$B(C_6F_5)_3$-catalyzed metal-free hydrogenation of 2-oxazolones

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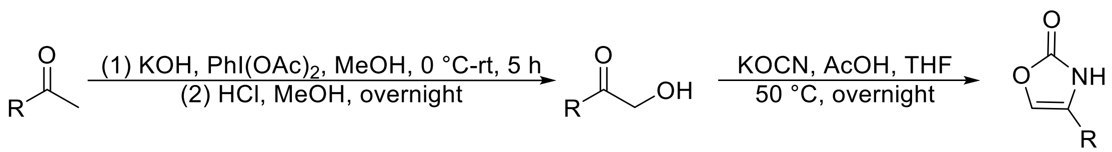
Supporting Information

General consideration: All air-sensitive compounds were handled under an atmosphere of argon or in a nitrogen-filled glovebox. ^{1}H NMR, ^{13}C NMR and ^{19}F NMR spectra were recorded on Bruker AV 400 and 500 at ambient temperature with $CDCl_3$ and d_6-DMSO as solvent and TMS as internal standard. Chemical shifts (δ) were given in ppm, referenced to the residual proton resonance of TMS (0), to the carbon resonance of the $CDCl_3$ (77.23) and d_6-DMSO (39.53). Coupling constants (*J*) were given in Hertz (Hz). IR spectrums were recorded on Perkin-Elmer-983 spectrometer. Optical rotations were measured with Rudolph-Autolpol-VI automatic polarimeter. High resolution mass spectra (HRMS) were recorded on Thermo Fisher Exactive orbitrap mass instrument (ESI). Column chromatography was performed on silica gel (200-300 mesh). All solvents were purified by conventional methods, distilled before use. Commercially available reagents were used without further purification.

Representative procedure for the synthesis of 1



Representative procedure for the synthesis of 4-(*p*-tolyl)oxazol-2(*3H*)-one (1):

To a stirred solution of the corresponding *p*-methylacetophenone (3.4 g, 1.0 eq, 25.0 mmol) and powdered potassium hydroxide (7.7 g, 5.5 eq, 137.5 mmol) in 50.0 mL methanol was added iodobenzene diacetate (9.1 g, 1.1 eq, 35.0 mmol) slowly at 0 °C. The reaction mixture was kept at room temperature until TLC indicated the total consumption of the *p*-methylacetophenone. Then the whole reaction mixture was concentrated. The residue was shaken with water and ethyl acetate. The combined organic layer was evaporated under reduced pressure. The residue was dissolved in a mixture of 12.5 mL methanol and 12.5 mL aqueous hydrochloric acid (2.0 M) and then stirred overnight at room temperature. Water (100 mL) was added and the mixture was extracted with ethyl acetate (2 × 100 mL). The organic layers were washed with water (3 × 150 mL) and brine (150 mL), dried over anhydrous Na_2SO_4. The solvent was evaporated under reduced pressure. The crude product 2-hydroxy-1-*p*-tolyl-ethanone was used directly for the next step without further purifications.

To a stirred solution of 2-hydroxy-1-*p*-tolyl-ethanone (25.0 mmol, 1.0 eq.) and KOCN (4.1 g, 2.0 eq, 50.0 mmol) in 60 mL tetrahydrofuran was added AcOH (3.6 g, 2.4 eq, 60.0 mmol) slowly at 50 °C. The reaction was stirred at this temperature for 12 h until TLC indicated the total consumption of the 2-hydroxy-1-*p*-tolyl-ethanone, and then poured into ice cooled H_2O and the resulting precipitate was collected by filtration to obtain crude product, was passed through a silica gel column to give the desired products **1d** (1.5 g, 34% yield).

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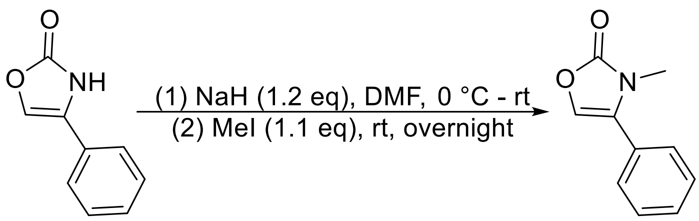

To a solution of **1a** (322.1 mg, 2.0 mmol) in 4.0 mL DMF was added sodium hydride (96.0 mg, 2.4 mmol, 60% purity) portionwise at 0 °C under N_2. The mixture was stirred at 0 °C for 1 h before MeI (312.3 mg, 2.2 mmol) was added. The mixture was stirred at room temperature until full consumption of the starting material indicated by TLC.

Then the reaction was quenched with water and was added EtOAc. The organic layers were washed twice with 5 wt % aqueous LiCl solution to remove DMF, followed by additional washing with brine. After drying over Na_2SO_4, the crude product was purified by column chromatography (petroleum ether/EA = 3/1) on silica gel to provide the desired products **1v** as white solid (65.0 mg, 18% yield).

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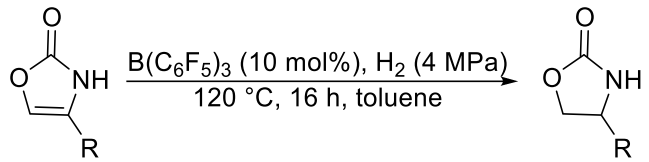
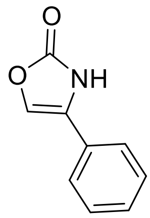


Representative procedure for asymmetric hydrogenation of 4-phenyloxazol-2(3*H*)-one 1 (Scheme 2): To a stainless-steel autoclave, were added 4-phenyloxazol-2(3*H*)-one (**1a**) (80.6 mg, 0.50 mmol), $B(C_6F_5)_3$ (**2a**) (25.6 mg, 0.05 mmol) and dry toluene (5.0 mL) in a nitrogen atmosphere glovebox. The resulting mixture was stirred at 120 °C in an oil bath for 16 h. The solvent was removed under reduced pressure. The crude residue was purified by flash chromatography on silica gel (200-300 mesh) to give the desired product **3a** as a white solid (79.2 mg, 97% yield). (**1e, 1f, 1i, 1j, 1k** was carried out with DCM as solvent; **1s** was carried out with oxazolidinone (1.0 mmol), $B(C_6F_5)_3$ (0.1 mmol) in toluene (10.0 mL); **3u** was carried out with 20 mol % $B(C_6F_5)_3$).

Characterization of substrates



4-phenyloxazol-2(3*H*)-one (1a). white solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.67 (s, 1H), 7.48-7.41 (m, 4H), 7.39-7.32 (m, 1H), 7.12 (s, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 158.4, 129.5, 129.2, 128.4, 126.5, 124.4, 124.1.

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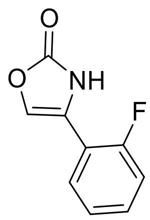

4-(2-fluorophenyl)oxazol-2(3*H*)-one (1b). white solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.61 (s, 1H), 7.52-7.45 (m, 1H), 7.37-7.31 (m, 1H), 7.31-7.24 (m, 2H), 7.20-7.13 (m, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.6 (d, J = 255.0 Hz), 157.7, 130.2 (d, J = 8.8 Hz), 127.9 (d, J = 15.0 Hz), 126.0 (d, J = 2.5 Hz), 125.3 (d, J = 3.8 Hz), 122.7, 116.4 (d, J = 21.3 Hz), 114.9 (d, J = 12.5 Hz); ^{19}F NMR (377 MHz, $CDCl_3$, ppm) δ -111.0.

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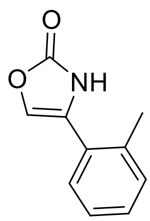

4-(*o*-tolyl)oxazol-2(3*H*)-one (1c). white solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.06 (s, 1H), 7.40-7.35 (m, 1H), 7.31-7.26 (m, 3H), 6.92 (s, 1H), 2.41 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 157.6, 135.9, 131.5, 129.2, 127.5, 127.2, 126.9, 126.2, 125.9, 21.4.

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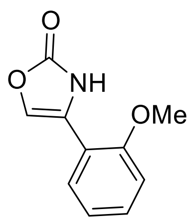
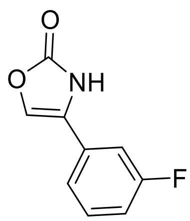
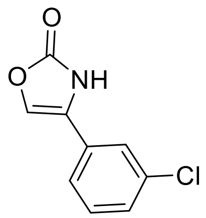


4-(*o*-methoxyphenyl)-4-oxazoline-2-one (1d). white solid; m.p. 194-196 °C. IR (film): 3051, 1762, 1508 cm^{-1}; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.13 (s, 1H), 7.55-7.48 (m, 2H), 7.36-7.28 (m, 1H), 7.14-7.08 (m, 1H), 7.05-6.98 (m, 1H), 3.89 (s, 3H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 155.9, 155.4, 129.0, 127.4, 125.4, 123.4, 120.4, 115.2, 111.3, 55.4; HRMS (ESI) m/z: $[M+H]^+$ Calcd for $C_{10}H_{10}NO_3$ 192.0655; Found 192.0660.



4-(3-fluorophenyl)oxazol-2(3*H*)-one (1e). white solid; m.p. 158-161 °C. IR (film): 3162, 3093, 1782, 1760, 1467 cm^{-1}; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.38 (s, 1H), 7.77 (s, 1H), 7.51-7.39 (m, 3H), 7.21-7.14 (m, 1H); ^{13}C NMR (125 MHz, d_6-

DMSO, ppm): δ 162.4 (d, *J* = 241.3 Hz), 155.7, 131.0 (d, *J* = 8.8 Hz), 129.1 (d, *J* = 8.8 Hz), 126.1 (d, *J* = 3.8 Hz), 125.7, 120.0 (d, *J* = 2.5 Hz), 114.9 (d, *J* = 20.0 Hz), 110.7 (d, *J* = 23.8 Hz); ^{19}F NMR (377 MHz, d_6-DMSO, ppm) δ -112.3; HRMS (ESI) m/z: $[M-H]^-$ Calcd for $C_9H_5NO_2F$ 178.0310; Found 178.0296.



4-(3-chlorophenyl)-4-oxazoline-2-one (1f). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.37 (s, 1H), 7.79 (m, 1H), 7.67 (s, 1H), 7.55-7.35 (m, 3H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 155.9, 133.9, 130.7, 129.0, 128.0, 126.0, 125.9, 123.7, 122.4.

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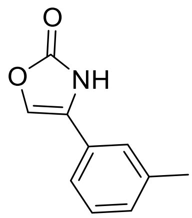

4-(*m*-tolyl)oxazol-2(3*H*)-one (1g). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.28 (s, 1H), 7.64 (s, 1H), 7.41 (s, 1H), 7.38-7.28 (m, 2H), 7.19-7.13 (m, 1H), 2.33 (s, 3H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 155.9, 138.1, 128.9, 128.7, 127.2, 126.7, 124.5, 124.4, 121.1, 20.9.

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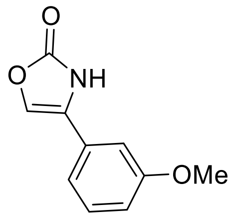

4-(3-methoxyphenyl)-4-oxazoline-2-one (1h). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.31 (s, 1H), 7.69-7.65 (m, 1H), 7.35-7.28 (m, 1H), 7.15-7.10 (m, 2H), 6.92-6.86 (m, 1H), 3.77 (s, 3H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 159.7, 156.0, 130.0, 128.1, 127.1, 124.9, 116.3, 114.1, 109.6, 55.2.

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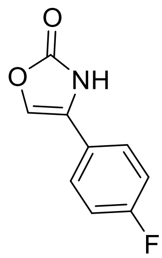

4-(4-fluorophenyl)oxazol-2(3*H*)-one (1i). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.39 (s, 1H), 7.78 (s, 1H), 7.51-7.39 (m, 3H), 7.21-7.14 (m, 1H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 162.4 (d, J = 241.3 Hz), 155.7, 131.0 (d, J = 8.8 Hz), 129.1 (d, J = 10.0 Hz), 126.1 (d, J = 2.5 Hz), 125.7, 120.0 (d, J = 2.5 Hz), 114.9 (d, J = 21.3 Hz), 110.7 (d, J = 23.8 Hz); ^{19}F NMR (377 MHz, d_6-DMSO, ppm) δ -112.9.

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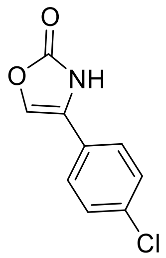
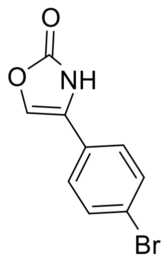


4-(4-chlorophenyl)-4-oxazoline-2-one (1j). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.37 (s, 1H), 7.74-7.70 (m, 1H), 7.57 (d, J = 8.5 Hz, 2H), 7.54-7.47 (m, 2H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 155.8, 132.6, 128.9, 126.1, 125.7, 125.6, 125.1.

Y. Liu, Z. Yi, X. Yang, H. Wang, C. Yin, M. Wang, X.-Q. Dong and X. Zhang, *ACS Catal.*, 2020, **10**, 11153−11161.



4-(4-bromophenyl)oxazol-2(3*H*)-one (1k). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.37 (s, 1H), 7.74 (s, 1H), 7.64 (d, J = 8.5 Hz, 2H), 7.51 (d, J = 8.5 Hz, 2H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 155.8, 131.8, 126.2, 126.1, 125.9, 125.2, 121.1.

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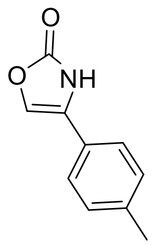

4-(*p*-tolyl)oxazol-2(3*H*)-one (1l). yellow solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.43 (s, 1H), 7.32 (d, *J* = 8.0 Hz, 2H), 7.23 (d, *J* = 8.0 Hz, 2H), 7.07 (s, 1H), 2.37 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 158.2, 139.3, 130.1, 128.4, 124.4, 123,7, 123.6, 21.5.

