

Phenothiazine-Based Bipolar Green-Emitters Containing Benzimidazole Units: Synthesis, Photophysical and Electroluminescent Properties

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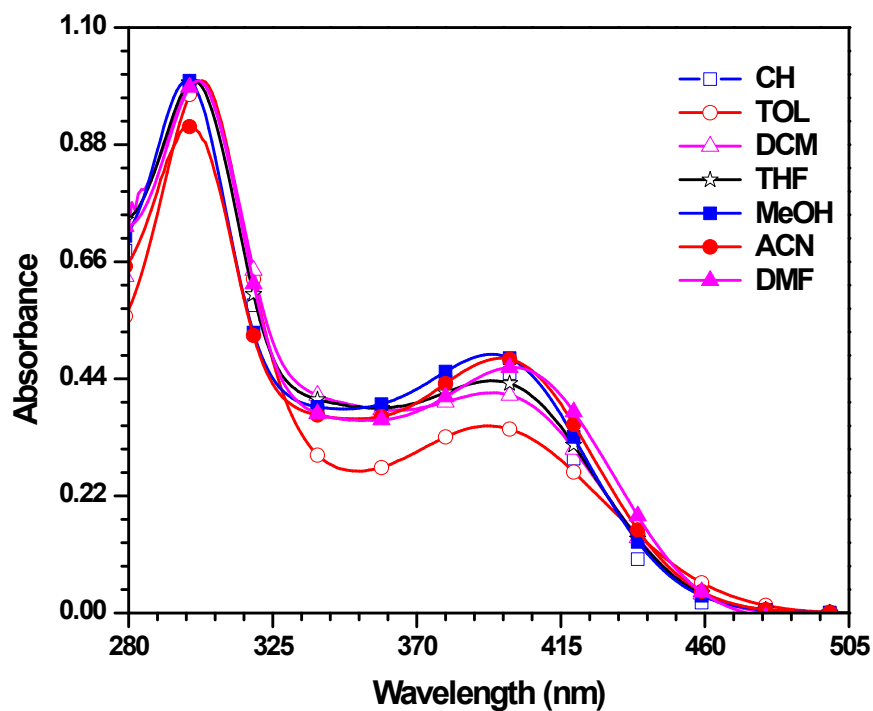


Fig. S1 Absorption spectra of **4a** recorded in different solvents.

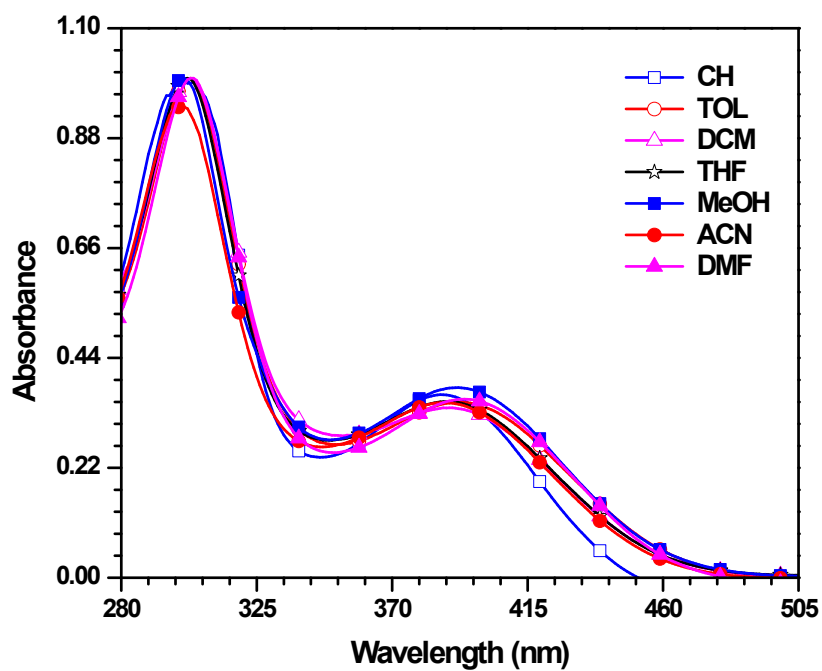


Fig. S2 Absorption spectra of **4b** recorded in different solvents.

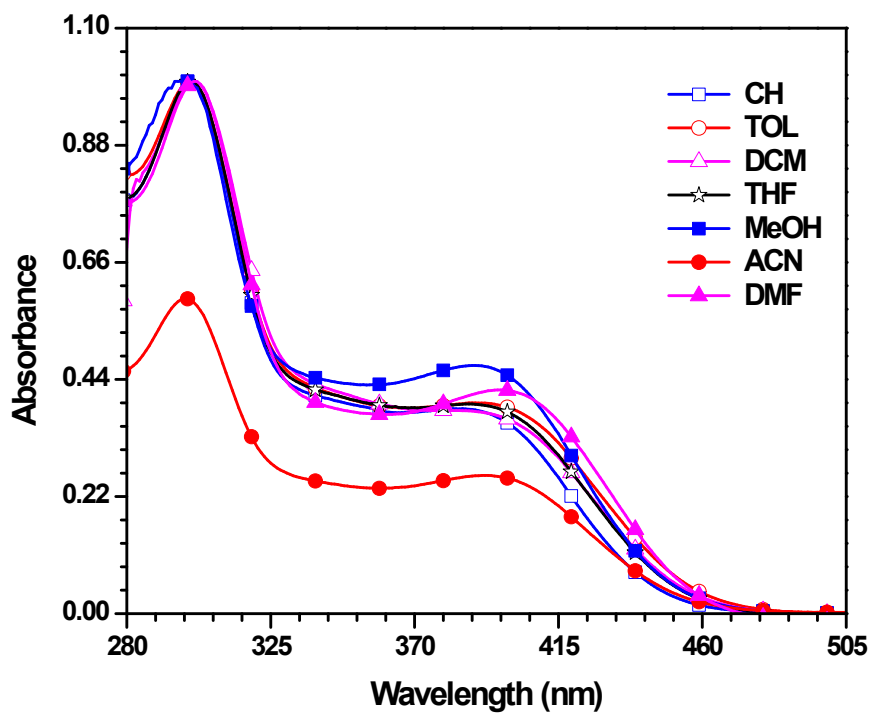


Fig. S3 Absorption spectra of 4c recorded in different solvents.

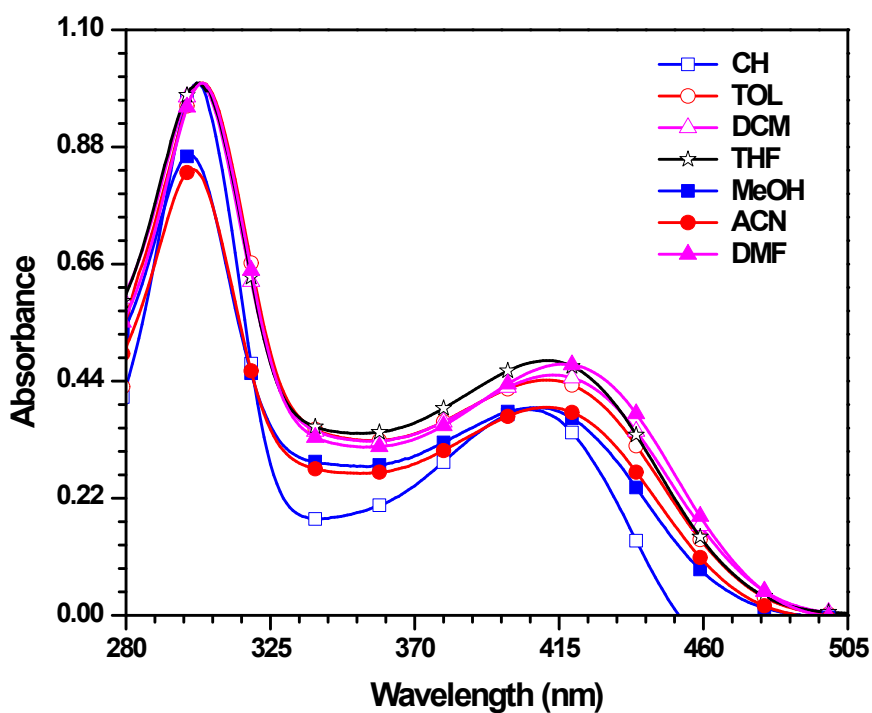


Fig. S4 Absorption spectra of 4d recorded in different solvents.

