Electronic Supplementary Information

Structural and Magnetic Properties of Semiquinone based Al(III) and Ga(III) complexes

Chinmoy Das, Pragya Shukla, Lorenzo Sorace, and Maheswaran Shanmugam*

Figure S1. $^1$H NMR (400 MHz in CDCl$_3$) spectrum of complex 1 (* = Grease, # = hexane, $ = CDCl_3$)
Figure S2. ESI-mass spectrum of complex 1 (panel A) and 2 (panel B) recorded using dry CH$_3$CN (blue trace) and its corresponding simulation pattern (red trace)
Figure S3. $^1$H NMR (400 MHz in CDCl$_3$) spectrum of complex 2 (** = Grease, # = hexane, & = H$_2$O, @ = dimethoxyethane (DME), $ = CDCl_3$). The broad peak centered at 3.8 ppm is residual-THF.

Figure S4. Field dependent magnetization measurement performed on polycrystalline samples of 1 and 2 at 2.0 K.
Figure S5. Temperature dependent direct current magnetic susceptibility measurement performed on polycrystalline sample of 1 at 1 kOe applied magnetic field. The solid red line indicates the fit of the experimental data using the parameters given in the legend.