

SUPPLEMENTARY INFORMATION

Solvent-Mediated Switching Between Oxidative Addition and Addition-Oxidation: Access to β -Hydroxysulfides and β -Arylsulfones by Addition of Thiols to Olefins in the Presence of Oxone

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CONTENTS

1	Table of contents	S1-S3
2	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl phenyl sulfide (3a) in CDCl_3	S4
3	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl phenyl sulfide (3a) in CDCl_3	S4
4	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-methylphenyl sulfide (3b) in CDCl_3	S5
5	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-methylphenyl sulfide (3b) in CDCl_3	S5
6	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-methoxyphenyl sulfide (3c) in CDCl_3	S6
7	^{13}C NMR spectrum of (2-phenyl)- β -hydroxyethyl 4-methoxyphenyl sulfide (3c) in CDCl_3	S6
8	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 2-methylphenyl sulfide (3d) in CDCl_3	S7
9	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl 2-methylphenyl sulfide (3d) in CDCl_3	S7
10	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-isopropylphenyl sulfide (3e) in CDCl_3	S8
11	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-isopropylphenyl sulfide (3e) in CDCl_3	S8
12	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-bromophenyl sulfide (3f) in CDCl_3	S9
13	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl 4-bromophenyl sulfide (3f) in CDCl_3	S9
14	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 2,4-dichlorophenyl sulfide (3g) in CDCl_3	S10
15	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl 2,4-dichlorophenyl sulfide (3g) in CDCl_3	S10
16	^1H NMR spectrum of 2-(4-chlorophenyl)- β -hydroxyethyl phenyl sulfide (3i) in CDCl_3	S11

17	^{13}C NMR spectrum of 2-(4-chlorophenyl)- β -hydroxyethyl phenyl sulfide (3i) in CDCl_3	S11
18	^1H NMR spectrum of 2-(4-methoxyphenyl)- β -hydroxyethyl phenyl sulfide (3j) in CDCl_3	S12
19	^{13}C NMR spectrum of 2-(4-methoxyphenyl)- β -hydroxyethyl phenyl sulfide (3j) in CDCl_3	S12
20	^1H NMR spectrum of 2-(4-methylphenyl)- β -hydroxyethyl phenyl sulfide (3k) in CDCl_3	S13
21	^{13}C NMR spectrum of 2-(4-methylphenyl)- β -hydroxyethyl phenyl sulfide (3k) in CDCl_3	S13
22	^1H NMR spectrum of 2-(4-tert-butylphenyl)- β -hydroxyethyl phenyl sulfide (3l) in CDCl_3	S14
23	^{13}C NMR spectrum of 2-(4-tert-butylphenyl)- β -hydroxyethyl phenyl sulfide (3l) in CDCl_3	S14
24	^1H NMR spectrum of 2-(4-cyanophenyl)- β -hydroxyethyl phenyl sulfide (3m) in CDCl_3	S15
25	^{13}C NMR spectrum of 2-(4-cyanophenyl)- β -hydroxyethyl phenyl sulfide (3m) in CDCl_3	S15
26	^1H NMR spectrum of 2-(2,4-dichlorophenyl)- β -hydroxyethyl phenyl sulfide (3o) in CDCl_3	S16
27	^{13}C NMR spectrum of 2-(2,4-dichlorophenyl)- β -hydroxyethyl phenyl sulfide (3o) in CDCl_3	S16
28	^1H NMR spectrum of 2-(3-methoxyphenyl)- β -hydroxyethyl phenyl sulfide (3p) in CDCl_3	S17
29	^{13}C NMR spectrum of 2-(3-methoxyphenyl)- β -hydroxyethyl phenyl sulfide (3p) in CDCl_3	S17
30	^1H NMR spectrum of 2-(4-tert-butylphenyl)- β -hydroxyethyl 4-methoxyphenyl sulfide (3q) in CDCl_3	S18
31	^{13}C NMR spectrum of 2-(4-tert-butylphenyl)- β -hydroxyethyl 4-methoxyphenyl sulfide (3q) in CDCl_3	S18
32	^1H NMR spectrum of 2-(4-tert-butylphenyl)- β -hydroxyethyl 2-methylphenyl sulfide (3r) in CDCl_3	S19
33	^{13}C NMR spectrum of 2-(4-tert-butylphenyl)- β -hydroxyethyl 2-methylphenyl sulfide (3r) in CDCl_3	S19
34	^1H NMR spectrum of 2-(4-bromophenyl)- β -hydroxyethyl 4-methoxyphenyl sulfide (3s) in CDCl_3	S20
35	^{13}C NMR spectrum of 2-(4-bromophenyl)- β -hydroxyethyl 4-methoxyphenyl sulfide (3s) in CDCl_3	S20
36	^1H NMR spectrum of 2-(4-bromophenyl)- β -hydroxyethyl 4-methylphenyl sulfide (3t) in CDCl_3	S21
37	^{13}C NMR spectrum of 2-(4-bromophenyl)- β -hydroxyethyl 4-methylphenyl sulfide (3t) in CDCl_3	S21
38	^1H NMR spectrum of 2-(phenyl)- β -hydroxyethyl 2-naphthyl sulfide (3u) in CDCl_3	S22
39	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxyethyl 2-naphthyl sulfide (3u) in CDCl_3	S22
40	^1H NMR spectrum of 2-(naphthalen-1-yl)- β -hydroxyethyl phenyl sulfide (3v) in CDCl_3	S23

41	^{13}C NMR spectrum of 2-(naphthalen-1-yl)- β -hydroxyethyl phenyl sulfide (3v) in CDCl_3	S23
42	^1H NMR spectrum of 2-(phenyl)- β -hydroxypropyl phenyl sulfide (3w) in CDCl_3	S24
43	^{13}C NMR spectrum of 2-(phenyl)- β -hydroxypropyl phenyl sulfide (3w) in CDCl_3	S24
44	^1H NMR spectrum of 2-(phenyl)ethyl phenyl sulfone (4a) in CDCl_3	S25
45	^{13}C NMR spectrum of 2-(phenyl)ethyl phenyl sulfone (4a) in CDCl_3	S25
46	^1H NMR spectrum of 2-(phenyl)ethyl 4-methylphenyl sulfone (4b) in CDCl_3	S26
47	^{13}C NMR spectrum of 2-(phenyl)ethyl 4-methylphenyl sulfone (4b) in CDCl_3	S26
48	^1H NMR spectrum of 2-(phenyl)ethyl 4-bromophenyl sulfone (4c) in CDCl_3	S27
49	^{13}C NMR spectrum of 2-(phenyl)ethyl 4-bromophenyl sulfone (4c) in CDCl_3	S27
50	^1H NMR spectrum of 2-(phenyl)ethyl 2-methylphenyl sulfone (4d) in CDCl_3	S28
51	^{13}C NMR spectrum of 2-(phenyl)ethyl 2-methylphenyl sulfone (4d) in CDCl_3	S28
52	^1H NMR spectrum of 2-(phenyl)ethyl 4-isopropylphenyl sulfone (4e) in CDCl_3	S29
53	^{13}C NMR spectrum of 2-(phenyl)ethyl 4-isopropylphenyl sulfone (4e) in CDCl_3	S29
54	^1H NMR spectrum of 2-(phenyl)ethyl 2,4-dichlorophenyl sulfone (4g) in CDCl_3	S30
55	^{13}C NMR spectrum of 2-(phenyl)ethyl 2,4-dichlorophenyl sulfone (4g) in CDCl_3	S30
56	^1H NMR spectrum of 2-(4-methylphenyl)ethyl phenyl sulfone (4h) in CDCl_3	S31
57	^{13}C NMR spectrum of 2-(4-methylphenyl)ethyl phenyl sulfone (4h) in CDCl_3	S31
58	^1H NMR spectrum of 2-(4-bromophenyl)ethyl phenyl sulfone (4i) in CDCl_3	S32
59	^{13}C NMR spectrum of 2-(4-bromophenyl)ethyl phenyl sulfone (4i) in CDCl_3	S32
60	^1H NMR spectrum of 2-(4-chlorophenyl)ethyl phenyl sulfone (4j) in CDCl_3	S33
61	^{13}C NMR spectrum of 2-(4-chlorophenyl)ethyl phenyl sulfone (4j) in CDCl_3	S33
62	^1H NMR spectrum of 2-(4-methylphenyl)ethyl 4-methoxyphenyl sulfone (4l) in CDCl_3	S34
63	^{13}C NMR spectrum of 2-(4-methylphenyl)ethyl 4-methoxyphenyl sulfone (4l) in CDCl_3	S34
64	^1H NMR spectrum of 2-(4-tert-butylphenyl)ethyl 4-methylphenyl sulfone (4m) in CDCl_3	S35
65	^{13}C NMR spectrum of 2-(4-tert-butylphenyl)ethyl 4-methylphenyl sulfone (4m) in CDCl_3	S35
66	^1H NMR spectrum of 2-(phenyl)ethyl 2-naphthyl sulfone (4n) in CDCl_3	S36
67	^{13}C NMR spectrum of 2-(phenyl)ethyl 2-naphthyl sulfone (4n) in CDCl_3	S36
68	^1H NMR spectrum of 2-(naphthalen-2-yl)ethyl phenyl sulfone (4o) in CDCl_3	S37
69	^{13}C NMR spectrum of 2-(naphthalen-2-yl)ethyl phenyl sulfone (4o) in CDCl_3	S37
70	^1H NMR spectrum of 1-(4-methoxyphenyl)2-propyl phenyl sulfone (4p) in CDCl_3	S38
71	^{13}C NMR spectrum of 1-(4-methoxyphenyl)2-propyl phenyl sulfone (4p) in CDCl_3	S38
72	^1H NMR spectrum of 1-(acetoxymethyl)-3-(phenyl)2-propyl phenyl sulfone (4q) in CDCl_3	S39
73	^{13}C NMR spectrum of 1-(acetoxymethyl)-3-(phenyl)2-propyl phenyl sulfone (4q) in CDCl_3	S39
74	^1H NMR spectrum of 2-(phenyl)ethyl phenyl sulfane (2ab) in CDCl_3	S40

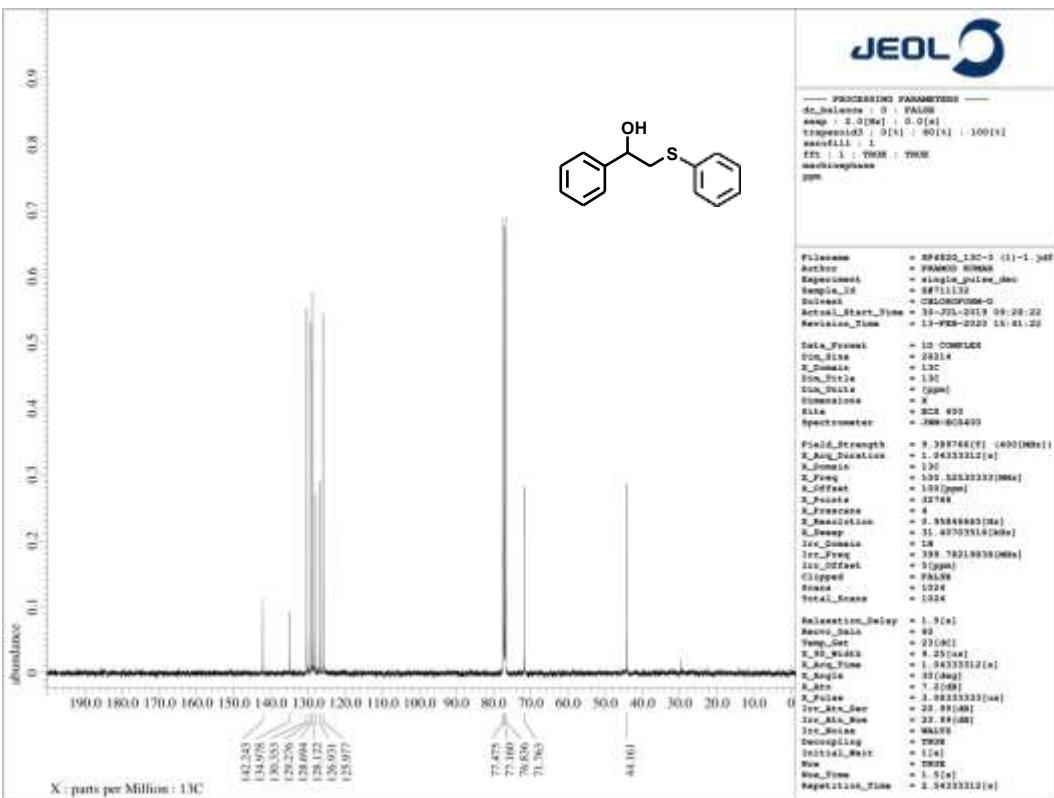
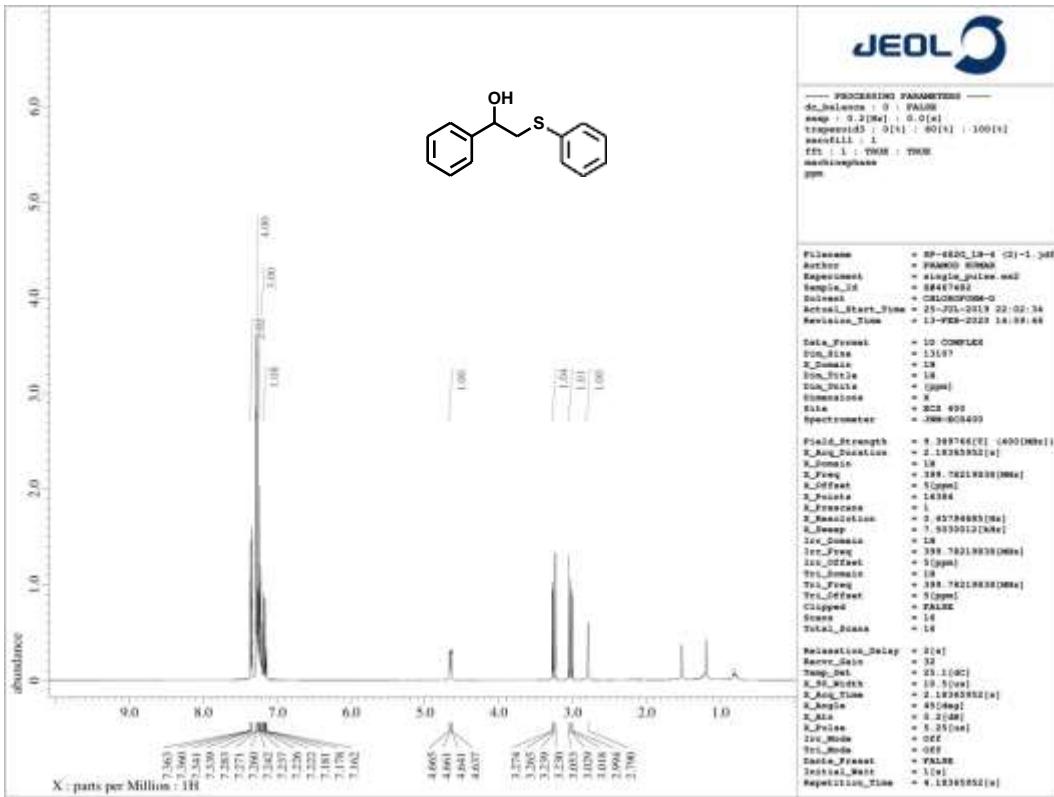


Figure S1. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3a**.

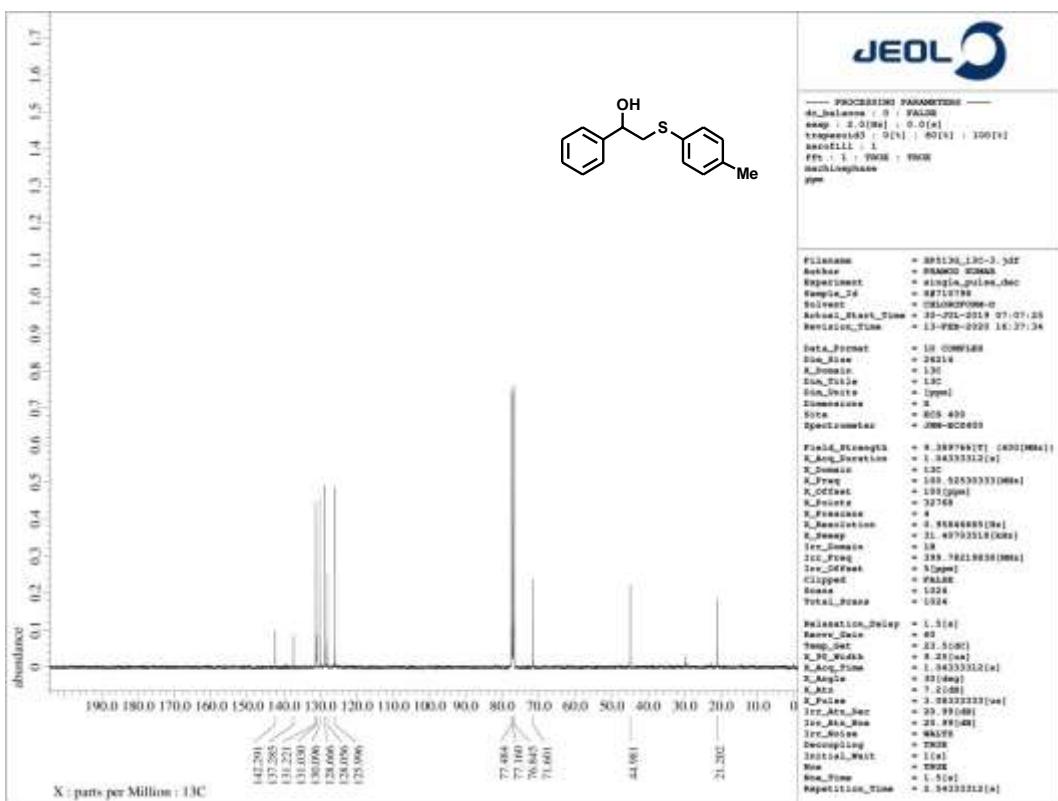
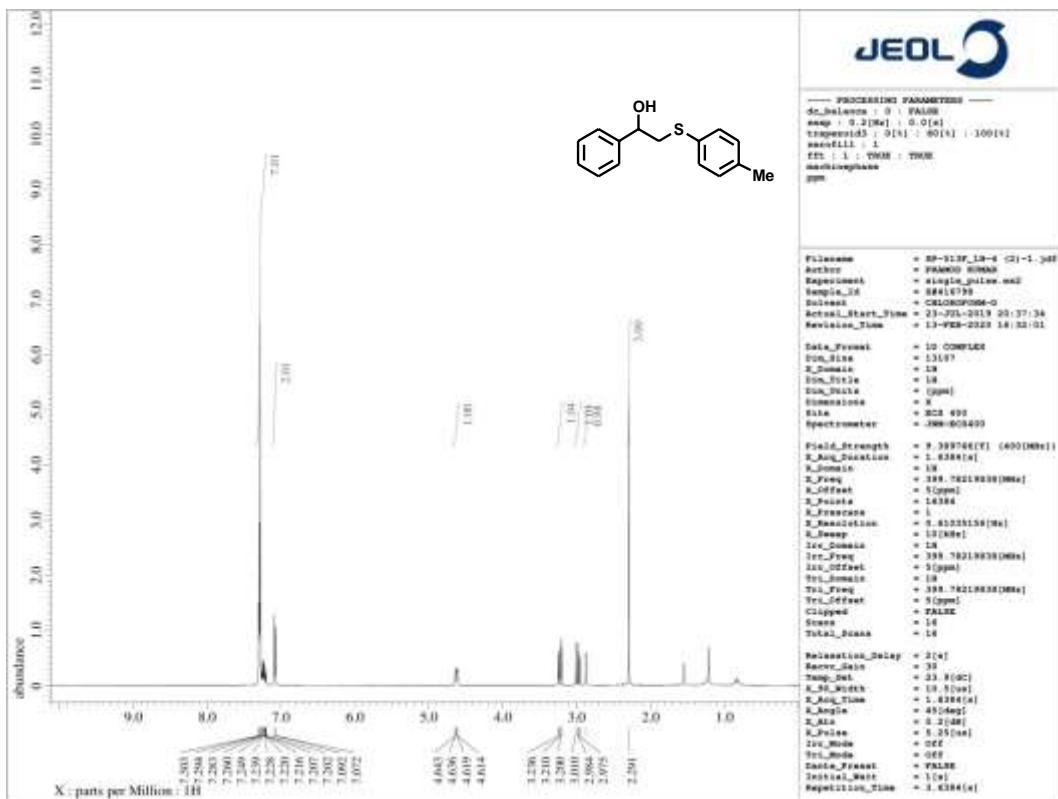


Figure S2. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3b**.

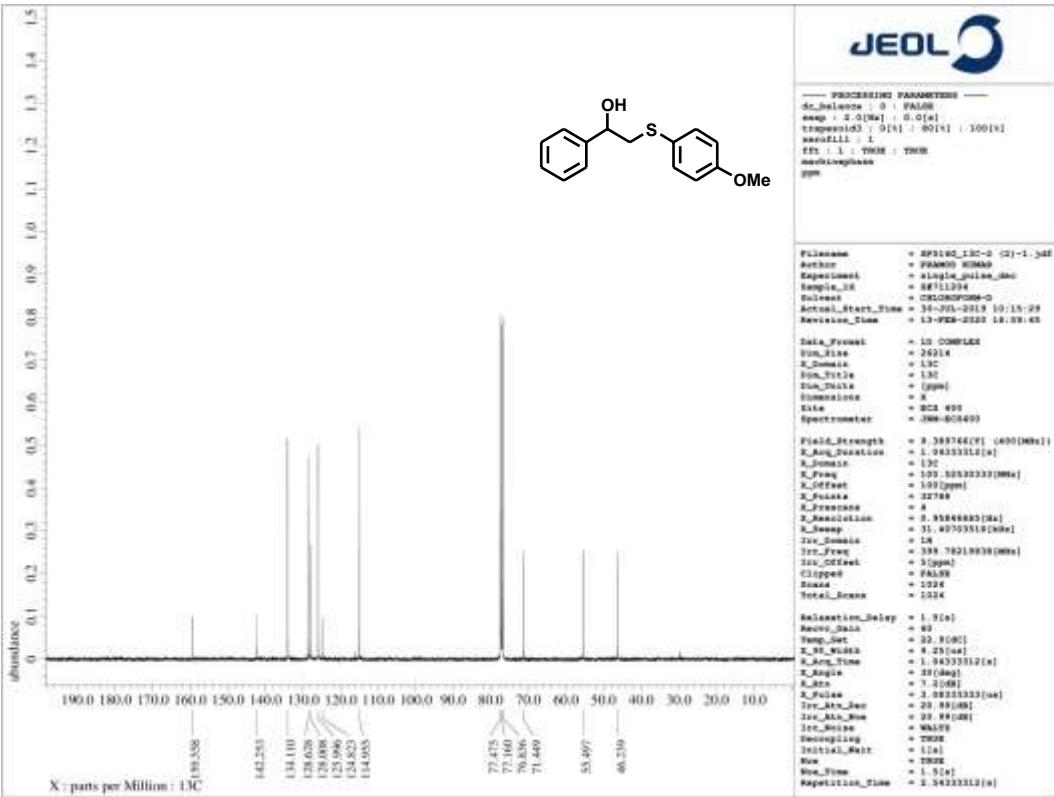
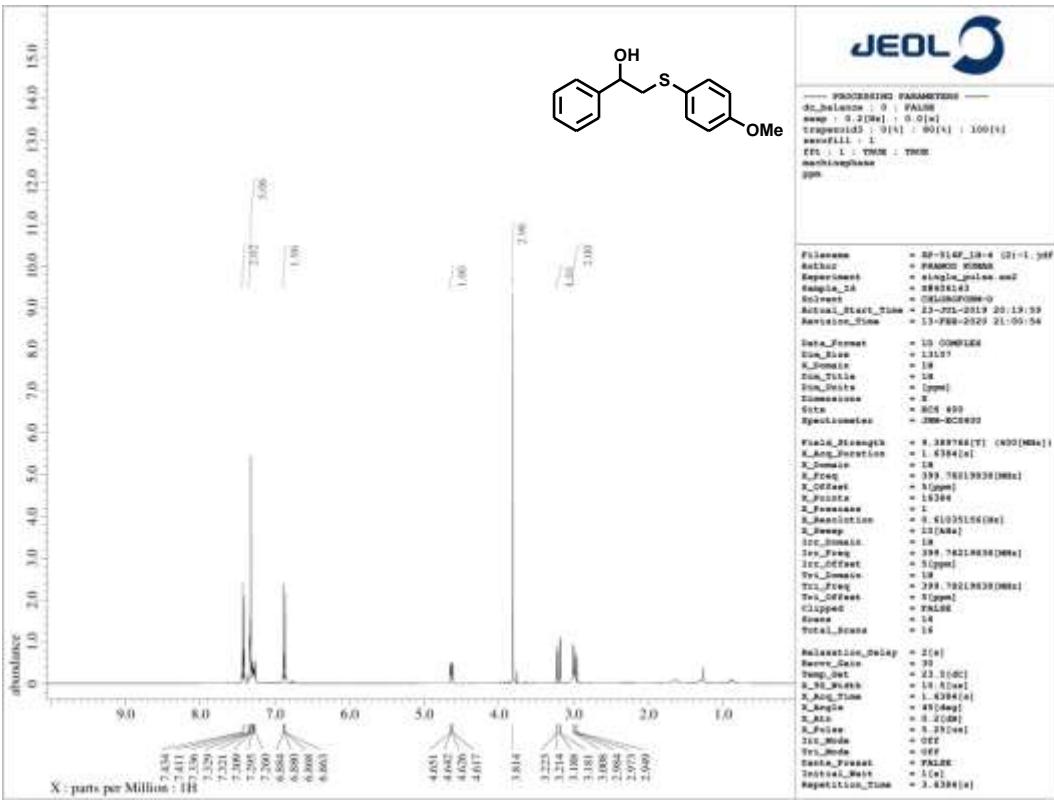


Figure S3. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3c**.