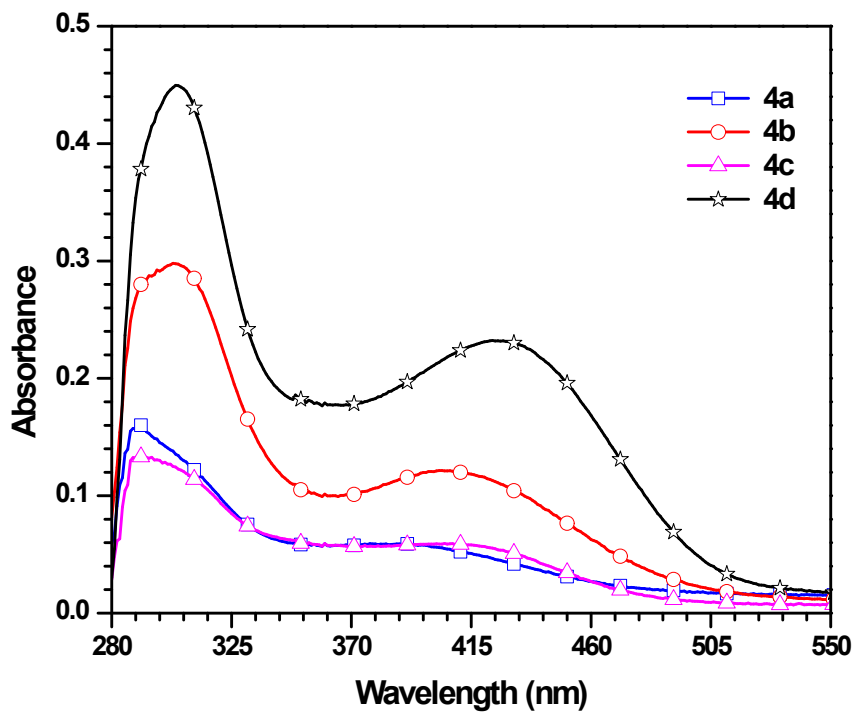


Fig. S5 Absorption spectra of the dyes recorded as thin film.

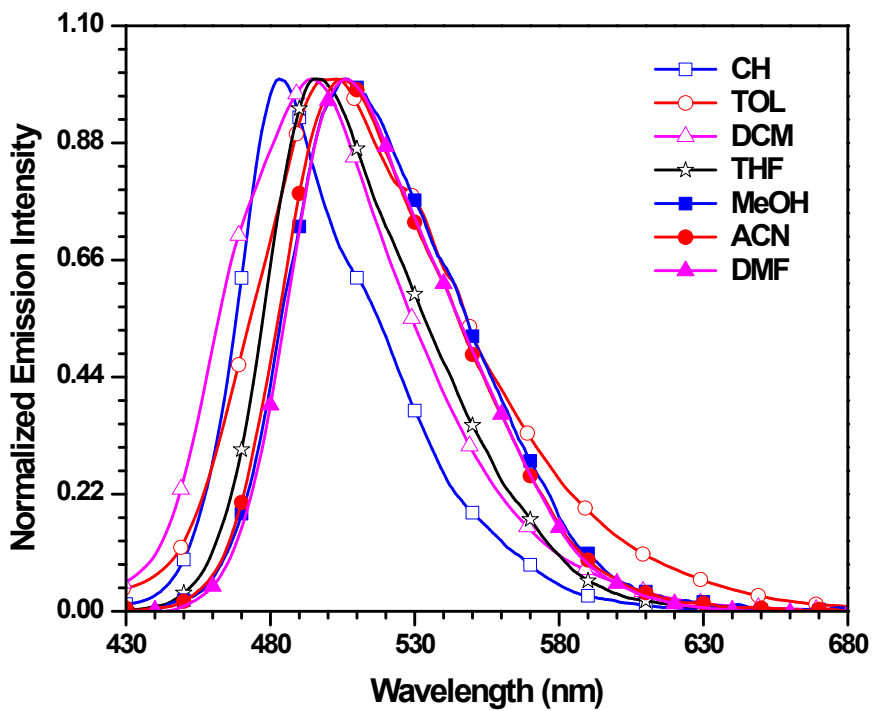


Fig. S6 Emission spectra of 4a recorded in different solvents.

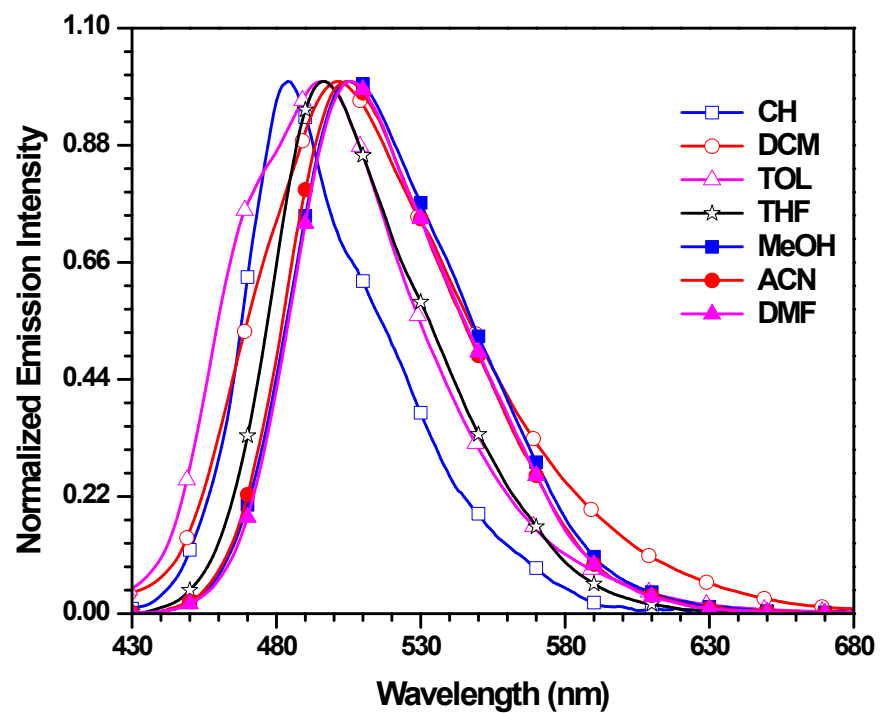


Fig. S7 Emission spectra of **4c** recorded in different solvents.

