

Supplementary Material

Novel bis([triazolo[3,4-*b*]thiadiazoles and bis([triazolo[3,4-*b*][thiadiazines) with antioxidant activity

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Table of Contents

¹ H and ¹³ C NMR spectra of synthesized compounds	S2
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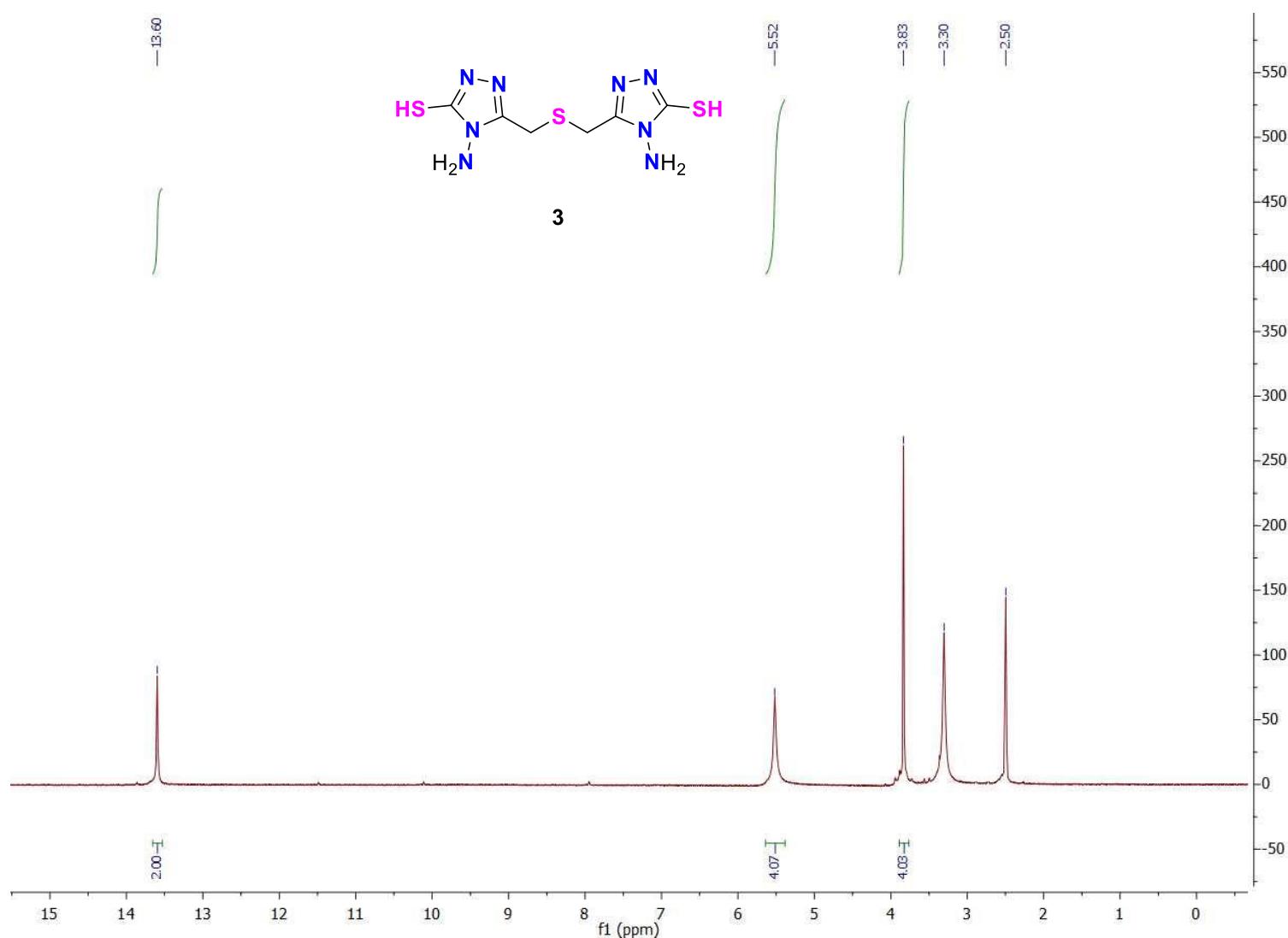
Spectral data

Figure S1: ^1H NMR spectrum of compound 3

MustafaElSayed-B3-DMSO-C13
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Solvent: DMSO
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Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18761.7 Hz
1408 repetitions
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DECOUPLE H1, 300.0702830 MHz
Power 33 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
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Total time 32 hr, 58 min, 37 sec
Date: Oct 8 2023

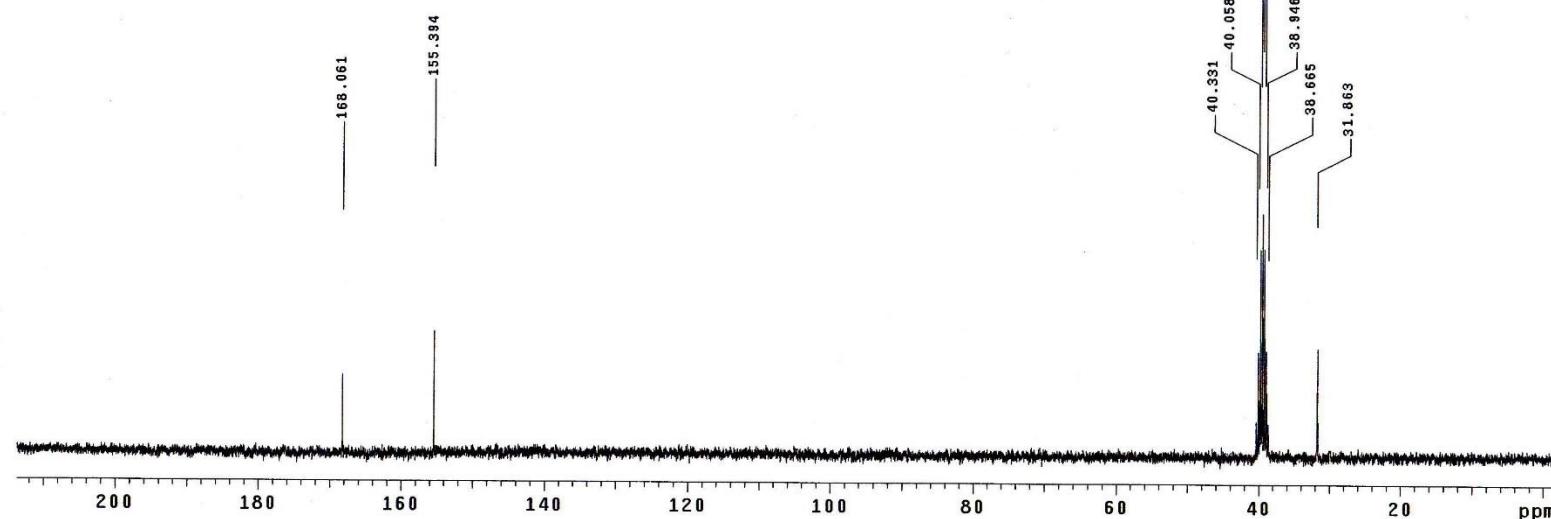
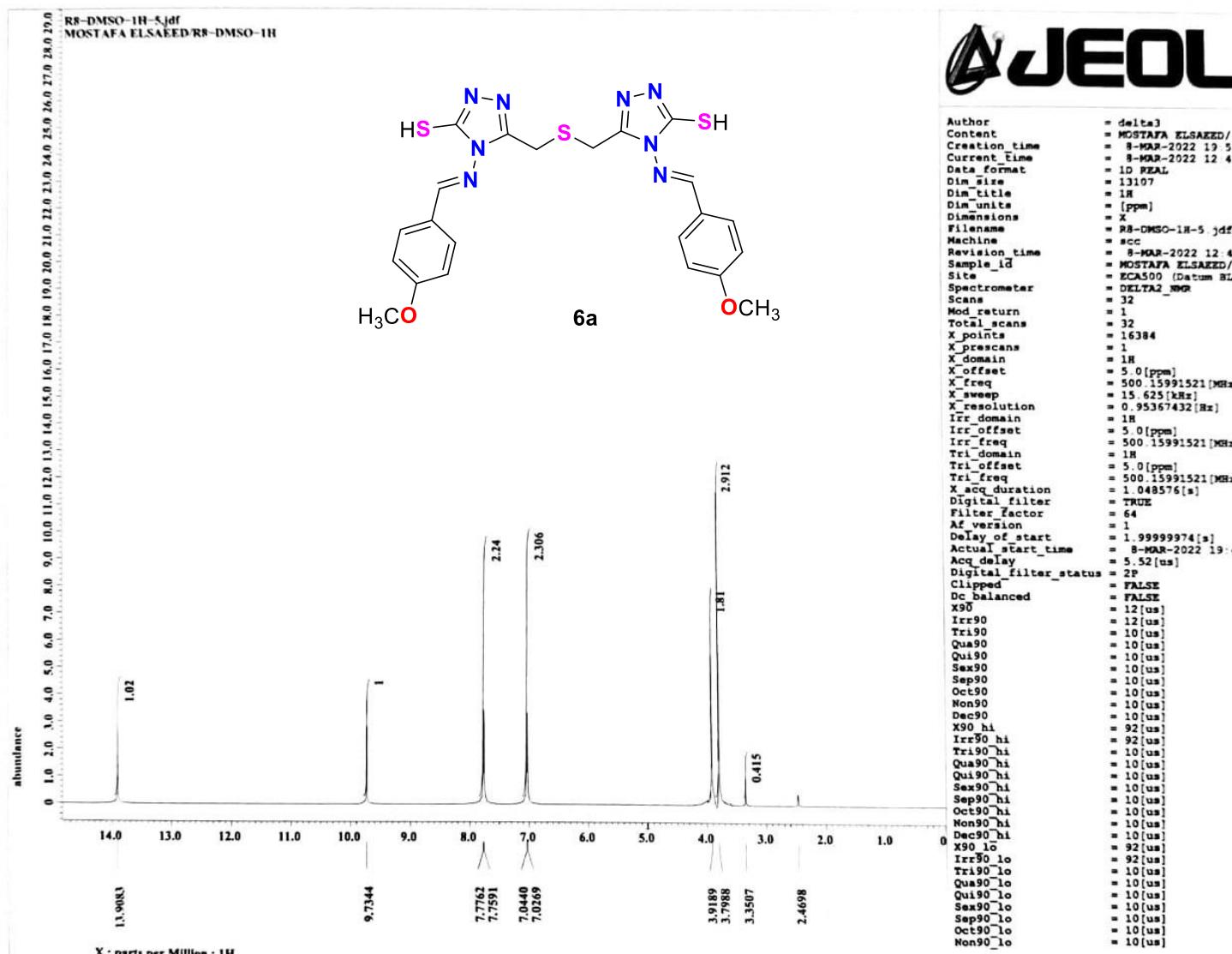
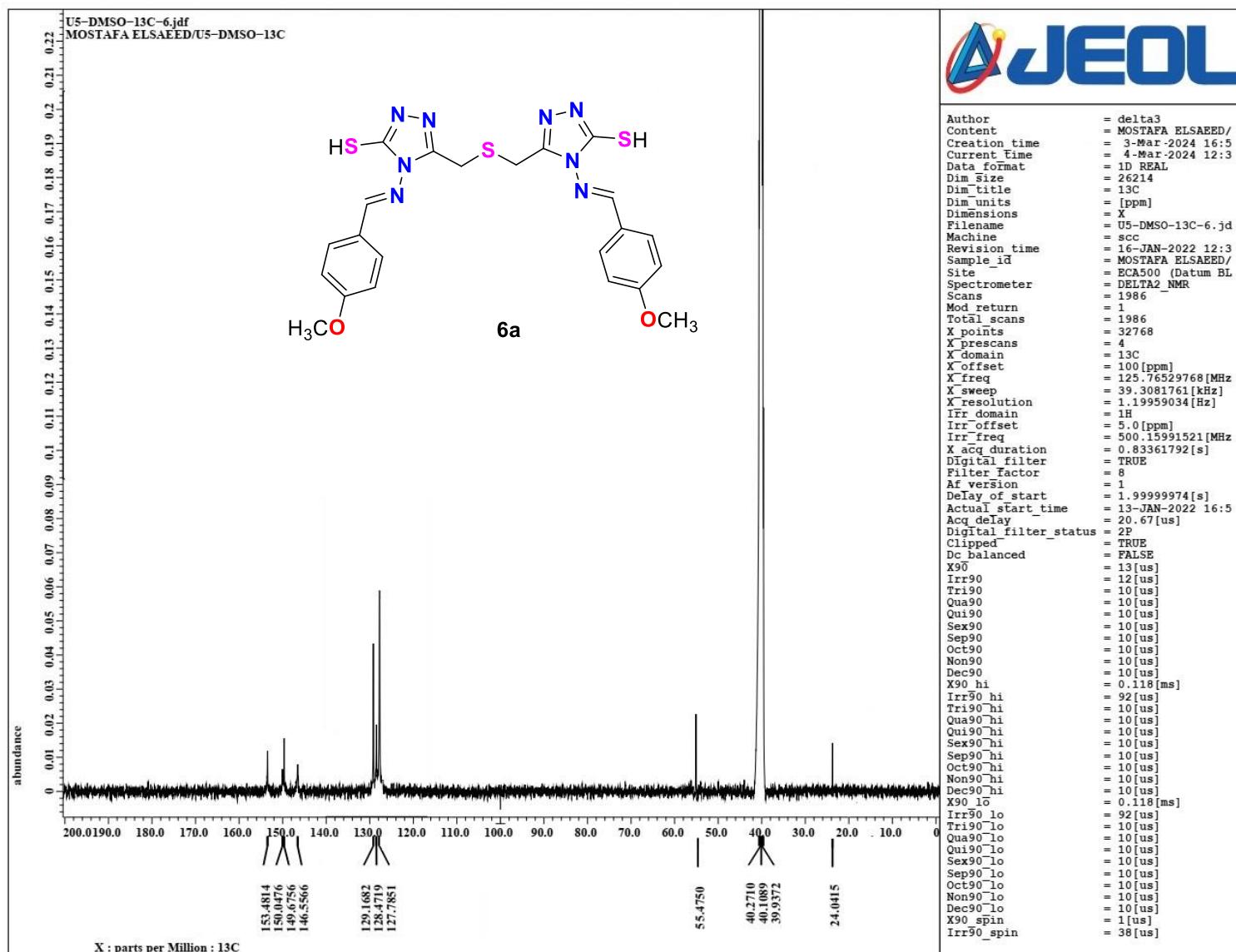
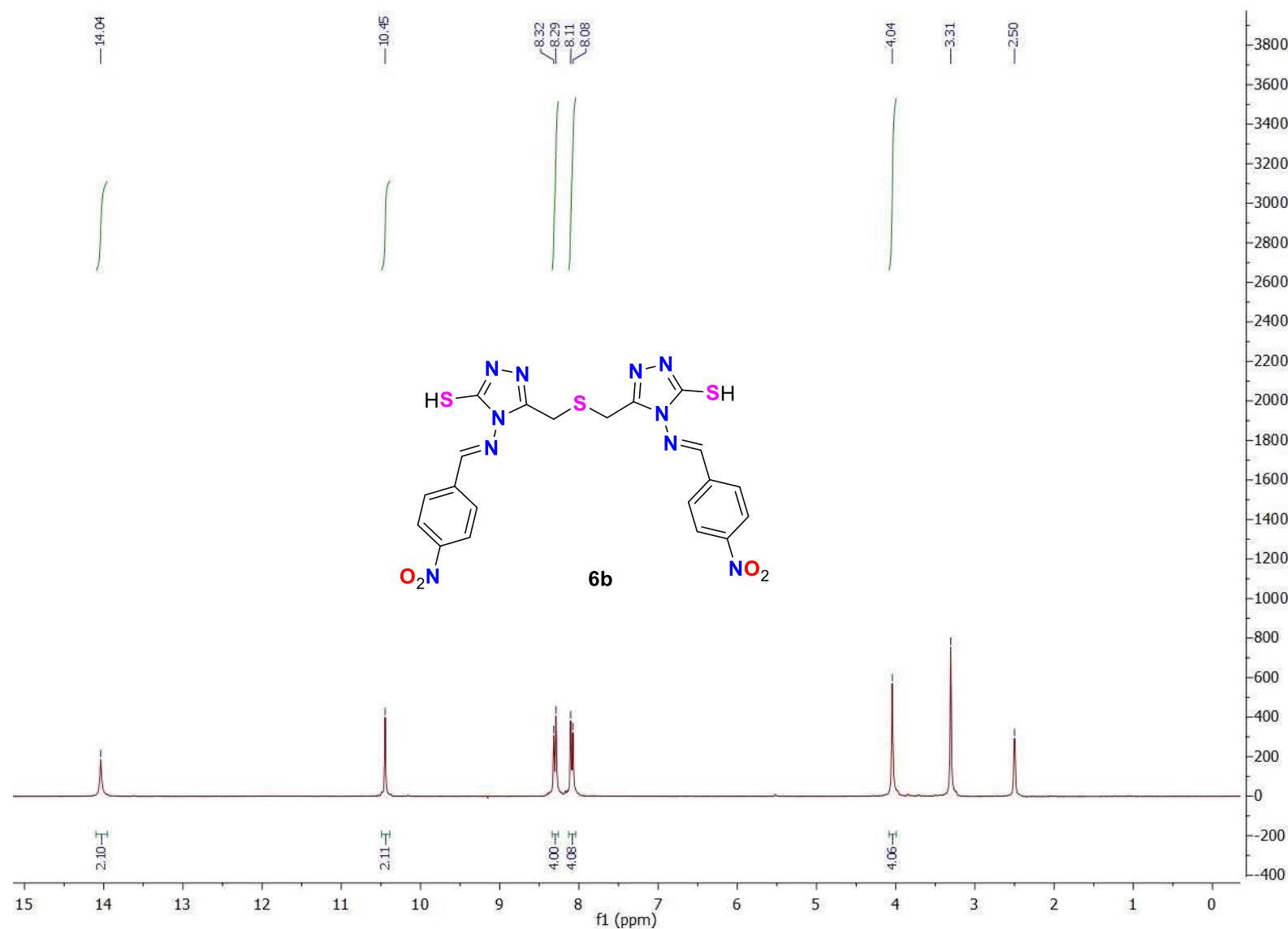
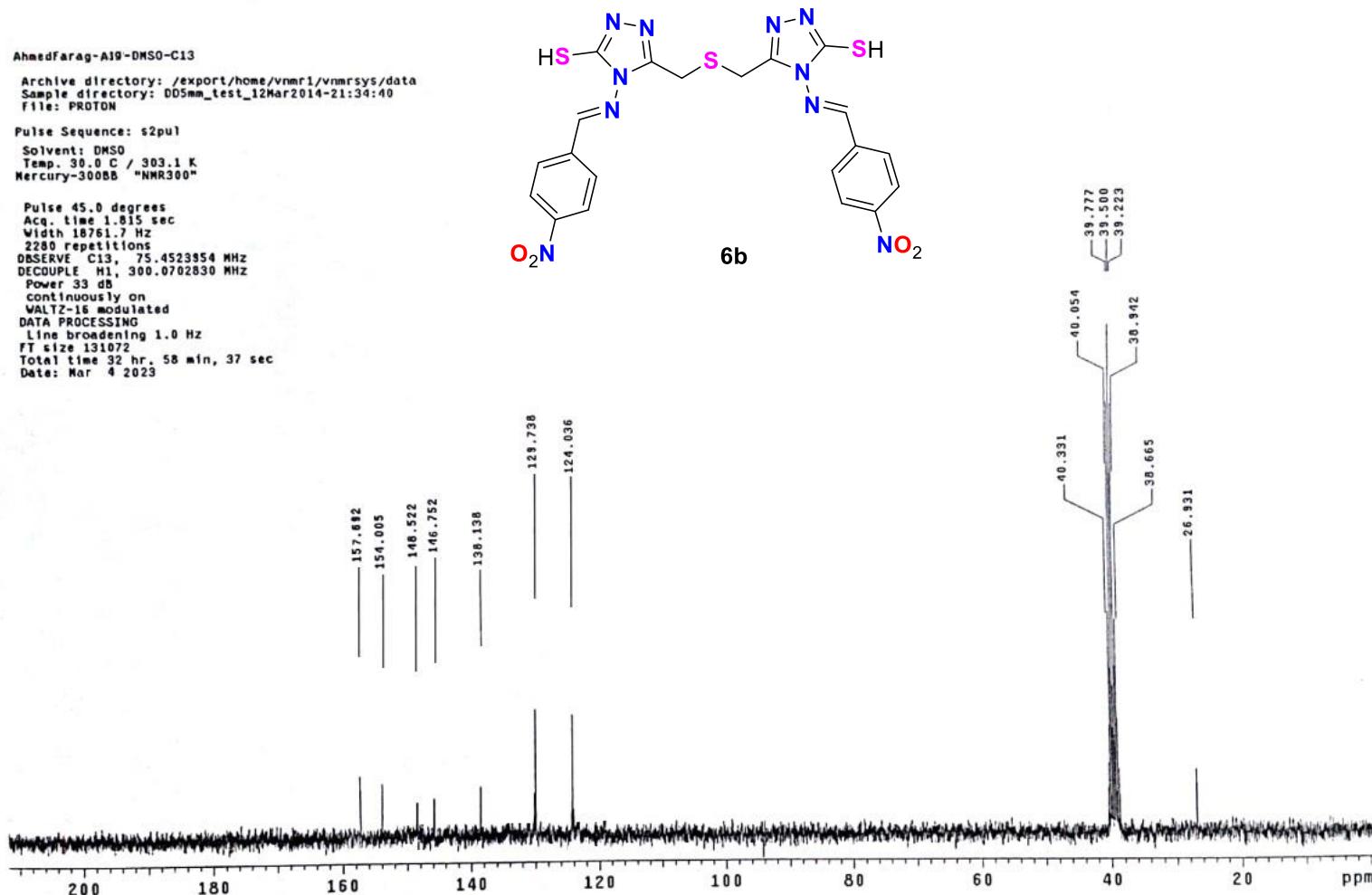


