

SUPPORTING INFORMATION

Synthesis of the First 4-Oxobutane-1,1,2,2-Tetracarbonitriles Containing a Phenol

Fragment and Their Transformation into Cyano-Substituted Pyrrol-2-Ones

Showing Three-Position Molecular Switching

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^1H , ^{13}C NMR spectra

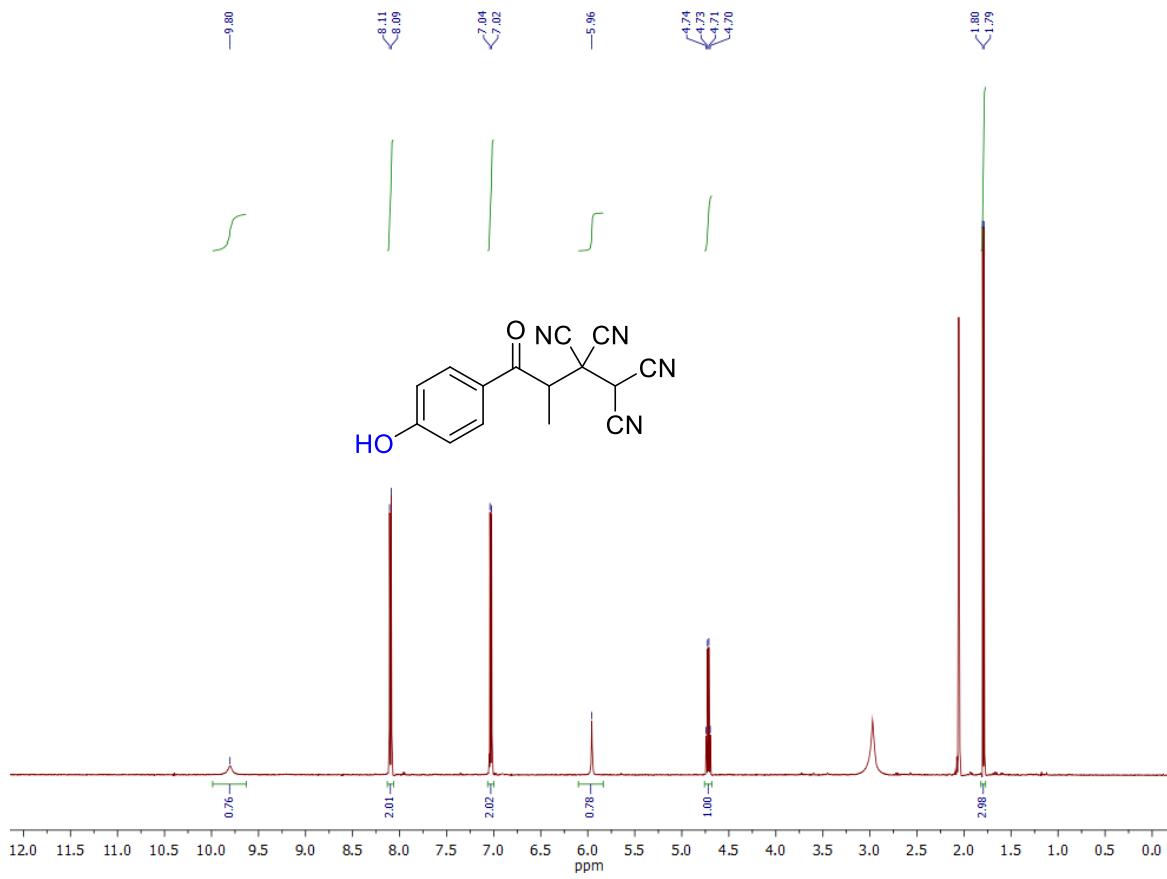


Fig. S1. ^1H -NMR-spectrum of compound **1a** (500 MHz, acetone- d_6)

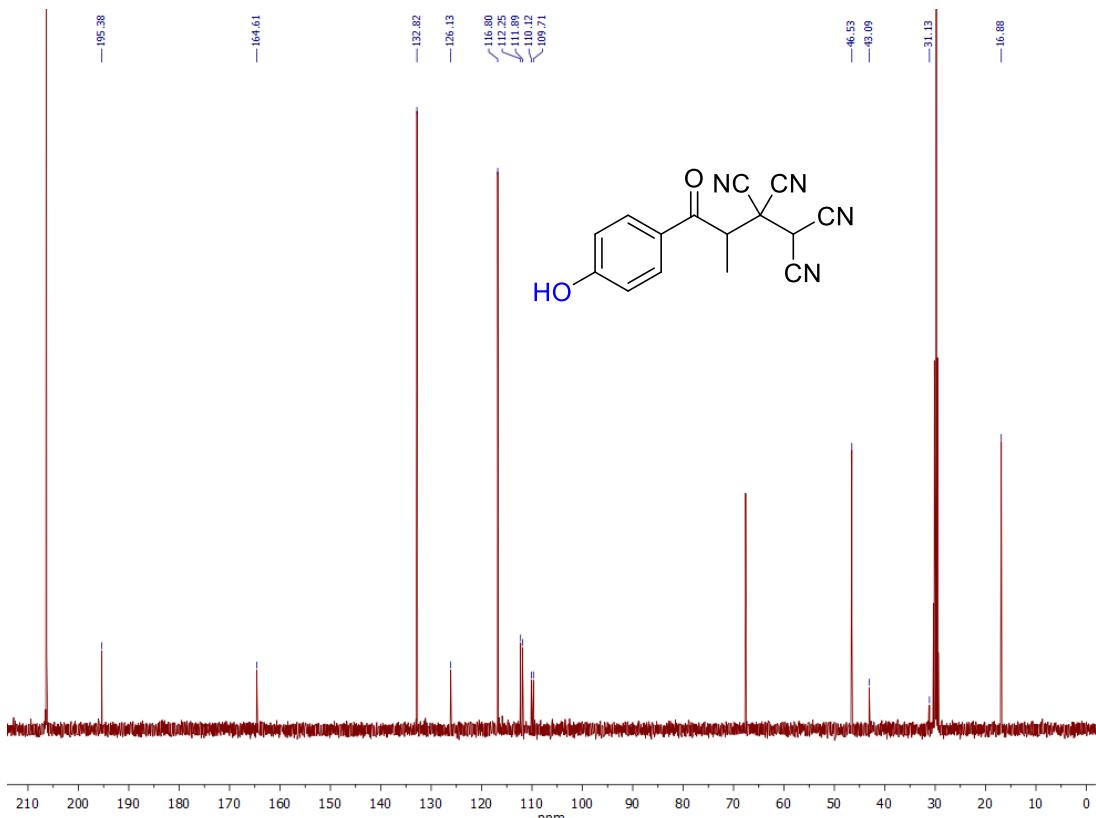


Fig. S2. ^{13}C -NMR-spectrum of compound **1a** (126 MHz, acetone- d_6)

