

Electronic Supporting Information for

Halogen bonded networks from pyridyl-substituted tetraarylethylenes and diiodotetrafluorobenzenes

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Figure S1. One unique conformation of **1** in **1**·(1,4-DIB)₂ (conformer a).

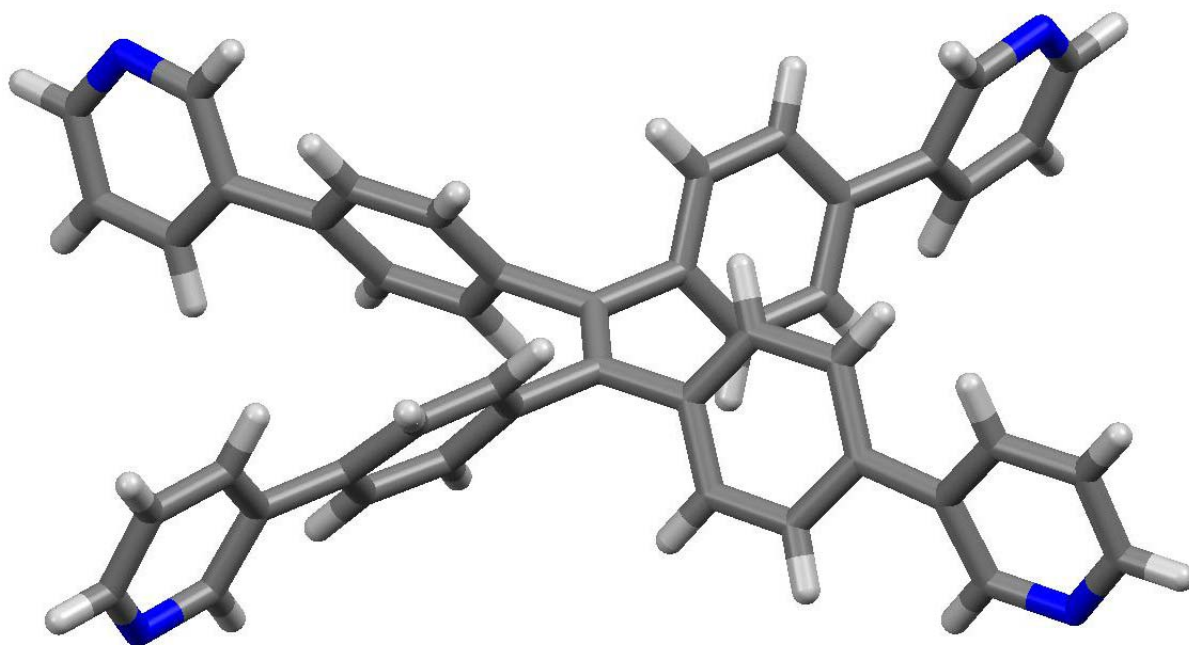


Figure S2. A second unique conformation of **1** in **1**·(1,4-DIB)₂ (conformer b).

