Supporting Information

for

Reactions of nitroxides 15. Cinnamates bearing a nitroxyl moiety synthesized using a Mizoroki–Heck cross-coupling reaction

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EIMS, ESIMS, ^{1}H NMR, ^{13}C NMR, and IR spectra of 3 and 5a–5i.

EIMS, ESIMS, ^{1}H NMR, ^{13}C NMR, and IR spectra of 3 and 5a–5i.
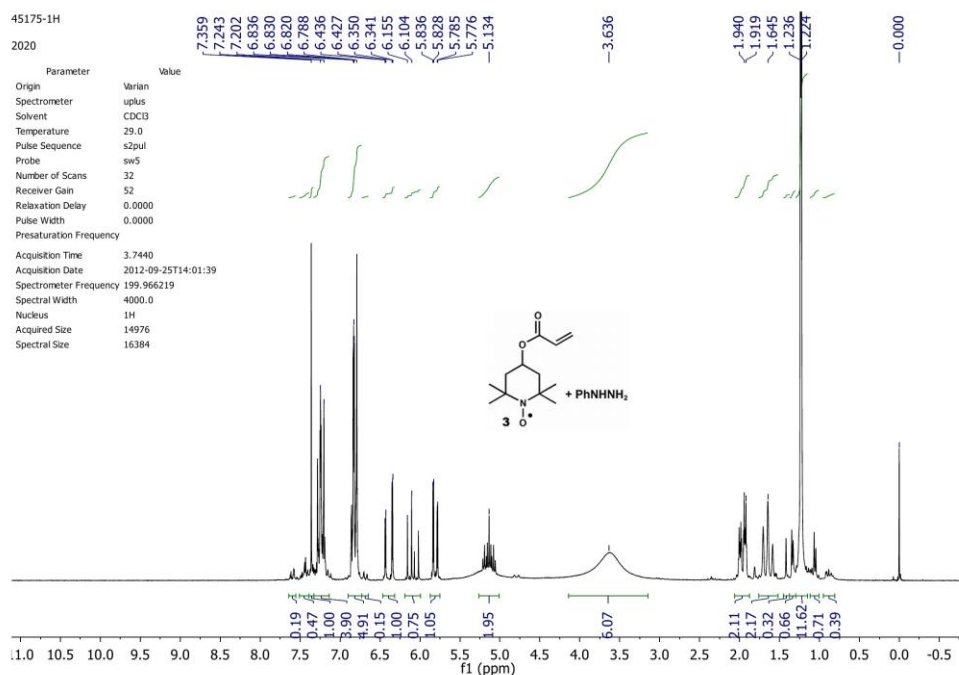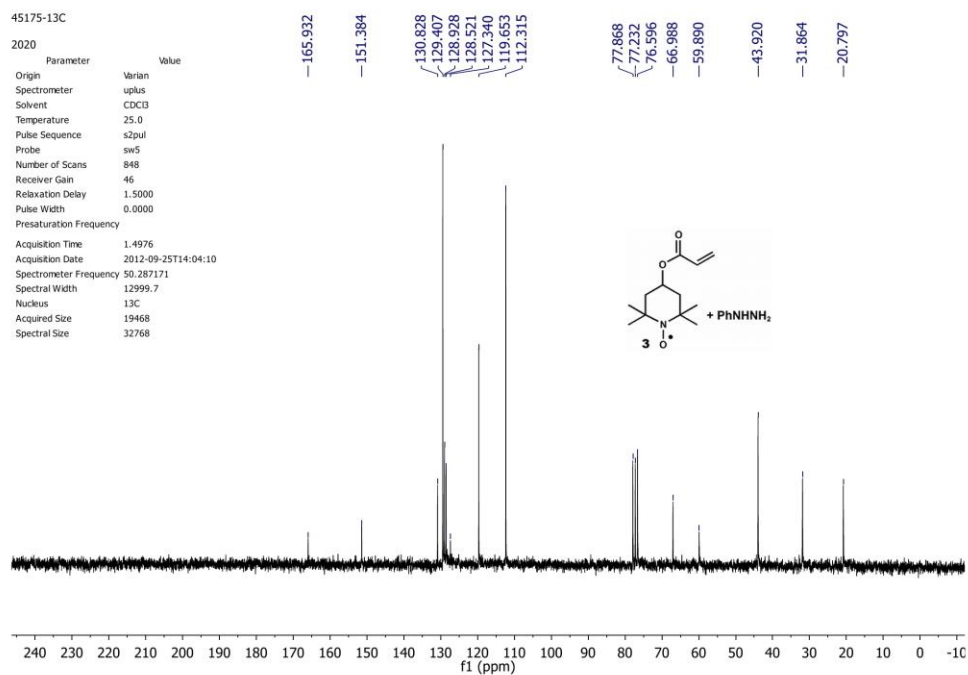

Fig. S1. 4-Acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl (**3**) + $C_6H_5HNH_2$, ^{1}H NMR

Fig. S2. 4-Acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl (**3**) + $C_6H_5HNH_2$, ^{13}C NMR

SCAN GRAPH. Flagging=Nominal M/z. Highlighting=Base Peak.
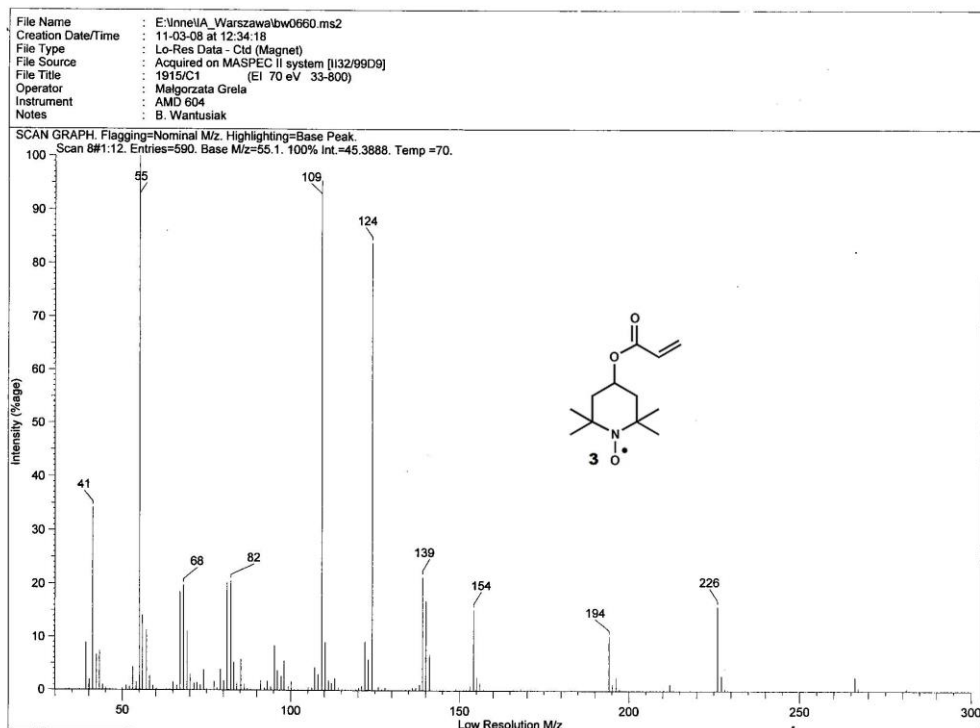Scan 8#1:12. Entries=590. Base M/z=55.1. 100% Int.=45.3888. Temp =70.

Fig. S3. 4-Acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl (**3**), EI MS
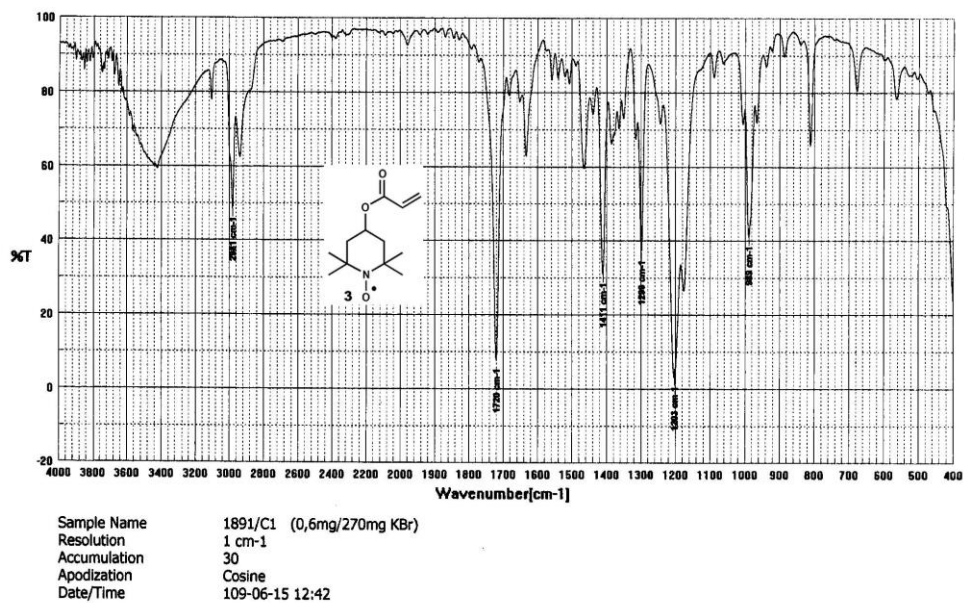
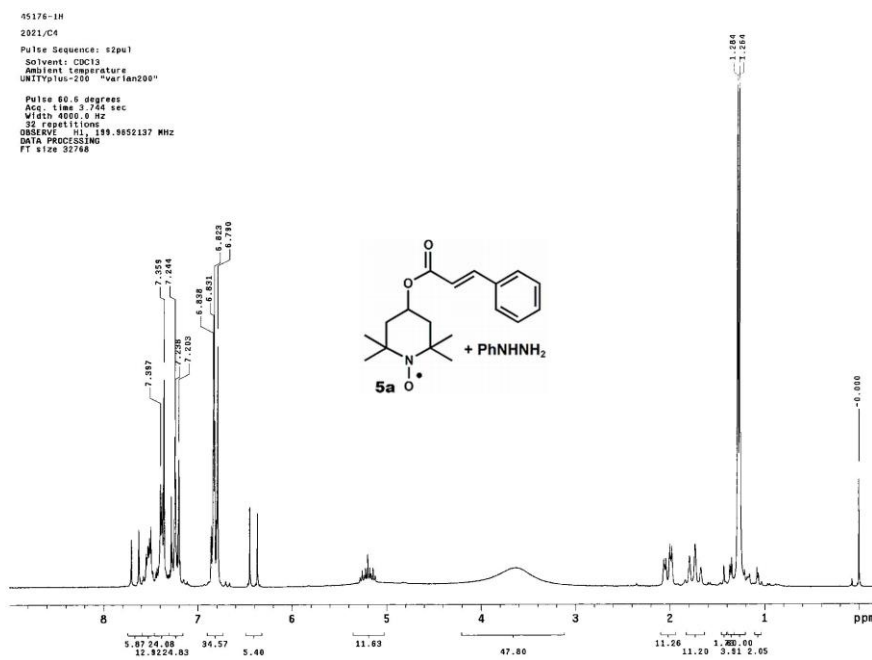Fig. S4. 4-Acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl (**3**), IR

