

Electronic Supplementary Information (ESI)

for

One-Pot Synthesis of End-Functionalised Soluble Star-Shaped Polymers by Living
Ring-Opening Metathesis Polymerisation Using Molybdenum-Alkylidene Catalyst

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Contents

Selected NMR spectra for the resultant polymers.

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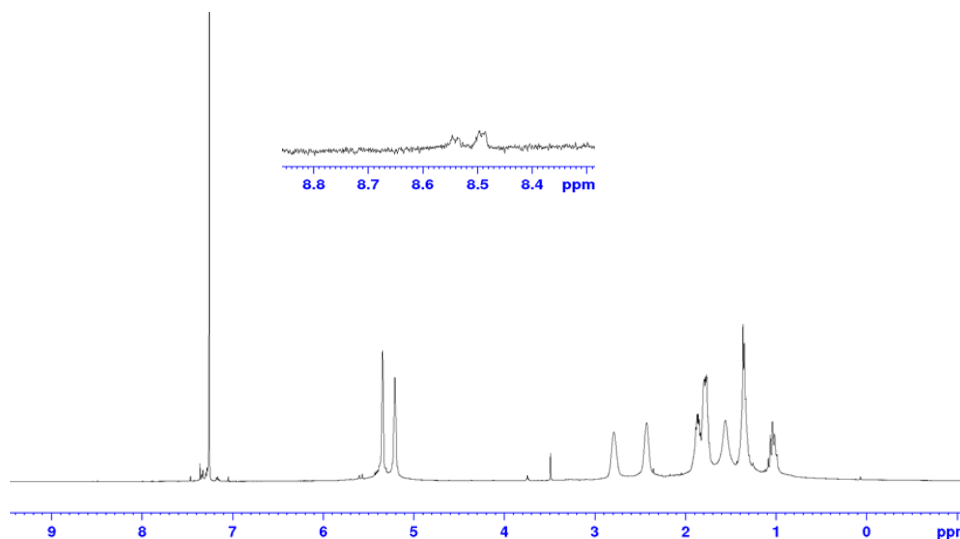


Figure S1. ^1H NMR spectrum (in CDCl_3 at $25\text{ }^\circ\text{C}$) of star-shaped polymer (Table 1, run 12).

^1H NMR (in CDCl_3 at $25\text{ }^\circ\text{C}$): δ 5.35 and 5.21 (br.s, 2H olefinic), 2.79 and 2.43 (br.s, 2H), 1.85 and 1.03 (m, 2H), 1.78 and 1.36 (m, 4H) ppm. Moreover, resonances ascribed to pyridine end group [8.54 and 8.50 (d) ppm] were also observed.

