

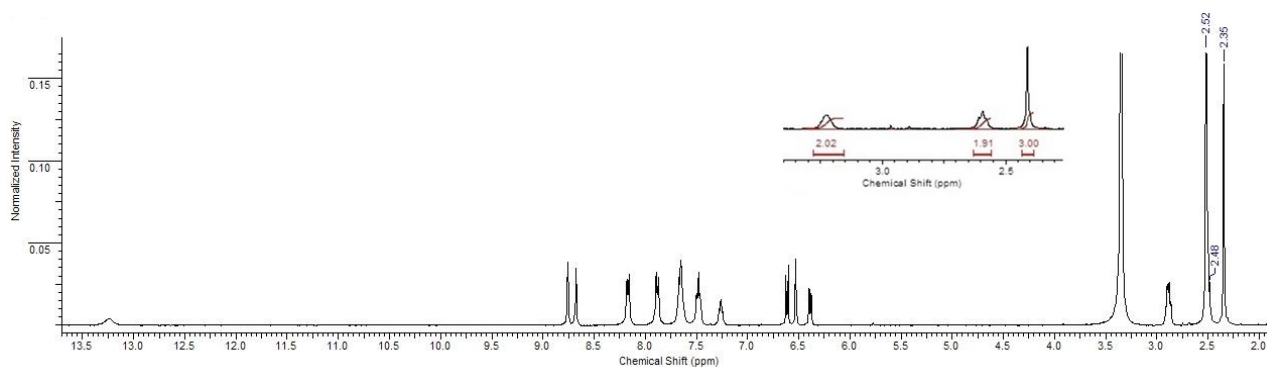
Supporting information

**Bio-inspired colouration on various textile materials using a novel catechol colorant**

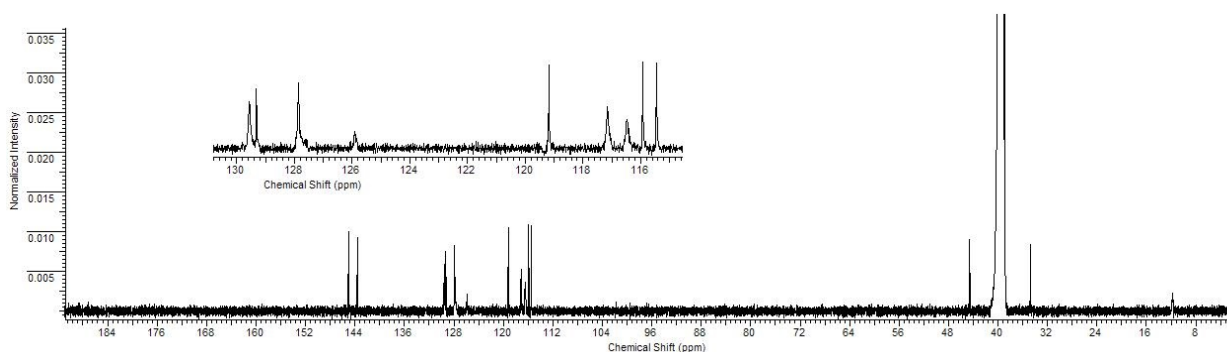
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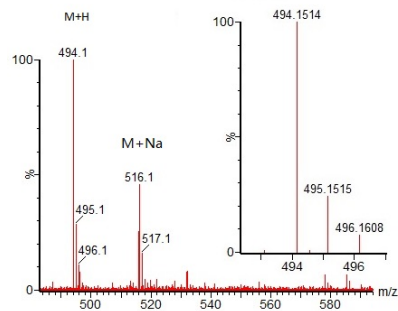
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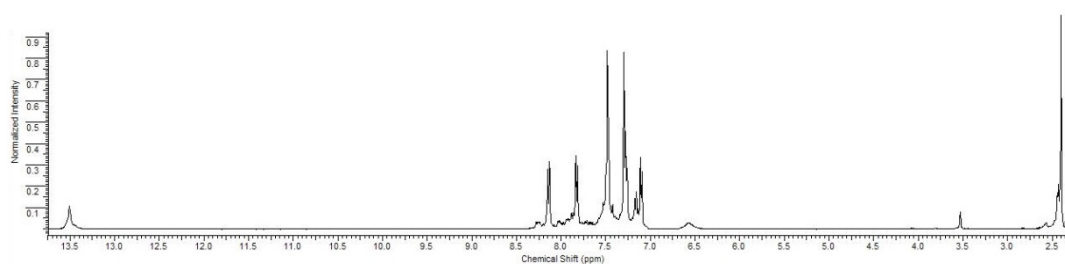
**Fig. S1** <sup>1</sup>H NMR spectrum of D1 in DMSO-d<sub>6</sub>. Inset, partial <sup>1</sup>H NMR spectrum of D1 in CDCl<sub>3</sub>. In order to check the peaks of OH groups, DMSO-d<sub>6</sub> was used as solvent for NMR. But, one peak for CH<sub>2</sub> group at δ 2.48 ppm was almost covered by the solvent residual peak at δ 2.52 ppm. So, CDCl<sub>3</sub> was used for <sup>1</sup>H NMR again. Its spectrum clearly showed the three peaks for two CH<sub>2</sub> groups and a CH<sub>3</sub> group with the correct ratio of integral area. According to the results of these two <sup>1</sup>H NMR spectra, it showed the correct chemical structure of D1.



