

Supporting Information

for

Reactions of nitroxides XIII: Synthesis of the Morita–Baylis–Hillman adducts bearing a nitroxyl moiety using 4-acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl as a starting compound, and DABCO and quinuclidine as catalysts

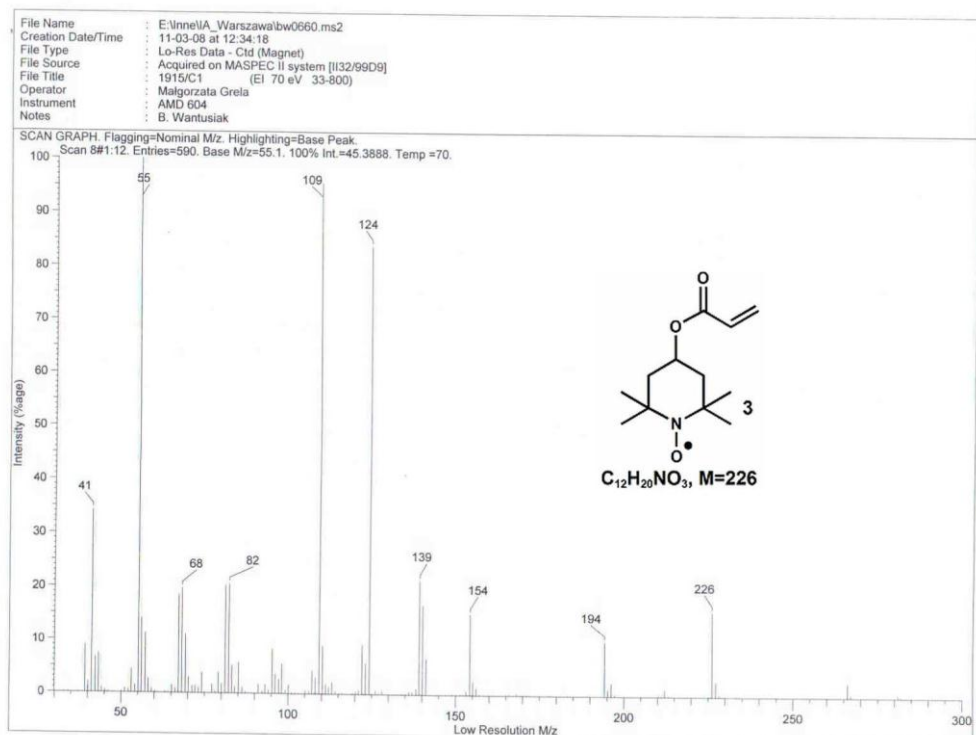
Jerzy Zakrzewski

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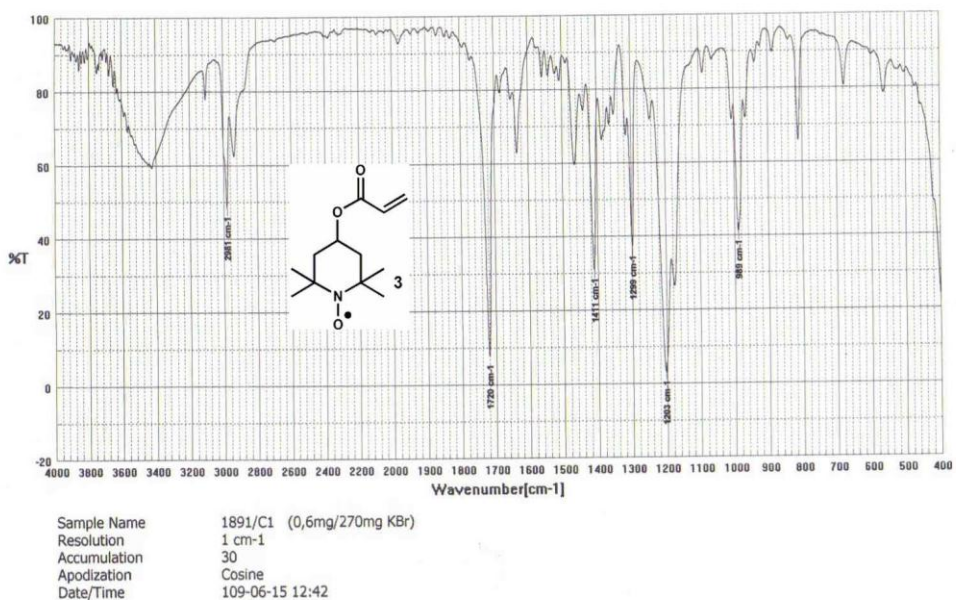
Email: Jerzy Zakrzewski - zakrzewski@ipo.waw.pl

Detailed spectrographic data

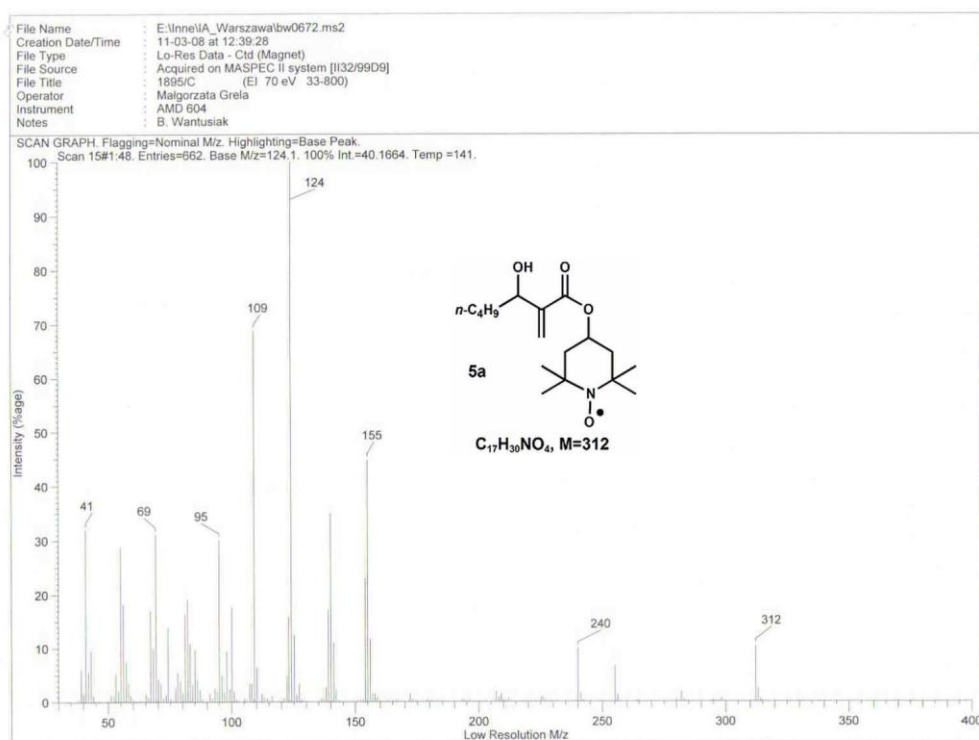
3, 4-Acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl, EIMS



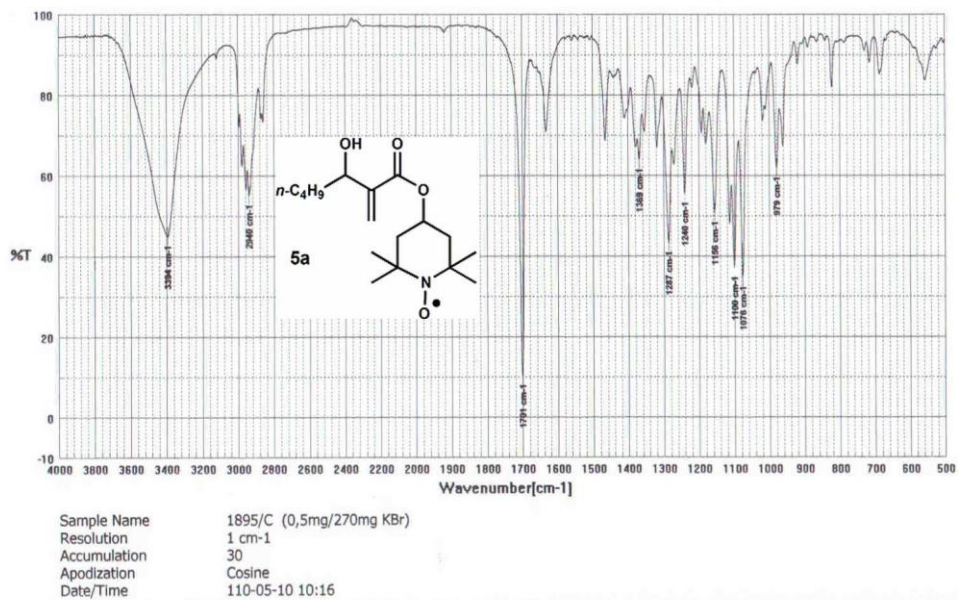
3, 4-Acryloyloxy-2,2,6,6-tetramethylpiperidine-1-oxyl, IR