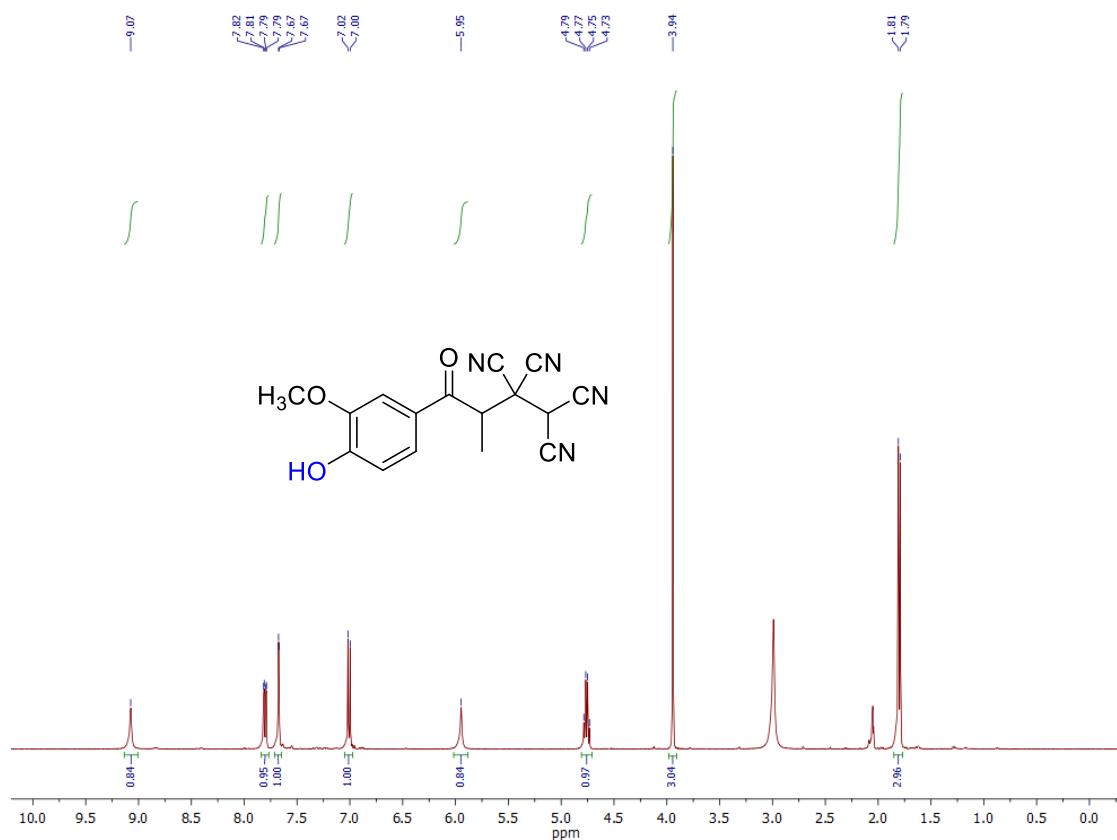


Fig. S3. ^1H -NMR-spectrum of compound **1b** (400 MHz, acetone- d_6)

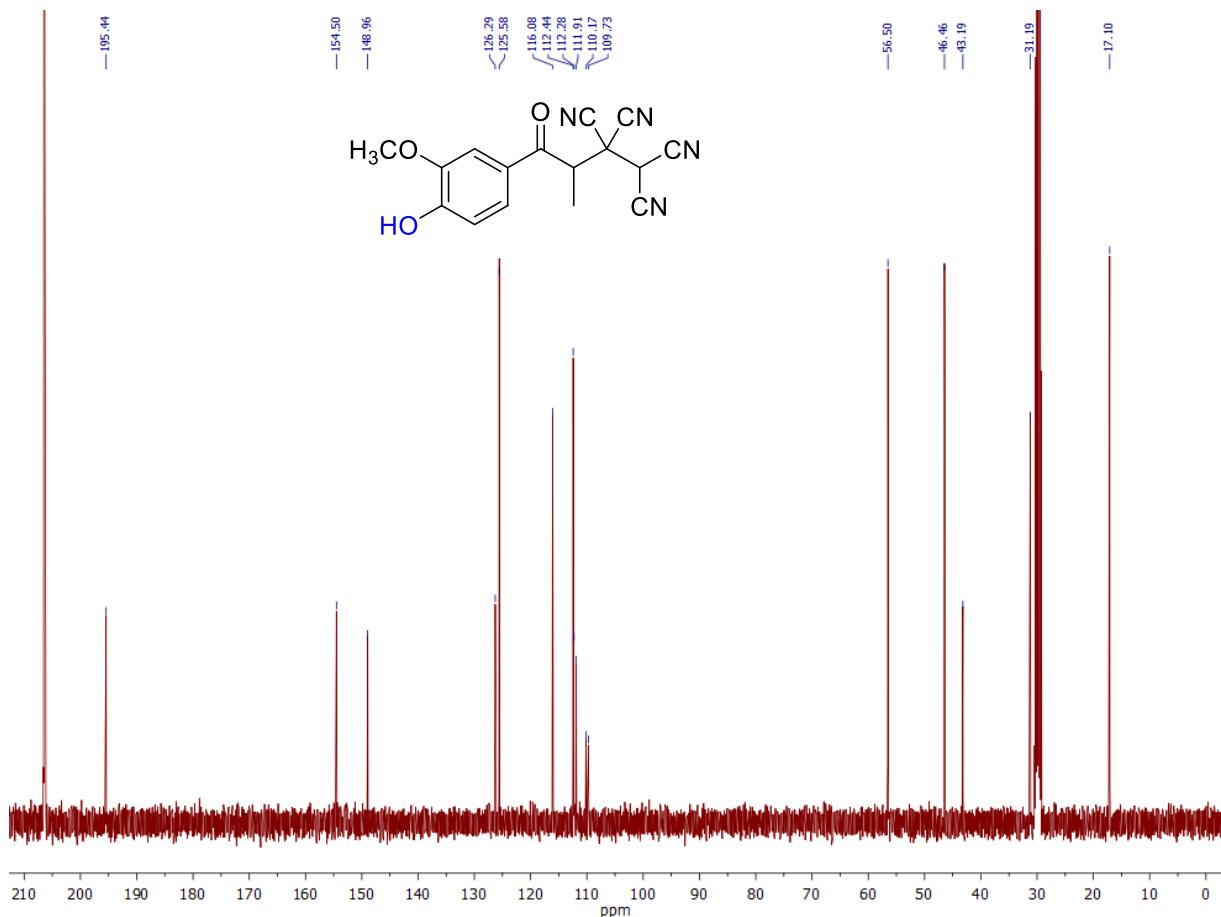


Fig. S4. ^{13}C -NMR-spectrum of compound **1b** (101 MHz, acetone- d_6)