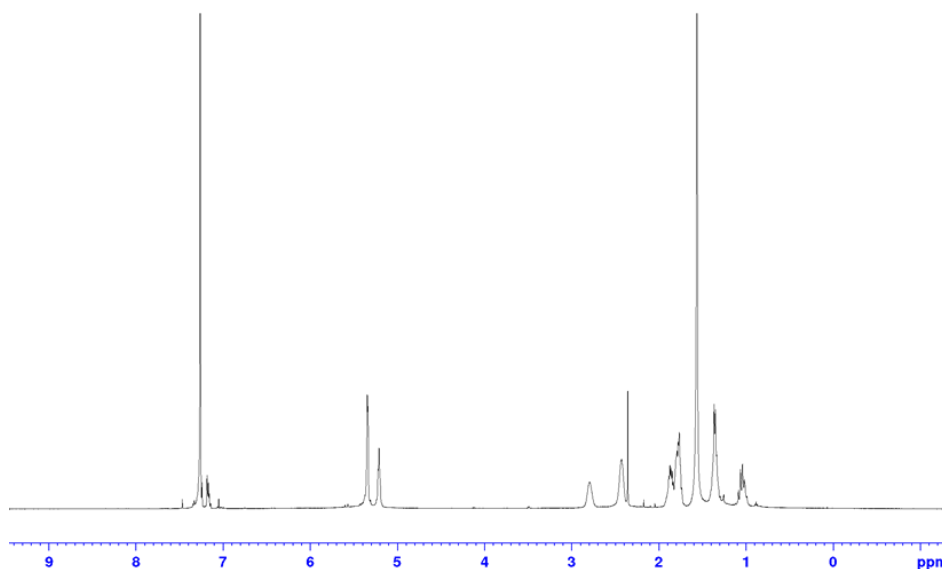


Figure S2. ^1H NMR spectrum (in CDCl_3 at $25\text{ }^\circ\text{C}$) of star-shaped polymer (Table 1, run 23).

^1H NMR (in CDCl_3 at $25\text{ }^\circ\text{C}$): δ 5.35 and 5.21 (br.s, 2H olefinic), 2.79 and 2.43 (br.s, 2H), 1.85 and 1.03 (m, 2H), 1.78 and 1.36 (m, 4H) ppm. Moreover, resonances ascribed to thiophene end group [7.00-7.40] were also observed.

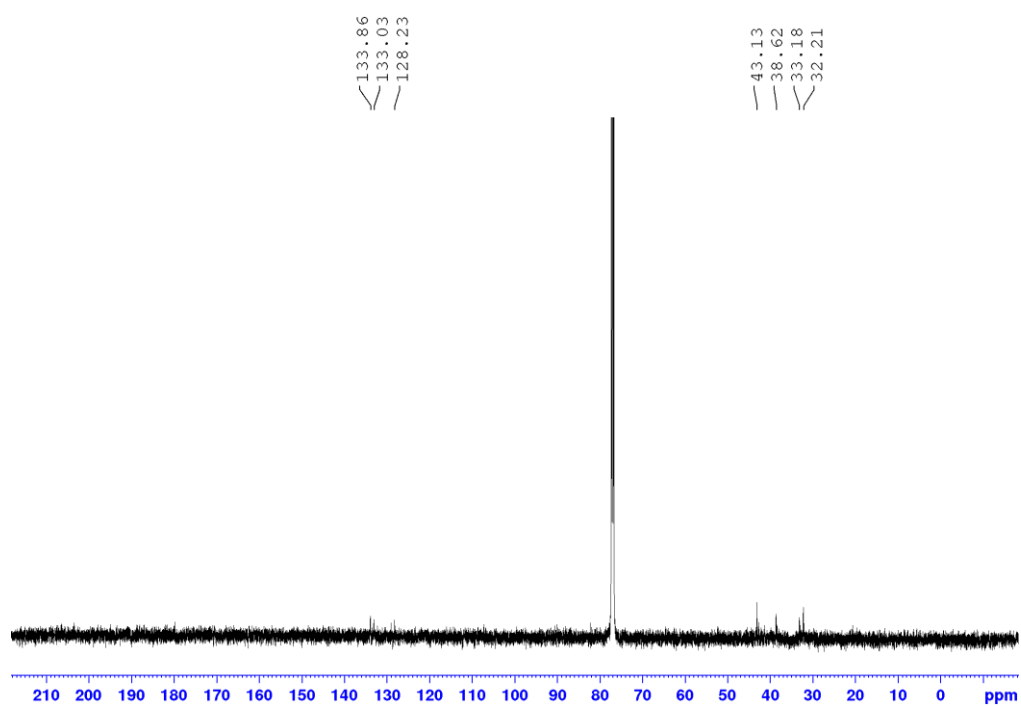


Figure S3. ^{13}C NMR spectrum (in CDCl_3 at $25\text{ }^\circ\text{C}$) of star-shaped polymer (Table 1, run 12).

^{13}C NMR (in CDCl_3 at $25\text{ }^\circ\text{C}$): δ 133.9, 133.0, 128.2, 43.1, 38.6, 33.2, 32.2 ppm.