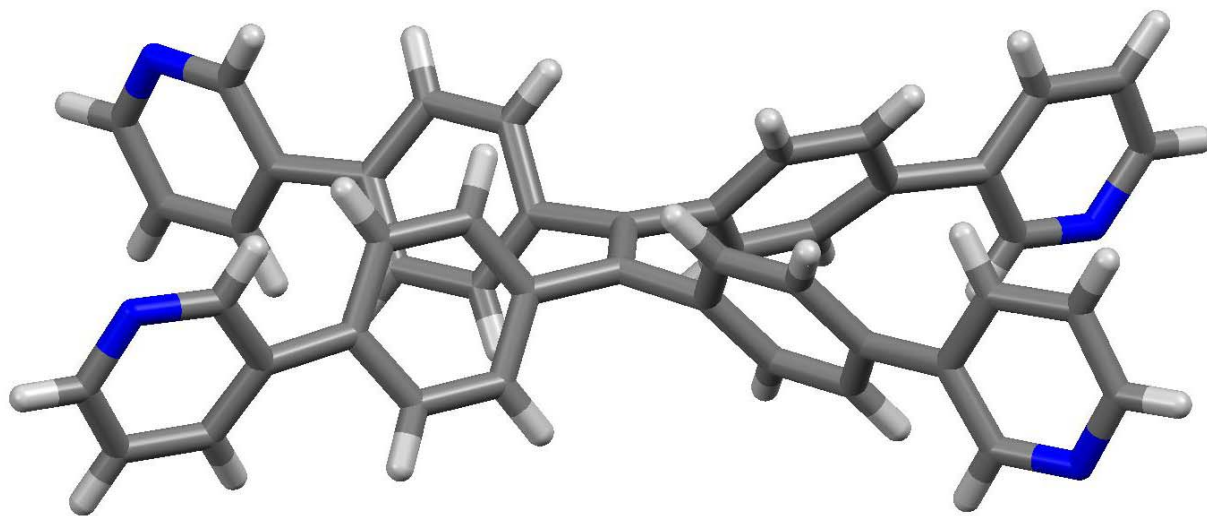
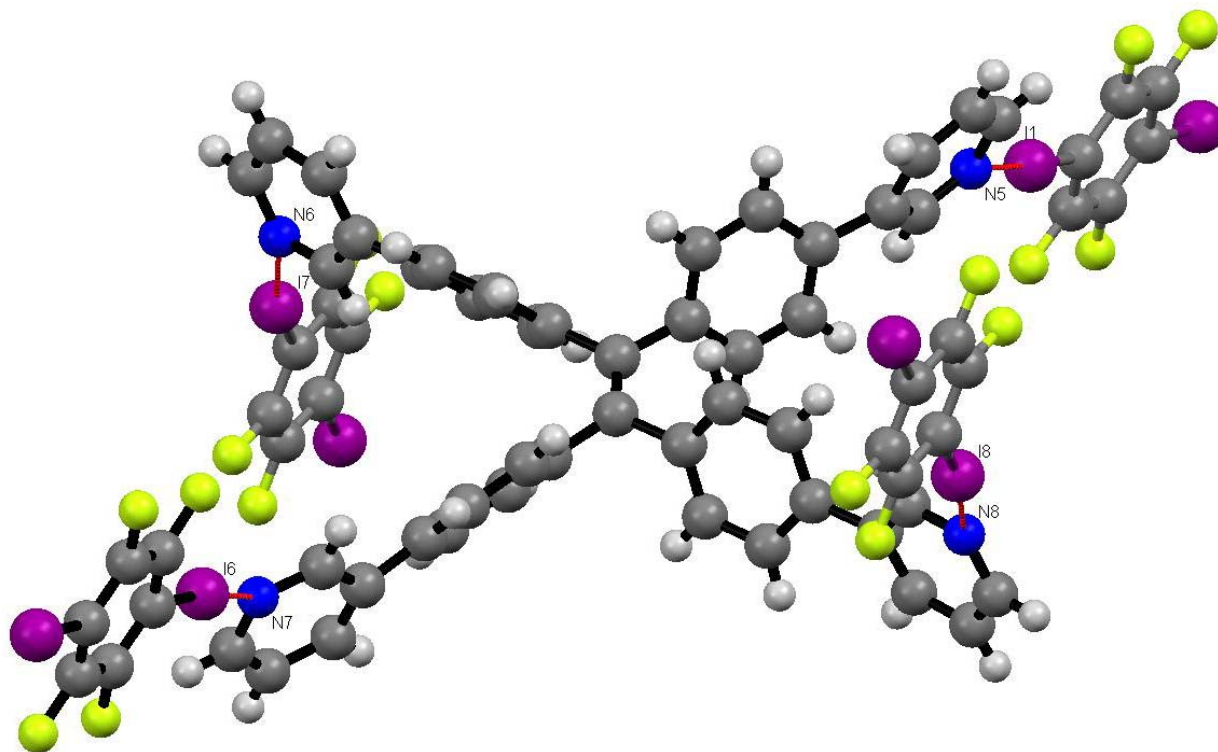
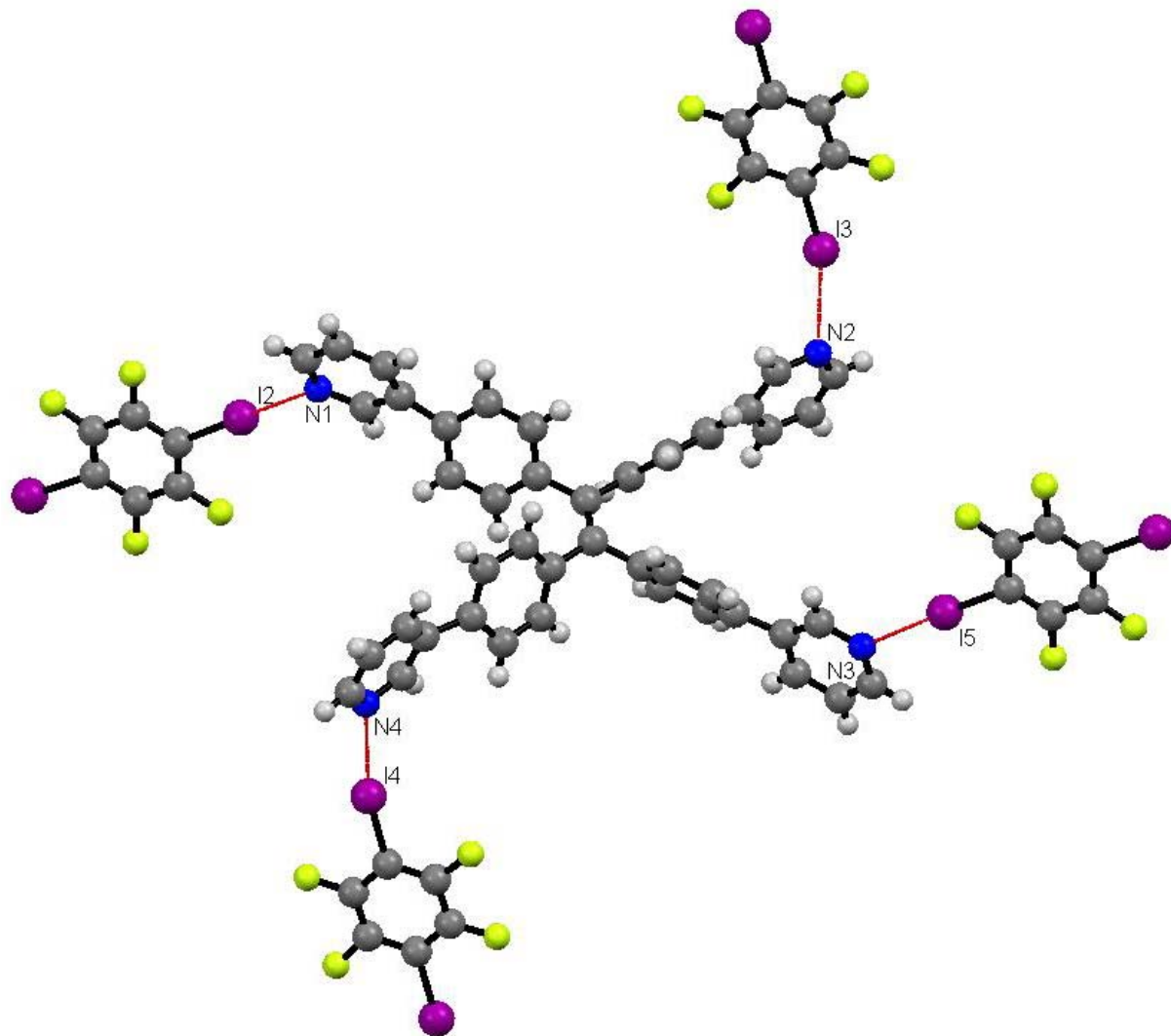


Figure S3. Halogen bonding interactions in **1**·(1,4-DIB)₂ (conformer a).



Bond	Distance (Å) or angle (°)
N5···I1	2.796
N6···I7	2.896
N7···I6	2.878
N8···I8	2.884
C-I1···N5	175.91
C-I7···N6	167.85
C-I6···N7	171.50
C-I8···N8	173.05

Figure S4. Halogen bonding interactions in **1**·(1,4-DIB)₂ (conformer b).



Bond	Distance (Å) or angle (°)
N1···I2	2.768
N2···I3	3.004
N3···I5	2.814
N4···I4	2.849
C-I2···N1	174.31
C-I3···N2	162.39
C-I5···N3	177.43
C-I4···N4	167.60

Figure S5. Halogen bonding among orthogonally-oriented molecules of **1** in $1 \cdot (1,4\text{-DIB})_2$ (down *c*).