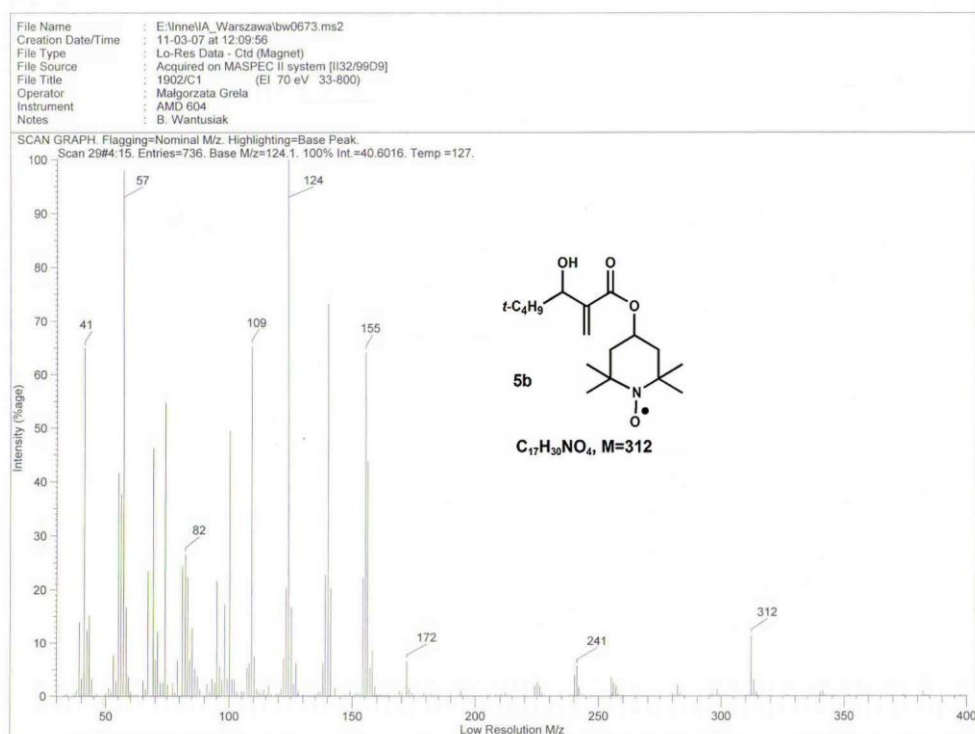
5a, 4-(2-(*n*-Butylhydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=*n*-C₄H₉, EIMS



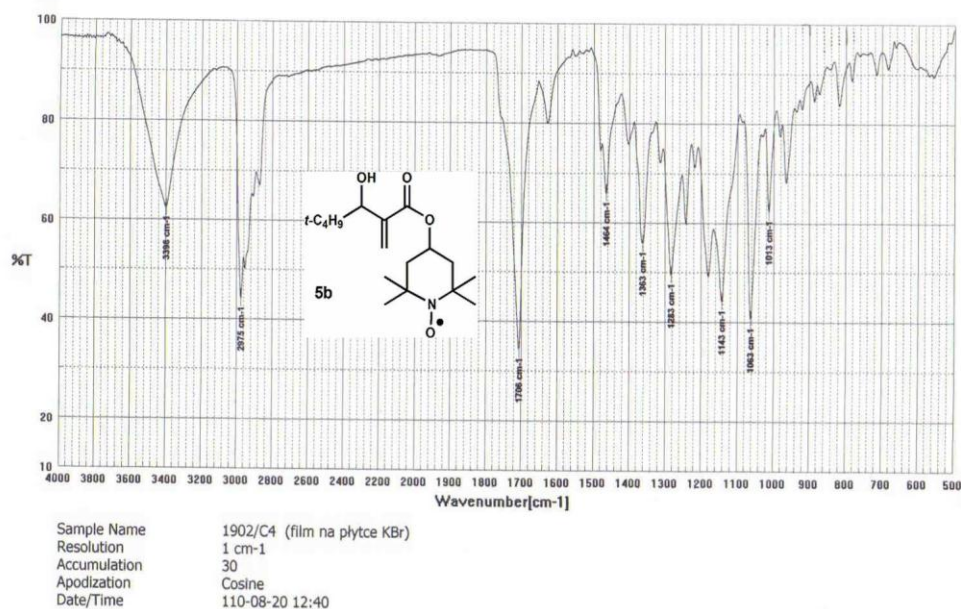
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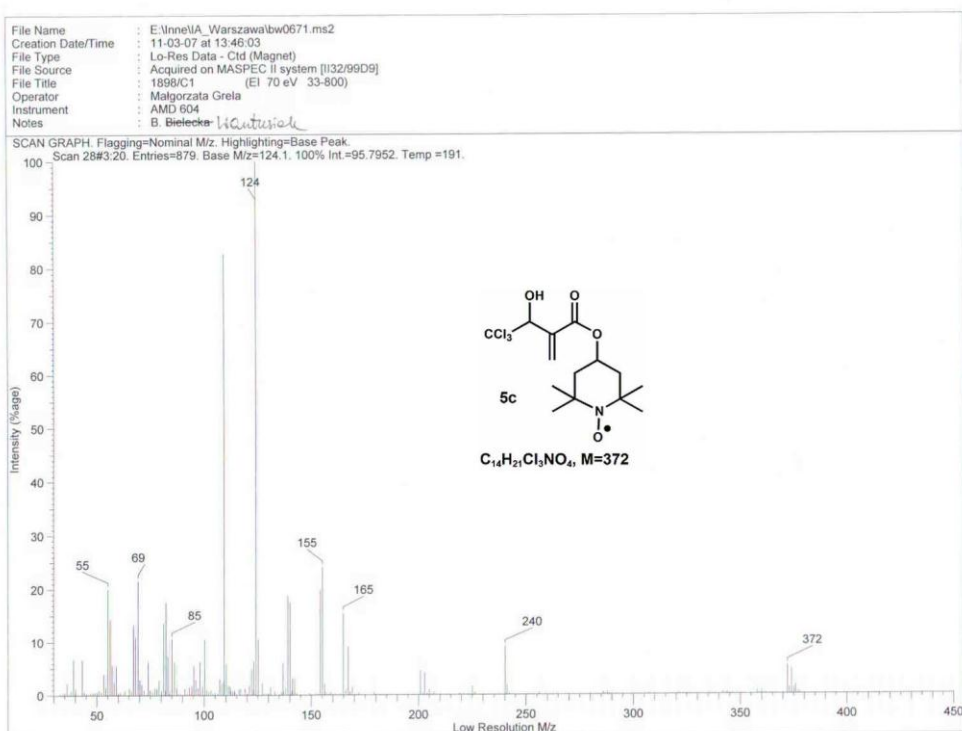
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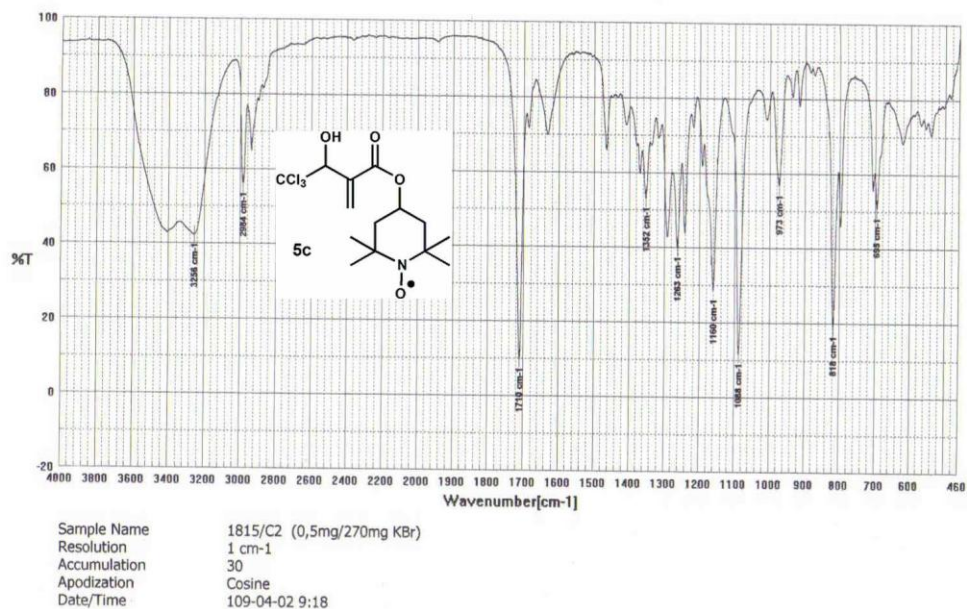
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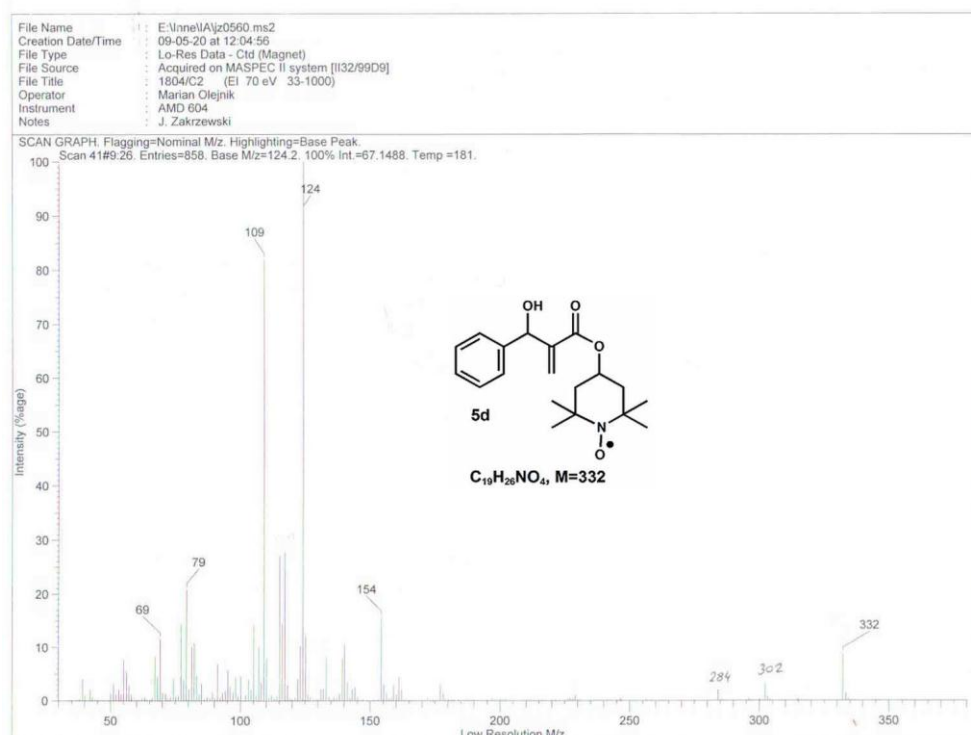
5c, 4-(2-(Trichloromethylhydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=CCl₃, EIMS