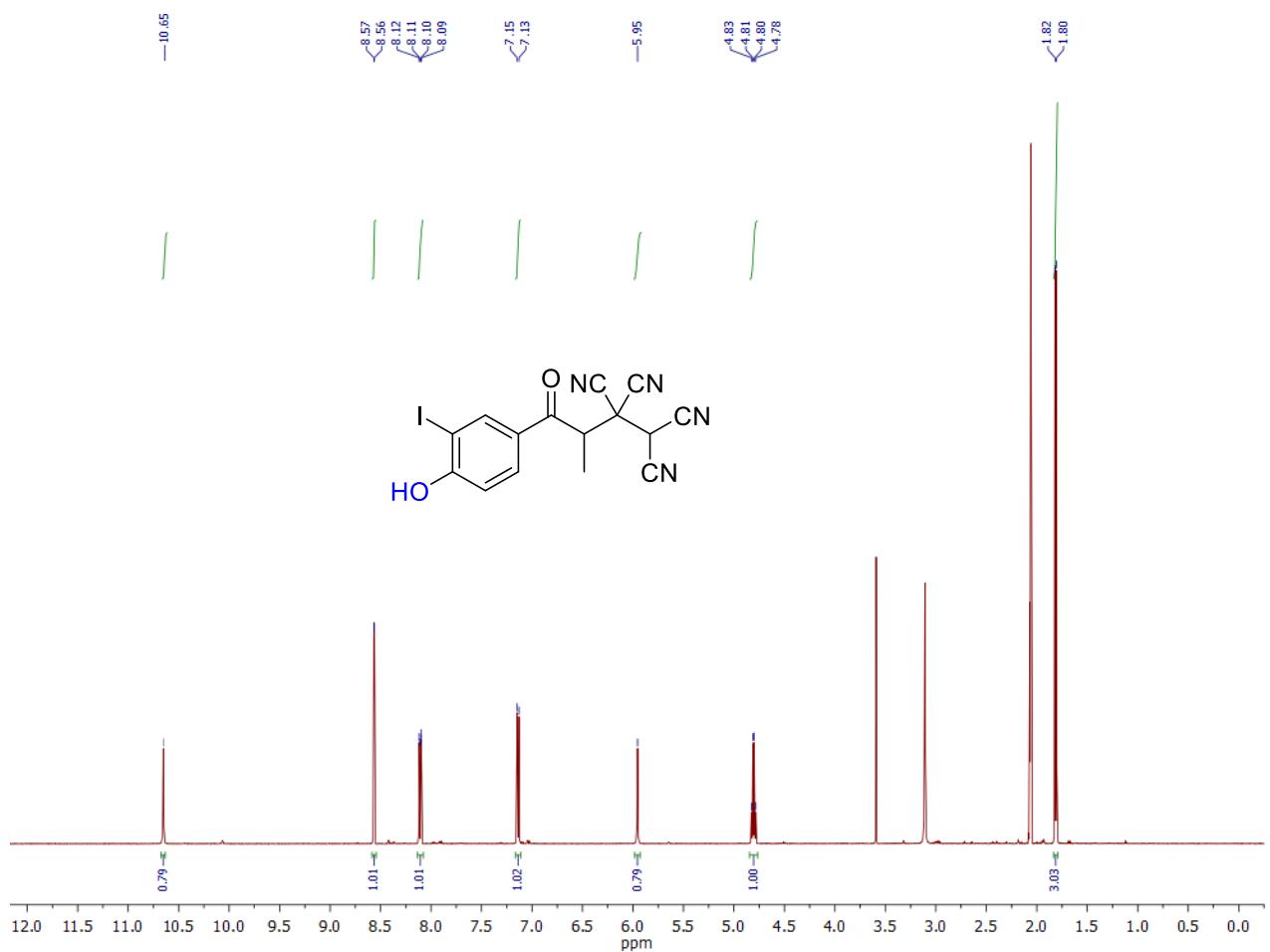


Fig. S5. ¹H-NMR-spectrum of compound **1c** (500 MHz, acetone-*d*₆)

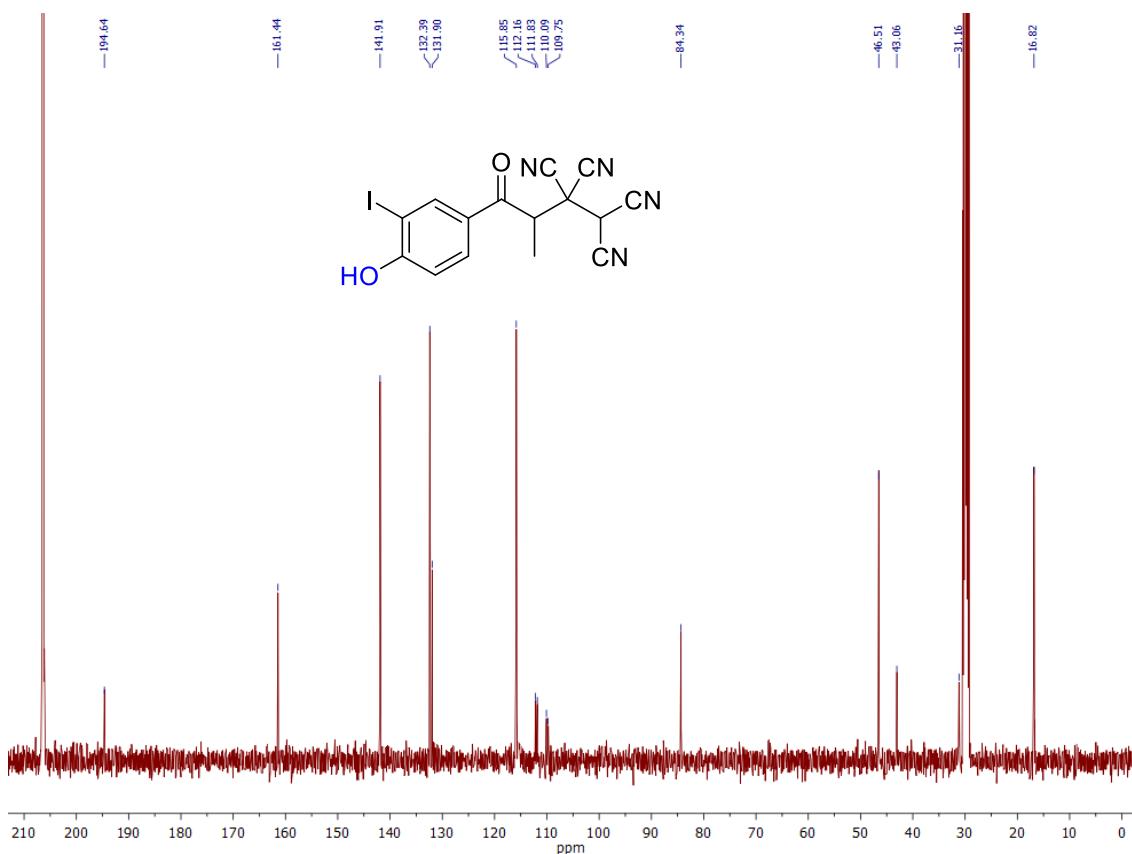


Fig. S6. ¹³C-NMR-spectrum of compound **1c** (101 MHz, acetone-*d*₆)

