Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary data:

A new fluorescent probe based on quinoline for detection of Al^{3+} and Fe^{3+} with "off-on-off" response in aqueous solution

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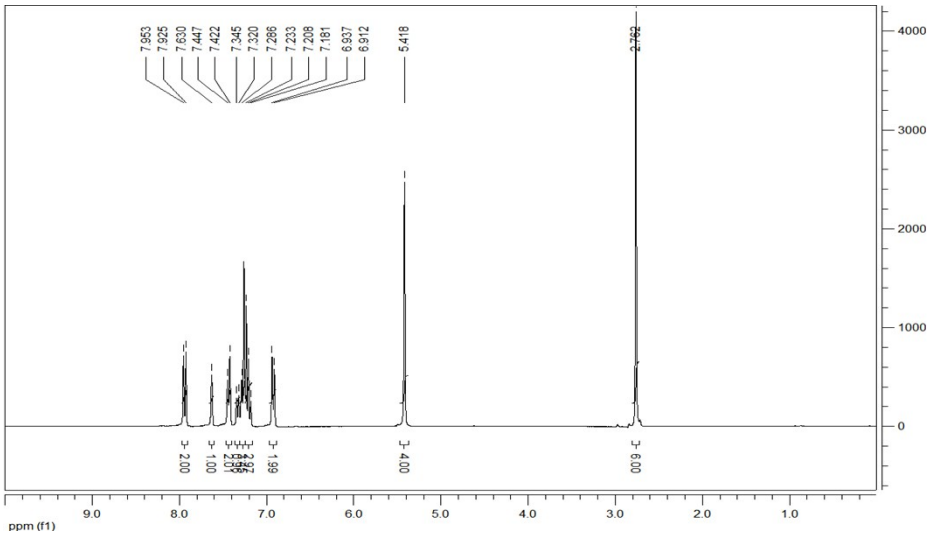
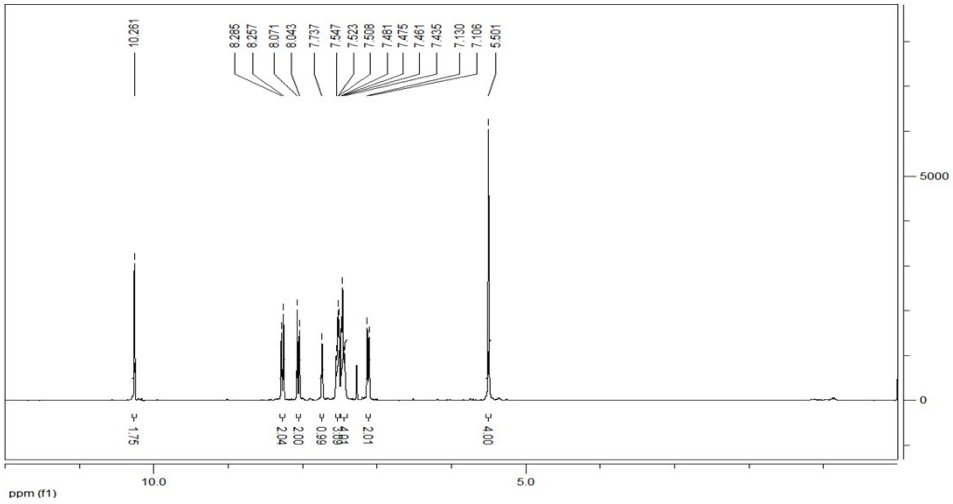
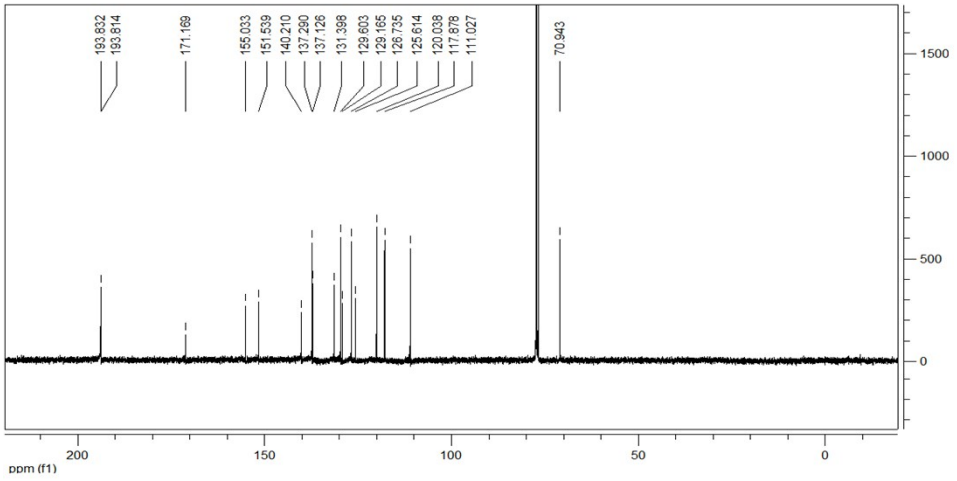
[1]H NMR of compound 3