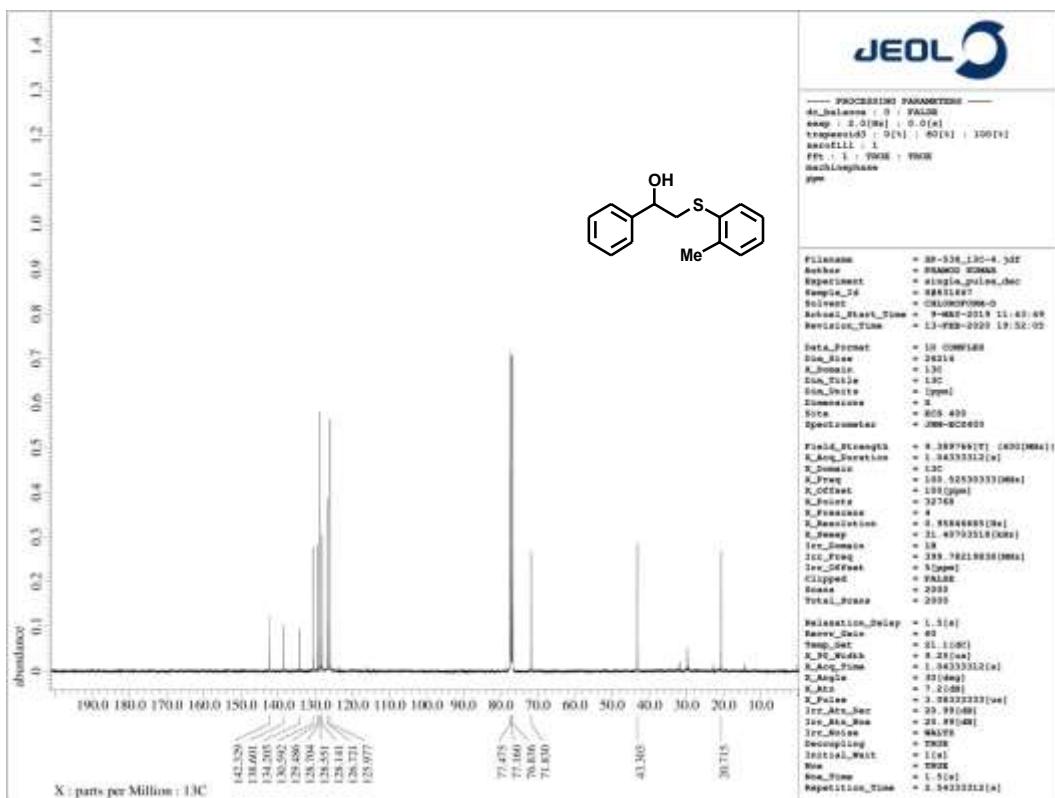
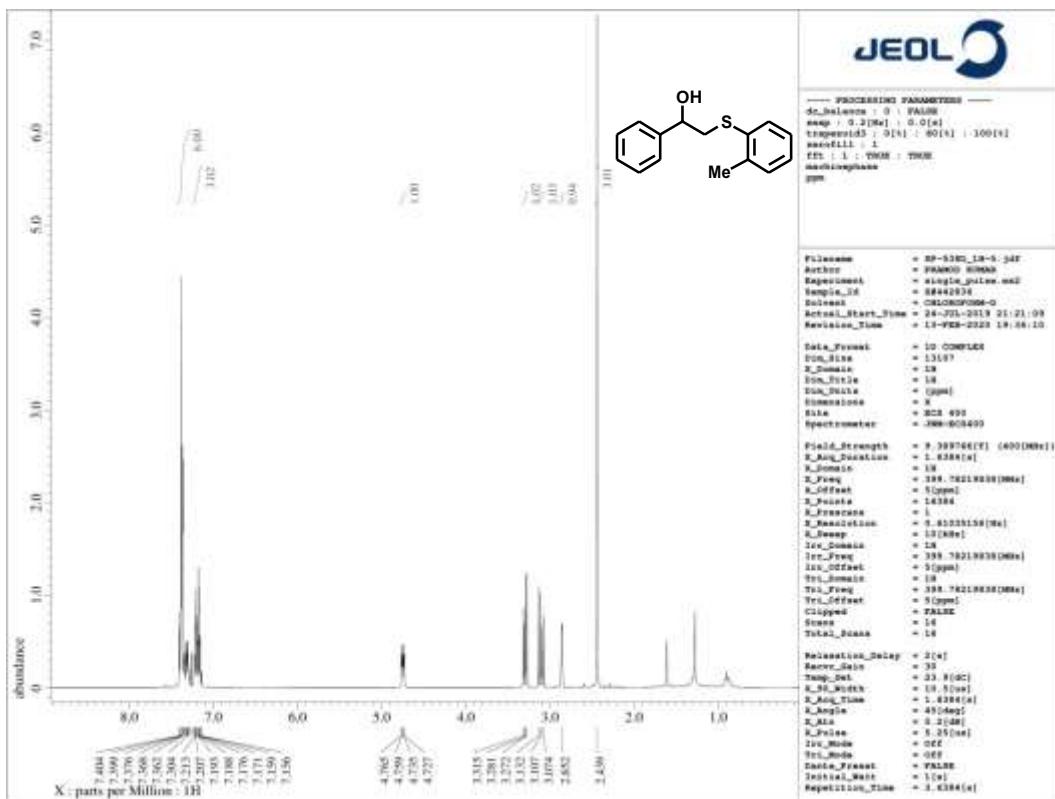


Figure S4. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3d**.

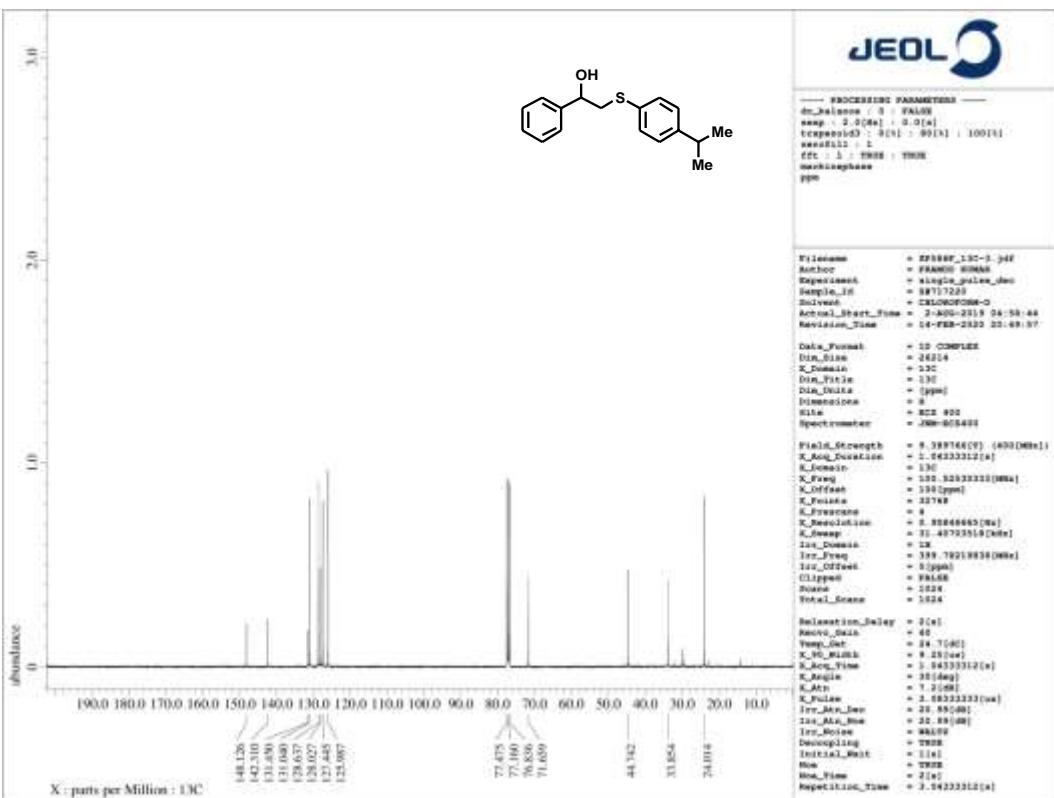
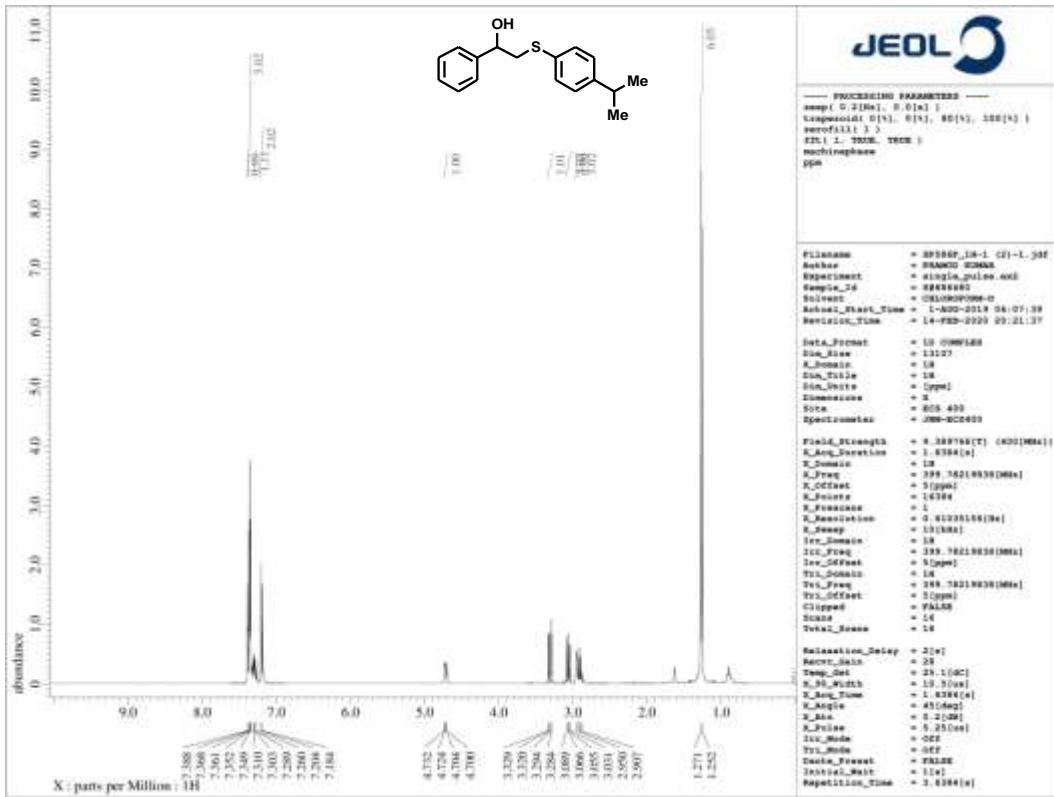


Figure S5. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3e**.

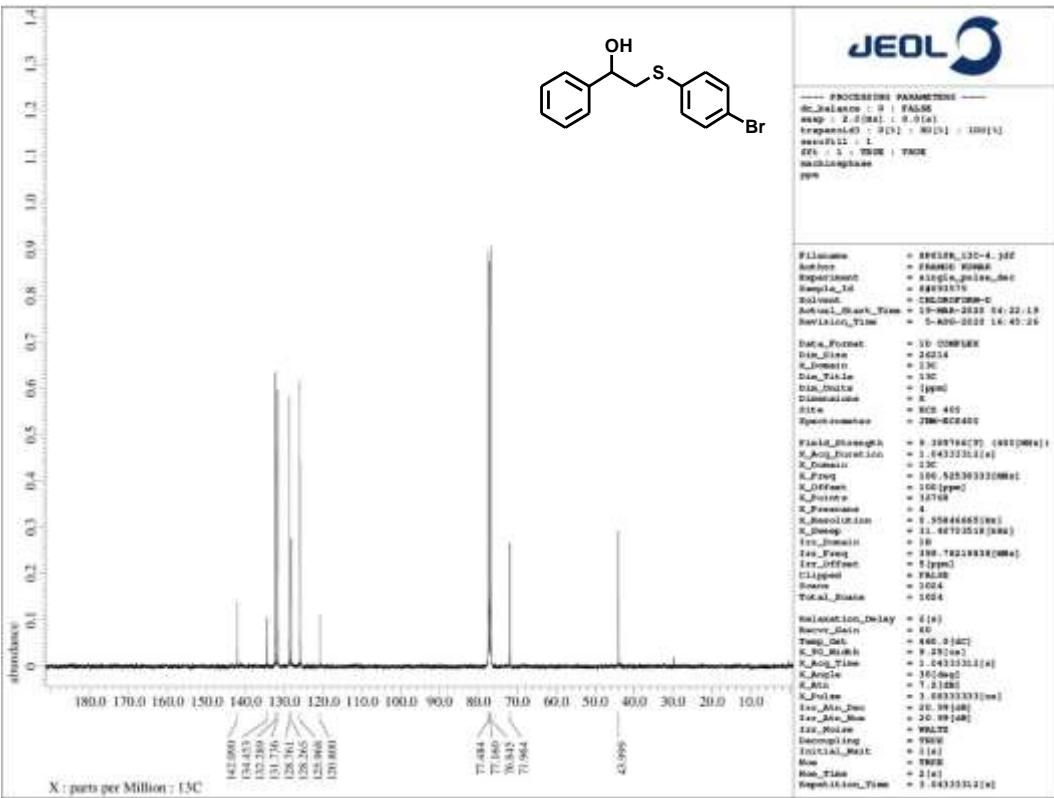
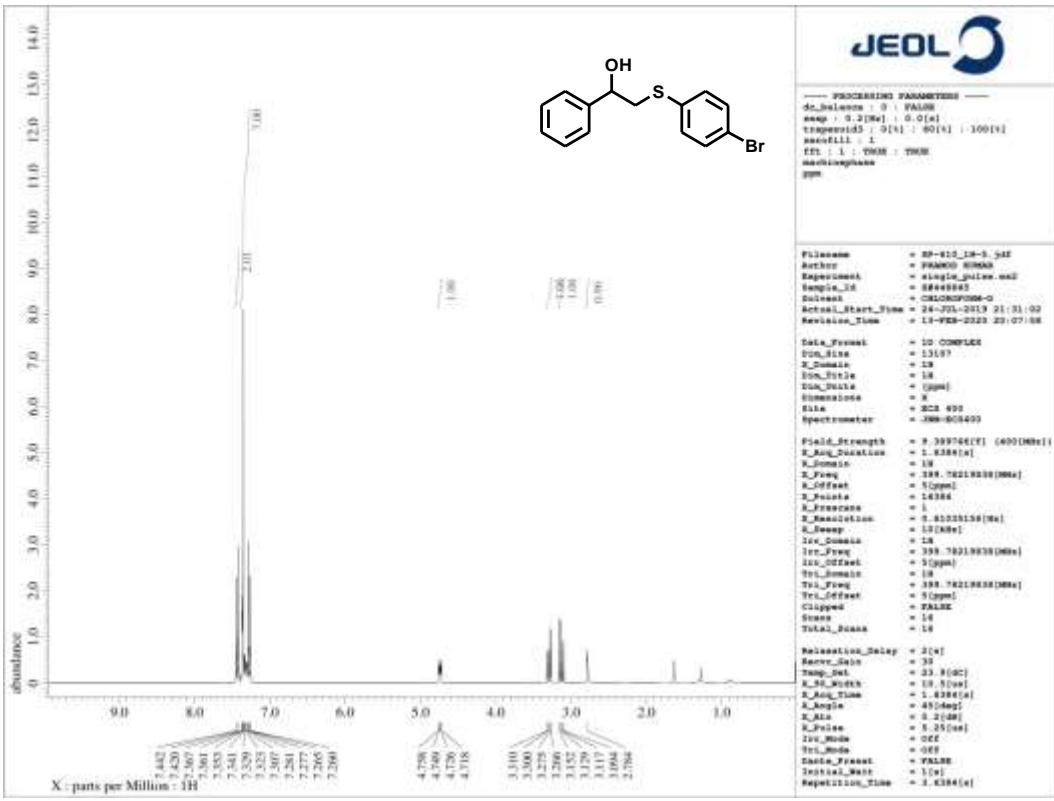


Figure S6. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3f**.

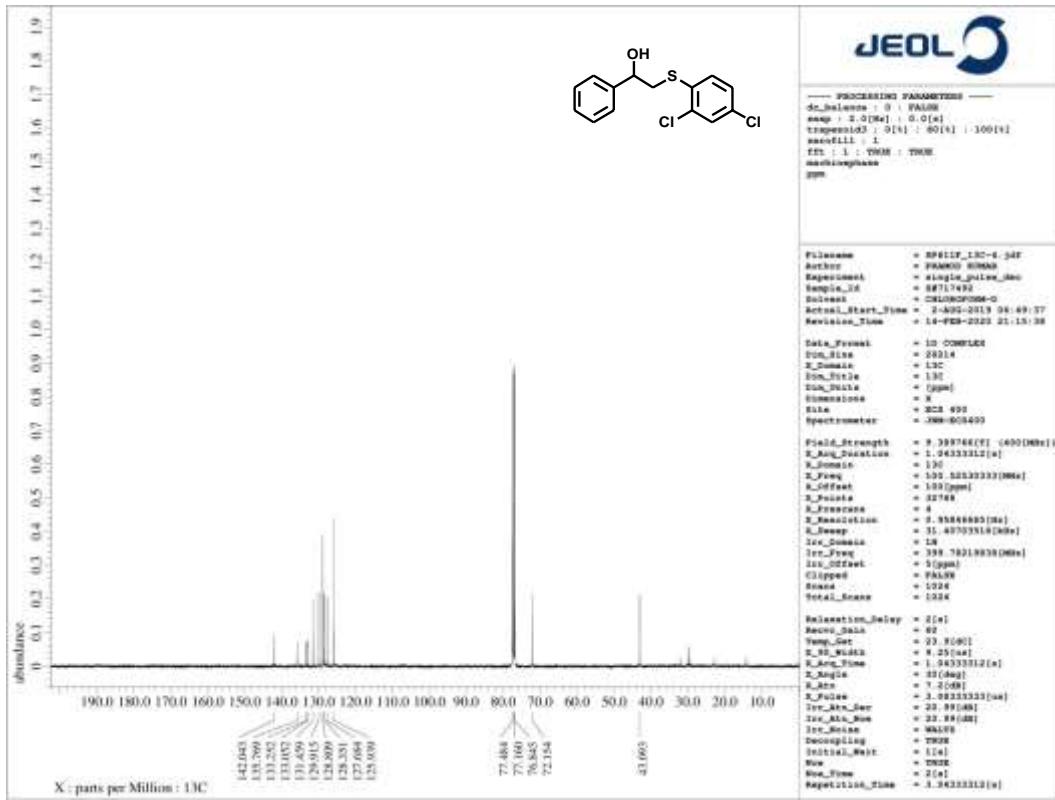
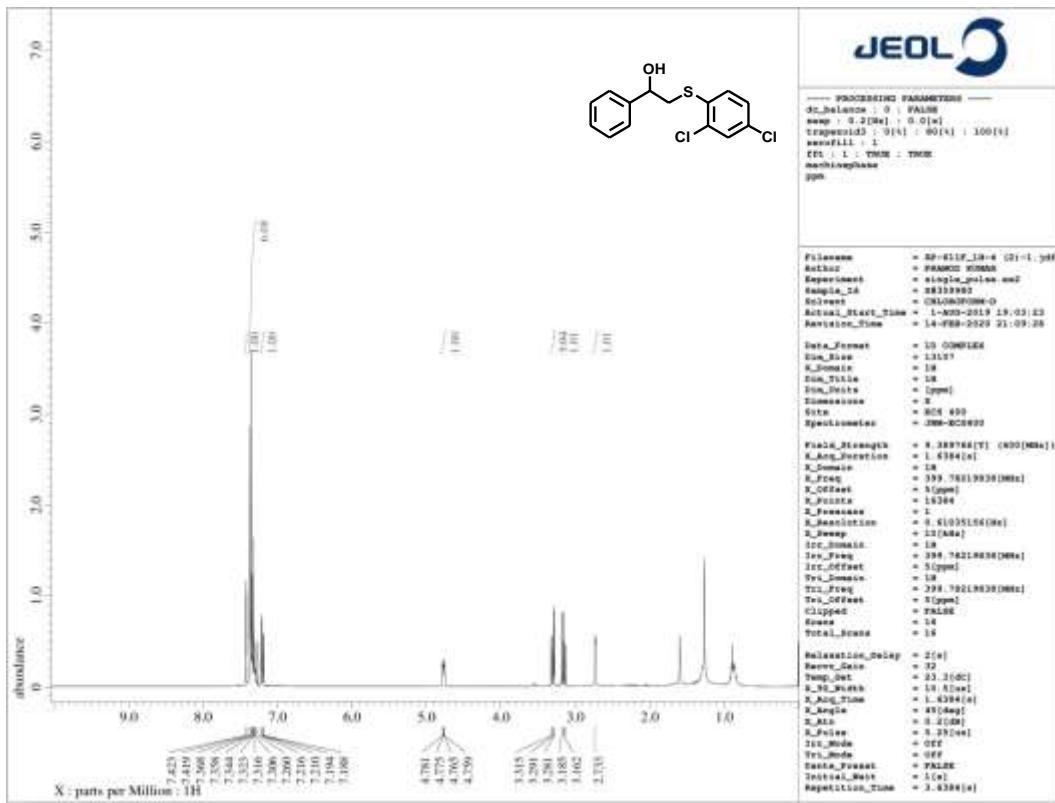


Figure S7. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3g**.

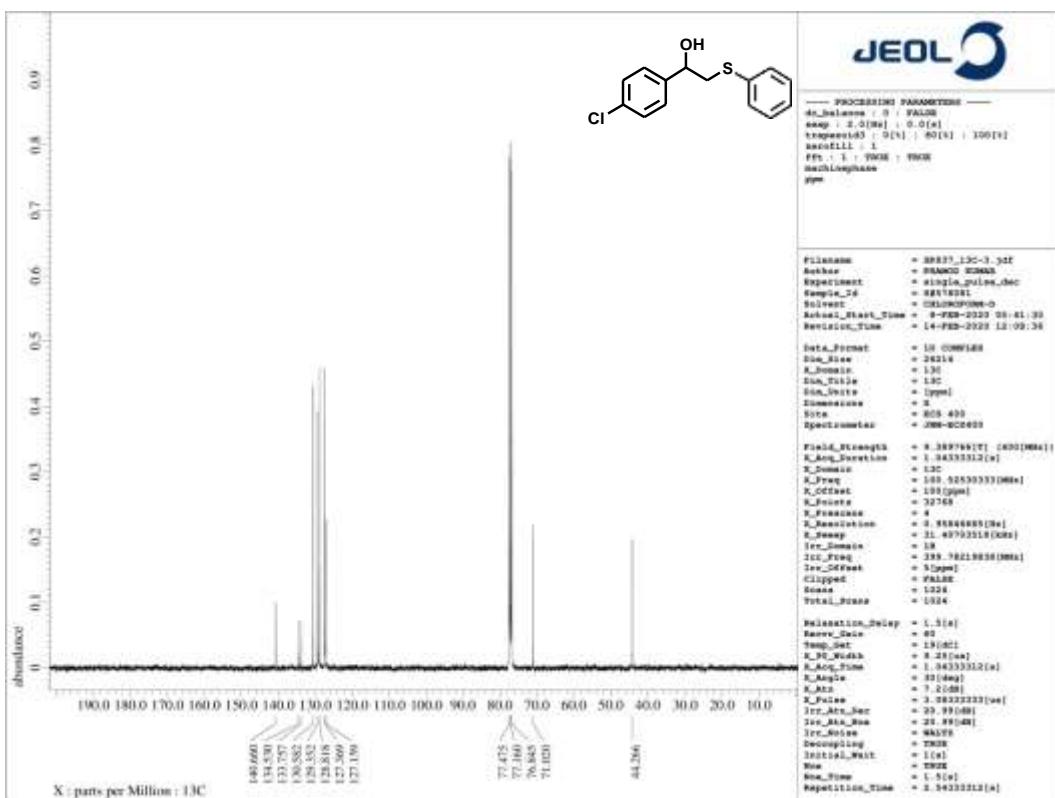
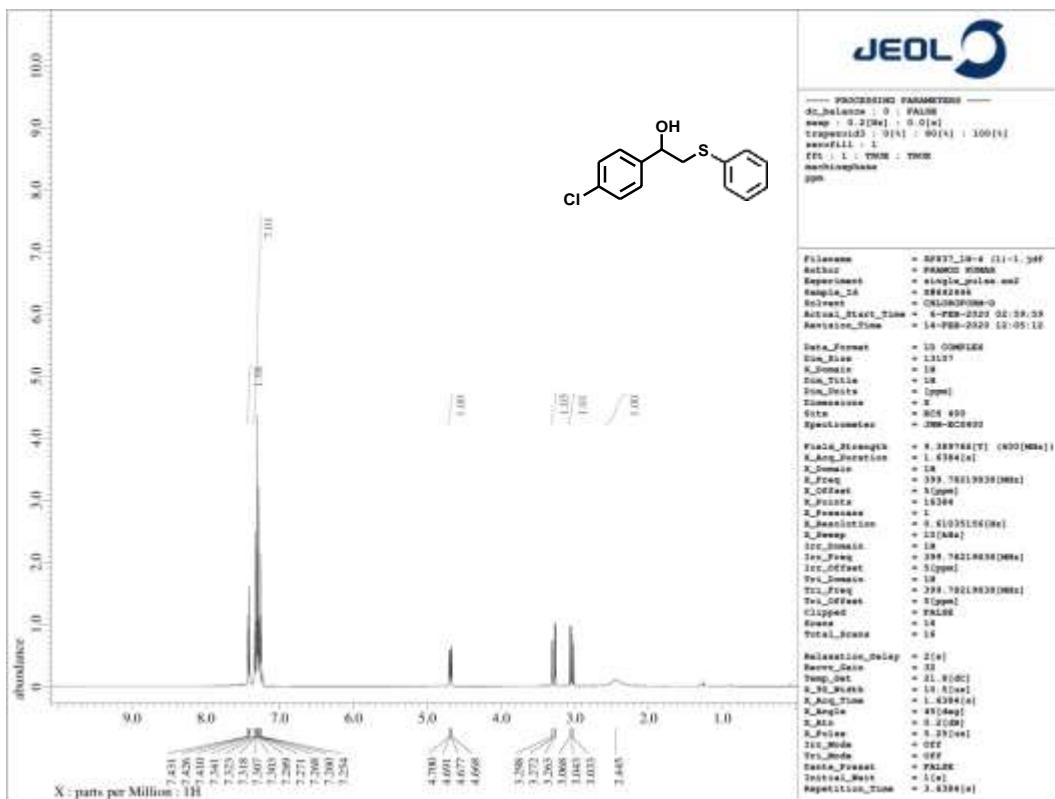


Figure S8. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3i**.