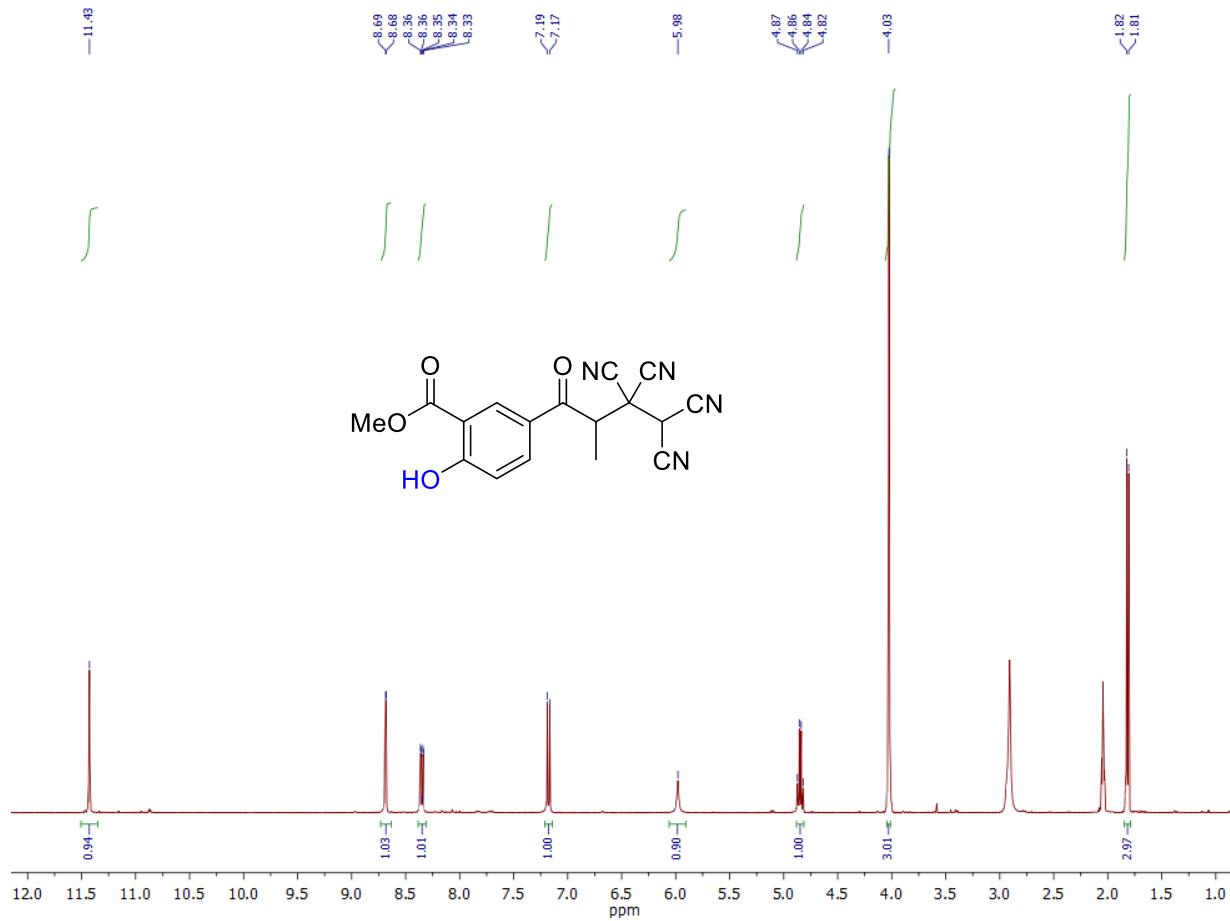


Fig. S7. ¹H-NMR-spectrum of compound **1d** (400 MHz, acetone-*d*₆)

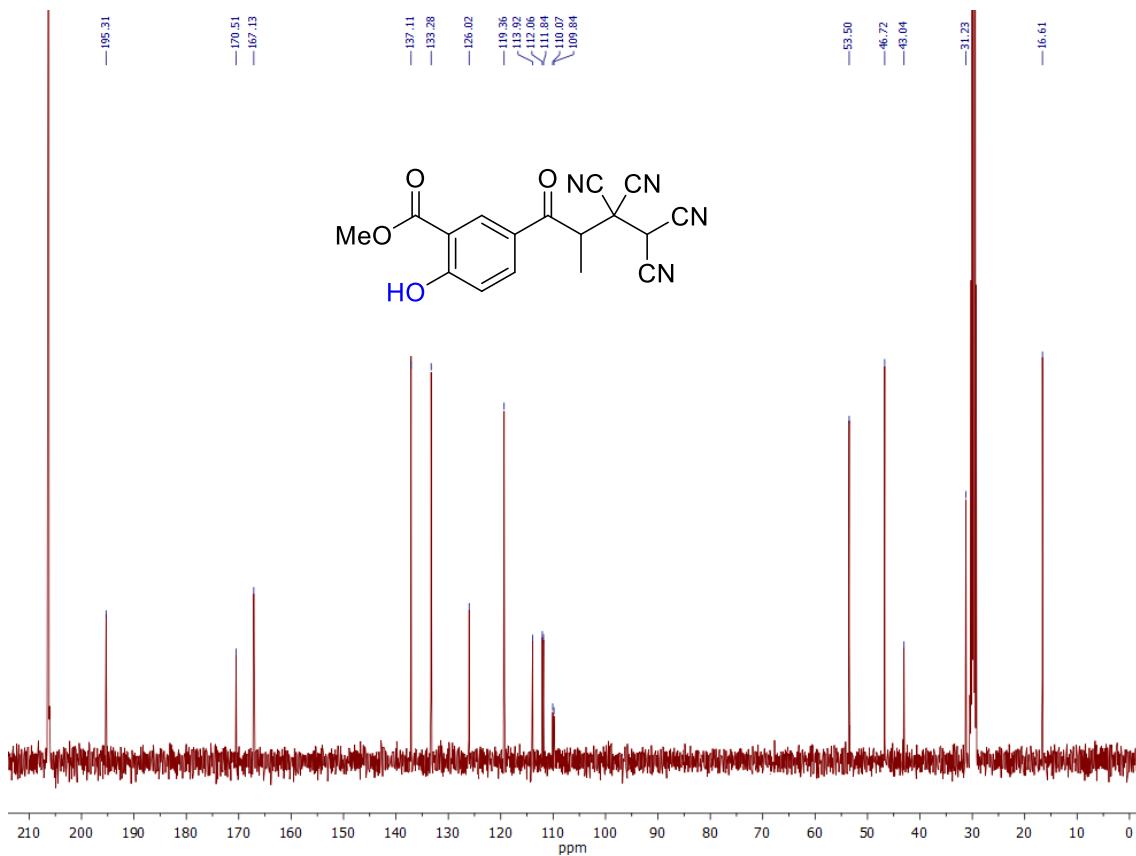


Fig. S8. ¹³C-NMR-spectrum of compound **1d** (101 MHz, acetone-*d*₆)

