

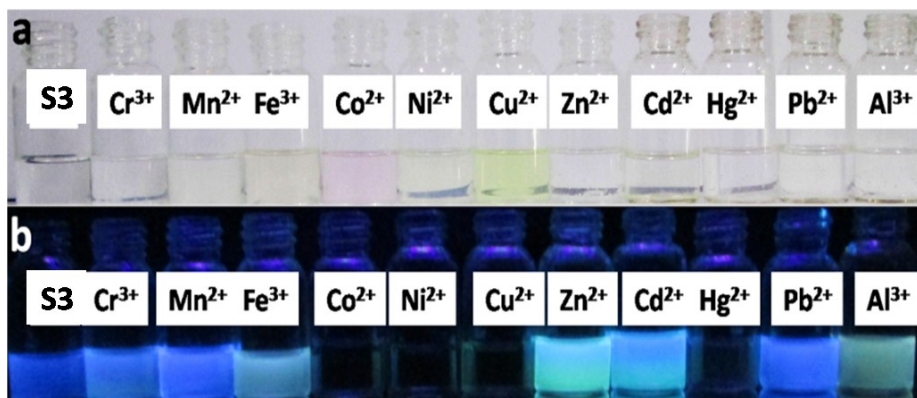
## Coplanarity driven fluorescence turn-on sensor for chromium(III) and its application towards bio-imaging

G. Balamurugan<sup>a</sup> and S. Velmathi<sup>a,\*</sup>

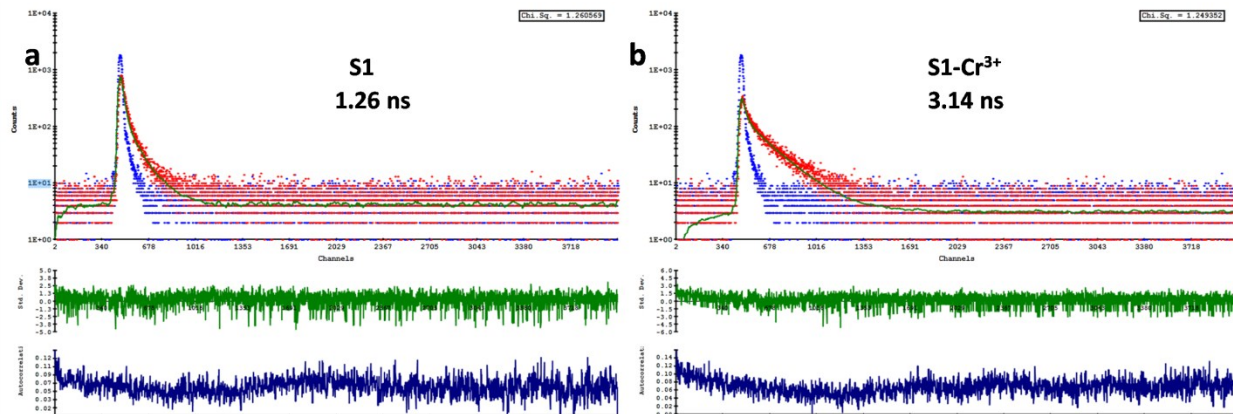
<sup>a</sup>. Organic and polymer synthesis Laboratory, Department of Chemistry, National Institute of Technology, Tiruchirappalli-620015, India.

\*Correspondence to be addressed to [velmathis@nitt.edu](mailto:velmathis@nitt.edu) and +91-431-2503640

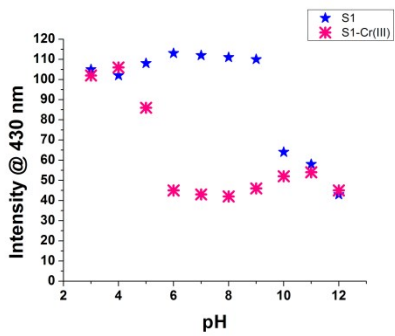
### Supporting Information



**Fig. S1** Naked eye experiments of S3 (50 μM in H<sub>2</sub>O) with various cations (1.5 mM in H<sub>2</sub>O) (a) under visible light and (b) under UV light. Cu<sup>2+</sup> showed selective color change from colorless to yellow but under UV light no selectivity was achieved.



**Fig. S2** Fluorescence lifetime measurements of (a) S1 and (b) S1- Cr<sup>3+</sup> complex.



**Fig. S3** pH effect on the sensing behaviour of **S1** towards  $\text{Cr}^{3+}$  ions.