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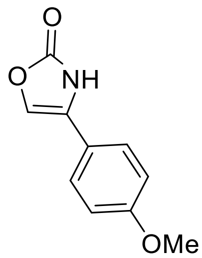
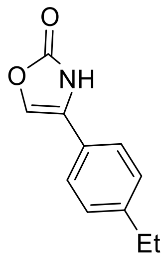


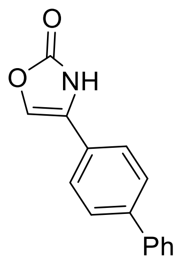
4-(4-methoxyphenyl)oxazol-2(3*H*)-one (1m). yellow solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.61 (s, 1H), 7.37 (d, *J* = 8.5 Hz, 2H), 7.02 (s, 1H), 6.95 (d, *J* = 8.5 Hz, 2H), 3.83 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.4, 158.3, 128.2, 126.0, 122.9, 119.0, 115.0, 55.6.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett*., 2016, **57**, 658−662.



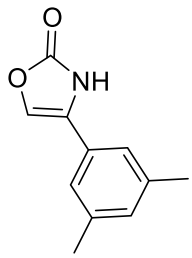
4-(4-ethylphenyl)oxazol-2(3*H*)-one (1n). white solid; ^{1}H NMR (500 MHz, CDCl$_3$, ppm): δ 10.47 (s, 1H), 7.35 (d, *J* = 8.0 Hz, 2H), 7.25 (d, *J* = 8.0 Hz, 2H), 7.07 (s, 1H), 2.67 (q, *J* = 7.5 Hz, 2H), 1.24 (t, *J* = 7.5 Hz, 3H); ^{13}C NMR (125 MHz, CDCl$_3$, ppm): δ 158.2, 145.7, 129.0, 128.4, 124.5, 123.9, 123.6, 28.9, 15.5.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett*., 2016, **57**, 658−662.

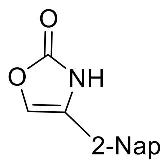


4-([1,1'-biphenyl]-4-yl)oxazol-2(3*H*)-one(1o). white solid; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.40 (s, 1H), 7.82-7.60 (m, 7H), 7.55-7.44 (m, 2H), 7.43-7.30 (m, 1H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 156.0, 139.8, 139.2, 128.9, 127.7, 127.0, 126.5, 125.9, 124.8, 124.5.

Z. Liu, W. Zhang, S. Guo and J. Zhu, *J. Org. Chem*., 2019, **84**, 11945−11957.

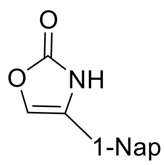


4-(3,5-dimethylphenyl)oxazol-2(3*H*)-one (1p). white solid; m.p. 140-142 °C. IR (film): 3141, 1727, 1641, 1456 cm^{-1}; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 11.19 (s, 1H), 7.59 (s, 1H), 7.18 (s, 2H), 6.96 (s, 1H), 2.27 (s, 6H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 156.0, 138.0, 129.8, 127.3, 126.7, 124.4, 124.3, 121.8, 20.8; HRMS (ESI) m/z: $[M-H]^-$ Calcd for $C_{11}H_{10}NO_2$ 188.0717; Found 188.0704.



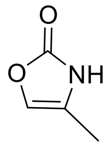
4-(naphthalen-2-yl)oxazol-2(3*H*)-one (1q). white solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.08 (s, 1H), 7.92-7.82 (m, 4H), 7.56-7.47 (m, 3H), 7.23 (s, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 156.0, 132.8, 132.5, 128.6, 127.8, 127.7, 127.3, 127.0, 126.5, 125.4, 124.3, 122.5, 122.1.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett*., 2016, **57**, 658−662.



4-(1'-Naphthyl)-4-oxazolin-2-one (1r). white solid; m.p. 167-169 °C. IR (film): 3048, 1790, 1747, 1509 cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 9.52 (s, 1H), 8.11 (d, *J* =

8.0 Hz, 1H), 7.91 (d, *J* = 7.5 Hz, 2H), 7.61-7.51 (m, 4H), 7.06 (s, 1H); ^{13}C NMR (125 MHz, *d*$_6$-DMSO, ppm): δ 157.1, 134.1, 130.9, 130.3, 129.1, 127.6, 126.9, 126.8, 126.6, 126.2, 125.6, 124.4, 124.1; HRMS (ESI) m/z: [M+H]$^+$ Calcd for $C_{13}H_{10}NO_2$ 212.0706; Found 212.0707.



4-methyloxazol-2(3*H*)-one (1s). yellow solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 9.65 (s, 1H), 6.54-6.51 (m, 1H), 2.02 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 158.1, 124.7, 123.2, 9.3.

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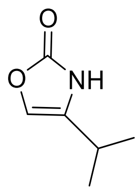
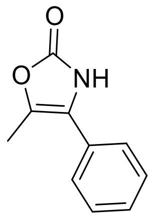


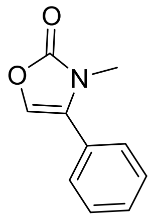
4-isopropyloxazol-2-one (1t). yellow solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.14 (s, 1H), 6.49 (s, 1H), 2.69 (septet, *J* = 6.5 Hz, 1H), 1.19 (d, *J* = 7.0 Hz, 6H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 158.6, 133.9, 122.9, 24.6, 20.4.

Y. Liu, Z. Yi, X. Yang, H. Wang, C. Yin, M. Wang, X.-Q. Dong and X. Zhang, *ACS Catal*., 2020, **10**, 11153−11161.



5-methyl-4-phenyl-1,3-oxazol-2(3*H*)-one (1u). white solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 10.42 (s, 1H), 7.47-7.38 (m, 4H), 7.36-7.30 (m, 1H), 2.33 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 157.4, 133.8, 129.3, 128.3, 127.8, 126.0, 121.9, 11.6.

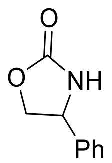
Z. Liu, W. Zhang, S. Guo and J. Zhu, *J. Org. Chem.*, 2019, **84**, 11945−11957.



3-methyl-4-phenyloxazol-2(3*H*)-one (1v). white solid; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.52-7.44 (m, 3H), 7.39-7.33 (m, 2H), 6.84 (s, 1H), 3.23 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 156.6, 130.2, 129.7, 129.3, 128.3, 126.8, 123.9, 29.5.

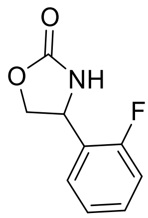
Y. Liu, Z. Yi, X. Yang, H. Wang, C. Yin, M. Wang, X.-Q. Dong and X. Zhang, *ACS Catal.*, 2020, **10**, 11153−11161.

Characterization of products:



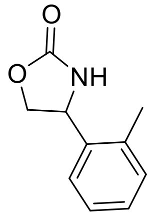
4-phenyloxazolidin-2-one (3a). white solid; 79.2 mg, 97% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.43-7.38 (m, 2H), 7.38-7.31 (m, 3H), 6.11 (s, 1H), 4.98-4.92 (m, 1H), 4.75-4.69 (m, 1H), 4.18 (dd, J = 8.5, 7.5 Hz, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.9, 139.7, 129.4, 129.0, 126.2, 72.7, 56.6.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett.*, 2016, **57**, 658−662.



2-fluorophenyloxazolidin-2-one (3b). white solid; 85.3 mg, 93% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ; 7.46-7.40 (m, 1H), 7.37-7.30 (m, 1H), 7.24-7.19 (m, 1H), 7.11-7.05 (m, 1H), 6.24 (s, 1H), 5.30-5.25 (m, 1H), 4.84-4.78 (m, 1H), 4.22 (dd, J = 8.5, 6.5 Hz, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.4 (d, J = 245.0 Hz), 159.9, 130.4 (d, J = 7.9 Hz), 127.0 (d, J = 13.8 Hz), 126.9 (d, J = 3.8 Hz), 125.1 (d, J = 2.5 Hz), 116.0 (d, J = 20.0 Hz), 71.6, 50.5 (d, J = 3.8 Hz); ^{19}F NMR (377 MHz, $CDCl_3$, ppm) δ -119.5.

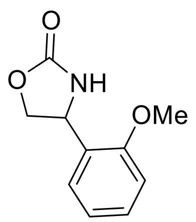
H. Lebel, L. M. Laparra, M. Khalifa, C. Trudel, C. Audubert, M. Szponarski, C. D. Leduc, E. Azek and M. Ernzerhof, *Org. Biomol. Chem.*, 2017, **15**, 4144–4158.



4-(3-methylphenyl)-oxazolidine-2-one (3c). white solid; 83.1 mg, 94% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.44 (d, J = 7.5 Hz, 1H), 7.31-7.27 (m, 1H), 7.25-

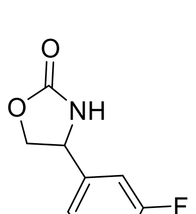
7.22 (m, 1H), 7.19 (d, J = 7.5 Hz, 1H), 5.48 (s 1H), 5.25-5.19 (m,1H), 4.82-4.76 (m, 1H), 4.14-4.09 (m, 1H), 2.31 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.7, 137.6, 134.9, 131.2, 128.6, 127.2, 125.0, 71.8, 53.3, 19.2.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett*., 2016, **57**, 658−662.



4-(2-methoxyphenyl)oxazolidin-2-one (3d). white solid, 93.6 mg, 97% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.36-7.26 (m, 2H), 7.05-6.95 (m, 1H), 6.89 (d, J = 7.5 Hz, 1H), 5.95 (s, 1H), 5.28-5.19 (m, 1H), 4.83-4.74 (m, 1H), 4.24-4.08 (m, 1H), 3.84 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.4, 156.7, 128.6, 128.1, 125.7, 121.1, 110.7, 71.7, 55.6, 51.6.

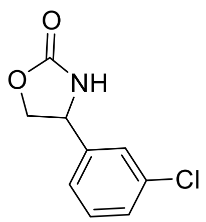
H. Lebel, L. M. Laparra, M. Khalifa, C. Trudel, C. Audubert, M. Szponarski, C. D. Leduc, E. Azek and M. Ernzerhof, *Org. Biomol. Chem.*, 2017, **15**, 4144–4158.



3-fluorophenyloxazolidin-2-one (3e). white solid; 81.1 mg, 89% yield. ^{1}H NMR (400 MHz, $CDCl_3$, ppm): δ 7.43-7.33 (m, 1H), 7.17-7.02 (m, 3H), 5.81 (s, 1H), 5.02-4.92 (m, 1H), 4.80-4.71 (m, 1H), 4.22-4.14 (m, 1H); ^{13}C NMR (100 MHz, $CDCl_3$, ppm): δ

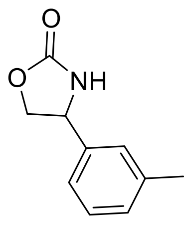
163.4 (d, J = 247.0 Hz), 160.0, 142.3 (d, J = 7.0 Hz), 131.1 (d, J = 8.0 Hz), 121.8 (d, J = 3.0 Hz), 116.0 (d, J = 21.0 Hz), 113.2 (d, J = 22.0 Hz), 72.4, 56.1; ^{19}F NMR (377 MHz, $CDCl_3$, ppm) δ -111.1.

N. Wan, J. Tian, X. Zhou, H. Wang, B. Cui, W. Han and Y. Chen, *Adv. Synth. Catal.*, 2019, **361**, 4651–4655.



4-(3-chlorophenyl)oxazolidin-2-one (3f). white solid; 94.6 mg, 97% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.35-7.31 (m, 3H), 7.25-7.20 (m, 1H), 6.35 (s, 1H), 4.96-4.91 (m, 1H), 4.75-4.70 (m, 1H), 4.15 (dd, J = 8.5, 7.0 Hz, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.9, 141.9, 135.4, 130.8, 129.2, 126.5, 124.3, 72.4, 56.1.

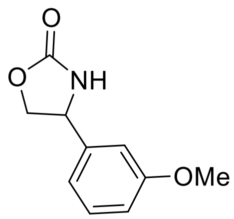
H. Lebel, L. M. Laparra, M. Khalifa, C. Trudel, C. Audubert, M. Szponarski, C. D. Leduc, E. Azek and M. Ernzerhof, *Org. Biomol. Chem.*, 2017, **15**, 4144–4158.



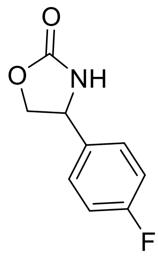
4-(3-methylphenyl)-oxazolidine-2-one (3g). white solid; 82.4 mg, 93% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.32-7.25 (m, 1H), 7.20-7.10 (m, 3H), 5.65 (s, 1H), 4.94-4.86 (m, 1H), 4.75- 4.68 (m, 1H), 4.22-4.15 (m, 1H), 2.37 (s, 3H); ^{13}C NMR (125

MHz, $CDCl_3$, ppm): δ 159.7, 139.7, 139.3, 129.8, 129.3, 126.8, 123.3, 72.8, 56.5, 21.6.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett.*, 2016, **57**, 658−662.



4-(3-methoxyphenyl)oxazolidin-2-one (3h). white solid, 94.8 mg, 98% yield, m.p. 59-61 °C. IR (film): 3279, 2919, 2839, 1750, 1604, 1459 cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$, ppm): δ 7.33-7.28 (m, 1H), 6.99-6.85 (m, 3H), 5.98 (s, 1H), 4.94-4.89 (m, 1H), 4.73-4.68 (m, 1H), 4.17 (dd, J = 8.5, 7.0 Hz, 1H), 3.81 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.6, 159.9, 141.3, 130.5, 118.4, 114.4, 117.7, 72.6, 56.5, 55.5; HRMS (ESI) m/z: $[M+Na]^+$ Calcd for $C_{10}H_{11}O_3N$ Na 2126.0631; Found 216.0634.



4-fluorophenyloxazolidin-2-one (3i). white solid; 84.0 mg, 92% yield. ^1H NMR (500 MHz, $CDCl_3$, ppm): δ; 7.35-7.29 (m, 2H), 7.13-7.05 (m, 2H), 6.48 (s, 0.7H), 6.04 (s, 0.2H), 4.98-4.92 (m, 1H), 4.75-4,68 (m, 1H), 4.18-4.11 (m, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 163.1 (d, J = 246.3 Hz), 160.0, 135.6 (d, J = 3.8 Hz), 128.0 (d, J = 7.5 Hz), 116.3 (d, J = 21.3 Hz), 72.7, 55.9; ^{19}F NMR (377 MHz, $CDCl_3$, ppm) δ -112.9.

