10.1071/CH12406_AC

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Australian Journal of Chemistry 2013, 66(2), 151-156

Supplementary Material

Continuous flow synthesis of organic electronic materials – case studies in methodology translation and scale-up

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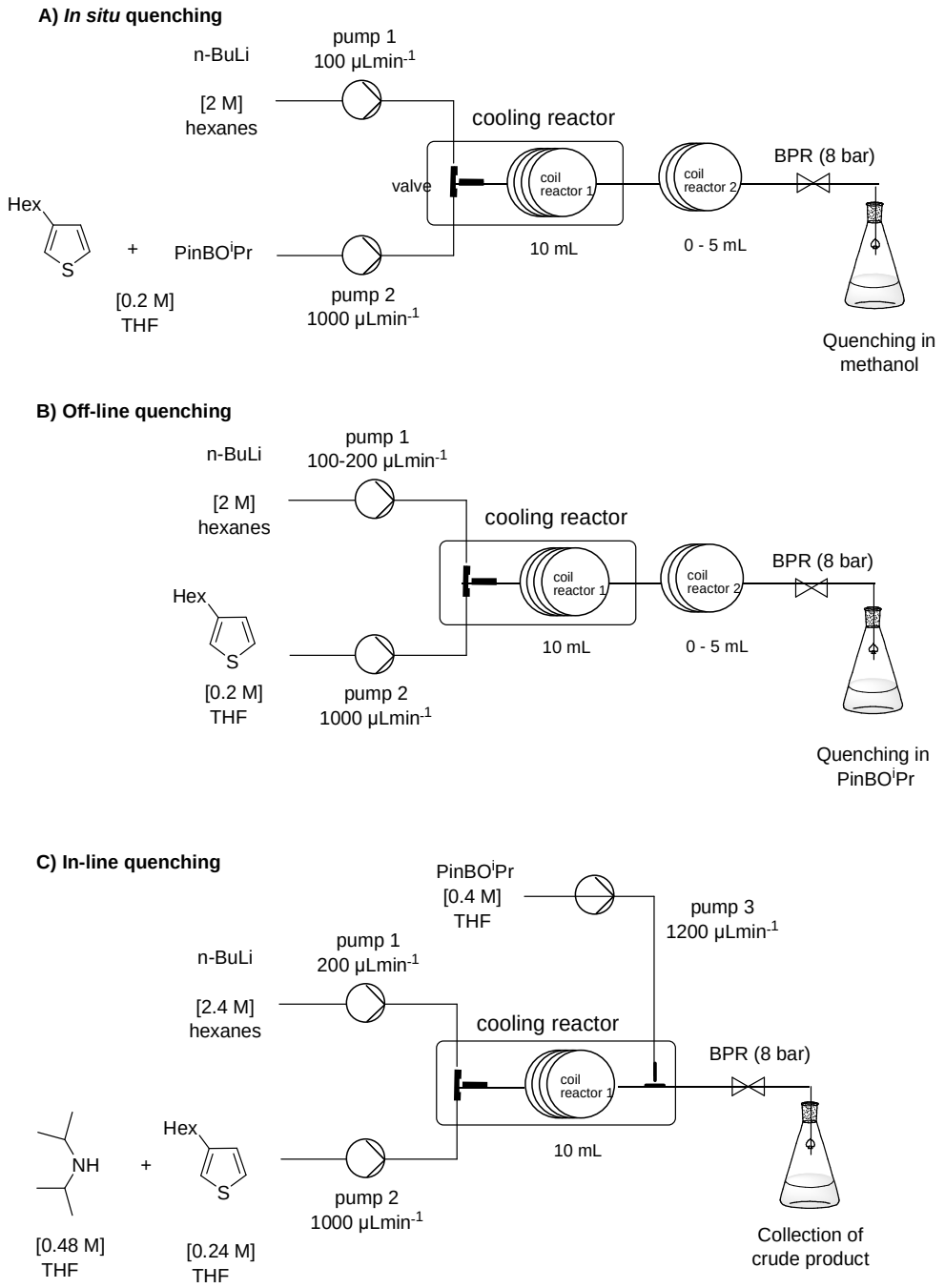

Scheme S1. Flow set-up for the lithiation of thiophene via (a) *in situ* quenching, (b) off-line quenching and (c) In-line quenching protocol with the boron electrophile.

Table S1. Optimization studies for the preparation of thiophene derivative **5** in continuous flow with variations in flow set-up, temperature and residence time.