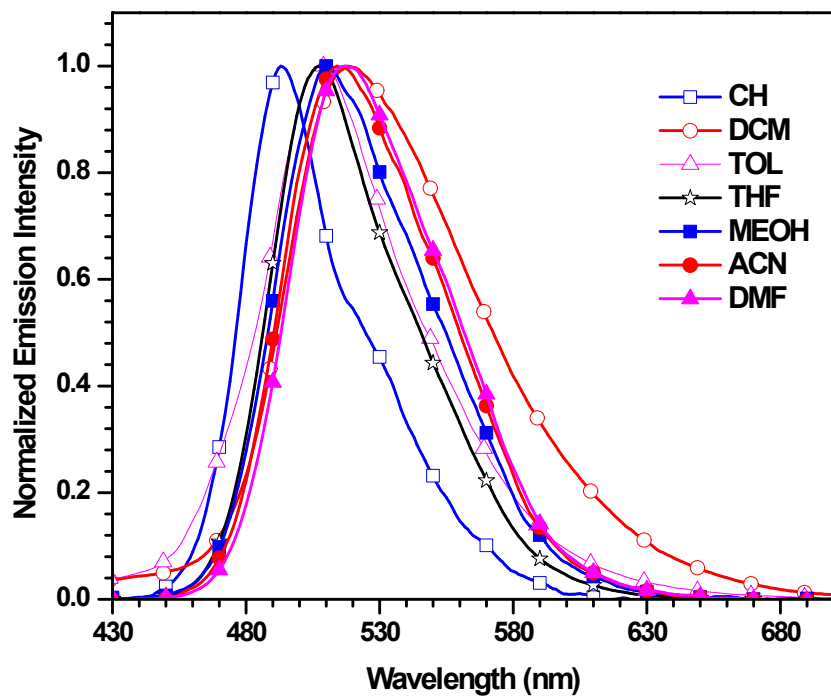


Fig. S8 Emission spectra of **4d** recorded in different solvents.

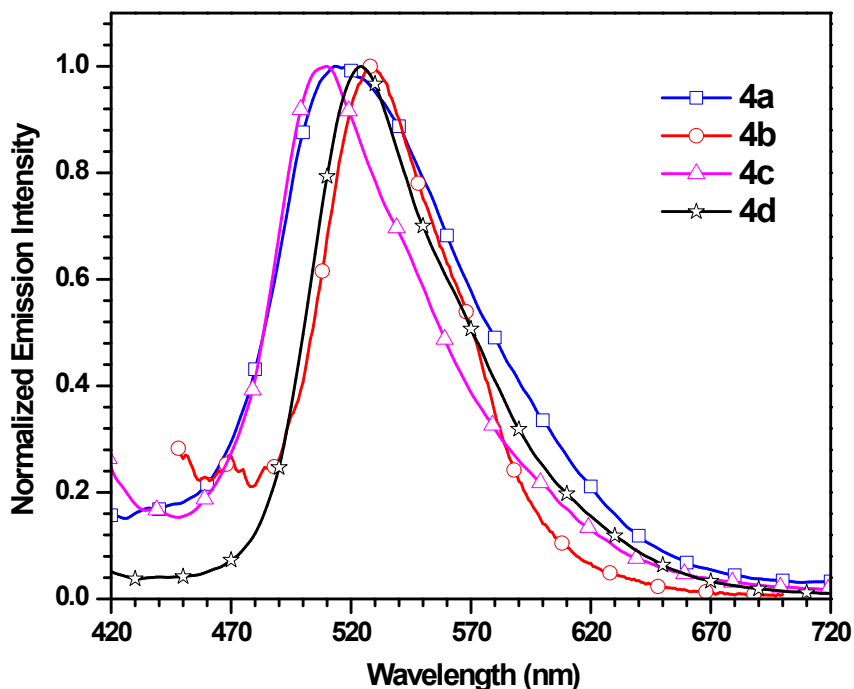


Fig. S9 Emission spectra of the dyes recorded as thin film.

Table S1 Absorption data for the dyes (4a-4d) recorded in different solvents with increasing solvent polarity

Dye	λ_{abs} , nm ($\epsilon_{\text{max}} \times 10^3 \text{ M}^{-1} \text{ cm}^{-1}$)							
	CH	TOL	DCM	THF	MeOH	ACN	DMF	Film ^a
4a	375, 300	377 (27.5), 303 (80.8),	377 (28.4), 300(61.0)	375 (31.6), 302 (93.5)	374, 299	375, 300	378 (31.6), 302 (90.9)	409, 290
4b	386, 301	389 (19.0), 303 (56.0)	392 (28.9), 303 (82.3)	388 (22.9), 302 (65.0)	392, 300	387, 300	394 (30.0), 304 (58.7)	403, 303
4c	385 , 299	382 (26.7), 301 (69.9),	389 (29.9), 300 (75.5)	388 (23.2), 300 (58.9)	388, 299	392, 298,	397 (23.2), 301 (55.2)	405, 290
4d	406 302	412 (48.3), 305 (108.0)	414 (57.7), 303 (126.0)	412 (59.8), 303 (128.0)	407, 300	411, 301	417 (47.3), 303 (97.7)	423, 304

^a Measured for spin cast thin film.

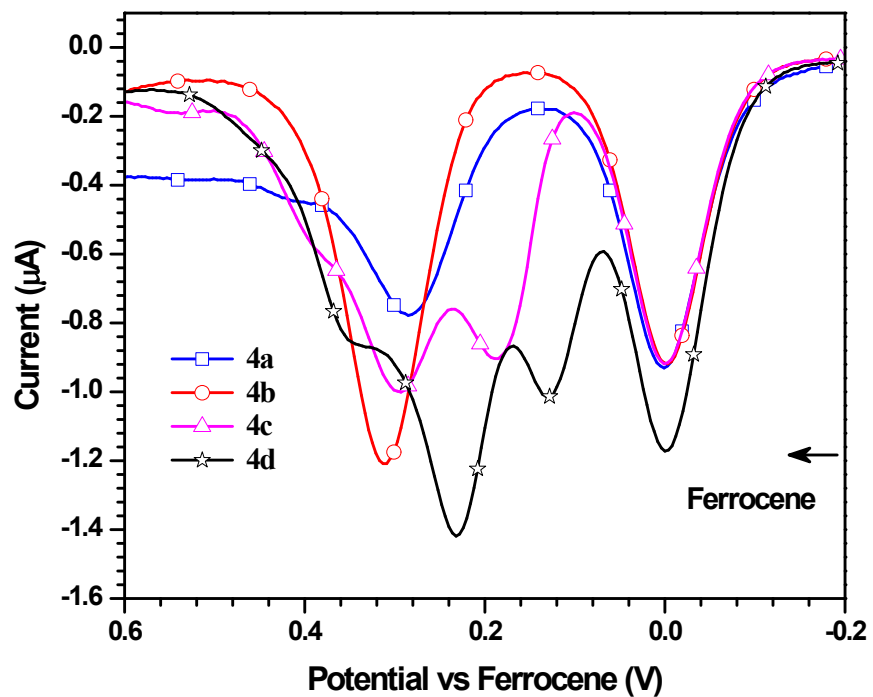


Fig. S10 Differential pulse voltammograms for the dyes (4a-4d) recorded in dichloromethane.