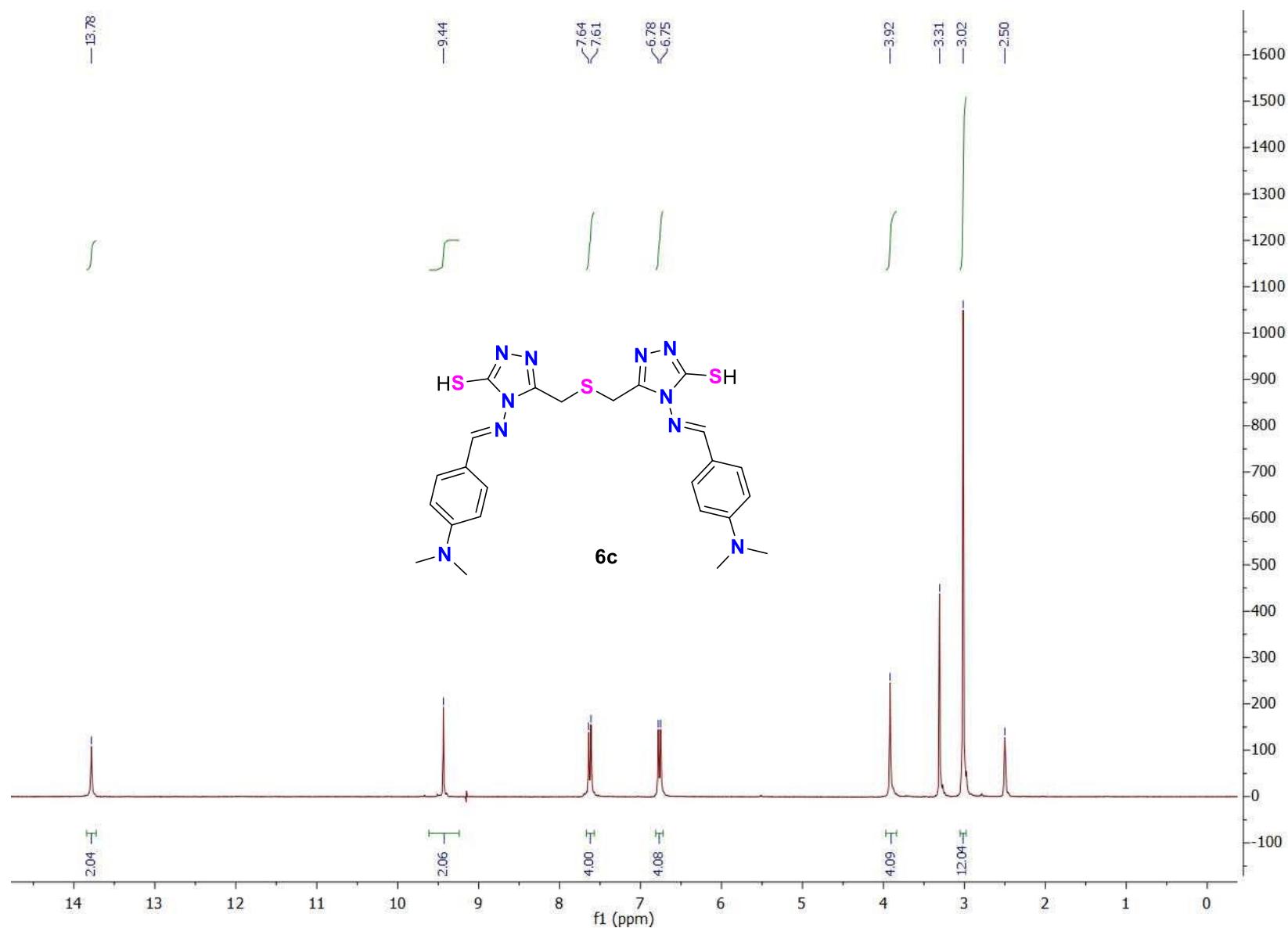
Figure S2: ¹³C NMR spectrum of compound 3

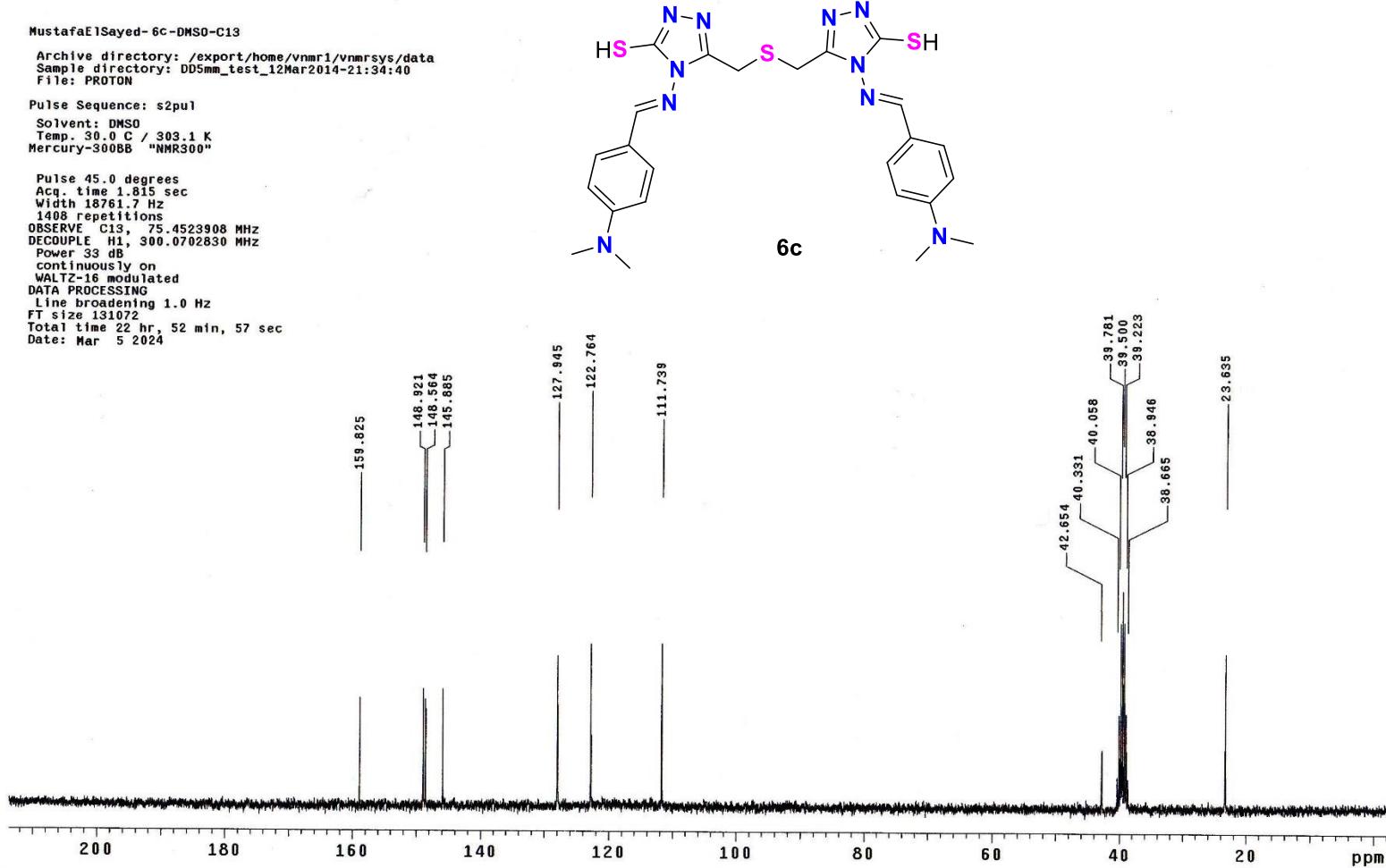
Figure S3: ^1H NMR spectrum of compound 6a

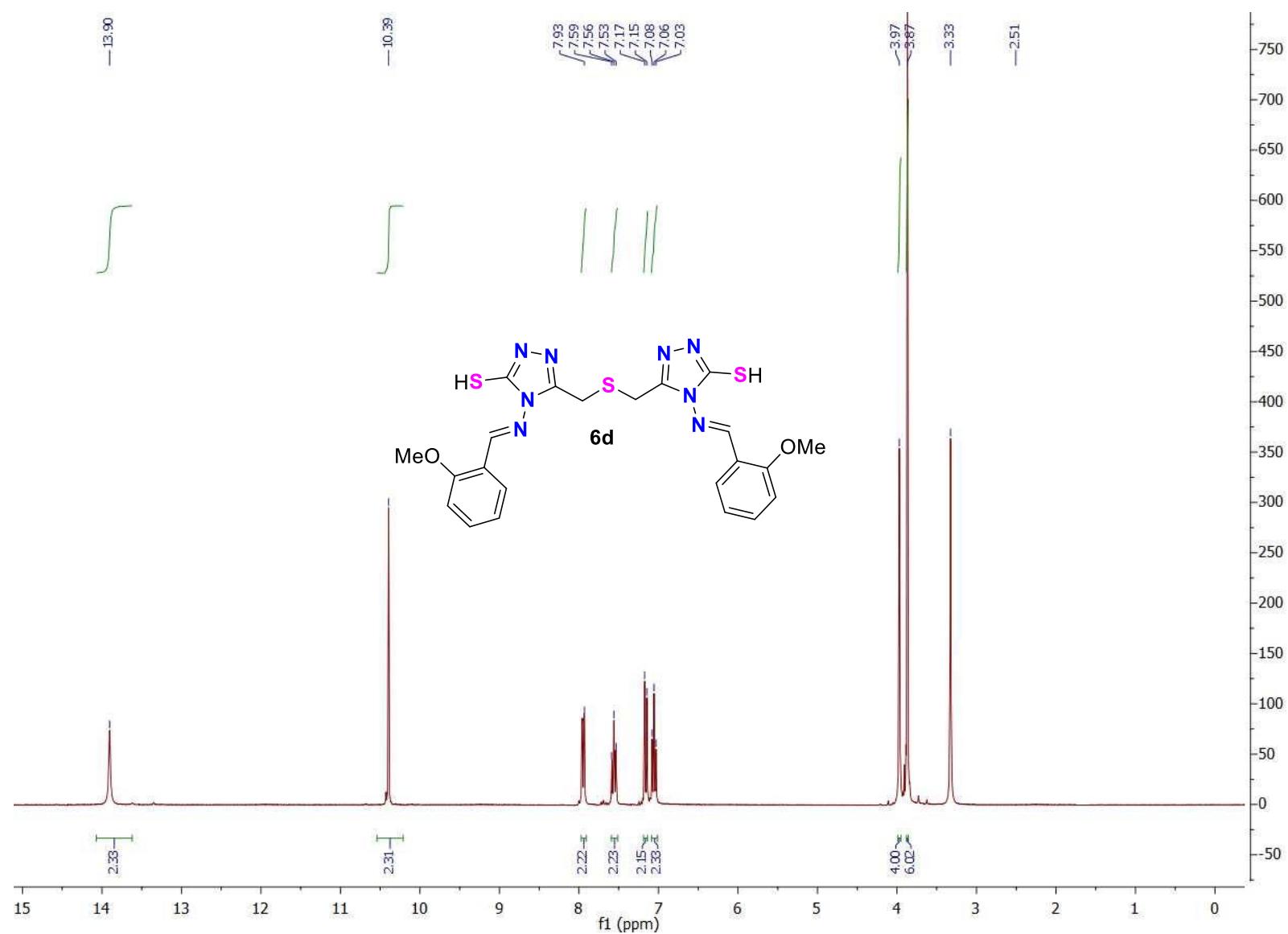
Figure S4: ^{13}C NMR spectrum of compound 6a