Entry	Quenching setup	n-BuLi / DIPA [equiv]	Temp. Coil 1 / Coil 2 [℃]	Retention time Coil 1 / Coil 2 [min]	2:3 [a]	Conversion (%)[a]
1(Batch)	-	1 /0	-70	60 / 12 h	10:1	85

2	In-situ.	1/0	-50 / RT	9 / 4.5	-	14
3	In-situ.	1/0	-30	9	6:1	25
4	In-situ.	1/0	-10	9	6:1	25
5	Off-line	1/0	-50	9	10:1	58
6	Off-line	1/0	-10 / RT	9 /4.5	8:1	57
7	In-line	2/0	-50	9	8:1	78
8	In-line	2/0	-10	9	5:1	95
9	In-line	2/2	-10	9	10:1	60

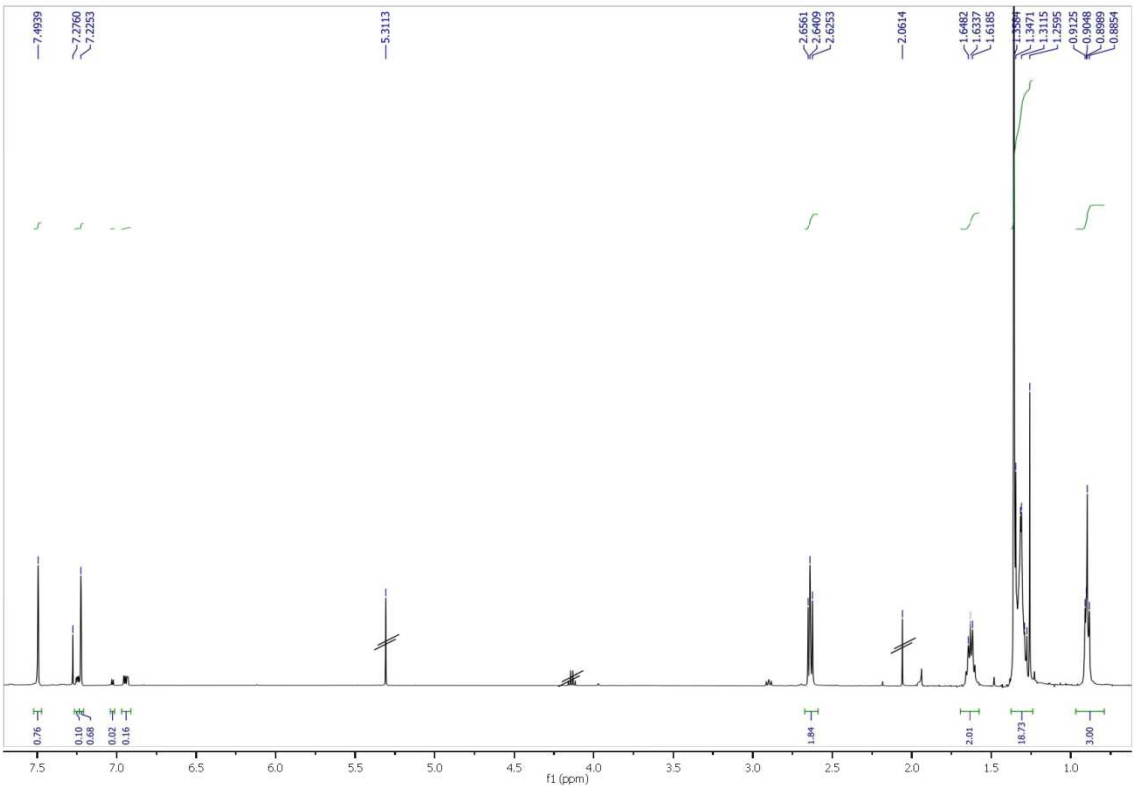

Figure S1. ^{1}H-NMR spectrum (C*D*Cl_3, 500 MHz) of the hexylthiophene **5** prepared using the continuous flow reactor. The sample contained a small amount of compound **6** and residual solvents.