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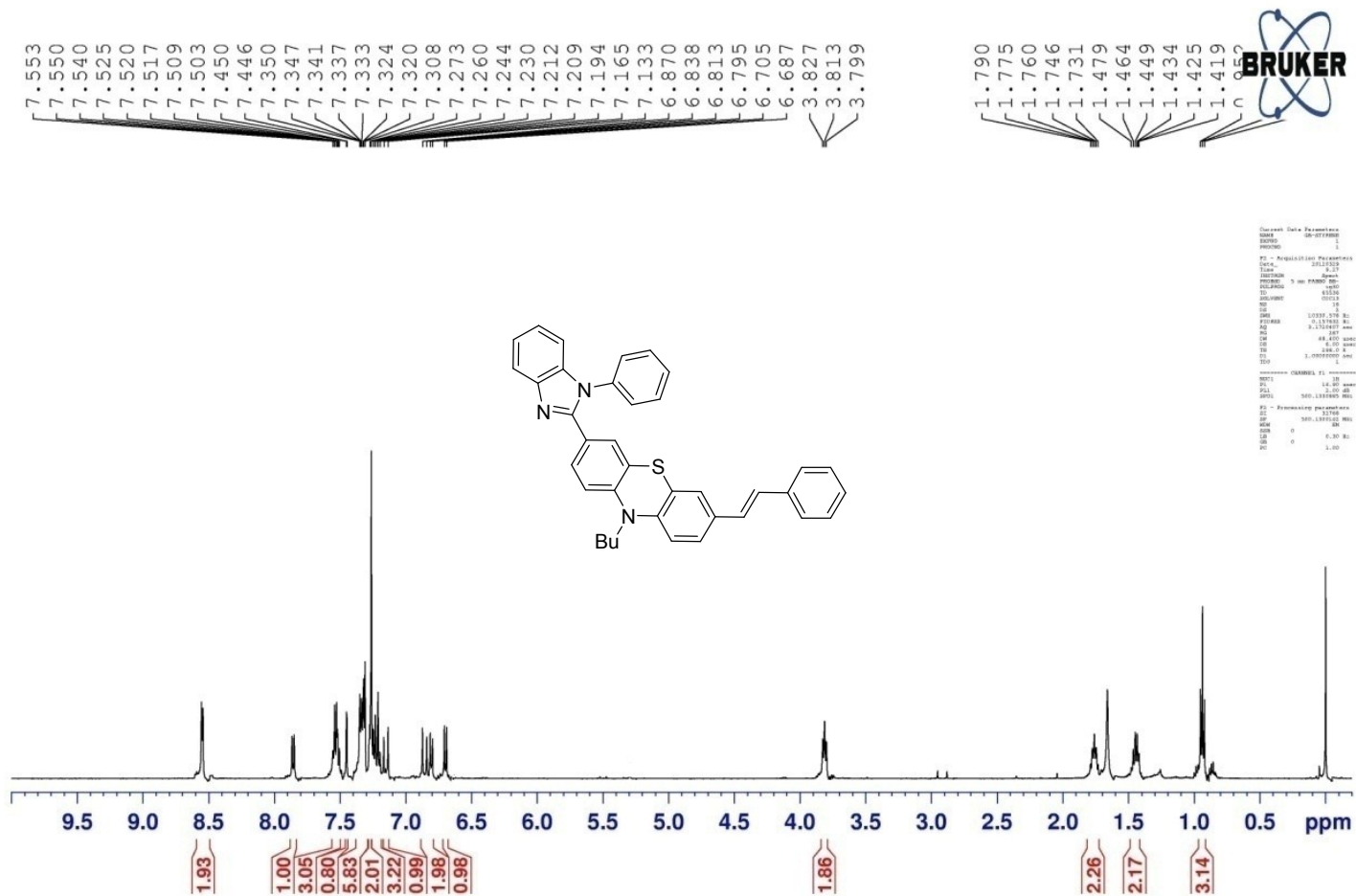


Fig. S11 ¹H NMR spectrum of 4a.

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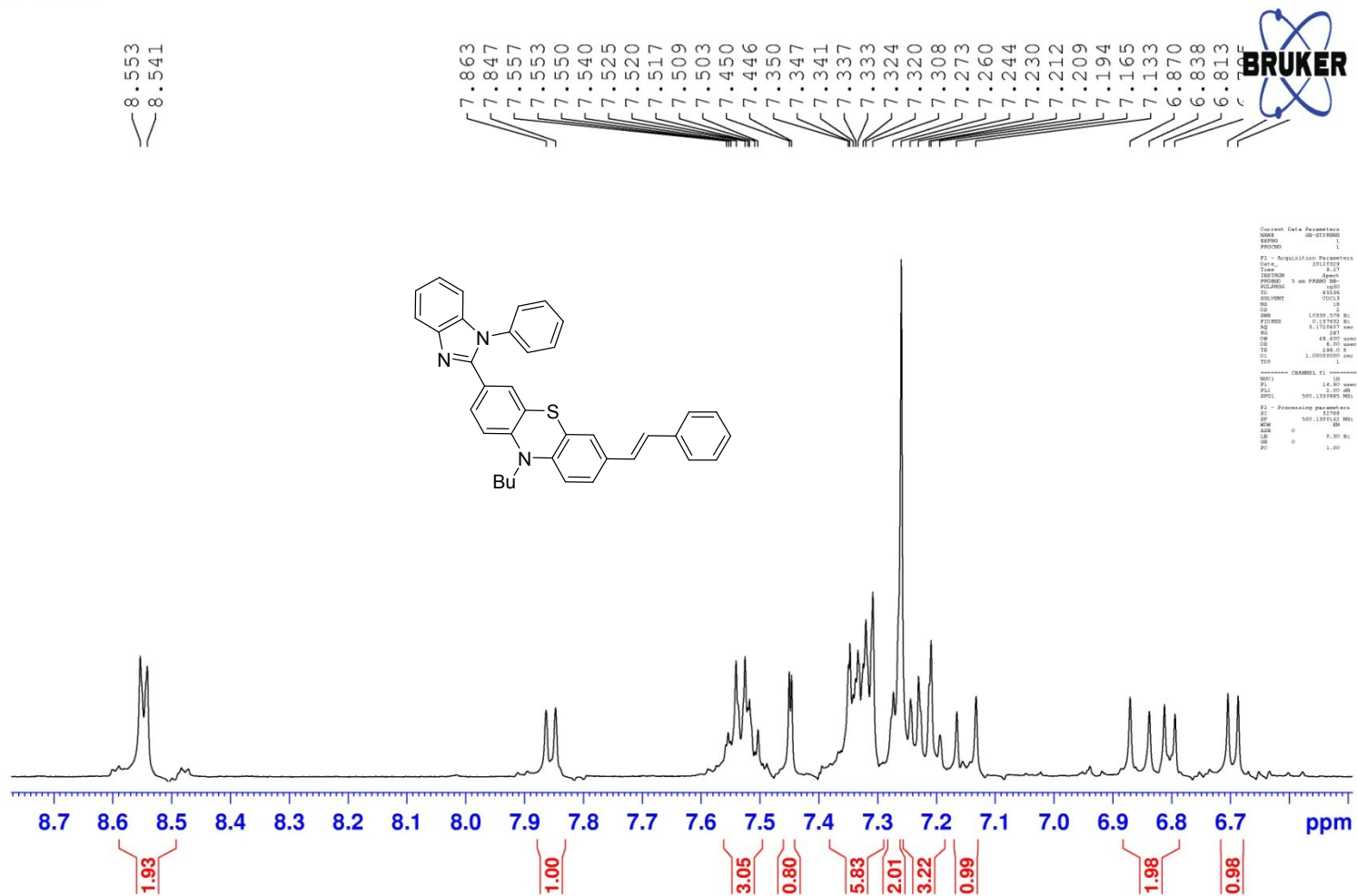
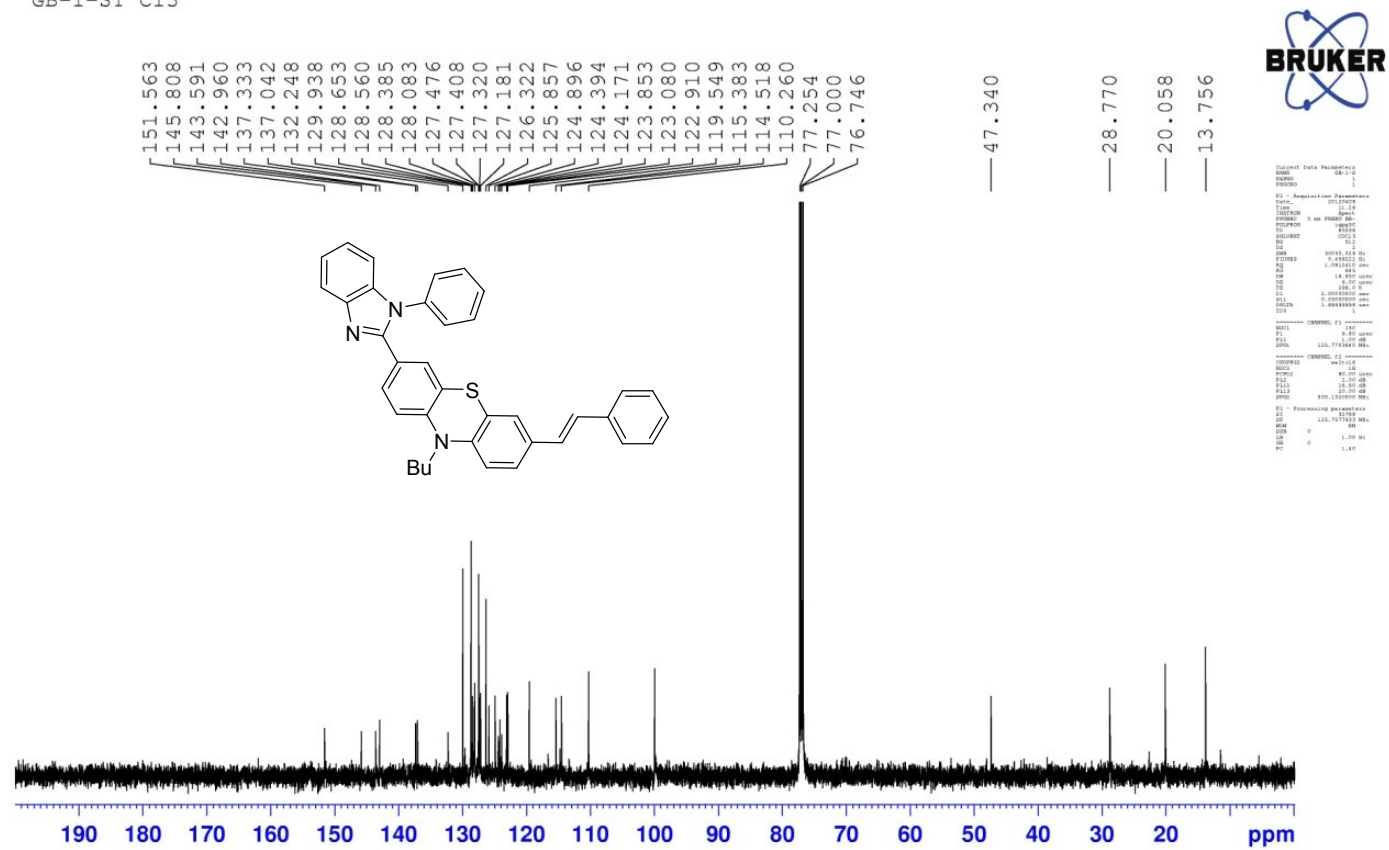