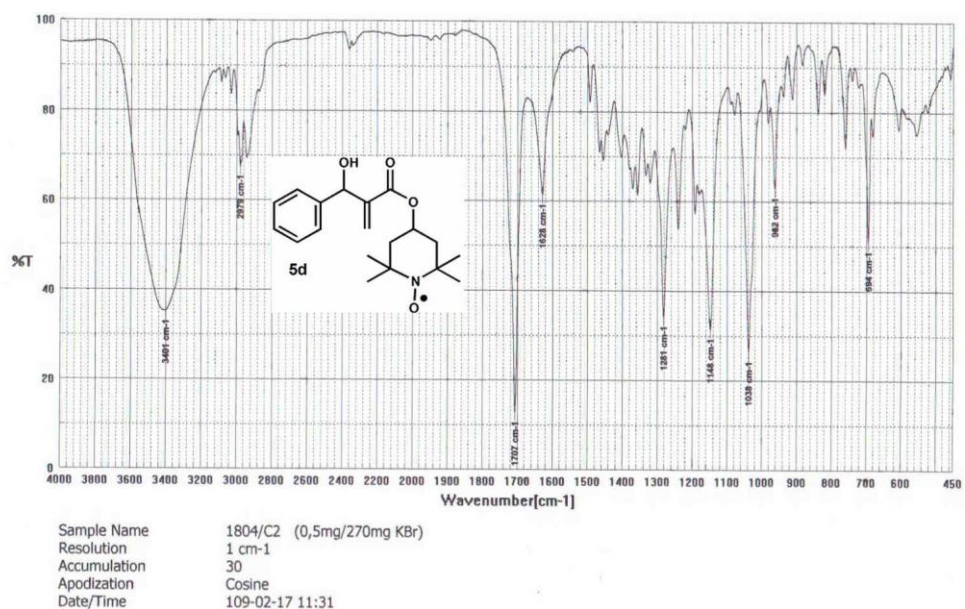
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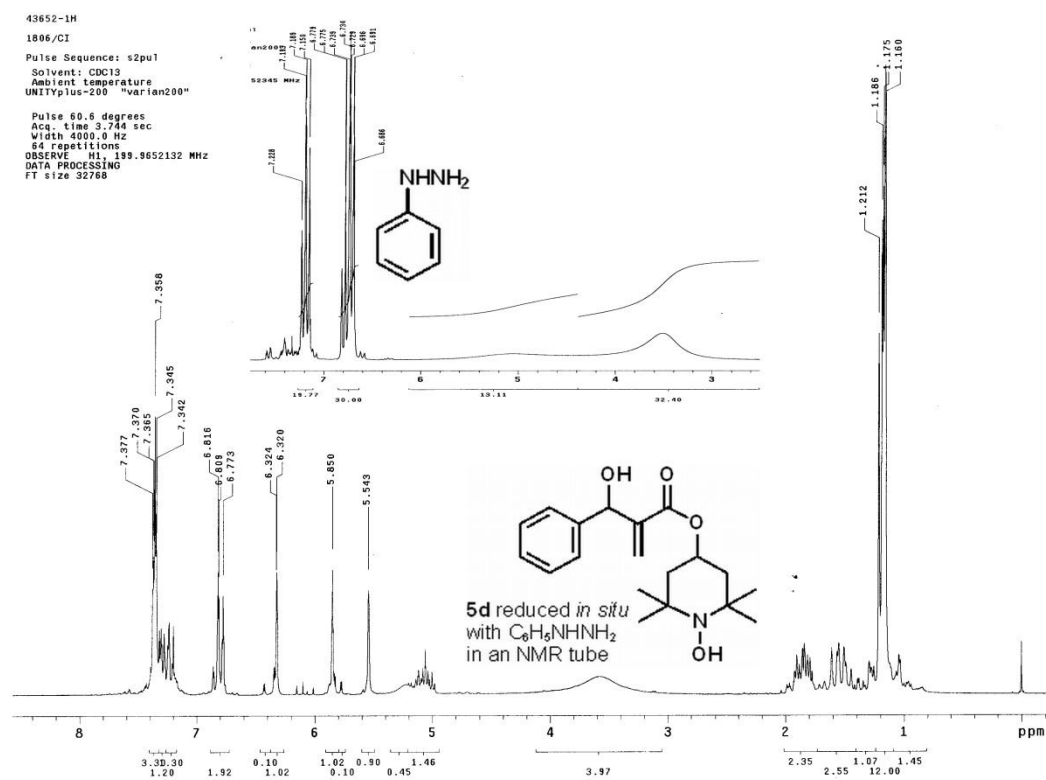
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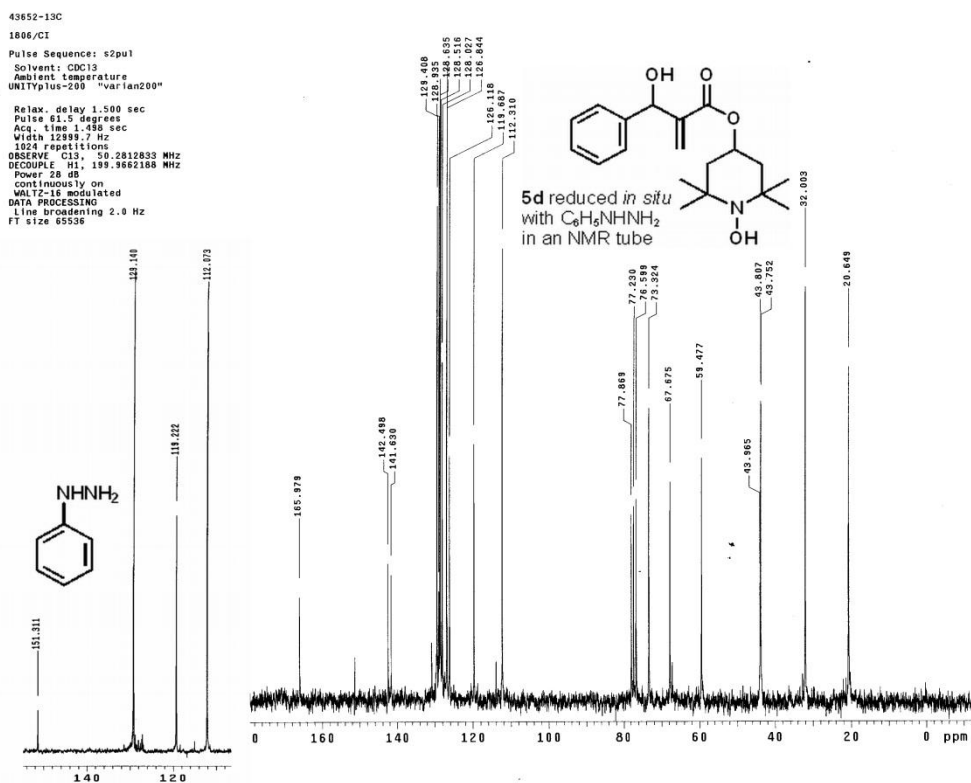
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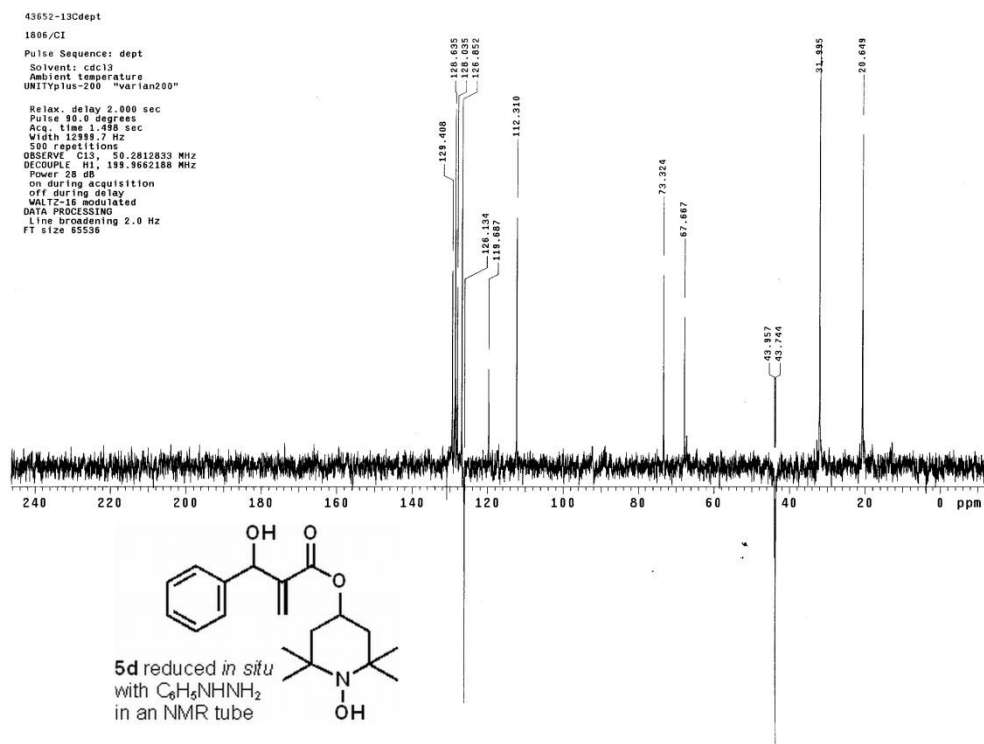
5d, 4-(2-(Phenylhydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=C₆H₅;
¹H NMR: **5d** reduced *in situ* with C₆H₅NHNH₂ in an NMR tube