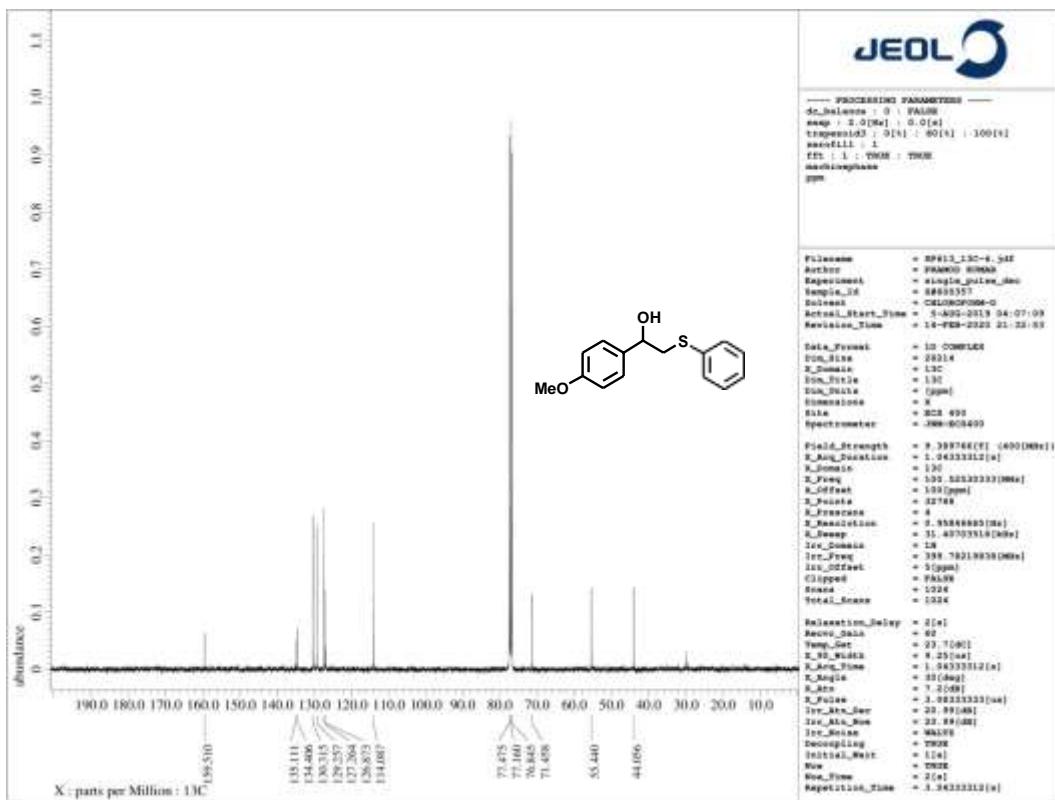
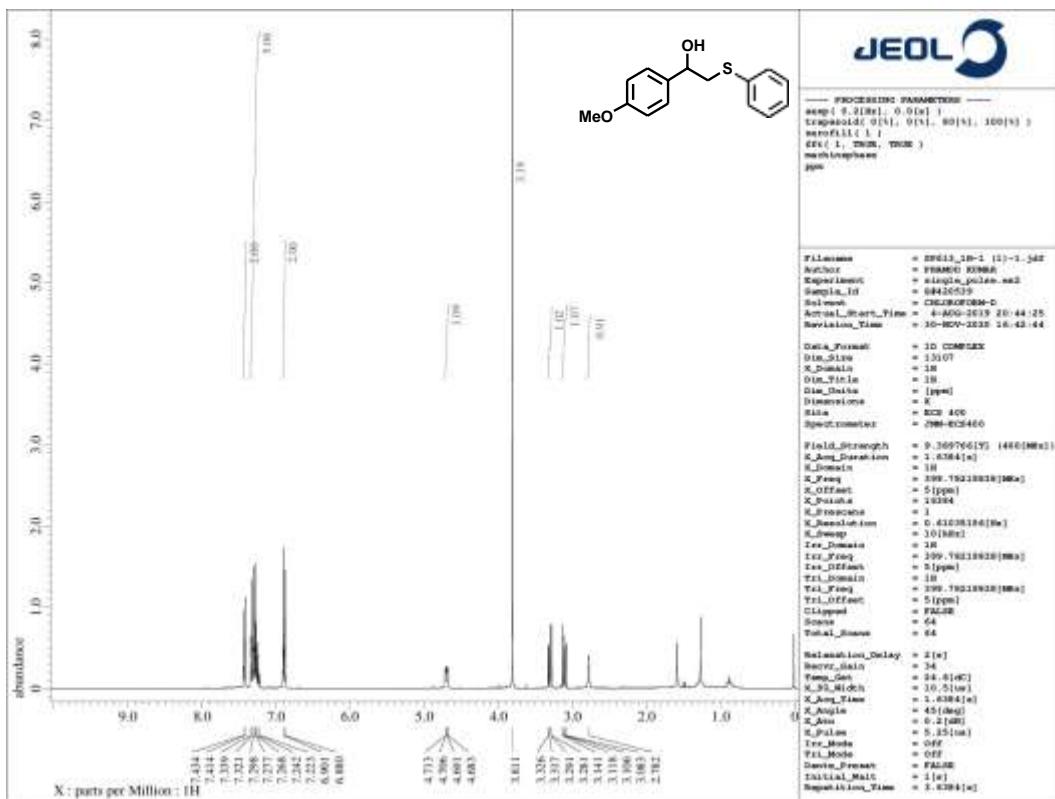


Figure S9. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3j**.

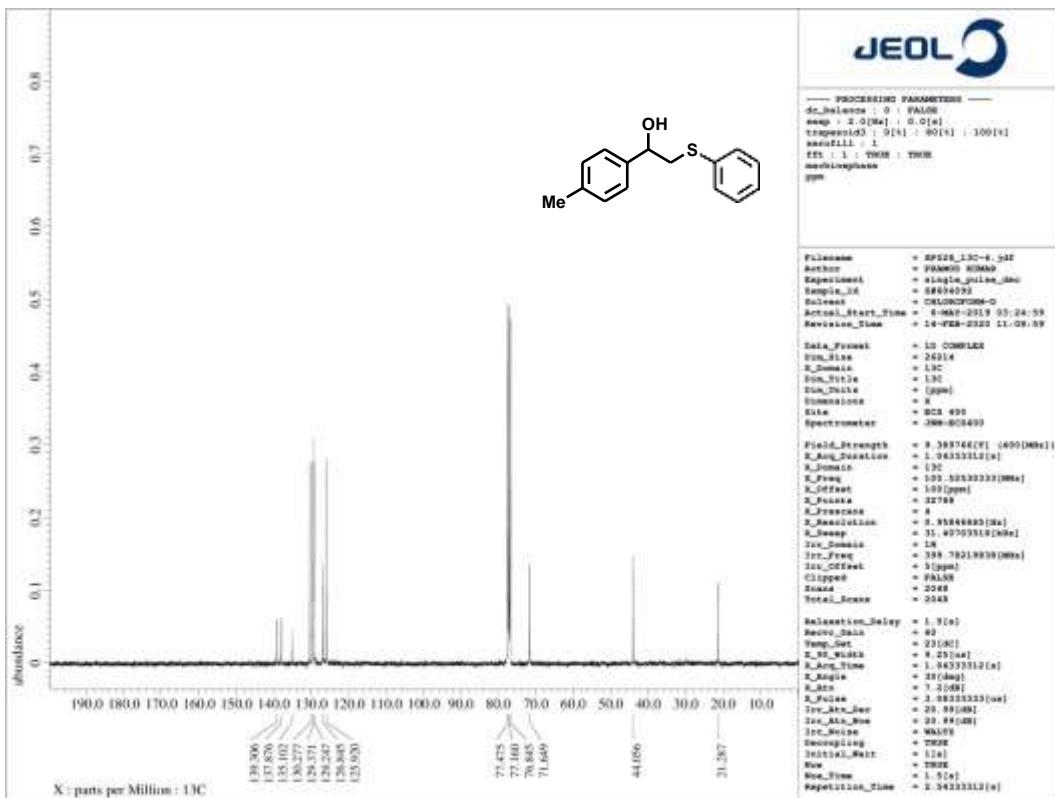
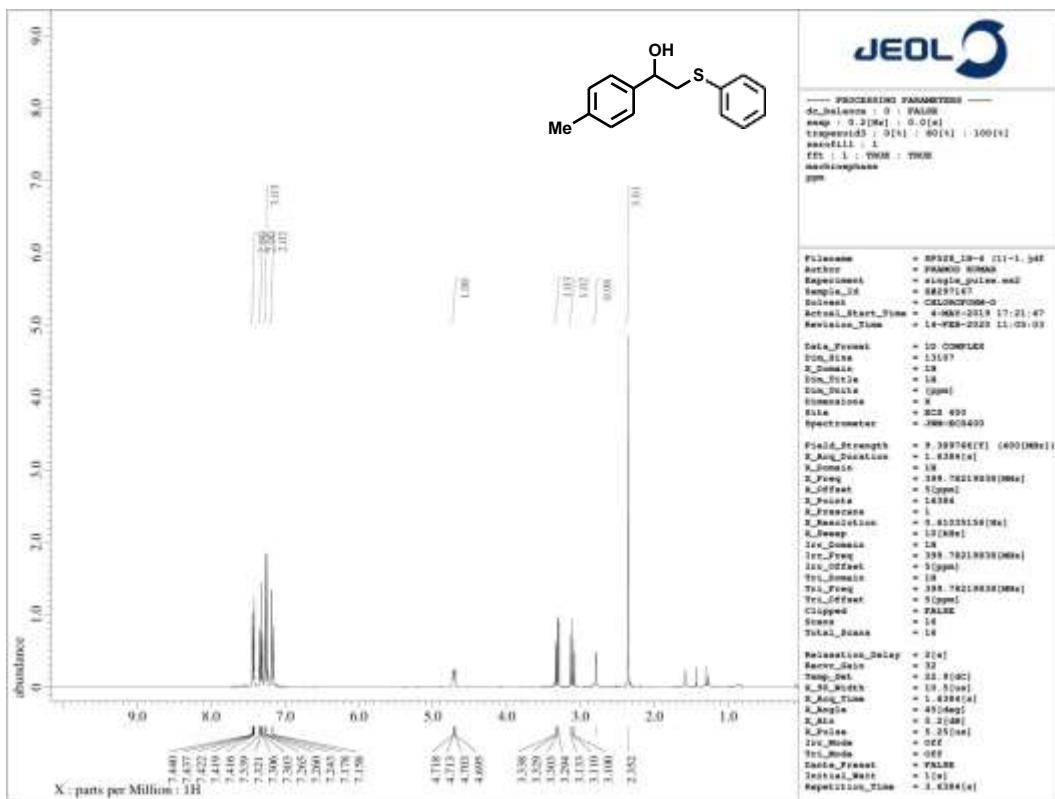


Figure S10.¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **3k**.

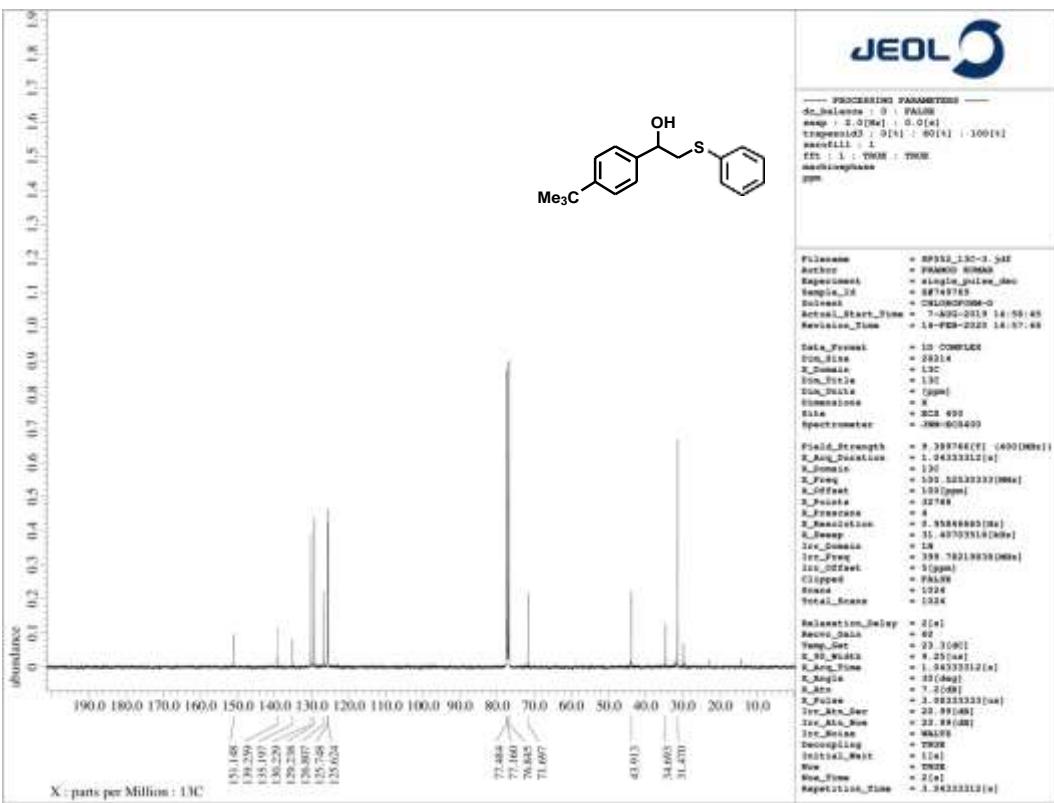
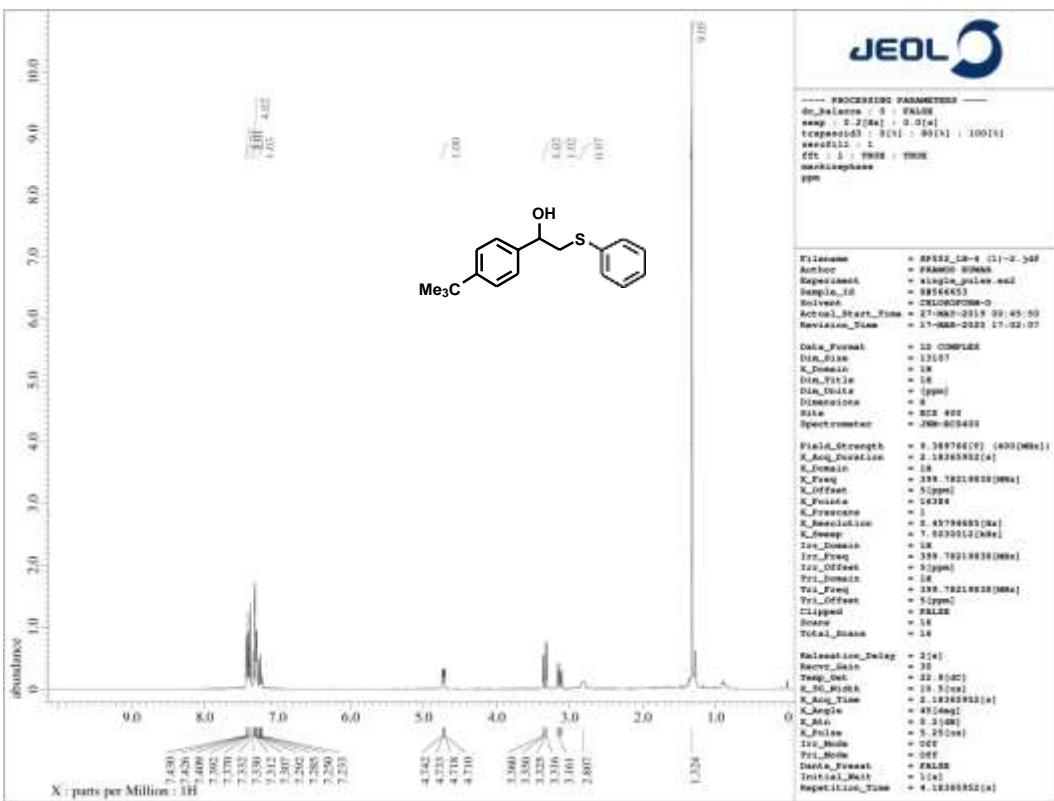


Figure S11. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3l**.

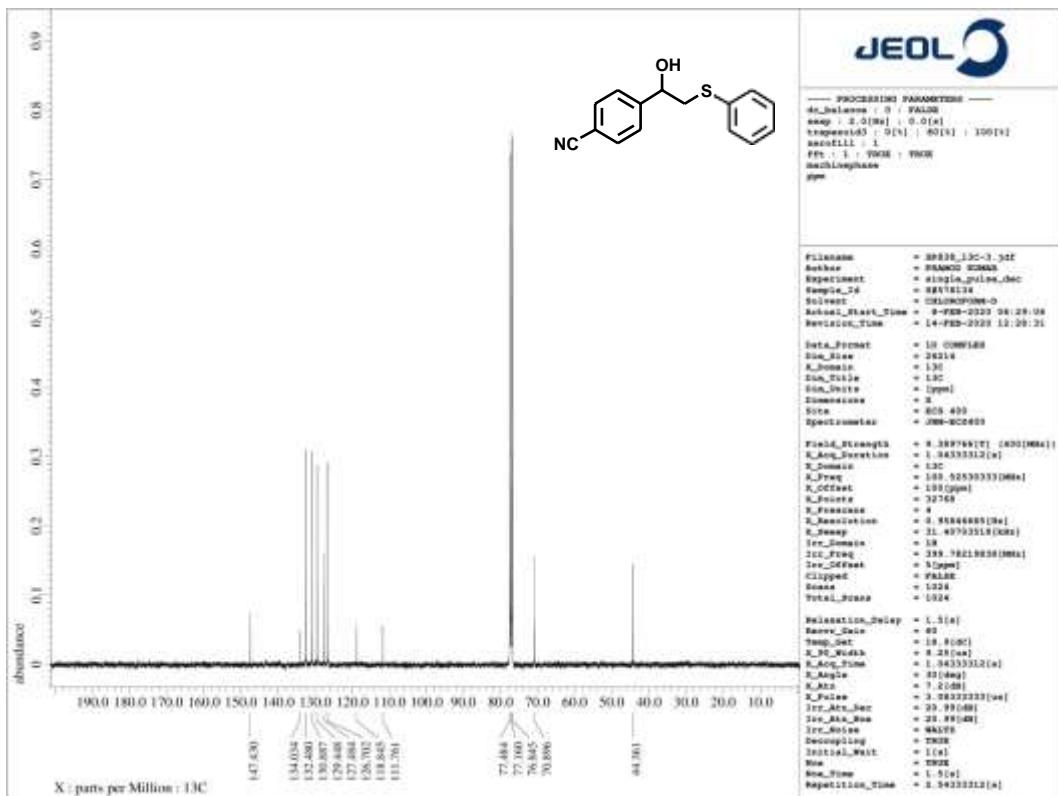
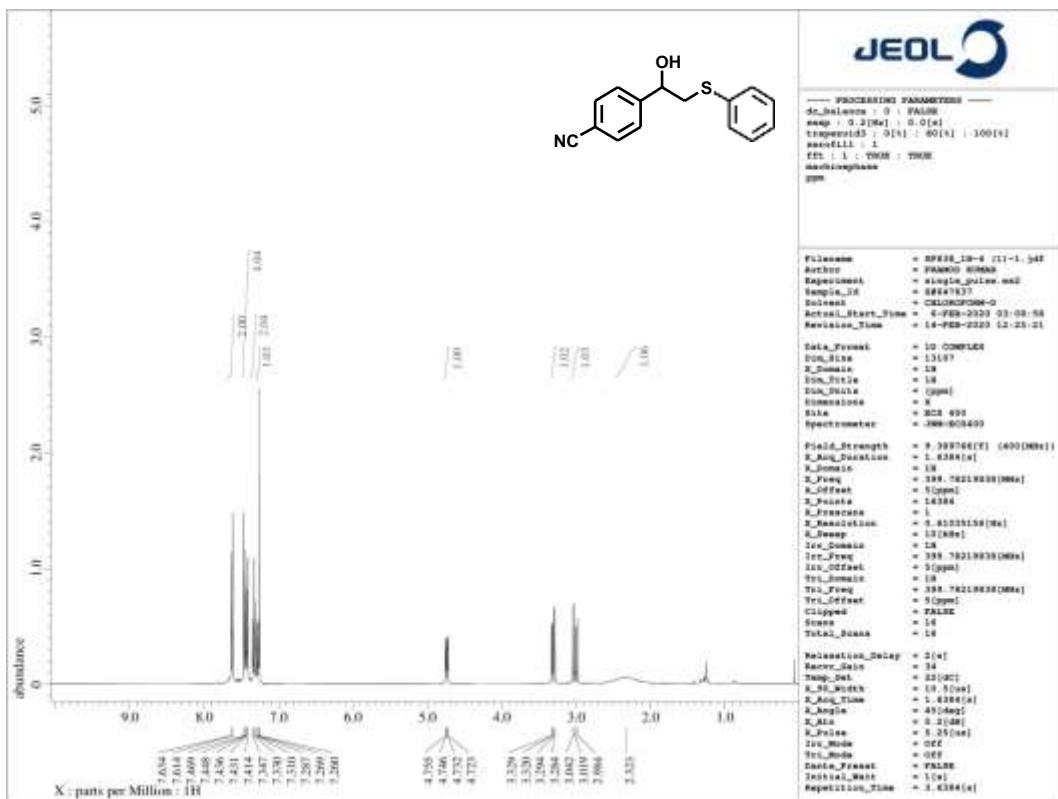


Figure S12. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3m**.