Fig. S12 ¹H NMR (expanded) spectrum of 4a.

Fig. S13 ¹³C NMR spectrum of 4a.

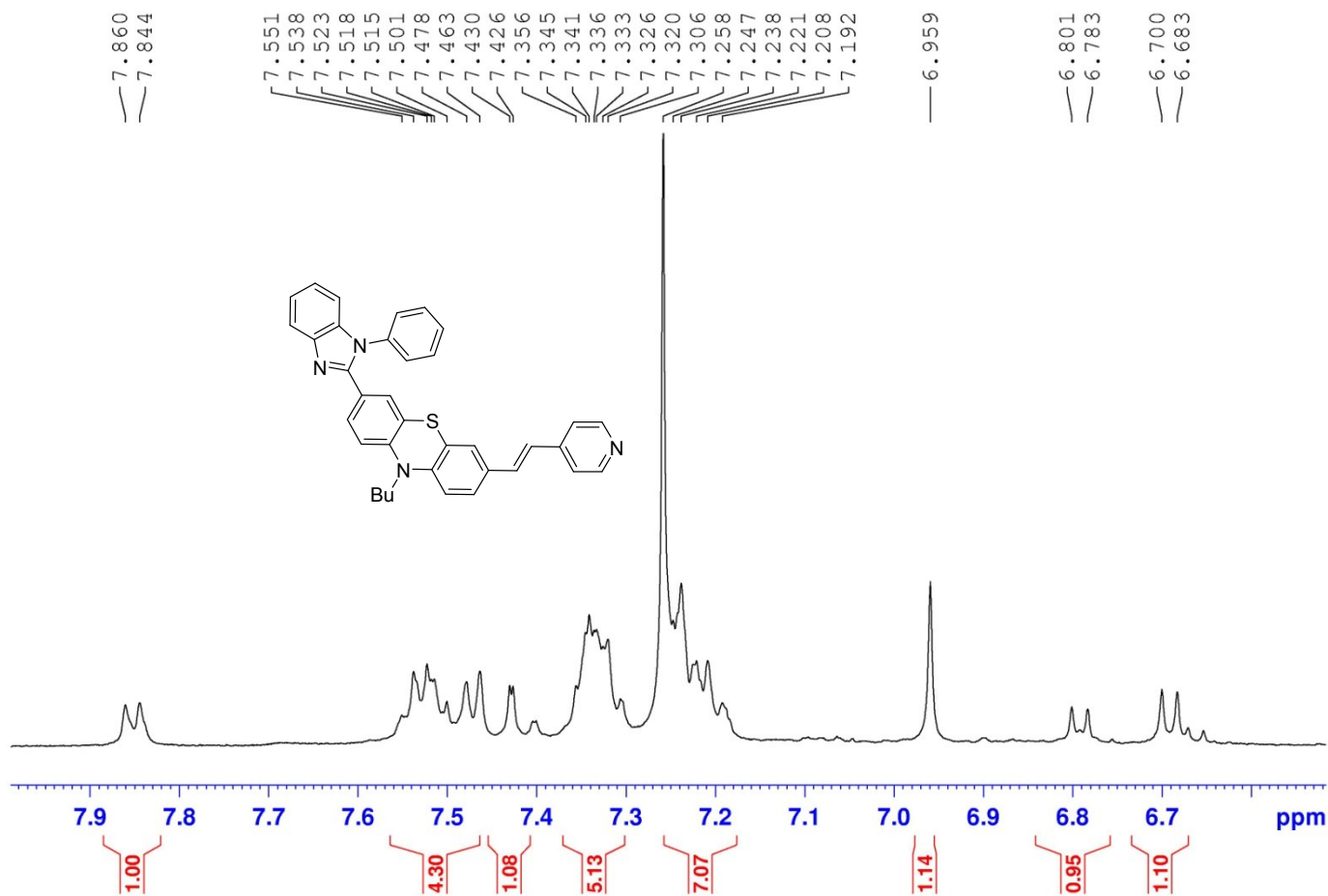
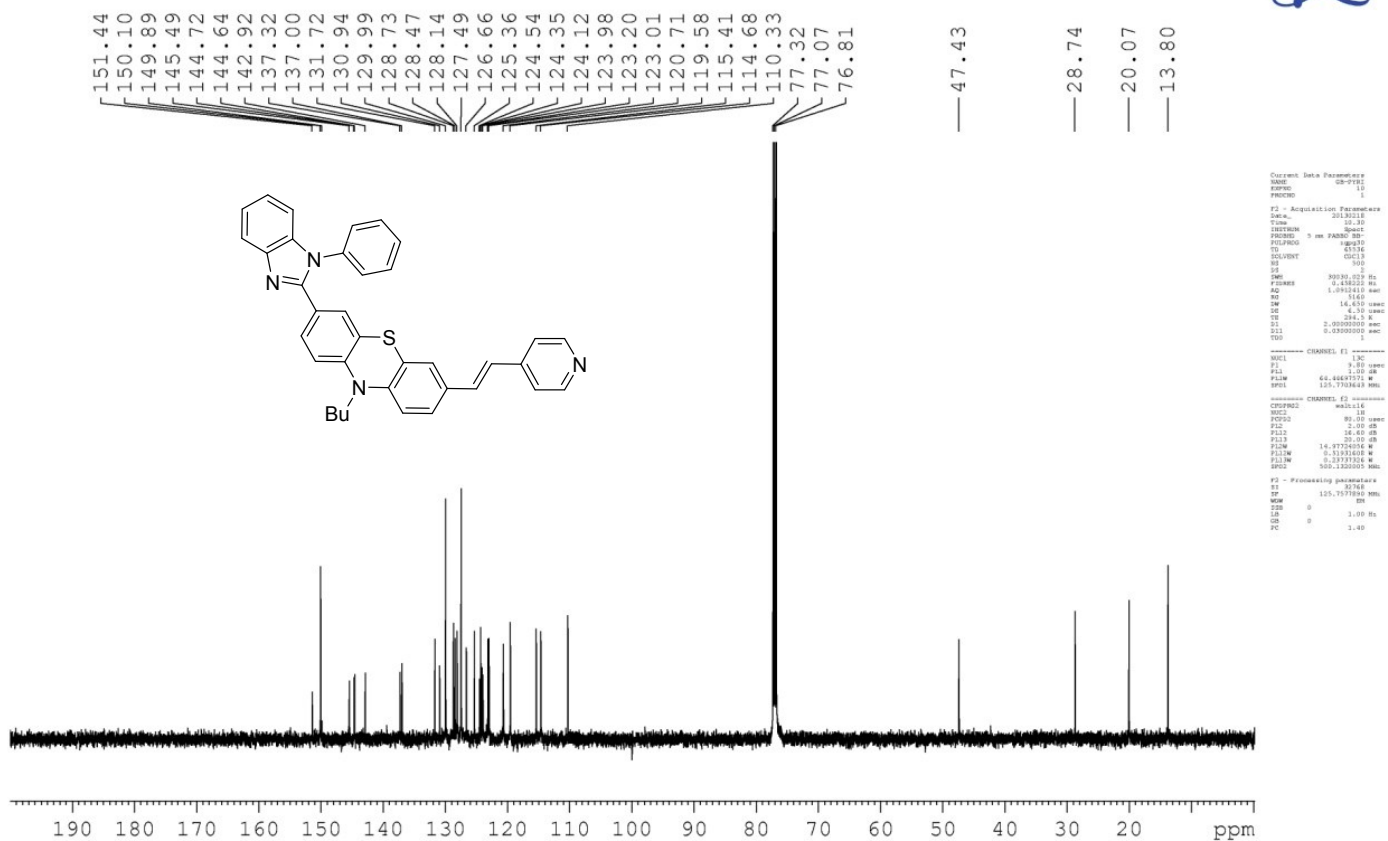