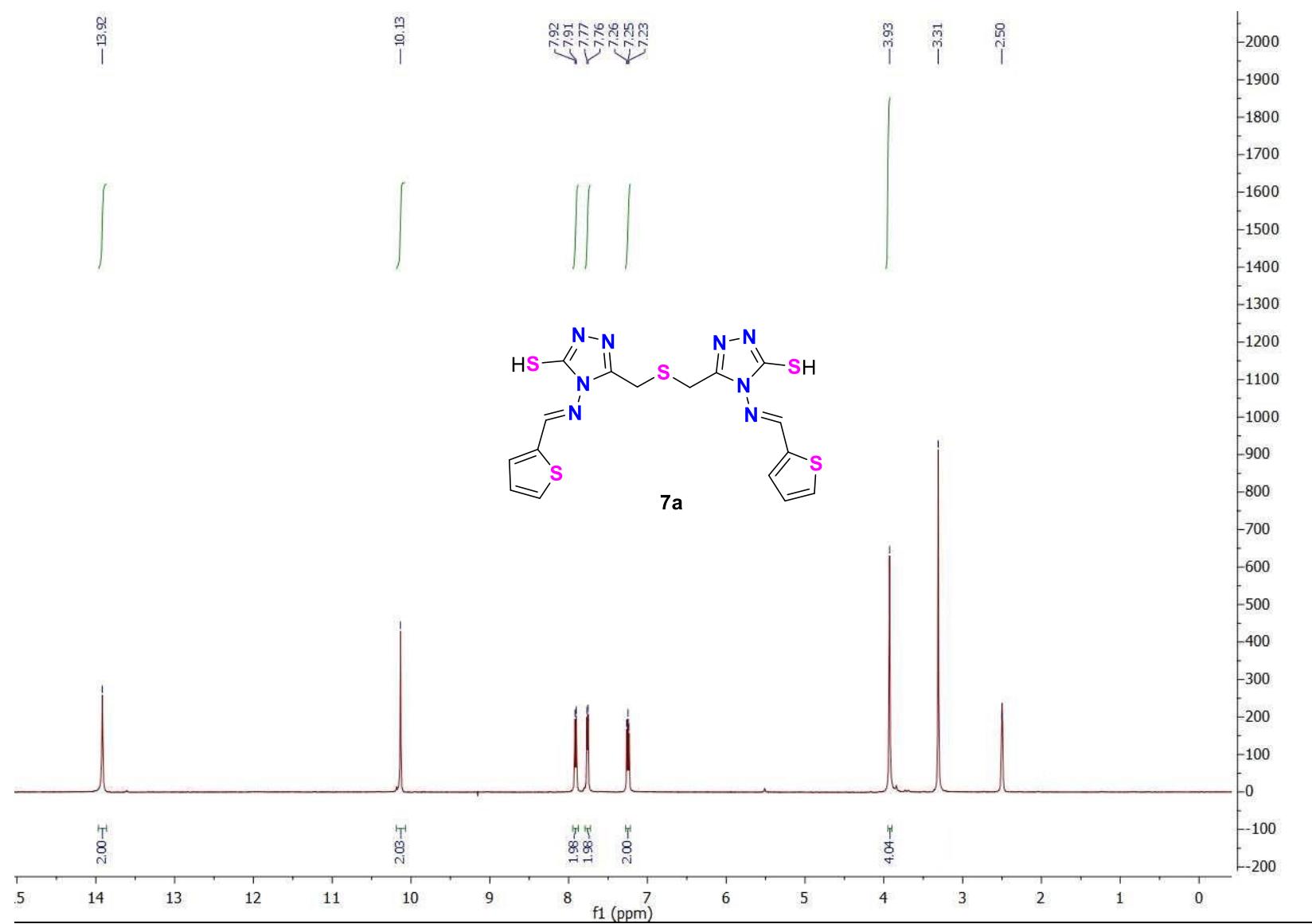
Figure S5: ^1H NMR spectrum of compound **6b**

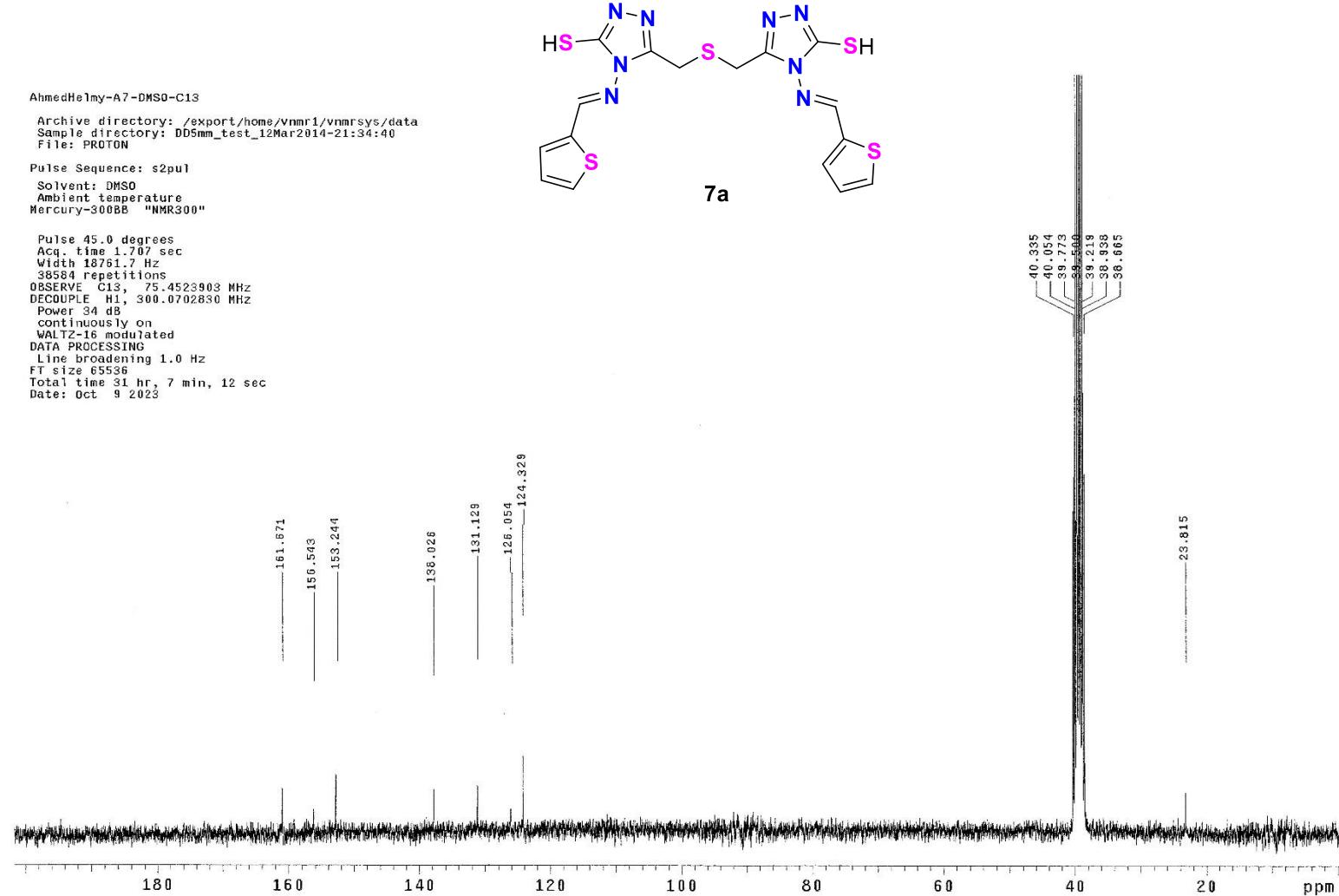
Figure S6: ^{13}C NMR spectrum of compound 6b

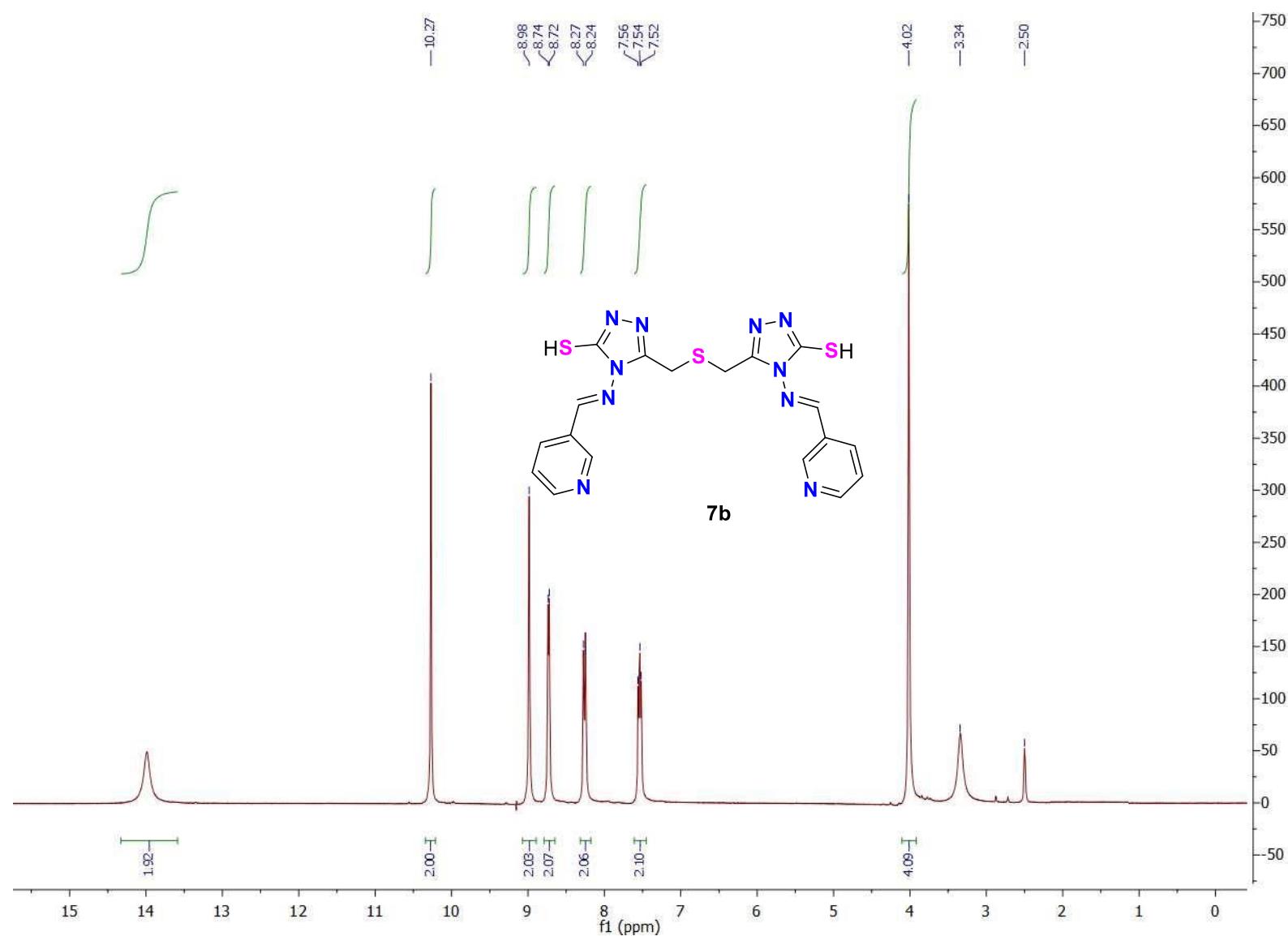
Figure S7: ¹H NMR spectrum of compound 6c

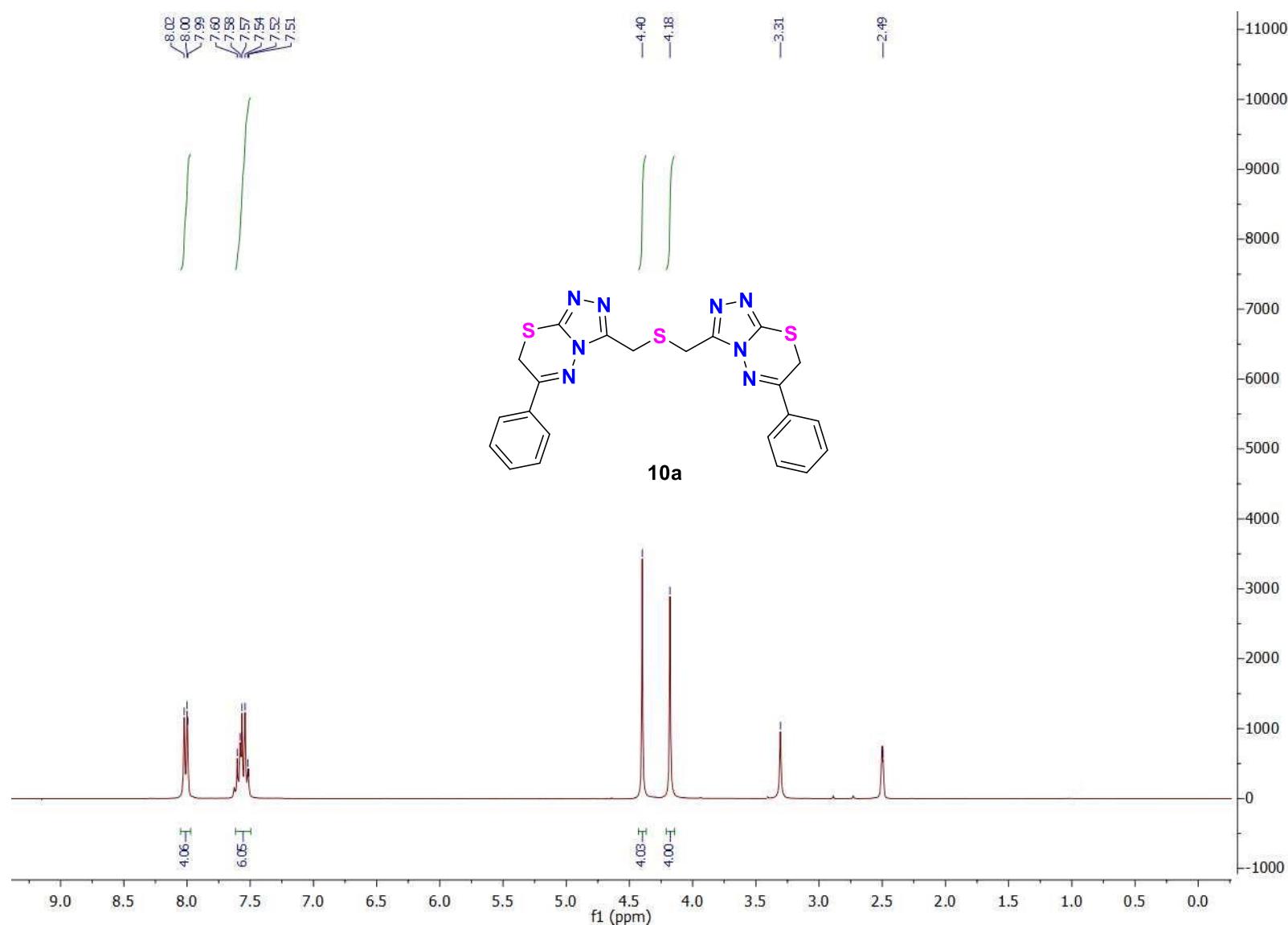
Figure S8: ^{13}C NMR spectrum of compound 6c