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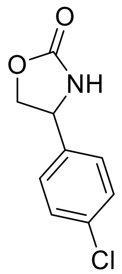
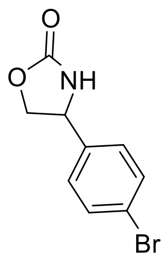
Catal., 2020, **10**, 11153−11161.



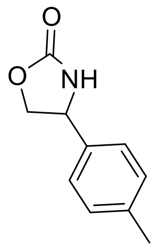
4-(4-chlorophenyl)oxazolidin-2-one (3j). white solid; 95.9 mg, 98% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.37 (d, *J* = 8.0 Hz, 2H), 7.27 (d, *J* = 8.0 Hz, 2H), 6.34 (s, 1H), 4.96-4.90 (m, 1H), 4.74-4.68 (m, 1H), 4.12 (dd, *J* = 8.5, 7.0 Hz, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.9, 138.2, 135.0, 129.6, 127.6, 72.5, 56.0.

H. Lebel, L. M. Laparra, M. Khalifa, C. Trudel, C. Audubert, M. Szponarski, C. D. Leduc, E. Azek and M. Ernzerhof, *Org. Biomol. Chem.*, 2017, **15**, 4144–4158.



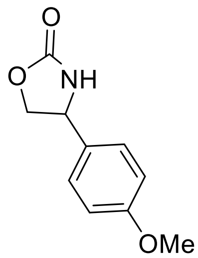
4-(4-bromophenyl)oxazolidin-2-one (3k). white solid; 112.0 mg, 92% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.56-7.50 (m, 2H), 7.25-7.19 (m, 2H), 6.30-5.96 (m, 1H), 4.96-4.90 (m, 1H), 4.72 (dd, *J* = 17.0, 8.5 Hz, 1H), 4.14 (dd, *J* = 16.0, 9.0 Hz, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.7, 138.7, 132.6, 127.9, 123.1, 72.4, 56.1.

N. Wan, J. Tian, X. Zhou, H. Wang, B. Cui, W. Han and Y. Chen, *Adv. Synth. Catal.*, 2019, **361**, 4651–4655.



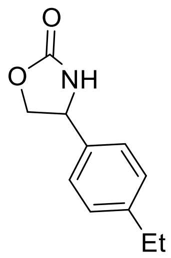
4-(*p*-tolyl)oxazolidin-2-one (3i). white solid; 89.8 mg, 98% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.25-7.18 (m, 4H), 5.57 (s, 1H), 4.94-4.88 (m, 1H), 4.74-4.67 (m, 1H), 4.19-4.14 (m, 1H), 2.36 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.7, 139.0, 136.7, 130.1, 126.2, 72.9, 56.4, 21.3.

Y. Liu, Z. Yi, X. Yang, H. Wang, C. Yin, M. Wang, X.-Q. Dong and X. Zhang, *ACS Catal*., 2020, **10**, 11153−11161.



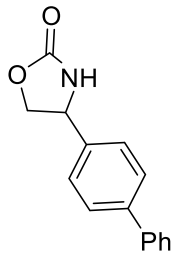
4-(4-methoxyphenyl)oxazolidin-2-one (3m). white solid; 88.9 mg, 92% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.26 (d, J = 8.5 Hz, 2H), 6.92 (d, J = 8.5 Hz, 2H), 5.46 (s, 1H), 4.92-4.87 (m, 1H), 4.72-4.67 (m, 1H), 4.19-4.14 (m, 1H), 3.81 (s, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.3, 159.5, 131.5, 127.6, 114.9, 72.9, 56.2, 55.6.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett*., 2016, **57**, 658−662.

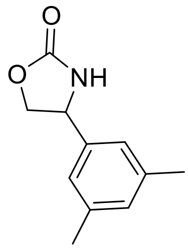


4-(4-ethylphenyl)oxazol-2(3H)-one (3n). white solid; 88.7 mg, 93% yield. ^{1}H NMR (400 MHz, $CDCl_3$, ppm): δ 7.27-7.19 (m, 4H), 6.36 (br, 1H), 4.95-4.88 (m, 1H), 4.75-4.65 (m, 1H), 4.20-4.12 (m, 1H), 2.64 (q, *J* = 7.6 Hz, 2H), 1.23 (t, *J* = 7.6 Hz, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.8, 145.3, 136.9, 128.9, 126.3, 72.8, 56.4, 28.7, 15.6.

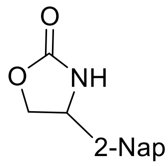
Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett.*, 2016, **57**, 658−662.



4-(biphenyl-4-yl)oxazolidin-2-one (3o). white solid; 115.5 mg, 96% yield, m.p. 202-204 °C. IR (film): 2919, 1736, 1701 cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.63 (d, *J* = 8.5 Hz, 2H), 7.57 (d, *J* = 8.0 Hz, 2H), 7.48-7.35 (m, 5H), 5.53 (s, 1H), 5.02-4.97 (m, 1H), 4.80- 4.74 (m, 1H), 4.27-4.21 (m, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.5, 142.3, 140.5, 138.5, 129.1, 128.2, 127.9, 127.3, 126.7, 72.7, 56.4; HRMS (ESI) m/z: $[M-H]^-$ Calcd for $C_{15}H_{12}NO_2$ 238.0863; Found 238.0863.

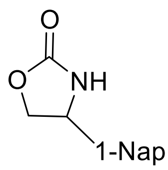


4-(3,5-dimethylphenyl)-2-oxazolidinone (3p). white solid; 89.0 mg, 93% yield, m.p. 127-130 °C. IR (film): 3275, 2919, 1752 cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 6.98 (s, 1H), 6.93 (s, 2H), 5.48 (s, 1H), 4.90-4.82 (m, 1H), 4.75-4.65 (m, 1H), 4.21-4.14 (m, 1H), 2.32 (s, 6H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.6, 139.7, 139.2, 130.7, 124.0, 72.8, 56.5, 21.4; HRMS (ESI) m/z: $[M+H]^+$ Calcd for $C_{11}H_{14}NO_2$ 192.1019; Found 192.1024.

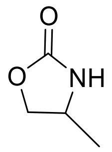


4-(naphthalen-2-yl)oxazolidin-2-one (3q). white solid; 96.4 mg, 91% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.91 (d, J = 8.5 Hz, 1H), 7.87-7.81 (m, 2H), 7.78 (s, 1H), 7.56-7.50 (m, 2H), 7.48-7.43 (m, 1H), 5.48 (s, 1H), 5.14-5.09 (m, 1H), 4.83-4.78 (m, 1H), 4.29 (dd, J = 9.0, 7.0 Hz, 1H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 159.6, 136.9, 133.7, 133.4, 129.7, 128.1, 128.0, 127.1, 126.9, 125.7, 123.4, 72.6, 56.7.

Q. Wang, X. Tan, Z. Zhu, X.-Q. Dong and X. Zhang, *Tetrahedron Lett*., 2016, **57**, 658−662.

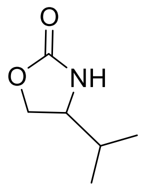


4-(1-Naphthyl)-2-oxazolidone (3r). white solid, 104.7 mg, 98% yield, m.p. 137-139 °C. IR (film): 3275, 3060, 1751, 1406 cm^{-1}; ^{1}H NMR (500 MHz, d_6-DMSO, ppm): δ 8.31 (s, 1H), 8.02-7.96 (m, 2H), 7.95-7.86 (m, 1H), 7.62-7.54 (m, 4H), 5.77-5.71 (m, 1H), 5.04-4.95 (m, 1H), 4.00-3.93 (m, 1H); ^{13}C NMR (125 MHz, d_6-DMSO, ppm): δ 158.9, 136.7, 133.4, 129.7, 128.7, 128.1, 126.5, 125.9, 125.4, 122.6, 121.9, 70.8, 52.0; HRMS (ESI) m/z: $[M+H]^+$ Calcd for $C_{13}H_{12}NO_2$ 214.0863; Found 214.0866.



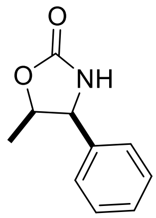
4-methyloxazolidin-2-one (3s). yellow oil; 94.0 mg, 93% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 5.97 (s, 1H), 4.51-4.46 (m, 1H), 4.02-3.91 (m, 2H), 1.27 (d, J = 6.0 Hz, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.3, 72.0, 48.5, 20.8.

Y. Liu, Z. Yi, X. Yang, H. Wang, C. Yin, M. Wang, X.-Q. Dong and X. Zhang, *ACS Catal.*, 2020, **10**, 11153−11161.



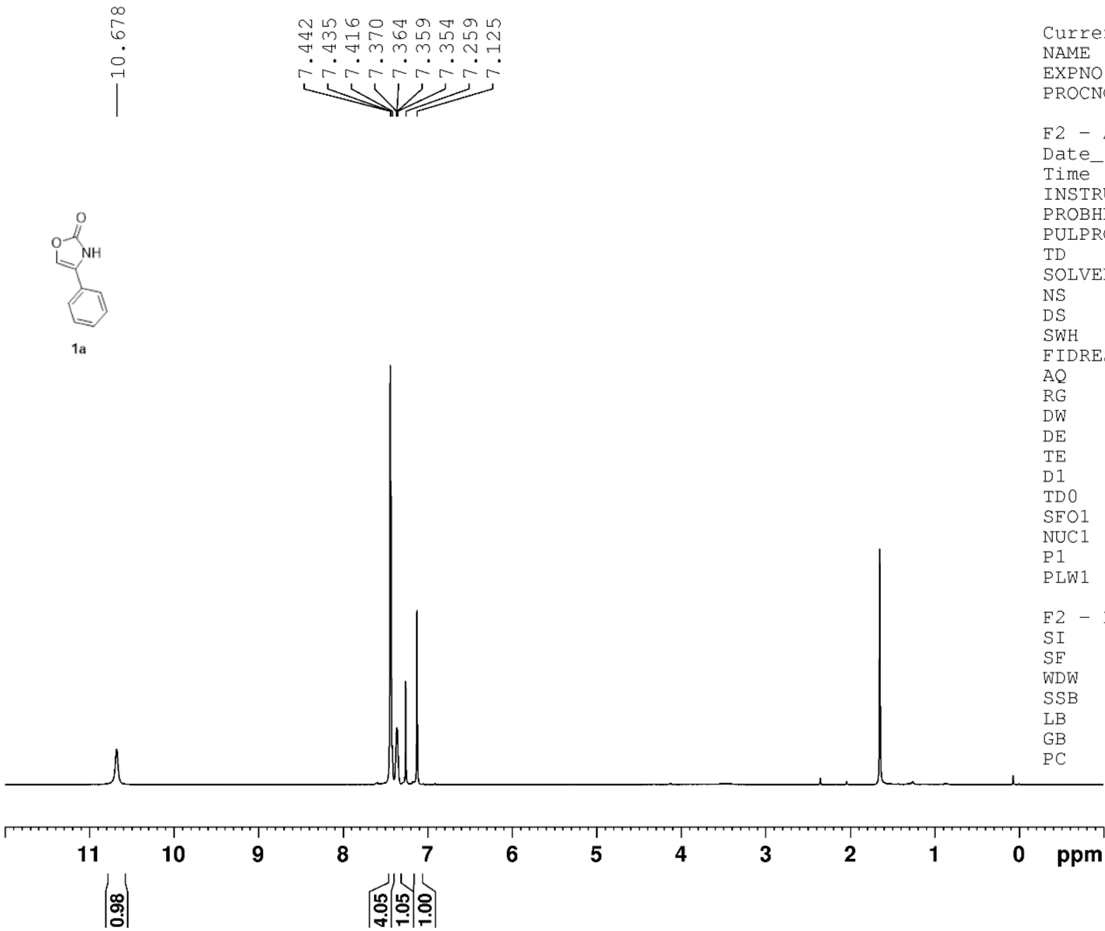
4-isopropyl-1,3-oxazolidin-2-one (3t). yellow oil; 58.4 mg, 89% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 6.04 (s, 1H), 4.47-4.41 (m, 1H), 4.13-4.08 (m, 1H), 3.60 (dd, J = 14.5, 6.0 Hz, 1H), 1.76-1.69 (m, 1H), 0.96 (d, J = 6.5 Hz, 3H), 0.90 (d, J = 7.0 Hz, 3H); 13C NMR (125 MHz, $CDCl_3$, ppm): δ 160.2, 68.8, 58.5, 32.8, 18.2, 17.8.

Y. Liu, Z. Yi, X. Yang, H. Wang, C. Yin, M. Wang, X.-Q. Dong and X. Zhang, *ACS Catal.*, 2020, **10**, 11153−11161.



syn-5-methyl-4-phenyloxazolidin-2-one (3u). white solid, 62.3 mg, 70% yield. ^{1}H NMR (500 MHz, $CDCl_3$, ppm): δ 7.41-7.33 (m, 3H), 7.23-7.17 (m, 2H), 5.86 (s, 1H), 5.02-4.94 (m, 1H), 4.91- 4.88 (d, *J* = 8.0 Hz, 1H), 0.92-0.89 (d, *J* = 6.0 Hz, 3H); ^{13}C NMR (125 MHz, $CDCl_3$, ppm): δ 160.1, 136.6, 129.1, 129.0, 127.1, 77.7, 60.2, 16.7.

H. Lebel, L. M. Laparra, M. Khalifa, C. Trudel, C. Audubert, M. Szponarski, C. D. Leduc, E. Azek and M. Ernzerhof, *Org. Biomol. Chem.*, 2017, **15**, 4144–4158.

