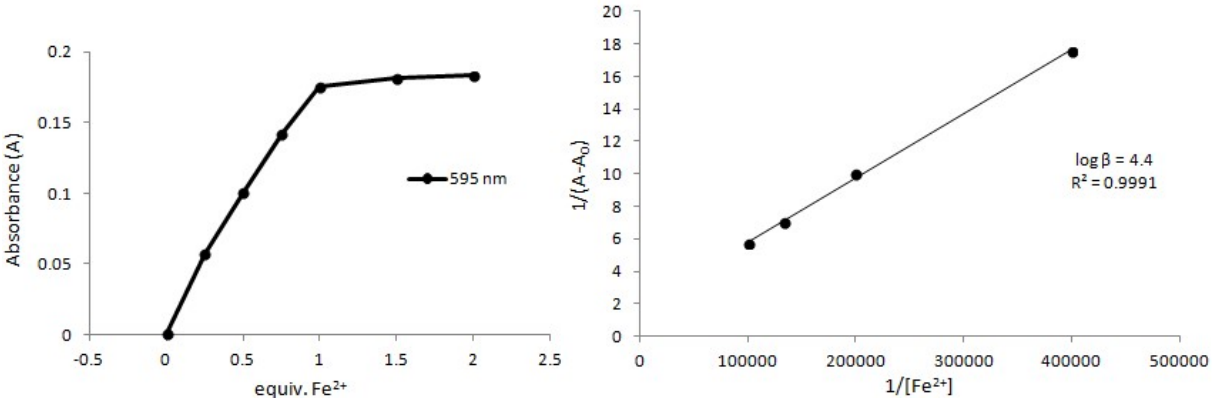

Figure S17 : Further study of UV-Visible titration of dyad **1** (10^{-5} M) in CH_2Cl_2/CH_3CN (1/1, v/v) in presence of $Fe(ClO_4)_2$

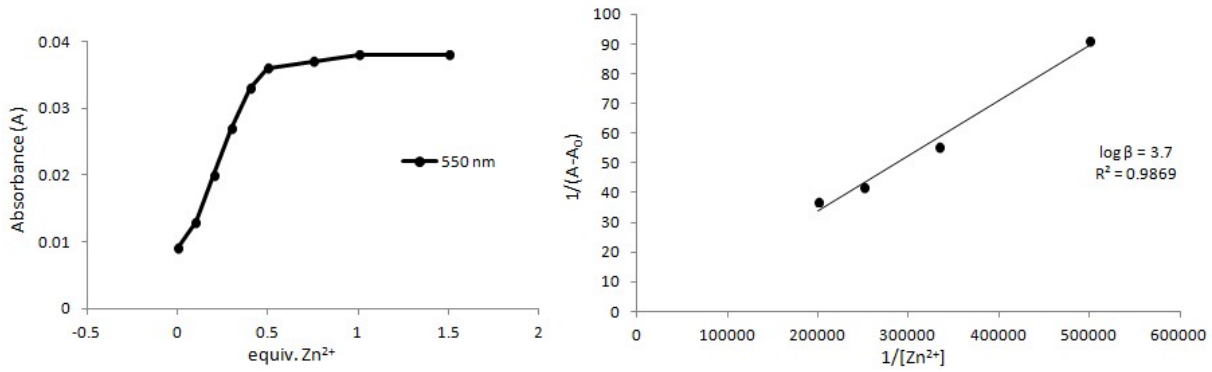

Figure S18 : Further study of UV-Visible titration of dyad **1** (10^{-5} M) in CH_2Cl_2/CH_3CN (1/1, v/v) in presence of $Zn(ClO_4)_2$