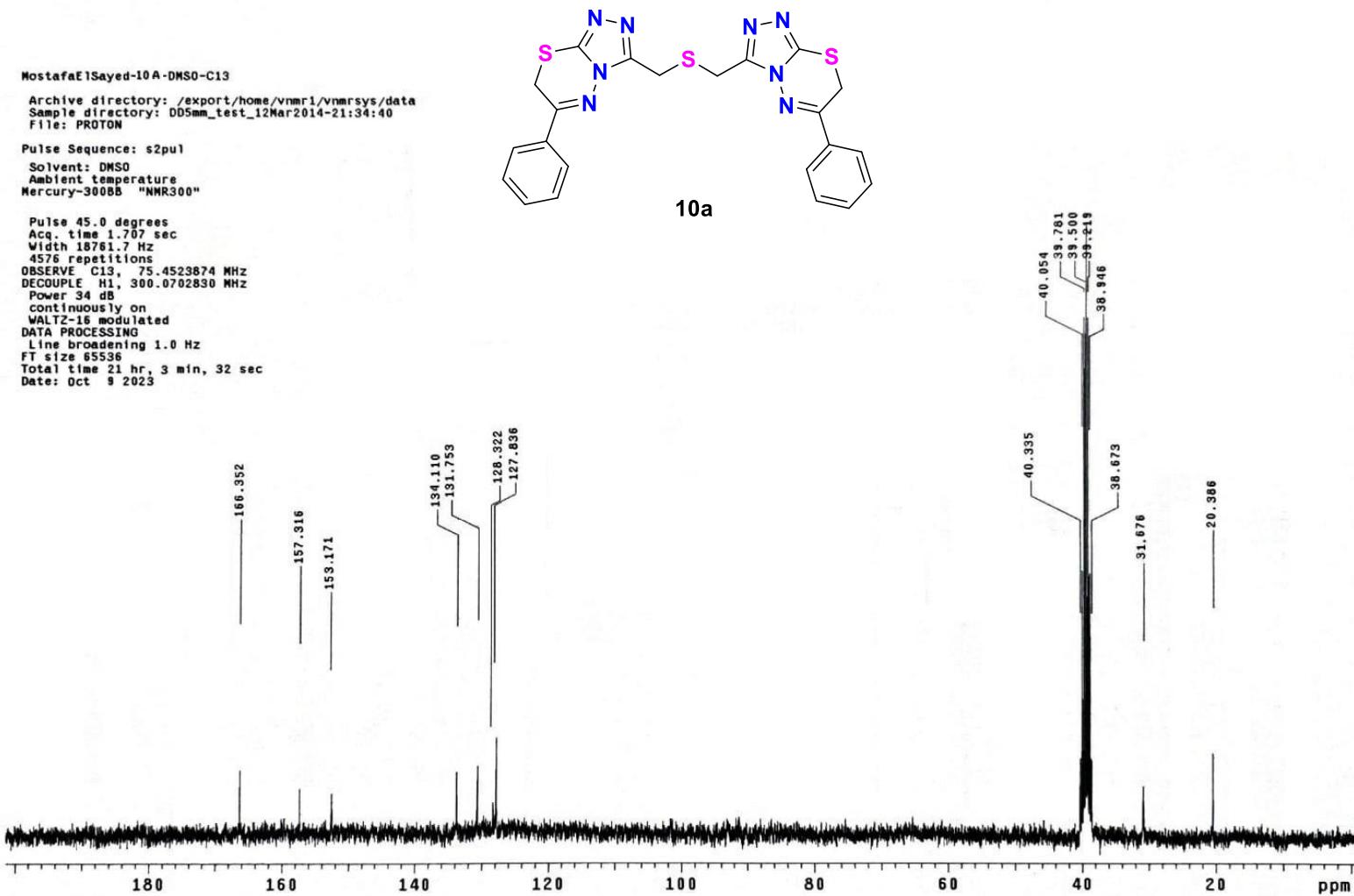
Figure S9: ¹H NMR spectrum of compound 6d

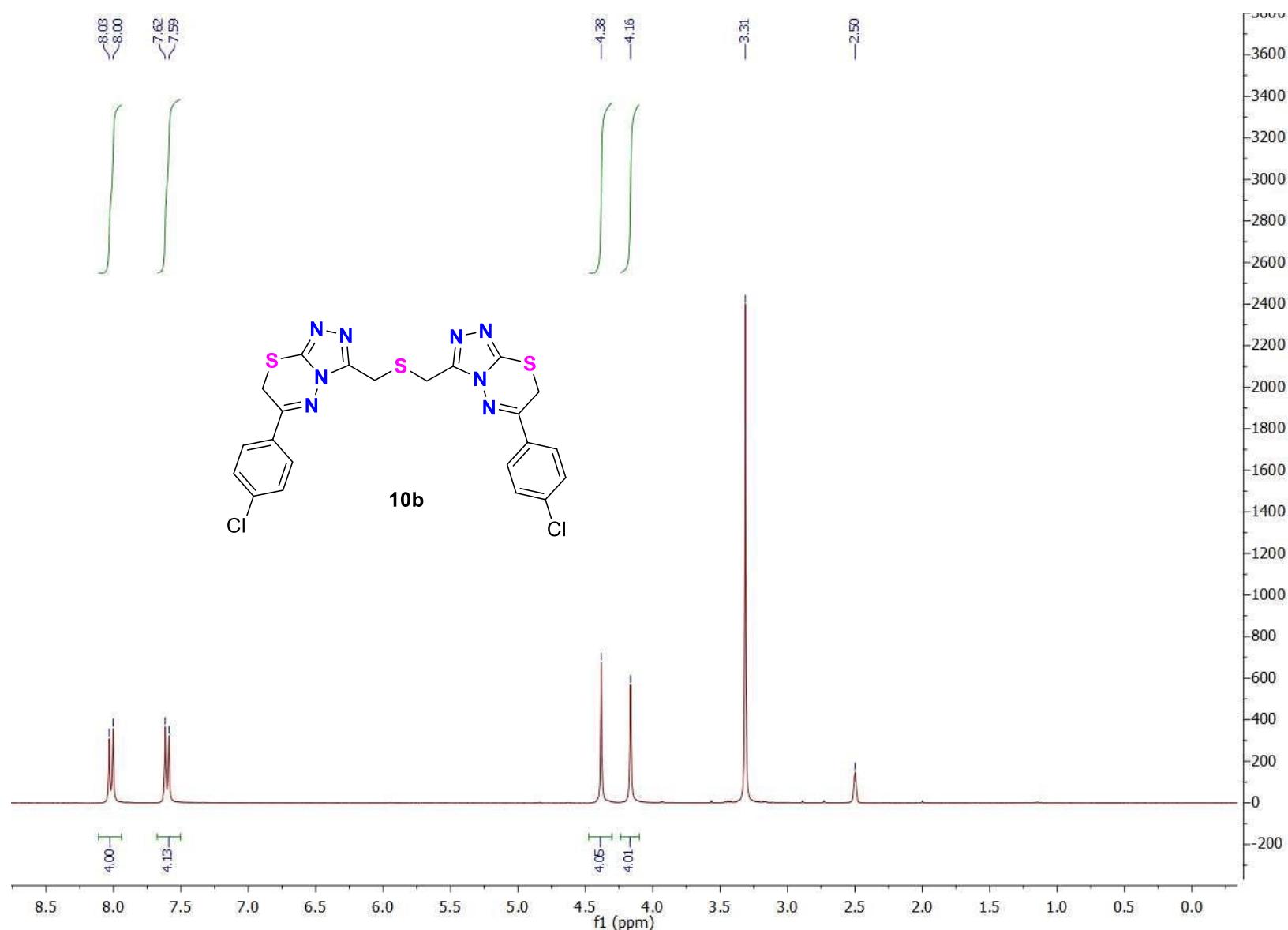
Figure S10: ^1H NMR spectrum of compound 7a

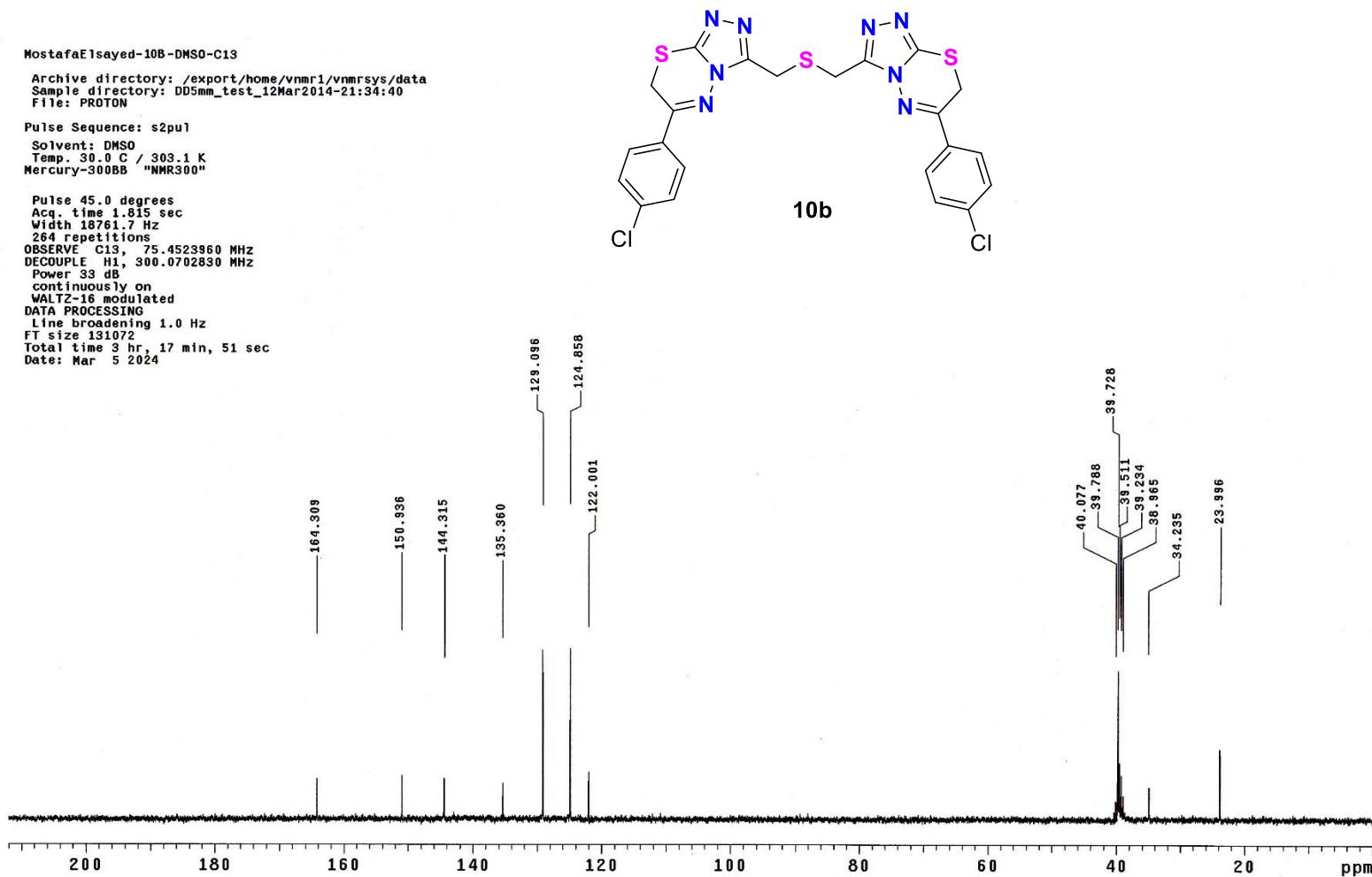
Figure S11: ^{13}C NMR spectrum of compound 7a

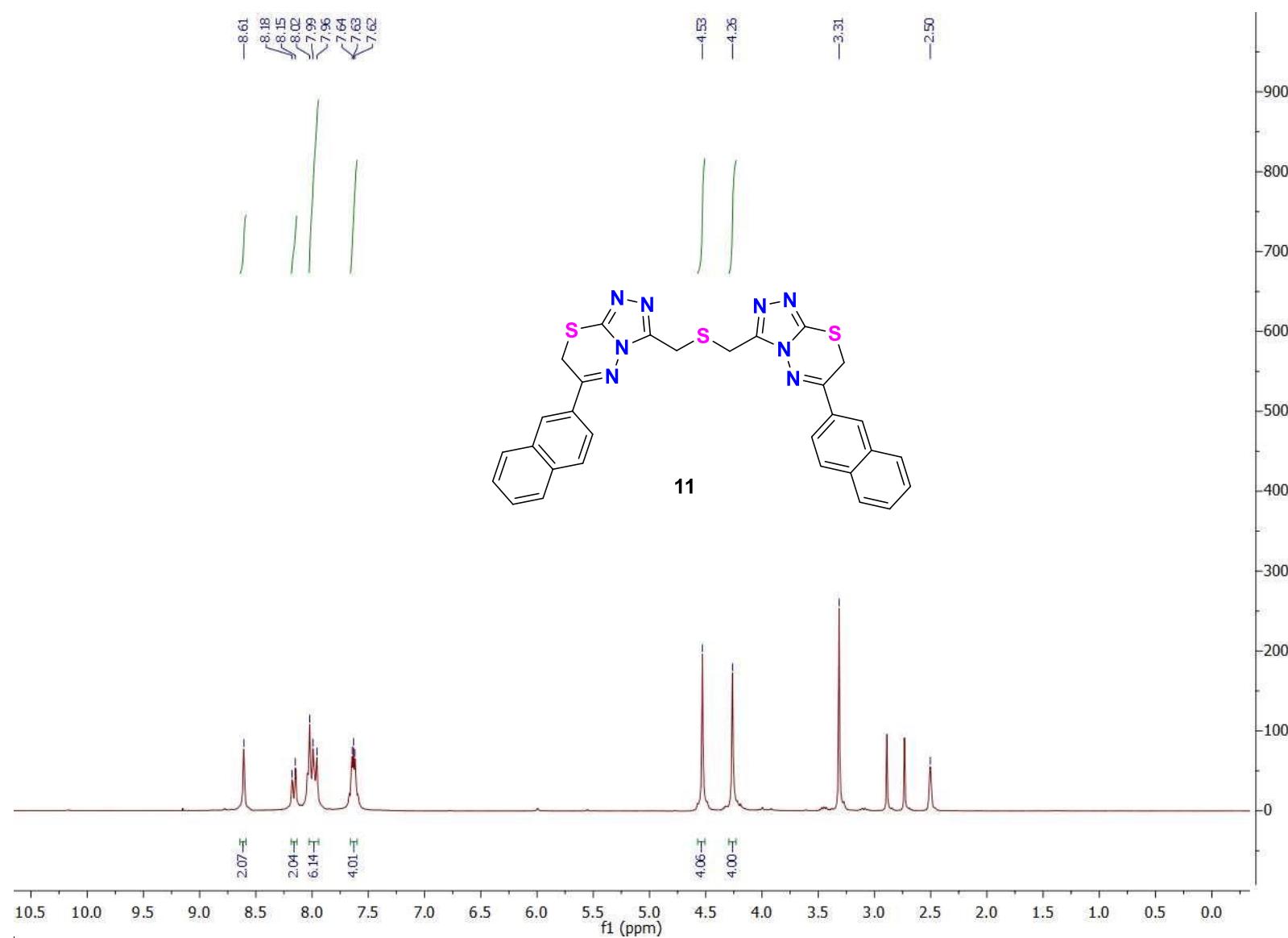
Figure S12: ^1H NMR spectrum of compound 7b