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NAME            500 cgy-7
EXPNO                   4
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220801
Time                19.33 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1300137 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
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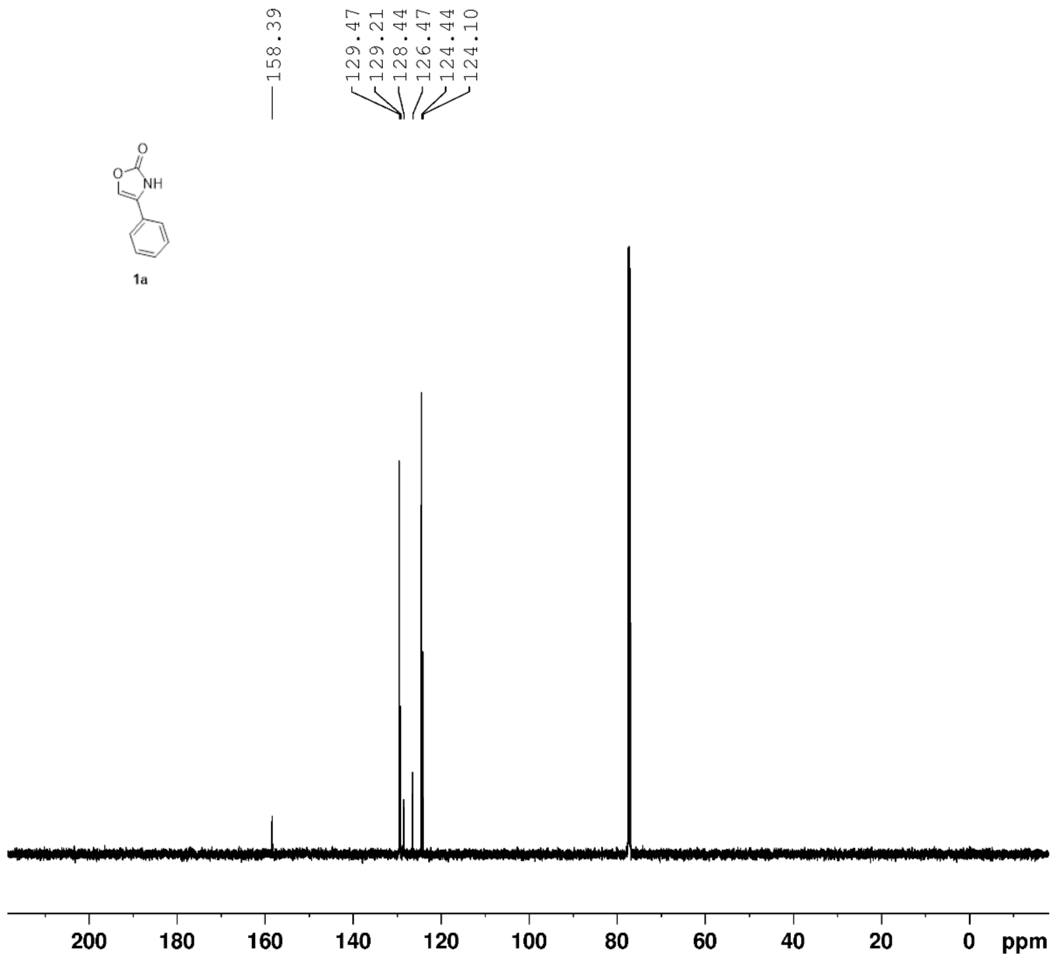


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Current Data Parameters
NAME          500 cgy-7
EXPNO                 5
PROCNO                1

F2 - Acquisition Parameters
Date_          20220801
Time              19.47 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG         zgpg30
TD               65536
SOLVENT          CDCl3
NS                 256
DS                   4
SWH          29761.904 Hz
FIDRES        0.908261 Hz
AQ           1.1010048 sec
RG              192.89
DW              16.800 usec
DE                6.50 usec
TE                   0 K
D1          2.00000000 sec
d11         0.03000000 sec
DELTA       1.89999998 sec
TD0                  1
SFO1       125.7703637 MHz
NUC1               13C
P1               10.00 usec
PLW1       80.00000000 W
SFO2       500.1320005 MHz
NUC2                1H
CPDPRG[2       waltz16
PCPD2            80.00 usec
PLW2       20.00000000 W
PLW12       0.39903000 W
PLW13       0.25538000 W

F2 - Processing parameters
SI               32768
SF         125.7577603 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                1.40
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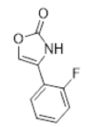

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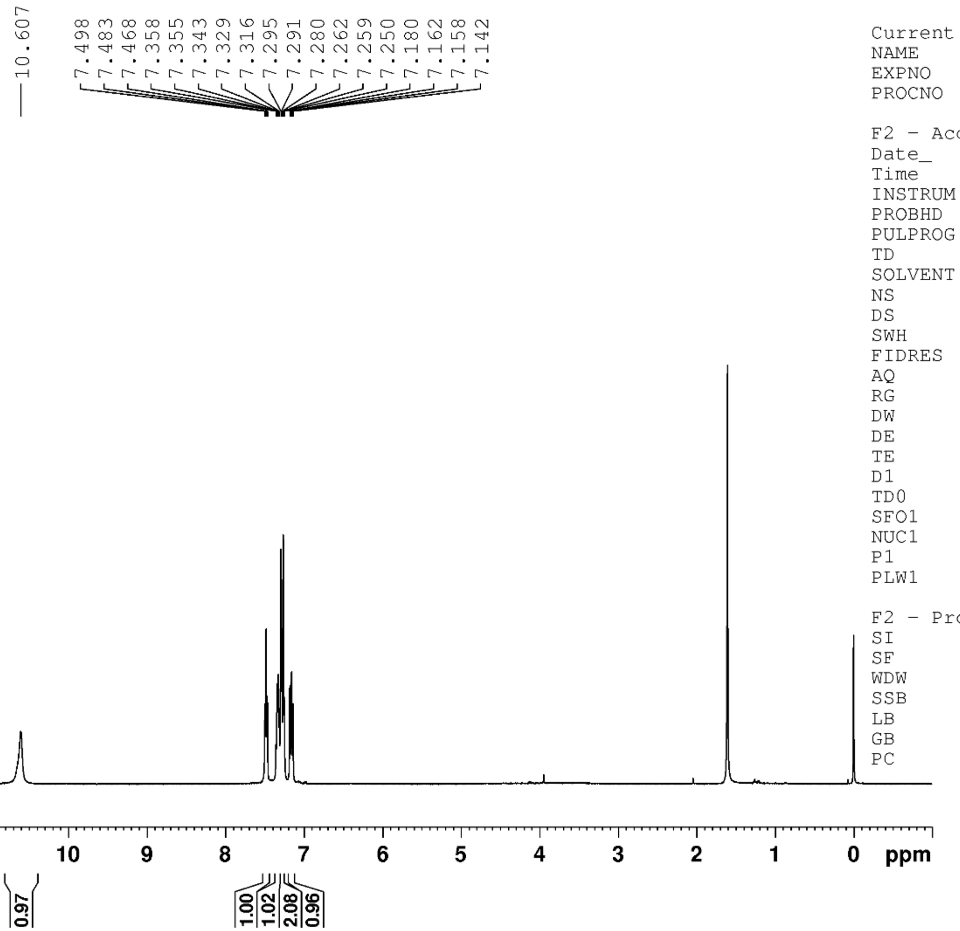


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Current Data Parameters
NAME            500 cgy-7
EXPNO                  32
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220812
Time                 6.04 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1300132 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
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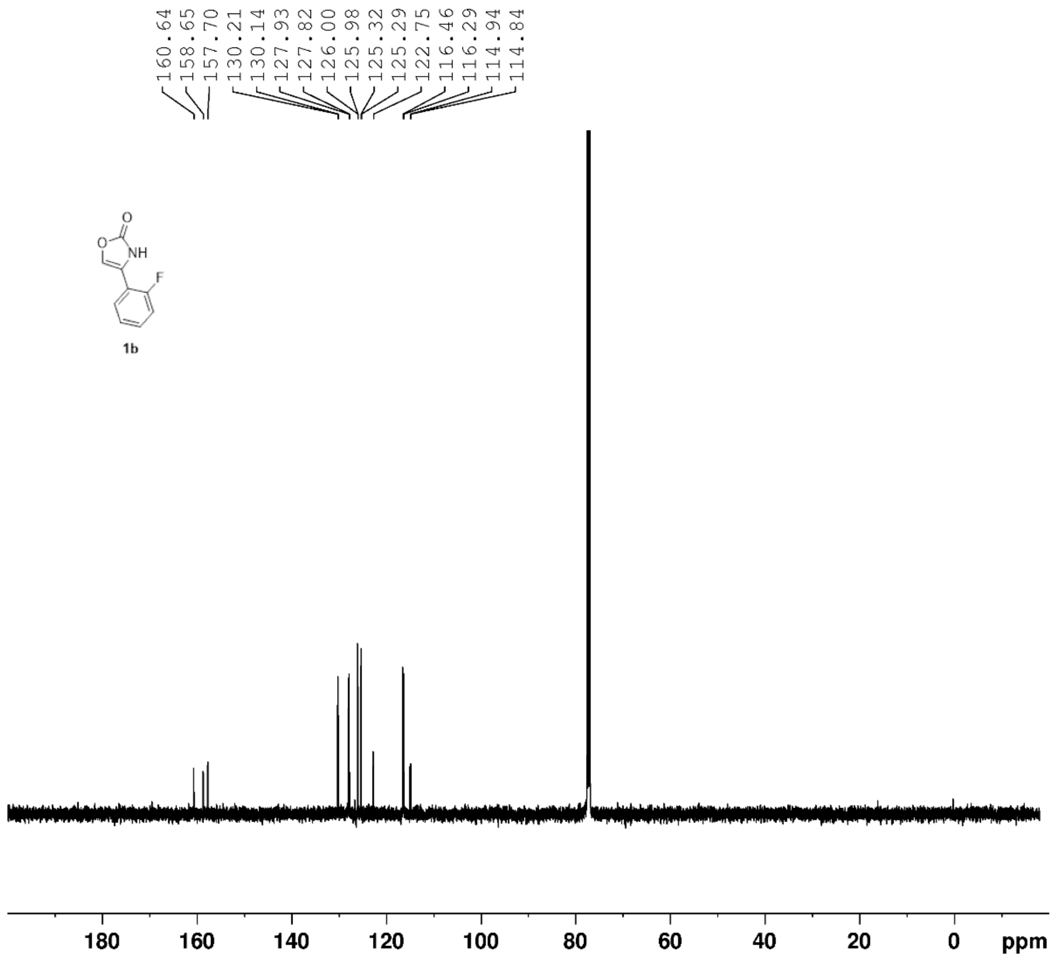


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Current Data Parameters
NAME            500 cgy-7
EXPNO                  33
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220812
Time                 6.59 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG           zgpg30
TD                  65536
SOLVENT             CDCl3
NS                   1024
DS                      4
SWH             29761.904 Hz
FIDRES           0.908261 Hz
AQ              1.1010048 sec
RG                 192.89
DW                 16.800 usec
DE                   6.50 usec
TE                      0 K
D1             2.00000000 sec
d11            0.03000000 sec
DELTA          1.89999998 sec
TD0                     1
SFO1          125.7703637 MHz
NUC1                  13C
P1                  10.00 usec
PLW1          80.00000000 W
SFO2          500.1320005 MHz
NUC2                   1H
CPDPRG[2          waltz16
PCPD2               80.00 usec
PLW2          20.00000000 W
PLW12          0.39903000 W
PLW13          0.25538000 W

F2 - Processing parameters
SI                  32768
SF            125.7577579 MHz
WDW                    EM
SSB                     0
LB                   1.00 Hz
GB                      0
PC                   1.40
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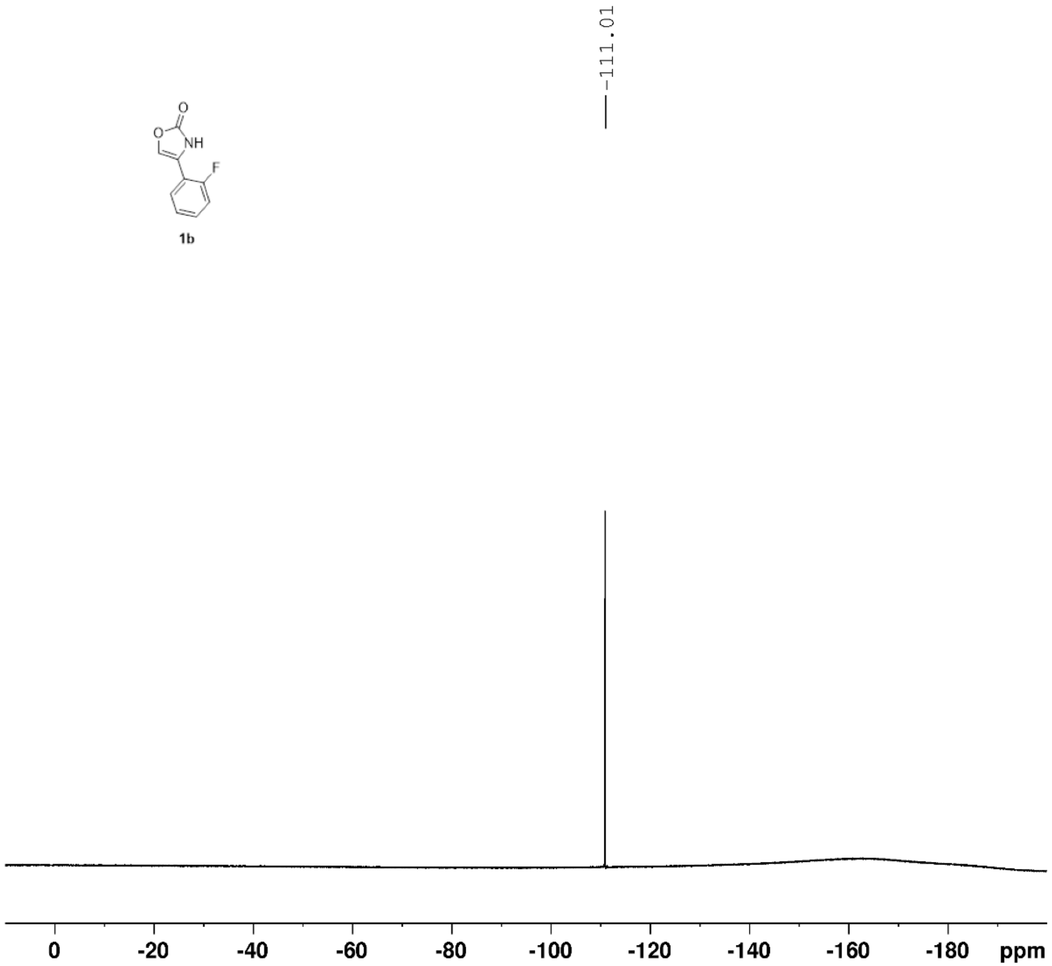
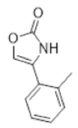


1b

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                34
PROCNO                1

