

**Supporting Information**

for

**Functionalisation of MWCNTs with  
poly(lauryl acrylate) polymerised by Cu(0)-mediated  
and RAFT methods**

*Jaipal Gupta,<sup>a</sup> Daniel J. Keddie,<sup>b</sup> Chaoying Wan,<sup>a</sup> David M. Haddleton,<sup>c</sup>  
and Tony McNally,<sup>a\*</sup>*

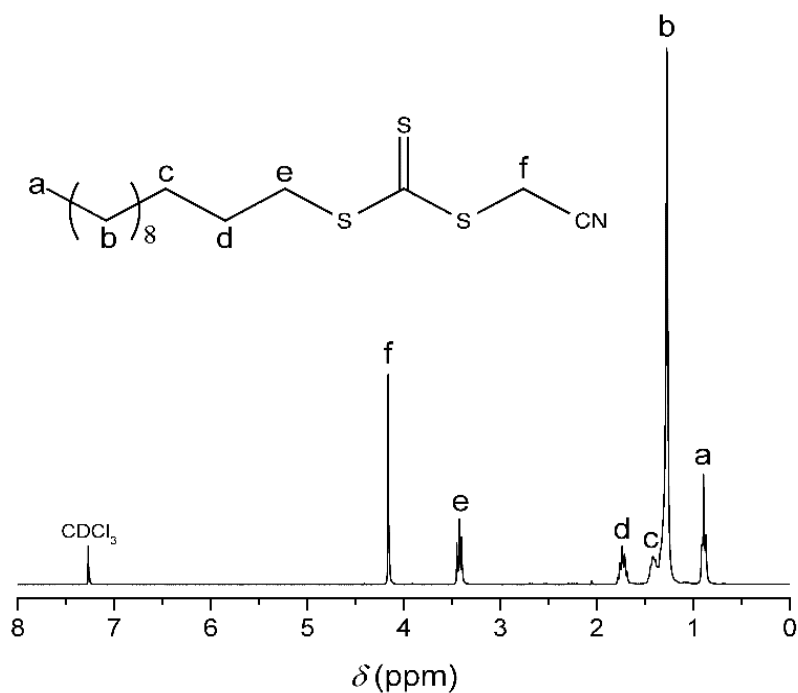
<sup>a</sup>International Institute for Nanocomposites Manufacturing (IINM), WMG, University of Warwick, CV4 7AL, UK.

<sup>b</sup>School of Biology, Chemistry and Forensic Science, University of Wolverhampton, WV1 1LY, UK.

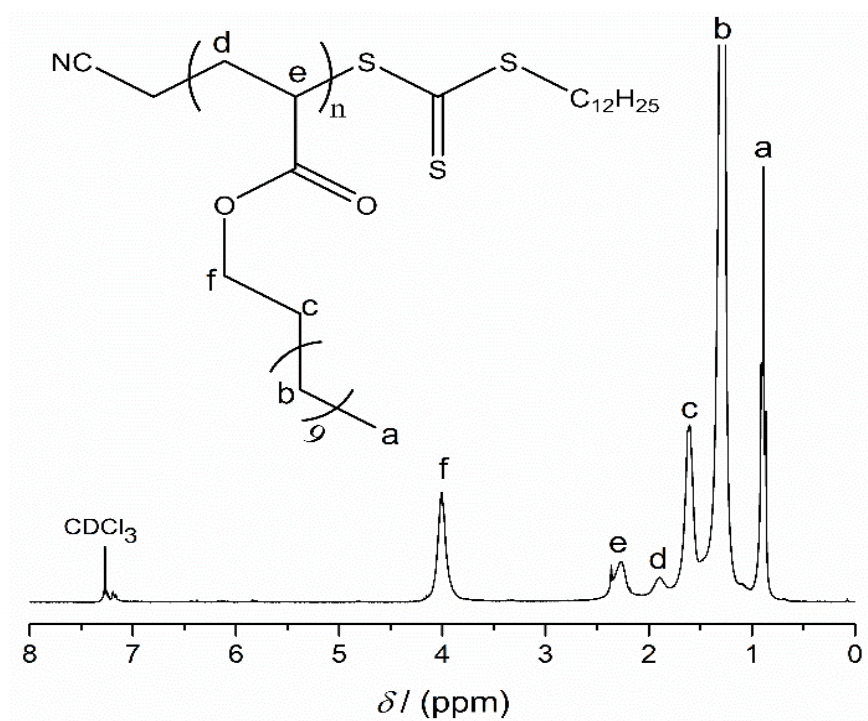
<sup>c</sup>Department of Chemistry, University of Warwick, Library Road, Coventry, CV4 7AL, UK.