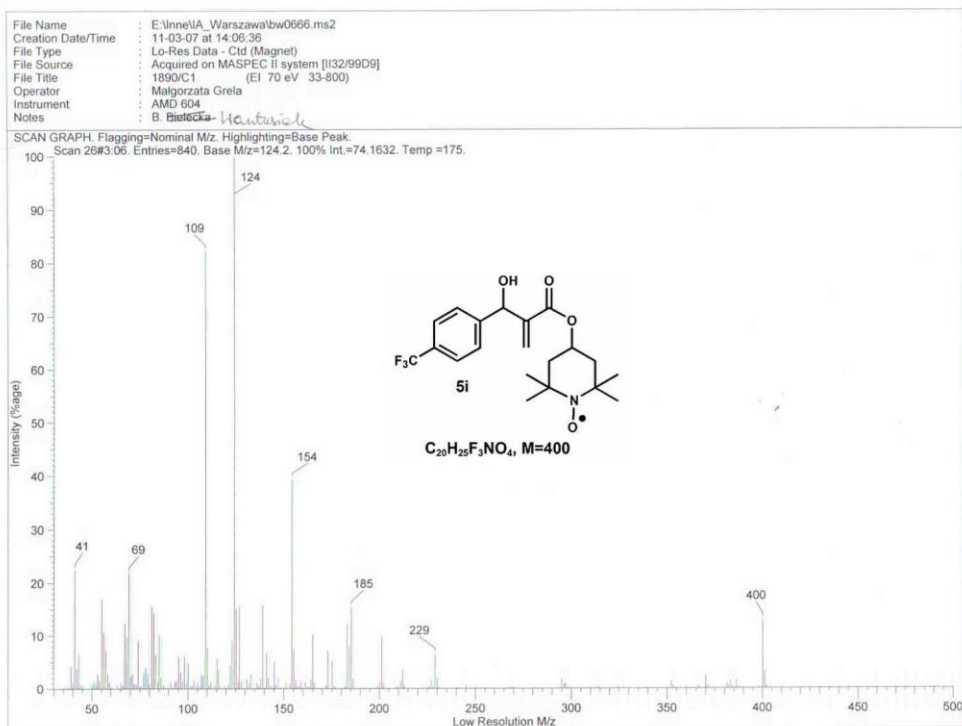
5d, 4-(2-(Phenylhydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=C₆H₅;
¹³C NMR: **5d** reduced *in situ* with C₆H₅NHNH₂ in an NMR tube



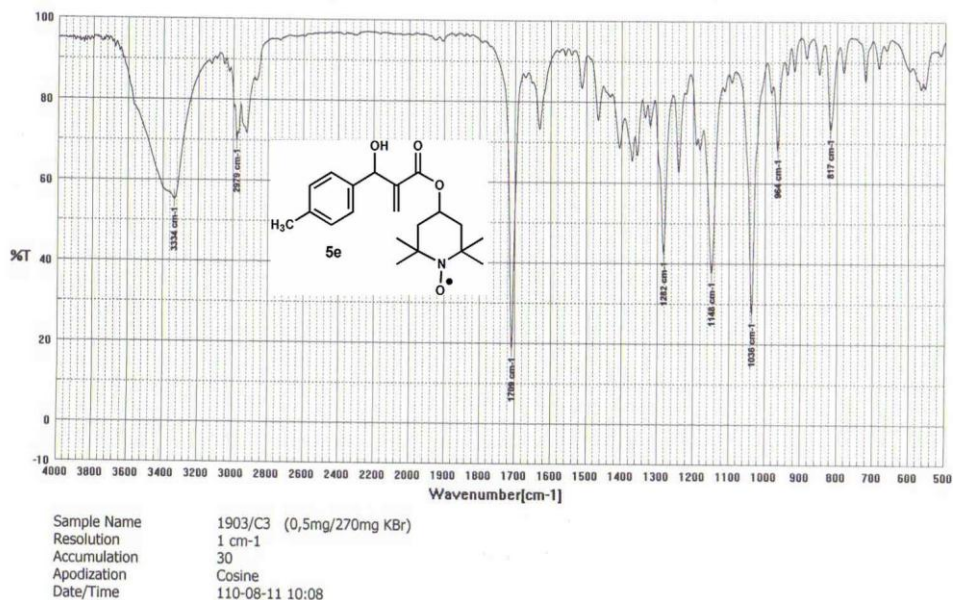
5d, 4-(2-(Phenylhydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=C₆H₅;
¹³C NMR, DEPT 135°: **5d** reduced *in situ* with C₆H₅NHNH₂ in an NMR tube



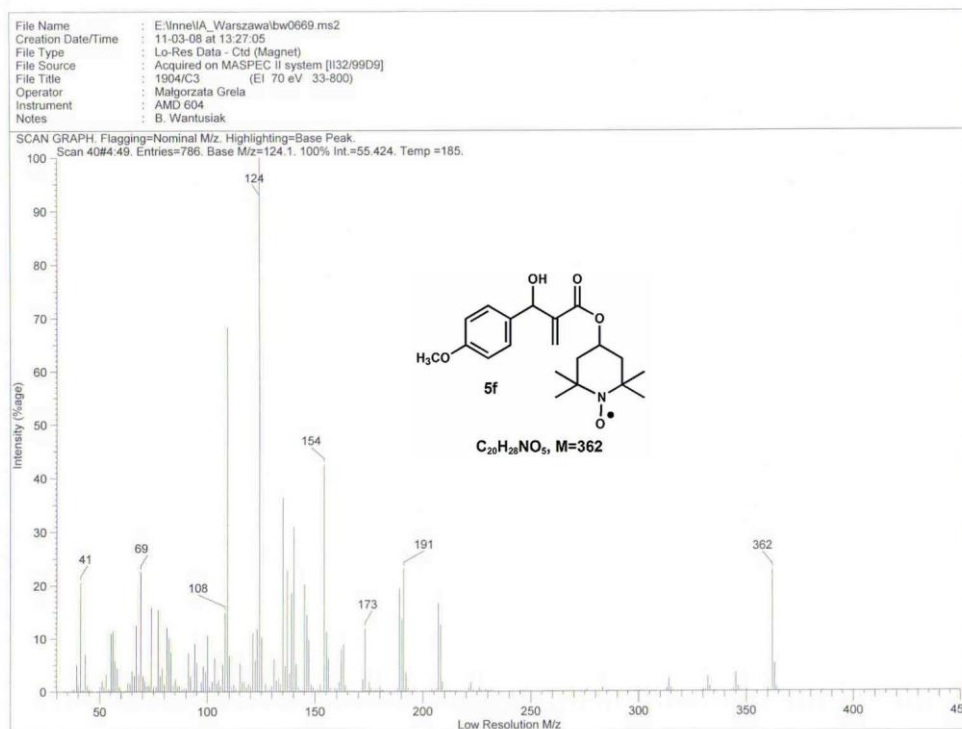
5e, 4-(2-((4-Methylphenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=4-CH₃C₆H₄, EIMS



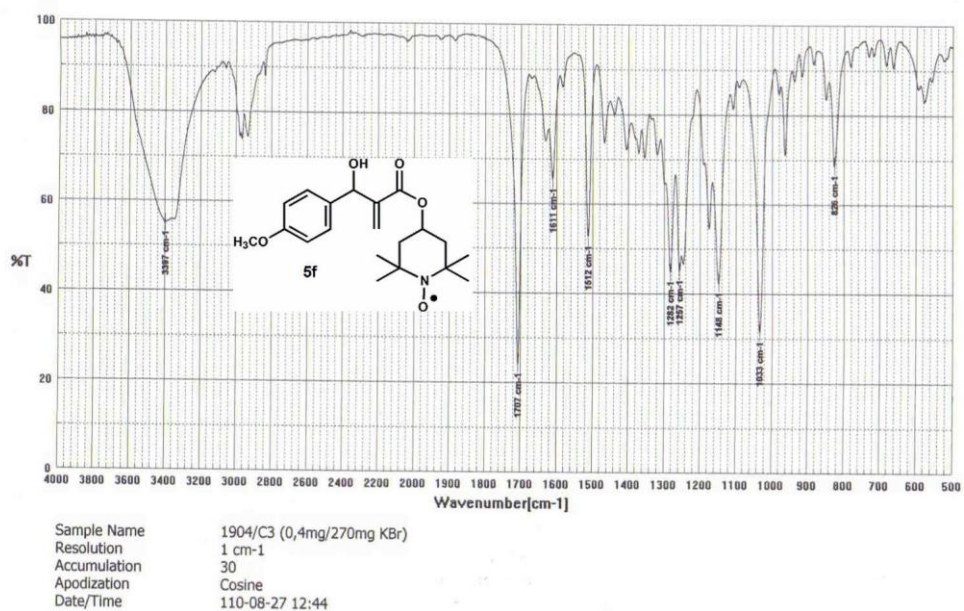
5e, 4-(2-((4-Methylphenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=4-CH₃C₆H₄, IR



