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Supporting Information

An Ampyrone based azo dye as pH-responsive and chemo-reversible colorimetric fluorescent probe for Al³⁺ in semi-aqueous medium: Implication towards logic gate analysis

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List of Supporting Information

Figures	List	Page
Figure S1	Mass spectra of 1-Al ³⁺ Complex	3
Figure S2	¹ H-NMR spectrum (400 MHz, DMSO-d ₆) of 1 in presence of aluminium (5 eq.)	4
Figure S3	¹³ C NMR spectrum (100 MHz, DMSO-d ₆) of 1 in presence of acid	5
Figure S4	¹ H-NMR spectrum (400 MHz, DMSO-d ₆) of 1	6
Figure S5	¹³ C-NMR spectrum (100 MHz, DMSO- d_6) of 1	7
Figure S6	IR spectrum of 1	8
Figure S7	HR-MS spectrum of 1	9

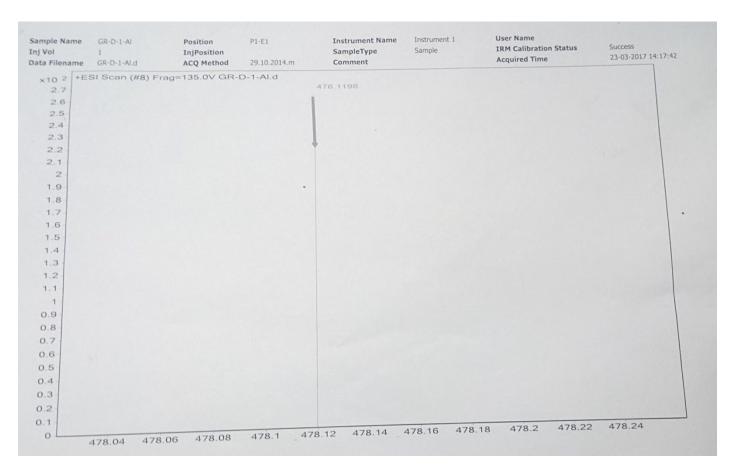


Figure S1: Mass spectra of 1-Al³⁺ Complex

0.0 JEOL ---- PROCESSING PARAMETERS 0.8 dc_balance : 0 : FALSE saxp_auto : 0.2 trapezoid3 : 0[%] : 80[%] : 100[%] fft : 1 fft : 1 machizephase dc_correct pps thresh : 5[%] : 1 pesk_pick : 0[Hz] : 0.1[pps] : Both : 0[Hz] suto_reference : 5[%] 50 970 Filename Author Experiment Sample Id Solvent Creation_Time Revision_Time Current_Time - JNK GR-D-A13+B - DNSO-D6 - 8-FEB-2017 10:22:35 - 12-OCT-2017 19:45:28 - 12-OCT-2017 19:45:34 5.15 0.5 Connent Data Format Din Sire Din Title Din Units Dimensions Site Spectrometer - JNK GR-D-A13+B - 1D COMPLEX - 13107 - 1H - [ppm] - X 0.4 - BCK 400P Field_Strength X_Acq_Duration X_Domain X_Treq X_Offset X_Freet X_Freet X_Freet X_Sweet Irr_Domain Irr_Freet 0.3 .05 0.2 Irr Freq Irr Offset 0.88 Tri Domain Tri Freq Tri Offset Clipped 0 abundance - 16 - 34 - 4[s] - 34 - 402.1[dC] - 10.1[us] - 1.31072[s] - 3[dm] - 3[dm] - 3.05[us] - 0ff - 0ff - FALSE - 1[s] Scans Total Sc 0 Relaxation_D Recyr Gain Temp Get X 90 Width X Acq Time X Angle X Atn 7.0 12.0 11.0 10.0 9.0 8.0 6.0 5.0 3.0 2.0 1.0 4.0 0 3.368 2.631 X Fulse Irr Mode Tri Mode Dante Prezat Initial Mait X : parts per Million : 1H

Figure S2: ¹H NMR spectrum (400 MHz, DMSO-d₆) of 1 in presence of Aluminium (5 eq.)