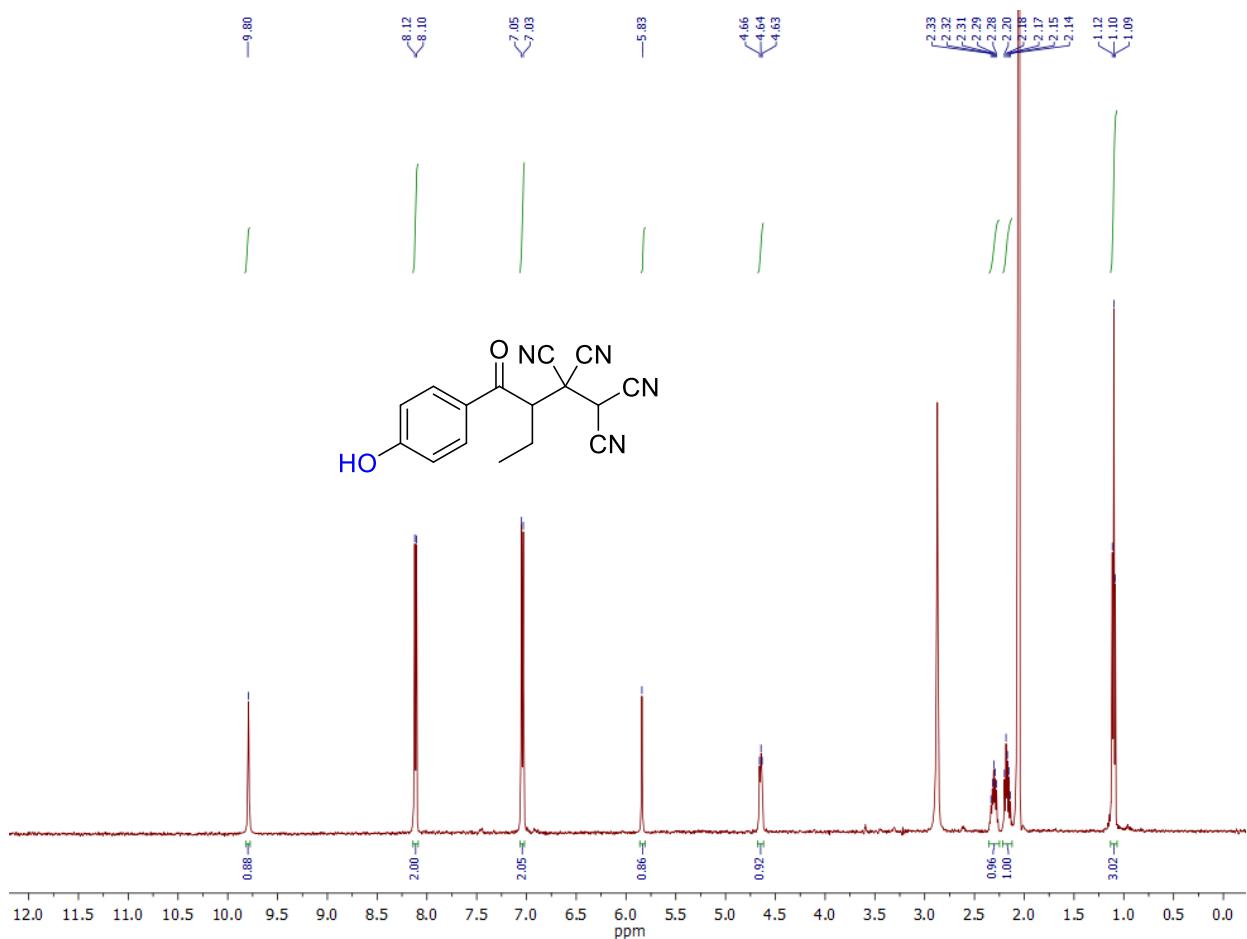


Fig. S9. ¹H-NMR-spectrum of compound **1e** (500 MHz, acetone-*d*₆)

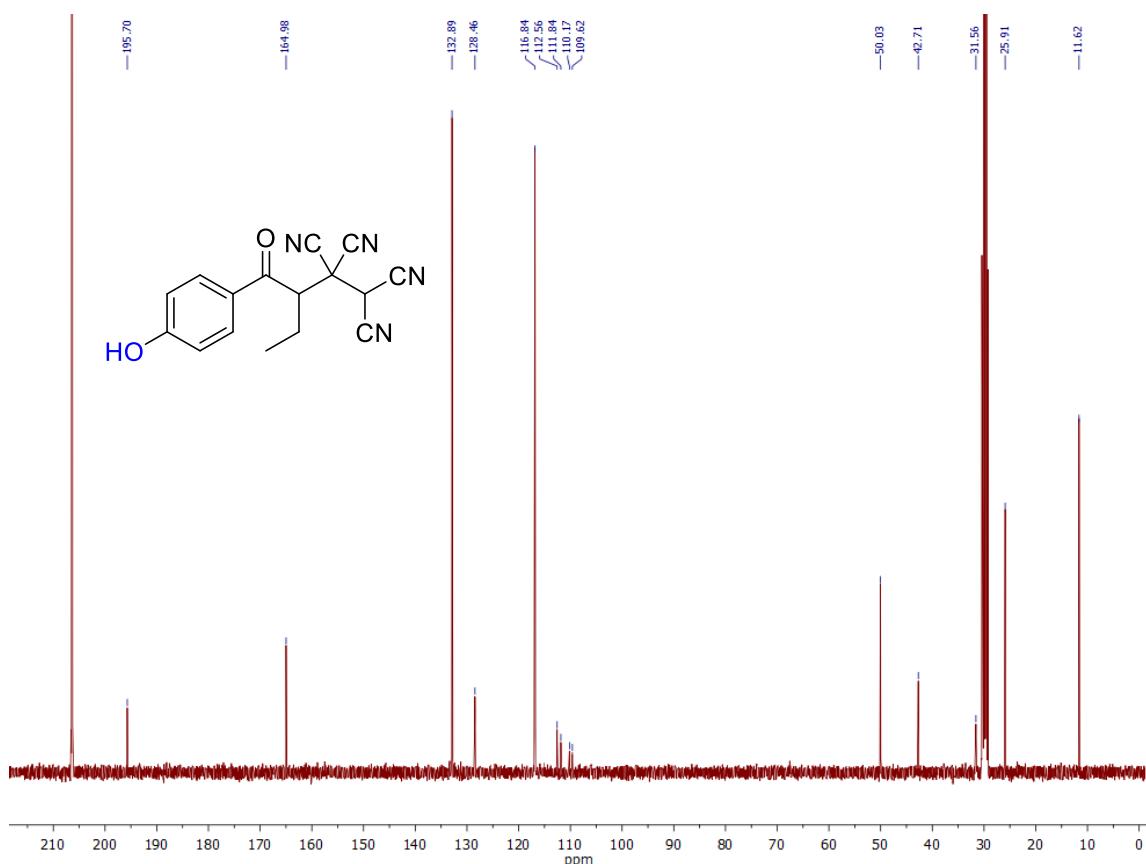


Fig. S10. ¹³C-NMR-spectrum of compound **1e** (101 MHz, acetone-*d*₆)