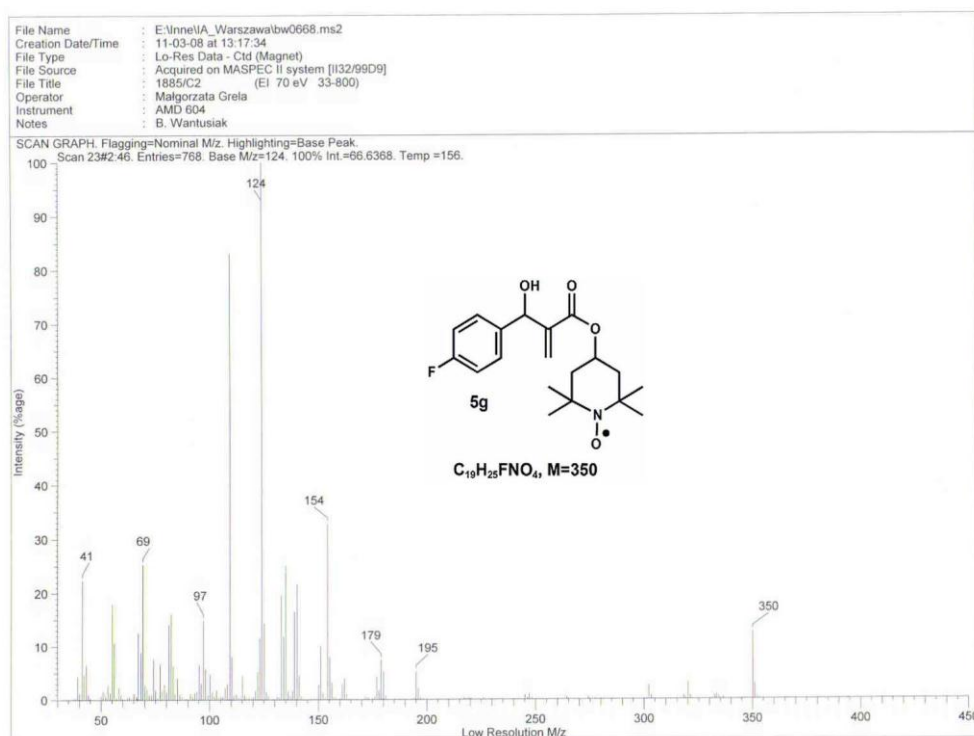
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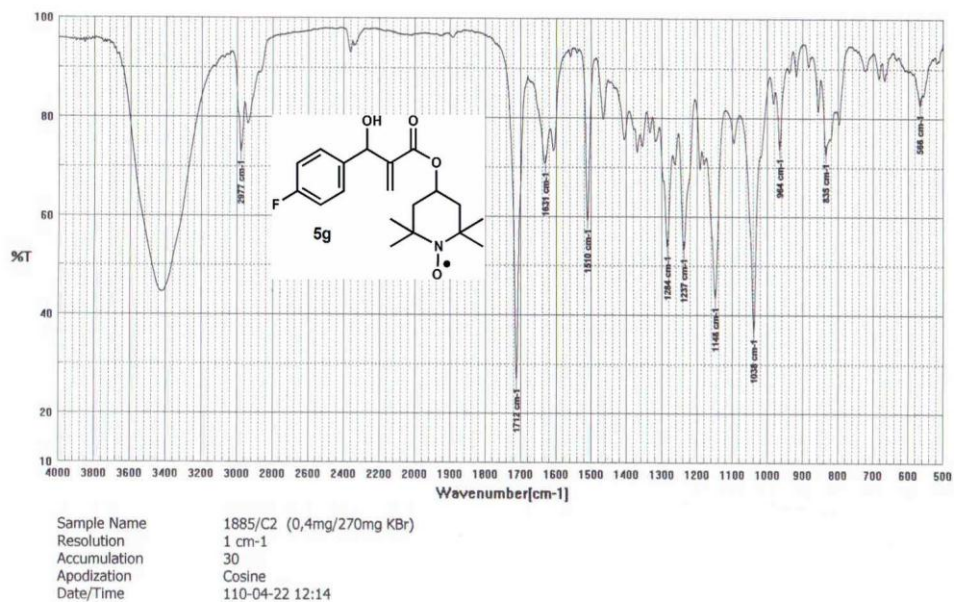
5f, 4-(2-((4-Methoxyphenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=4-CH₃OC₆H₄, IR



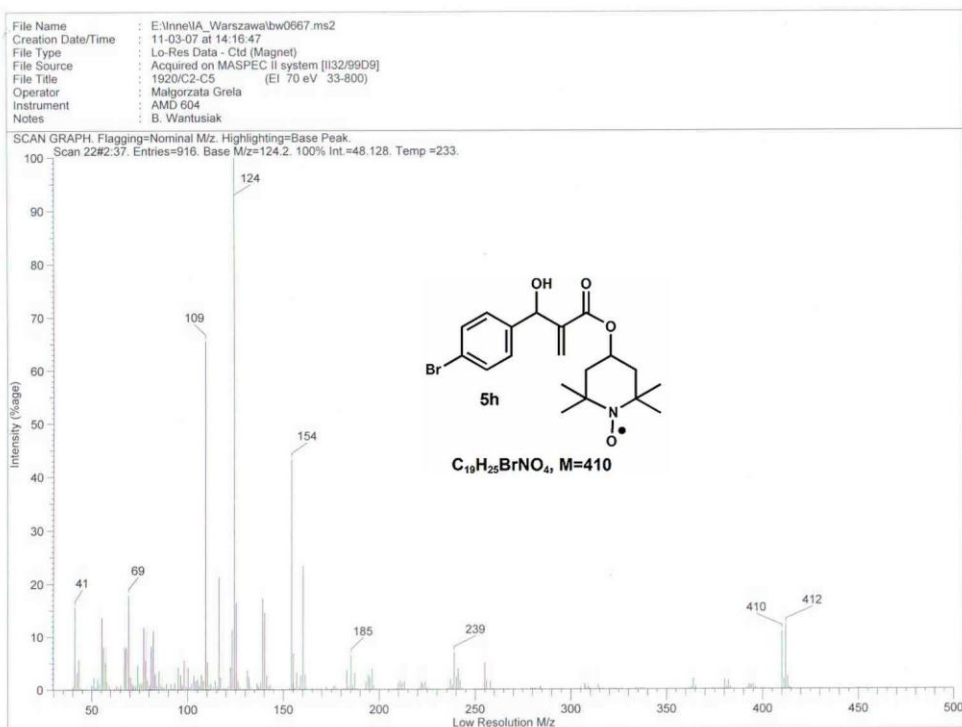
5g, 4-(2-((4-Fluorophenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=4-FC₆H₄, EIMS