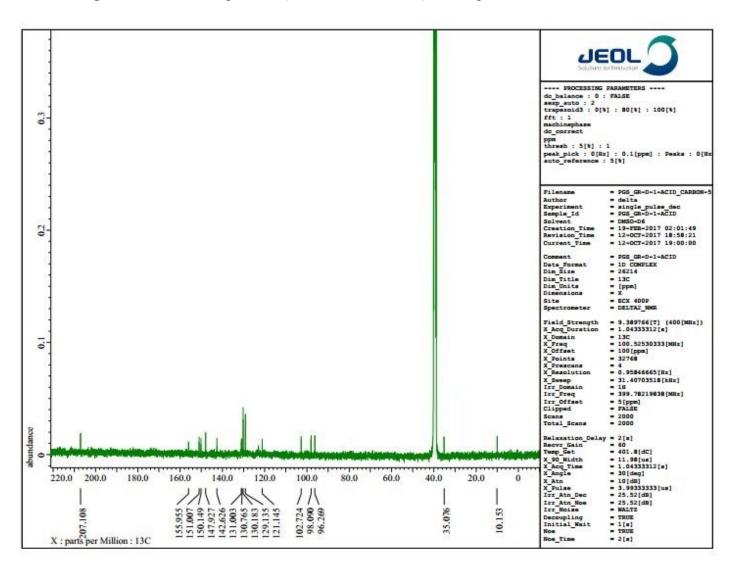


Figure S3: ¹³C NMR spectrum (100 MHz, DMSO-d₆) of 1 in presence of acid

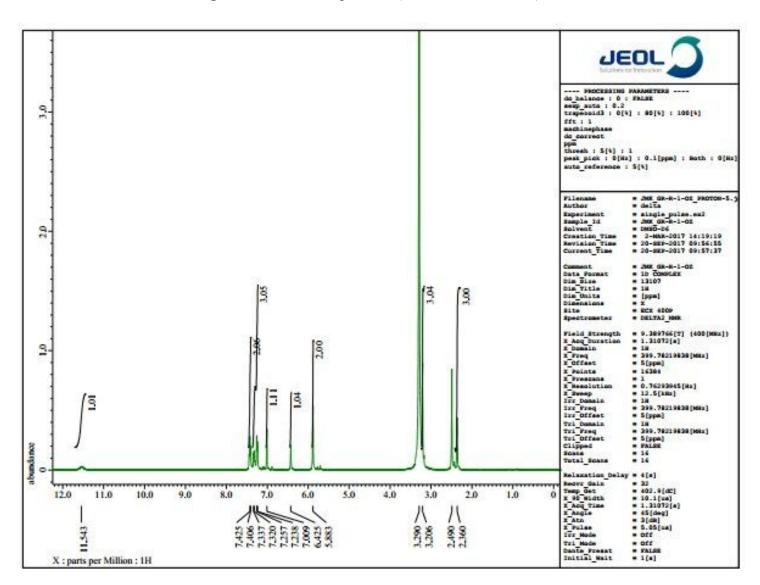


Figure S4: ¹H-NMR spectrum (400 MHz, DMSO-d₆) of 1

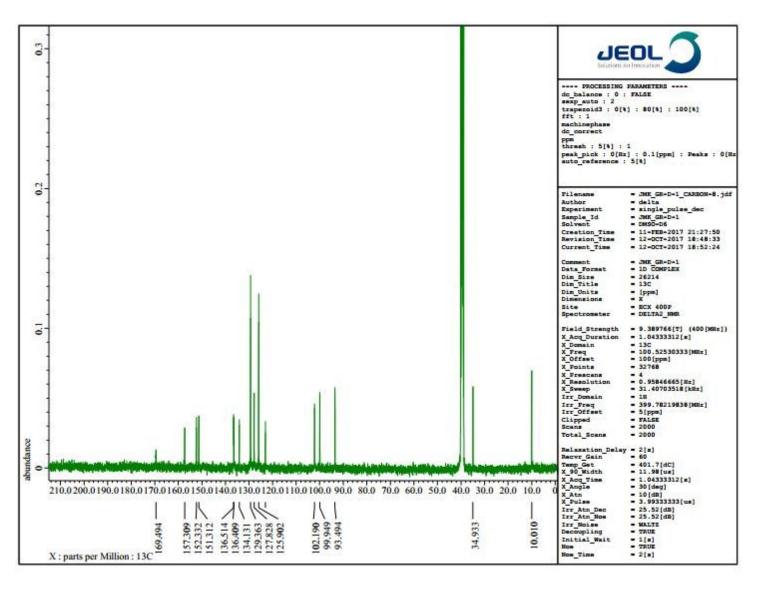


Figure S5: ¹³C-NMR spectrum (100 MHz, DMSO-d₆) of 1

Figure S6: IR spectrum of 1

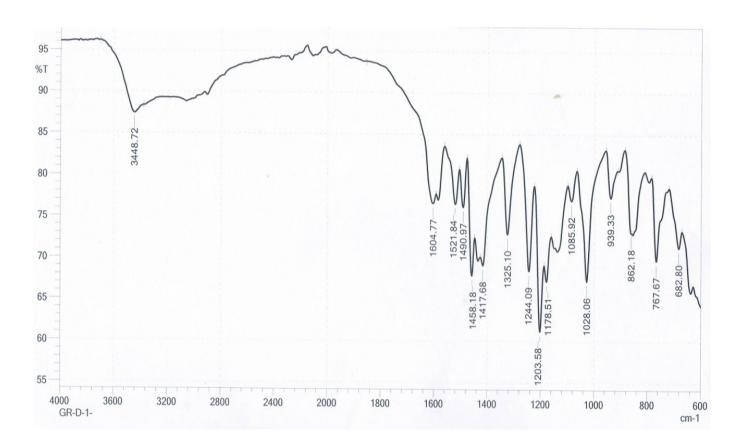


Figure S7: HR-MS spectrum of 1