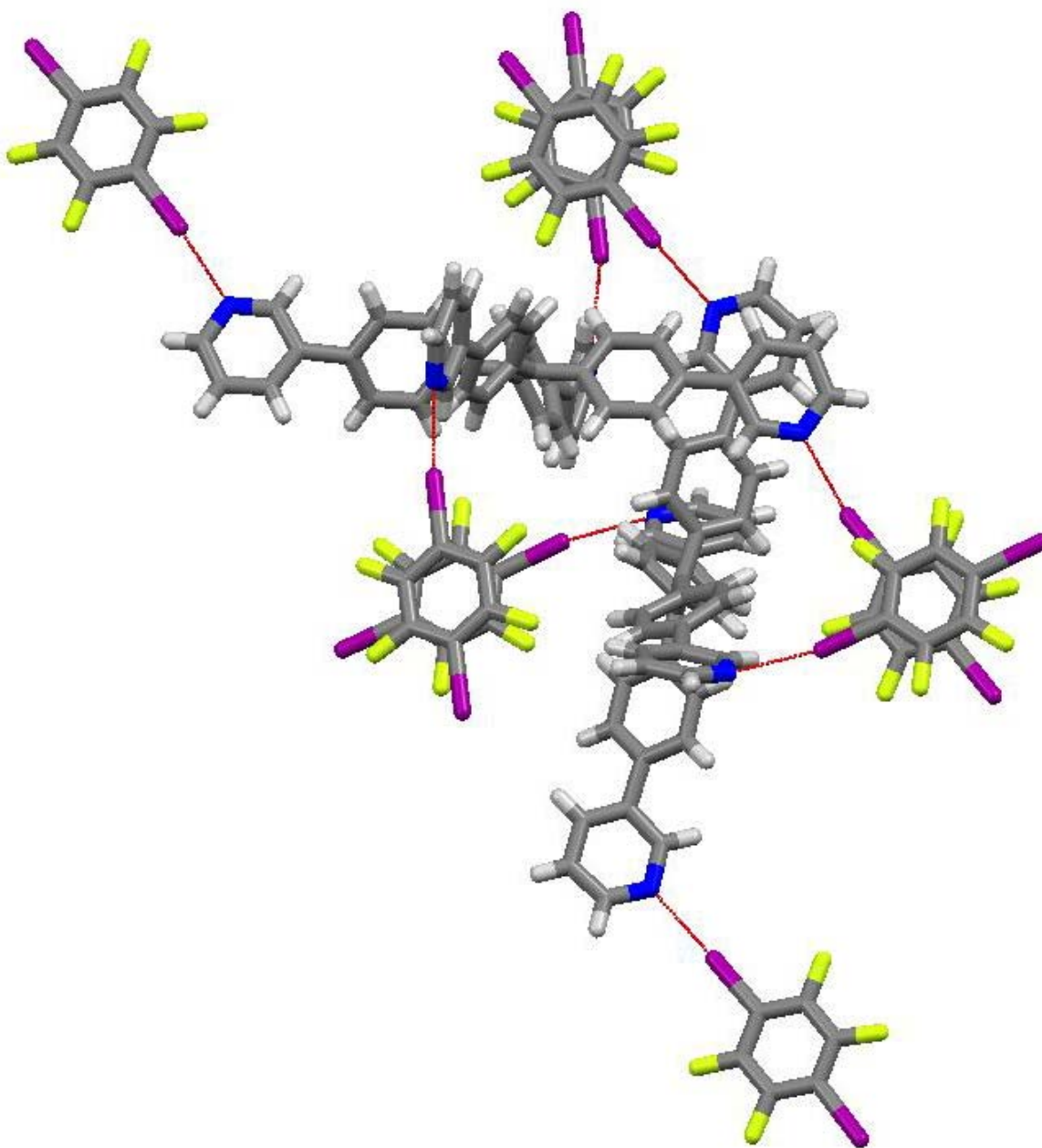


Figure S6. Molecular conformation of **1** in $1 \cdot (1,2\text{-DIB})_2$.