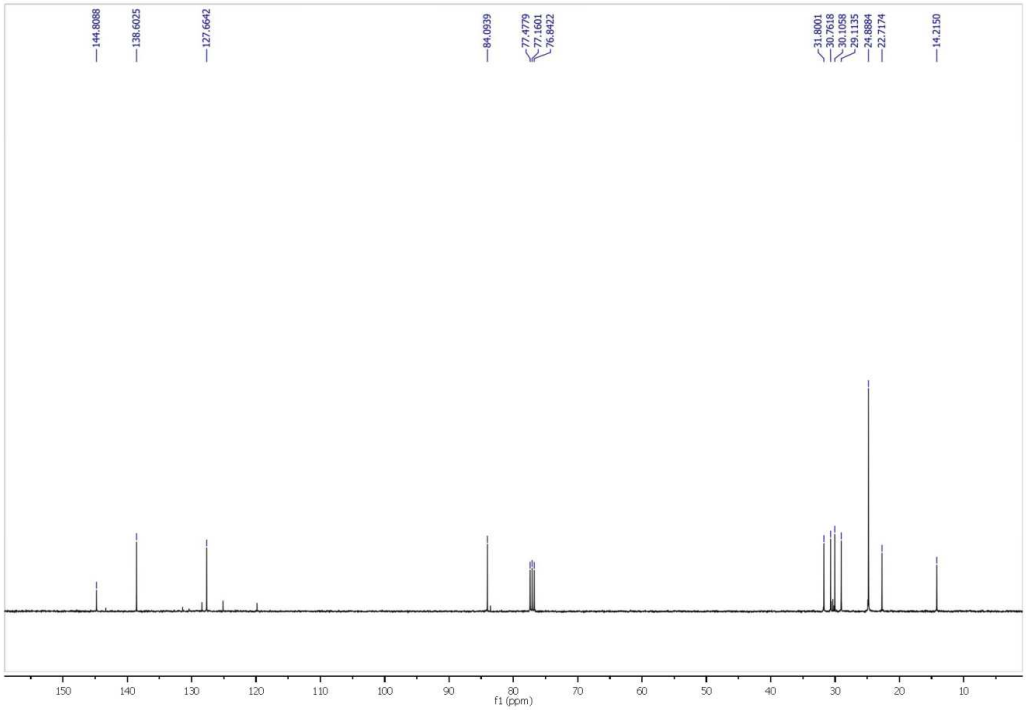

Figure S2. ^{13}C NMR spectrum (C*D*Cl$_3$, 100 MHz) of the hexylthiophene **5** prepared using the continuous flow reactor. The sample contained a small amount of compound **6** and residual solvents.

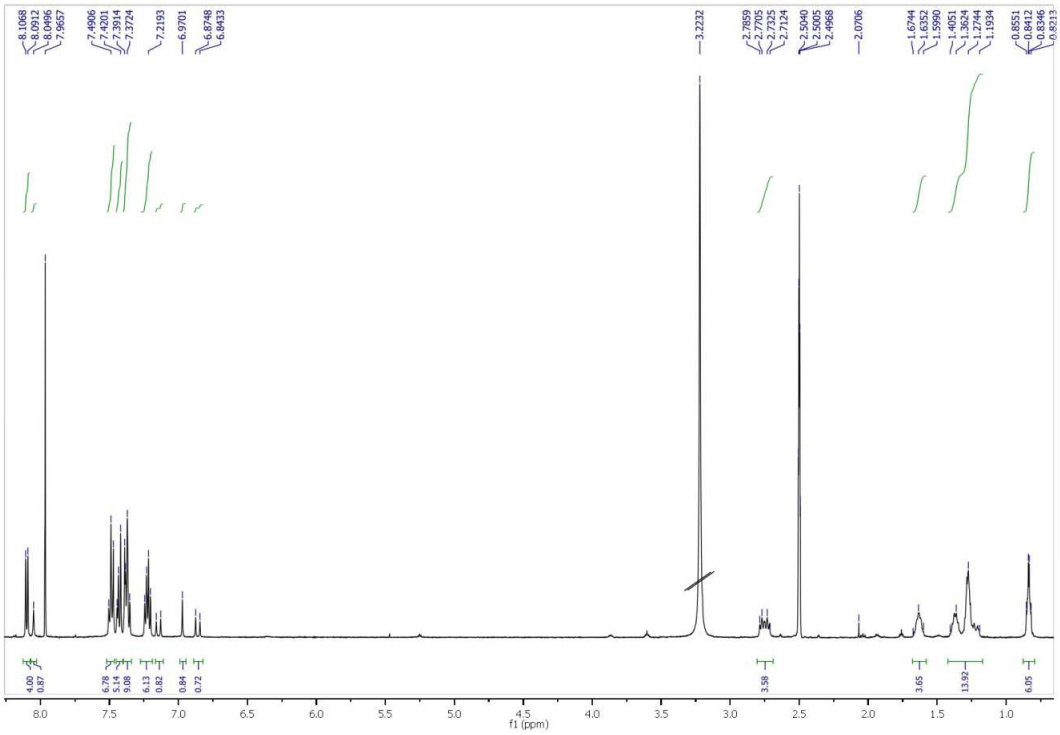

Figure S3. ^{1}H NMR spectrum (C*D*Cl$_3$:DMSO-d_6, 500 MHz) of the dye Carbz-PAHTDTT **11** prepared using the continuous flow reactor.