Supporting Information

Exploitation of the Menshutkin reaction for the controlled assembly of halogen bonded architectures incorporating 1,2-diiodotetrafluorobenzene and 1,3,5-triiodotrifluorobenzene

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Figure S1. Powder XRD pattern of 1 (red) compared to pattern simulated from the X-ray crystal structure (blue).

Figure S2. Powder XRD pattern of 2 (red) compared to pattern simulated from the X-ray crystal structure (blue).
Figure S3. Powder XRD pattern of 3 (red) compared to pattern simulated from the X-ray crystal structure (blue).

Figure S4. Powder XRD pattern of 5 (red) compared to pattern simulated from the X-ray crystal structure (blue).
Figure S5. Powder XRD pattern of 6 (red) compared to pattern simulated from the X-ray crystal structure (blue).

Figure S6. $^1$H NMR (D$_6$-DMSO, D$_2$O) spectrum of 3
Figure S7. $^1$H NMR (D$_6$-DMSO, D$_2$O) spectrum of 4

Figure S8. $^1$H NMR (D$_6$-DMSO, D$_2$O) spectrum of 5
Figure S9. $^1$H NMR (D$_6$-DMSO, D$_2$O) spectrum of 6

Figure S10. $^{13}$C NMR (D$_6$-DMSO) spectrum of 3
Figure S11. $^{13}$C NMR (D$_6$-DMSO) spectrum of 4

Figure S12. $^{13}$C NMR (D$_6$-DMSO) spectrum of 5
Figure S13. $^{13}$C NMR ($D_6$-DMSO) spectrum of 6

Figure S14. Raman Spectrum of 1
Figure S15. Raman spectrum of 2

Figure S16. Raman spectrum of 3
Figure S17. Raman spectrum of 4

Figure S18. Raman spectrum of 5
Figure S19. Raman spectrum of 6