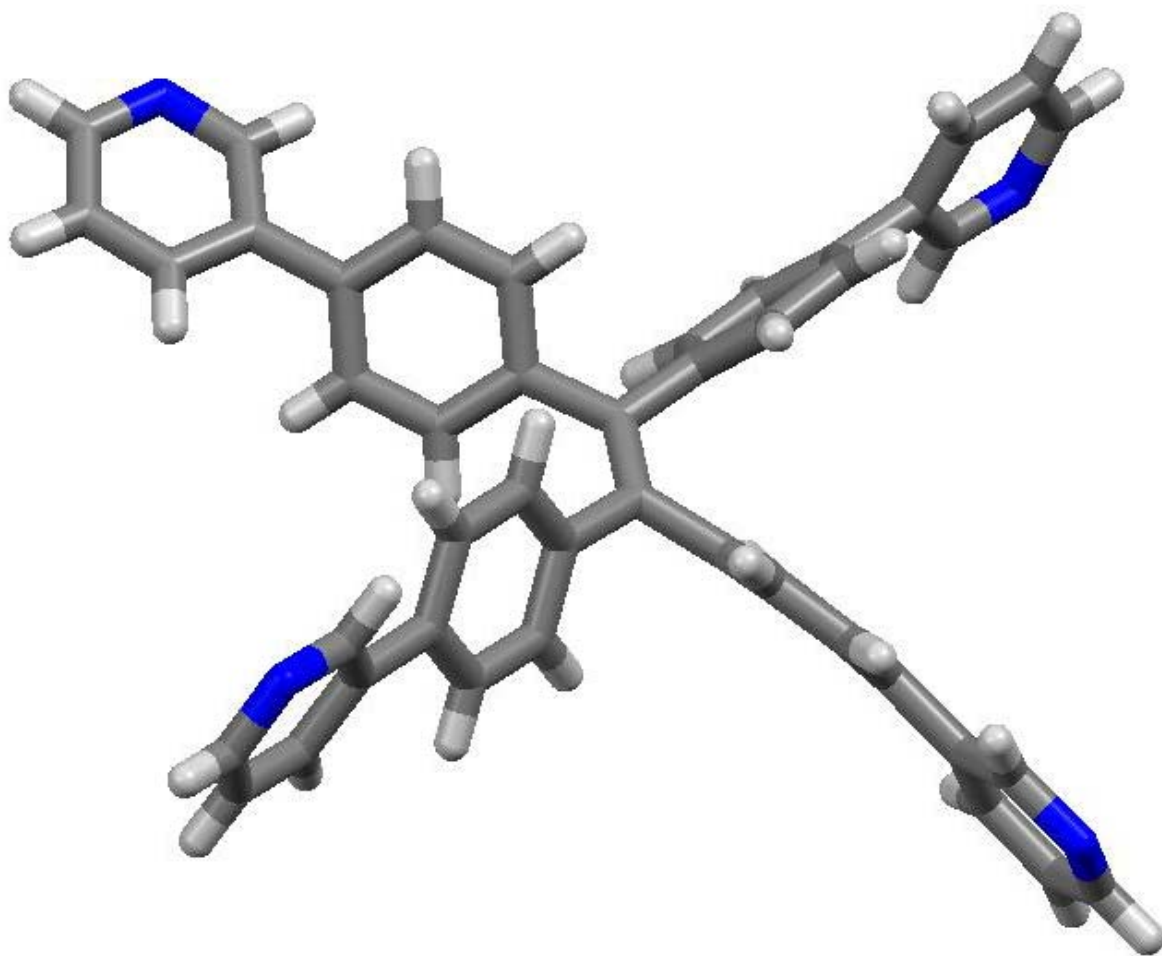
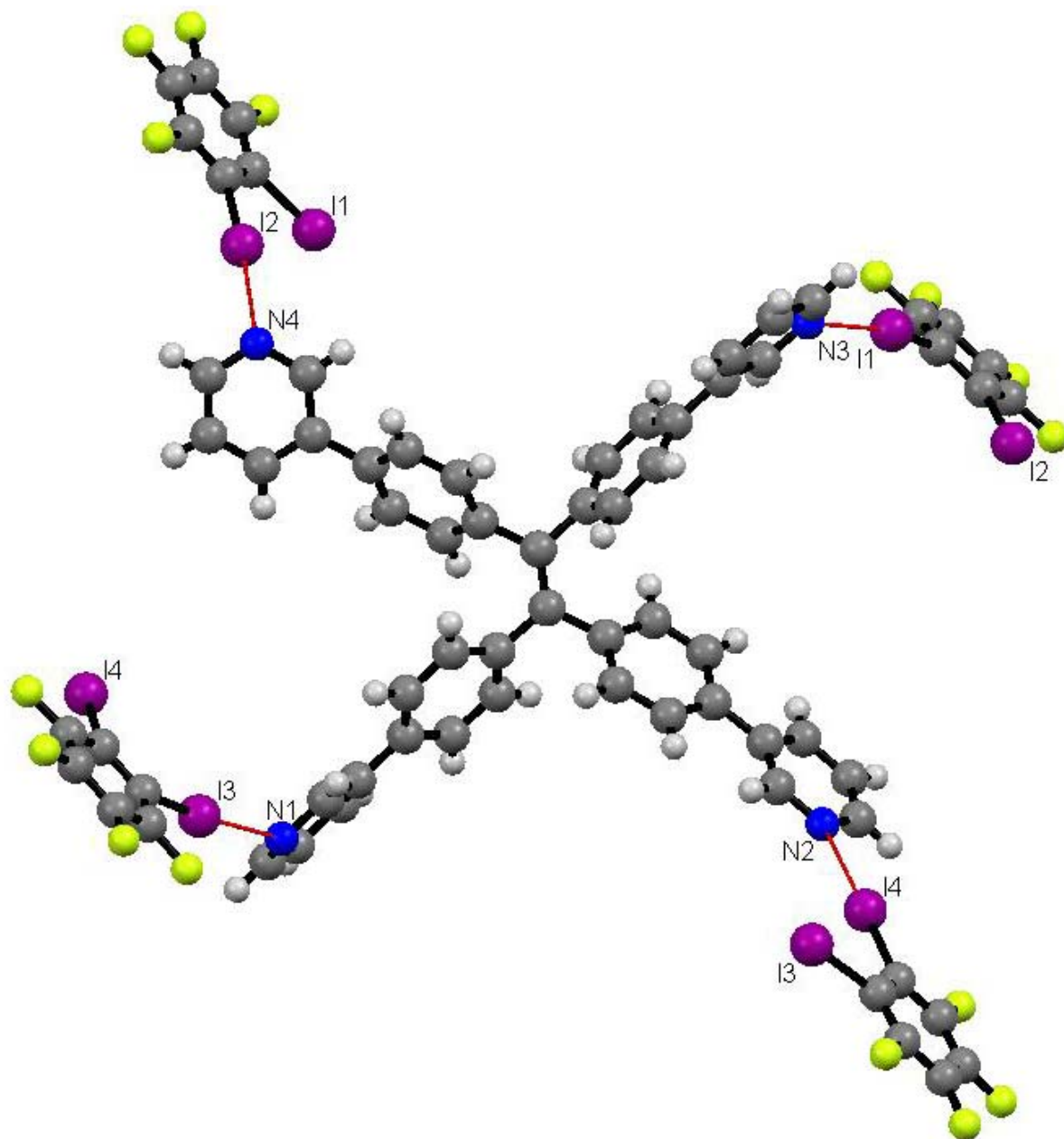
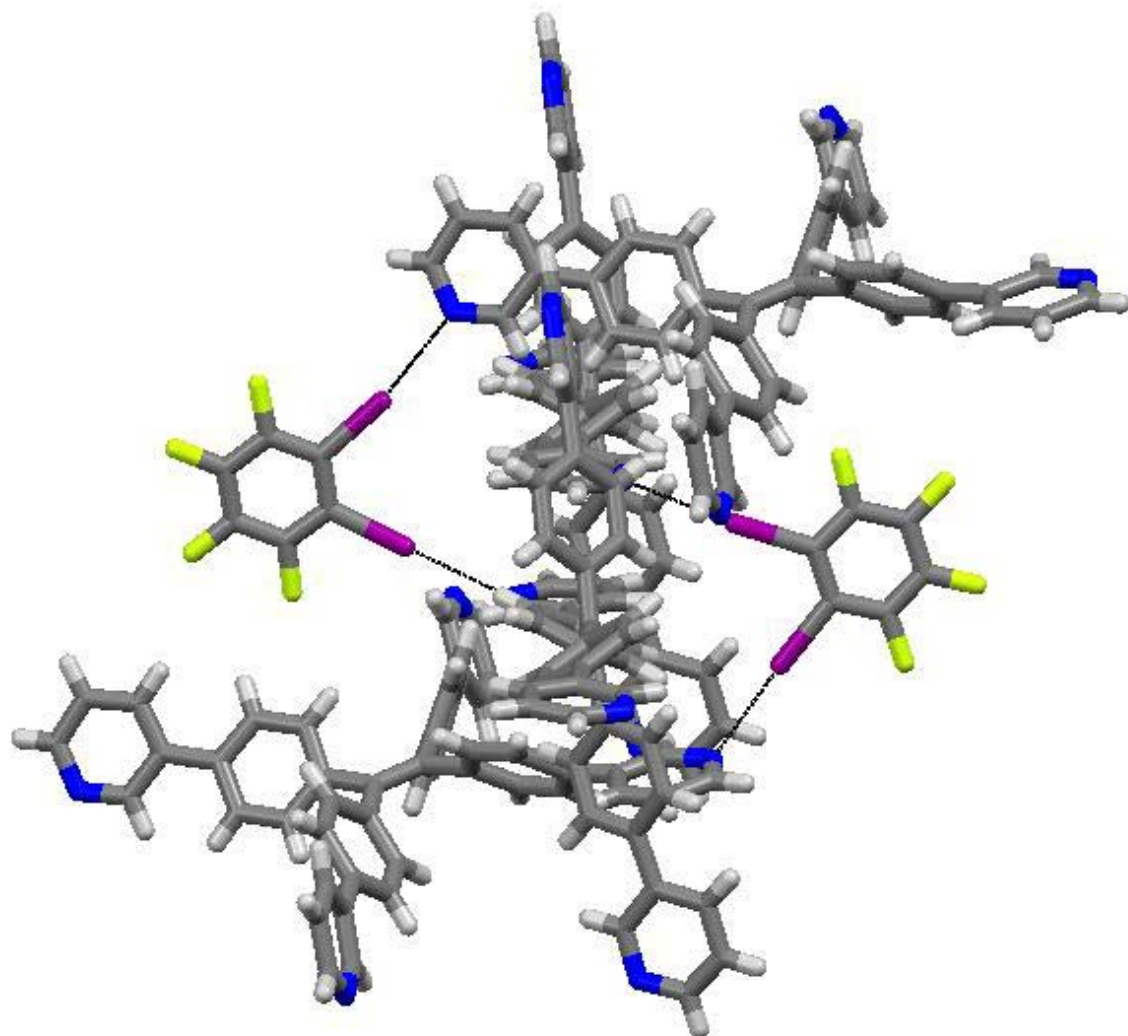


Figure S7. Halogen bonding environment surrounding **1** in **1**·(1,2-DIB)₂.