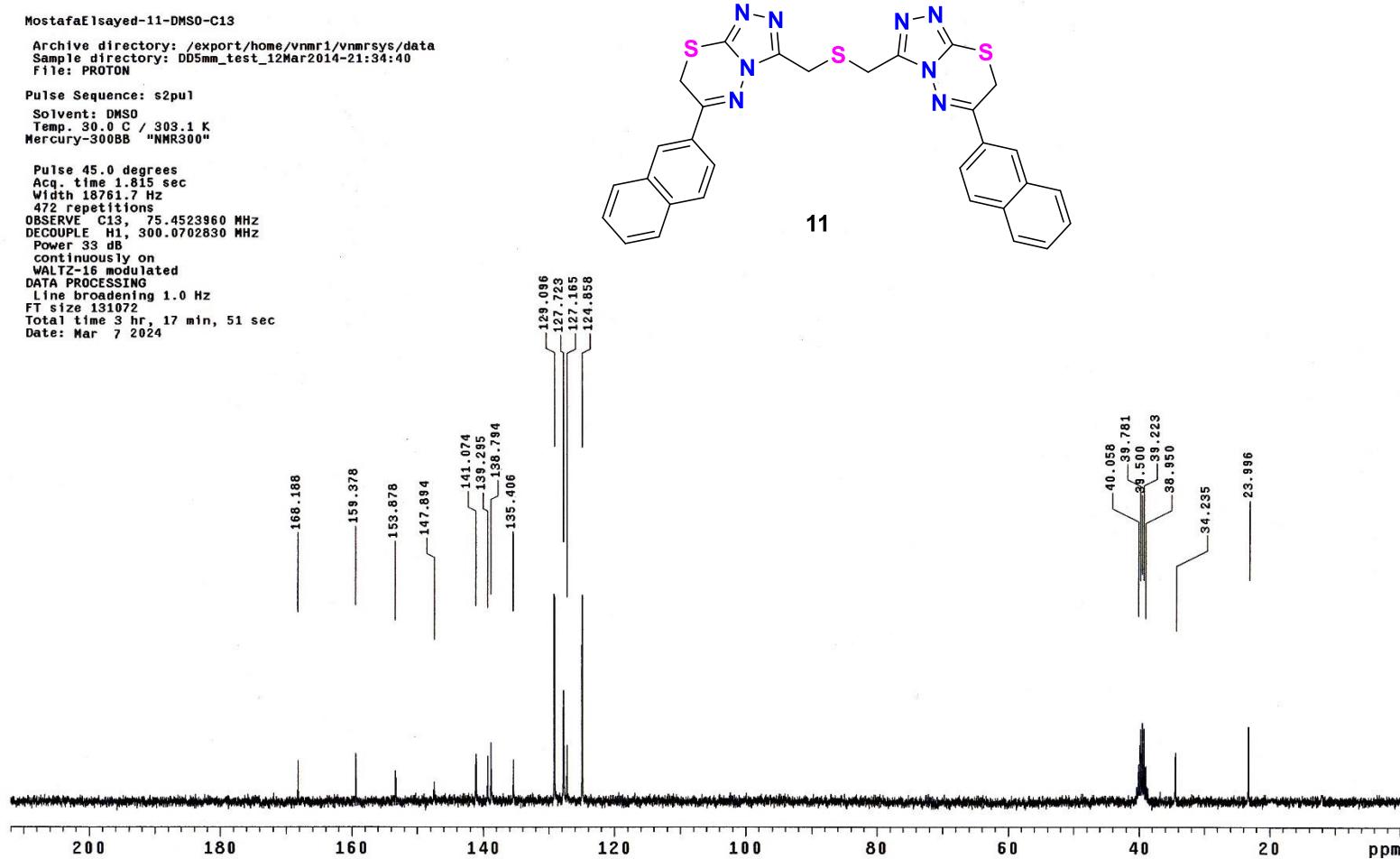
Figure S13: ^1H NMR spectrum of compound **10a**

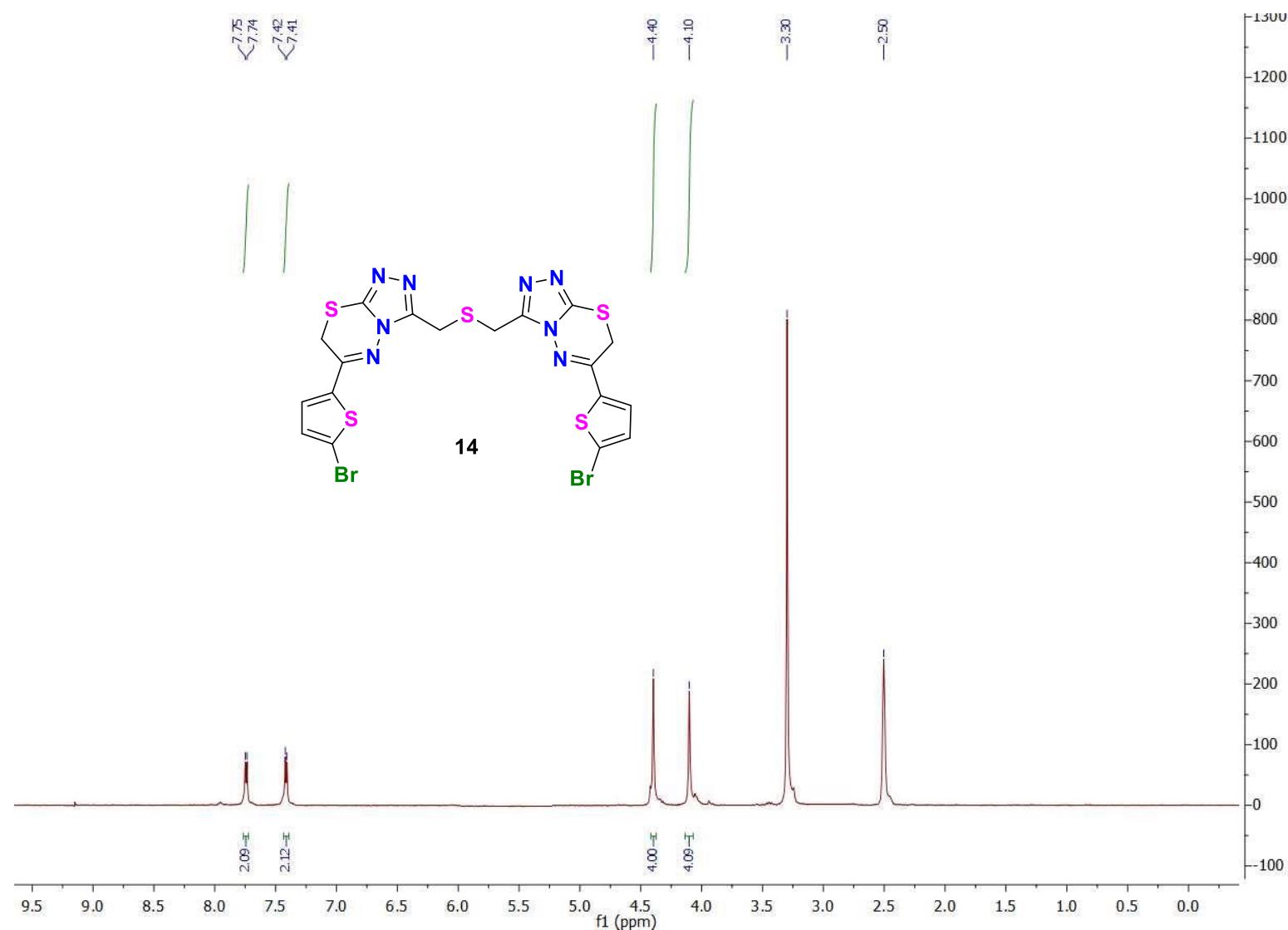
Figure S14: ¹³C NMR spectrum of compound 10a

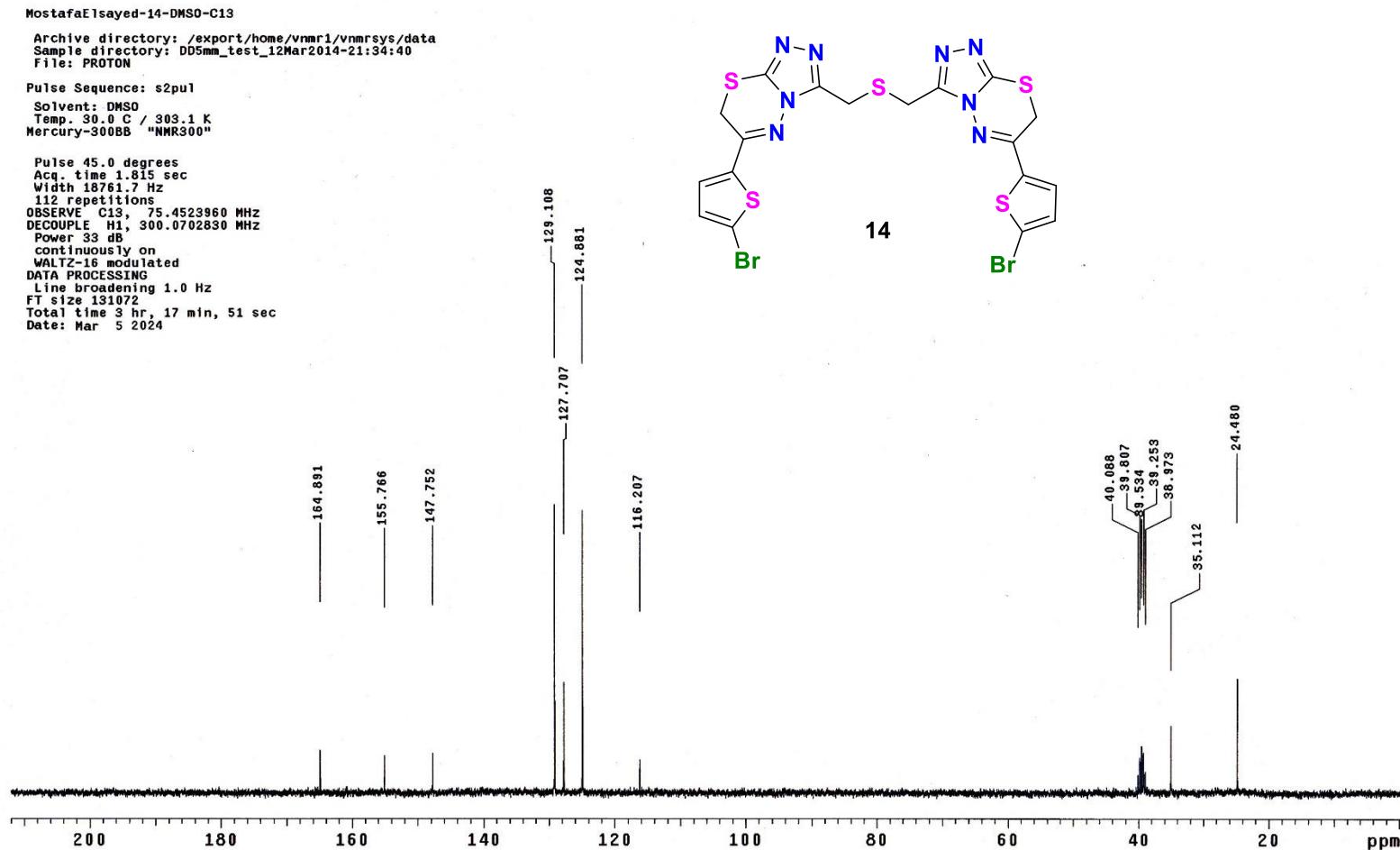
Figure S15: ^1H NMR spectrum of compound **10b**

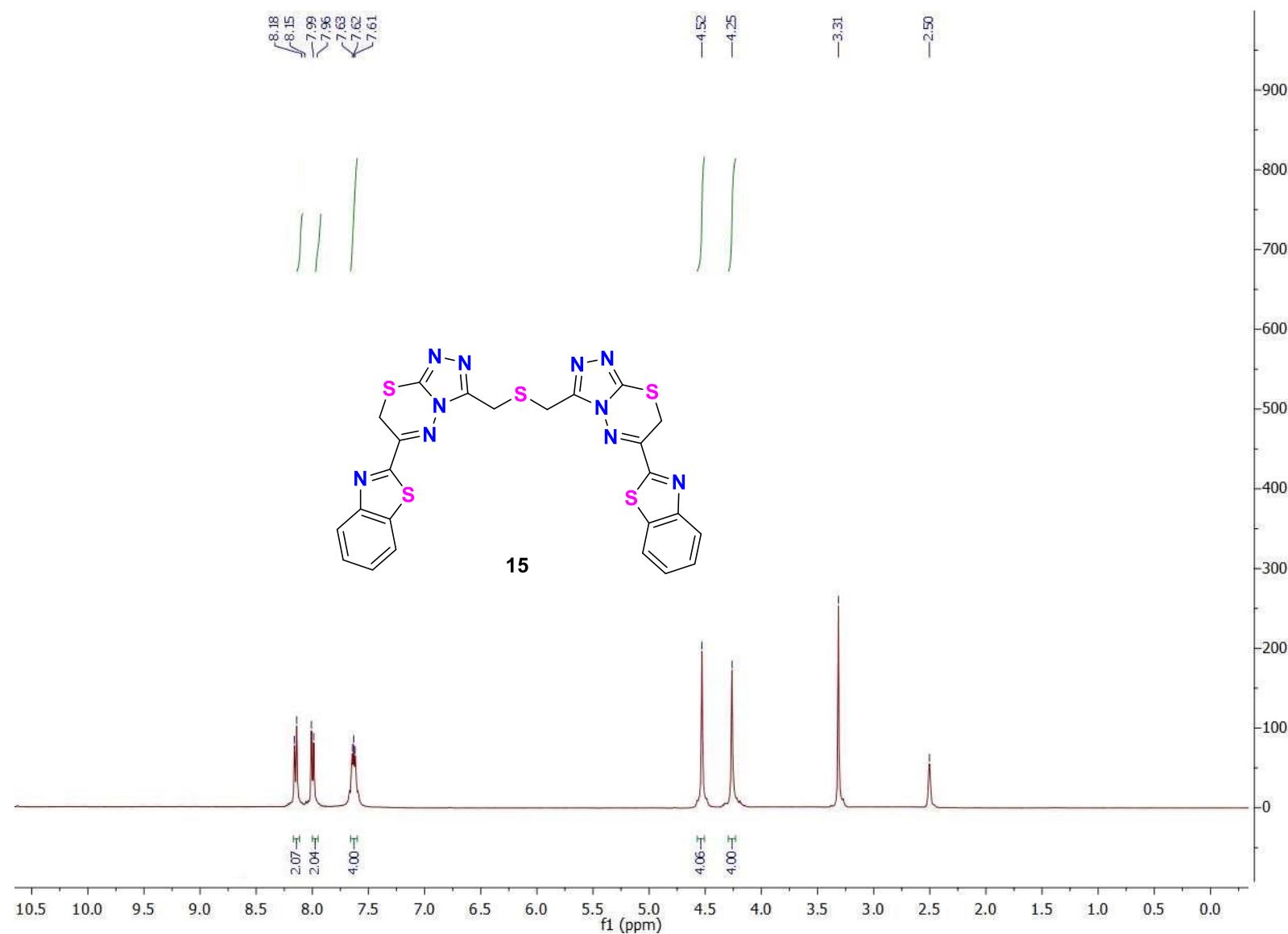
Figure S16: ^{13}C NMR spectrum of compound 10b