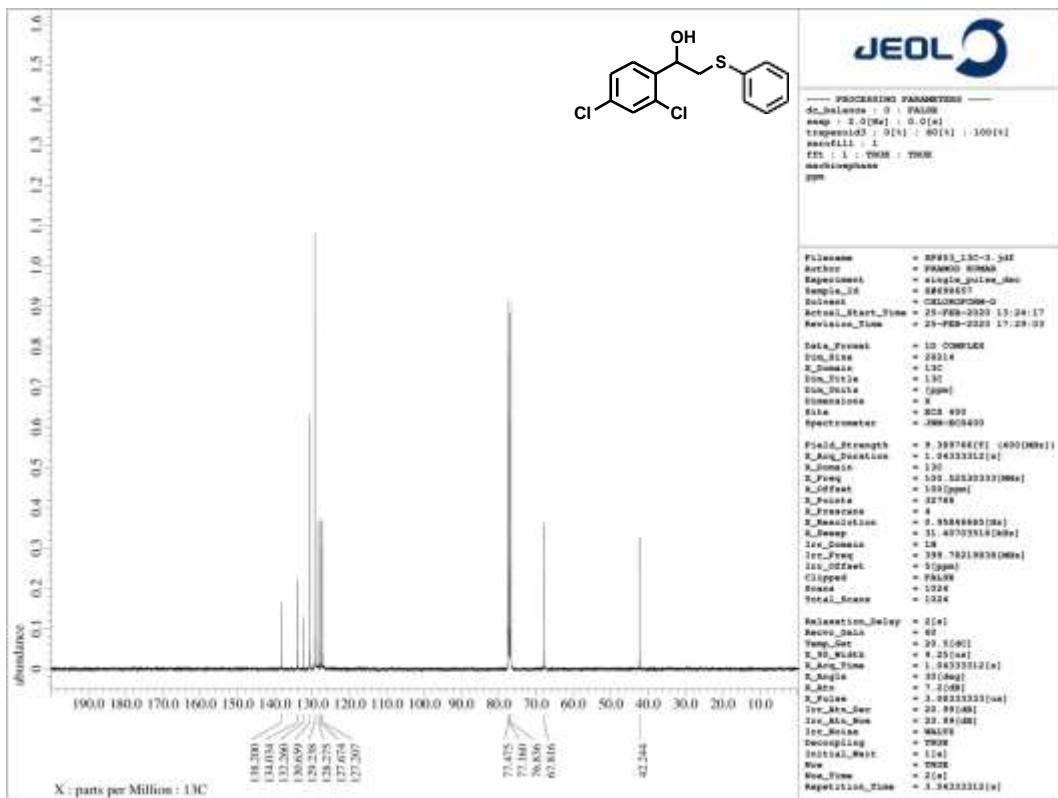
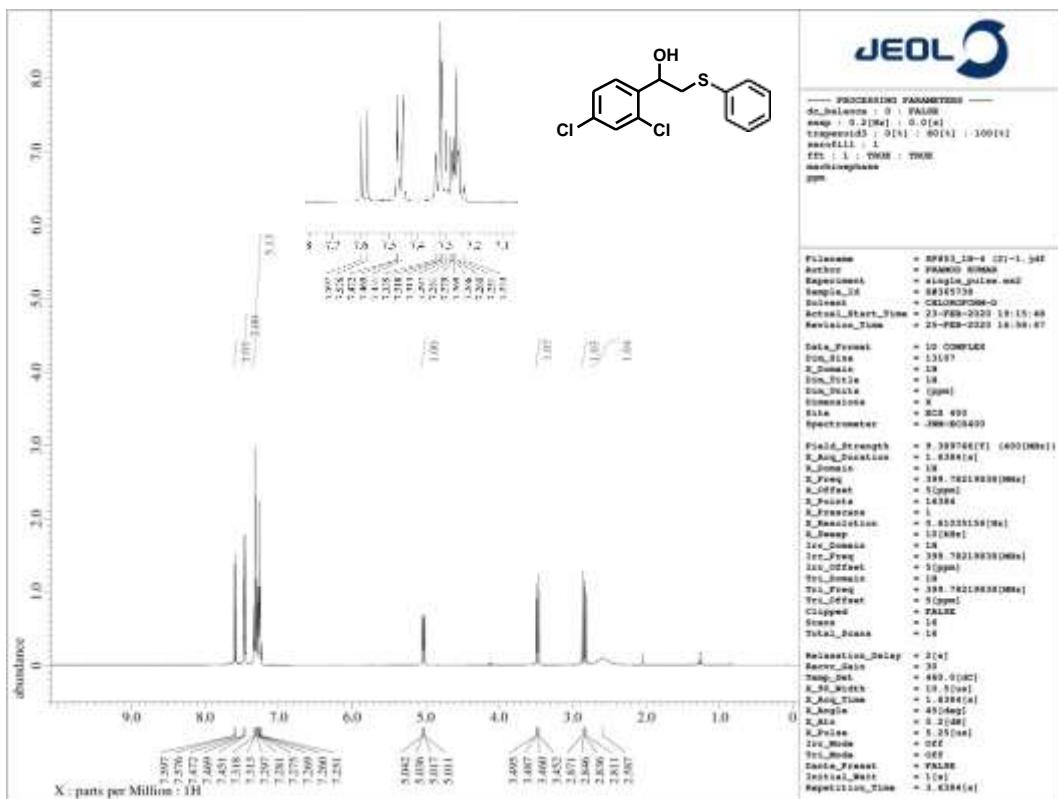


Figure S13. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **3o**.

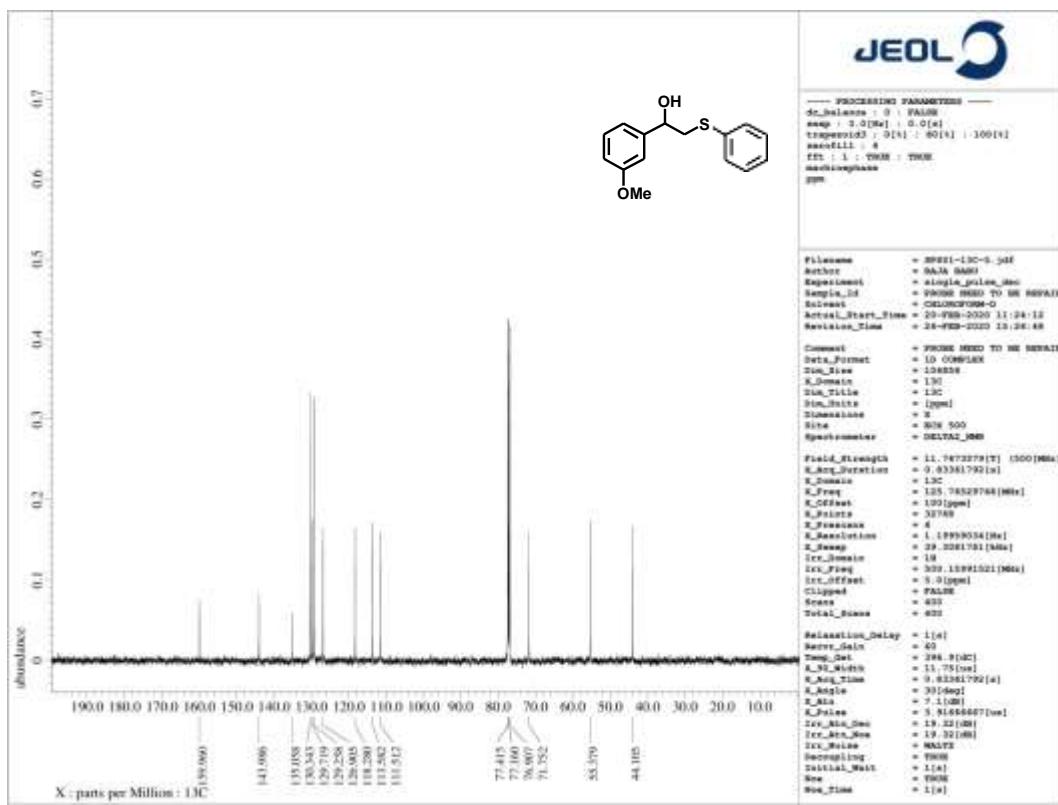
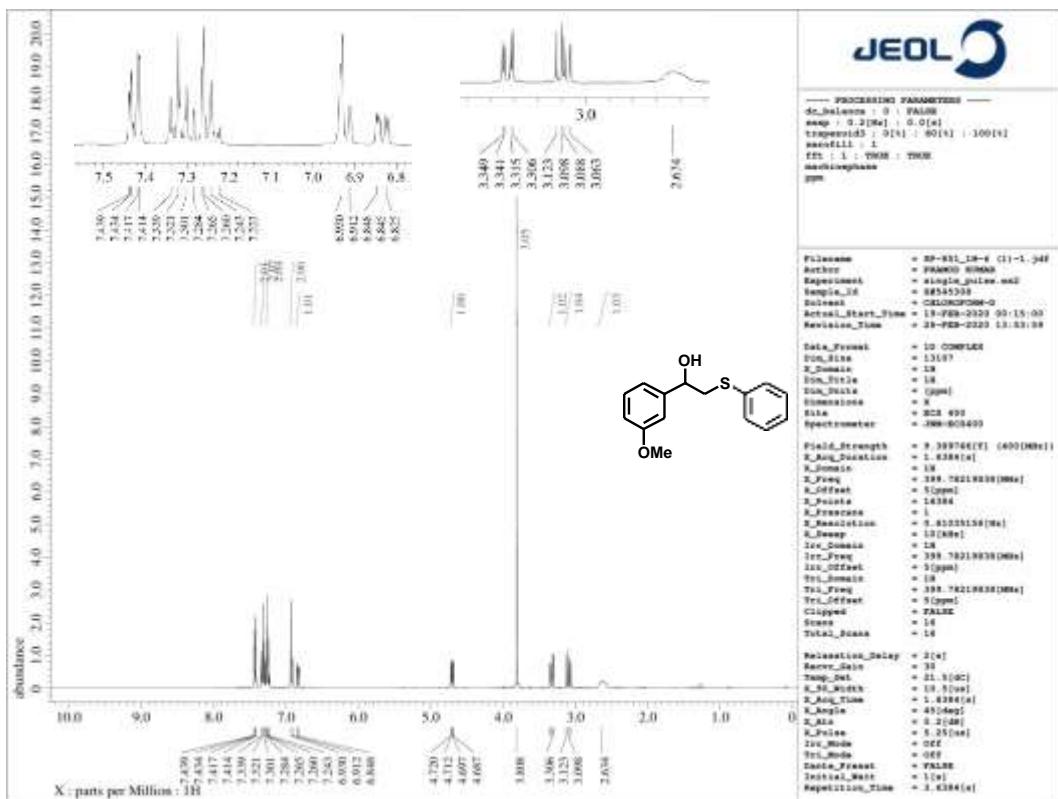


Figure S14. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3p**.

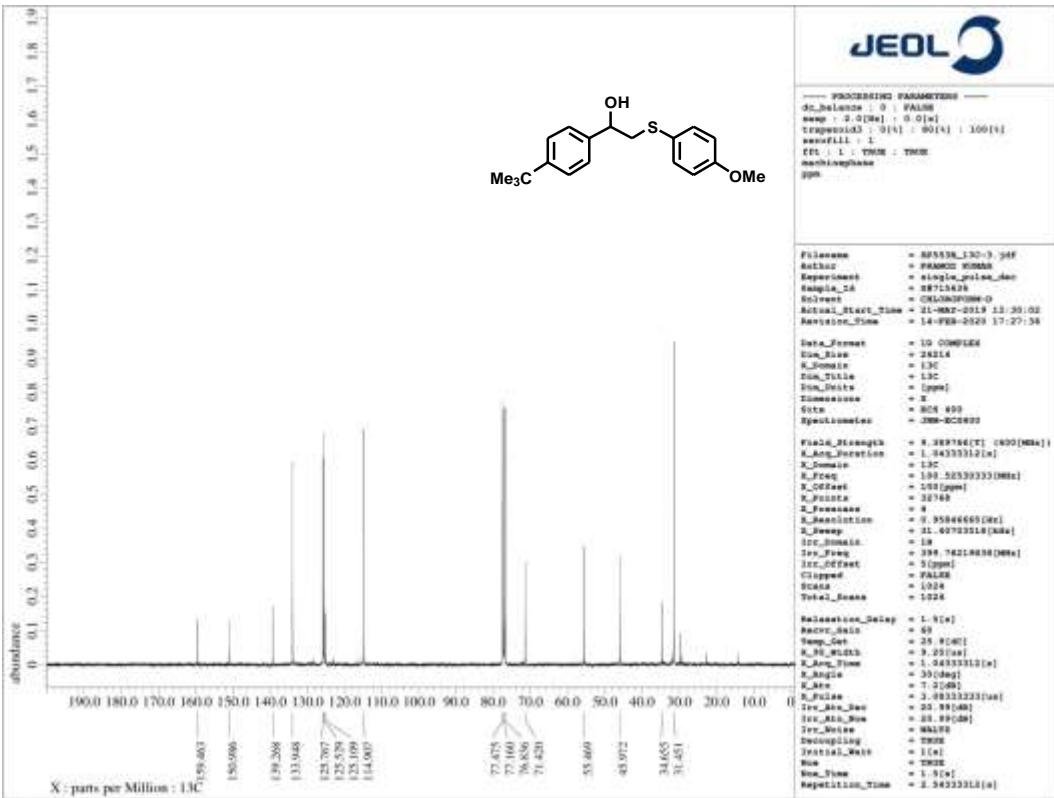
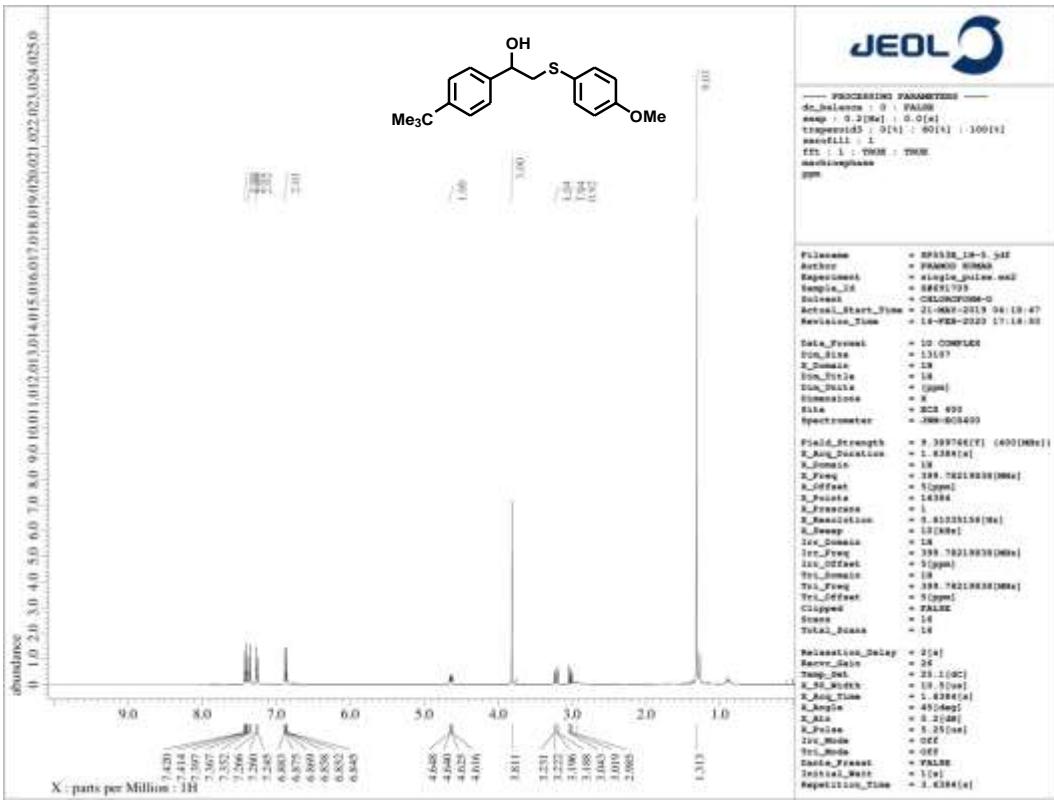


Figure S15. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **3q**.

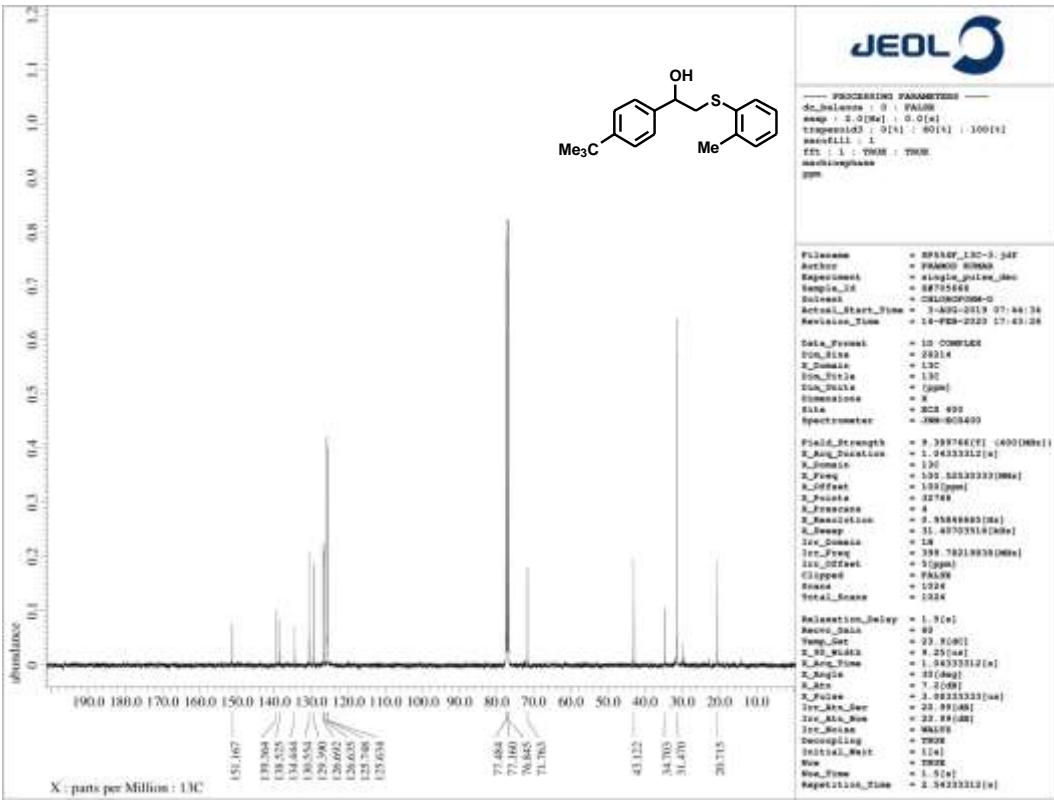
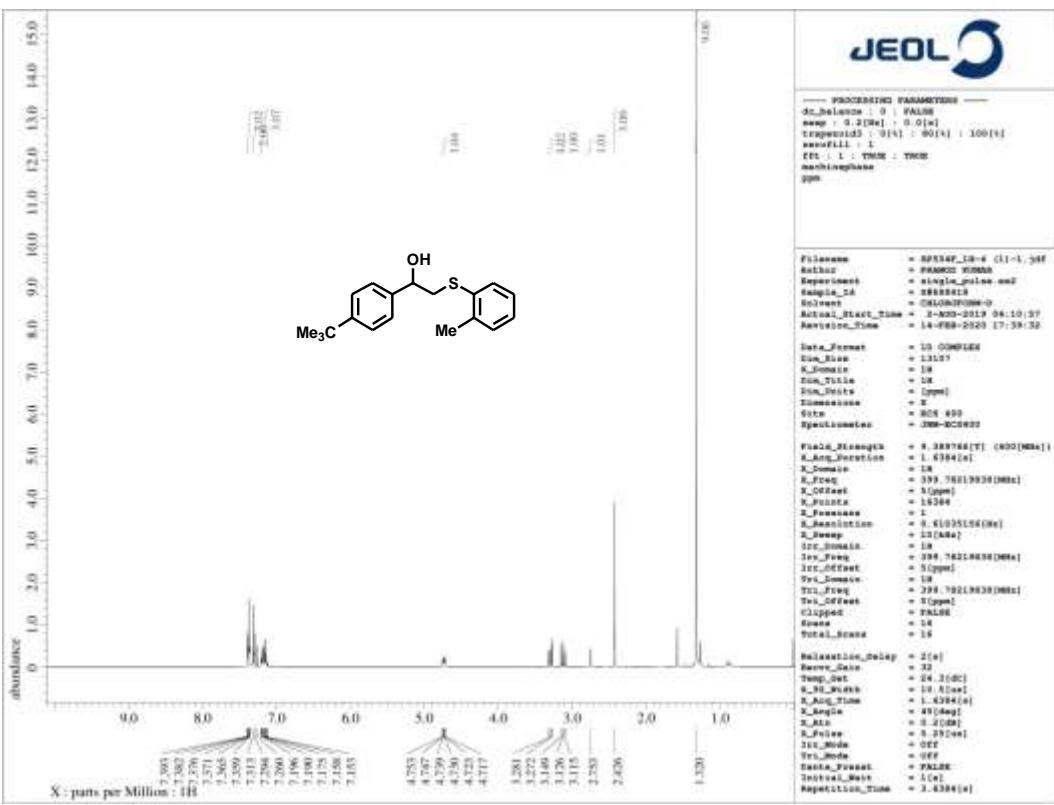


Figure S16. ^1H NMR (400 MHz, CDCl₃) and ^{13}C NMR (100 MHz, CDCl₃) spectra of **3r**.

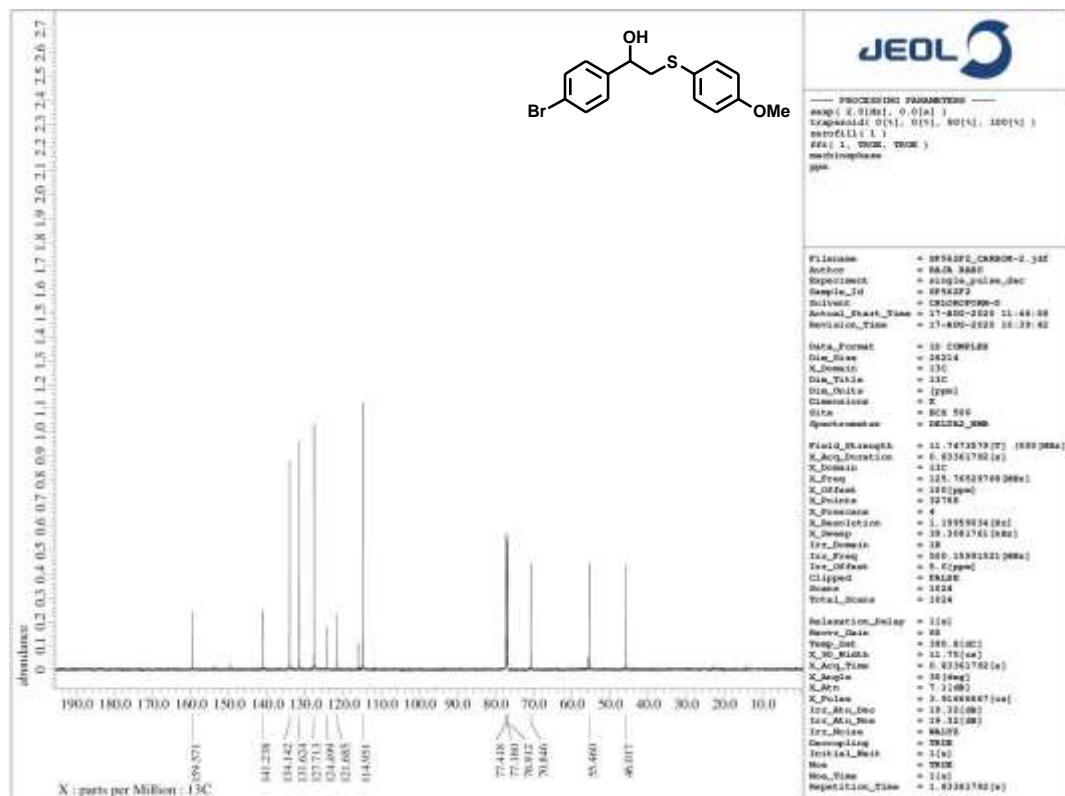
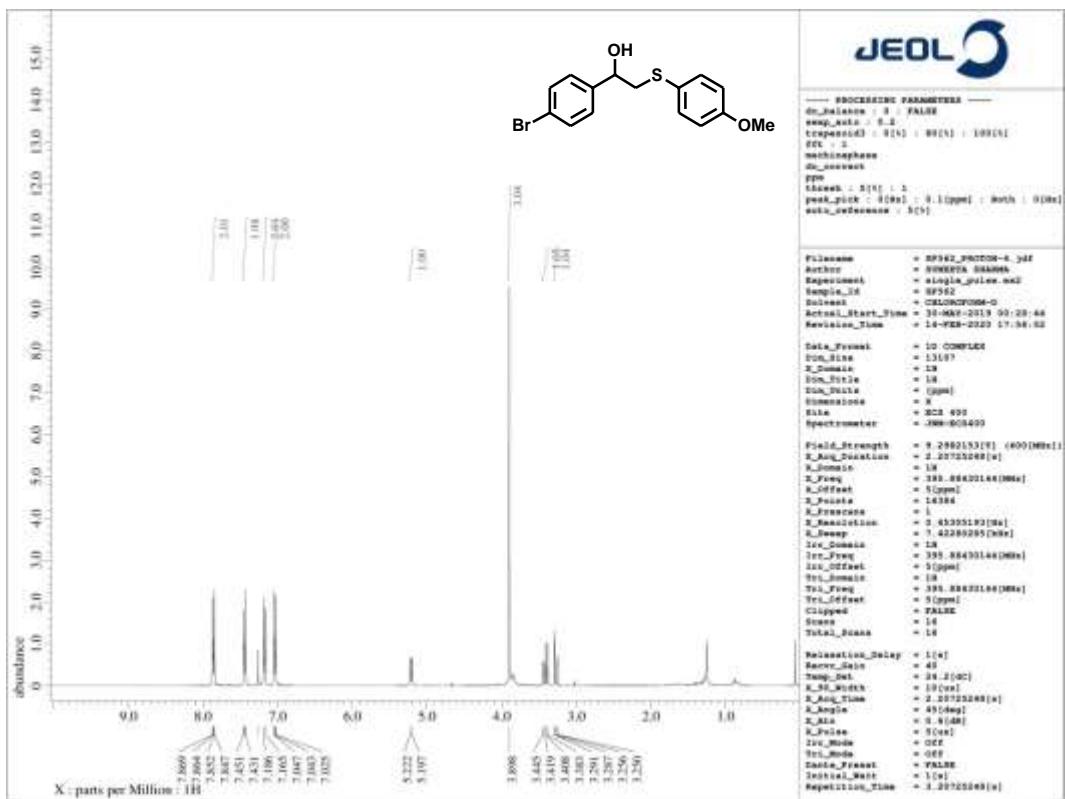


Figure S17. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (125 MHz, CDCl_3) spectra of **3s**.