Bond	Distance (Å) or angle (°)
N1...I3	2.913
N2...I4	3.106
N3...I1	2.987
N4...I2	2.935
C-I3...N1	175.24
C-I4...N2	168.20
C-I1...N3	167.94
C-I2...N4	175.76

Figure S8. Two views of halogen bonding network surrounding 1,2-DIB in $1 \cdot (1,2\text{-DIB})_2$.



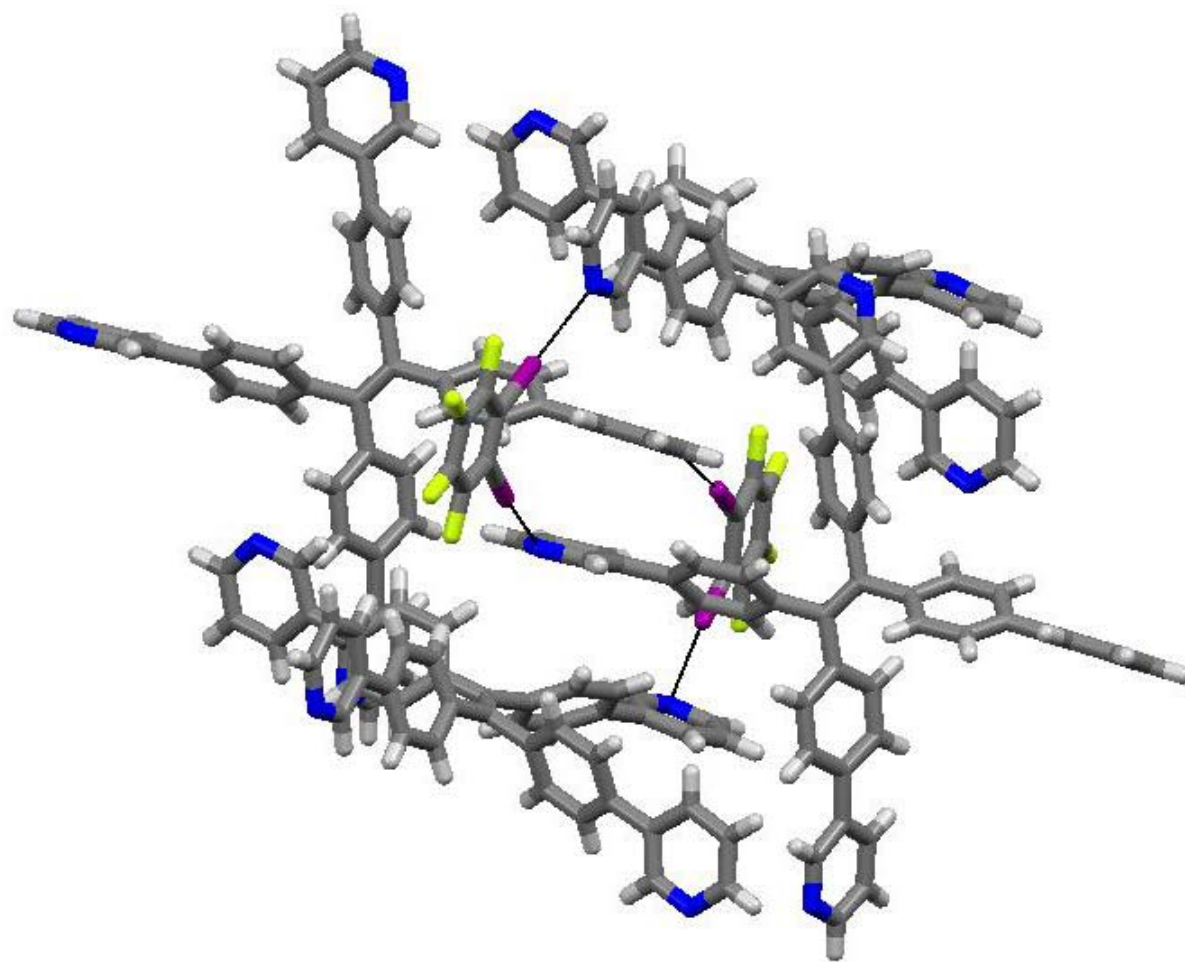


Figure S9. Asymmetric unit in **2**·(1,4-DIB).