Email: [T.McNally@warwick.ac.uk](mailto:T.McNally@warwick.ac.uk)

## Supplementary Figures



**Fig. S1** <sup>1</sup>H NMR spectrum of cyanomethyl dodecyltrithiocarbonate recorded in CDCl<sub>3</sub>.



**Fig. S2** <sup>1</sup>H NMR spectrum of P[LA] synthesised *via* RAFT using cyanomethyl dodecyltrithiocarbonate RAFT agent.

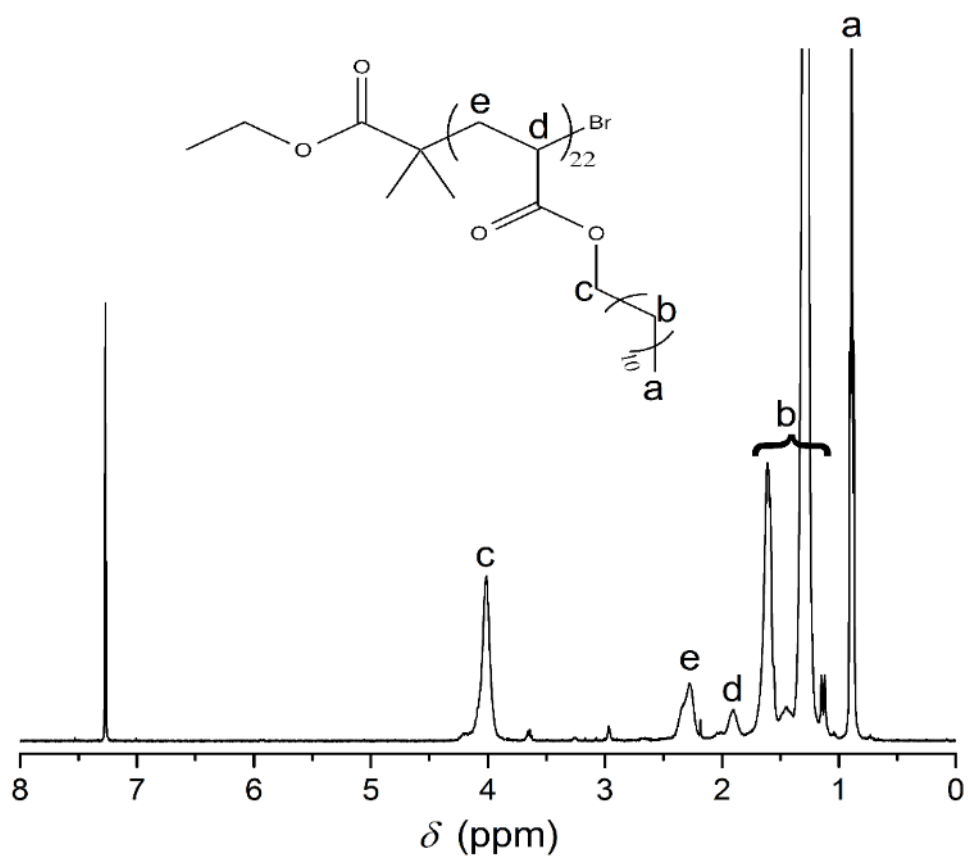


Fig S3. <sup>1</sup>H NMR spectra of P[LA] recorded in CDCl<sub>3</sub> synthesised *via* Cu(0)-mediated polymerisation.