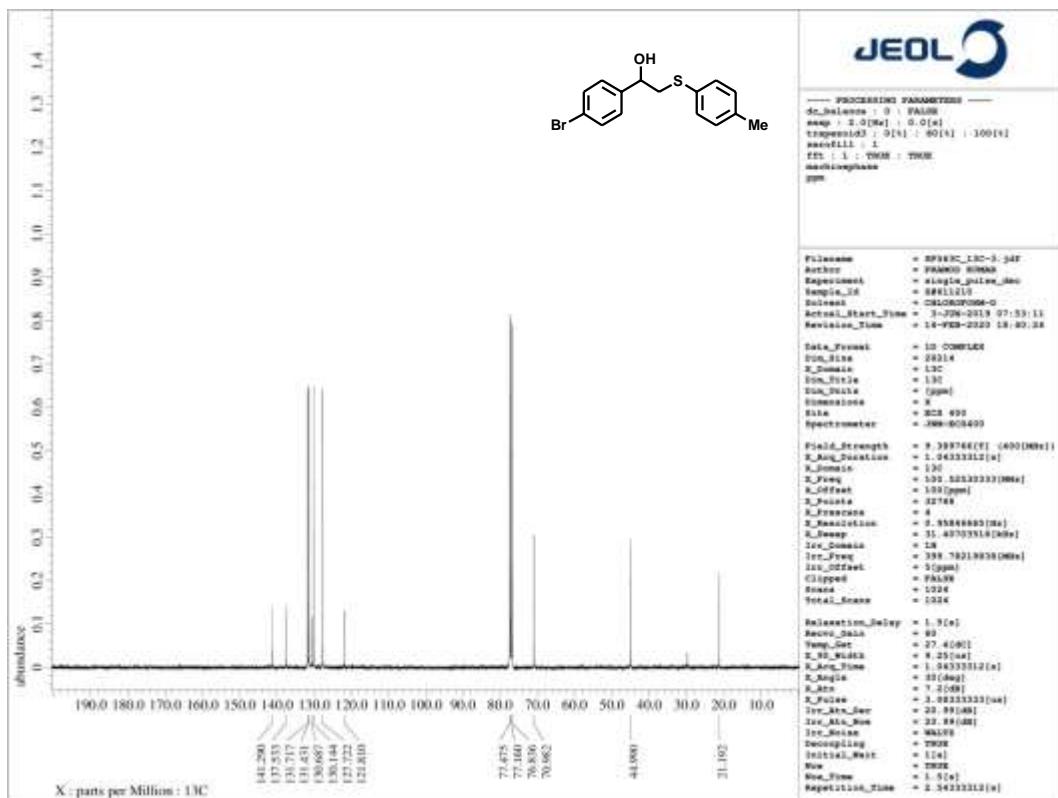
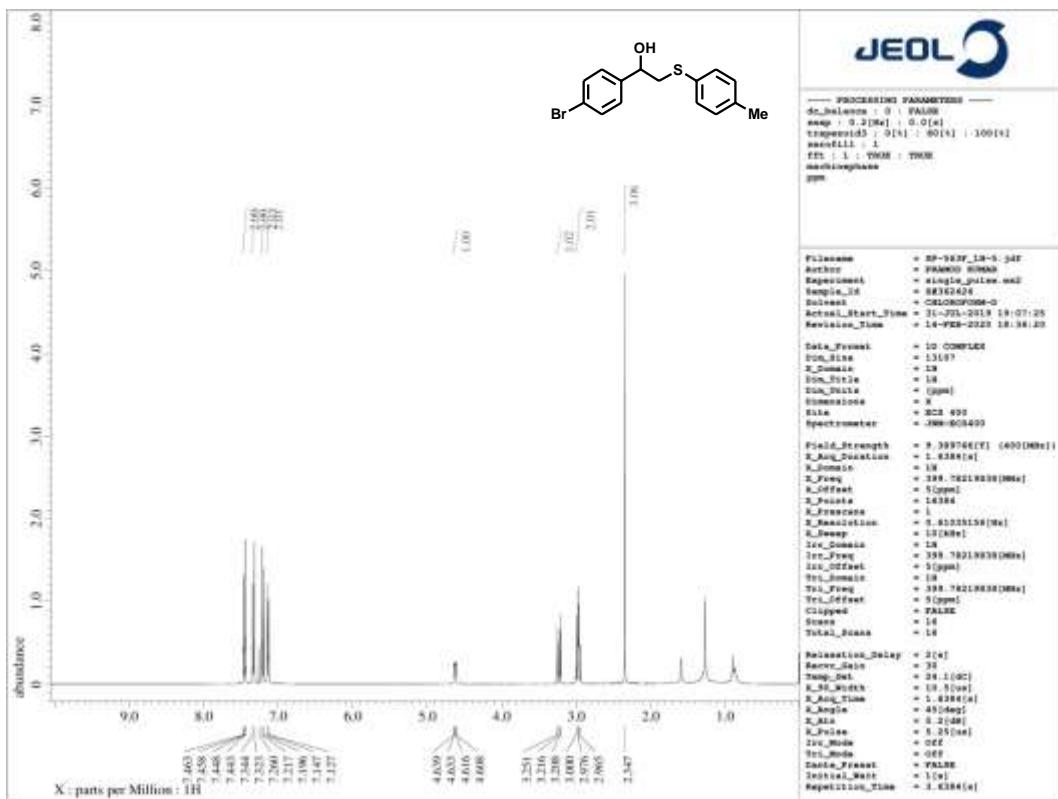


Figure S18. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **3t**.

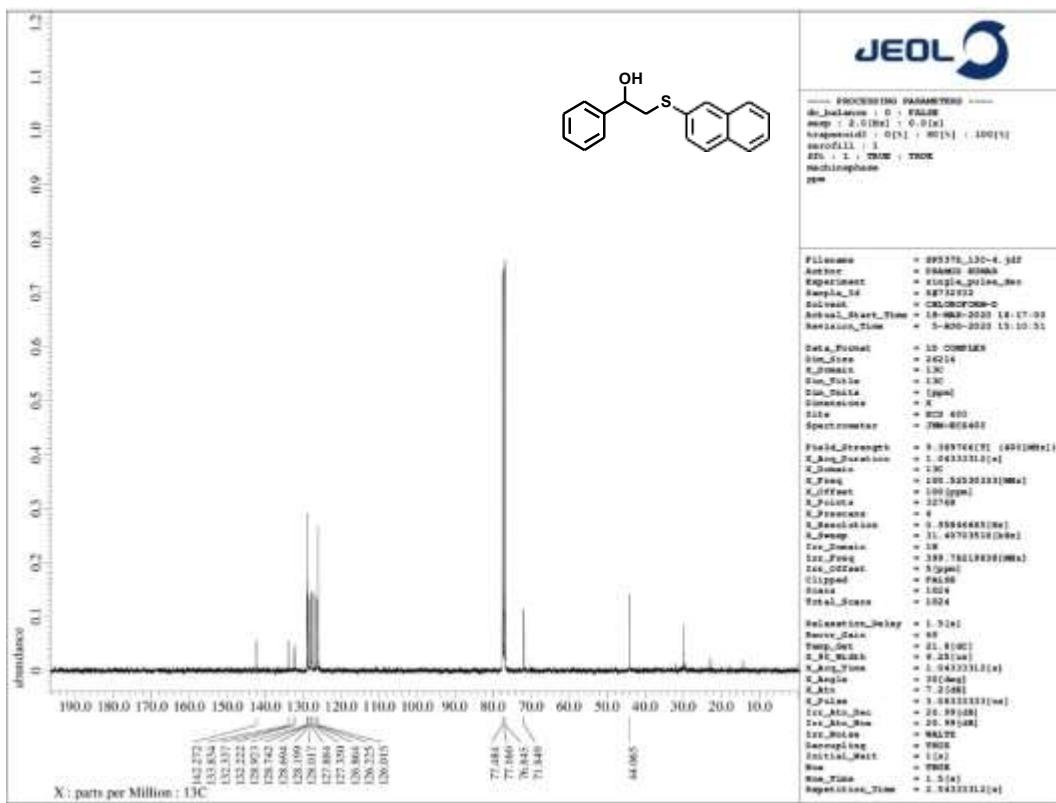
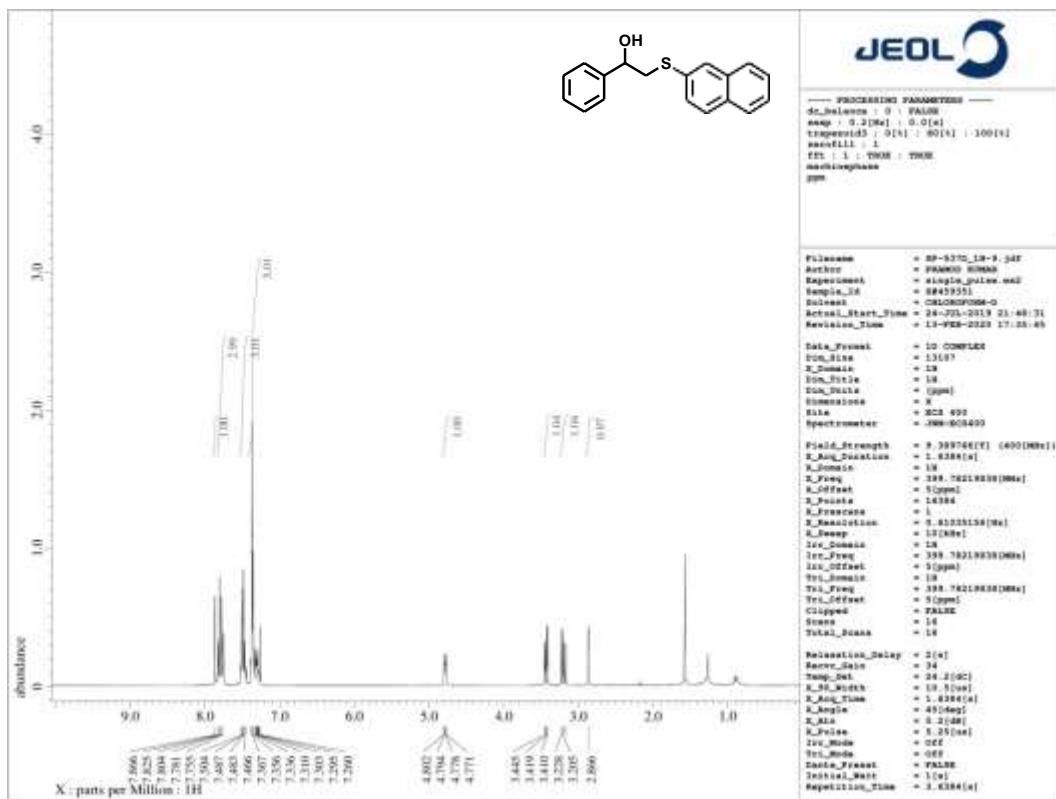


Figure S19. ^1H NMR (400 MHz, CDCl_3) NMR (100 MHz, CDCl_3) spectra of **3u**.

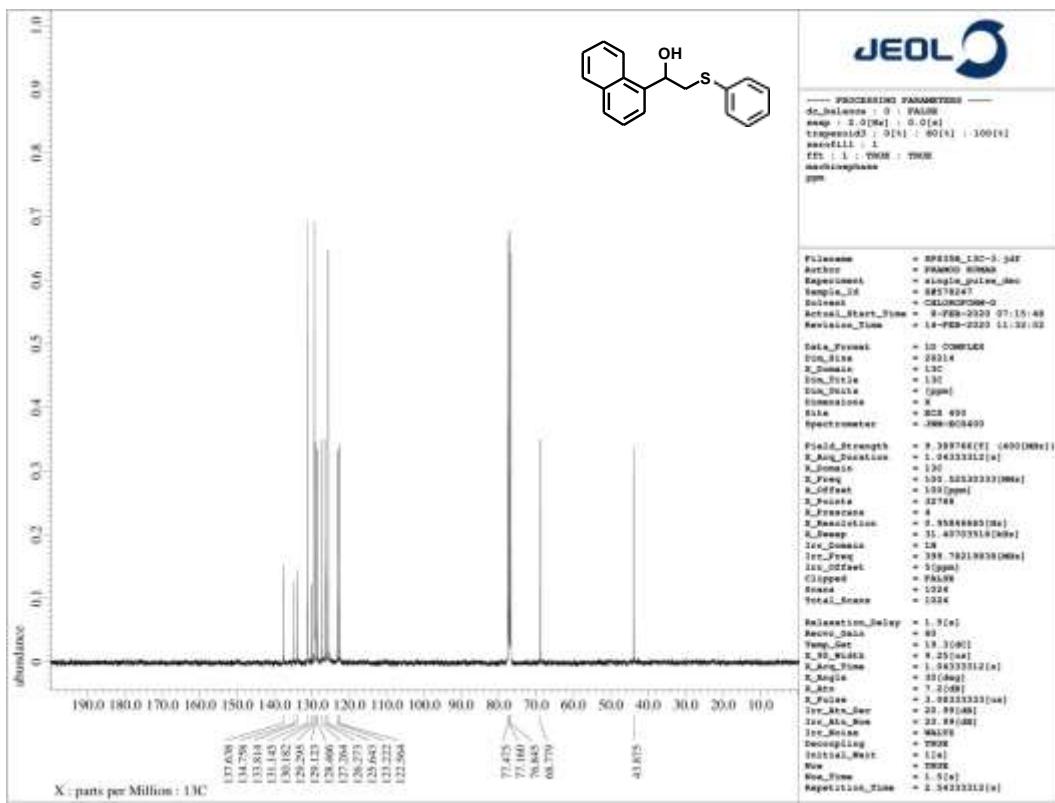
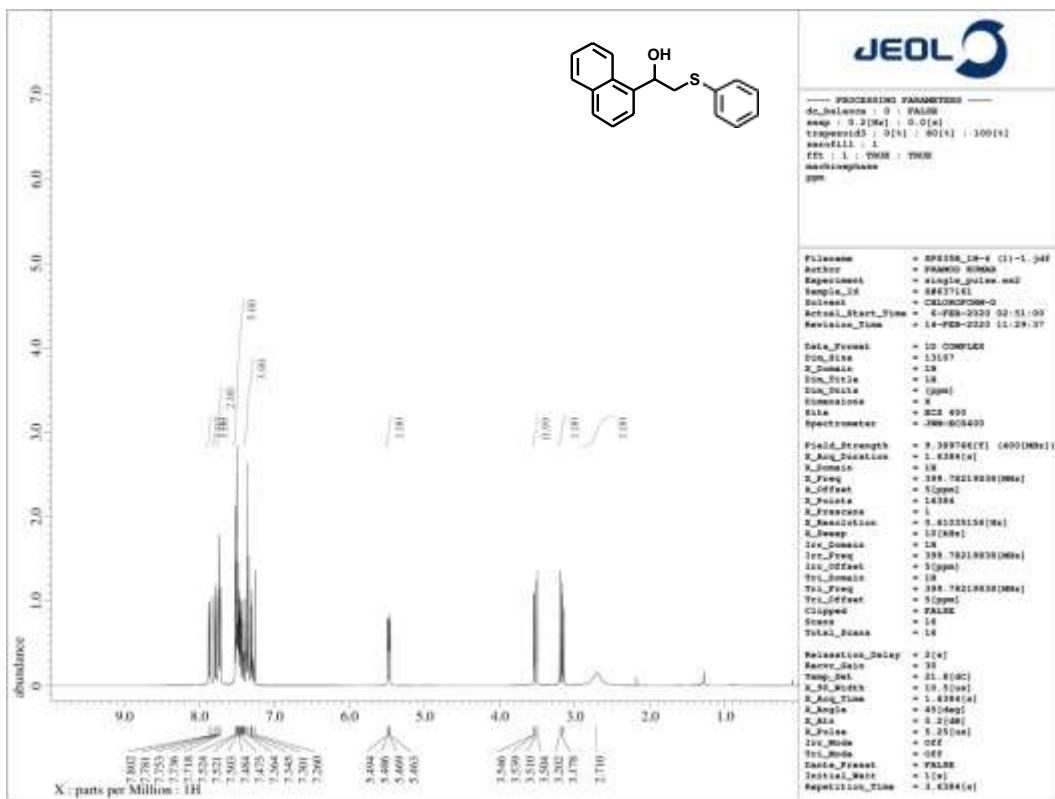


Figure S20. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **3v**.

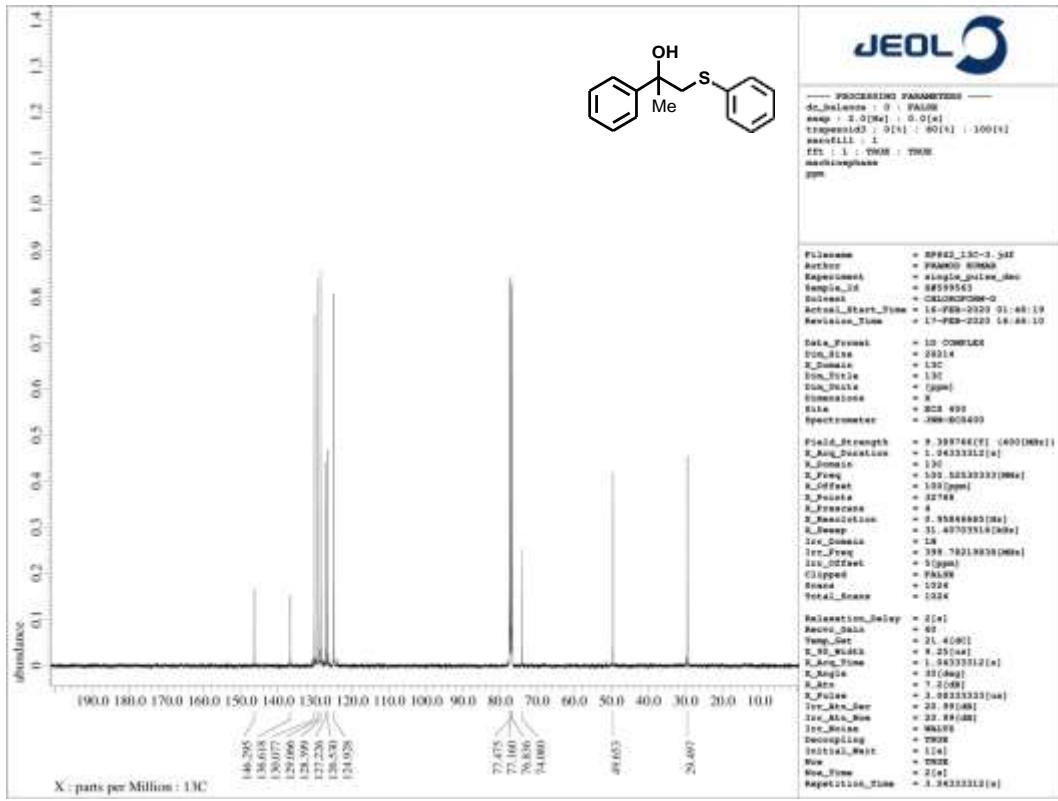
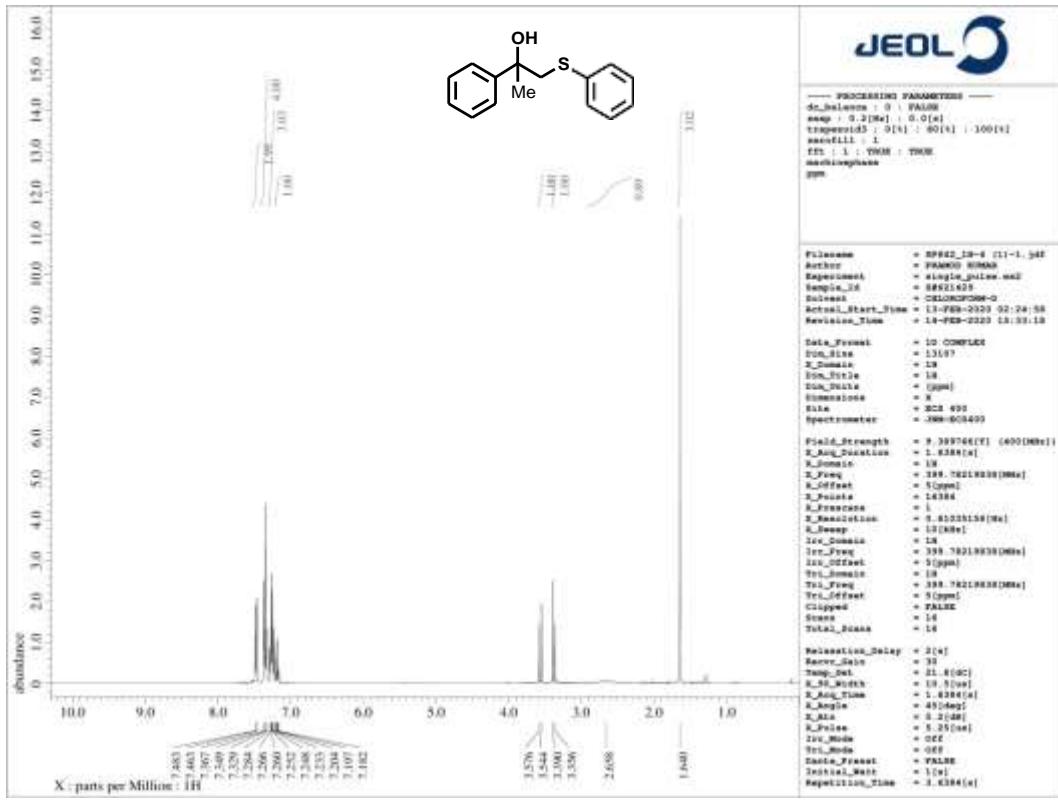


Figure S21. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **3w**.

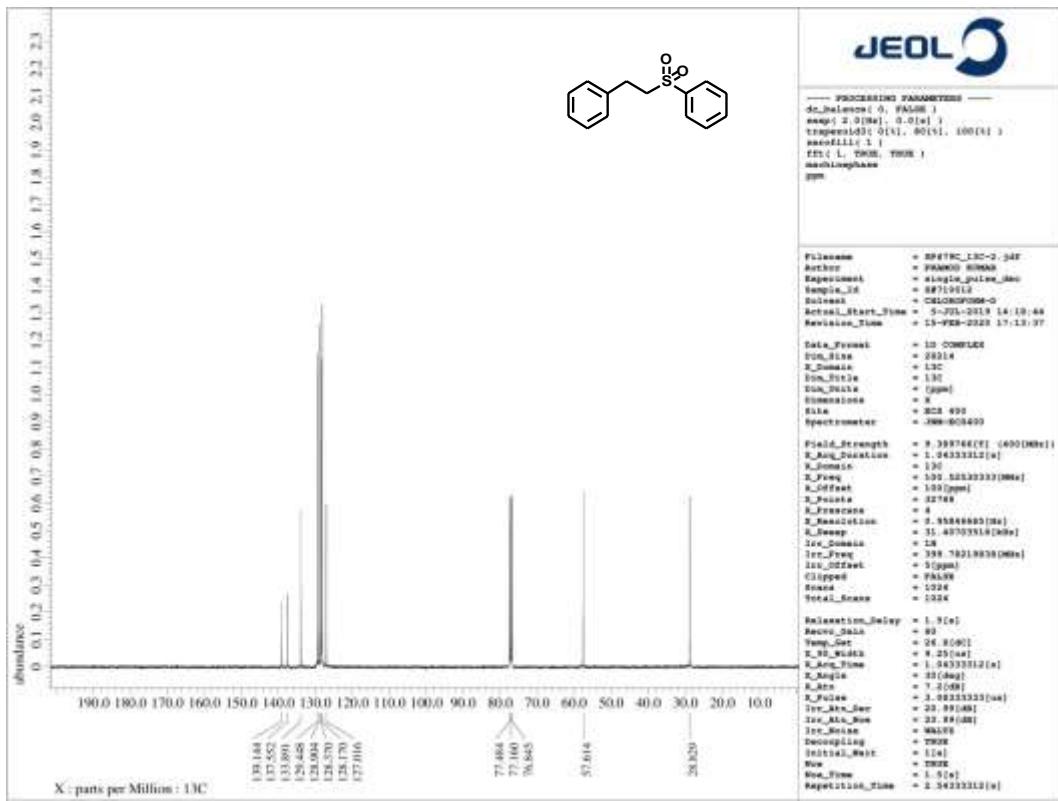
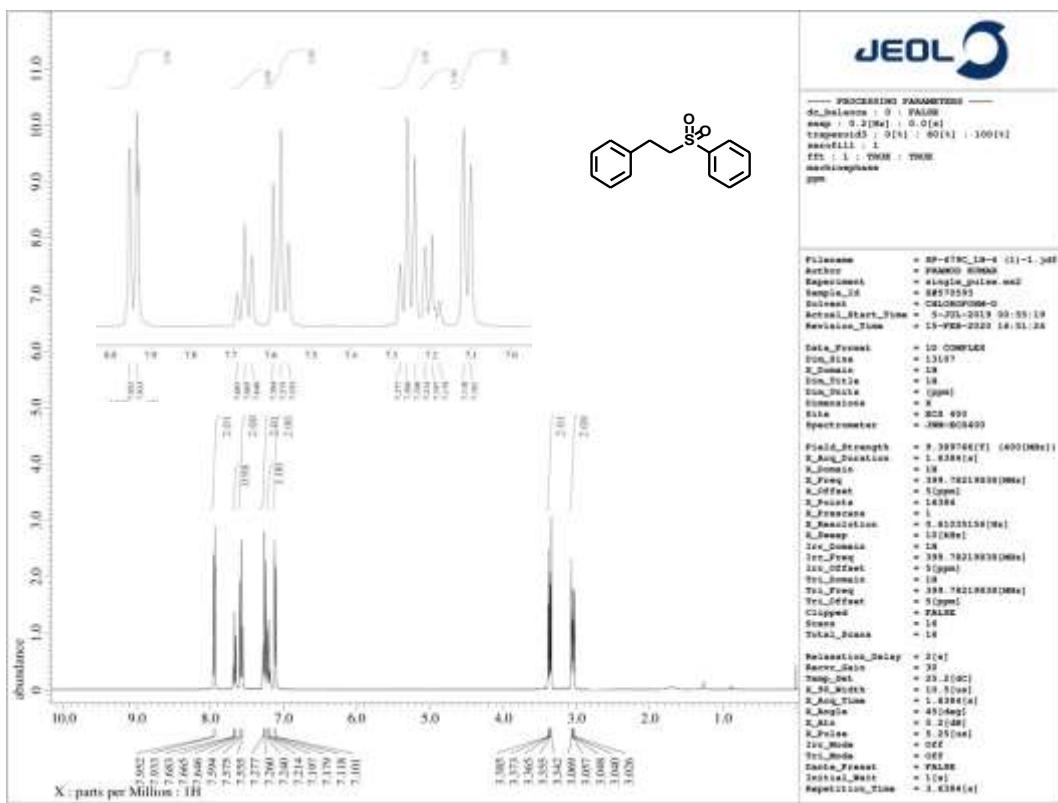


Figure S22. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **4a**.