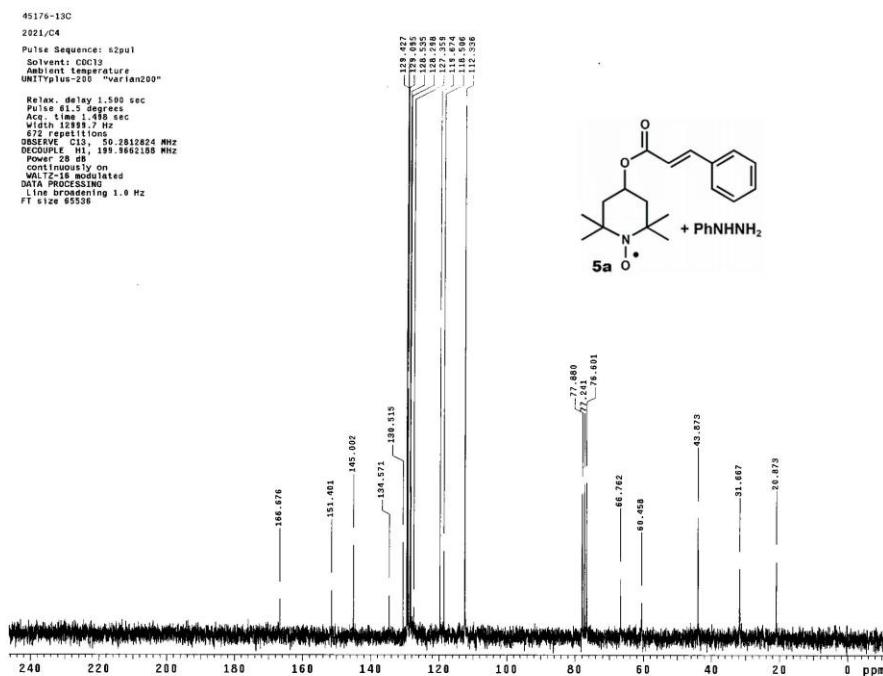Fig. S5. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-phenylacrylate (**5a**) + C$_6$H$_5$HNNH$_2$, ^{1}H NMR

Fig. S6. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-phenylacrylate (**5a**) + C$_6$H$_5$HNNH$_2$, ^{13}C NMR
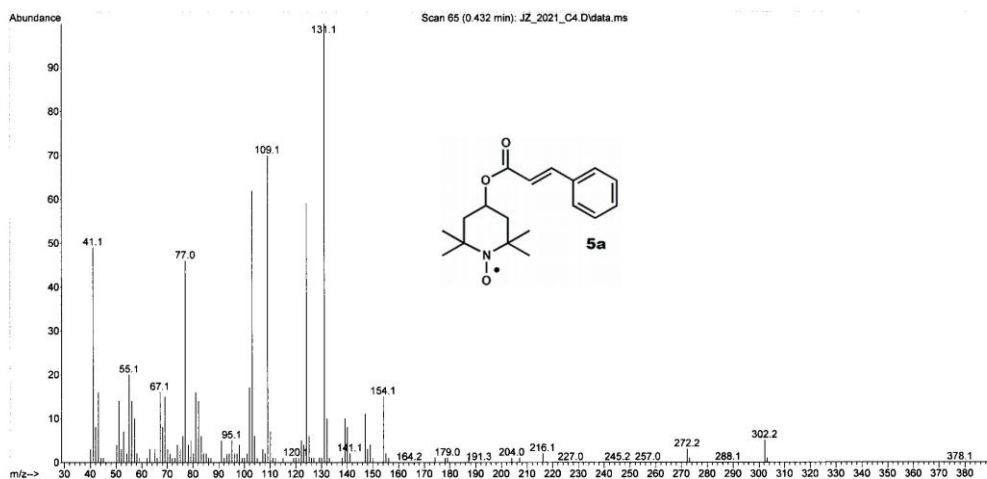
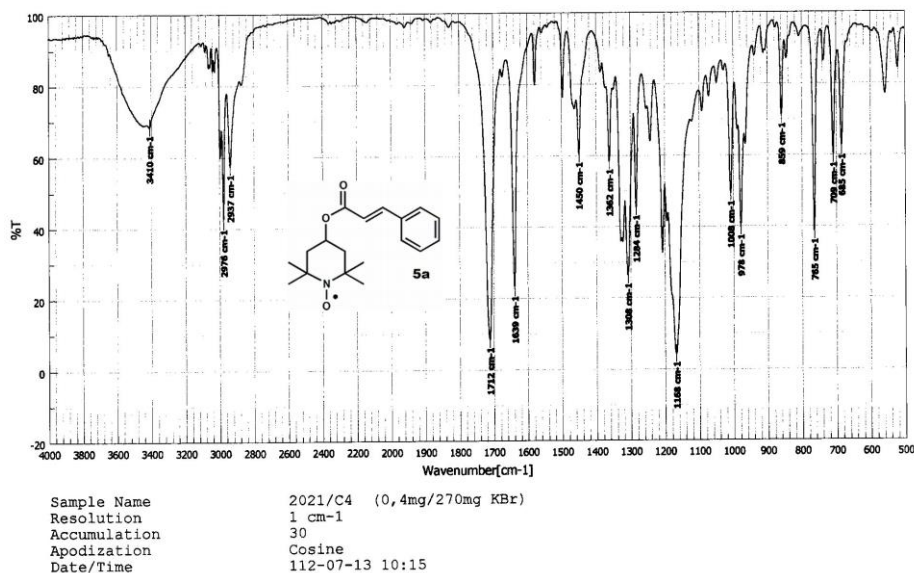Fig. S7. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-phenylacrylate (**5a**), EI MS

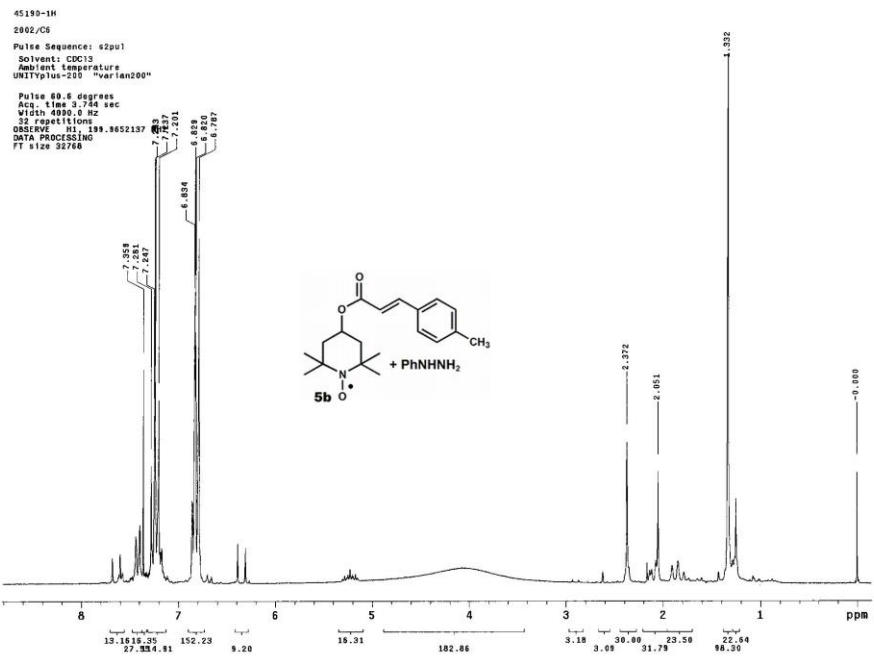Fig. S8. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-phenylacrylate (**5a**), IR

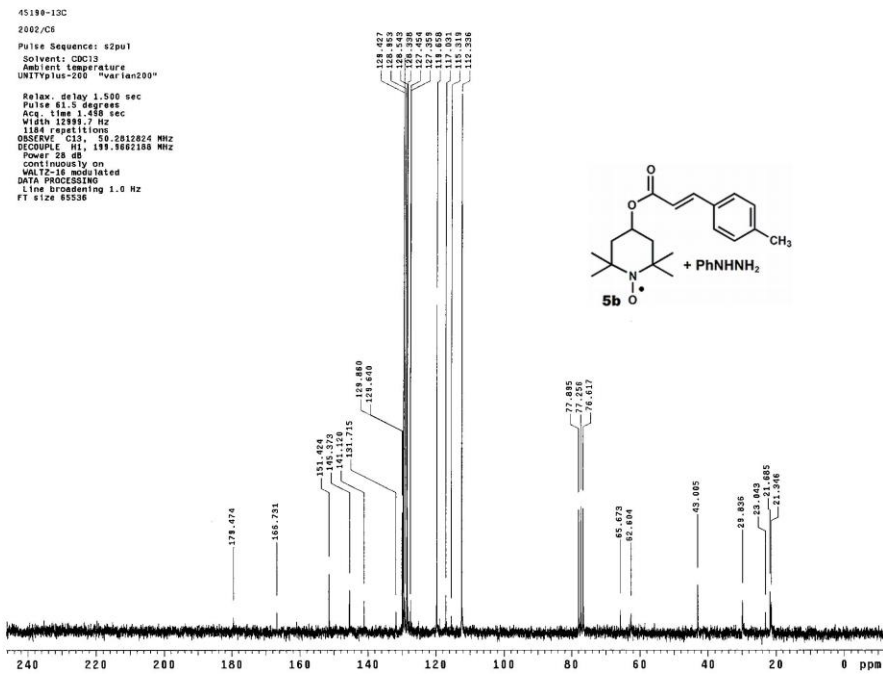Fig. S9. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methylphenyl)acrylate (**5b**) + $C_6H_5NHNH_2$, ^1H NMR