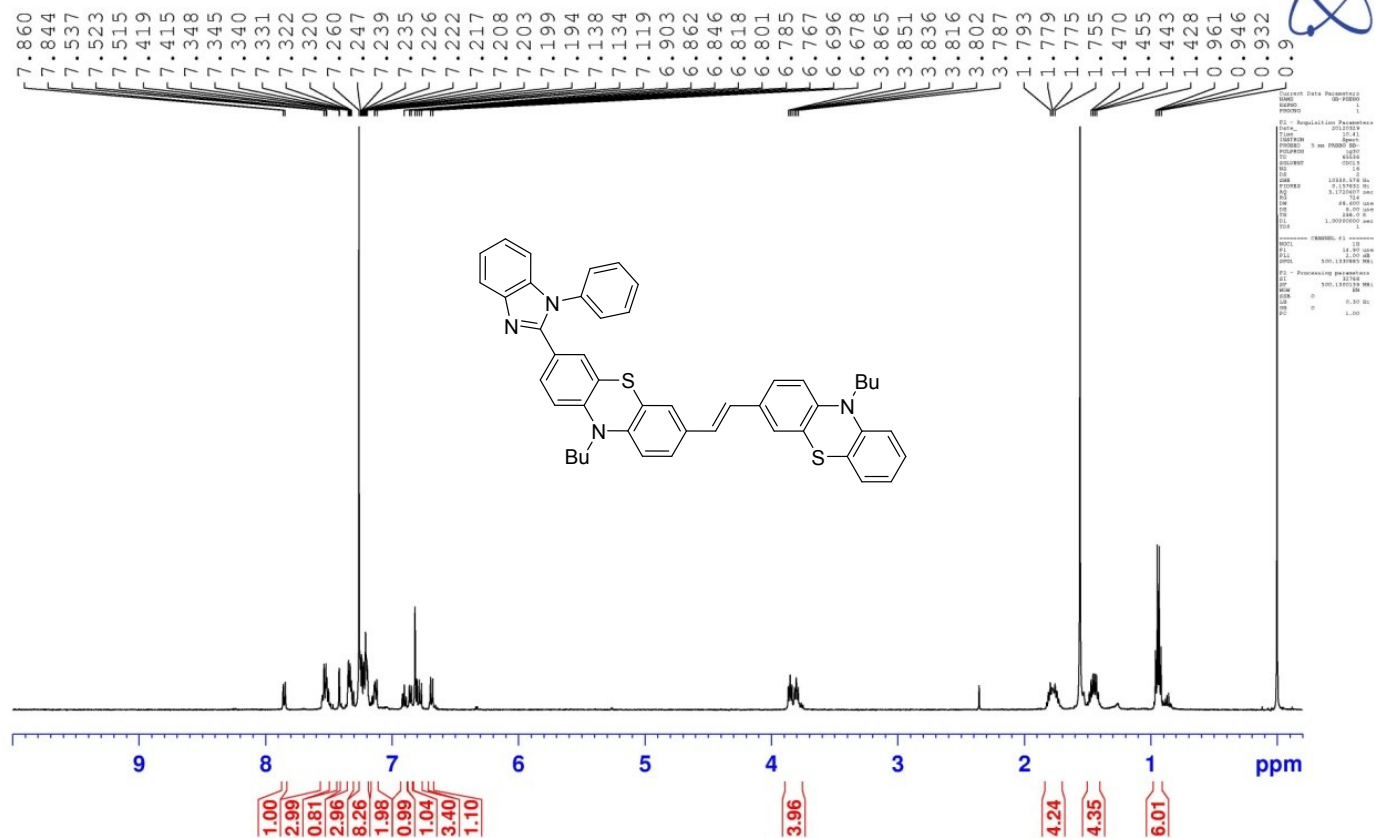


Fig. S15 ¹H NMR (expanded) spectrum of 4b.

Fig. S16 ¹³C NMR spectrum of **4b**.

Fig. S17 ¹H NMR spectrum of 4c.