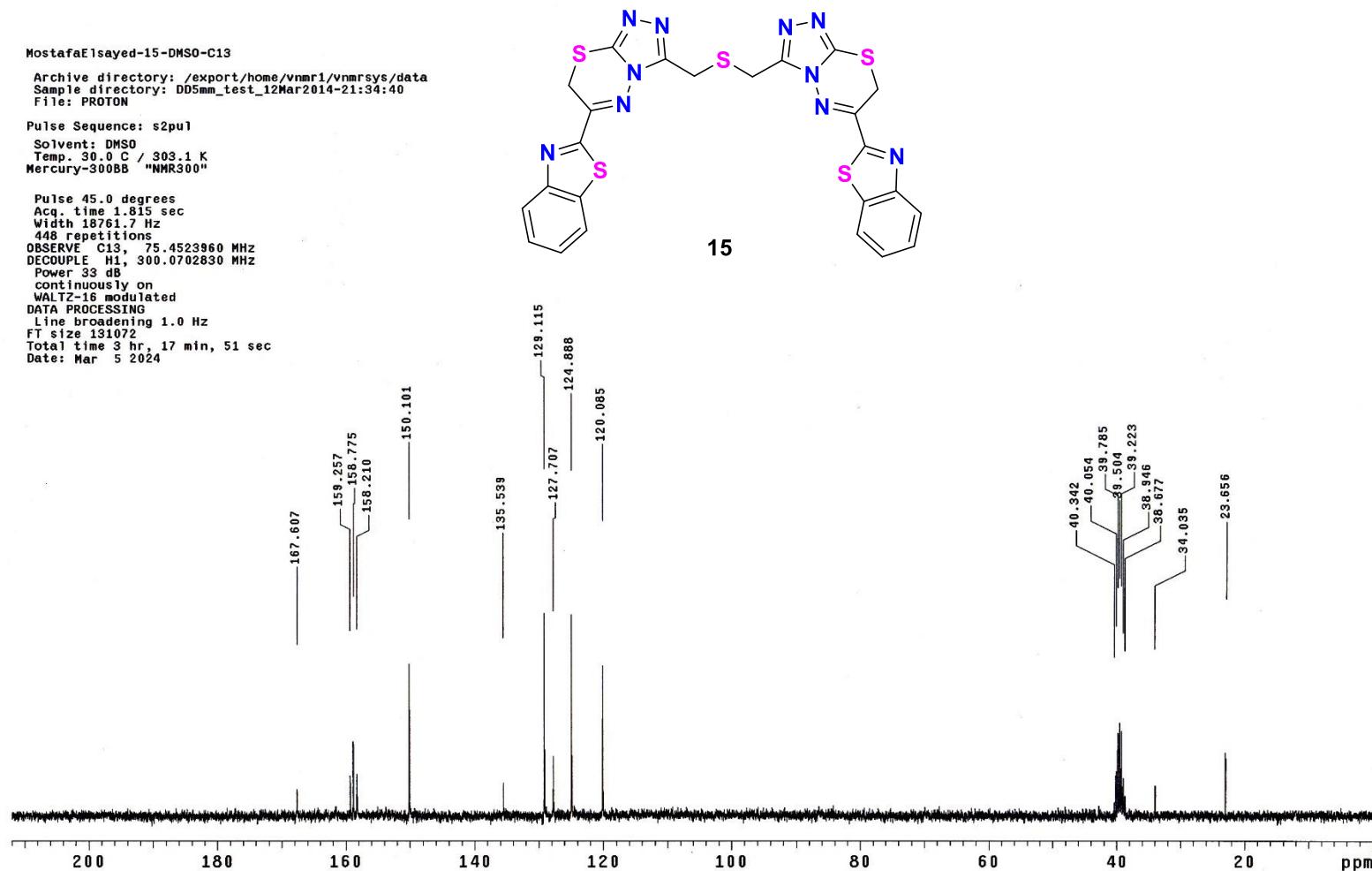
Figure S17: ¹H NMR spectrum of compound 11

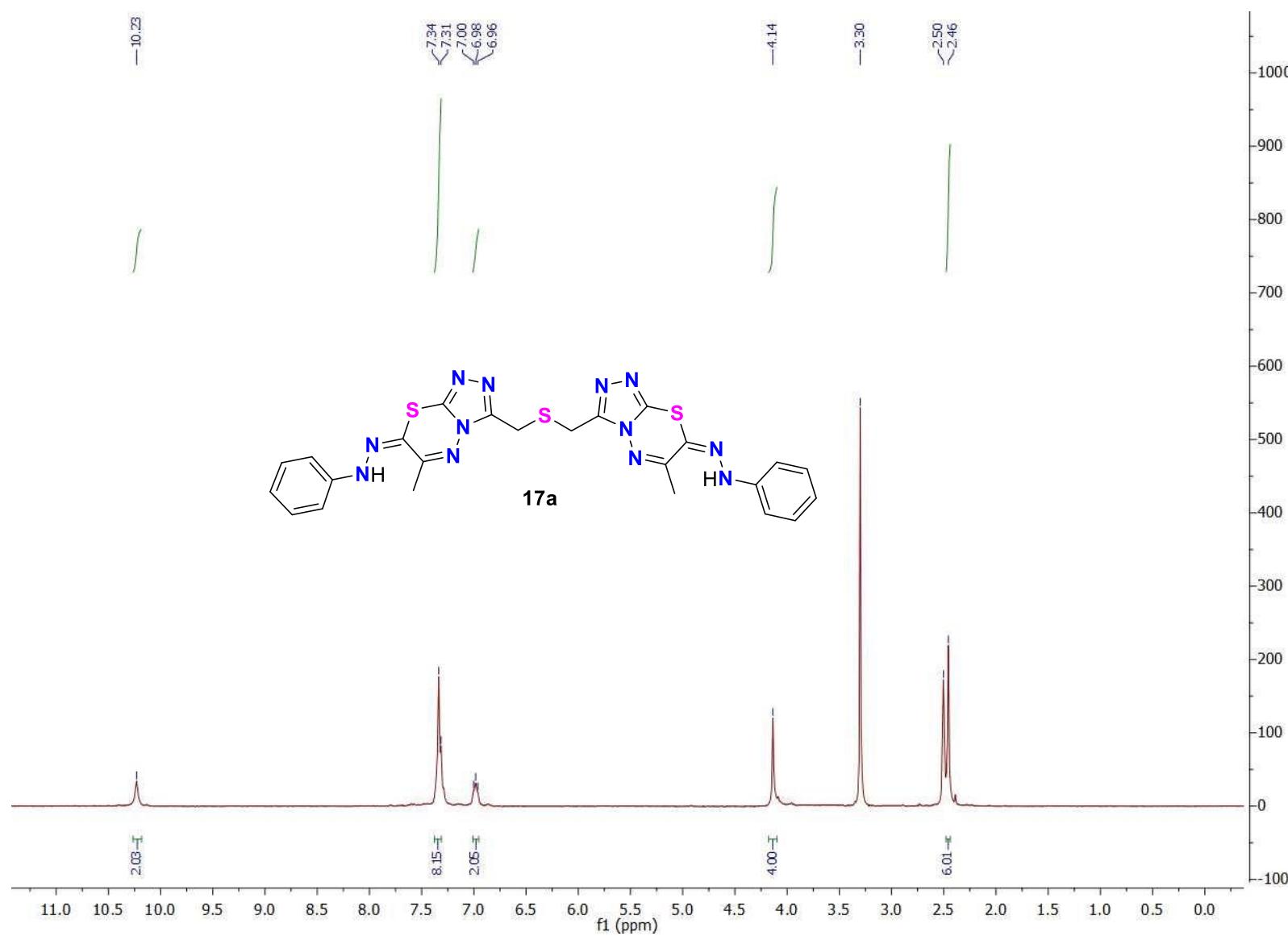
Figure S18: ¹³C NMR spectrum of compound 11

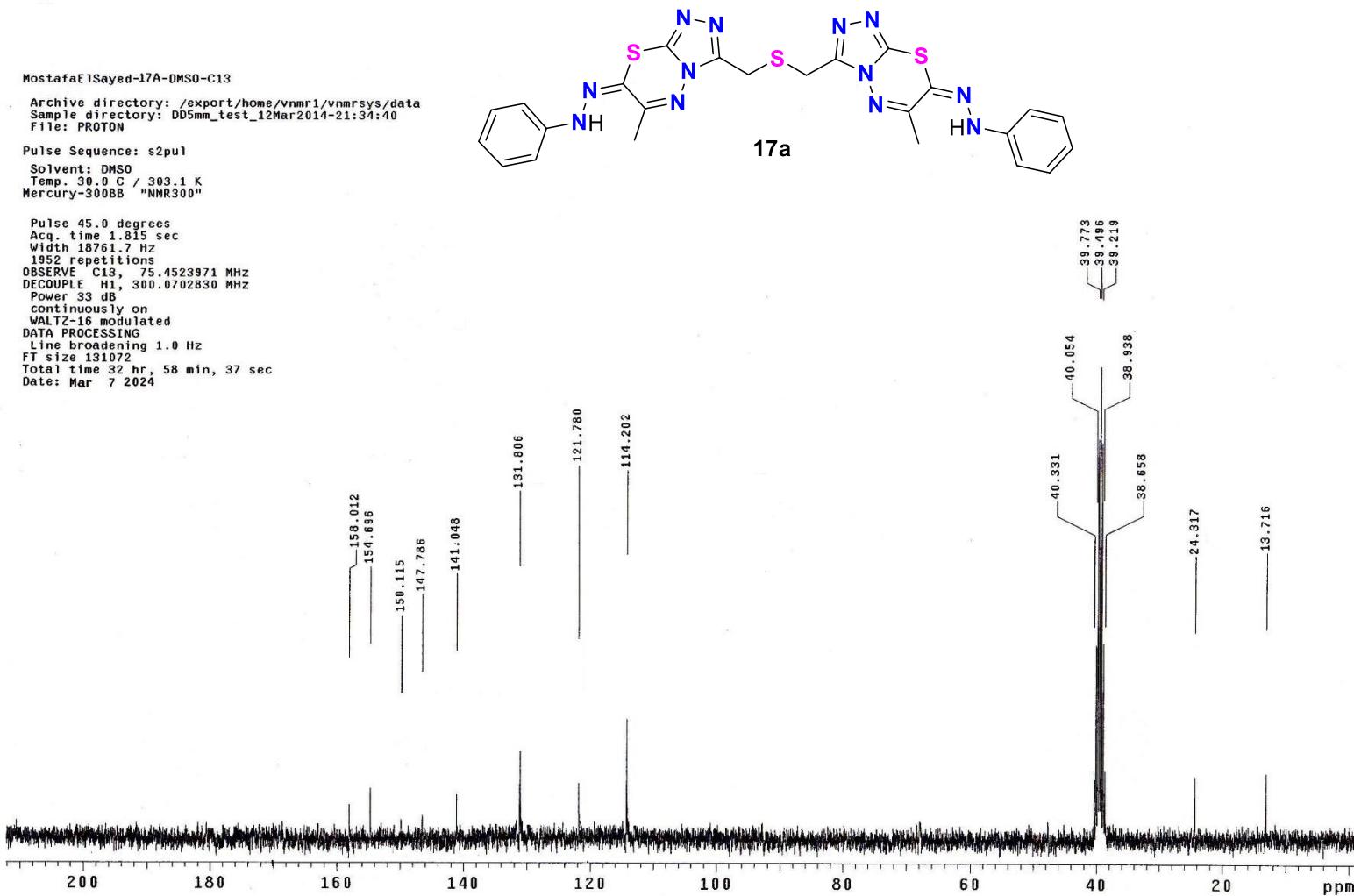
Figure S19: ^1H NMR spectrum of compound 14

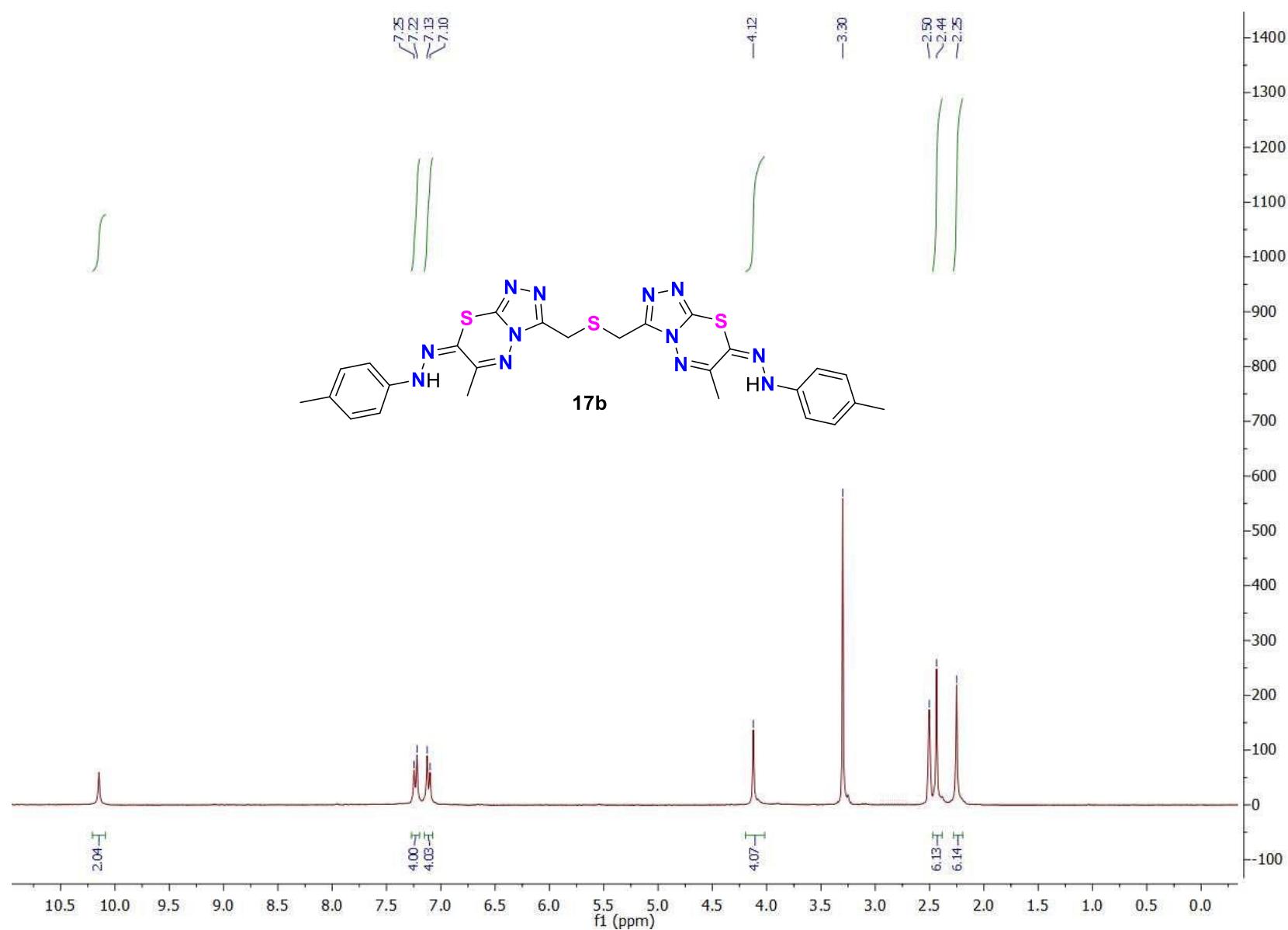
Figure S20: ^{13}C NMR spectrum of compound 14