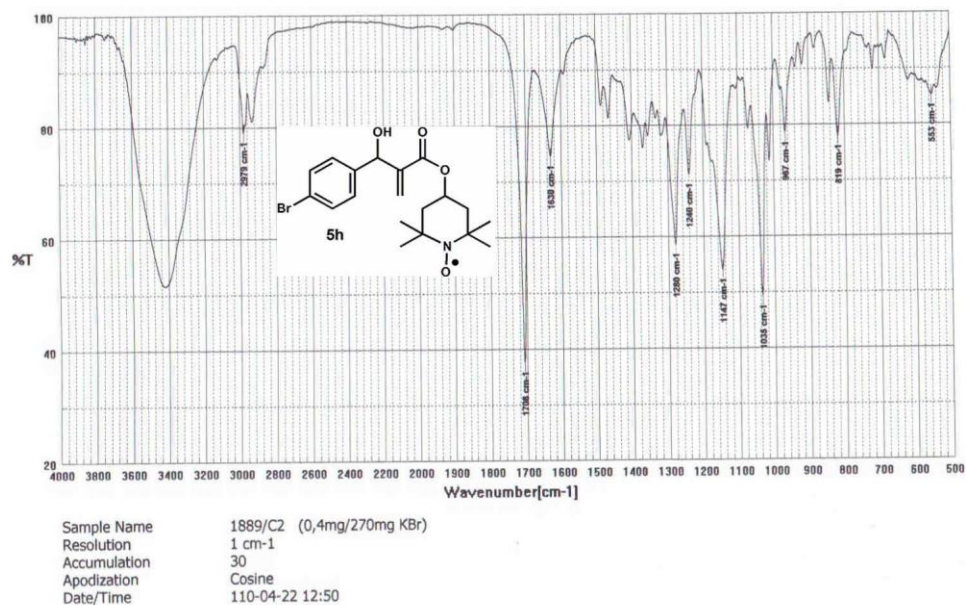
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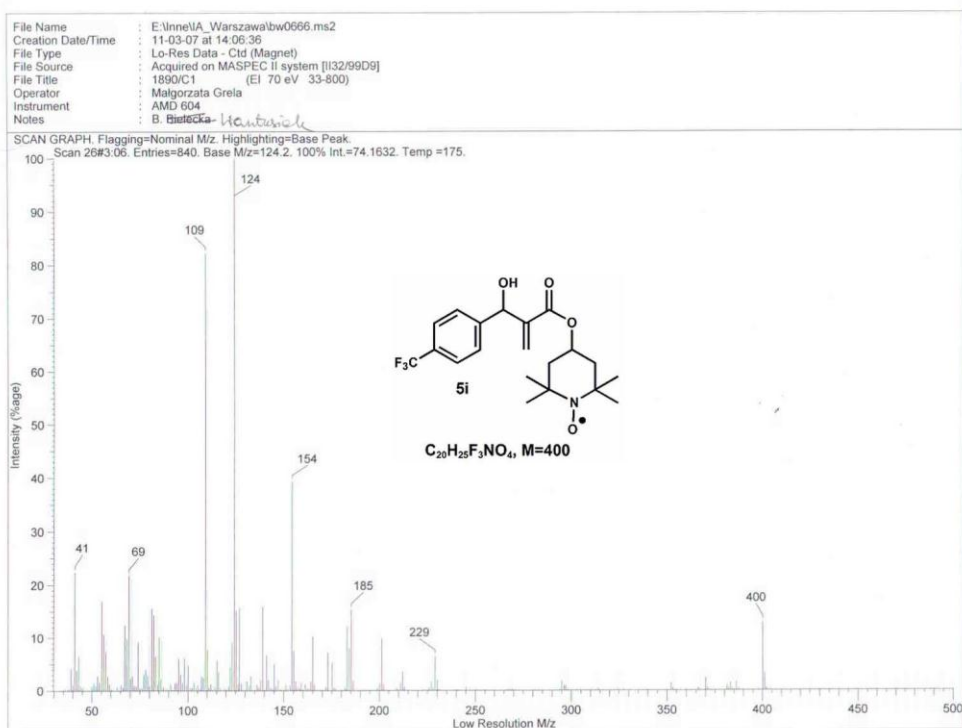
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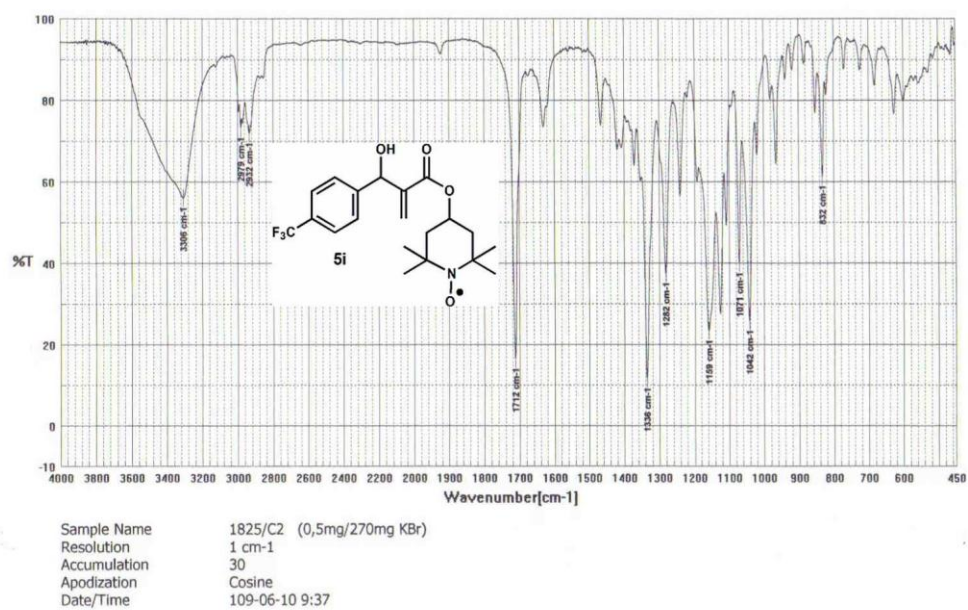
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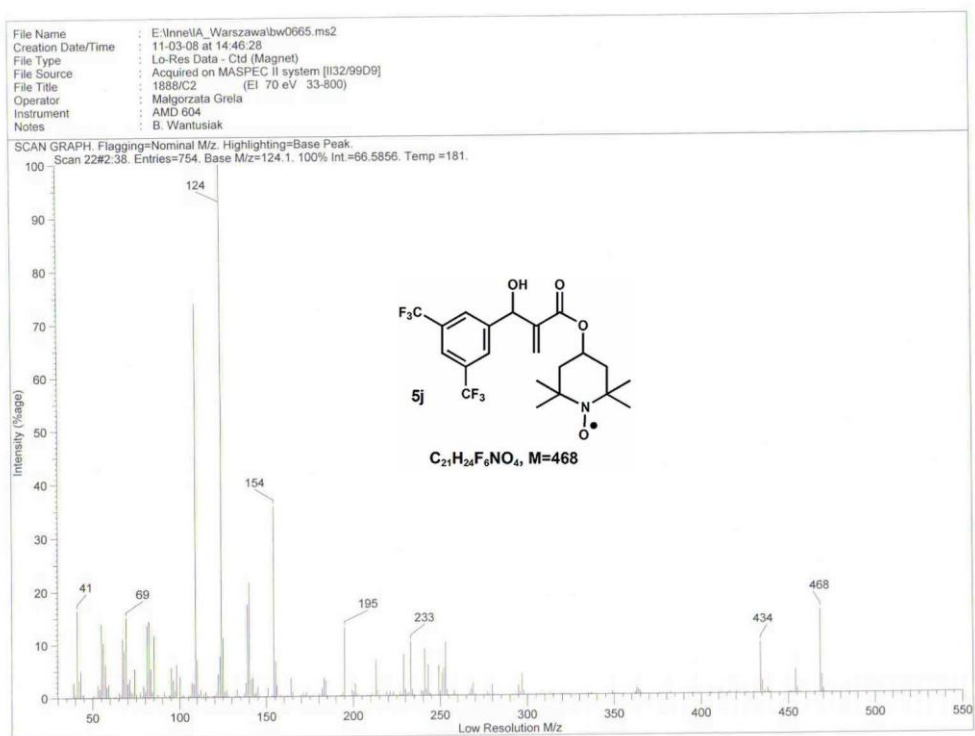
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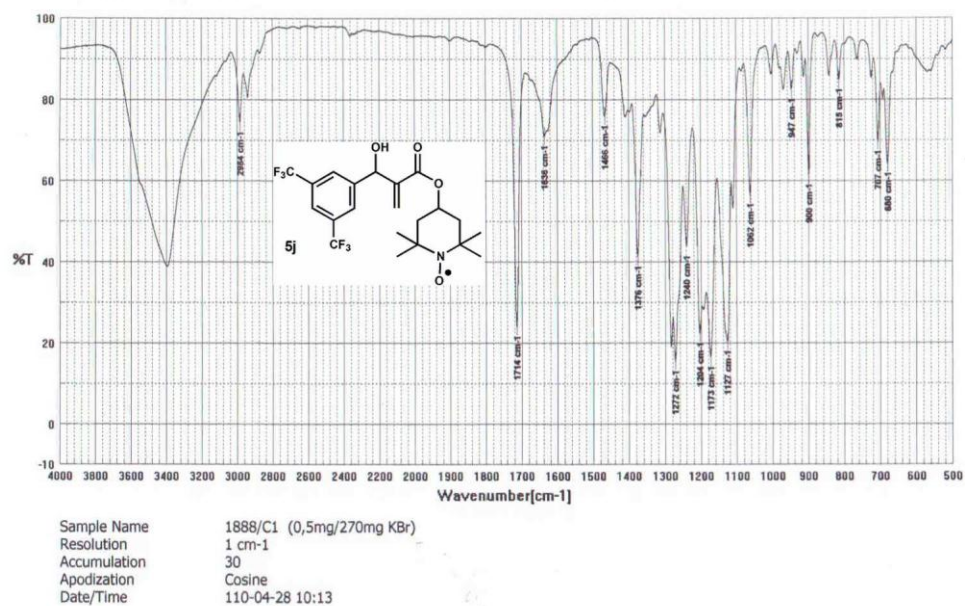
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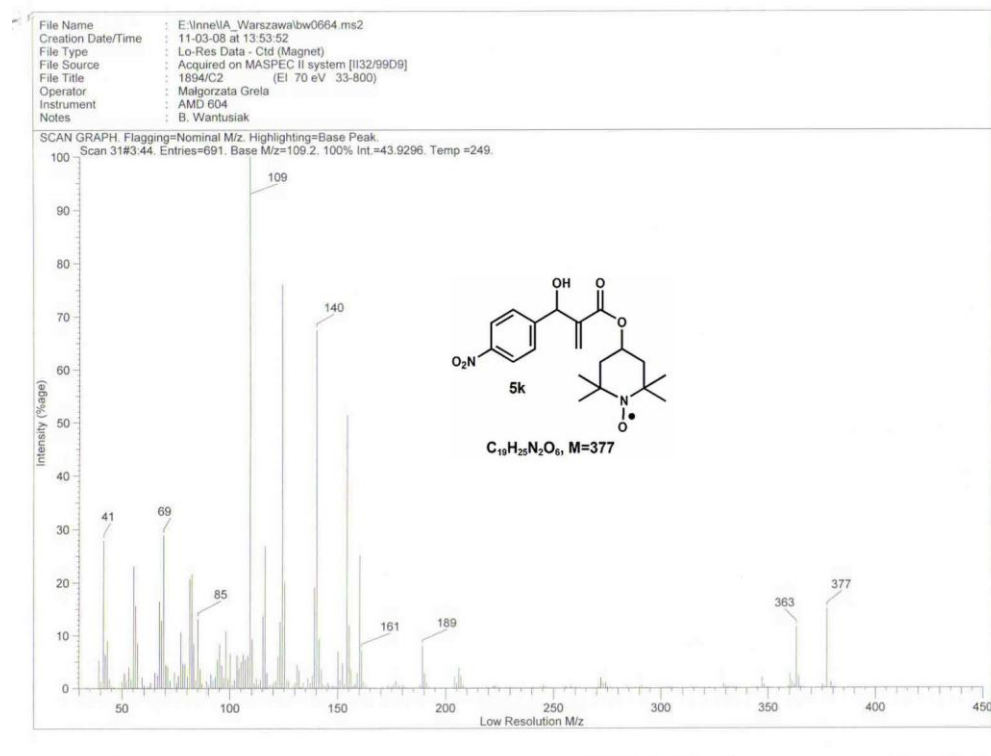
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R=3,5-di-CF₃C₆H₃, EIMS