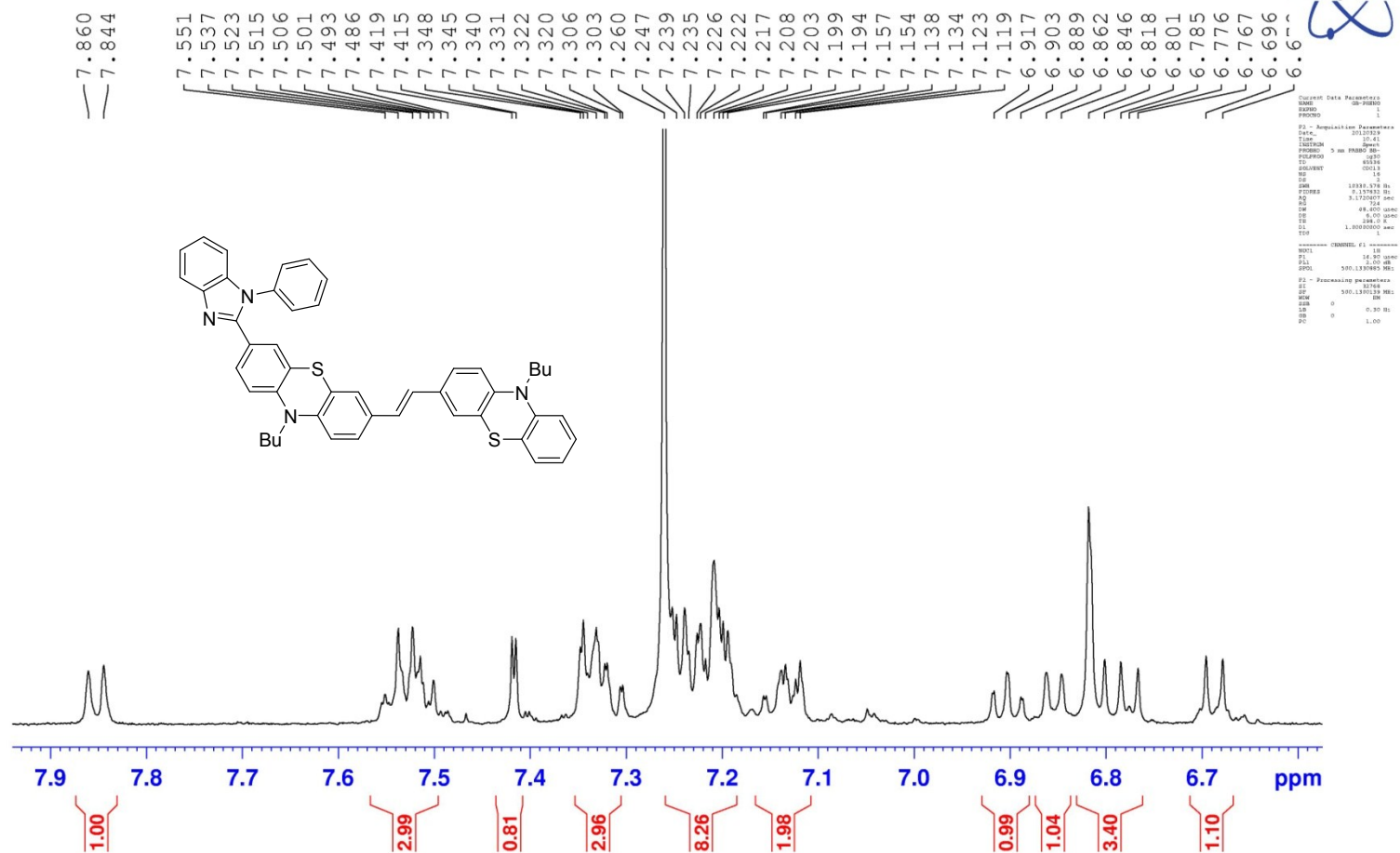


Fig. S18 ¹H NMR (expanded) spectrum of **4c**.

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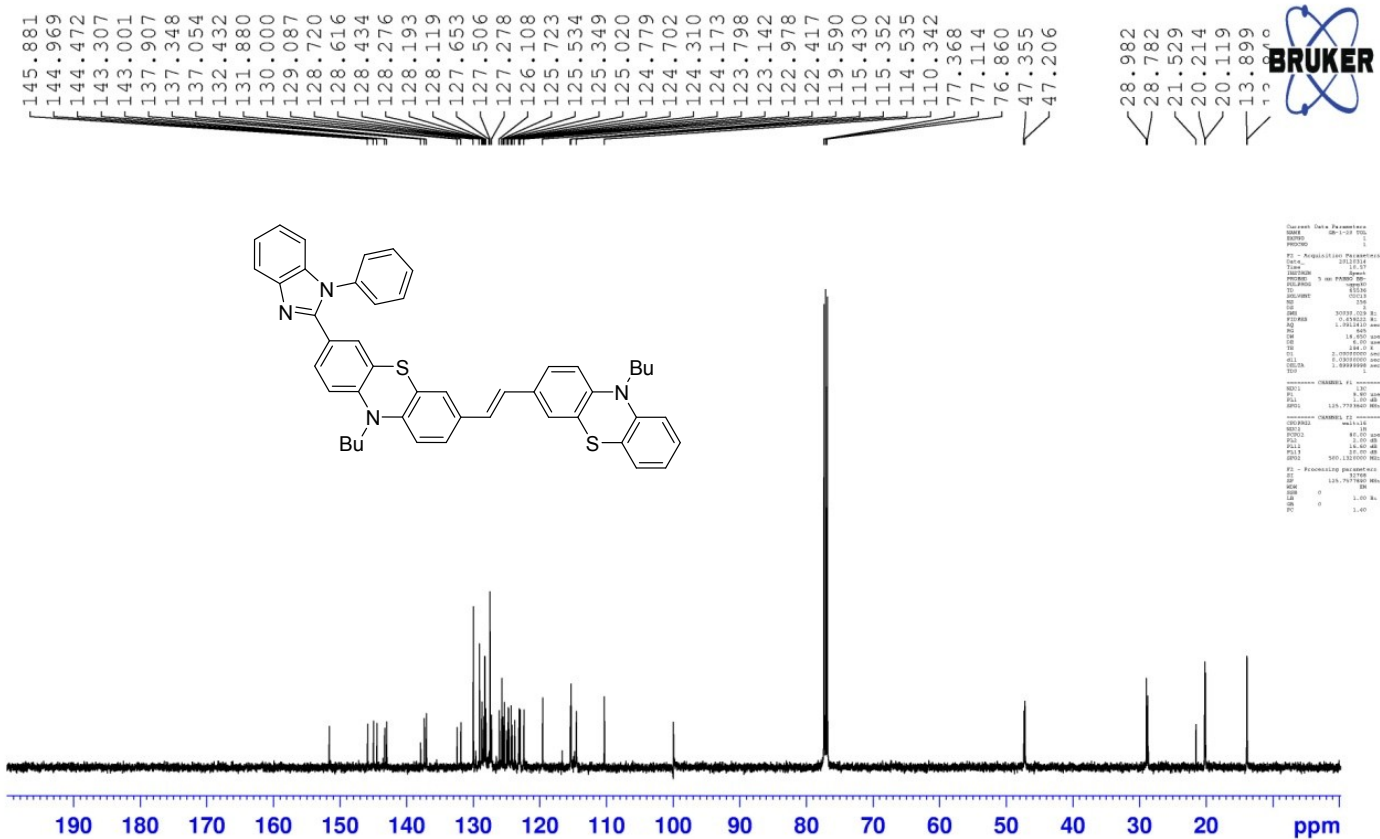


Fig. S19 ¹³C NMR spectrum of 4c.