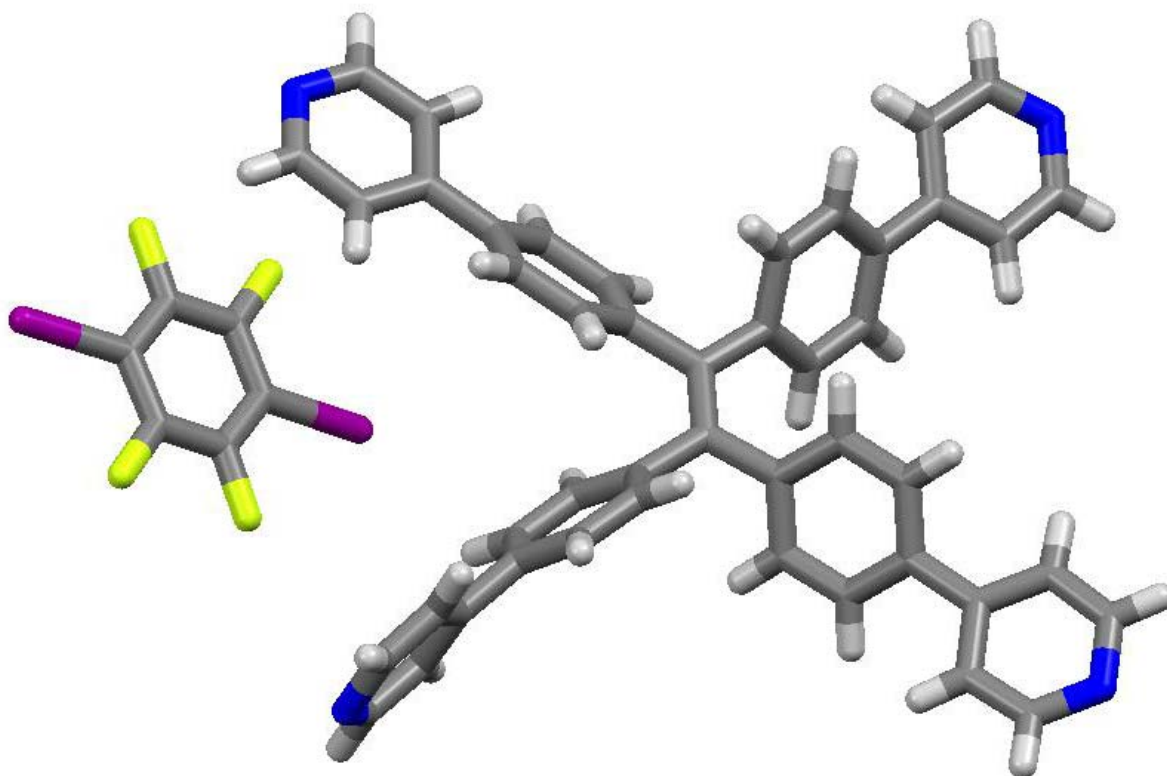
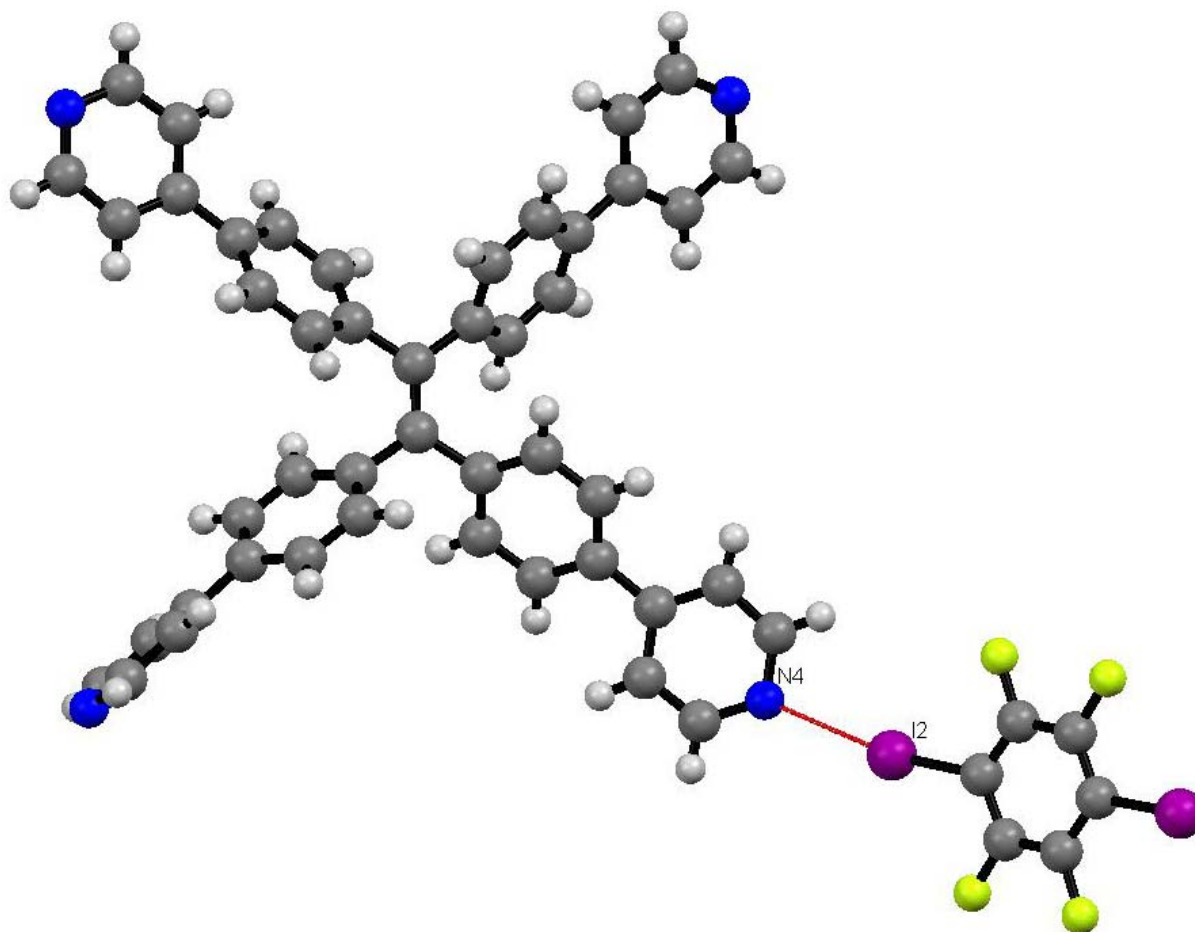


Figure S10. Halogen bonding in 2·(1,4-DIB).



Bond	Distance (Å) or angle (°)
N4...I2	2.917
C-I2...N4	166.15

Figure S11. Comparison of calculated (red trace) and observed (black trace) PXRD patterns for $1 \cdot (1,4\text{-DIB})_2$.