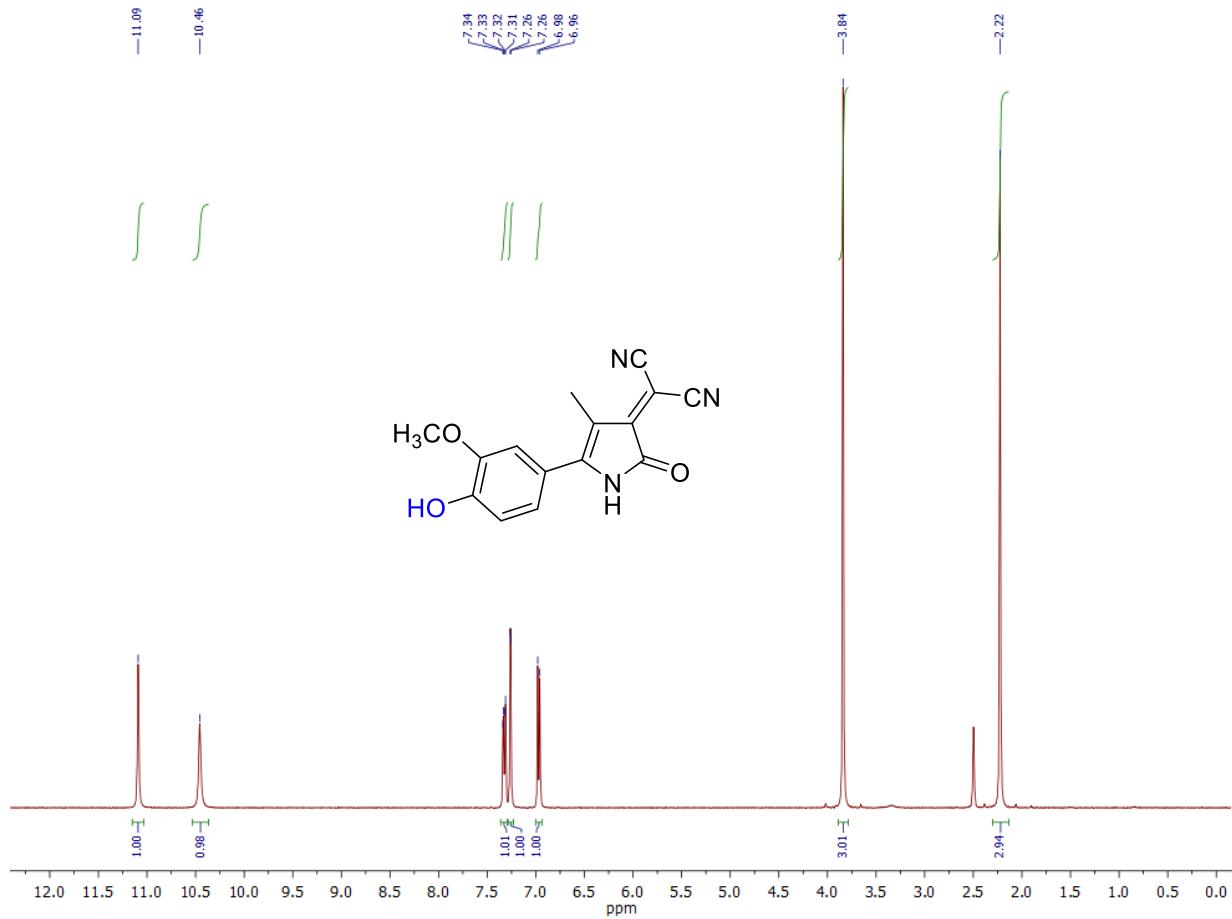


Fig. S11. ^1H -NMR-spectrum of compound **2b** (400 MHz, $\text{DMSO}-d_6$)

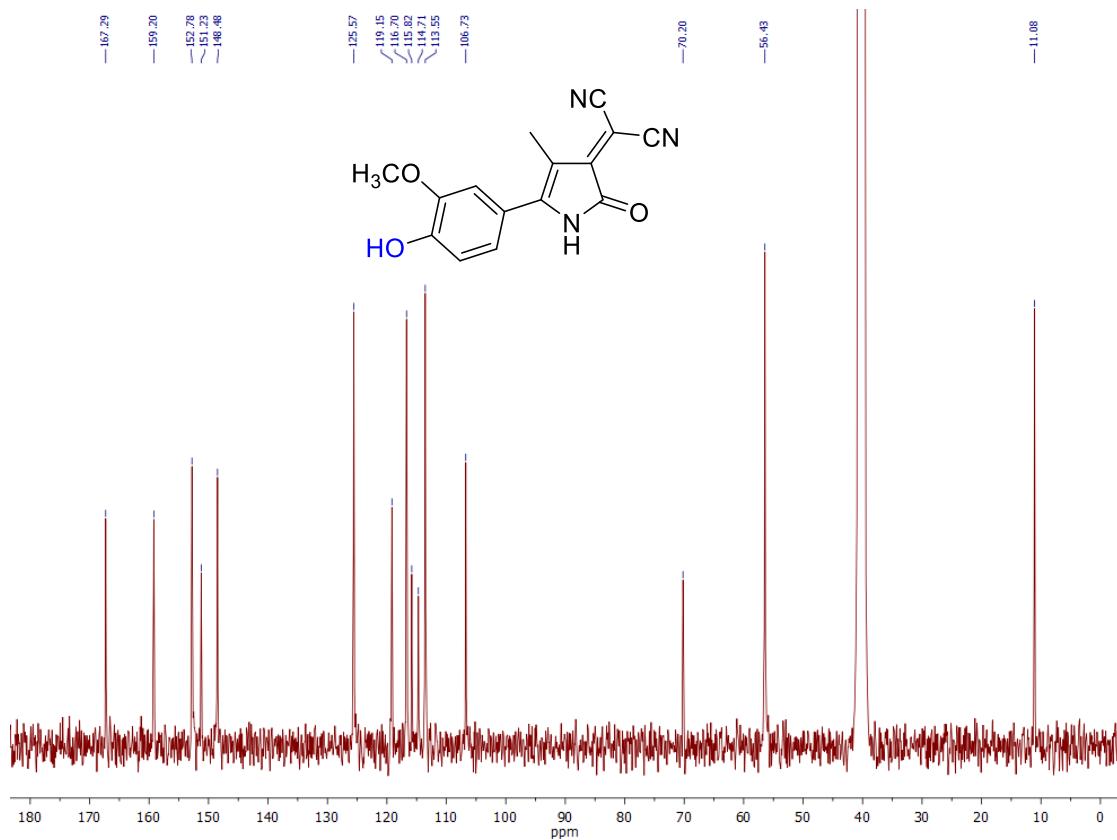


Fig. S12. ^{13}C -NMR-spectrum of compound **2b** (101 MHz, $\text{DMSO}-d_6$)