Fig. S10. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methylphenyl)acrylate (**5b**) + $C_6H_5NHNH_2$, ^{13}C NMR
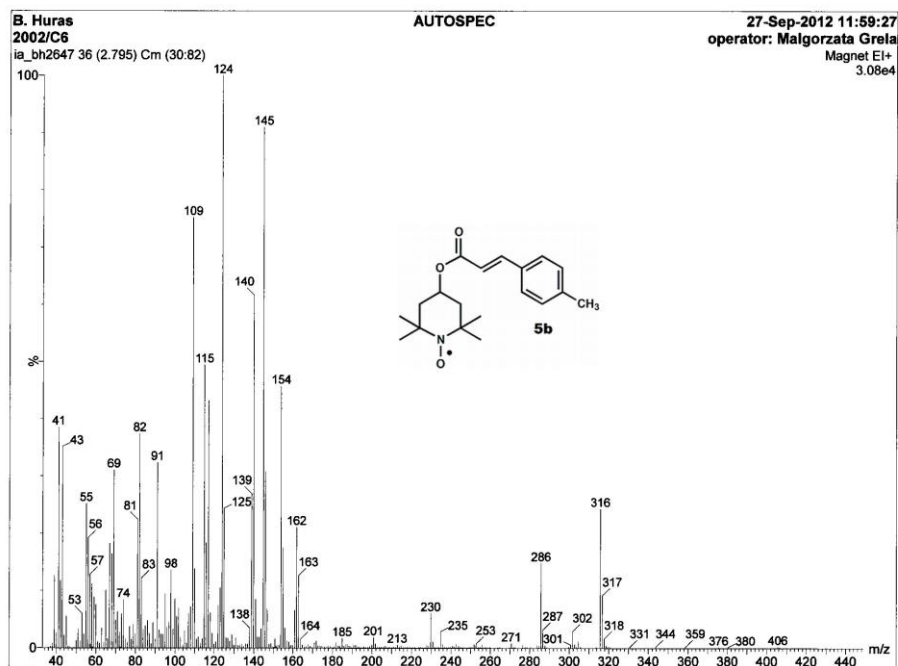
Fig. S11. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methylphenyl)acrylate (**5b**), EI MS
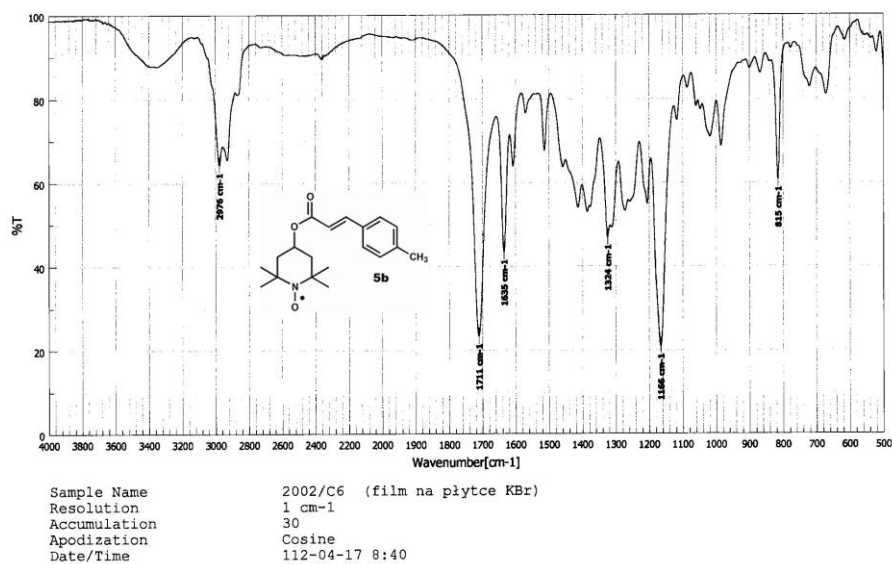

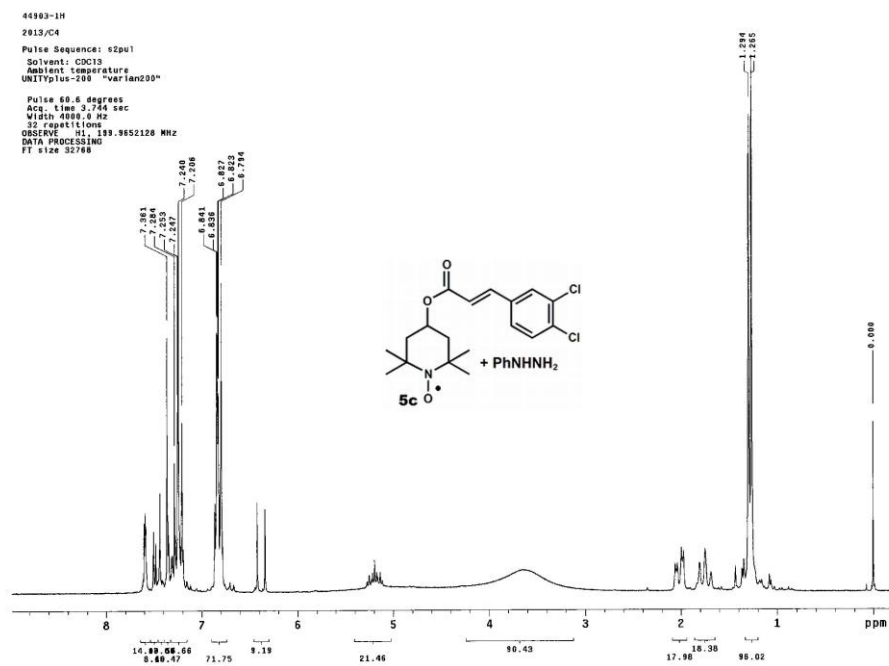Fig. S12. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methylphenyl)acrylate (**5b**), IR

Fig. S13. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3,4-dichlorophenyl)acrylate (**5c**) + $C_6H_5NHNH_2$, ^1H NMR
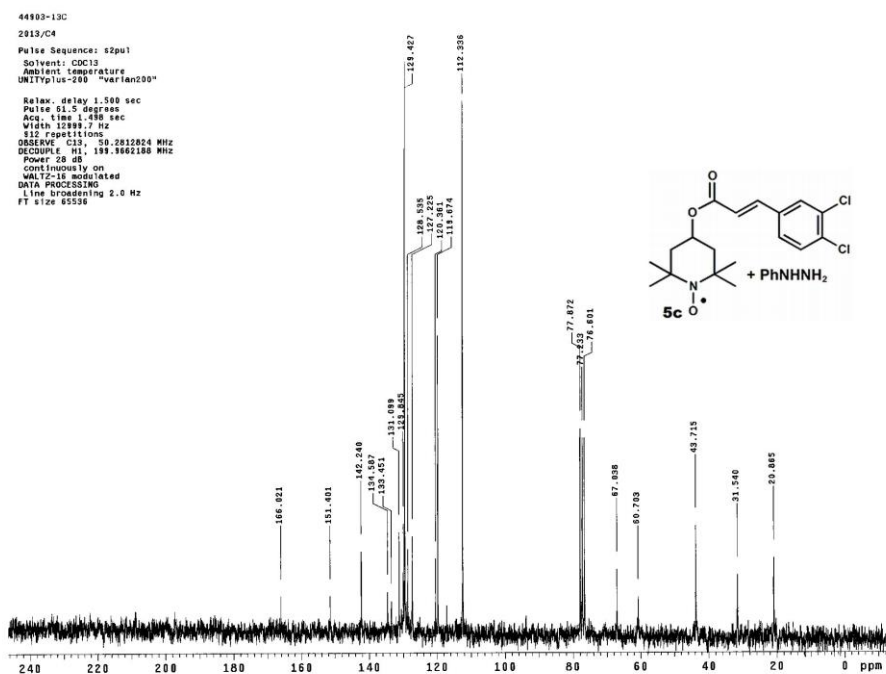

Fig. S14. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3,4-dichlorophenyl)acrylate (**5c**) + $C_6H_5NHNH_2$, ^{13}C NMR
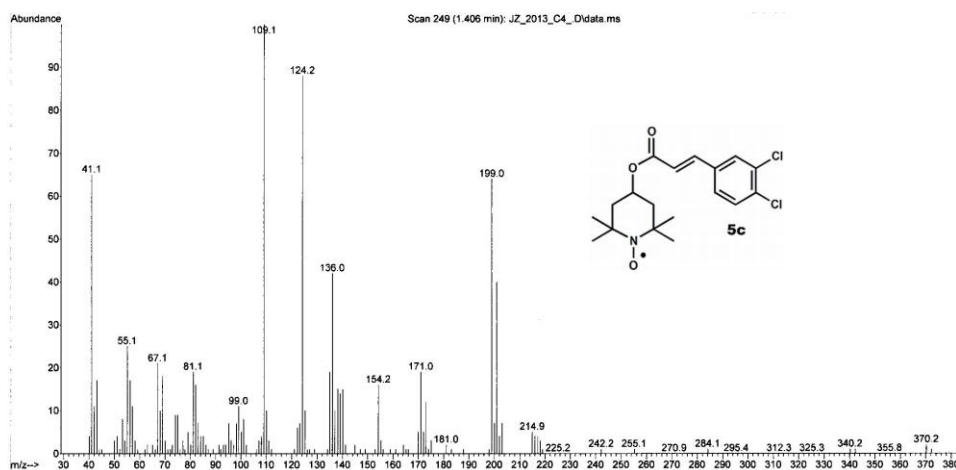
Fig. S15. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3,4-dichlorophenyl)acrylate (**5c**), EI MS
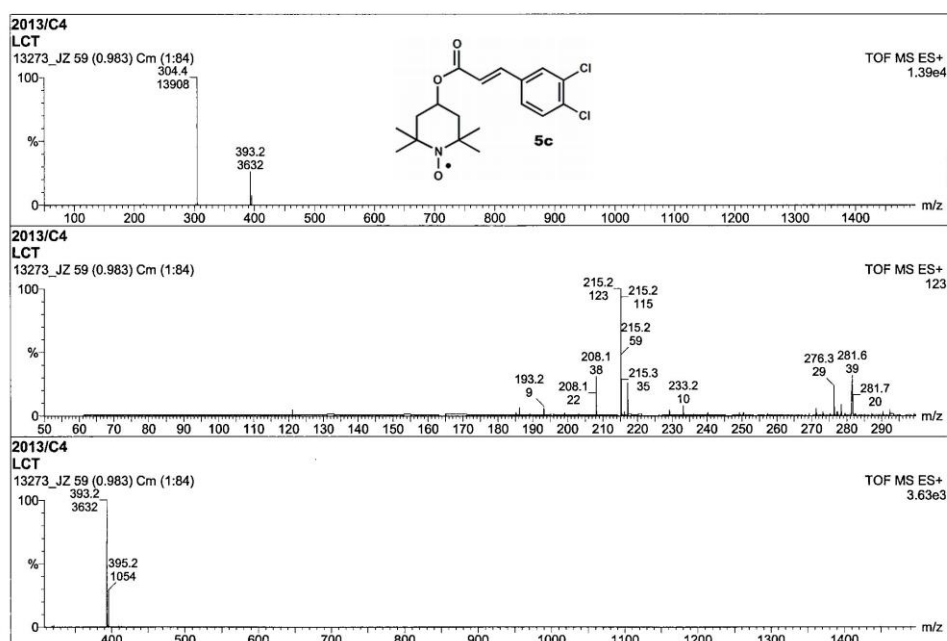