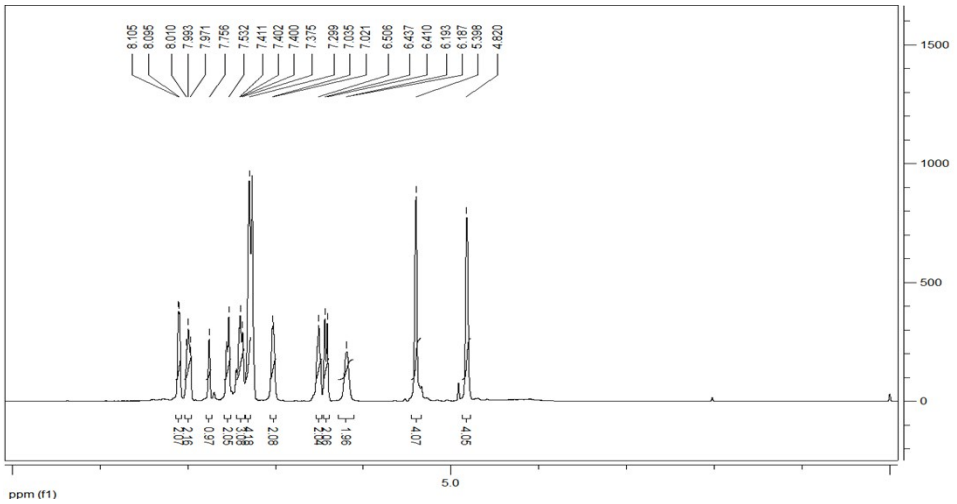
[1]H NMR of compound 2



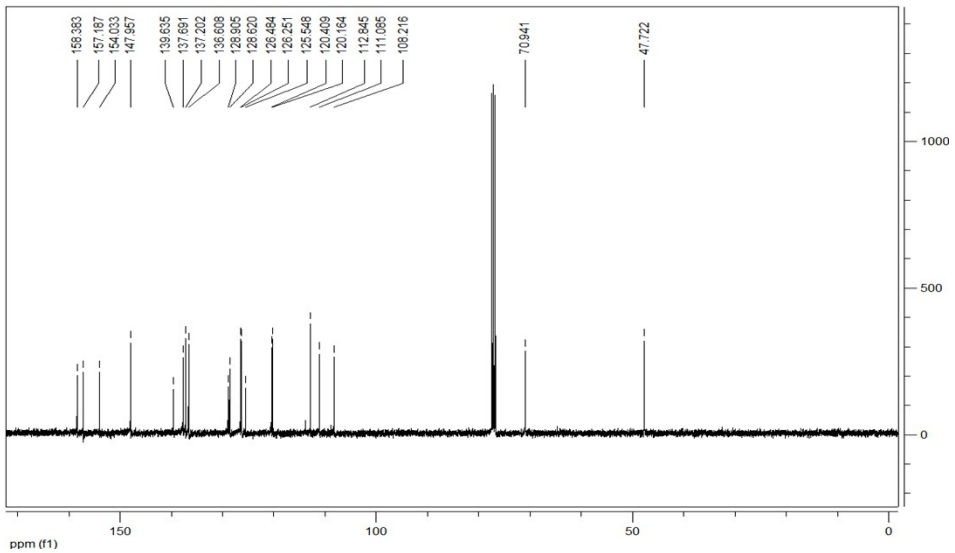
[13]C NMR of compound 2

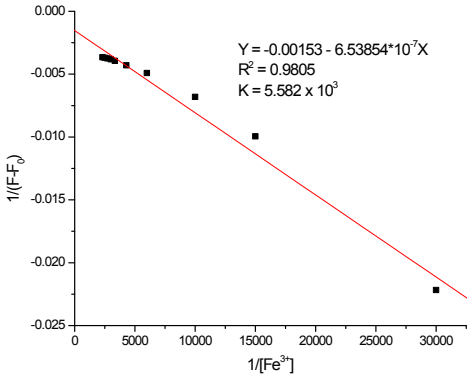


^{1}H NMR of compound 1

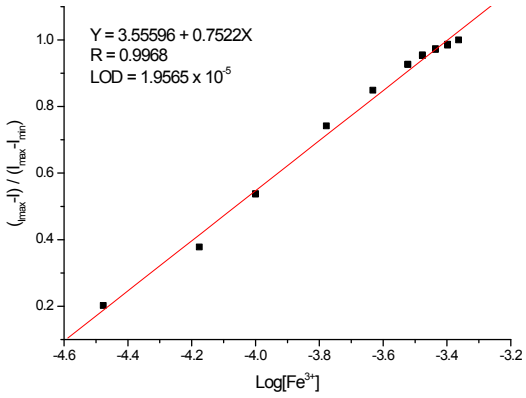


^{13}C NMR of compound 1





Figs. 1. Benesi–Hildebrand plot of fluorescent probe (**1** + Al^{3+} + Fe^{3+}) at λ_{ex} = 295 nm.



Figs. 2. The detection limit (DL) of probe **1**+Al^{3+} for Fe^{3+} was calculated as 1.9565×10^{-5} M in DMF-H_2O (1:1, v/v, pH=7.4 of Tris).