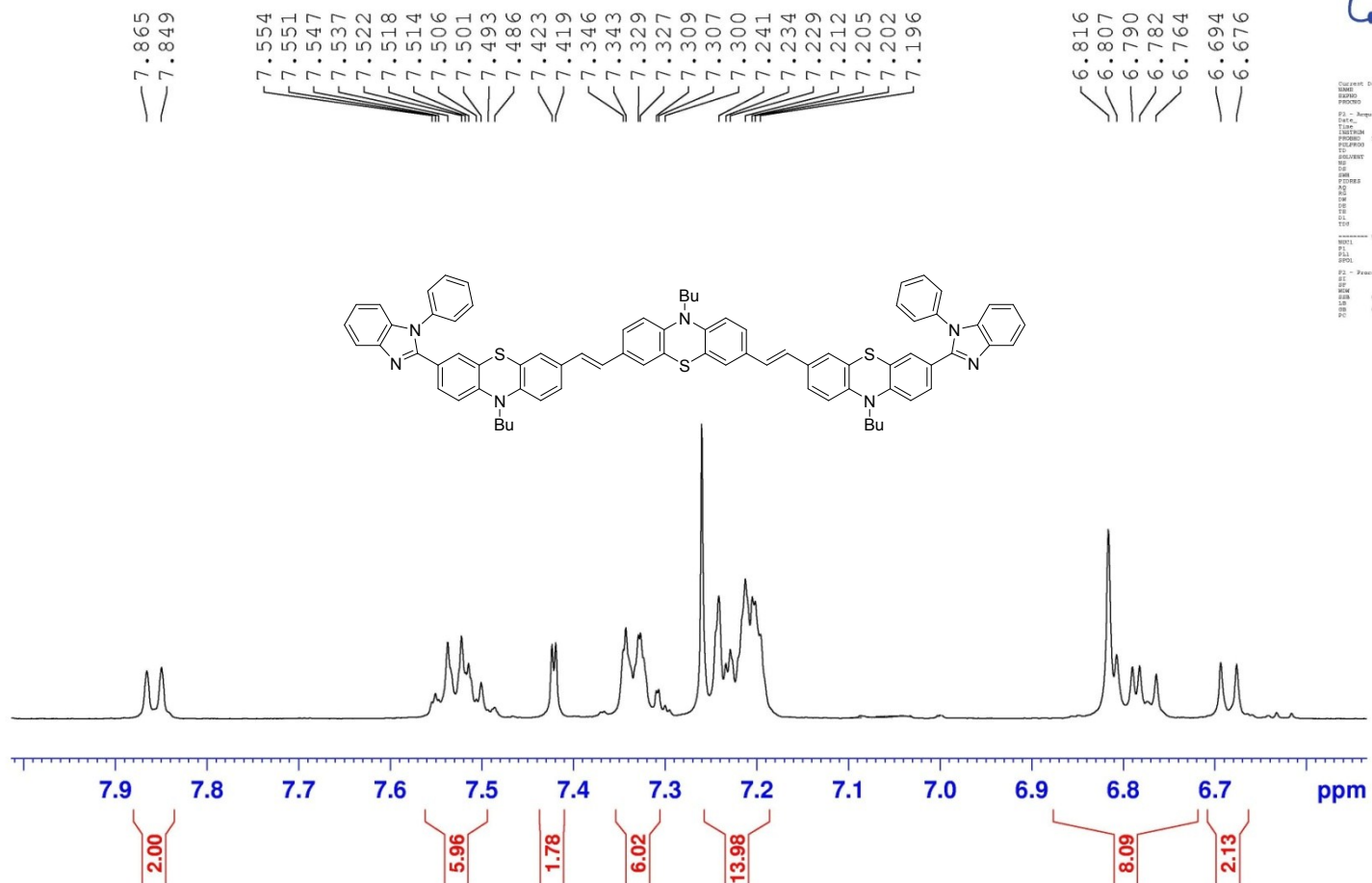


Fig. S21 ^1H NMR (expanded) spectrum of **4d**.

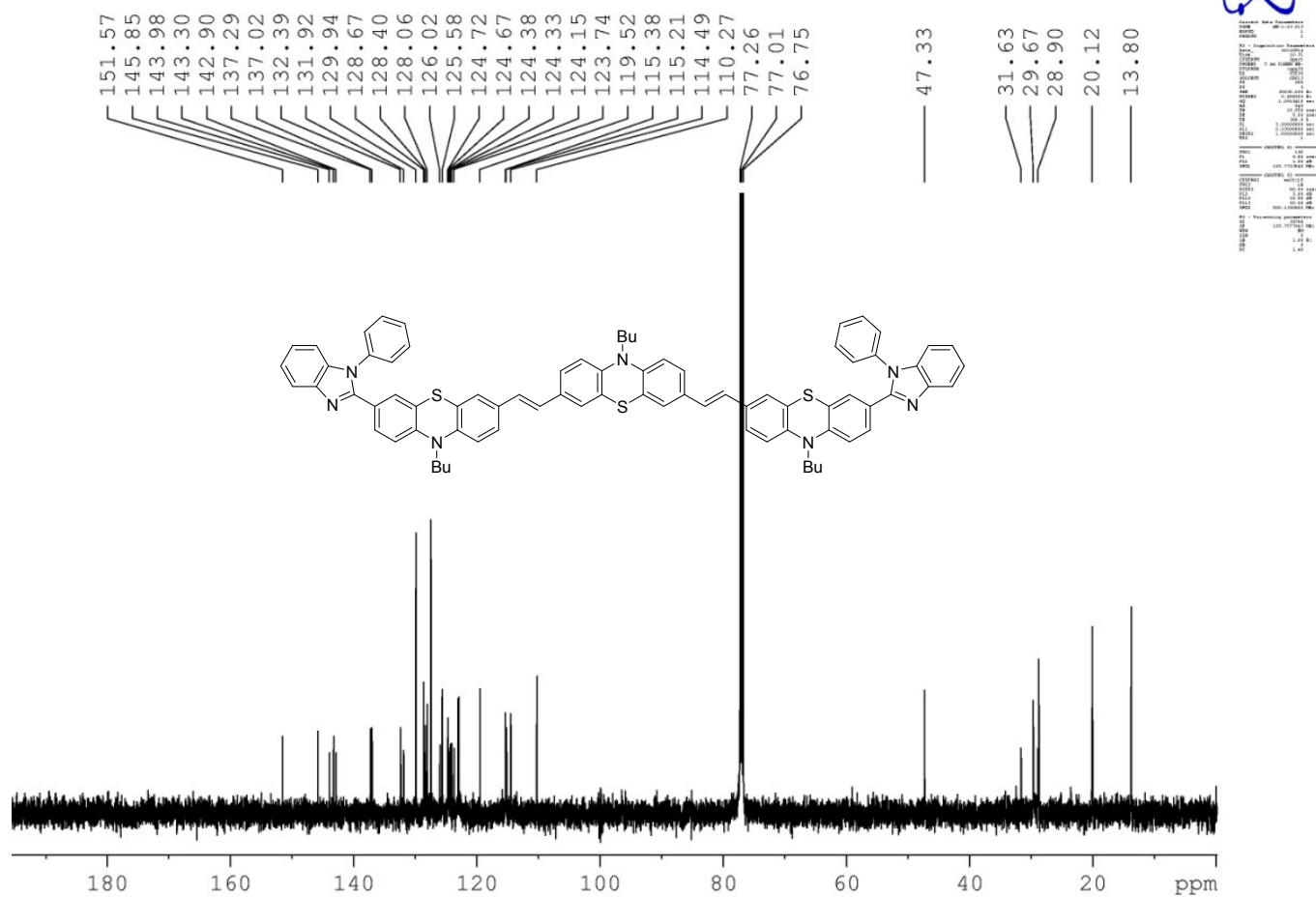


Fig. S22 ^{13}C NMR spectrum of 4d.