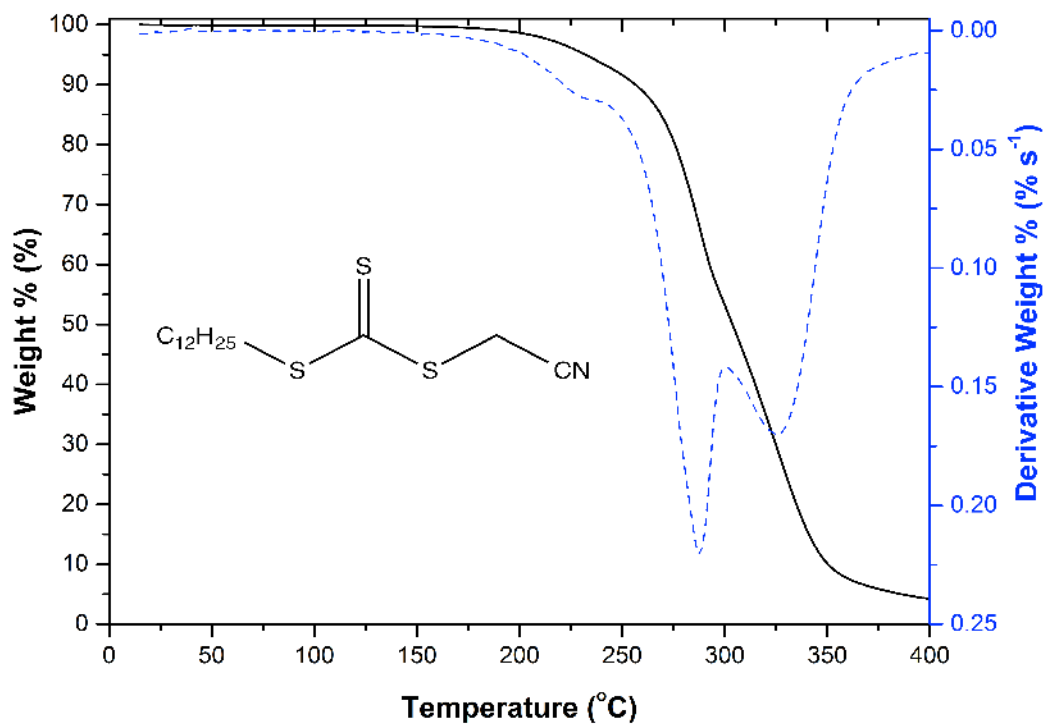


Fig. S4 TGA of cyanomethyl dodecyltrithiocarbonate.

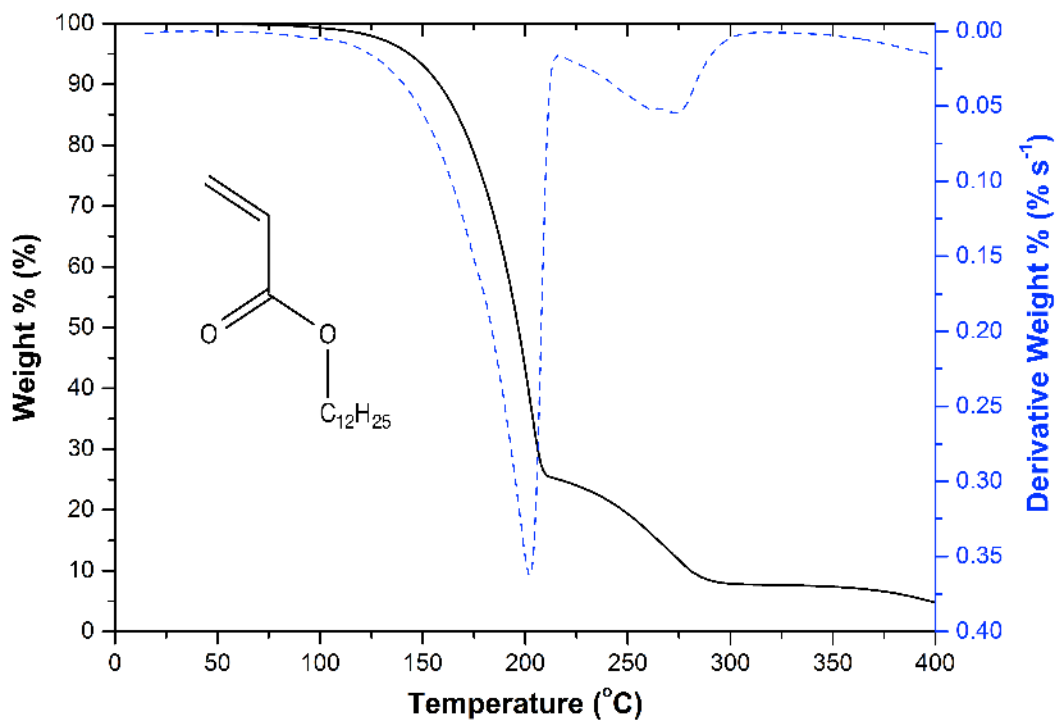


Fig. S5 TGA of lauryl acrylate.