Fig. S16. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3,4-dichlorophenyl)acrylate (**5c**), ESI MS
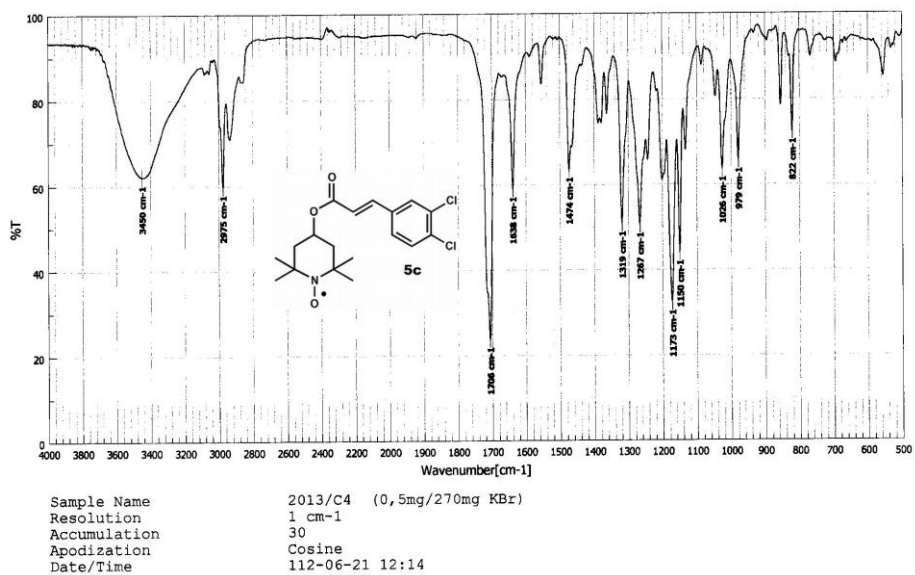
Fig. S17. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3,4-dichlorophenyl)acrylate (**5c**), IR
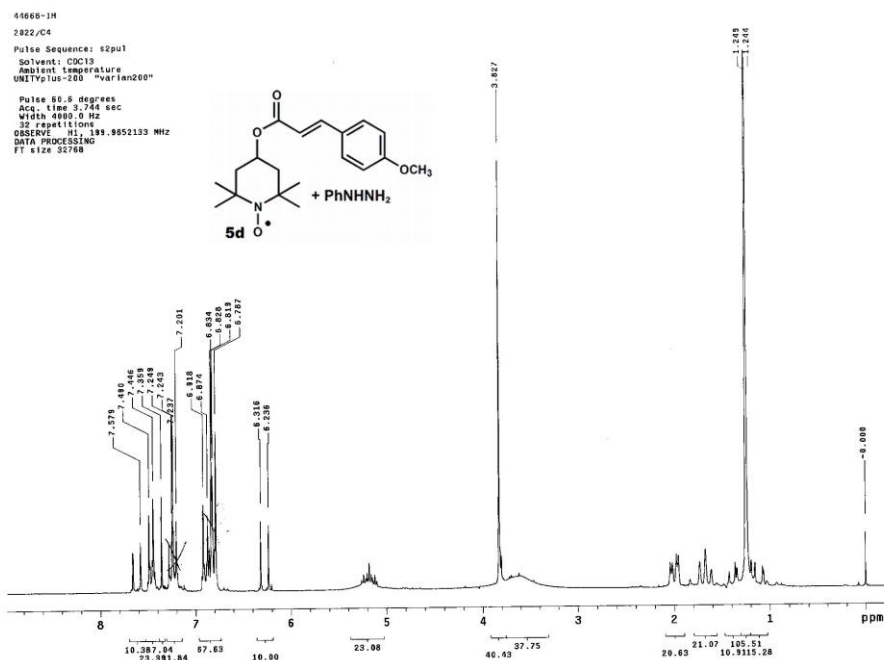
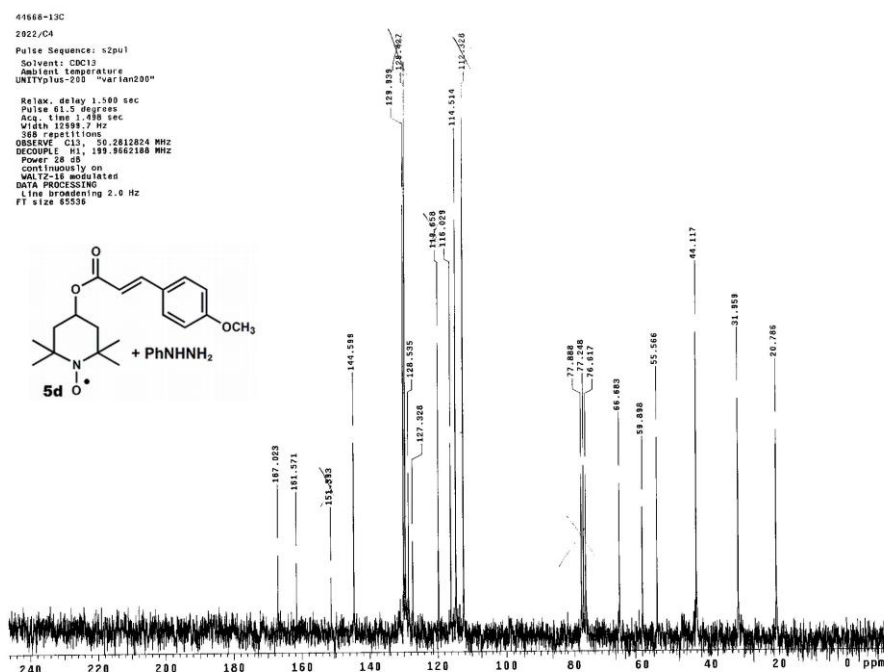Fig. S18. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methoxyphenyl)acrylate (**5d**) + $C_6H_5NHNH_2$, ^1H NMR

Fig. S19. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methoxyphenyl)acrylate (**5d**) + $C_6H_5NHNH_2$, ^{13}C NMR

Fig. S20. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methoxyphenyl)acrylate (**5d**), EI MS

Fig. S21. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methoxyphenyl)acrylate (**5d**), ESI MS

Sample Name   2022/C4 (0,5mg/270mg KBr)
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Accumulation   30
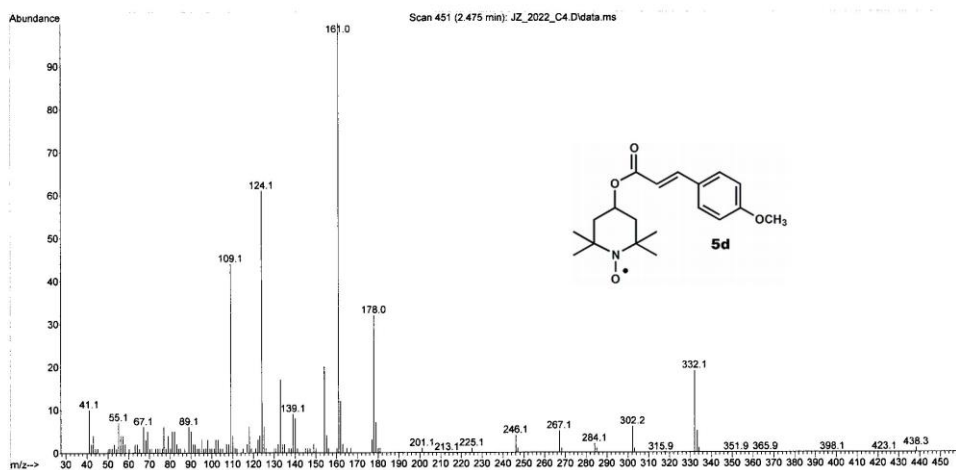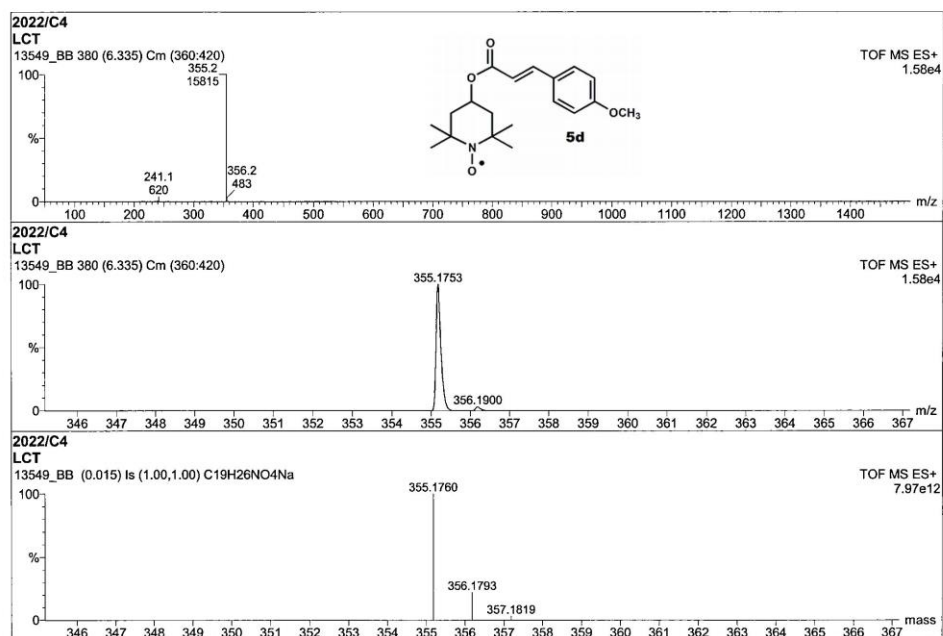Apodization   Cosine
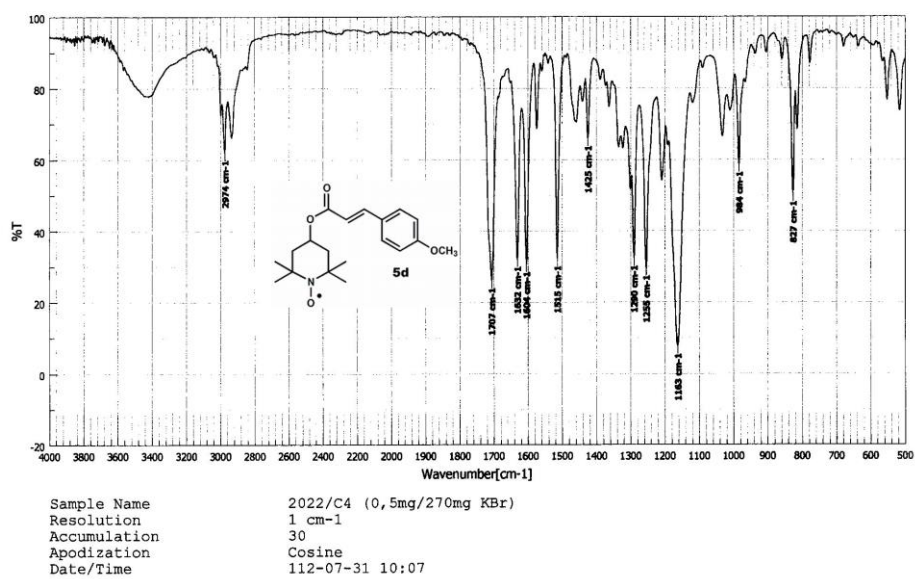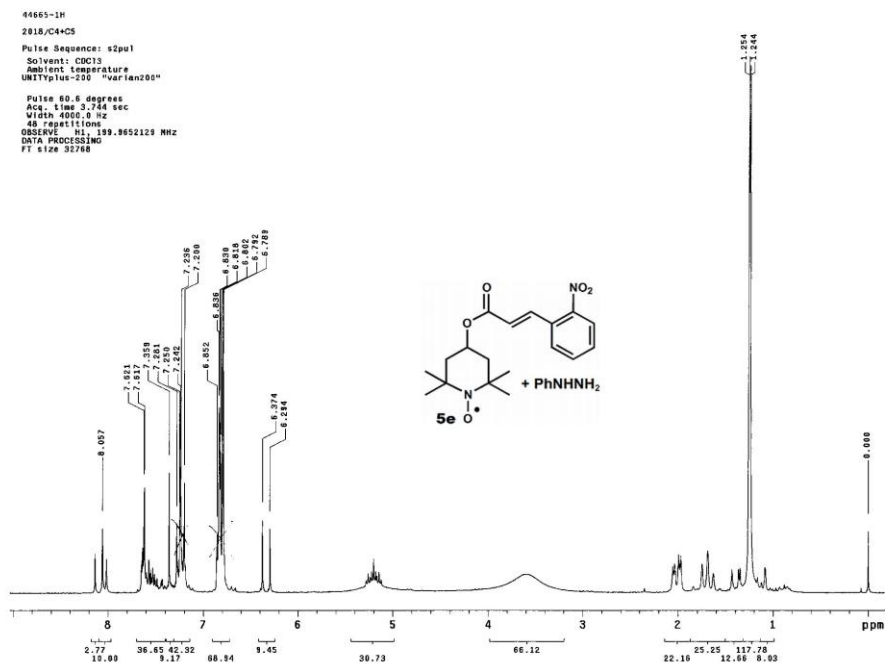Date/Time   112-07-31 10:07