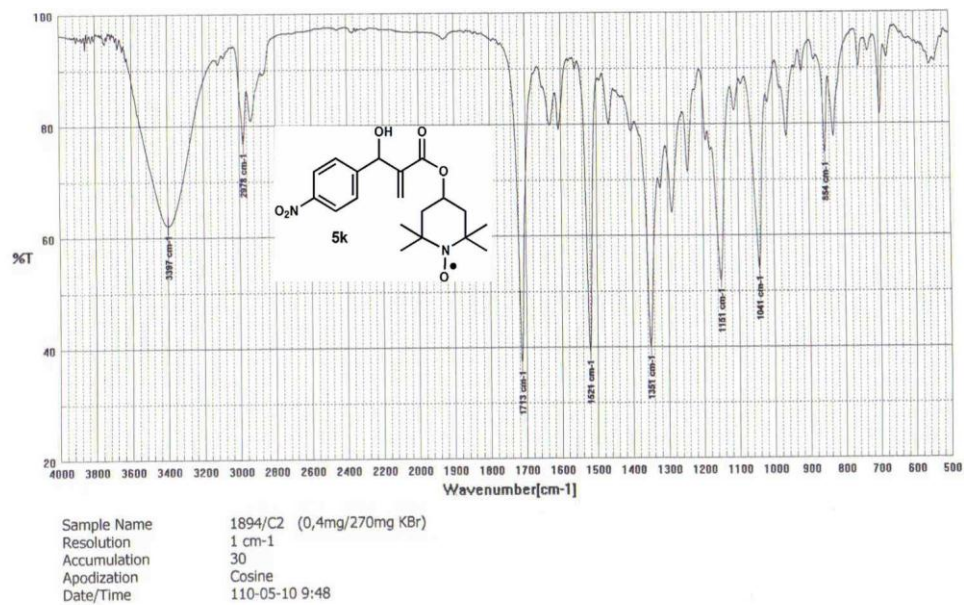
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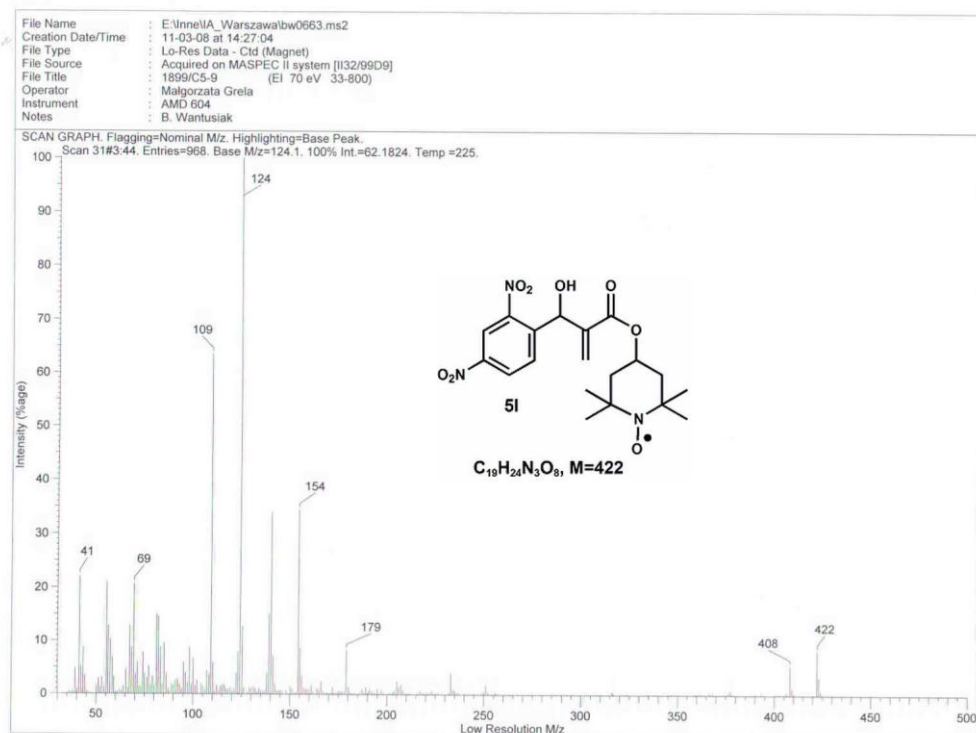
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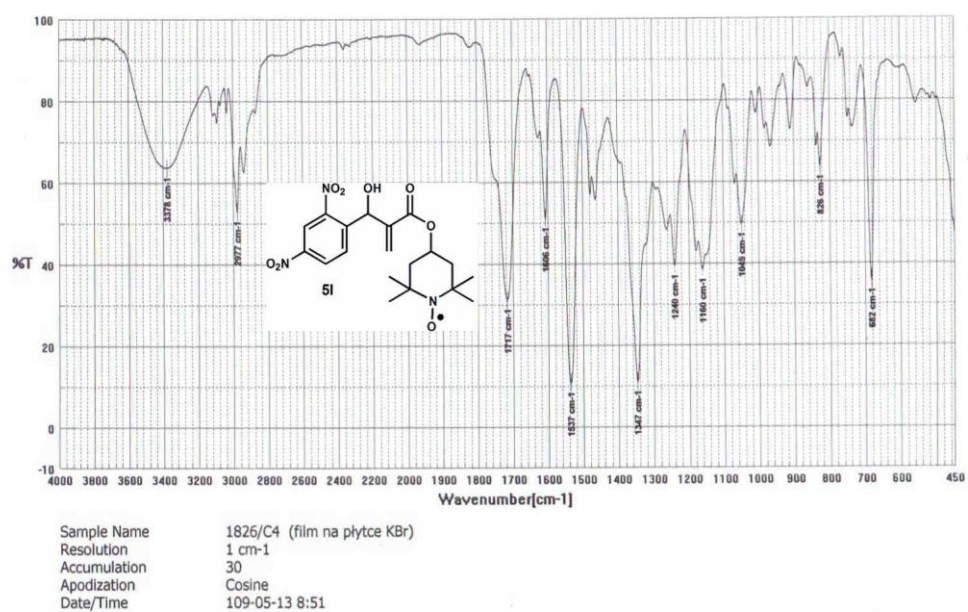
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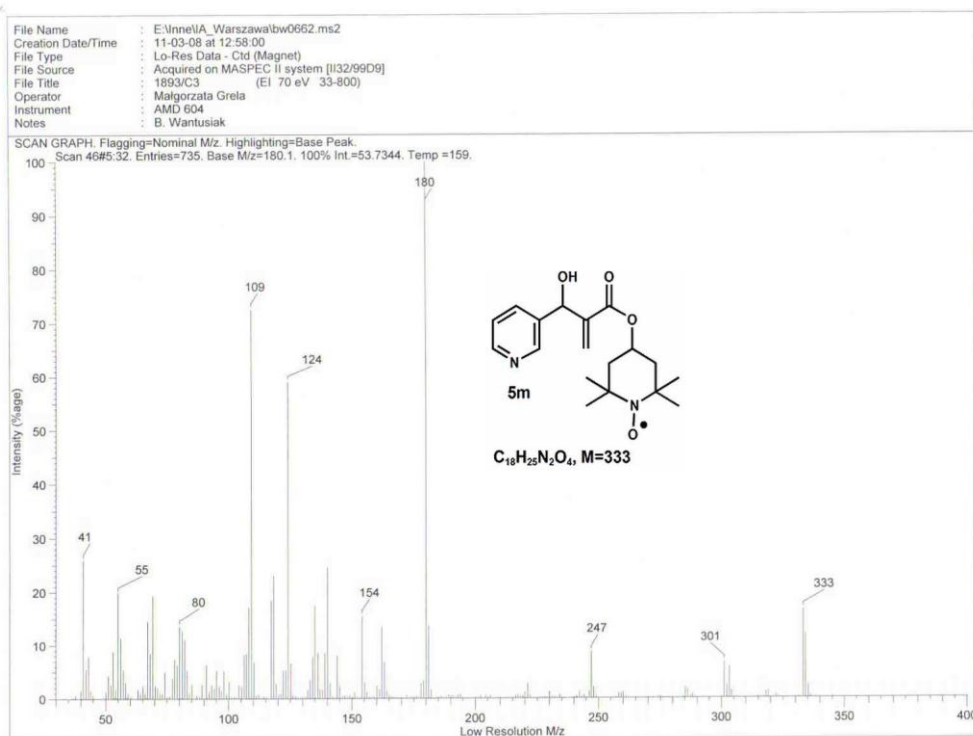
51, 4-(2-((2,4-Dinitrophenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=2,4-di-NO₂C₆H₃, EIMS



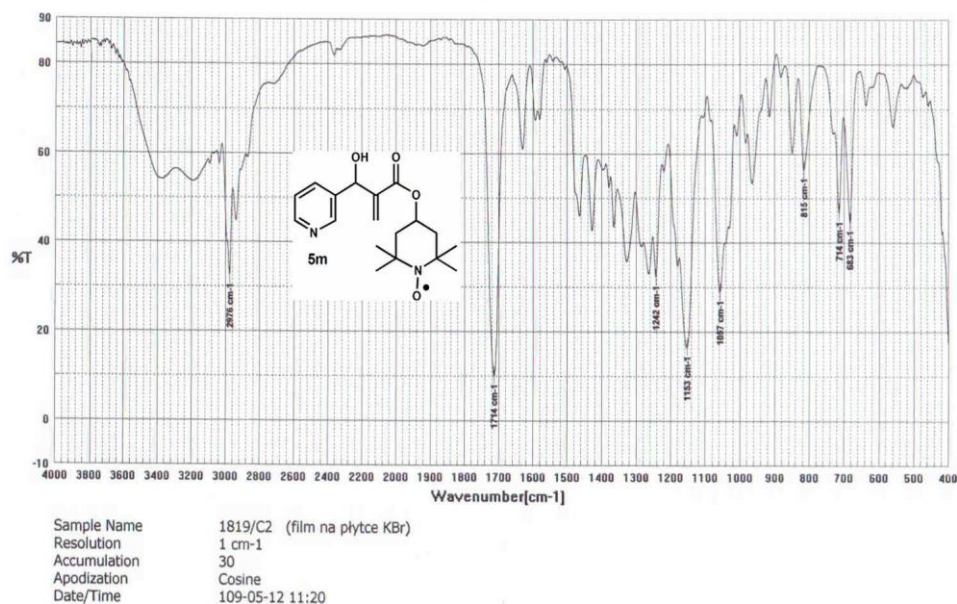
51, 4-(2-((2,4-Dinitrophenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=2,4-di-NO₂C₆H₃, IR