F2 - Acquisition Parameters
Date_          20220812
Time              21.15 h
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG      zgfhigqn.2
TD               131072
SOLVENT            DMSO
NS                   16
DS                    4
SWH           89285.711 Hz
FIDRES         1.362392 Hz
AQ            0.7340032 sec
RG               206.33
DW                5.600 usec
DE                 6.50 usec
TE                298.3 K
D1           1.00000000 sec
d11          0.03000000 sec
d12          0.00002000 sec
TD0                   1
rdel         0.00000650 sec
SFO1        376.5642094 MHz
NUC1                19F
P1                14.50 usec
PLW1        17.98900032 W
SFO2        400.2416010 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             90.00 usec
PLW2        12.00000000 W
PLW12        0.30294999 W

F2 - Processing parameters
SI                65536
SF          376.6018696 MHz
WDW                  EM
SSB                   0
LB                 0.30 Hz
GB                    0
PC                 1.00
```



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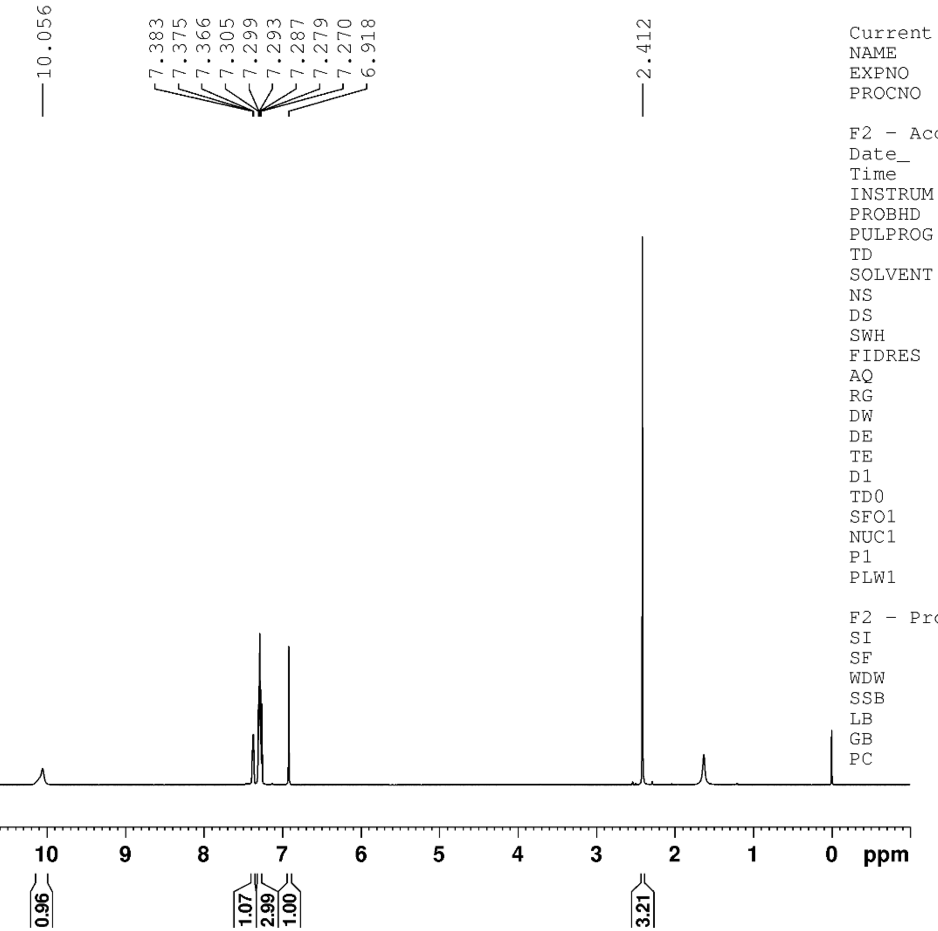


Current Data Parameters

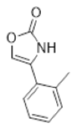
NAME	500 cgy-7
EXPNO	28
PROCNO	1

F2 - Acquisition Parameters

Date_	20220812
Time	18.57 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W

F2 - Processing parameters

SI	65536
SF	500.1300139 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



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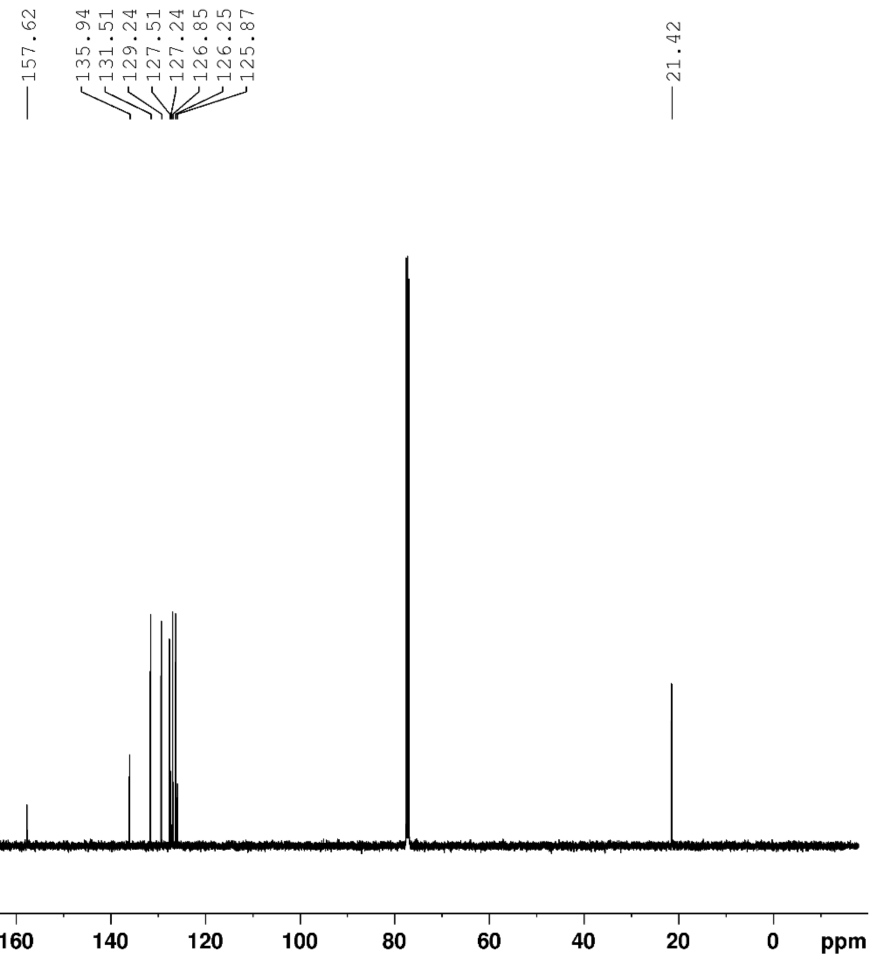


Current Data Parameters

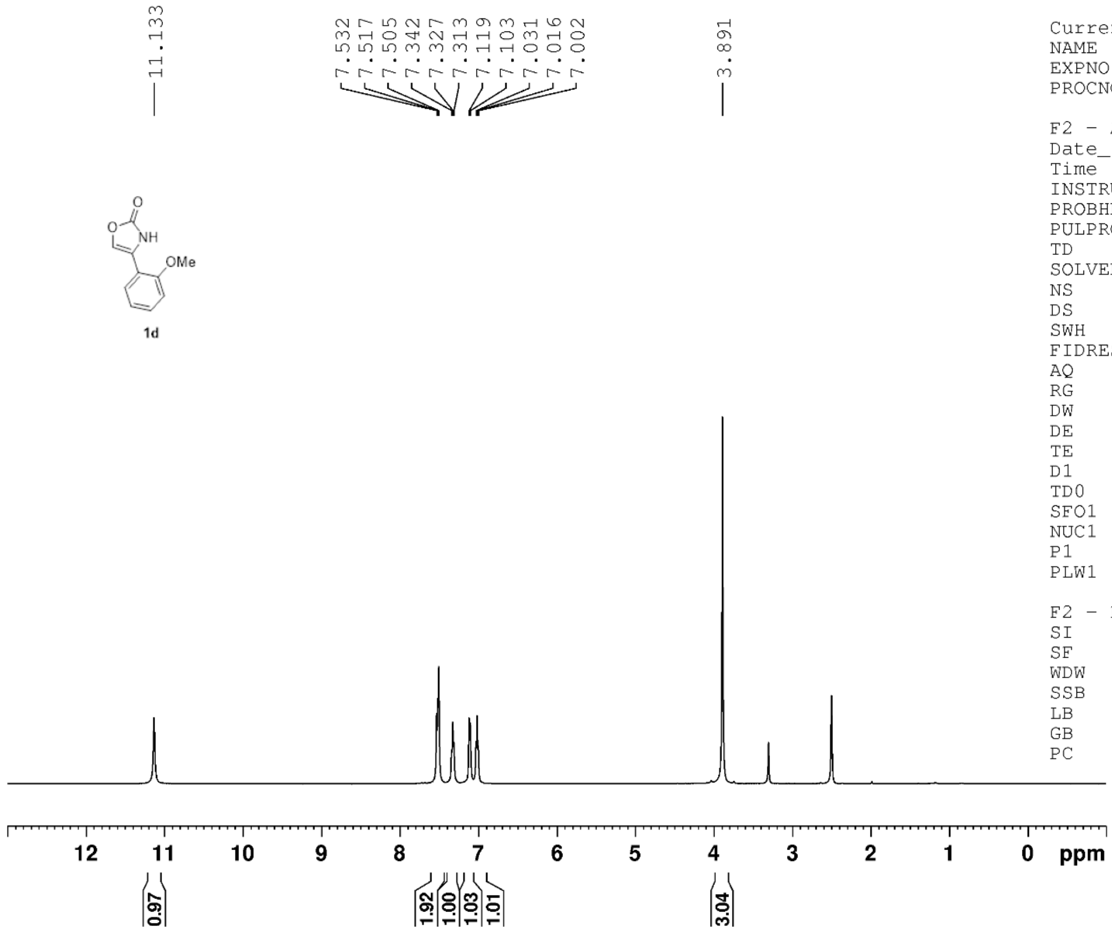
NAME	500 cgy-7	
EXPNO	29	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220815	
Time	9.43	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	500	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W

F2 - Processing parameters

SI	32768	
SF	125.7577594	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	




```
Current Data Parameters
NAME           500 cgy-7
EXPNO                 80
PROCNO                 1

F2 - Acquisition Parameters
Date_           20220921
Time               19.50 h
INSTRUM            spect
PROBHD   5 mm PADUL 13C
PULPROG             zg30
TD                 65536
SOLVENT             DMSO
NS                    16
DS                     2
SWH            10000.000 Hz
FIDRES          0.305176 Hz
AQ             3.2767999 sec
RG                192.89
DW                50.000 usec
DE                  6.50 usec
TE                     0 K
D1            1.00000000 sec
TD0                    1
SFO1         500.1330885 MHz
NUC1                  1H
P1                 11.30 usec
PLW1         20.00000000 W

F2 - Processing parameters
SI                 65536
SF           500.1300047 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
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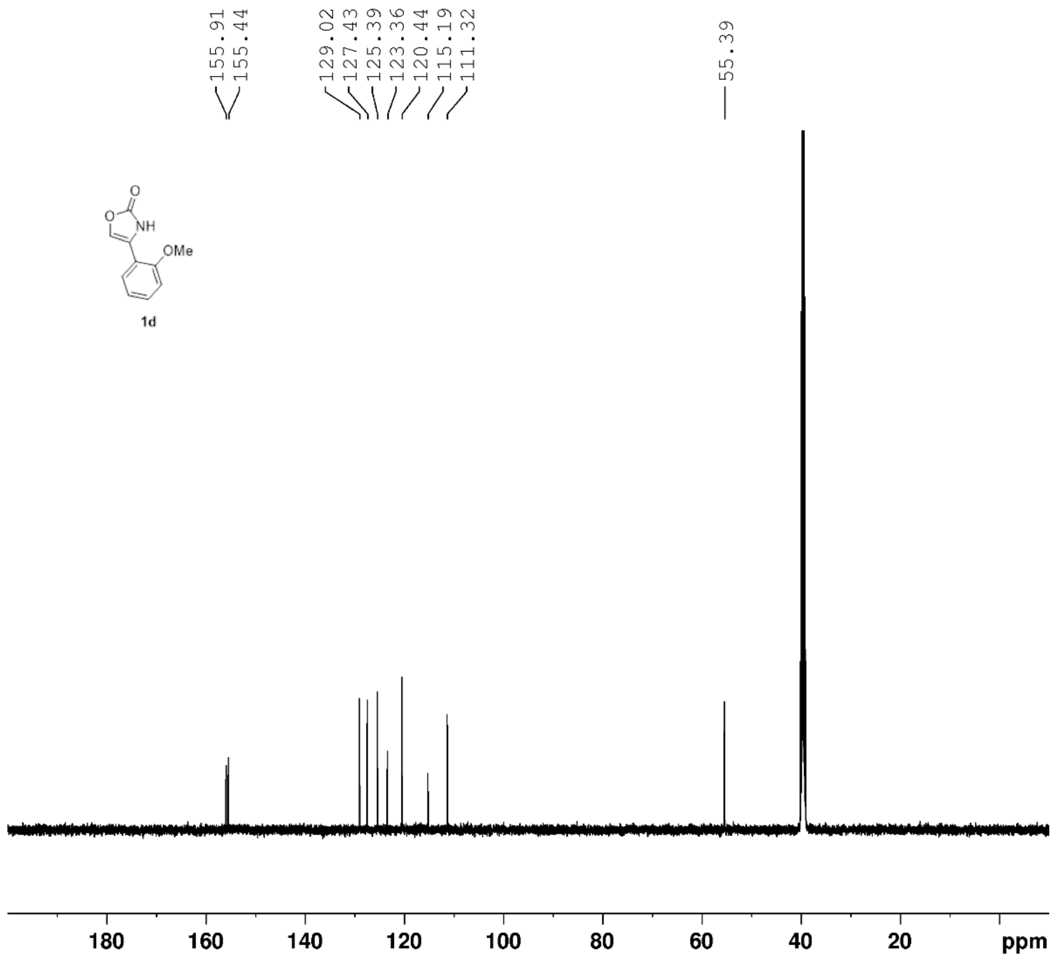