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Fig. S22. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-methoxyphenyl)acrylate (**5d**), IR

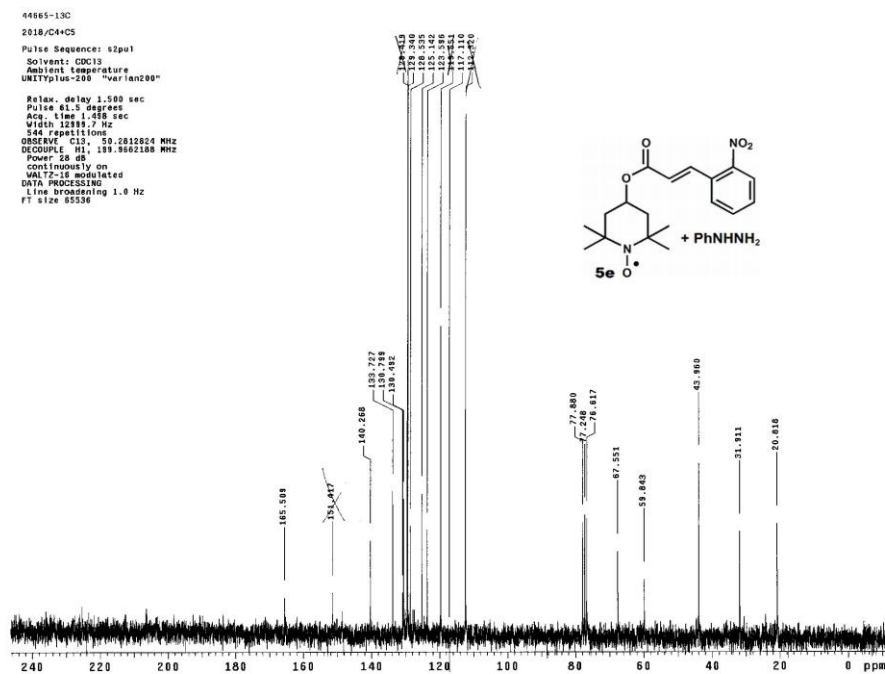Fig. S23. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(2-nitrophenyl)acrylate (**5e**) + $C_6H_5NHNH_2$, ^1H NMR

Fig. S24. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(2-nitrophenyl)acrylate (**5e**) + $C_6H_5NHNH_2$, ^{13}C NMR

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Acquired : 27 Jul 2012 10:42   using AcqMethod DI250.m
Instrument : SIS_DIP-5975B
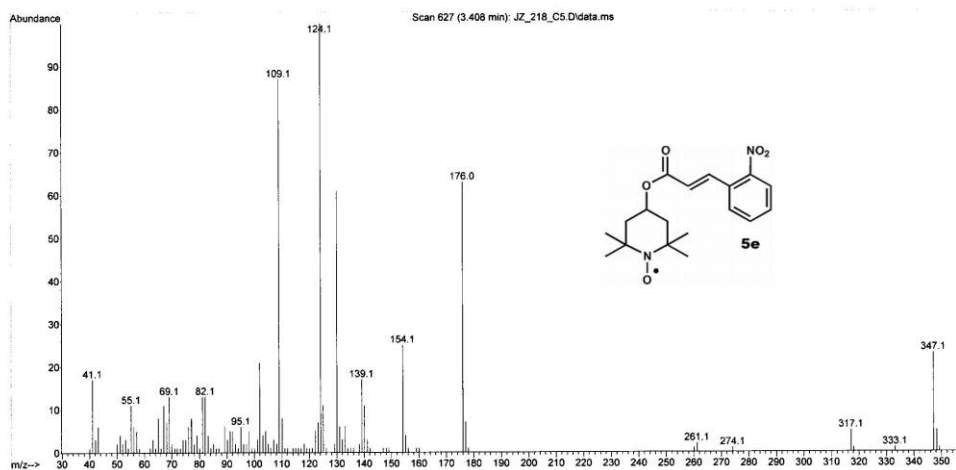Sample Name: 218_C5
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Vial Number: 1

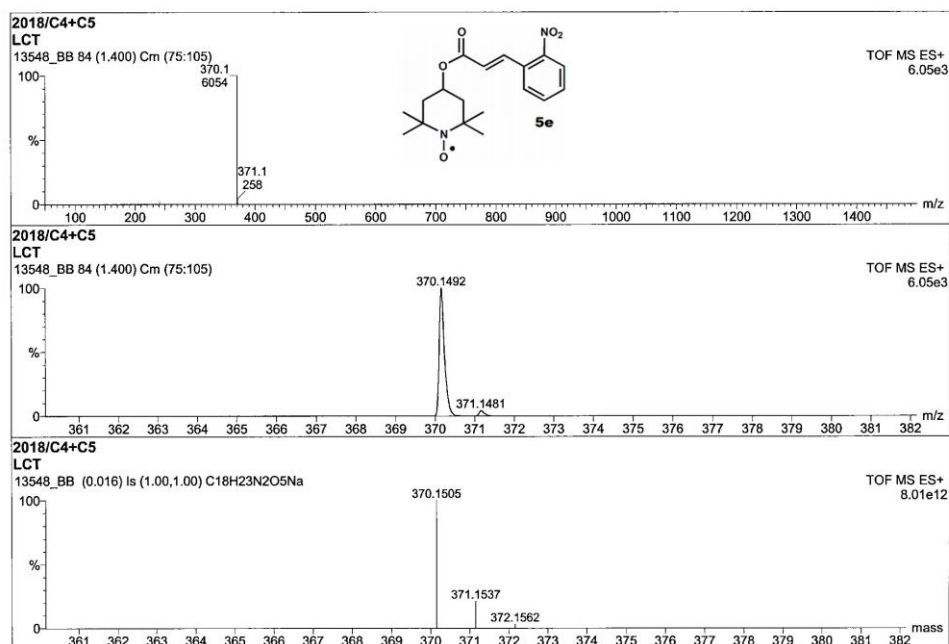Fig. S25. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(2-nitrophenyl)acrylate (**5e**), EI MS

Fig. S26. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(2-nitrophenyl)acrylate (**5e**), ESI MS
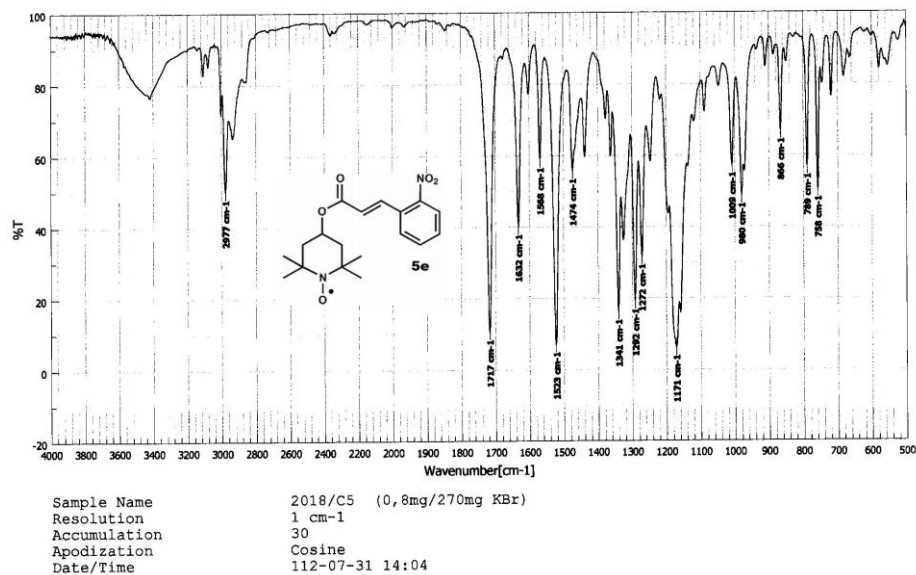
Fig. S27. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(2-nitrophenyl)acrylate (**5e**), IR
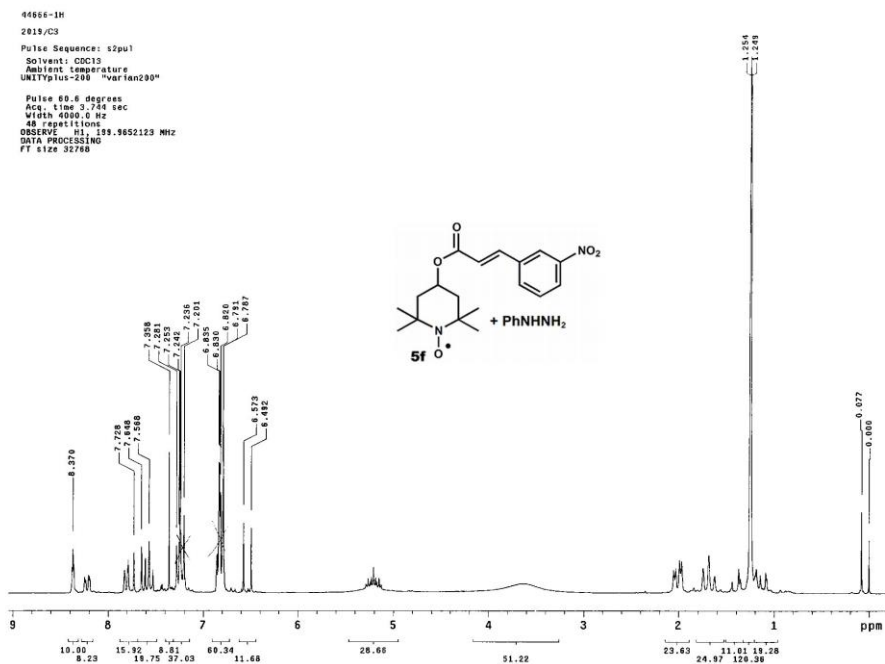
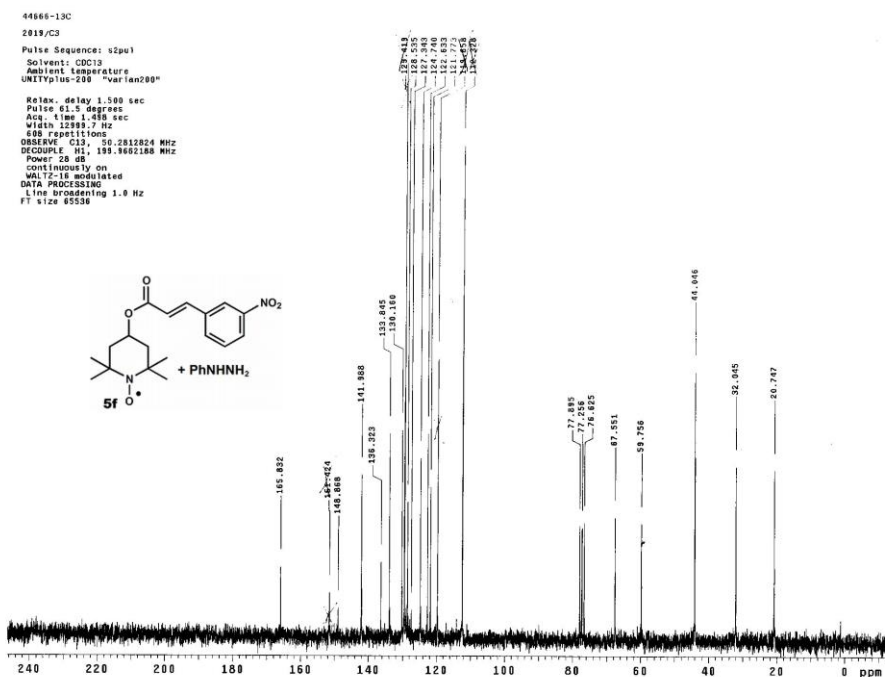Fig. S28. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3-nitrophenyl)acrylate (**5f**) + C$_6$H$_5$NHNH$_2$, ^{1}H NMR