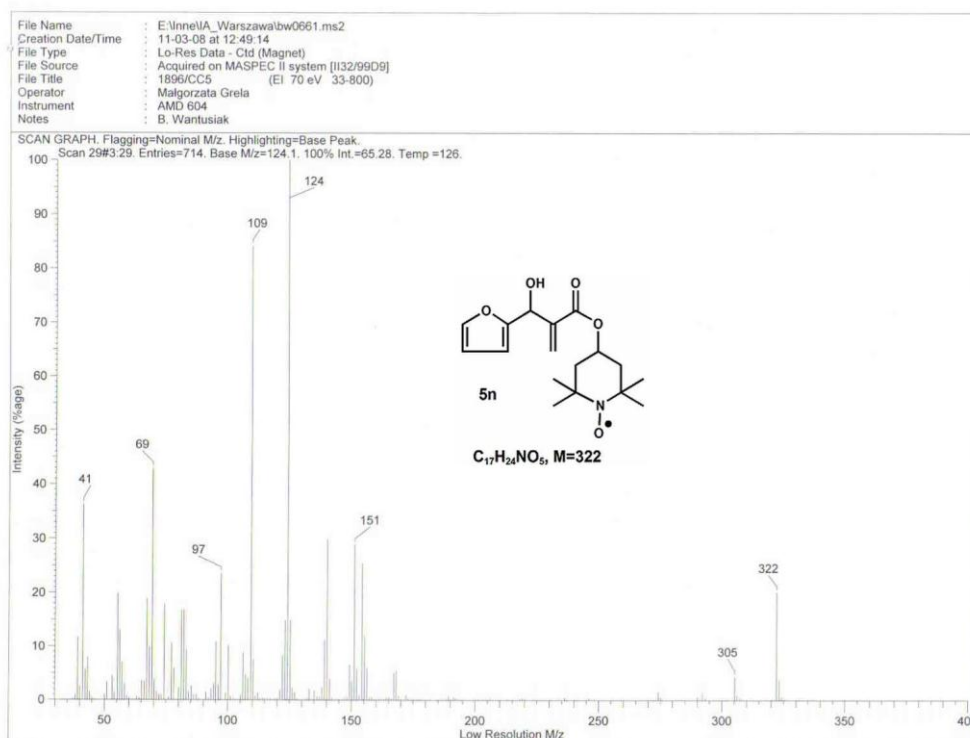
5m, 4-(2-((3-Pyridyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=3-pyridyl, EIMS



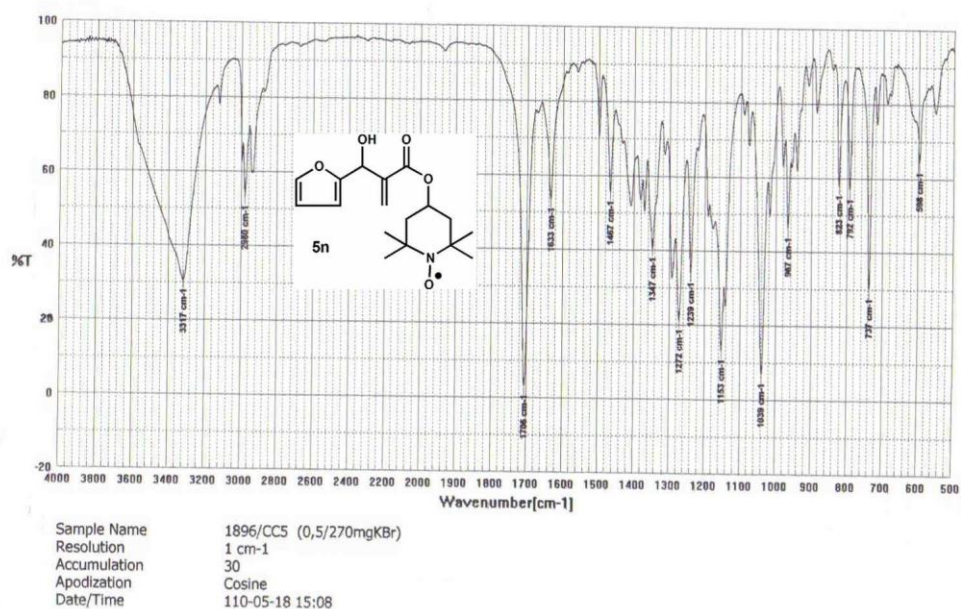
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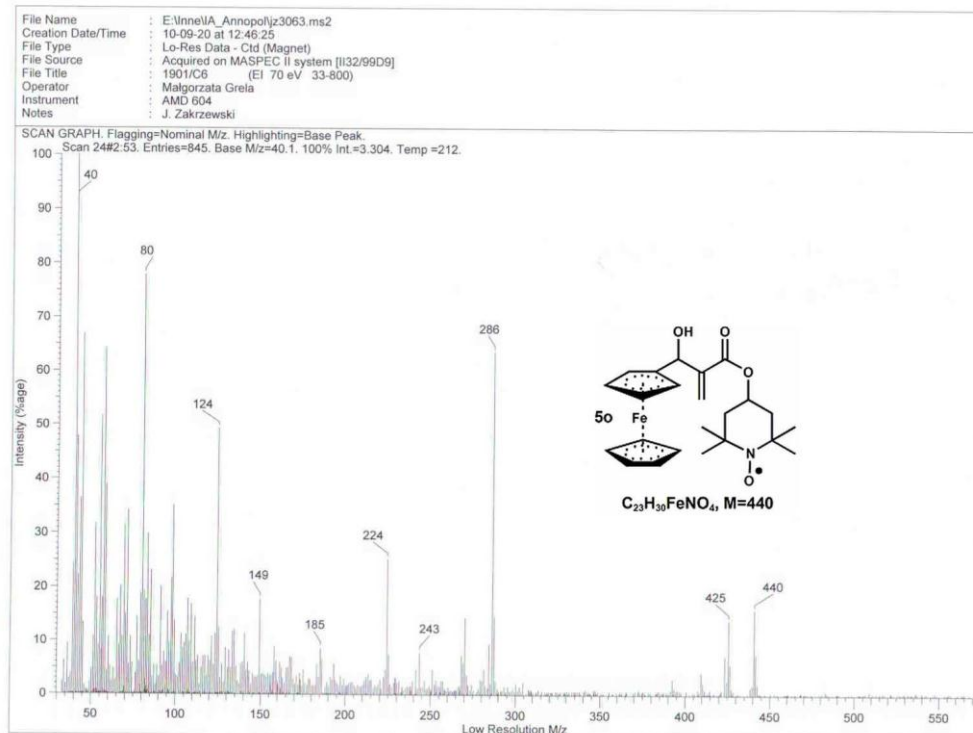
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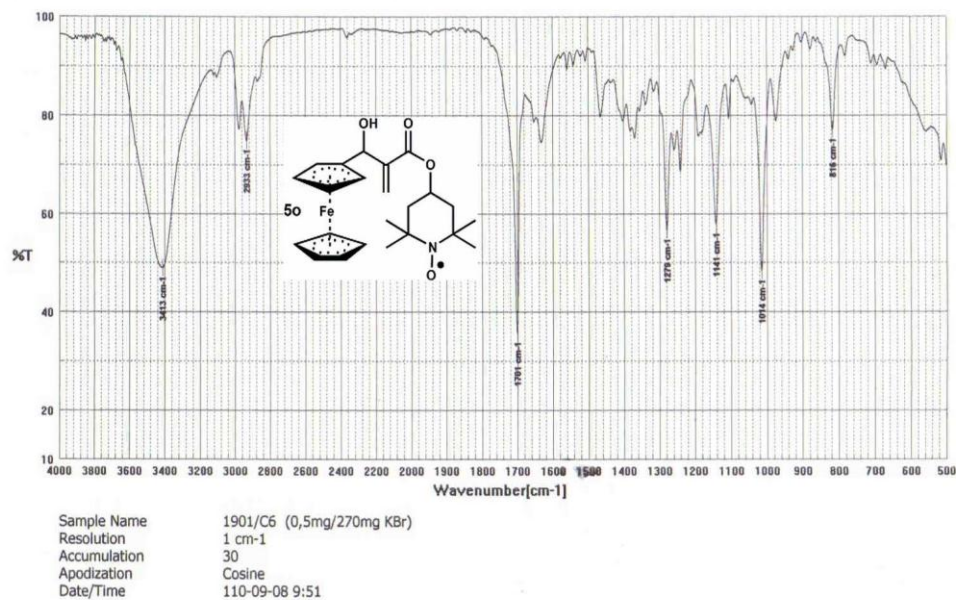
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5o, 4-(2-((Ferrocenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=ferrocenyl, EIMS



5o, 4-(2-((Ferrocenyl)hydroxymethyl)acryloyloxy)-2,2,6,6-tetramethylpiperidine-1-oxyl, R=ferrocenyl, IR



Blue fractions suggesting the presence of nitroso-compounds during the isolation of **51**