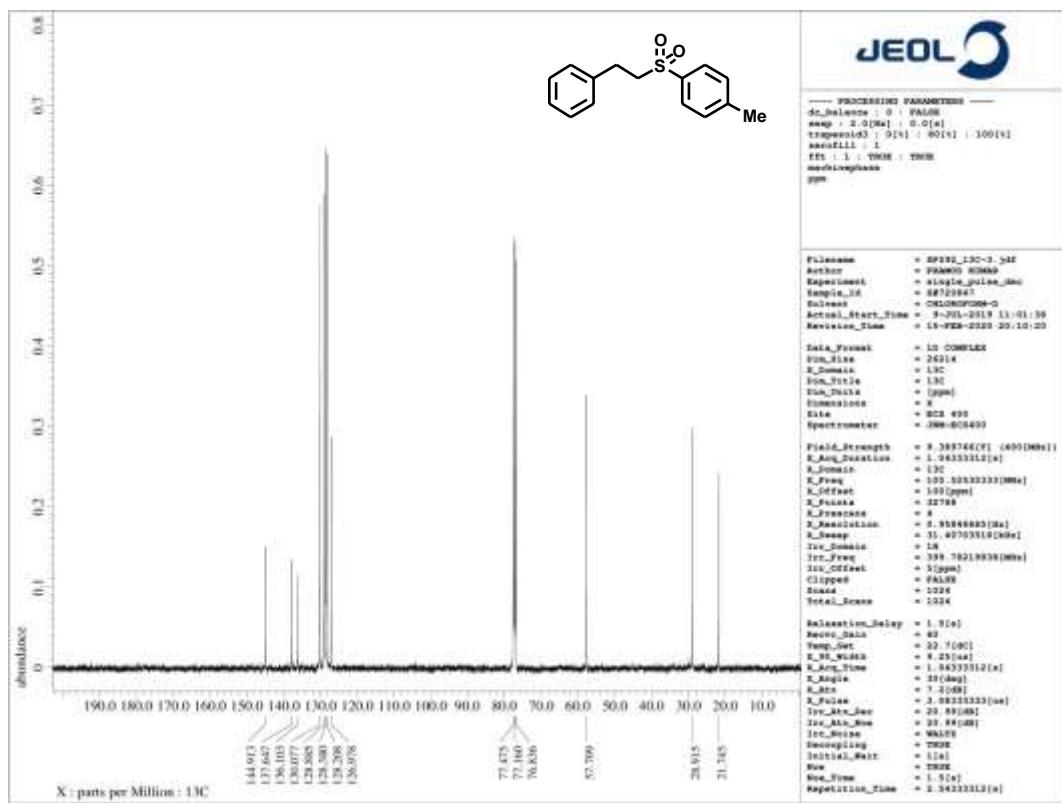
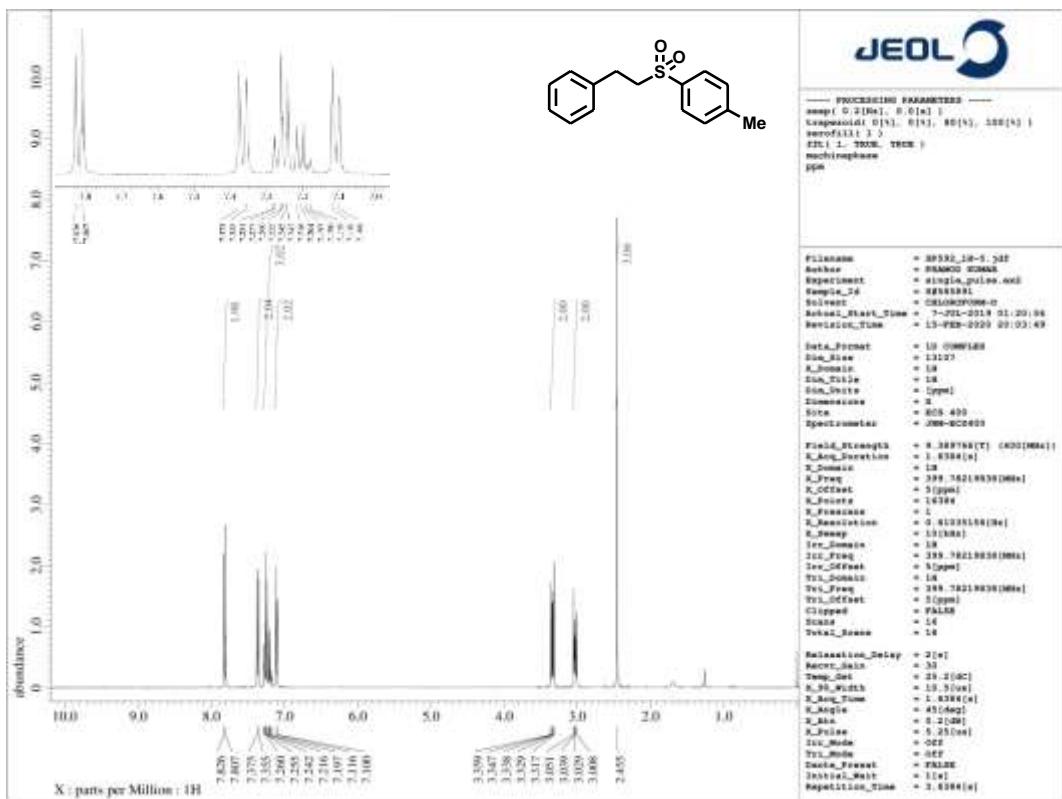


Figure S23. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4b**.

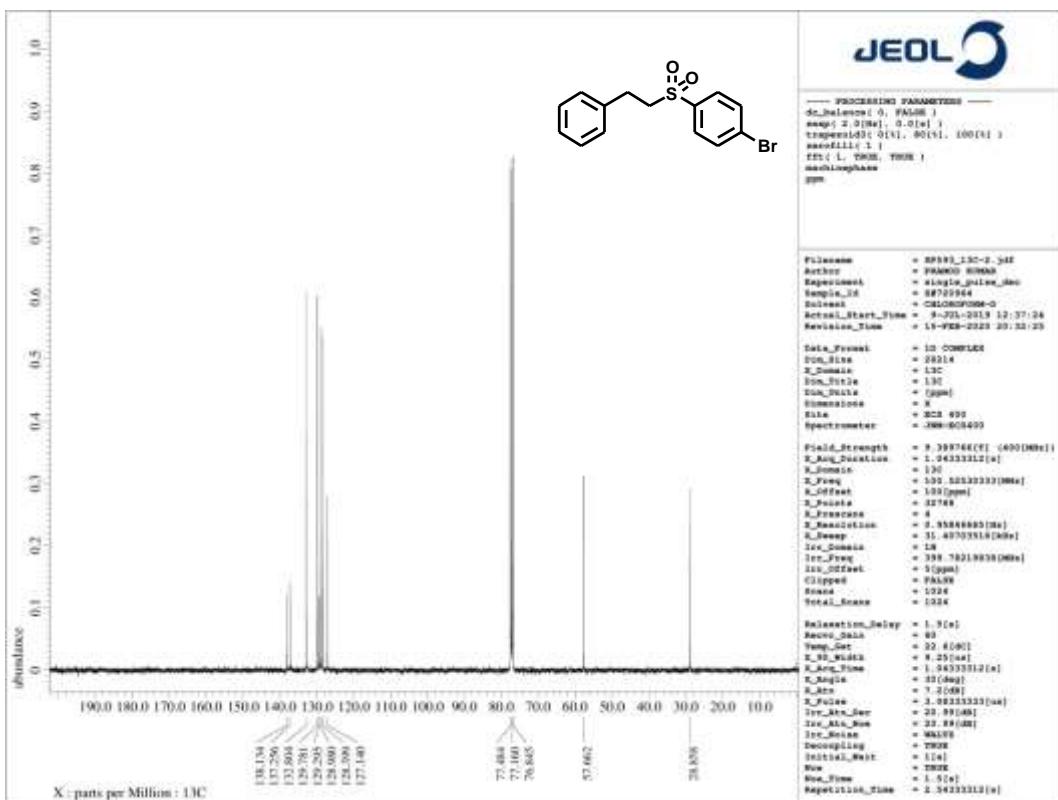
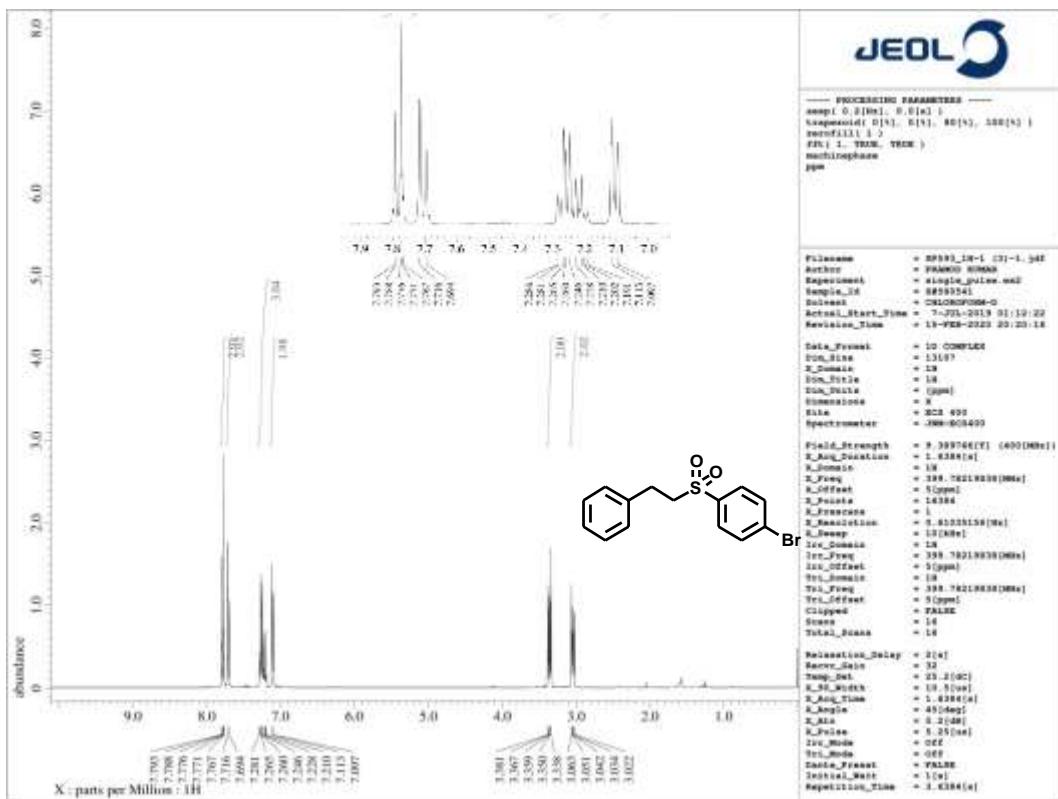


Figure S24. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **4c**.

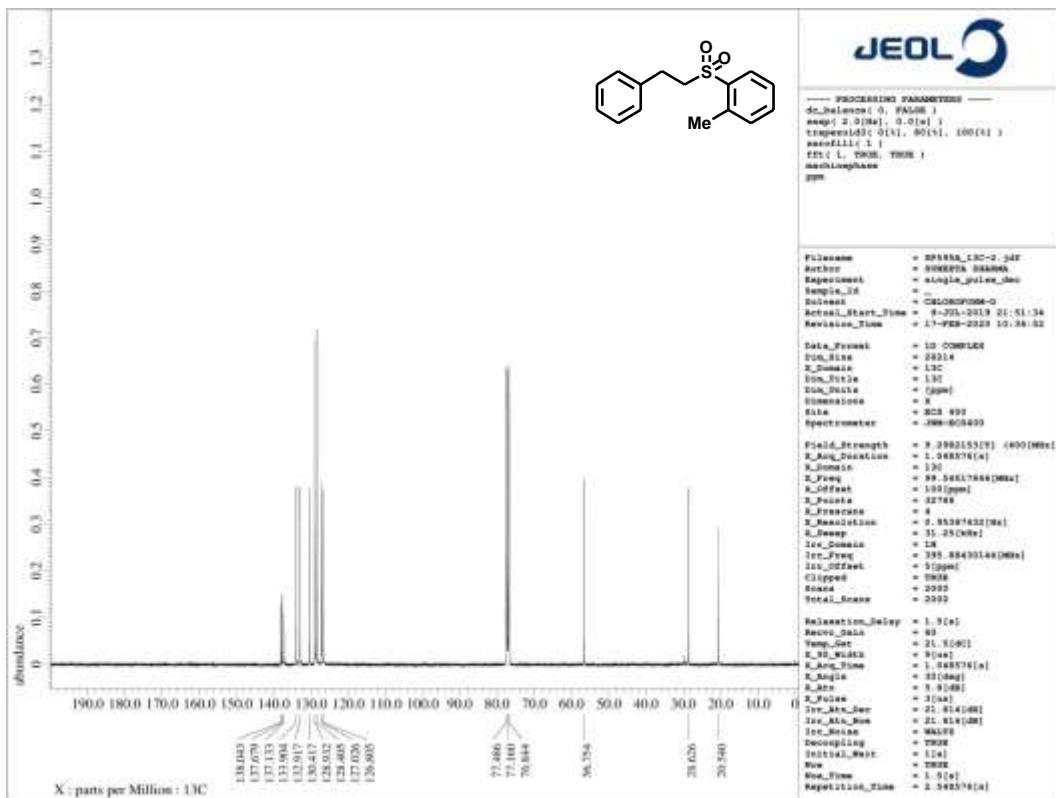
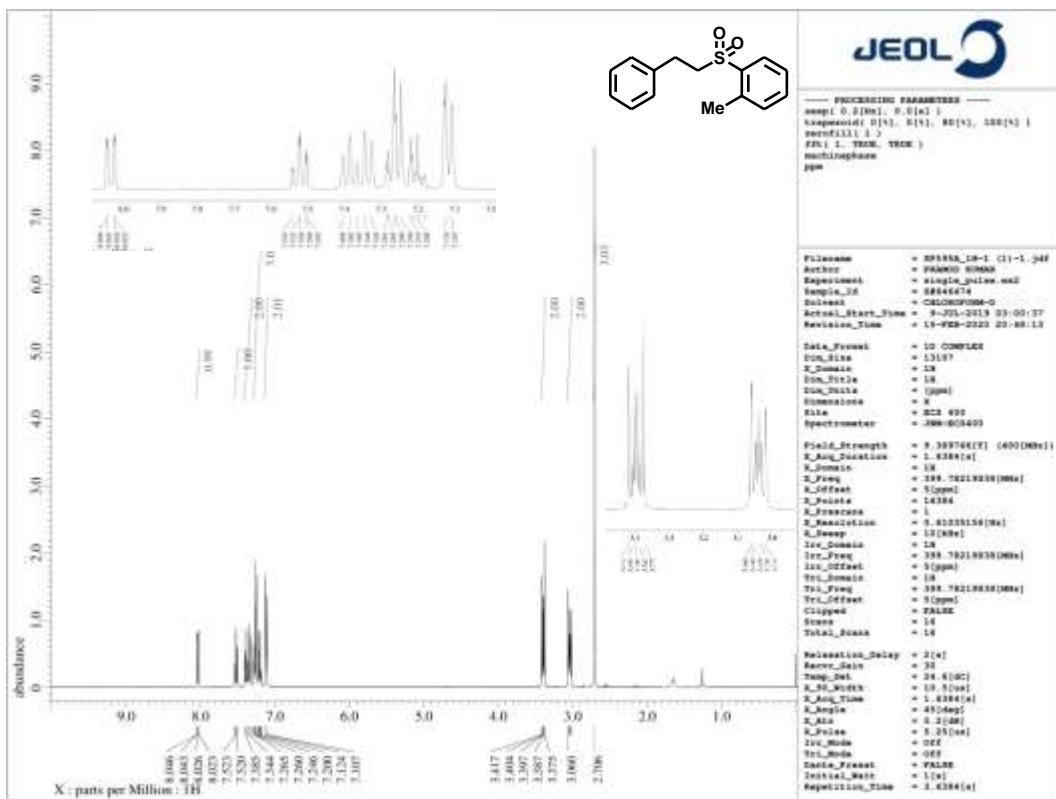


Figure S25. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4d**.

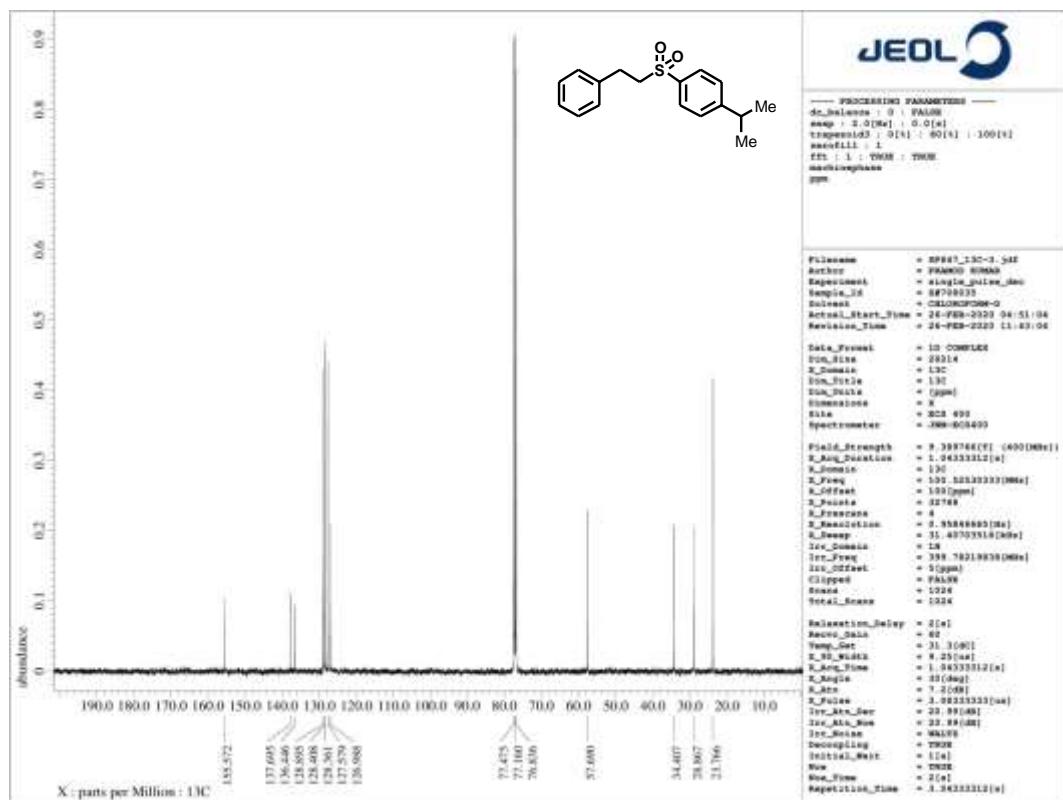
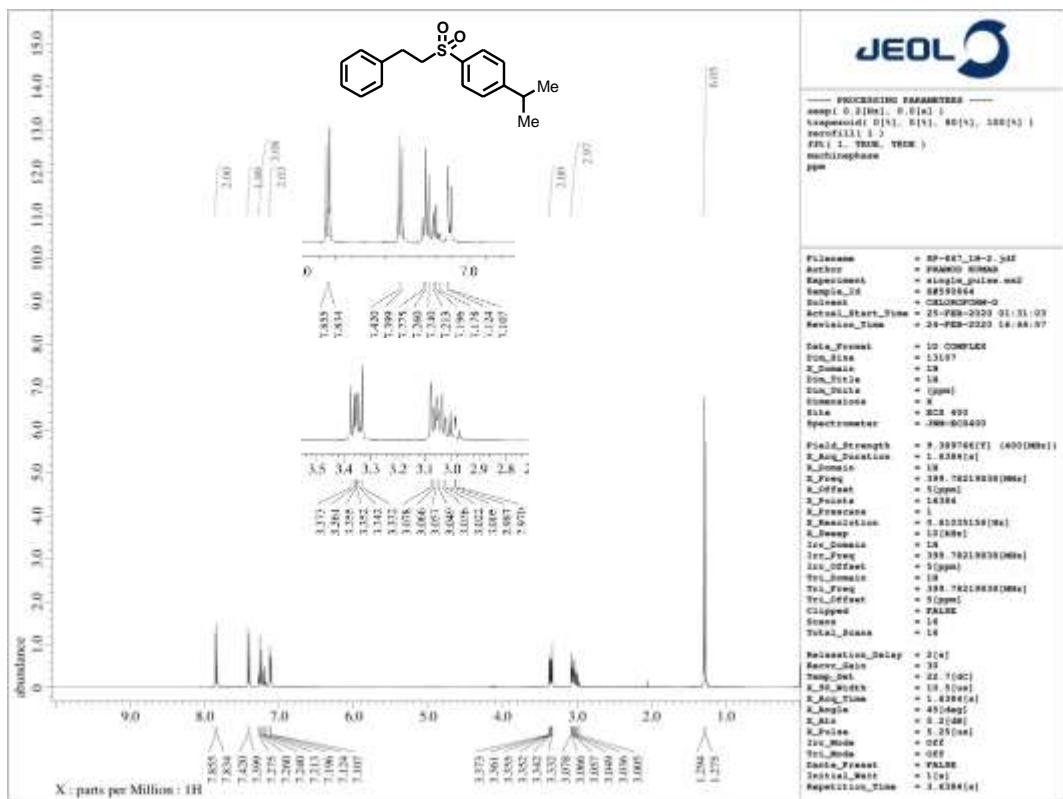


Figure S26. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4e**.