Fig. S29. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3-nitrophenyl)acrylate (**5f**) + C$_6$H$_5$NHNH$_2$, ^{13}C NMR

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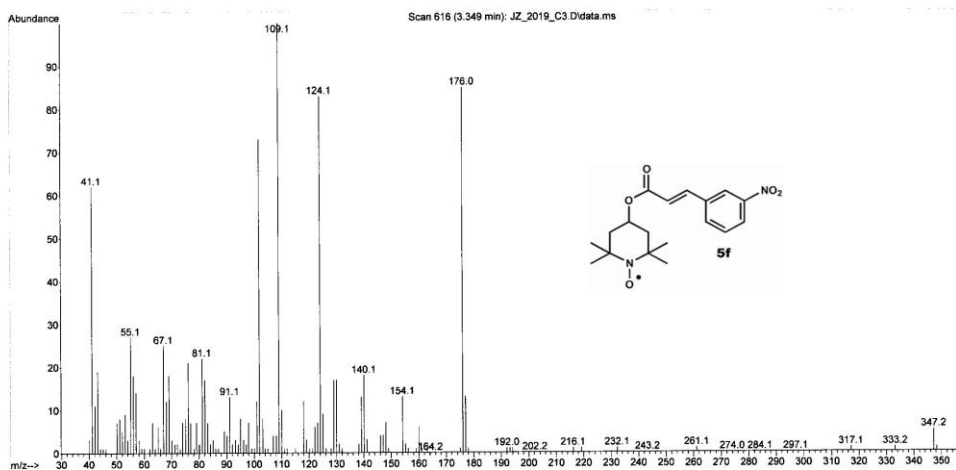Sample Name: 2019/C3
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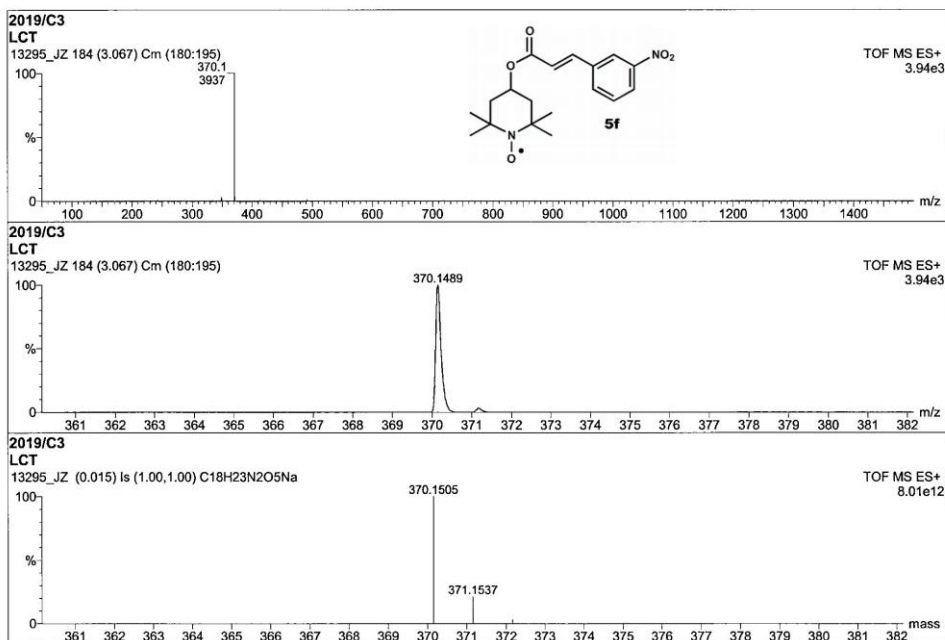Fig. S30. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3-nitrophenyl)acrylate (**5f**), EI MS

Fig. S31. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3-nitrophenyl)acrylate (**5f**), ESI MS
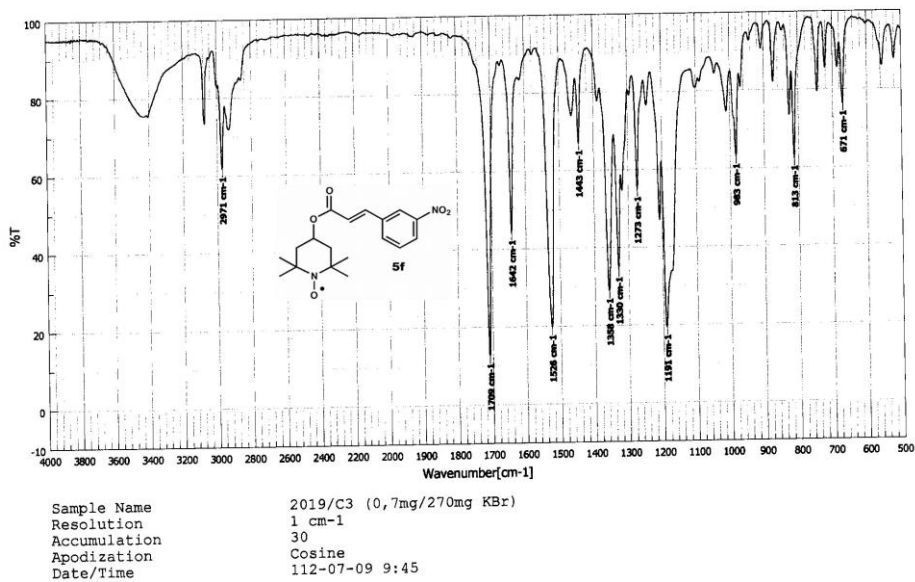
Fig. S32. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(3-nitrophenyl)acrylate (**5f**), IR
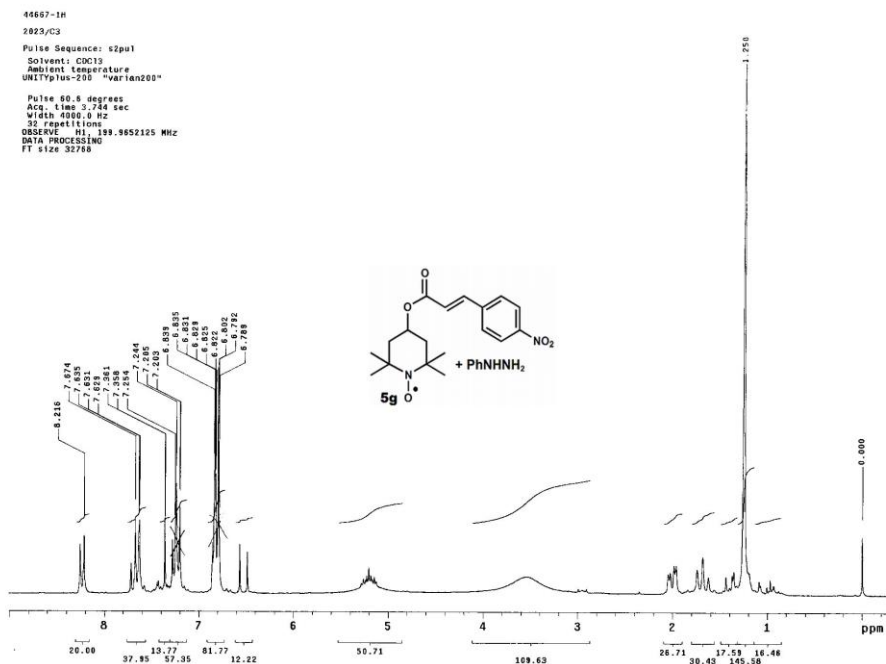
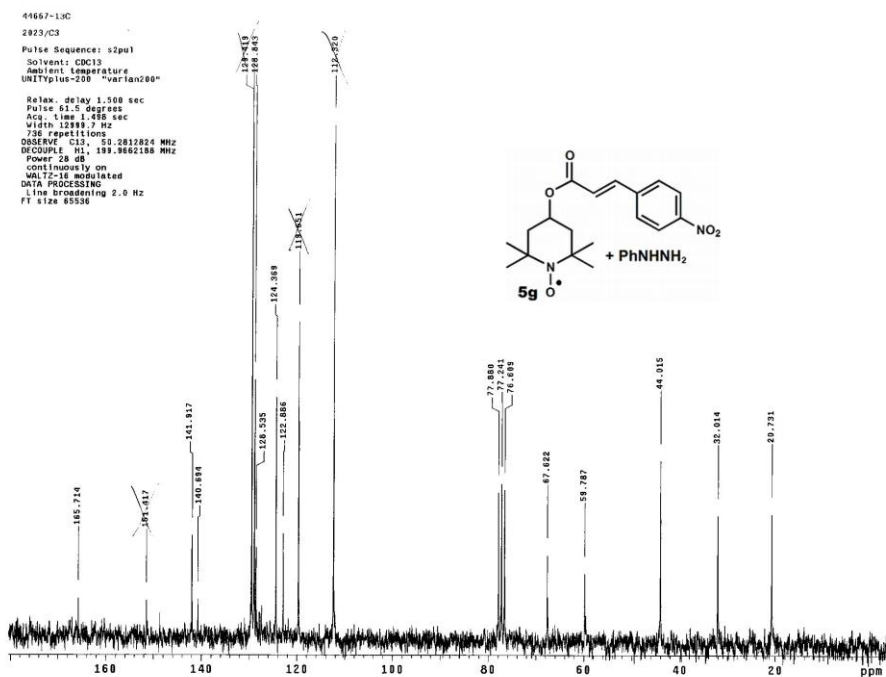Fig. S33. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-nitrophenyl)acrylate (**5g**) + $C_6H_5NHNH_2$, ^1H NMR