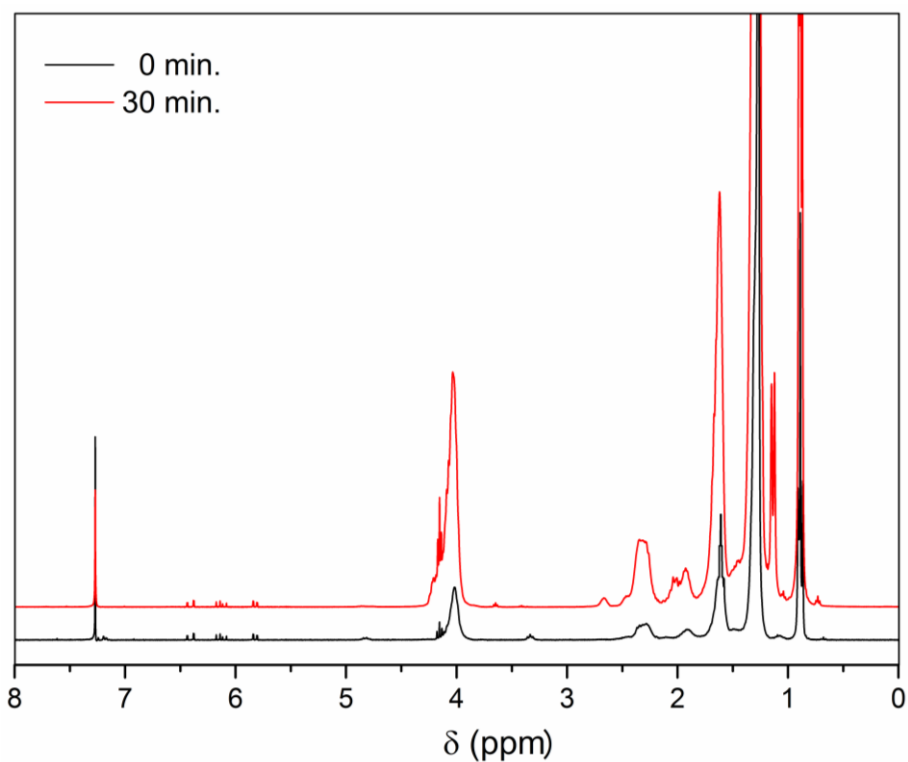
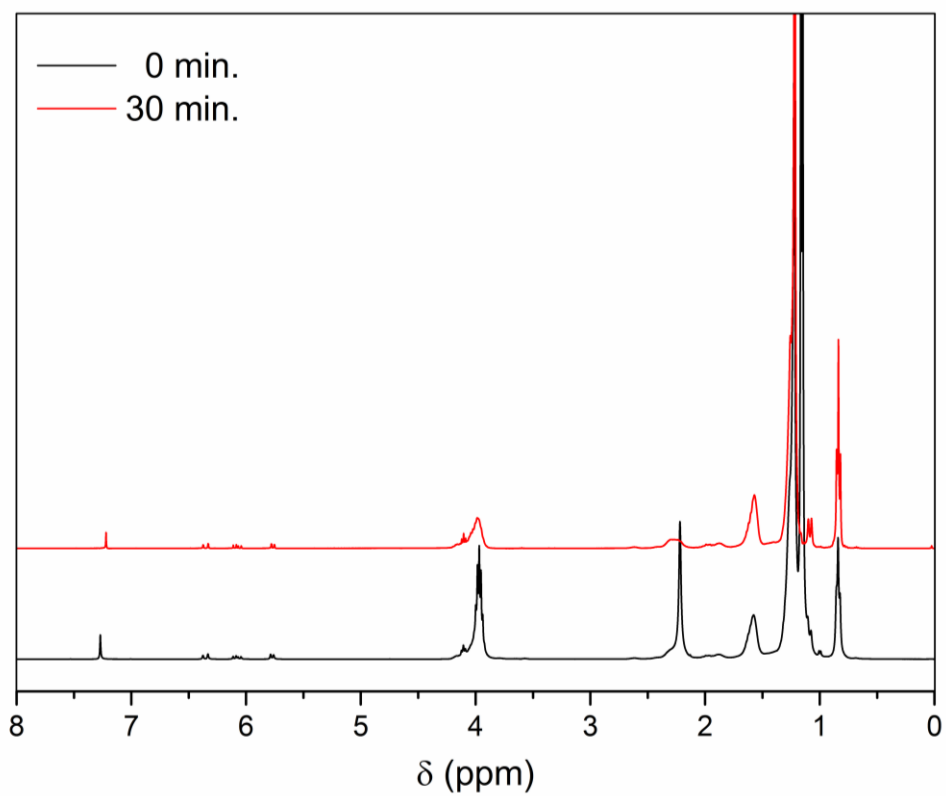


Fig. S6 NMR of P[LA] synthesised *via* RAFT ( $M_{n, SEC} = 2.5$  kDa,  $\mathcal{D} = 1.13$ ) before and after thermal treatment at 200 °C under an air atmosphere as a function of time.



**Fig. S7 NMR of P[LA] synthesised *via* Cu(0)-mediated polymerisation ( $M_{n, SEC} = 2.1$  kDa,  $\bar{D} = 1.11$ ) before and after thermal treatment at 200 °C under an air atmosphere as a function of time.**