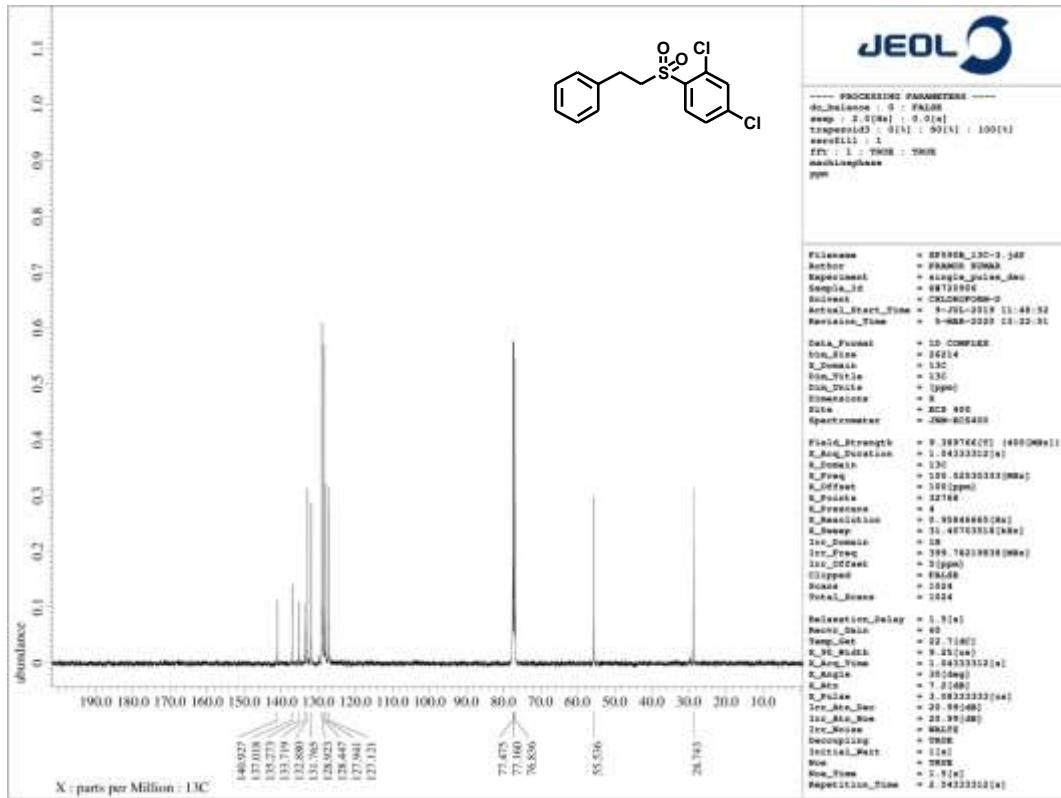
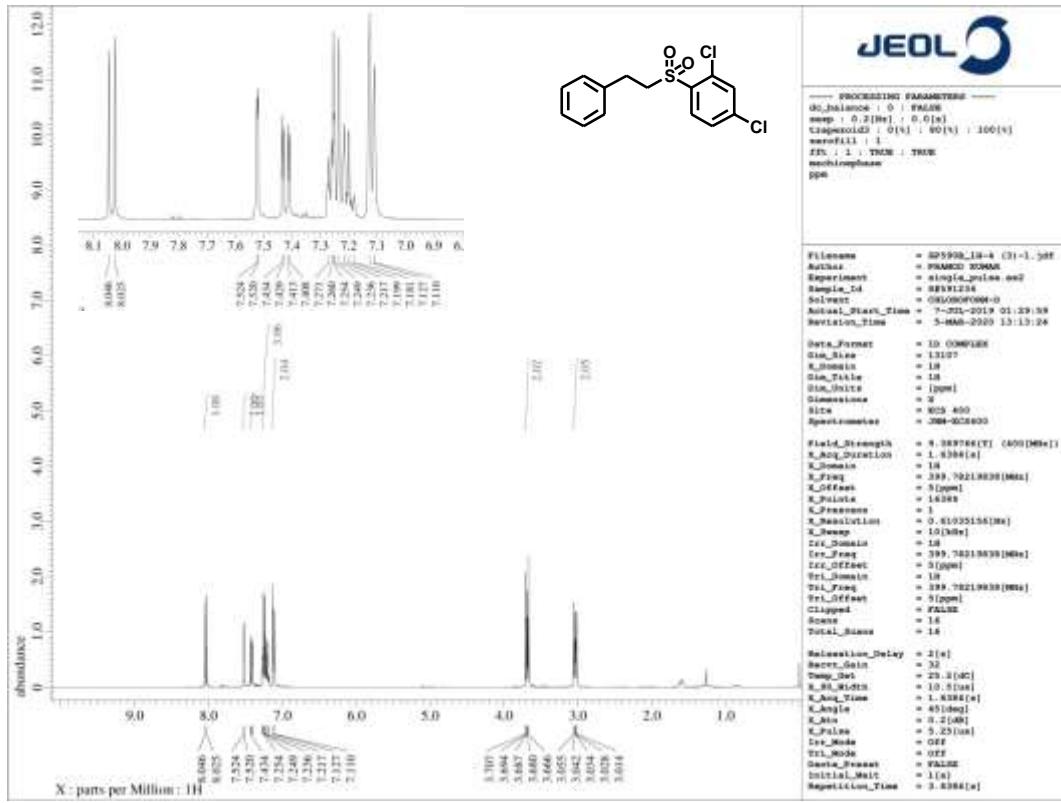


Figure S27. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4g**.

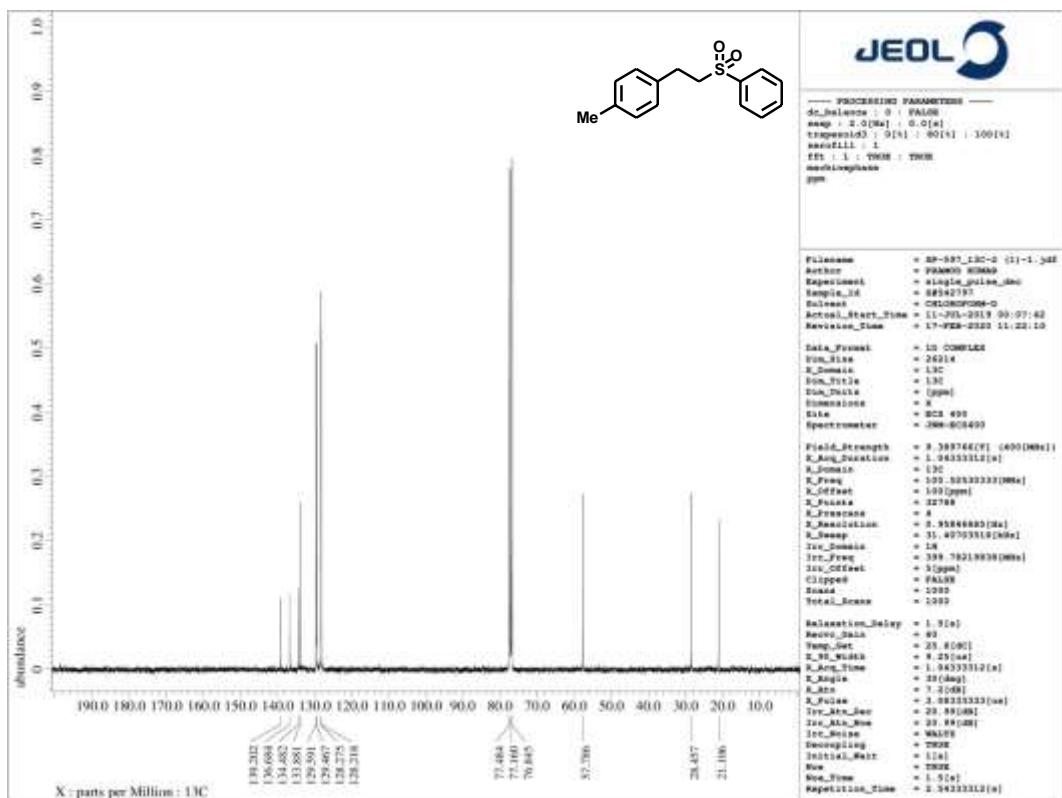
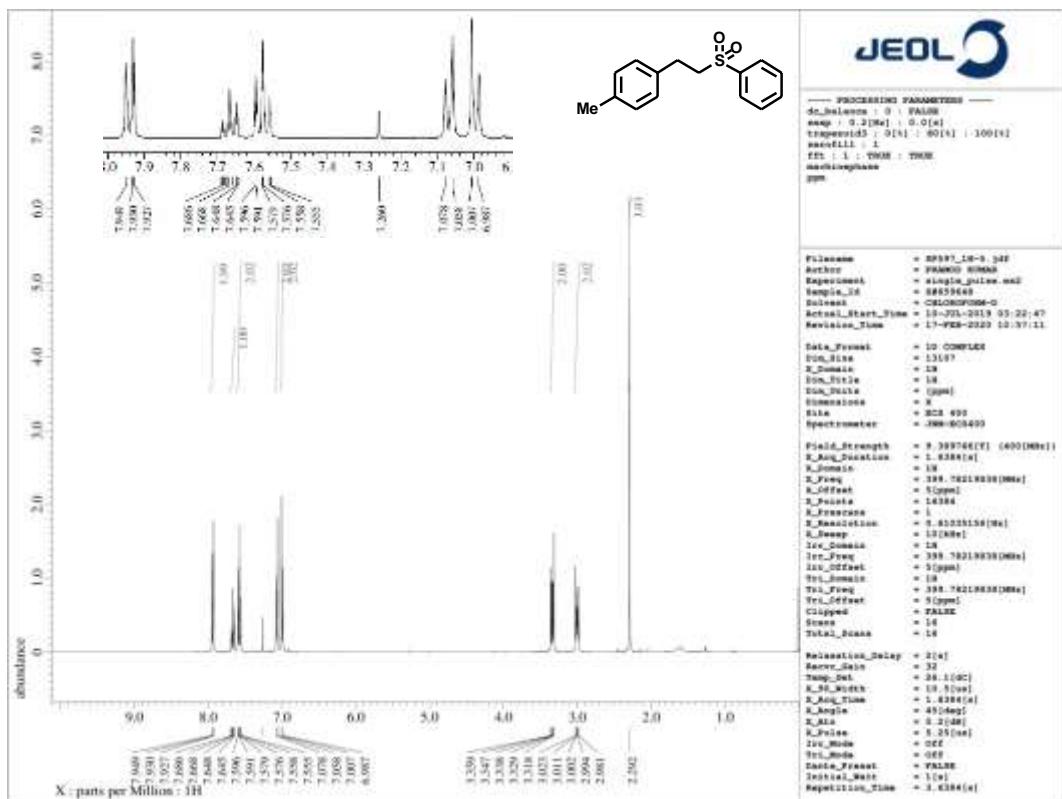


Figure S28. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4h**.

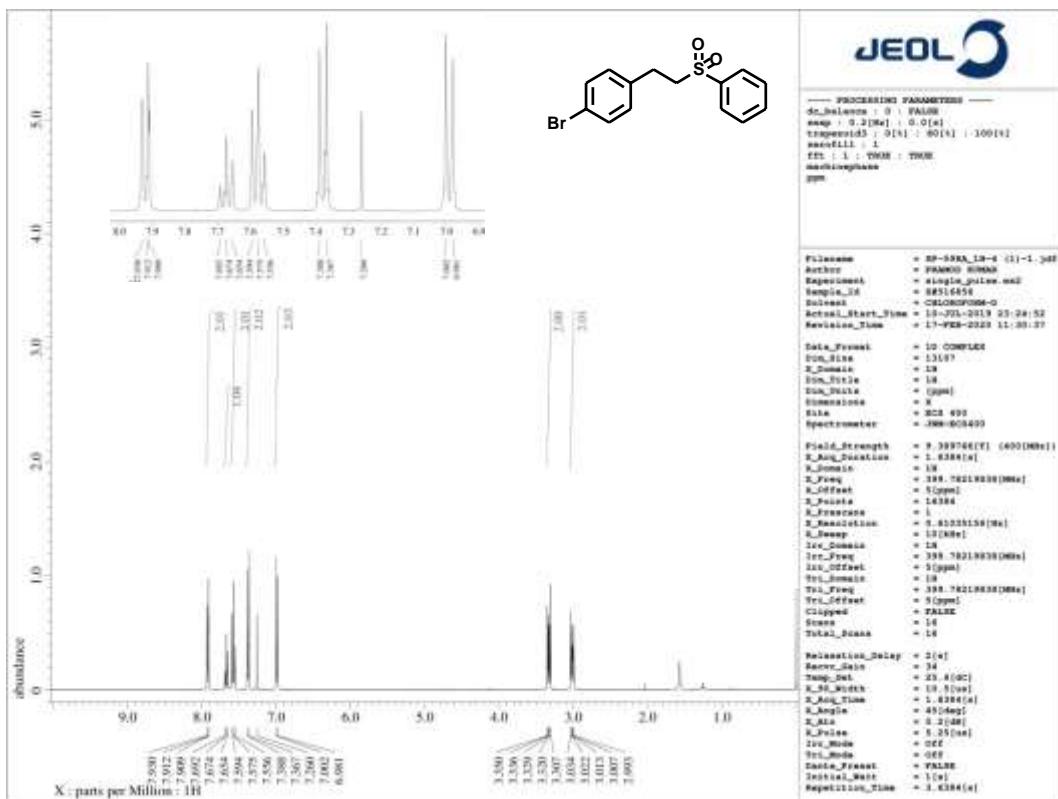


Figure S29. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **4i**.

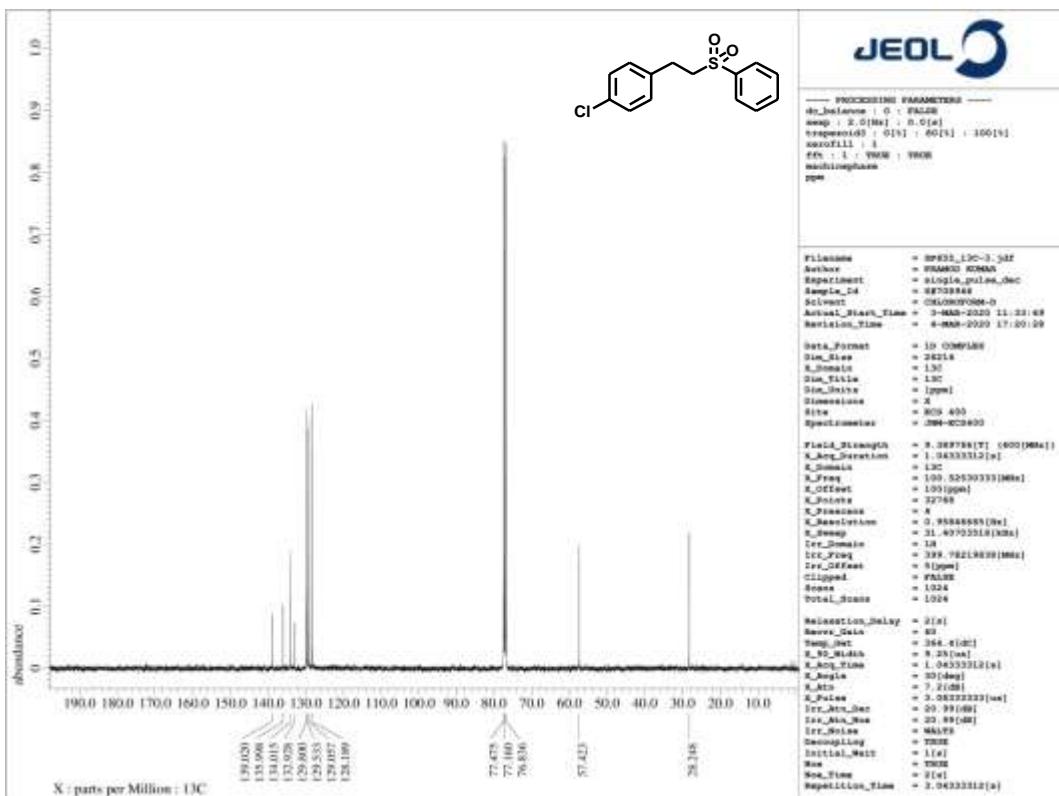
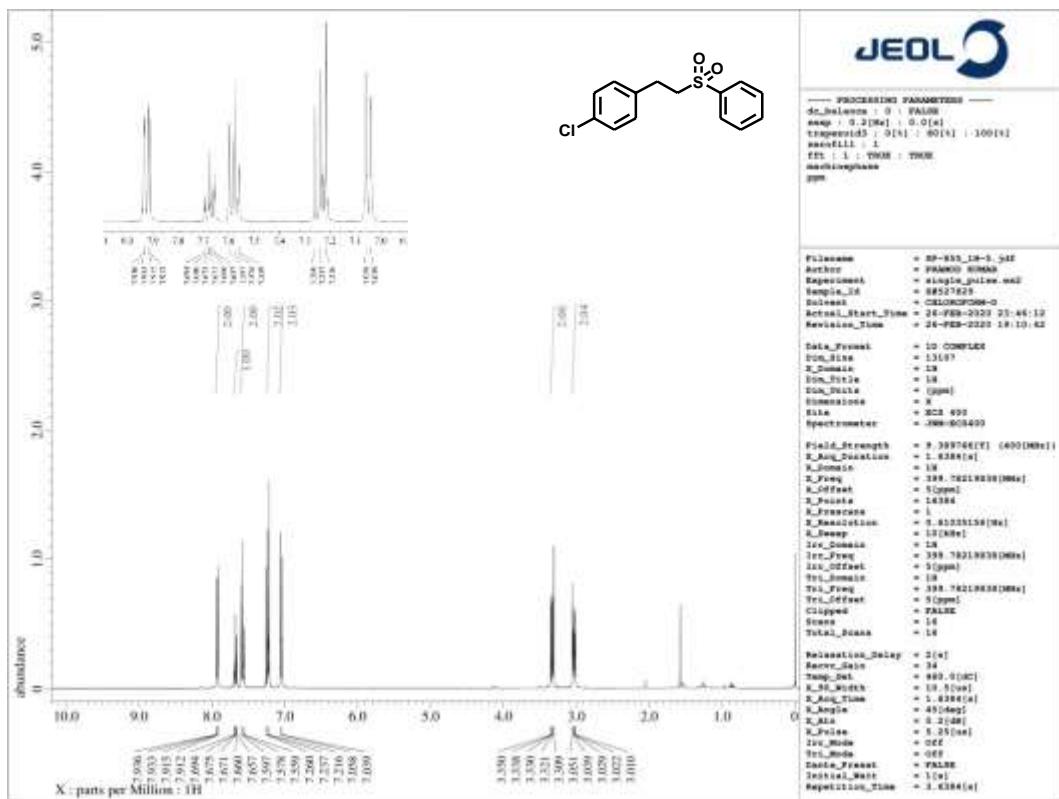


Figure S30. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4j**.

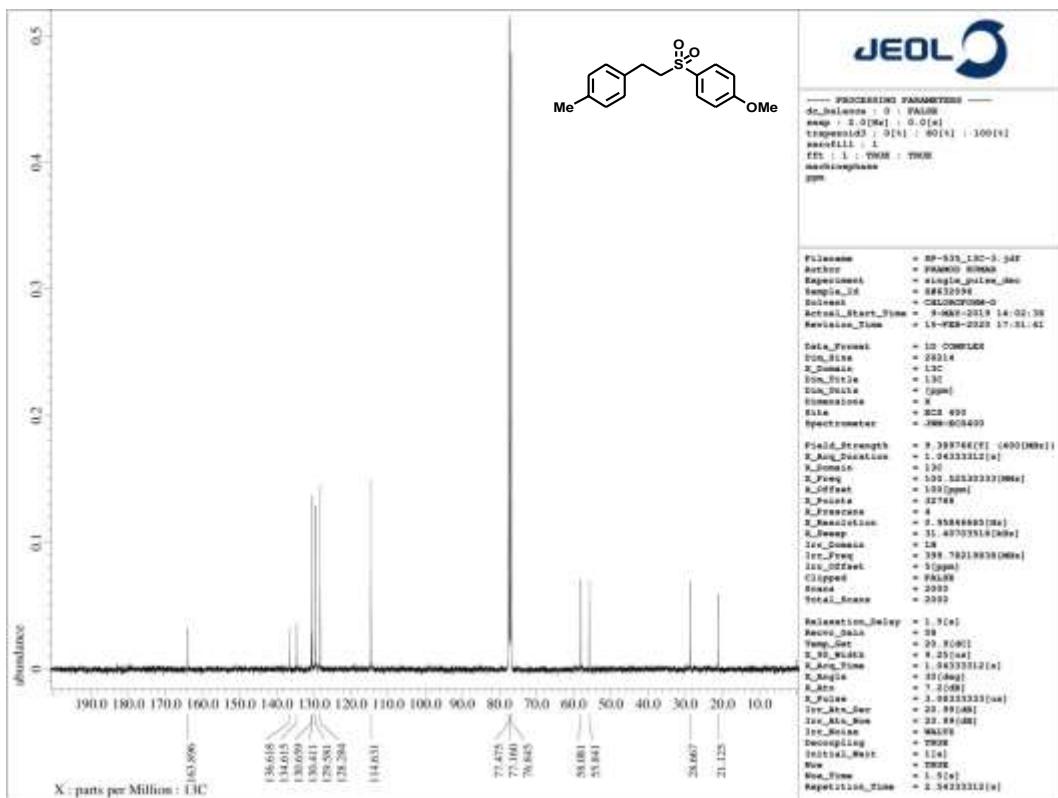
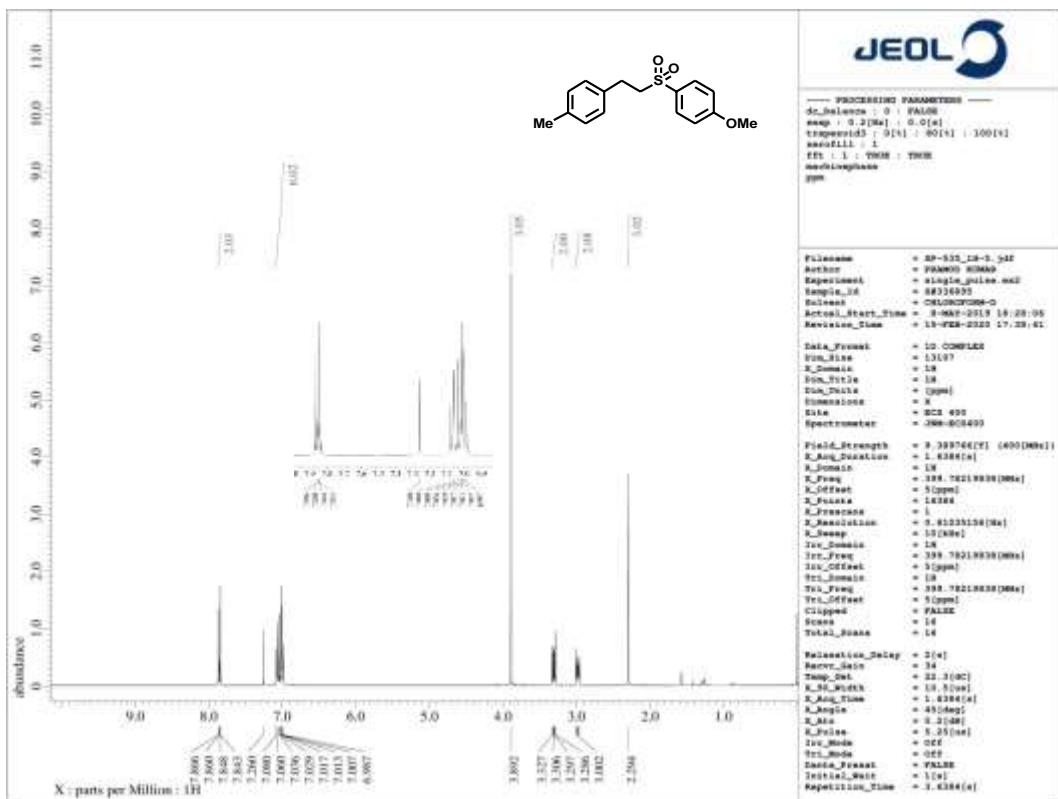


Figure S31. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4l**.

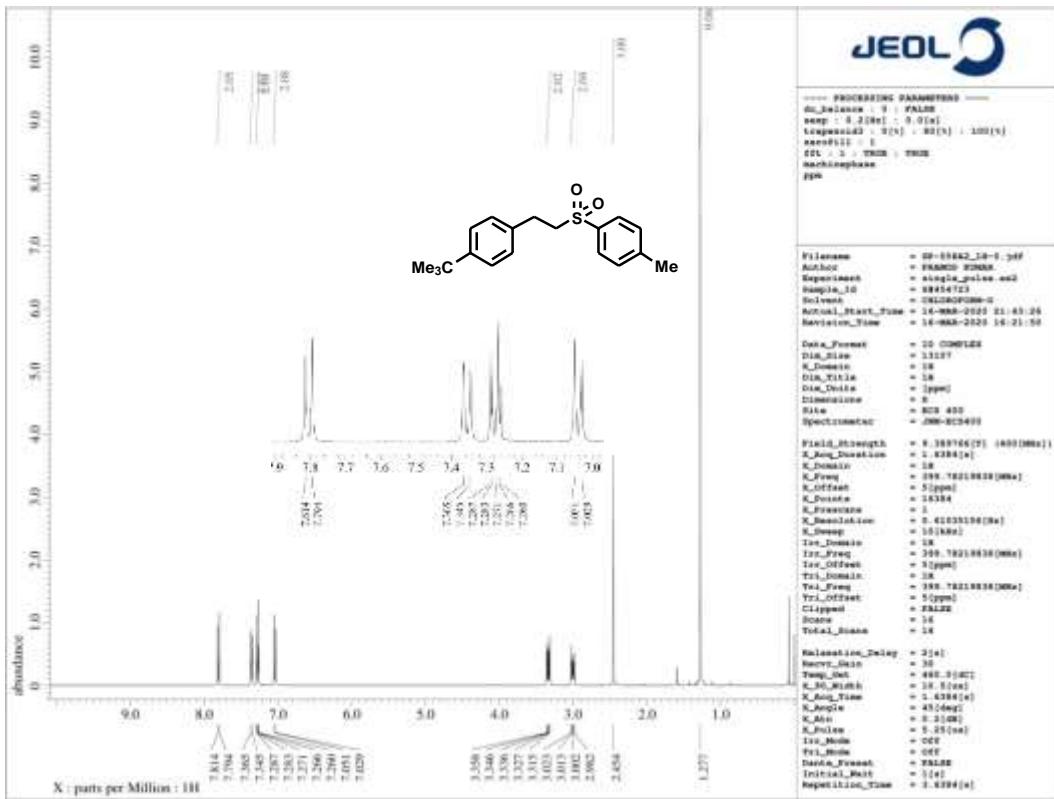


Figure S32. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4m**.