Fig. S34. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-nitrophenyl)acrylate (**5g**) + $C_6H_5NHNH_2$, ^{13}C NMR
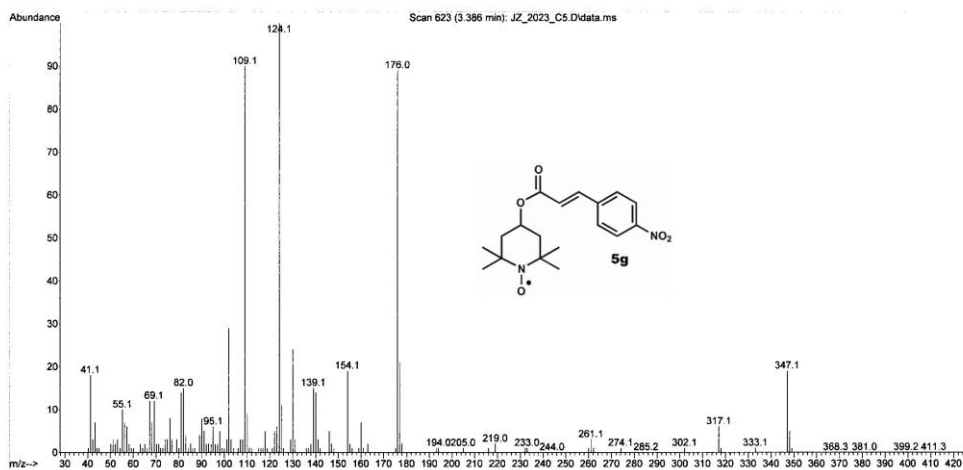
Fig. S35. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-nitrophenyl)acrylate (**5g**), EI MS
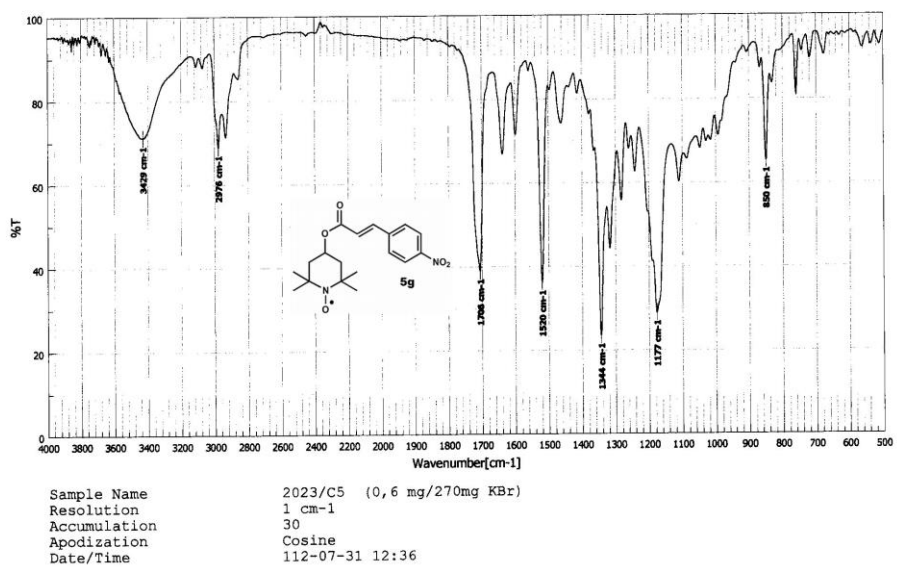
Fig. S36. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl 3-*E*-(4-nitrophenyl)acrylate (**5g**), IR
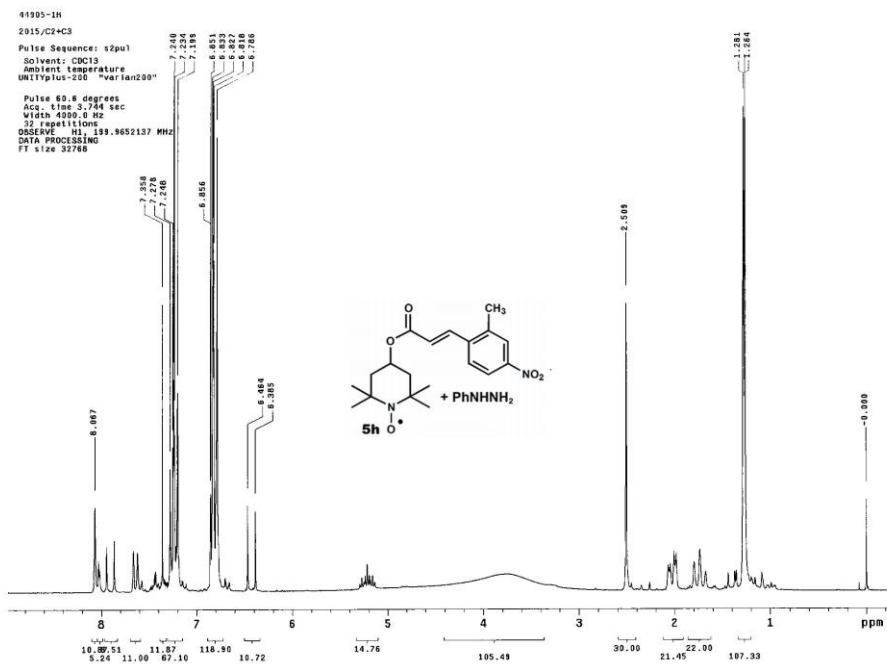
Fig. S37. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
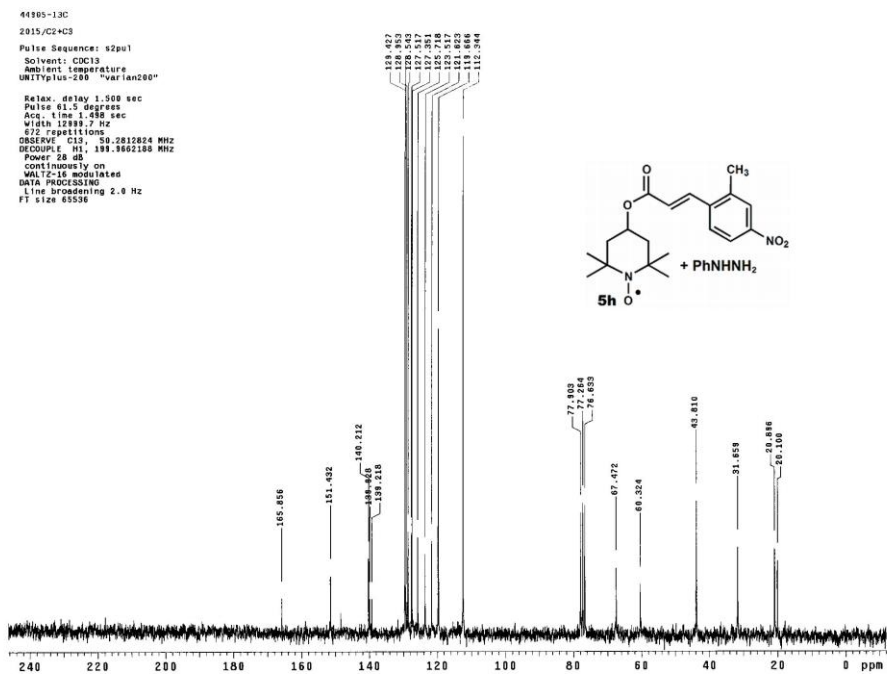3-*E*-(2-methyl-4-nitrophenyl)acrylate (**5h**) + $C_6H_5NHNH_2$, ^1H NMR

Fig. S38. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
3-*E*-(2-methyl-4-nitrophenyl)acrylate (**5h**) + $C_6H_5NHNH_2$, ^{13}C NMR

Fig. S39. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
3-*E*-(2-methyl-4-nitrophenyl)acrylate (**5h**), EI MS

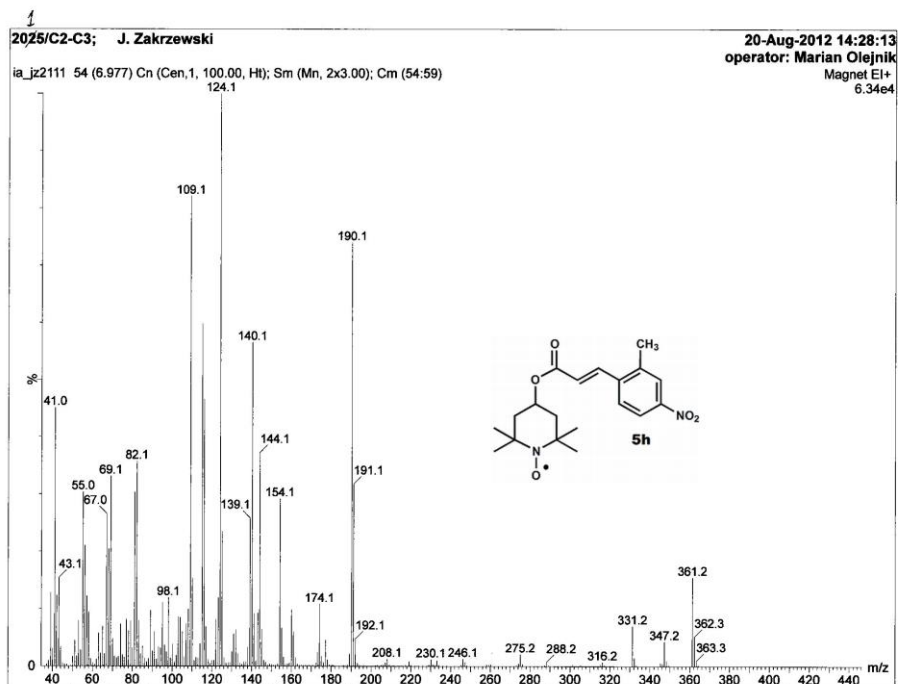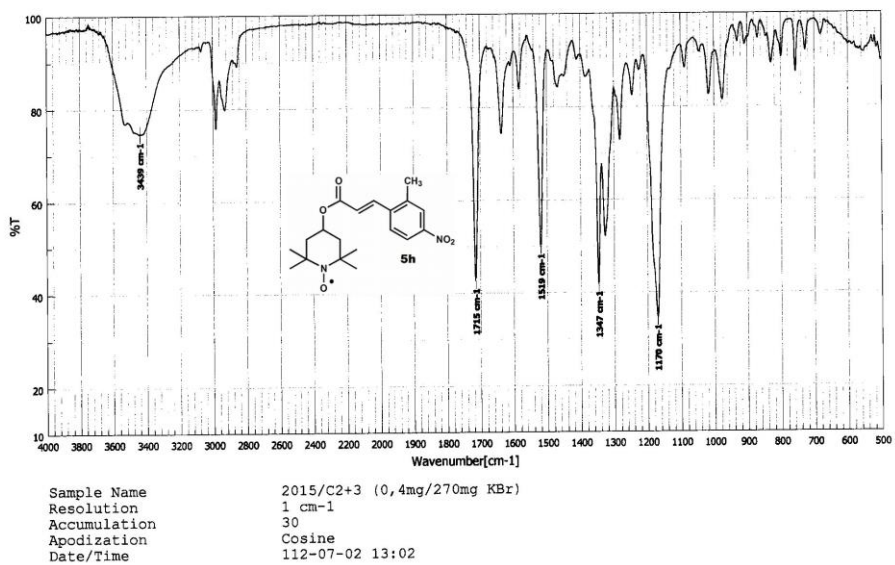| Sample Name	2015/C2+3 (0,4mg/270mg KBr)
Resolution	1 cm-1
Accumulation	30
Apodization	Cosine
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Fig. S40. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
3-*E*-(2-methyl-4-nitrophenyl)acrylate (**5h**), IR