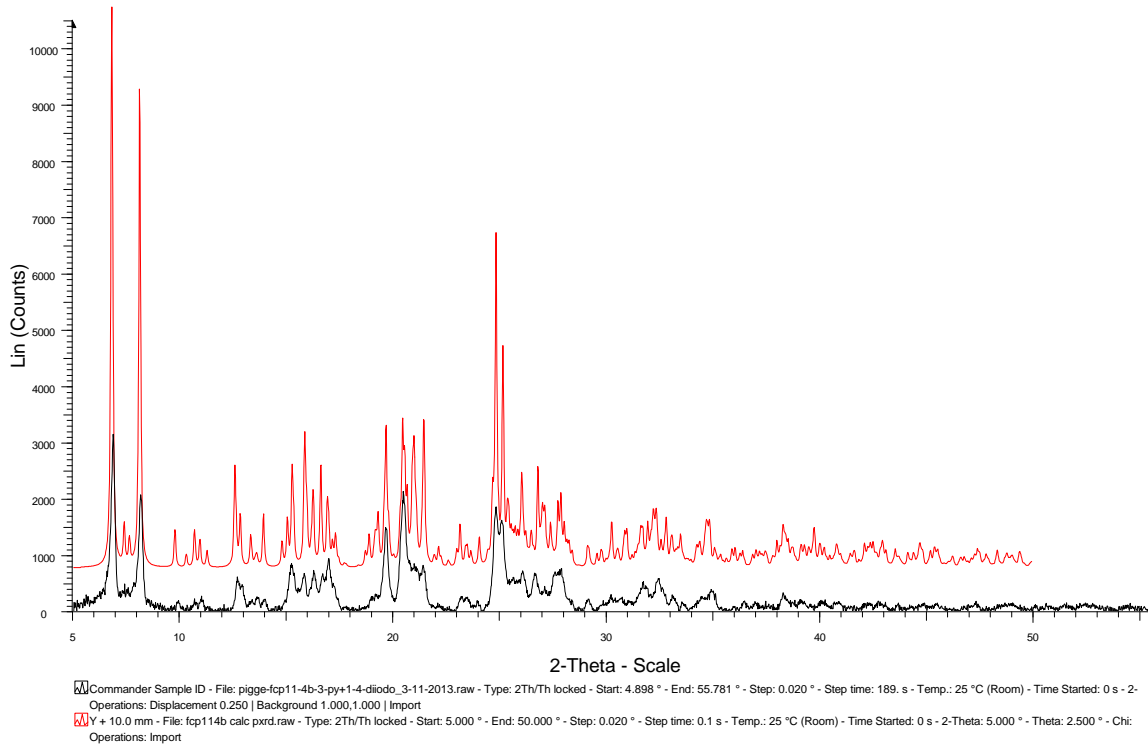
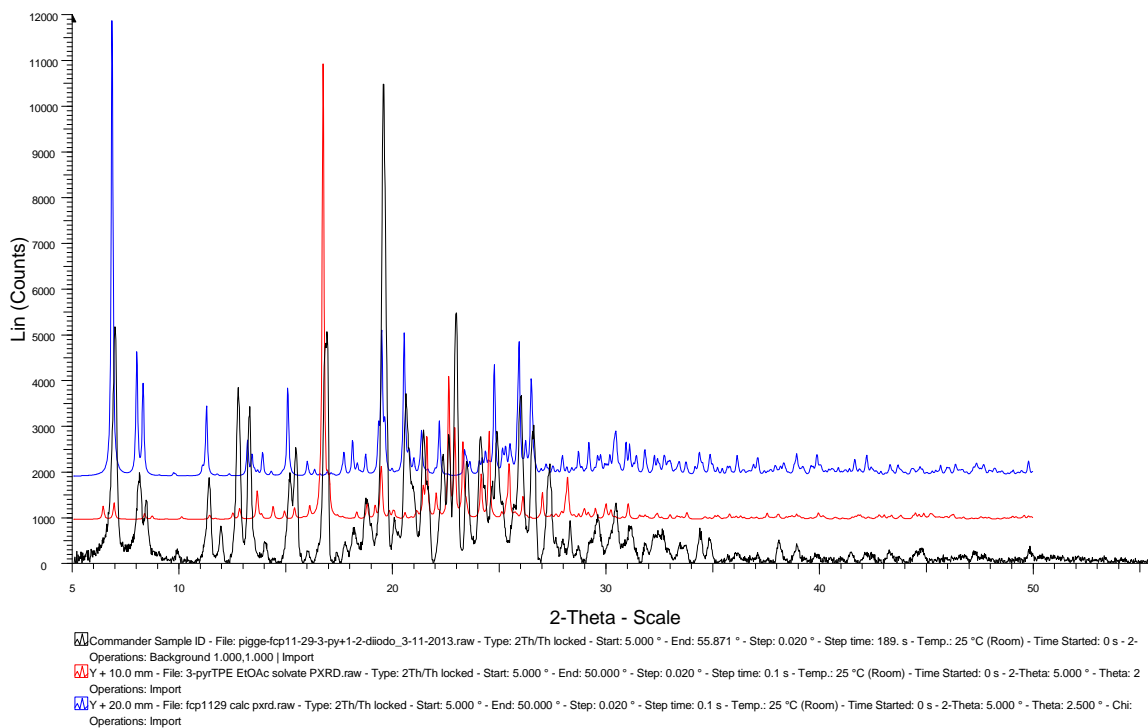


Figure S12a. Comparison of calculated powder patterns of **1** (as an EtOAc solvate, red trace)¹ and **1**·(1,2-DIB) (blue trace) with observed (black trace) PXRD pattern for **1**·(1,2-DIB)₂.



¹Kapadia, P. P.; Widen, J. C.; Magnus, M. A.; Swenson, D. C.; Pigge, F. C. *Tetrahedron Lett.* **2011**, *52*, 2519-2522.

Figure S12b. Comparison of merged calculated PXRD patterns for **1**·EtOAc and **1**·(1,2-DIB)₂ (red trace) with observed PXRD pattern for **1**·(1,2-DIB)₂ (black trace).

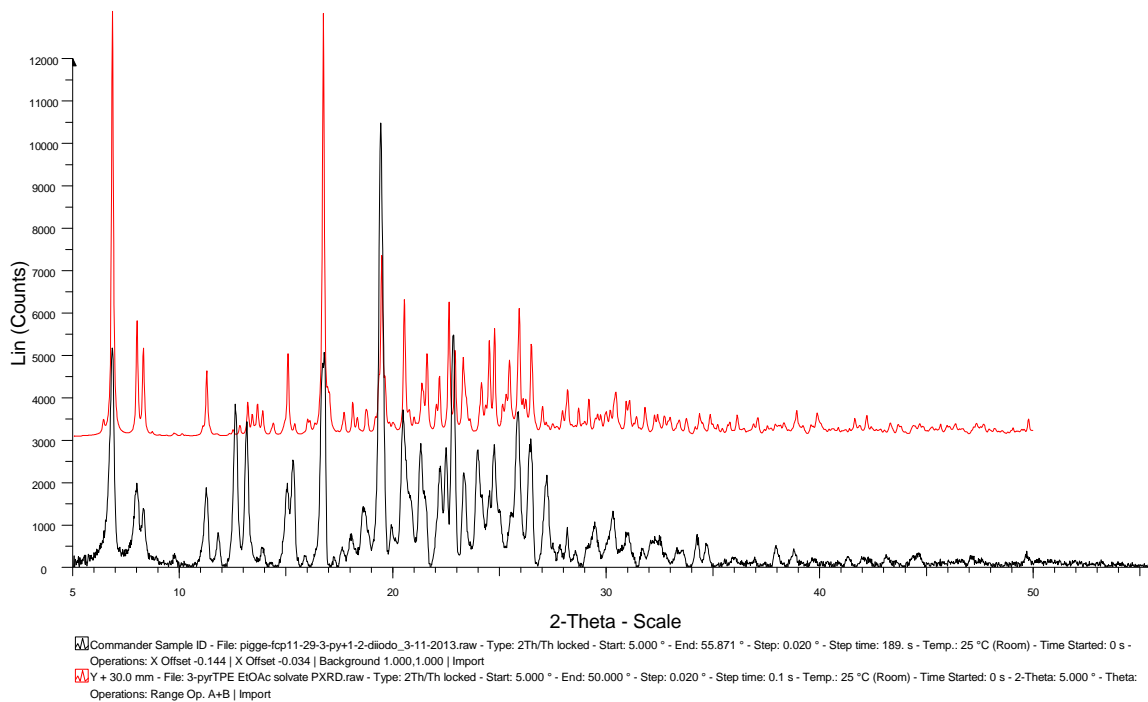


Figure S13. Comparison of calculated (red trace) and observed (black trace) PXRD patterns for 2·(1,4-DIB).