Current Data Parameters

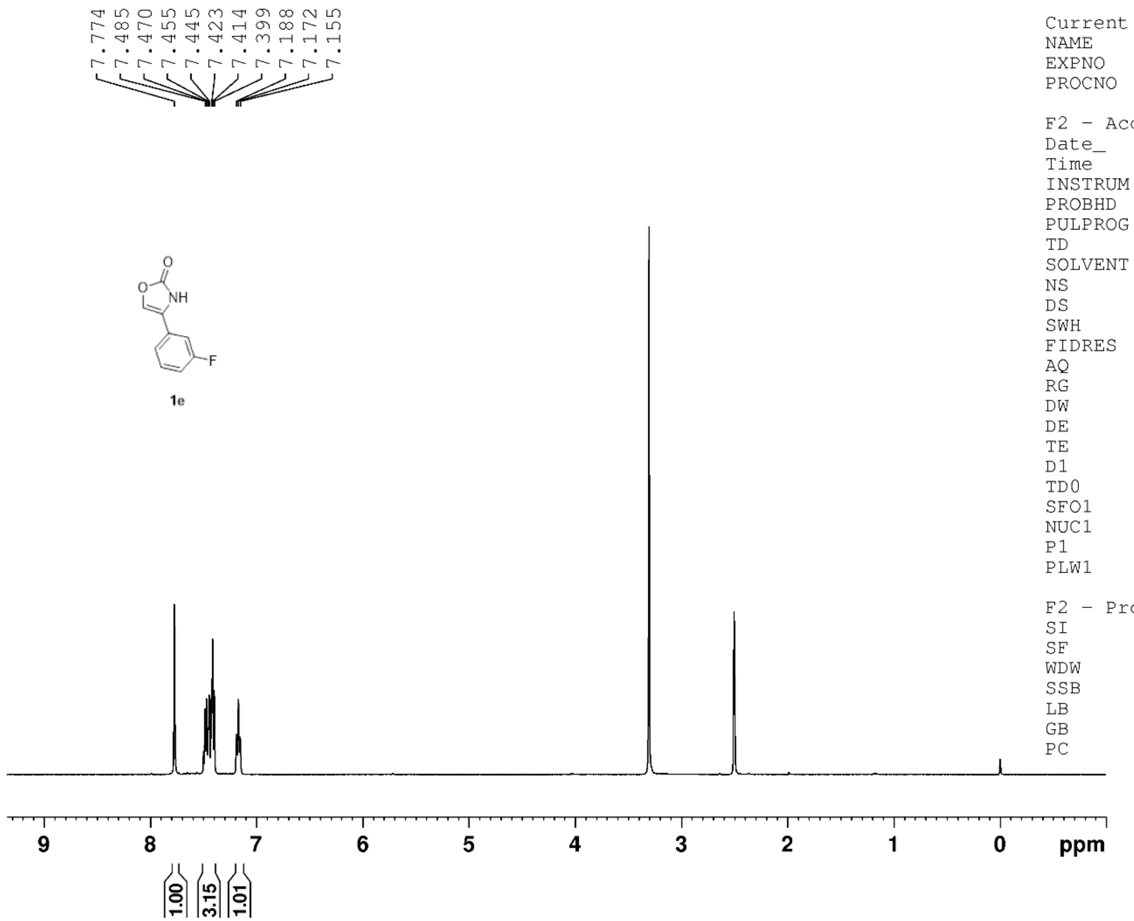
NAME	500 cgy-7	
EXPNO	81	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220921	
Time	20.17	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	DMSO	
NS	512	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W

F2 - Processing parameters

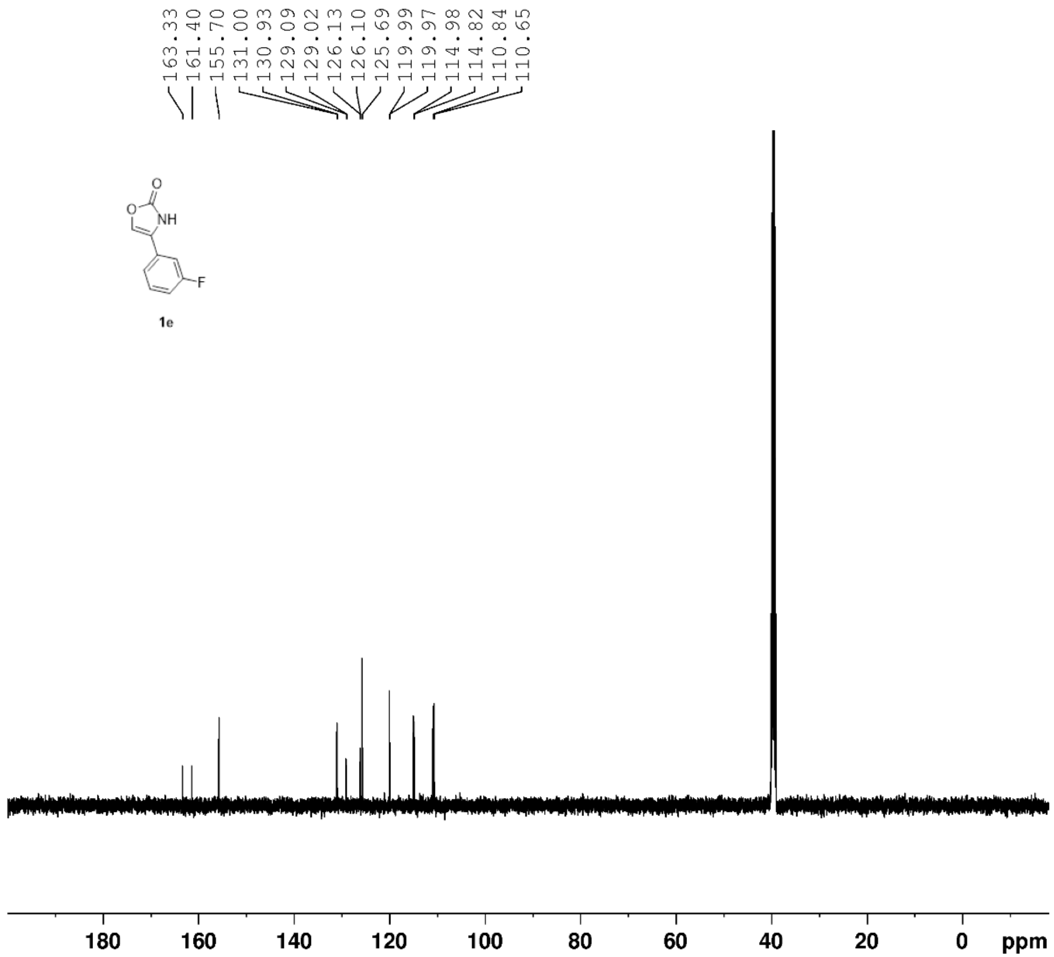
SI	32768	
SF	125.7578593	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   37
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220812
Time                 16.56 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT               DMSO
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

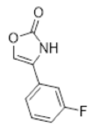
F2 - Processing parameters
SI                   65536
SF             500.1300039 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```




```
Current Data Parameters
NAME              500 cgy-7
EXPNO                    38
PROCNO                    1

F2 - Acquisition Parameters
Date_              20220812
Time                  17.10 h
INSTRUM               spect
PROBHD   5 mm PADUL 13C
PULPROG             zgpg30
TD                    65536
SOLVENT                DMSO
NS                      256
DS                        4
SWH              29761.904 Hz
FIDRES            0.908261 Hz
AQ               1.1010048 sec
RG                   192.89
DW                   16.800 usec
DE                     6.50 usec
TE                        0 K
D1              2.00000000 sec
d11             0.03000000 sec
DELTA           1.89999998 sec
TD0                       1
SFO1           125.7703637 MHz
NUC1                    13C
P1                    10.00 usec
PLW1           80.00000000 W
SFO2           500.1320005 MHz
NUC2                     1H
CPDPRG[2           waltz16
PCPD2                 80.00 usec
PLW2           20.00000000 W
PLW12           0.39903000 W
PLW13           0.25538000 W

F2 - Processing parameters
SI                    32768
SF             125.7578591 MHz
WDW                      EM
SSB                       0
LB                     1.00 Hz
GB                        0
PC                     1.40
```