Fig. S41. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
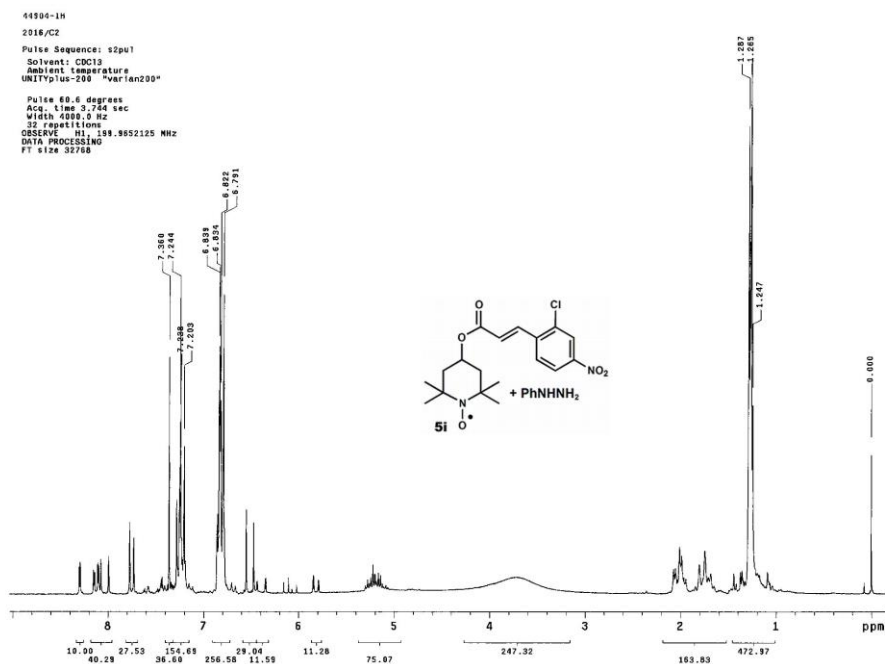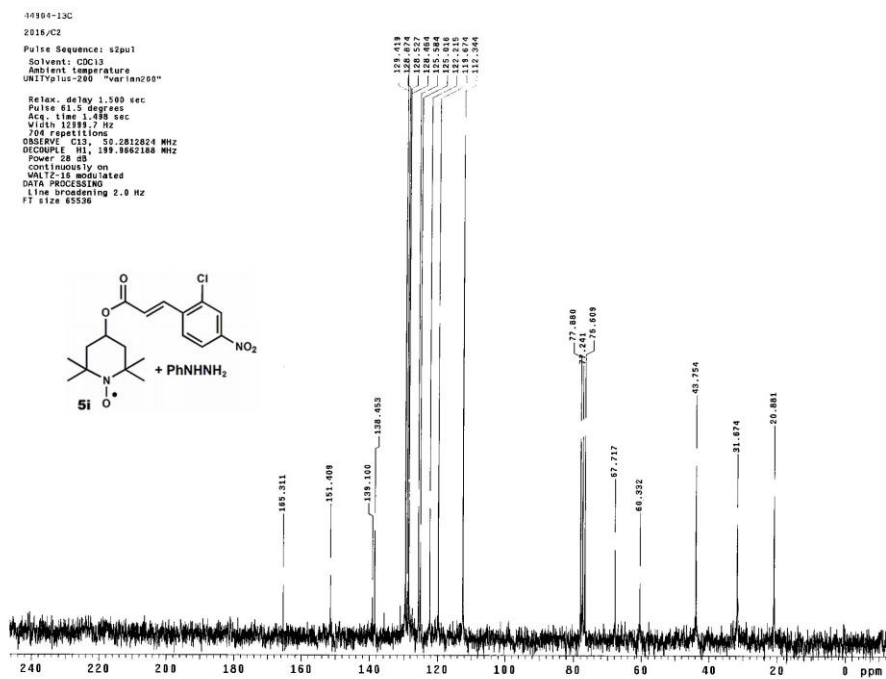3-*E*-(2-chloro-4-nitrophenyl)acrylate (**5i**) + $C_6H_5NHNH_2$, ^1H NMR

Fig. S42. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
3-*E*-(2-chloro-4-nitrophenyl)acrylate (**5i**) + $C_6H_5NHNH_2$, ^{13}C NMR

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Instrument : SIS_DIP-5975B
Sample Name: 2016/C2
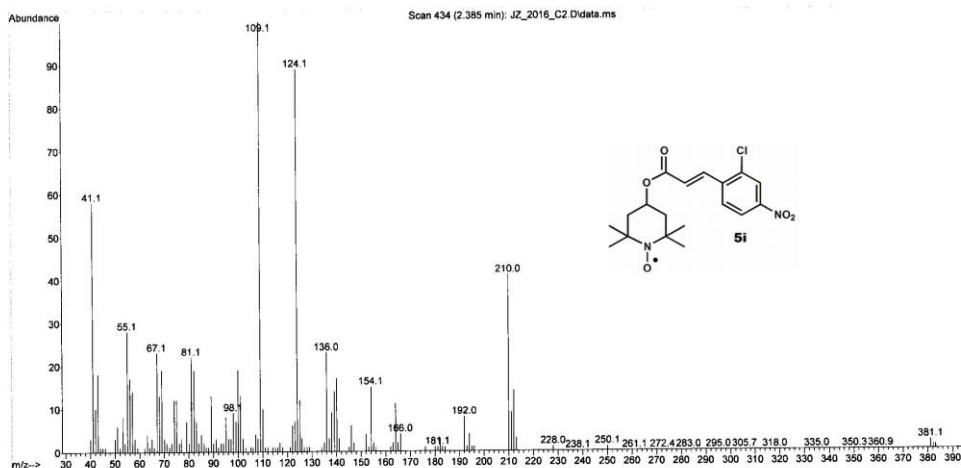Misc Info :
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Fig. S43. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
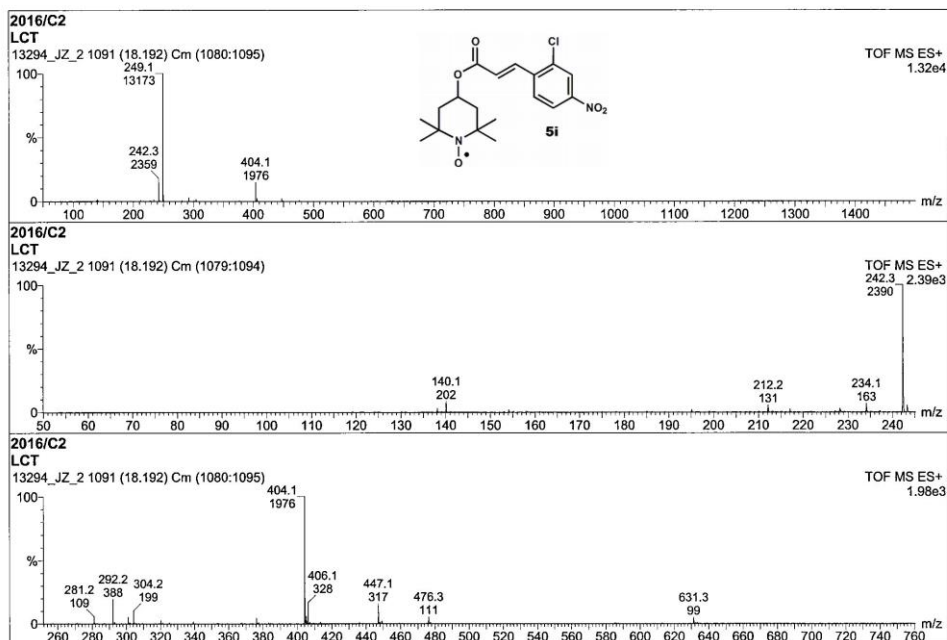3-*E*-(2-chloro-4-nitrophenyl)acrylate (**5i**), EI MS

Fig. S44. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
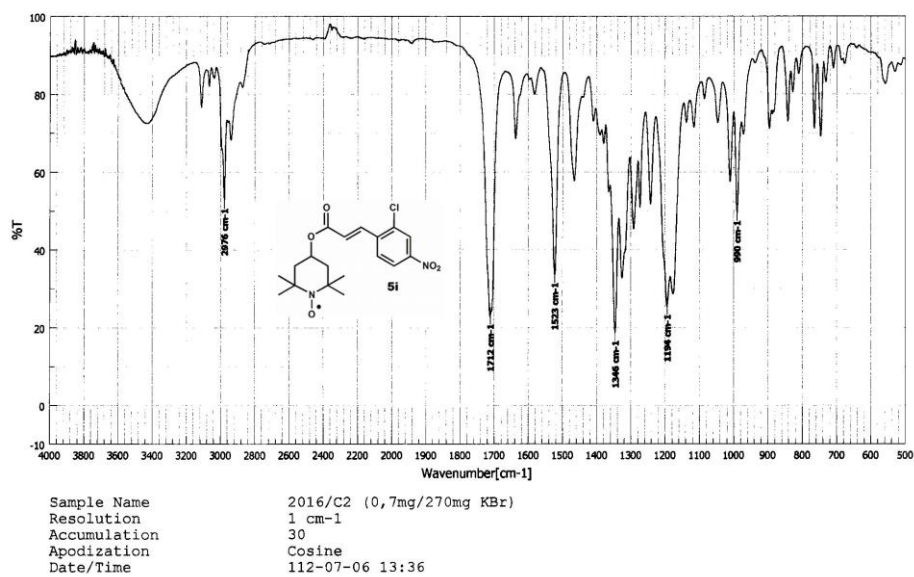3-*E*-(2-chloro-4-nitrophenyl)acrylate (**5i**), ESI MS

Fig. S45. 2,2,6,6-Tetramethyl-1-oxyl-4-piperidyl
3-*E*-(2-chloro-4-nitrophenyl)acrylate (**5i**), IR