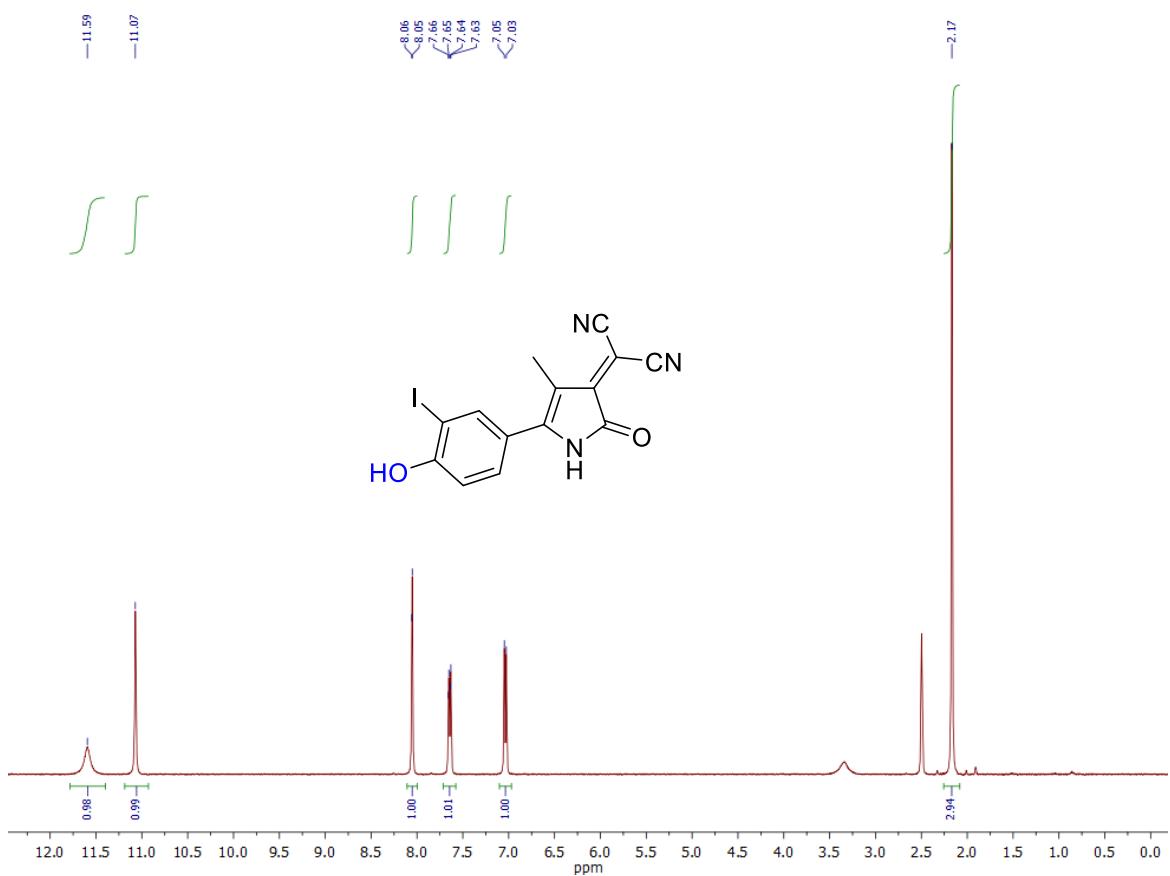


Fig. S13. ¹H-NMR-spectrum of compound **2c** (400 MHz, DMSO-*d*₆)

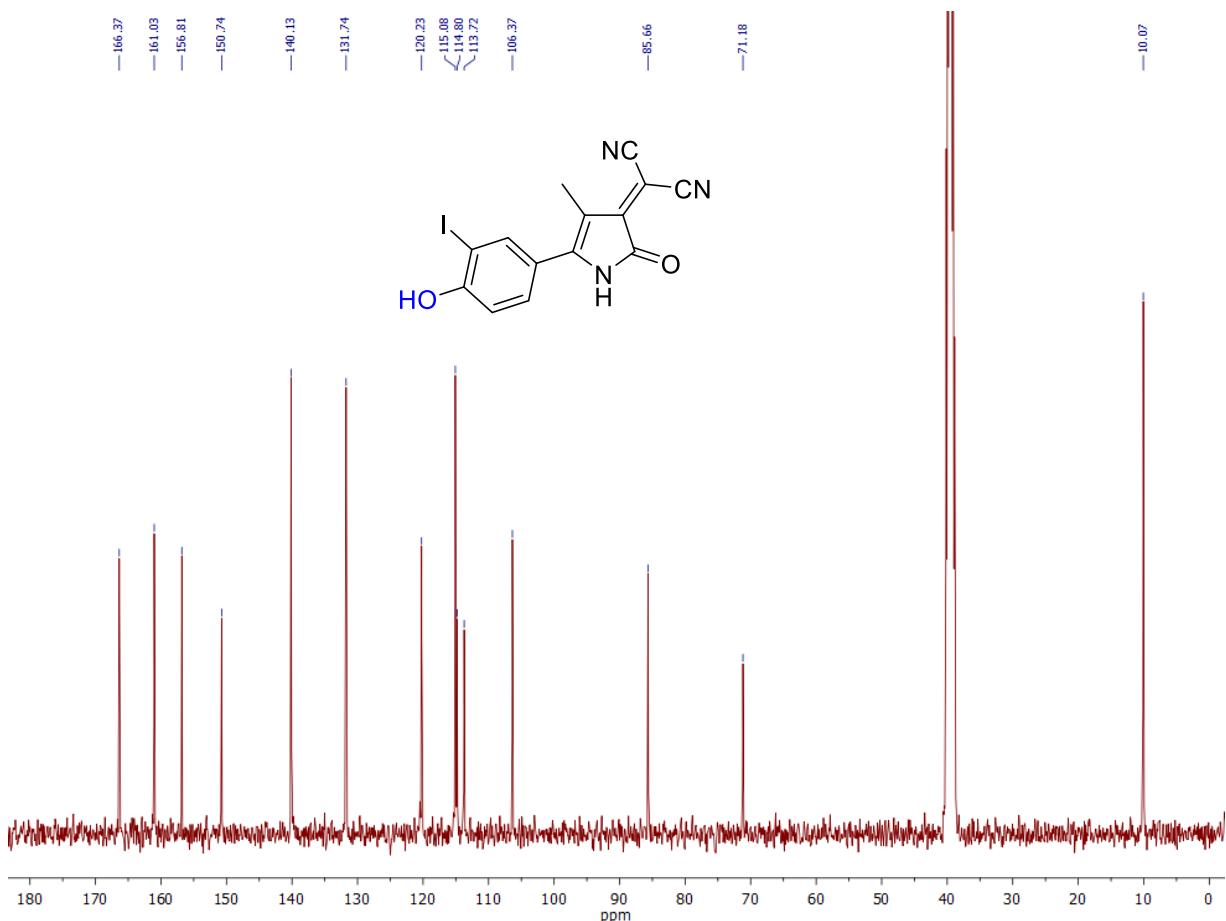


Fig. S14. ¹³C-NMR-spectrum of compound **2c** (101 MHz, DMSO-*d*₆)

