Electronic Supplementary Material (ESI) for RSC Advances.

Support Information for

Rate Acceleration for 4,4'-Dimethoxydiphenyl Nitroxide Mediated Polymerization of Methyl Methacrylate

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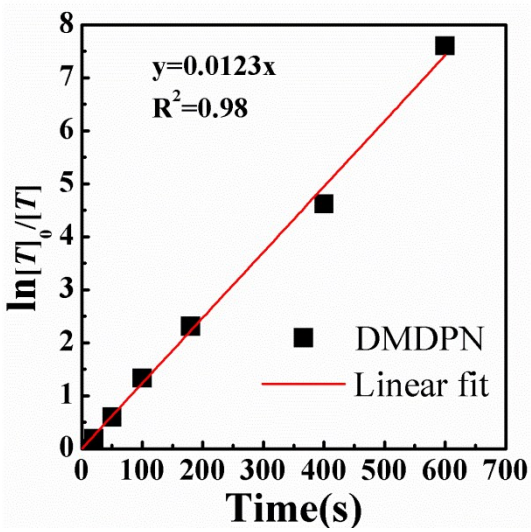

Figure 1. Evolution of $\ln[T]_0/[T]$ *vs* time for the DMDPN decay with CSA in *tert*-butylbenzene at 110 °C. $[DMDPN]_0$=0.1 mmol/L, $[CSA]_0$= 7.9 mmol/L.

Figure 1: Sample of 1 mmol/L DMDPN in *tert*-butylbenzene with 7.9 mmol/L CSA (at the same concentration as Entry 4 used in the polymerization) were mixed and then placed in the ESR cavity maintained at 110°C. The concentration of DMDPN was determined from the ESR spectrum.

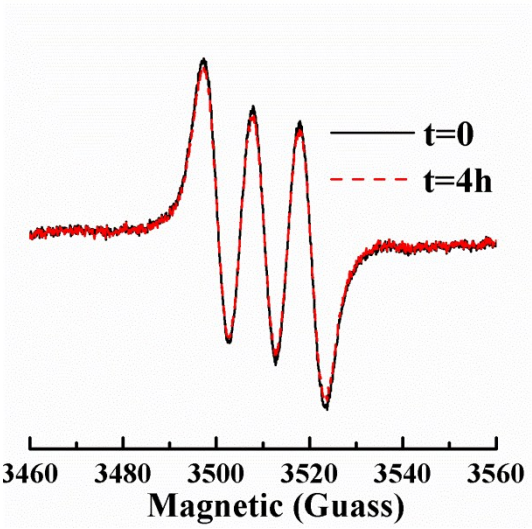

Figure 2. Growth of the ESR signal upon heating (T=110 °C) of the DMDPN with MN in *tert*-butylbenzene, before heating (solid line), 4h of heating (dashed line). $[DMDPN]_0$=0.1 mmol/L, $[MN]_0$= 35 mmol/L.

Figure 2: Sample of 0.1 mmol/L DMDPN in *tert*-butylbenzene with 35 mmol/L MN (at the same concentration as Entry 7 used in the polymerization) were mixed and then placed in the ESR cavity maintained at 110°C. The concentration of DMDPN was determined from the ESR spectrum.