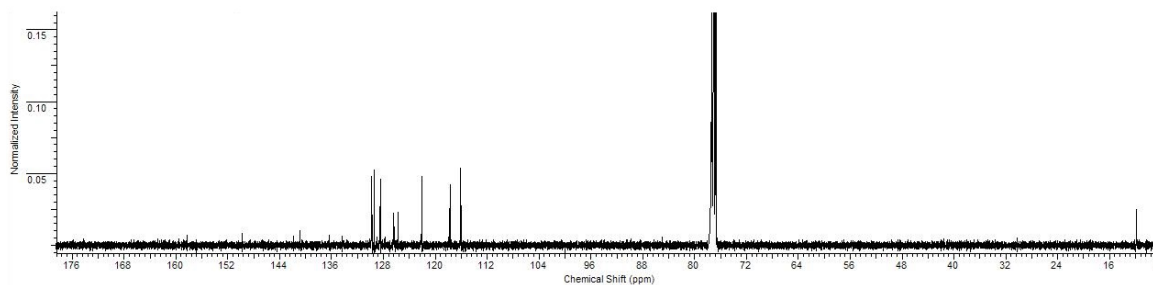
**Fig. S2** <sup>13</sup>C NMR spectrum of D1 in DMSO-d<sub>6</sub>.



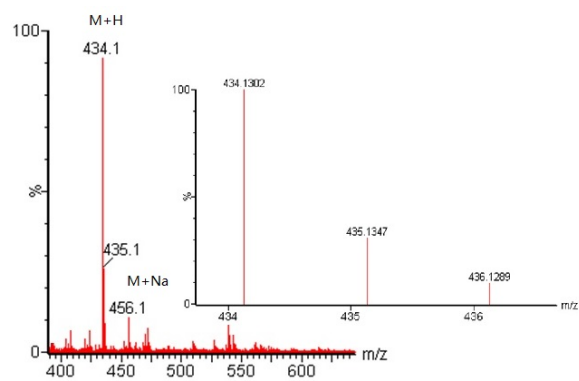
**Fig. S3** HRMS spectra of D1



**Fig. S4**  $^1\text{H}$  NMR spectrum of D2 in  $\text{CDCl}_3$ .



**Fig. S5**  $^{13}\text{C}$  NMR spectrum of D2 in  $\text{CDCl}_3$ .



**Fig. S6** HRMS spectra of D2