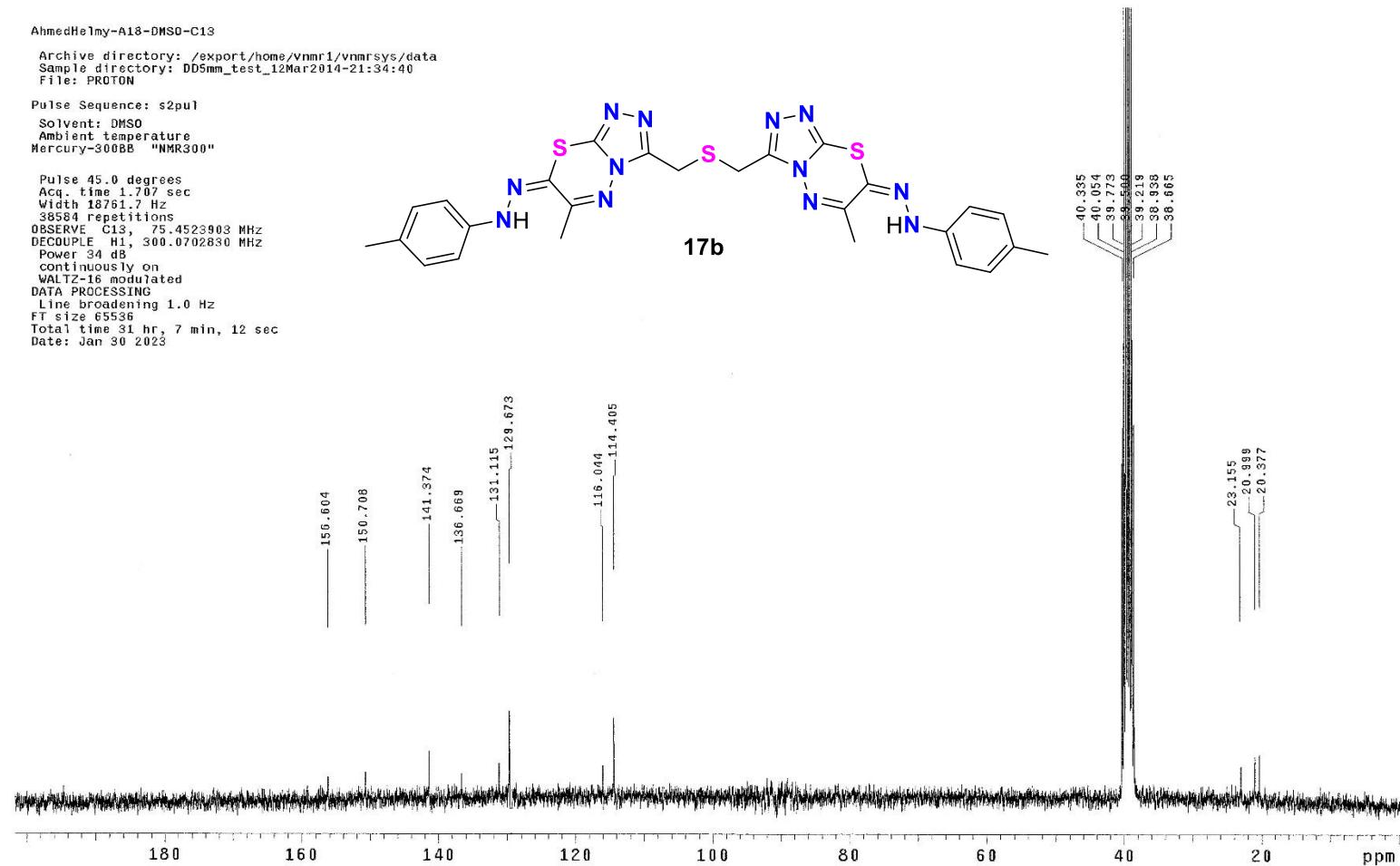
Figure S21: ^1H NMR spectrum of compound 15

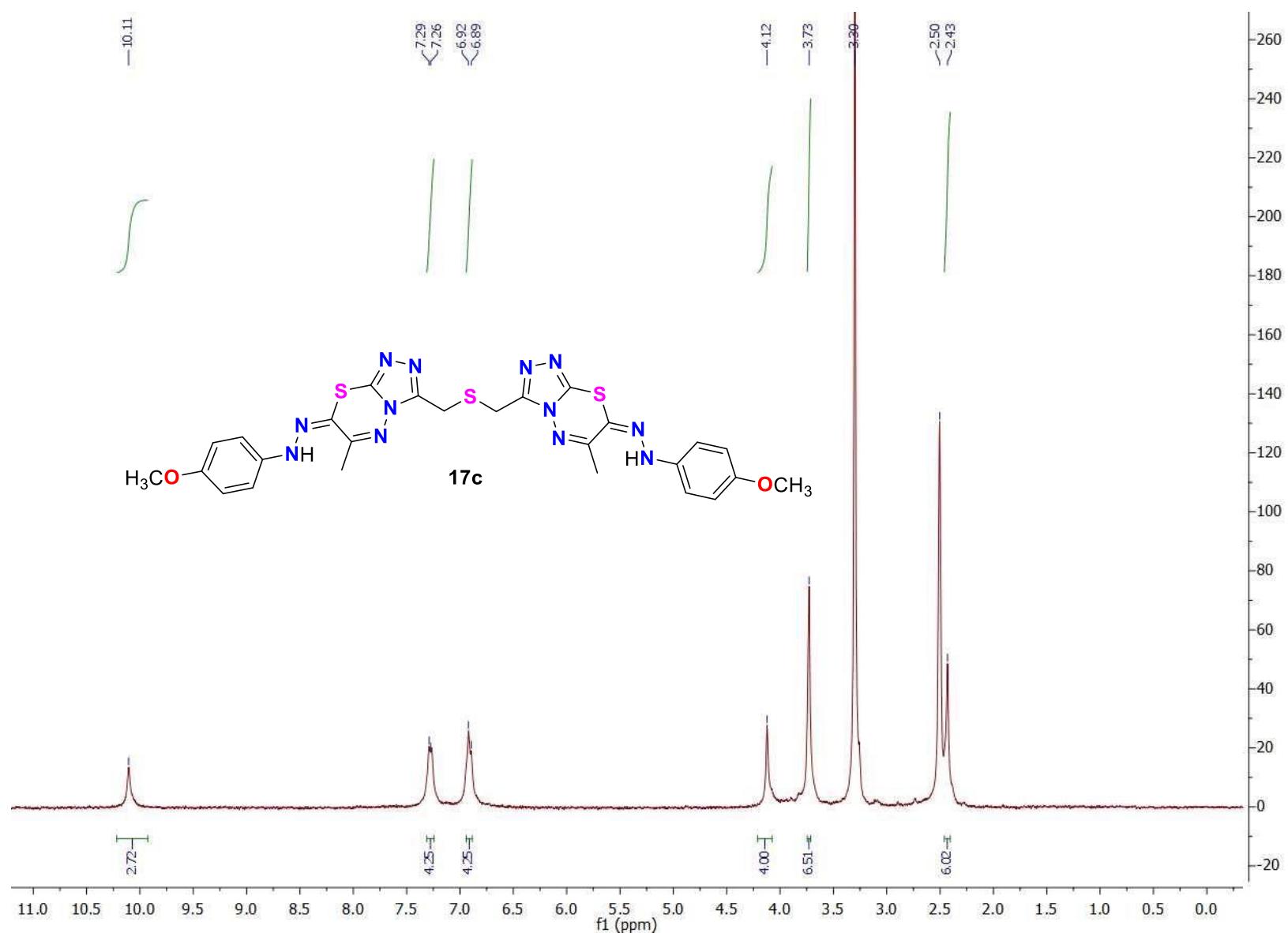
Figure S22: ¹³C NMR spectrum of compound 15

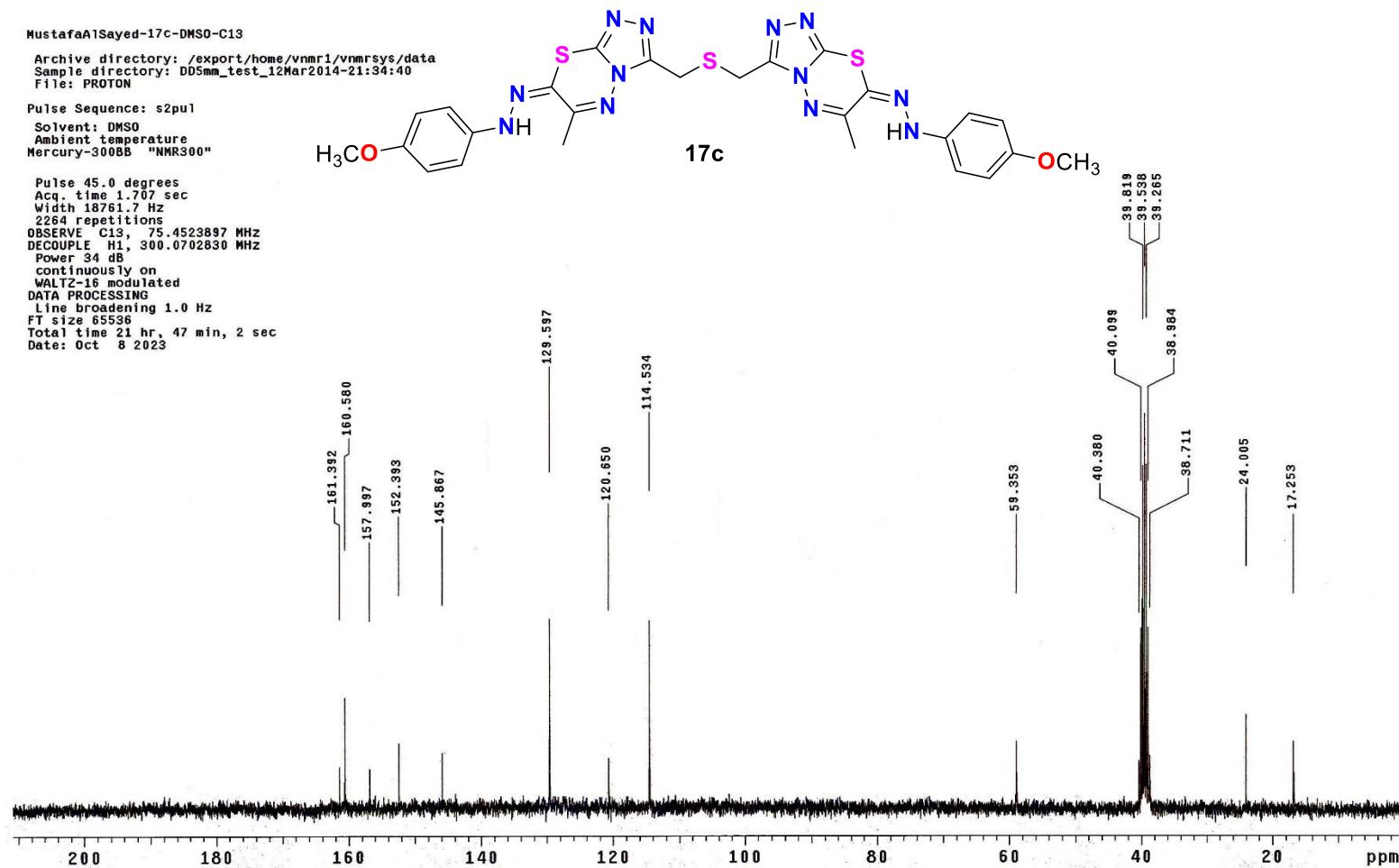
Figure S23: ¹H NMR spectrum of compound 17a

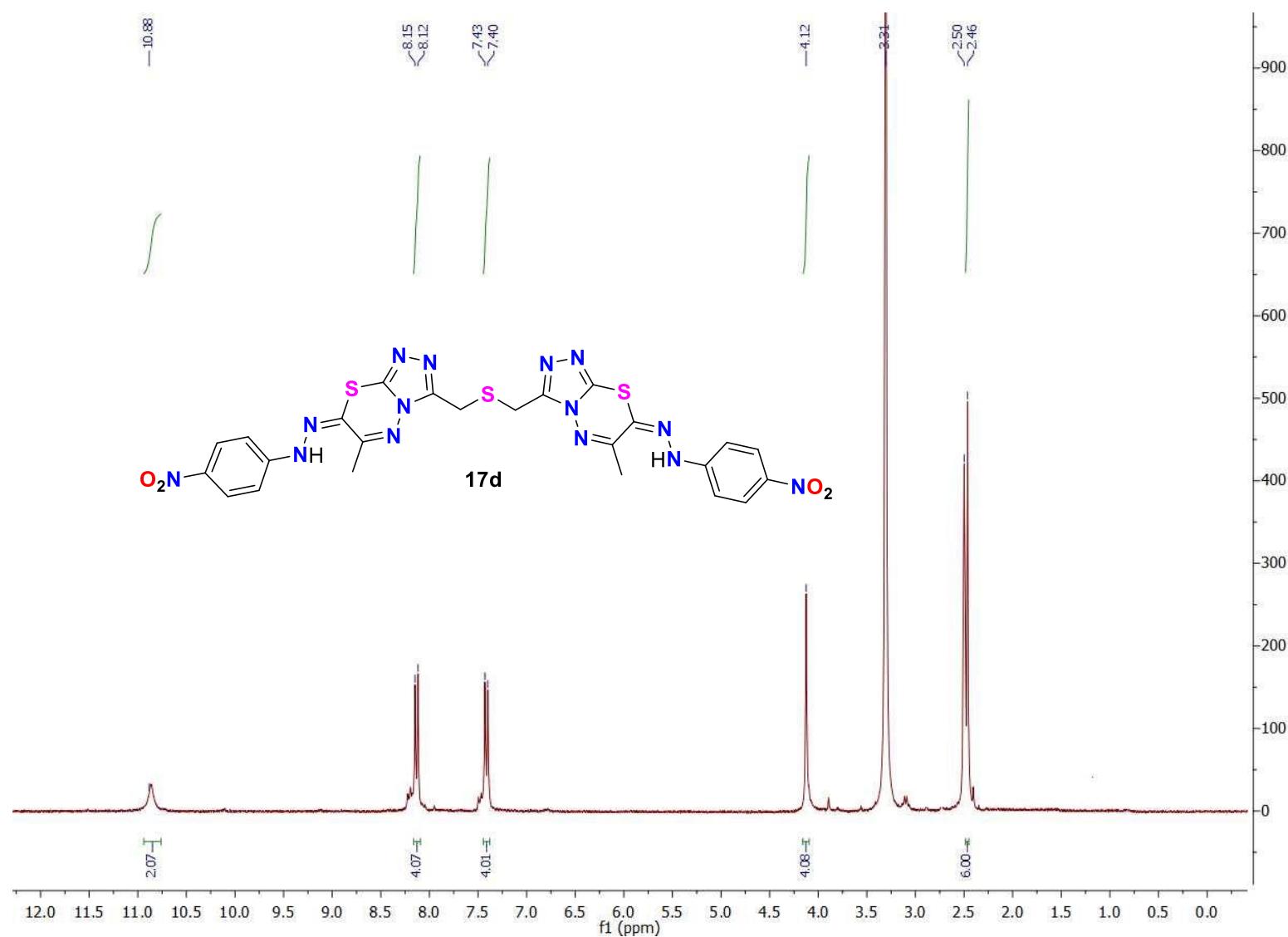
Figure S24: ¹³C NMR spectrum of compound 17a