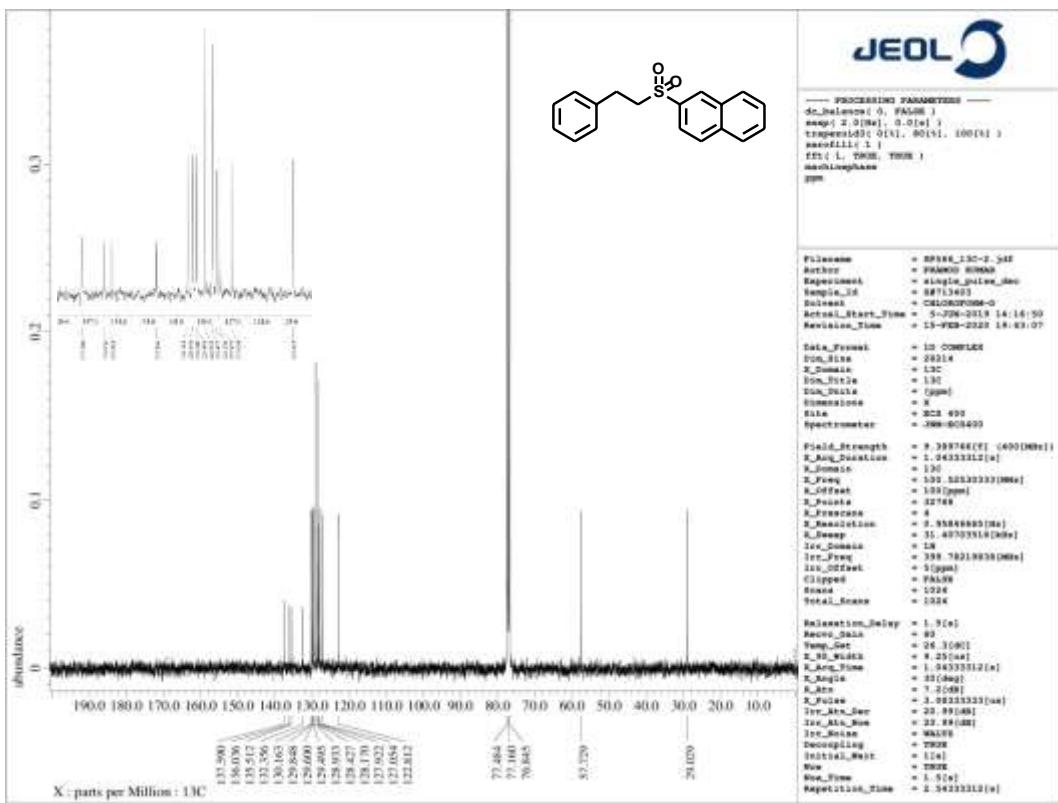
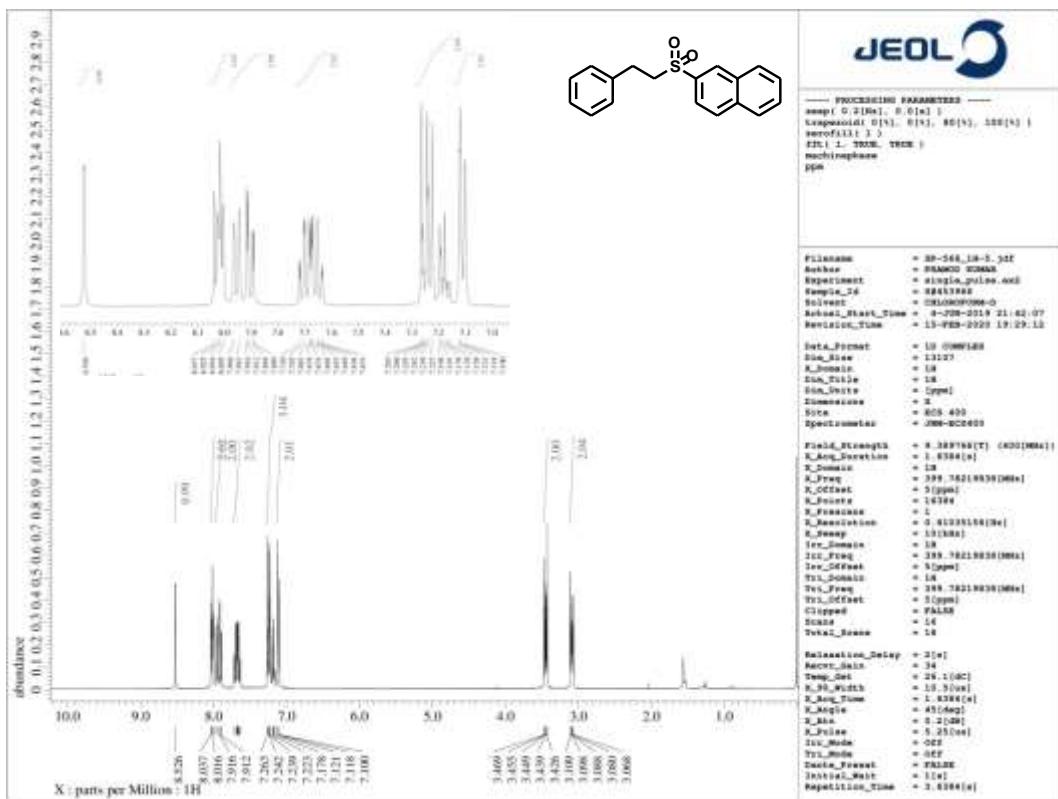


Figure S33. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4n**.

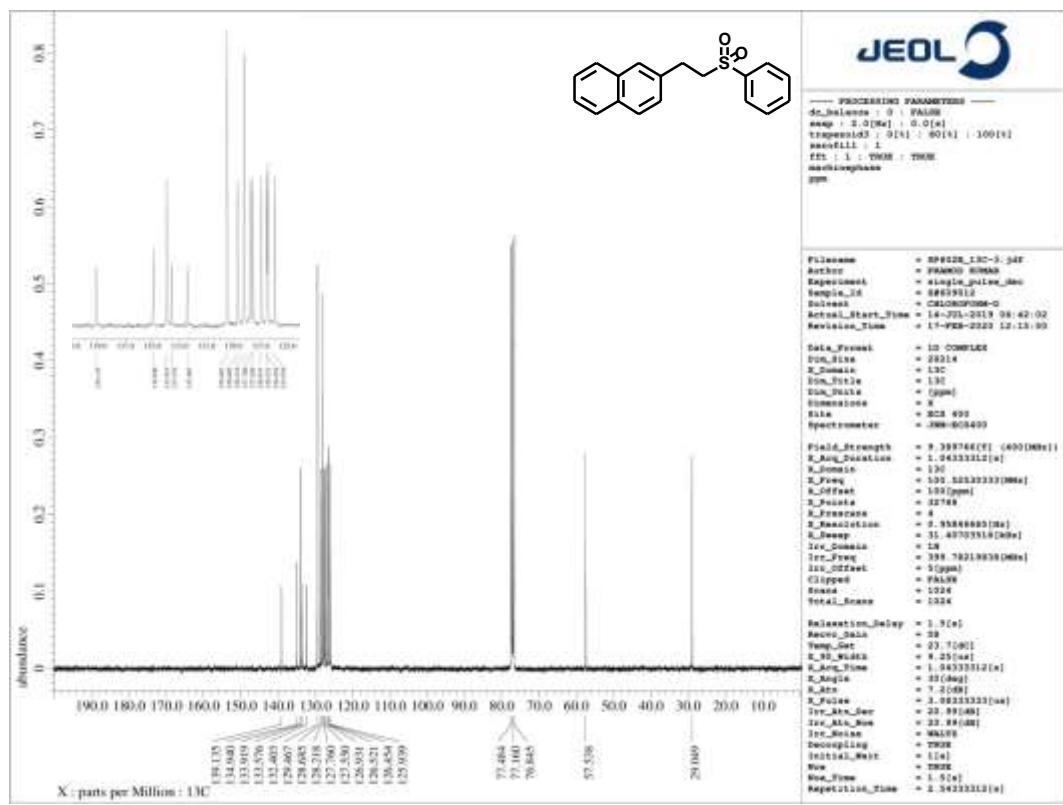
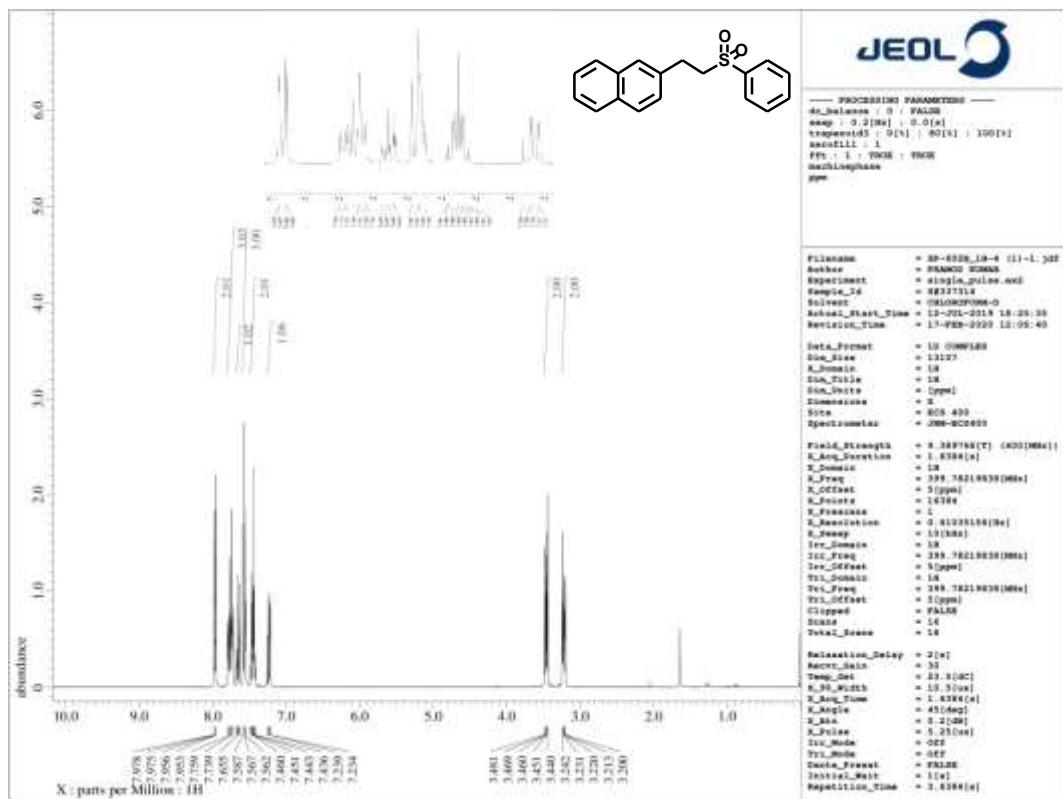


Figure S34. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4o**.

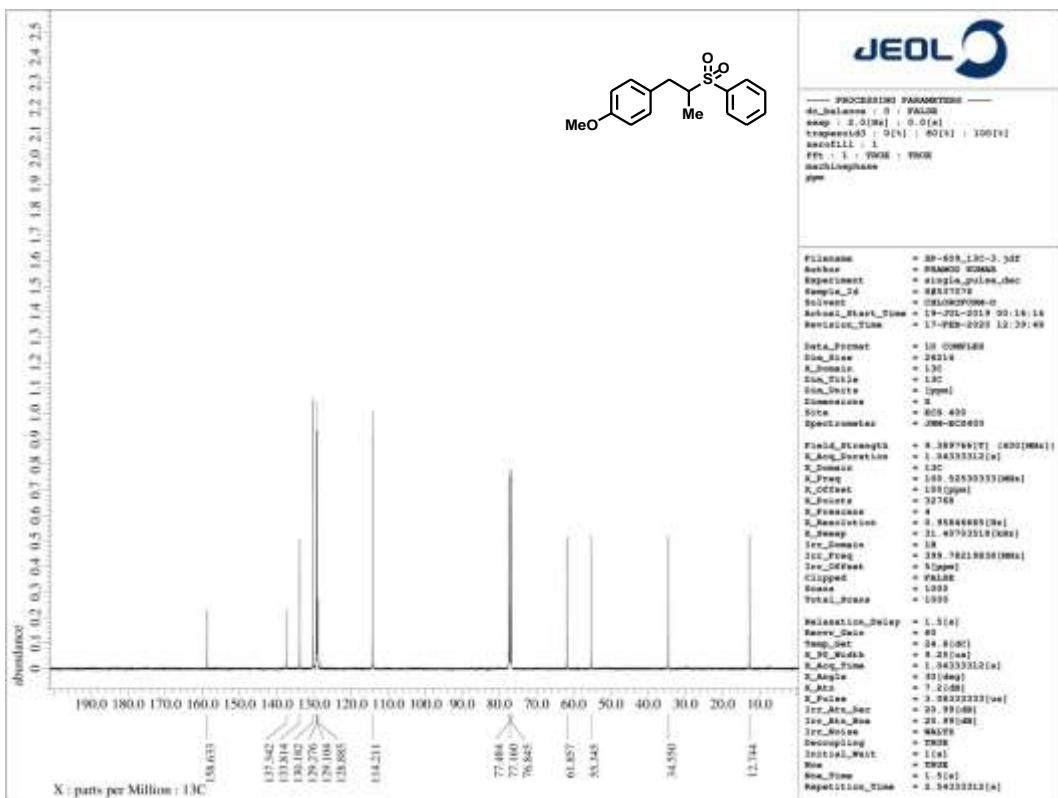
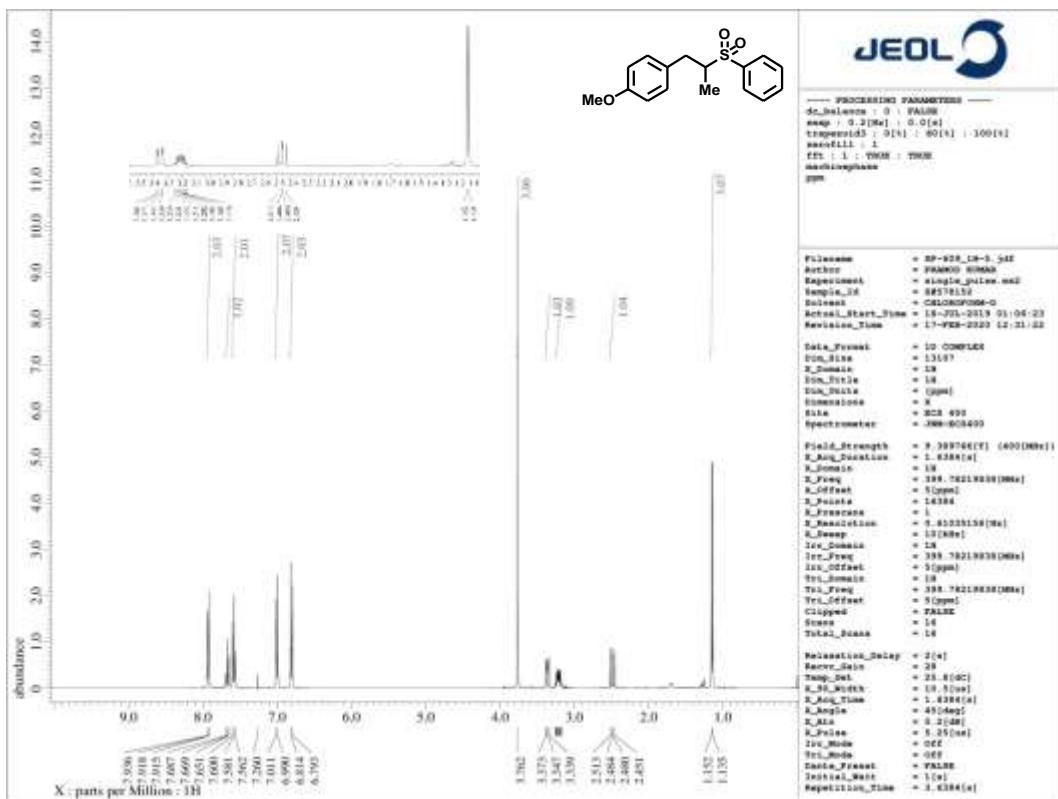


Figure S35. ^1H NMR (400 MHz, CDCl_3) and ^{13}C NMR (100 MHz, CDCl_3) spectra of **4p**.

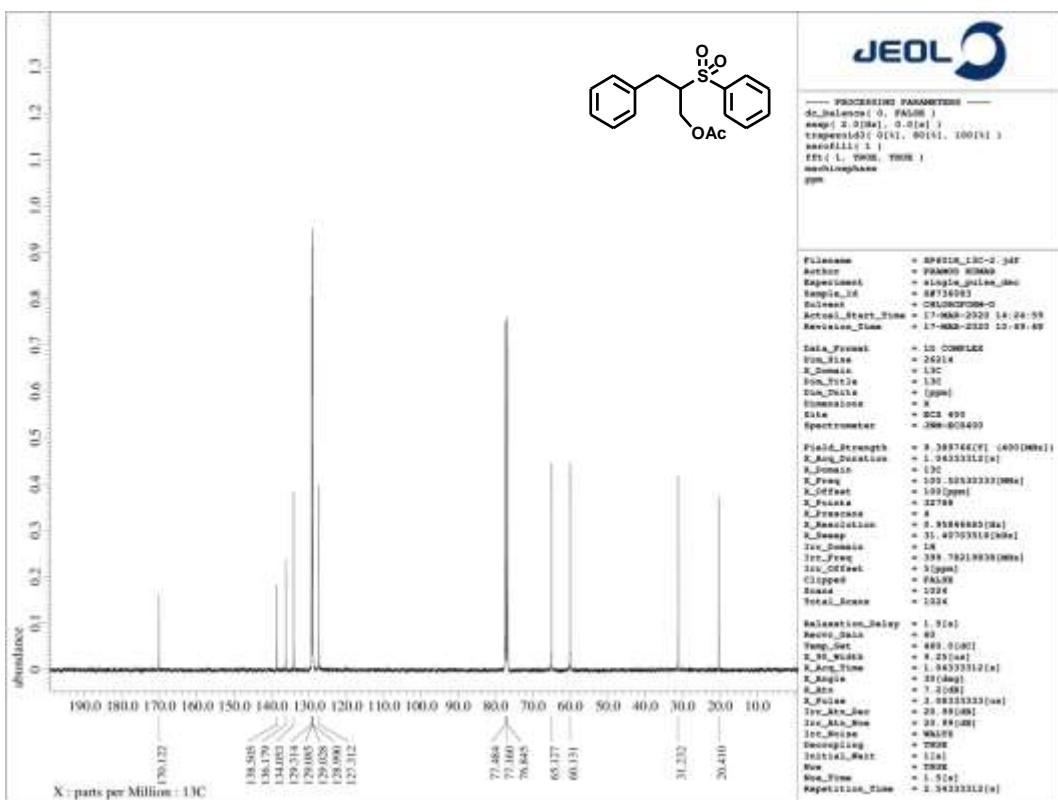
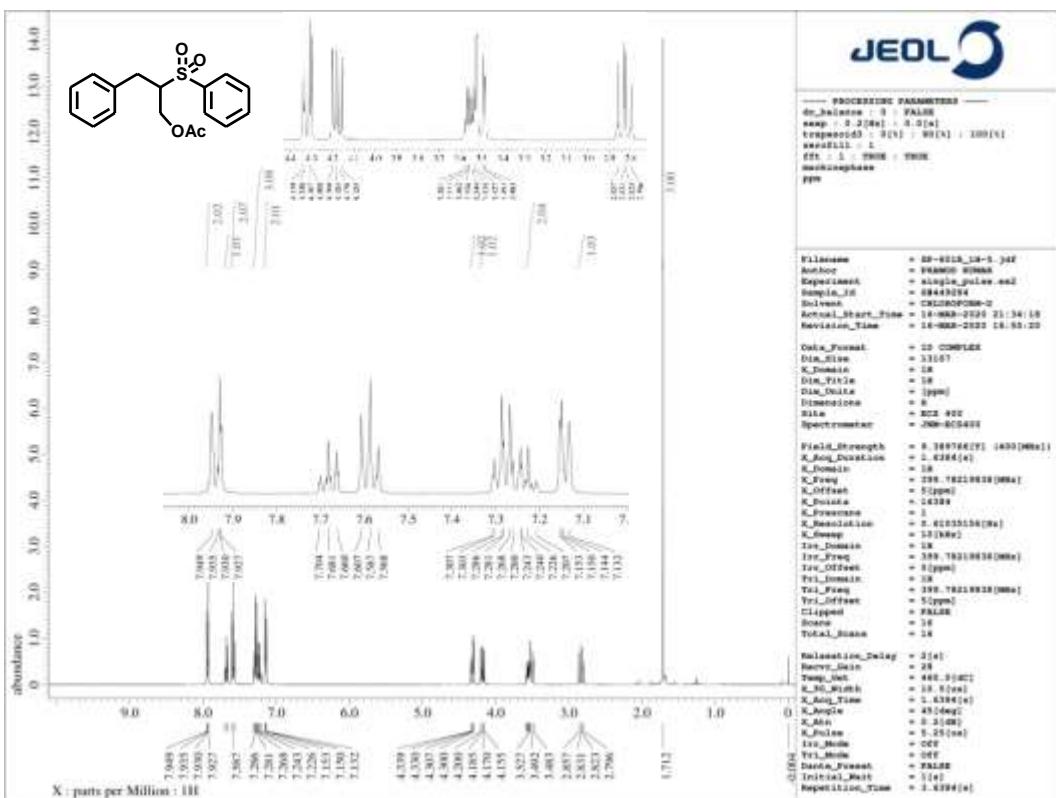


Figure S36. ¹H NMR (400 MHz, CDCl₃) and ¹³C NMR (100 MHz, CDCl₃) spectra of **4q**.

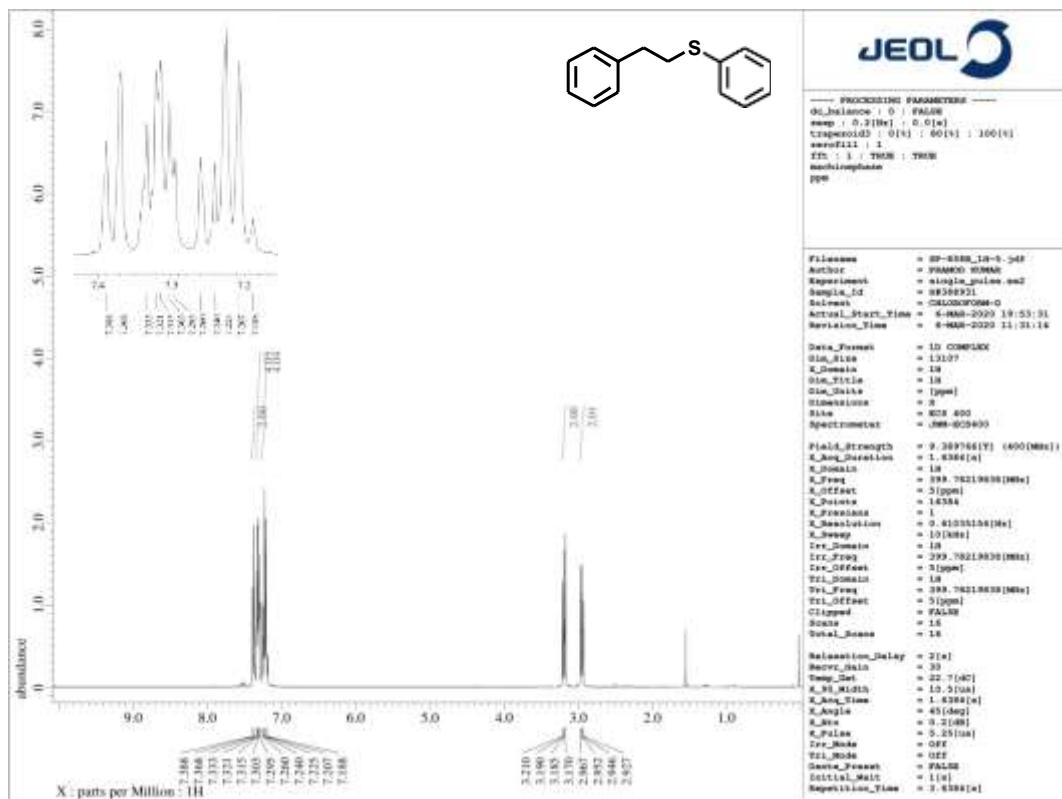


Figure S37. ^1H NMR (400 MHz, CDCl_3) spectra of **2ab**.