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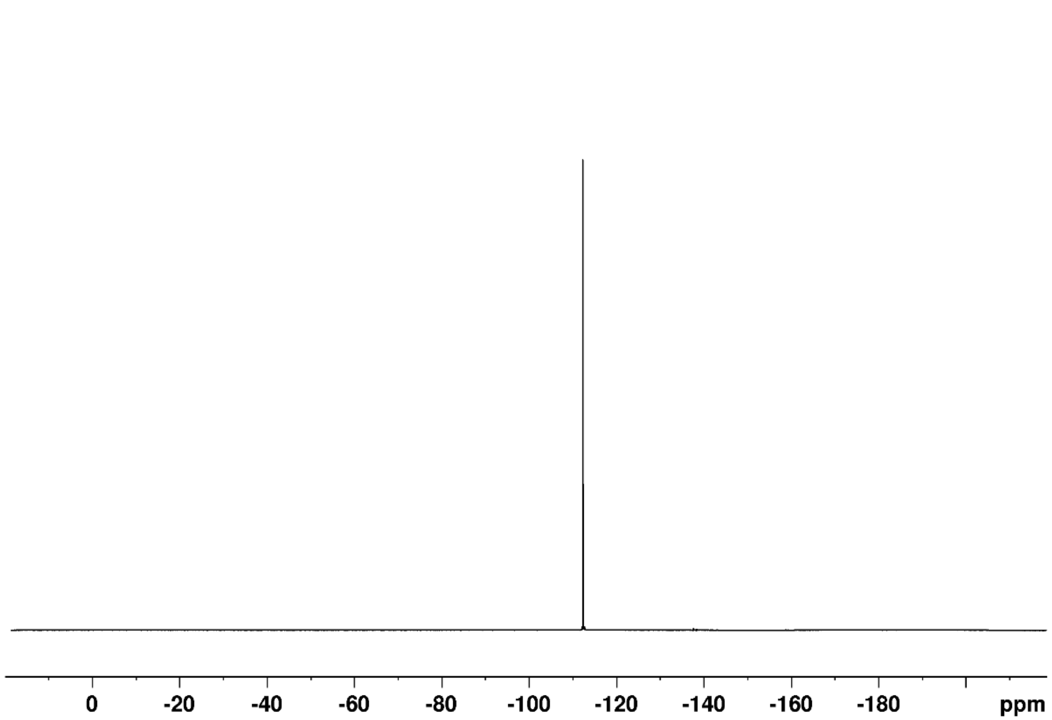


```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  39
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220919
Time                14.43 h
INSTRUM             spect
PROBHD   5 mm PABBO BB/
PULPROG        zgfhigqn.2
TD                 131072
SOLVENT              DMSO
NS                      8
DS                      4
SWH             89285.711 Hz
FIDRES           1.362392 Hz
AQ              0.7340032 sec
RG                 206.33
DW                  5.600 usec
DE                   6.50 usec
TE                  298.1 K
D1             1.00000000 sec
d11            0.03000000 sec
d12            0.00002000 sec
TD0                     1
rdel           0.00000650 sec
SFO1         376.5642094 MHz
NUC1                  19F
P1                  14.50 usec
PLW1          17.98900032 W
SFO2         400.2416010 MHz
NUC2                   1H
CPDPRG[2          waltz16
PCPD2               90.00 usec
PLW2          12.00000000 W
PLW12          0.30294999 W

F2 - Processing parameters
SI                  65536
SF           376.6018696 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
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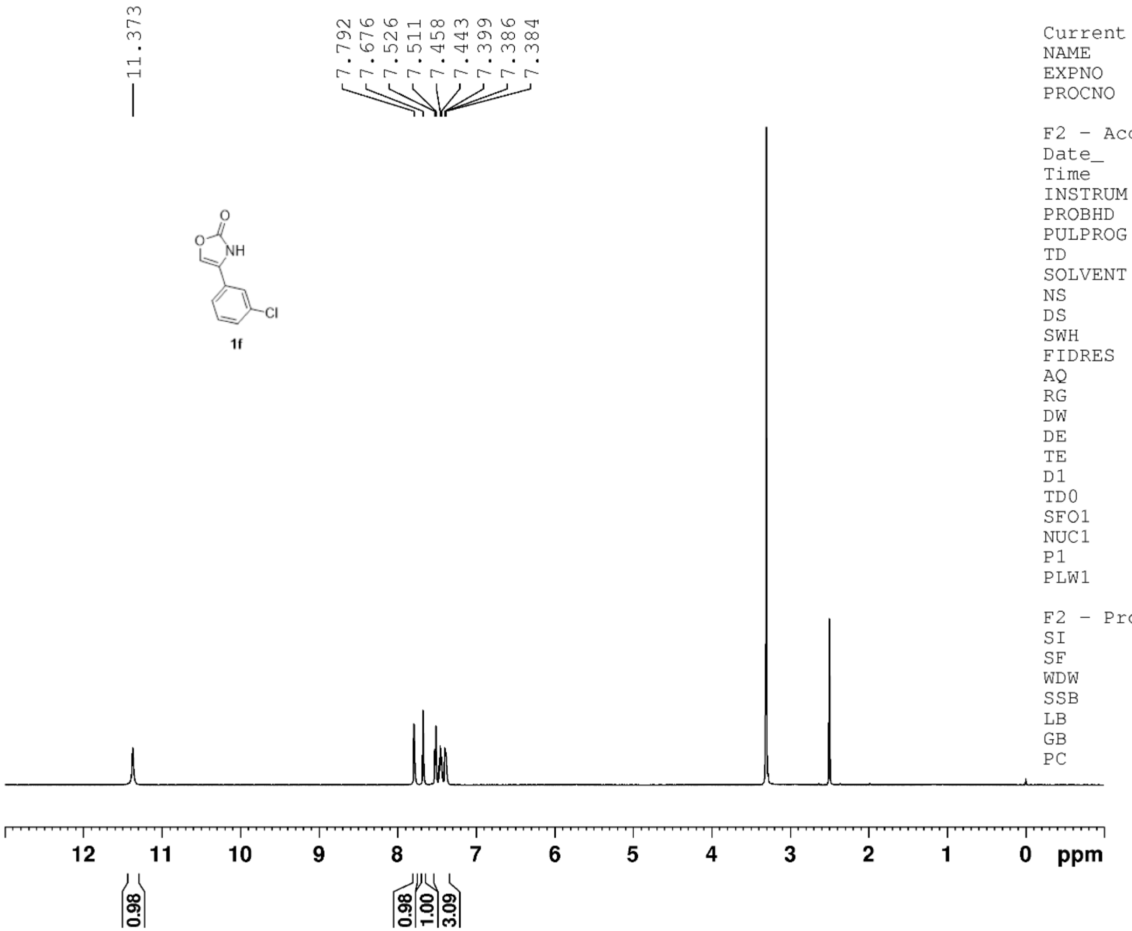
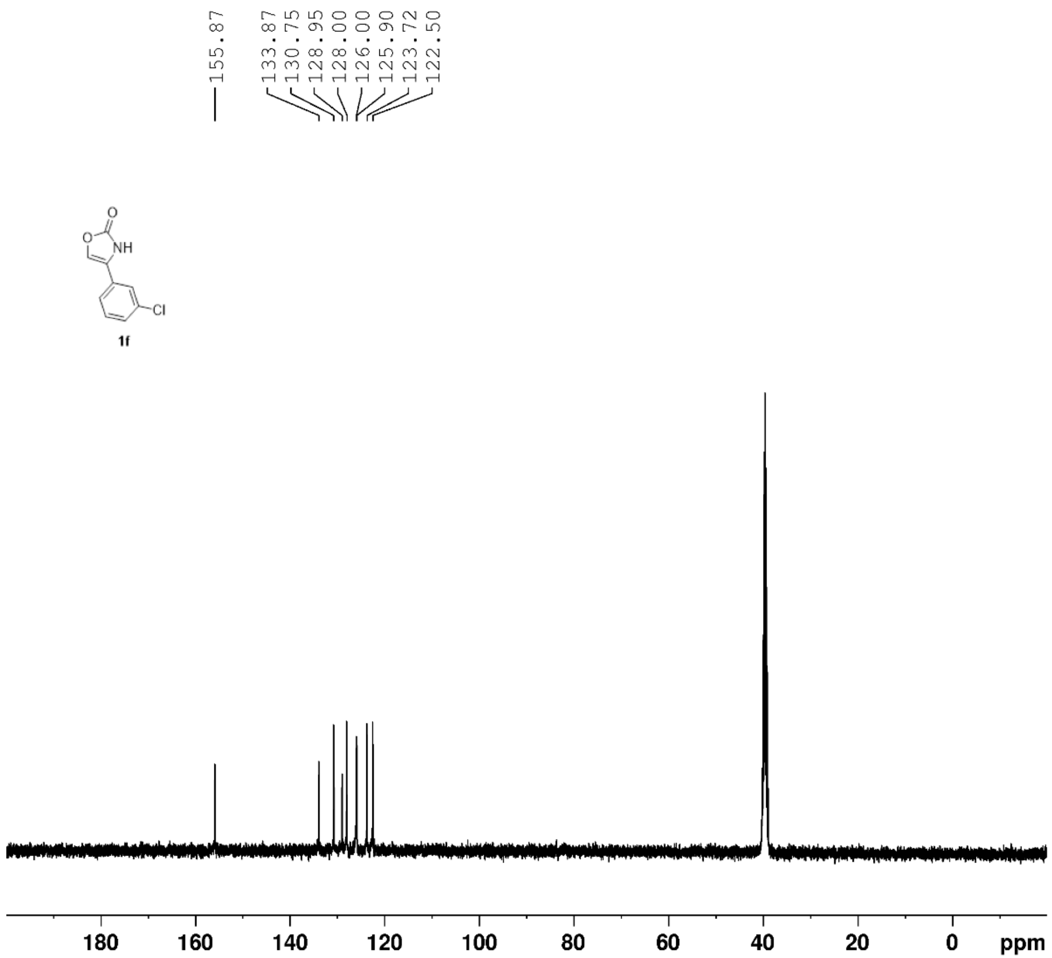


1f

Current Data Parameters	
NAME	500 cgy-7
EXPNO	49
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220812
Time	22.05 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	DMSO
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W
F2 - Processing parameters	
SI	65536
SF	500.1300052 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



1f

Current Data Parameters

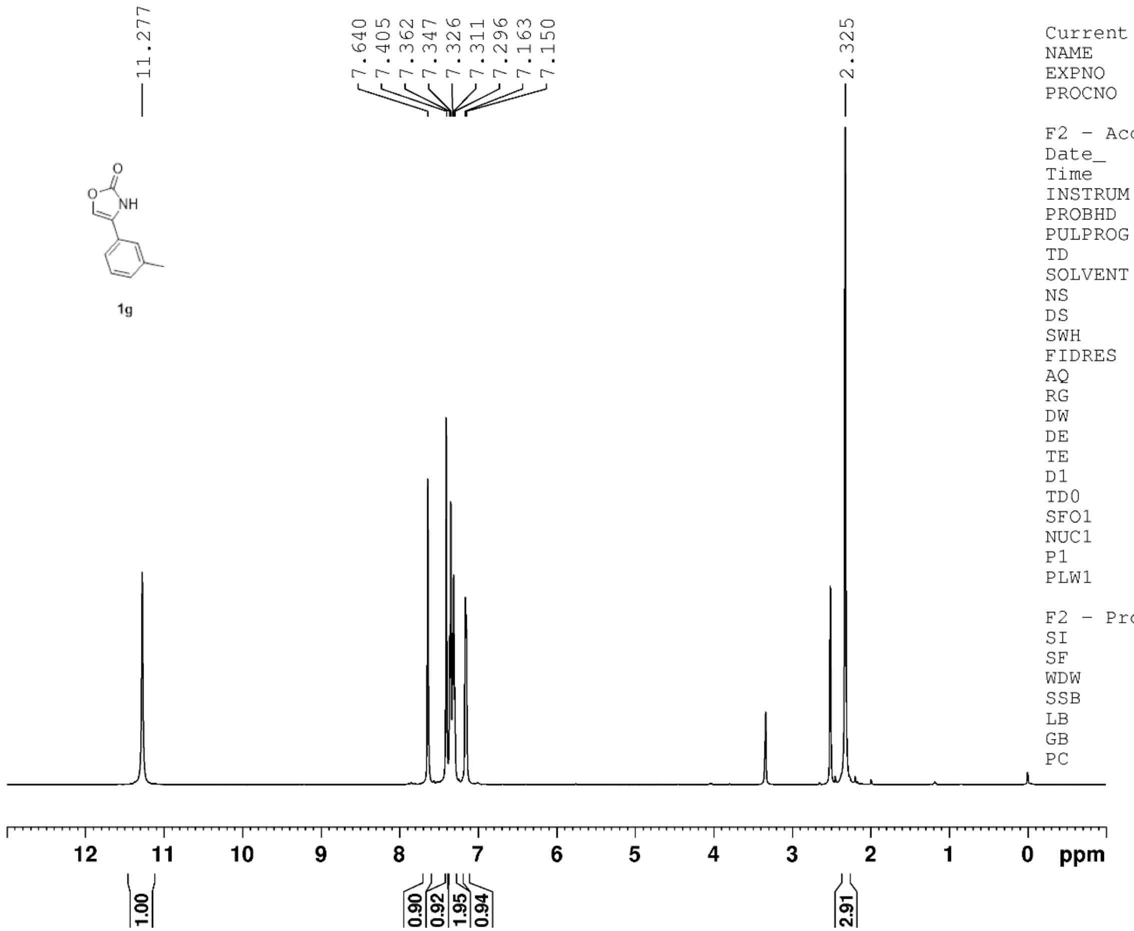
NAME	500 cgy-7
EXPNO	50
PROCNO	1

F2 - Acquisition Parameters

Date_	20221023
Time	15.58 h
INSTRUM	spect
PROBHD	5 mm PABBO BB/
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	512
DS	4
SWH	24038.461 Hz
FIDRES	0.733596 Hz
AQ	1.3631488 sec
RG	206.33
DW	20.800 usec
DE	6.50 usec
TE	298.4 K
D1	2.00000000 sec
d11	0.03000000 sec
DELTA	1.89999998 sec
TD0	1
SFO1	100.6504916 MHz
NUC1	13C
P1	10.00 usec
PLW1	54.00000000 W
SFO2	400.2416010 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	90.00 usec
PLW2	12.00000000 W
PLW12	0.30294999 W
PLW13	0.24539000 W

F2 - Processing parameters

SI	32768
SF	100.6409481 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  60
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220920
Time                23.43 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT              DMSO
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 123.14
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1299973 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
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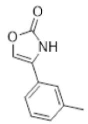

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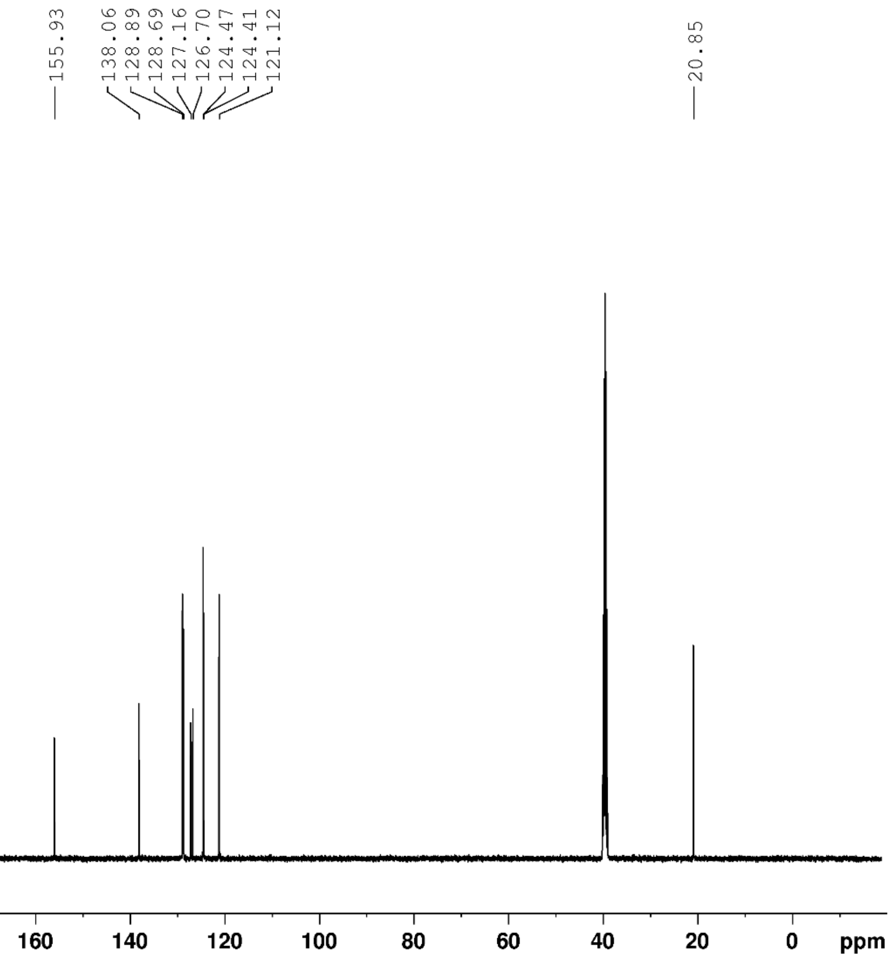
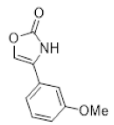


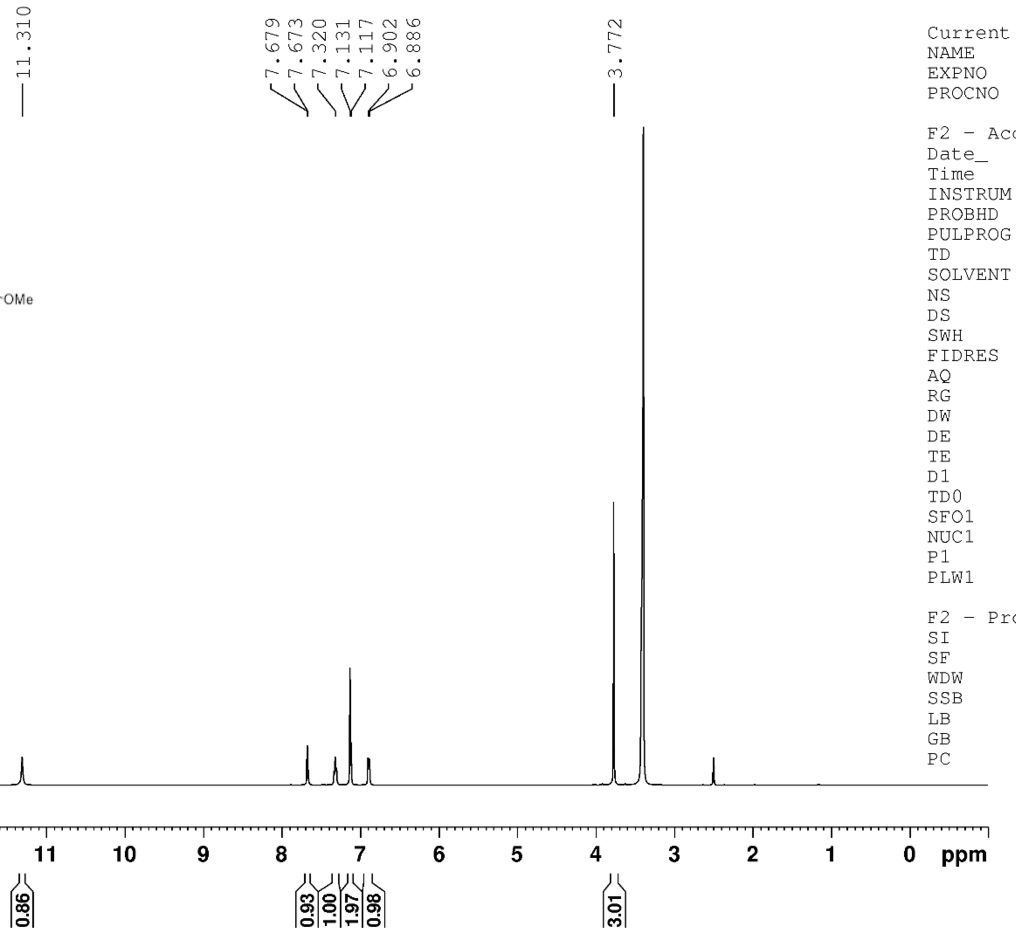

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                61
PROCNO                1

F2 - Acquisition Parameters
Date_          20220921
Time               0.10 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG         zgpg30
TD               65536
SOLVENT           DMSO
NS                 500
DS                   4
SWH          29761.904 Hz
FIDRES        0.908261 Hz
AQ           1.1010048 sec
RG              192.89
DW              16.800 usec
DE                6.50 usec
TE                   0 K
D1          2.00000000 sec
d11         0.03000000 sec
DELTA       1.89999998 sec
TD0                  1
SFO1       125.7703637 MHz
NUC1               13C
P1               10.00 usec
PLW1       80.00000000 W
SFO2       500.1320005 MHz
NUC2                1H
CPDPRG[2       waltz16
PCPD2            80.00 usec
PLW2       20.00000000 W
PLW12       0.39903000 W
PLW13       0.25538000 W

F2 - Processing parameters
SI               32768
SF         125.7578569 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                1.40
```