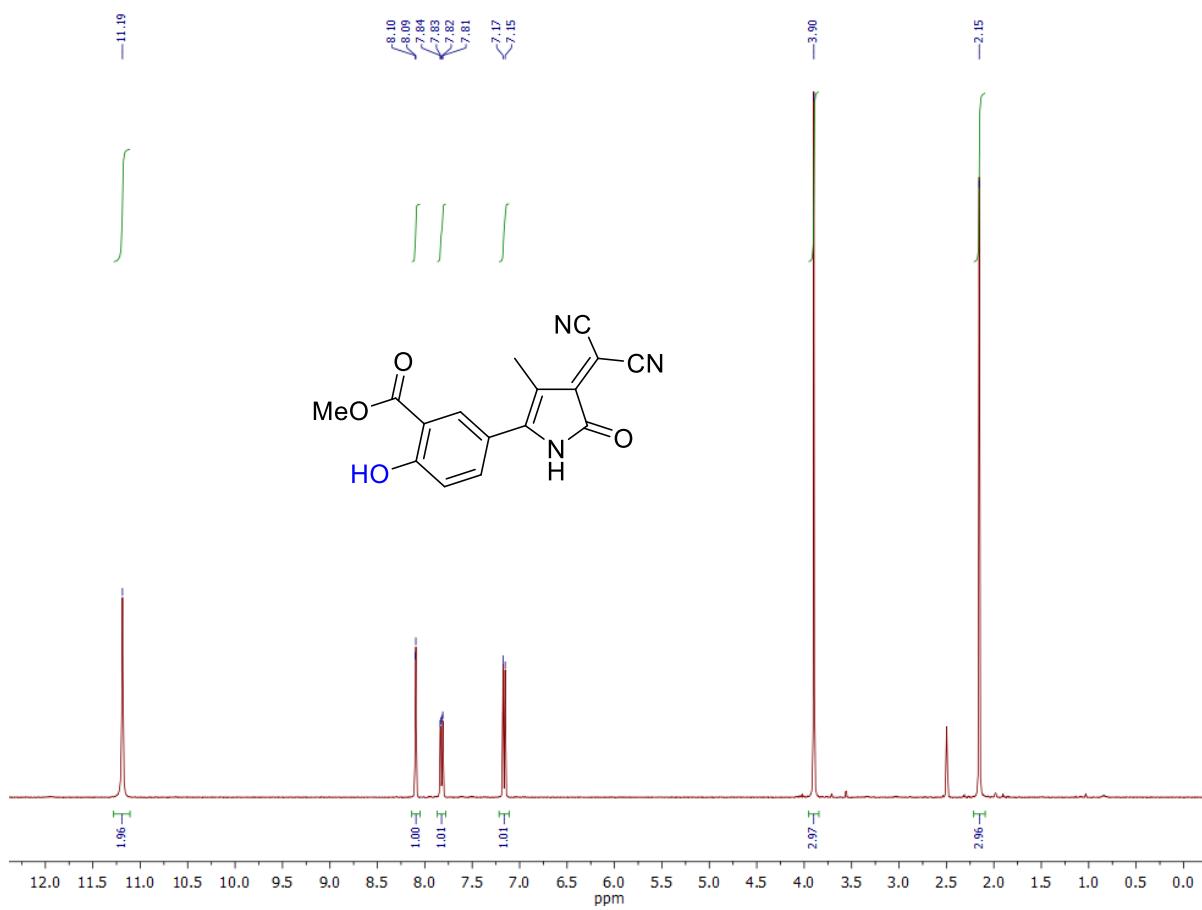


Fig. S15. ¹H-NMR-spectrum of compound **2d** (400 MHz, DMSO-*d*₆)

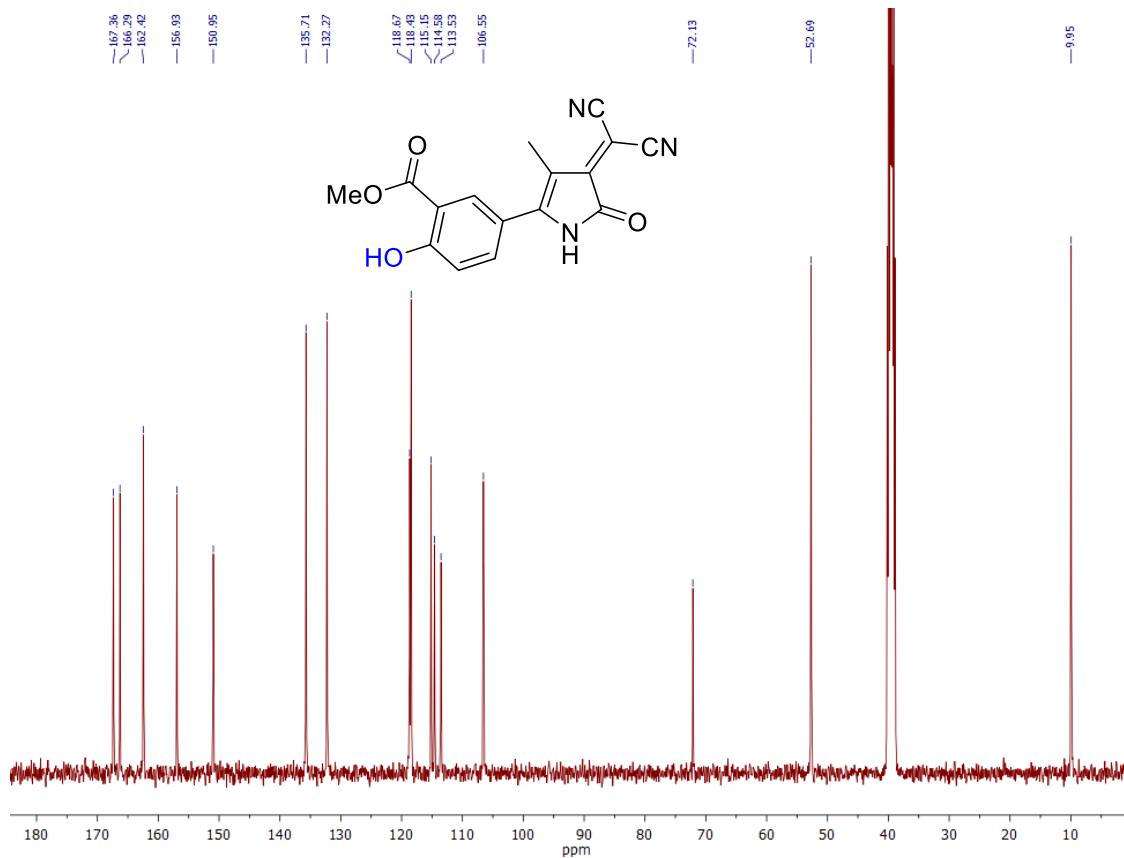


Fig. S16. ¹³C-NMR-spectrum of compound **2d** (101 MHz, DMSO-*d*₆)

Kinetic study for the transformation of 2a-C5 into 2a-Q

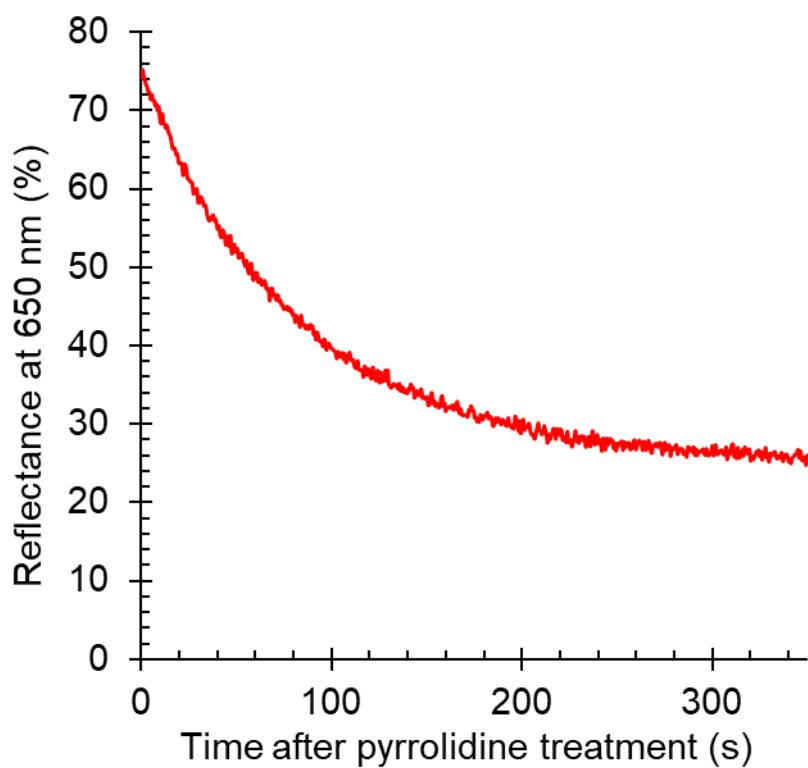


Fig. S17. Kinetic curve for the paper dyed with **2a** and treated with pyrrolidine vapors (25 °C)