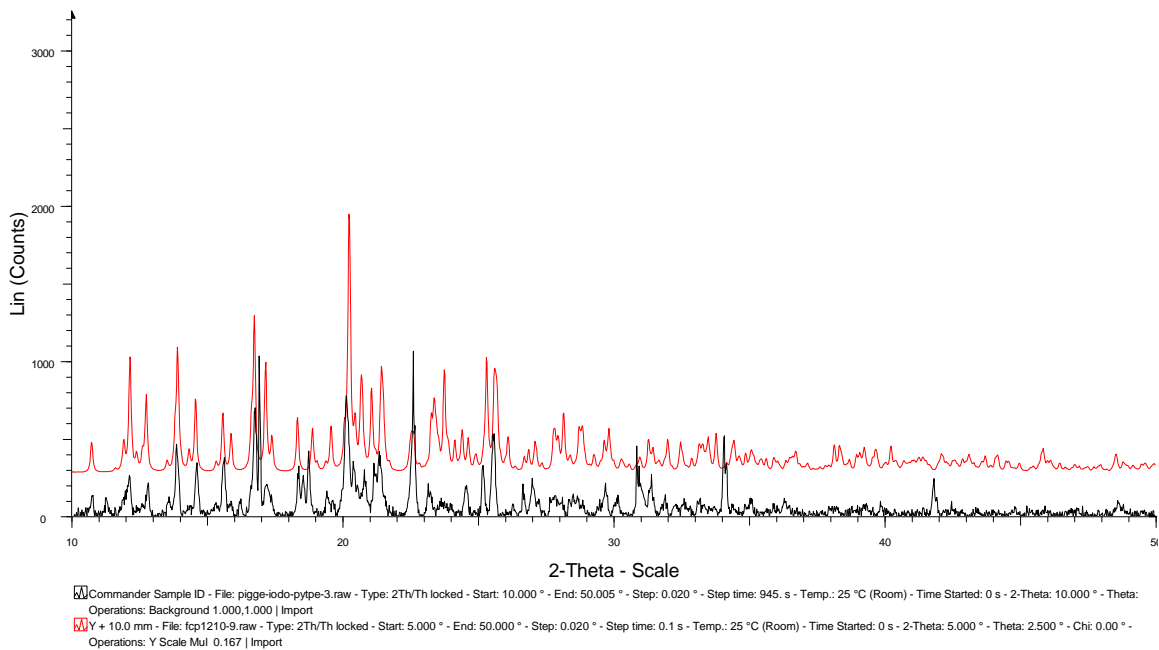


Figure S14. Appearance of $1 \cdot (1,4\text{-DIB})_2$ under ambient light and under irradiation by 366 nm UV light.

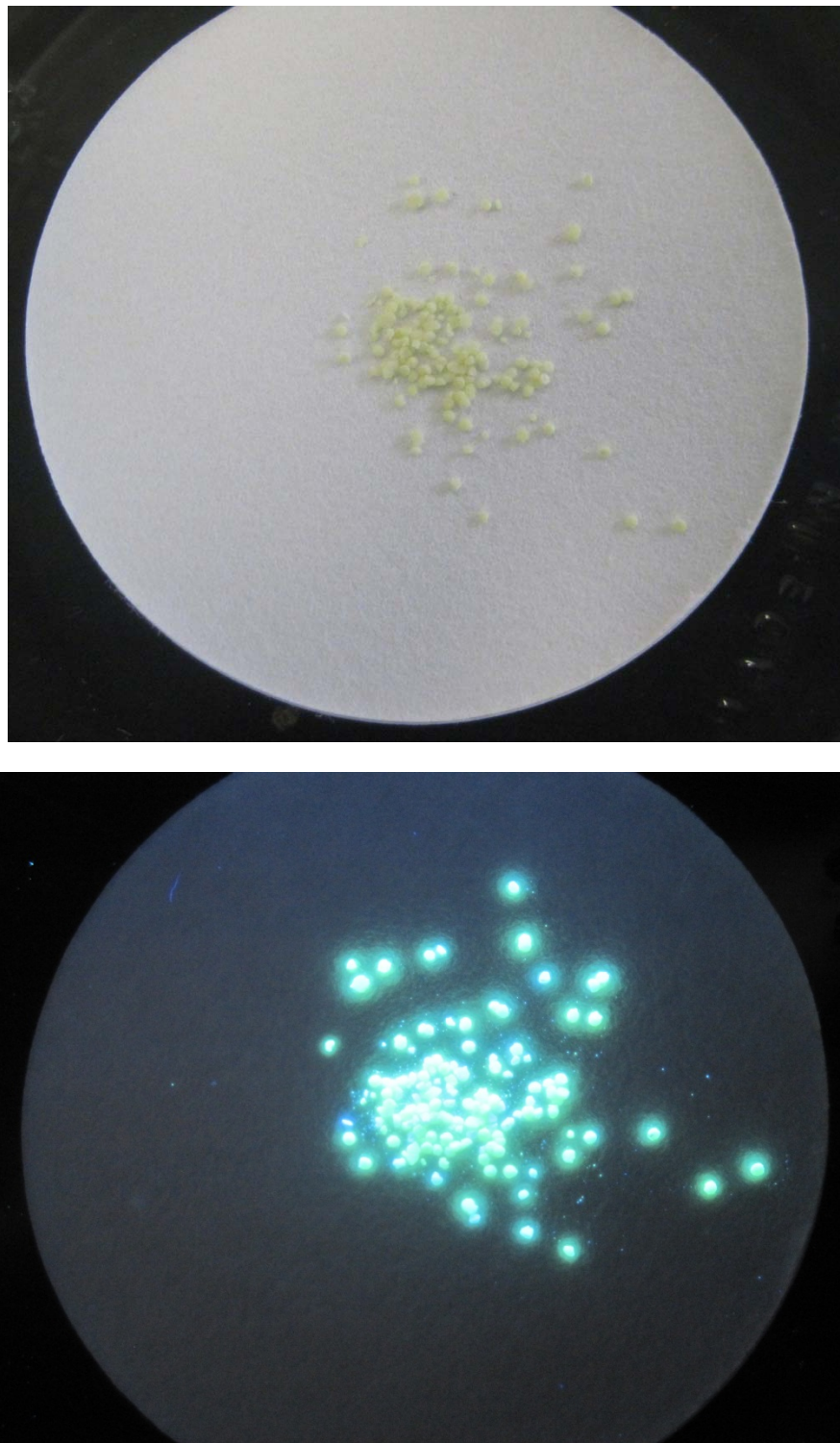


Figure S15. Appearance of $1 \cdot (1,2\text{-DIB})_2$ under ambient light and under irradiation by 366 nm UV light.