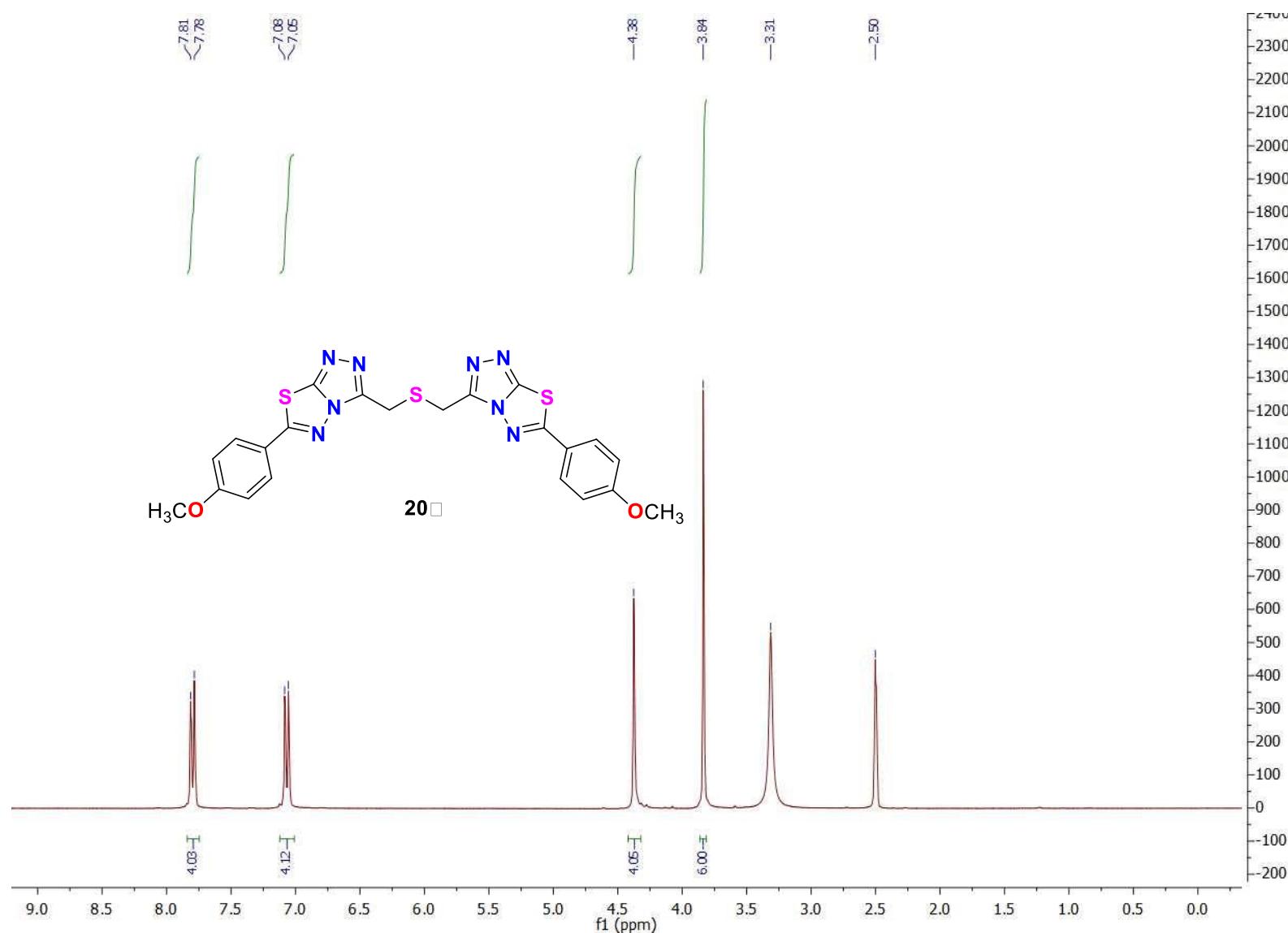
Figure S25: ^1H NMR spectrum of compound **17b**

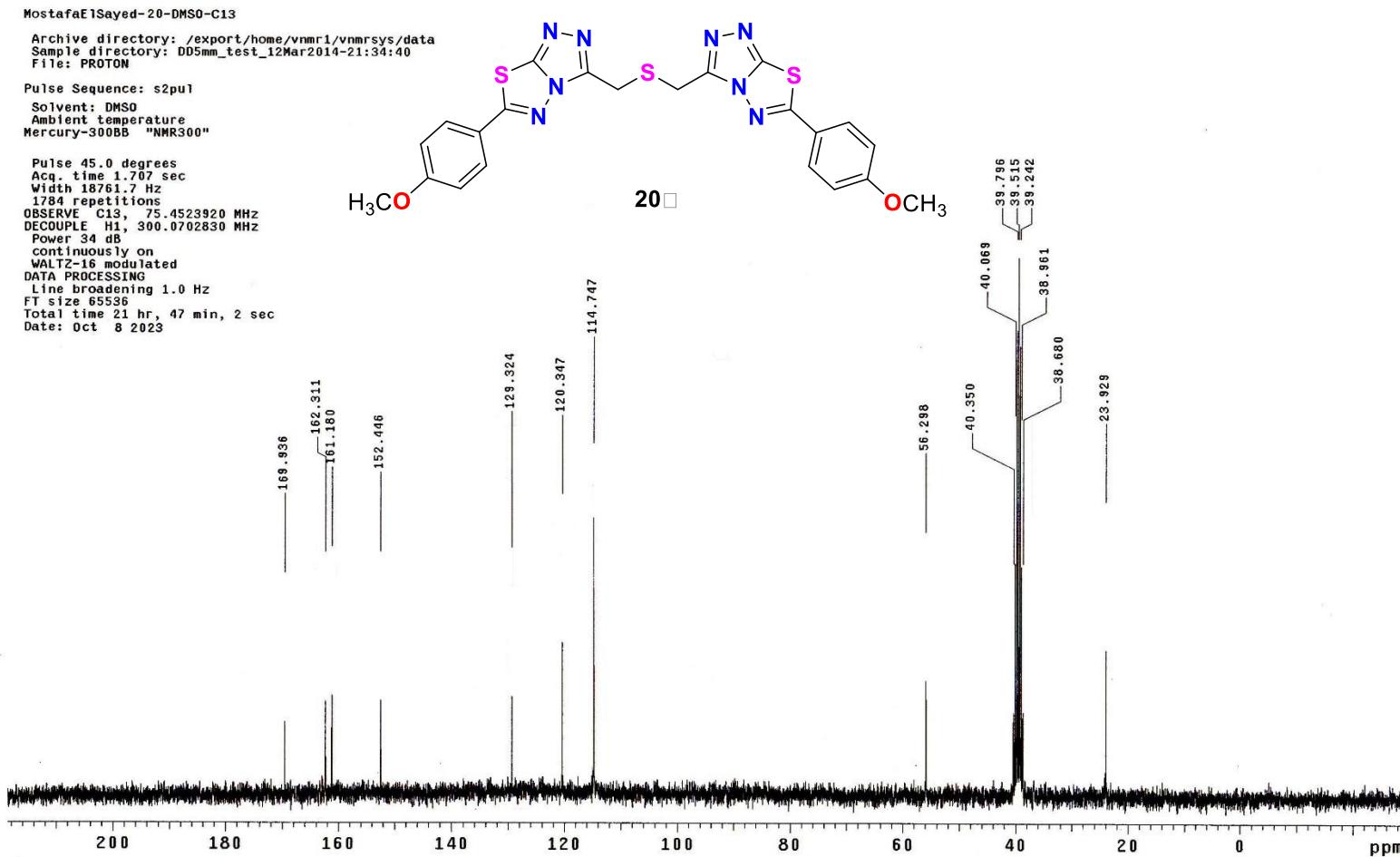
Figure S26: ^{13}C NMR spectrum of compound 17b

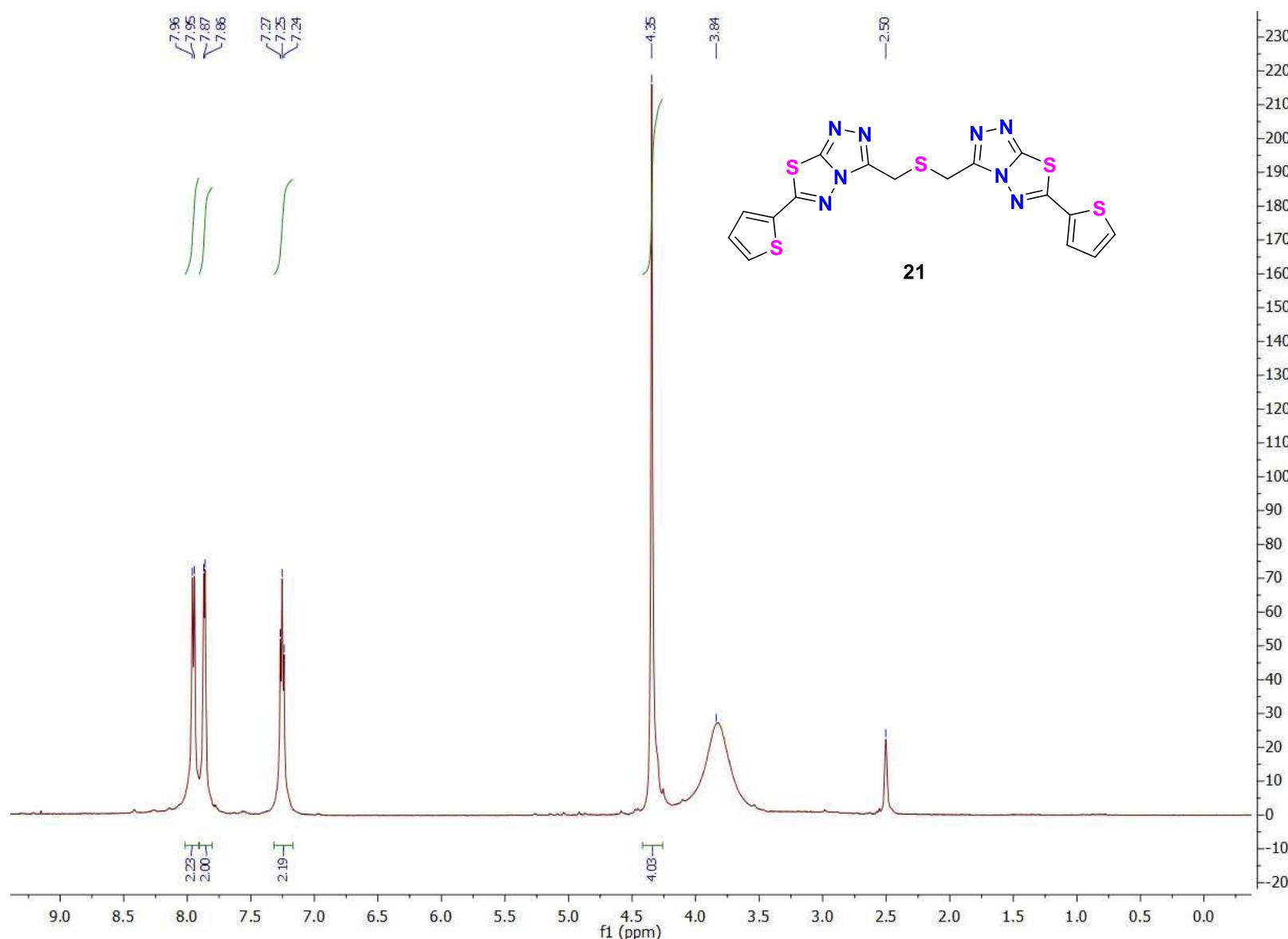
Figure S27: ^1H NMR spectrum of compound **17c**

Figure S28: ¹³C NMR spectrum of compound 17c

Figure S29: ¹H NMR spectrum of compound 17d

Figure S30: ^1H NMR spectrum of compound 20

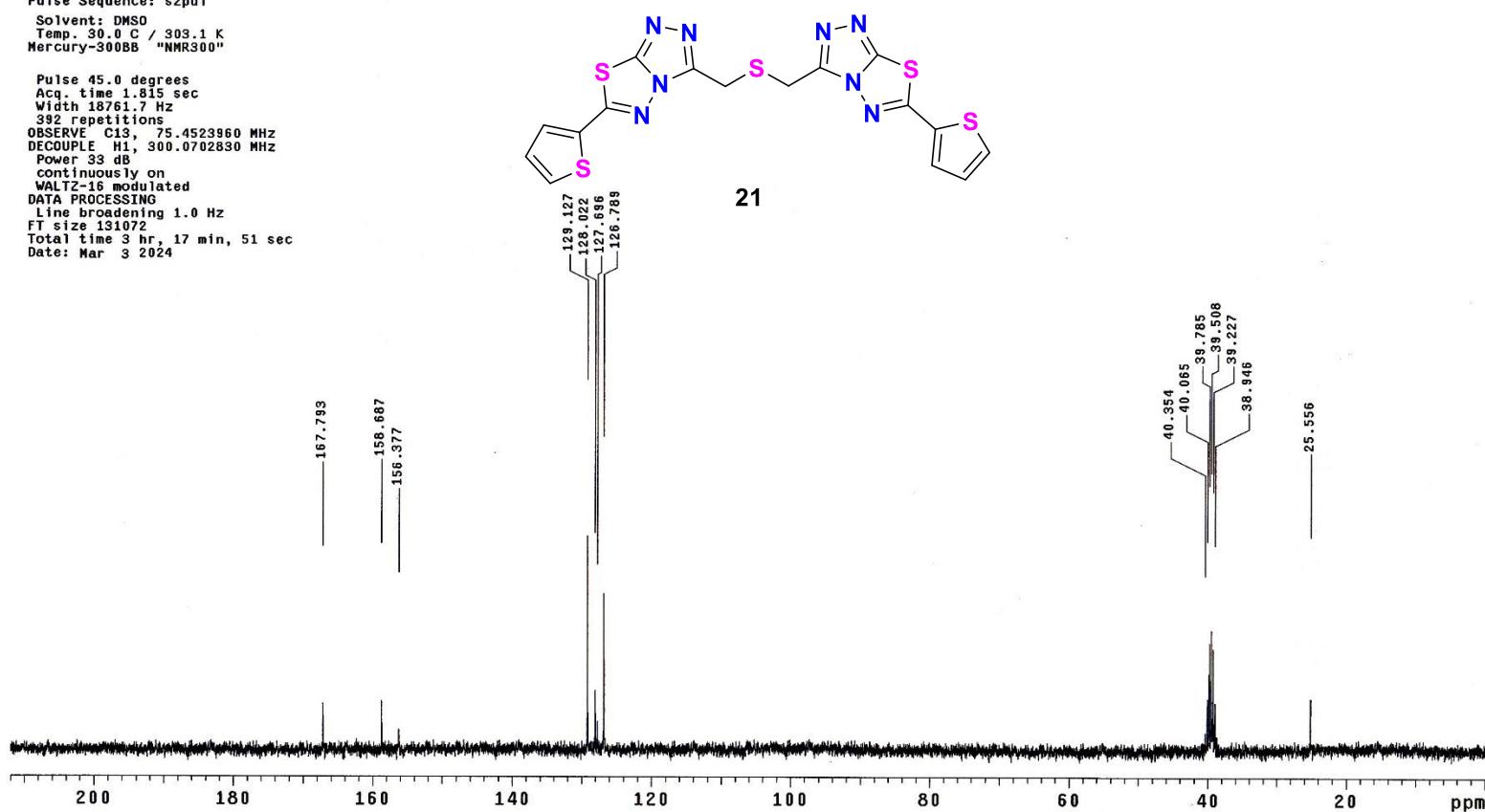
Figure S31: ^{13}C NMR spectrum of compound 20

Figure S32: ^1H NMR spectrum of compound 21

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File: PROTON

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Solvent: DMSO
Temp. 30.0 C / 303.1 K
Mercury-300BB "NMR300"

Pulse 45.0 degrees
Acq. time 1.815 sec
Width 18761.7 Hz
392 repetitions
OBSERVE C13, 75.4523960 MHz
DECOUPLE H1, 300.0702830 MHz
Power 33 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 3 hr, 17 min, 51 sec
Date: Mar 3 2024

Figure S33: ¹³C NMR spectrum of compound 21