1h



Current Data Parameters

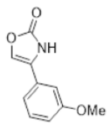
NAME	500 cgy-7
EXPNO	88
PROCNO	1

F2 - Acquisition Parameters

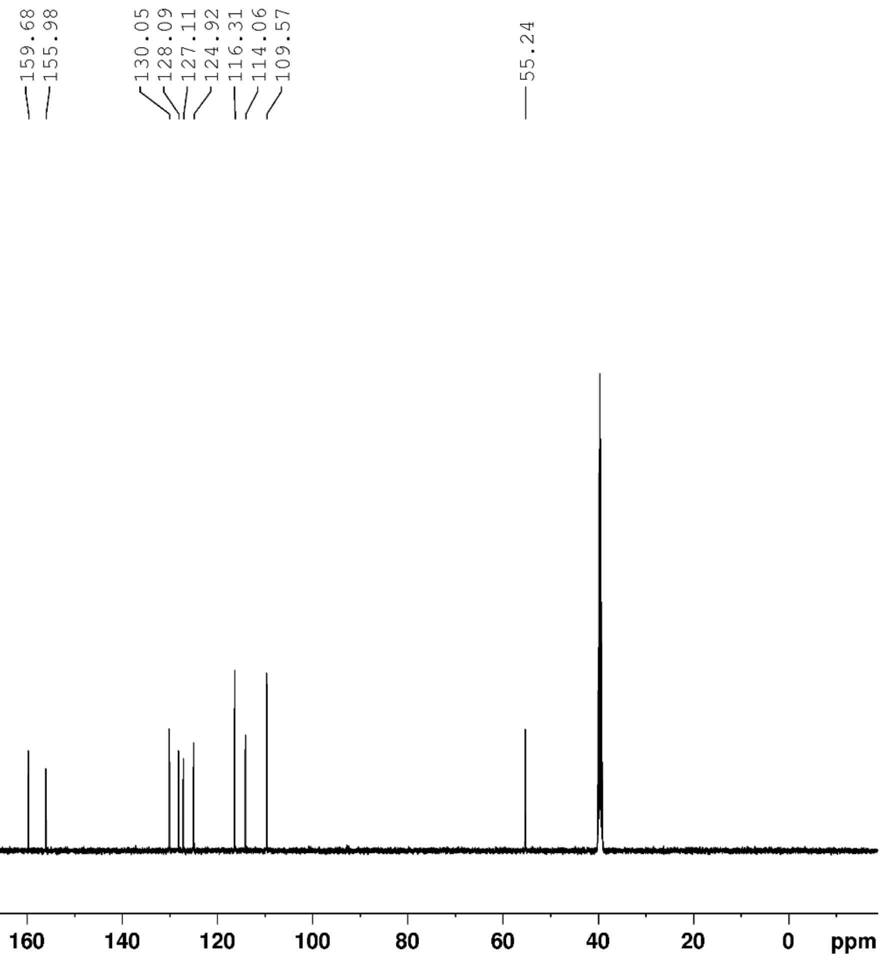
Date_	20220816
Time	0.58 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	DMSO
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	113.75
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W

F2 - Processing parameters

SI	65536
SF	500.1300050 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



1h



Current Data Parameters

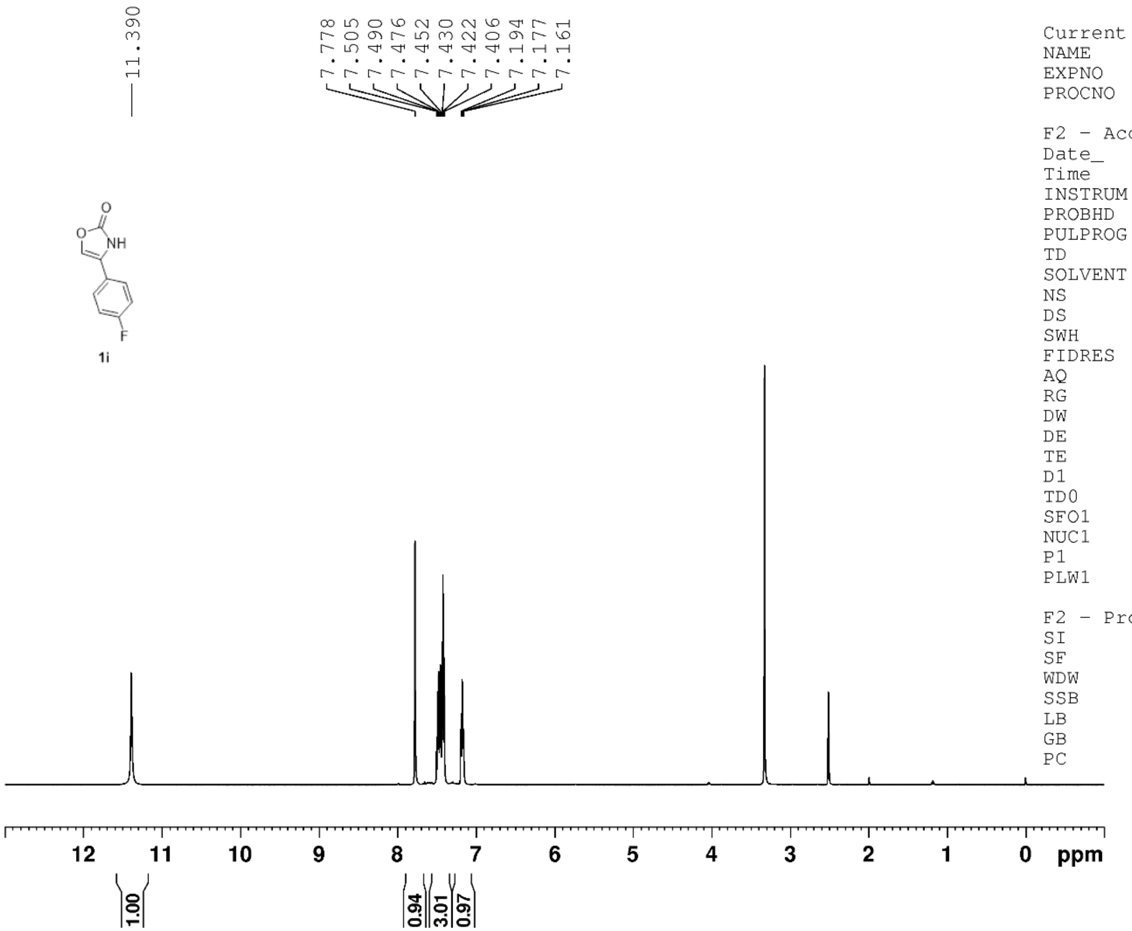
NAME	500 cgy-7	
EXPNO	89	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220816	
Time	1.20	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	DMSO	
NS	400	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W

F2 - Processing parameters

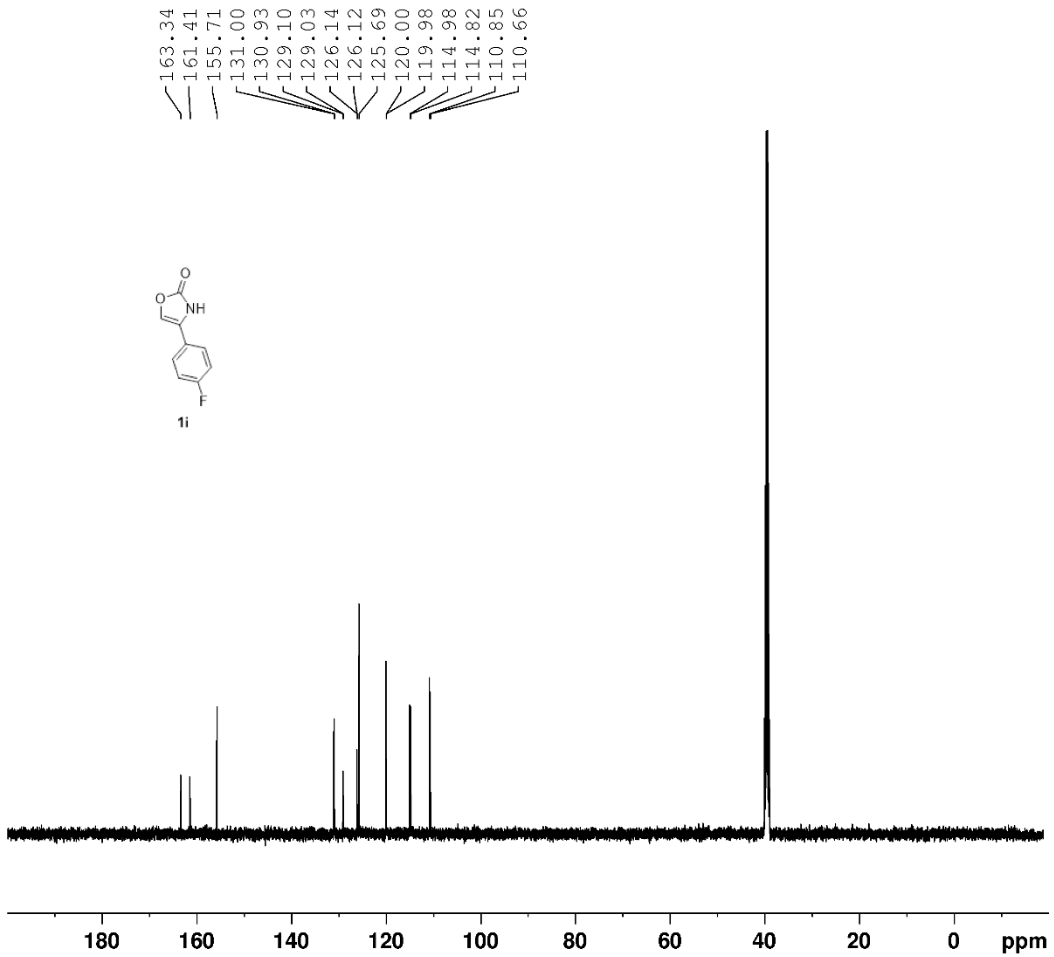
SI	32768	
SF	125.7578465	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   43
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220812
Time                 17.33 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT               DMSO
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

F2 - Processing parameters
SI                   65536
SF             500.1299991 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```



Current Data Parameters

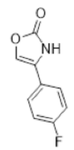
NAME	500 cgy-7
EXPNO	44
PROCNO	1

F2 - Acquisition Parameters

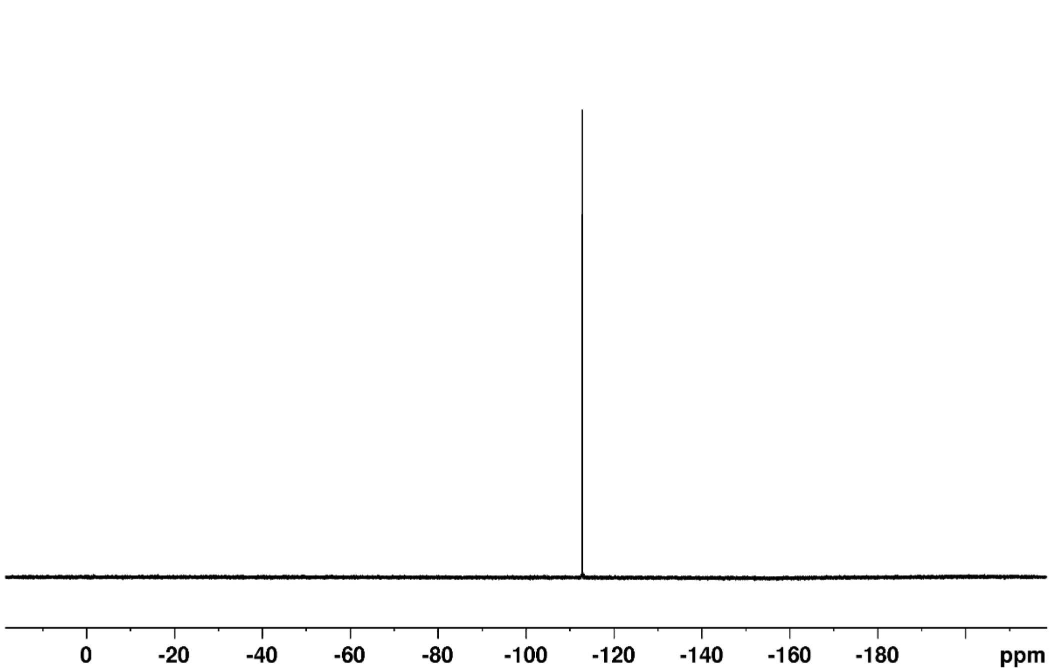
Date_	20220812
Time	17.47 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zgpg30
TD	65536
SOLVENT	DMSO
NS	256
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	1.1010048 sec
RG	192.89
DW	16.800 usec
DE	6.50 usec
TE	0 K
D1	2.00000000 sec
d11	0.03000000 sec
DELTA	1.89999998 sec
TD0	1
SFO1	125.7703637 MHz
NUC1	13C
P1	10.00 usec
PLW1	80.00000000 W
SFO2	500.1320005 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	80.00 usec
PLW2	20.00000000 W
PLW12	0.39903000 W
PLW13	0.25538000 W

F2 - Processing parameters

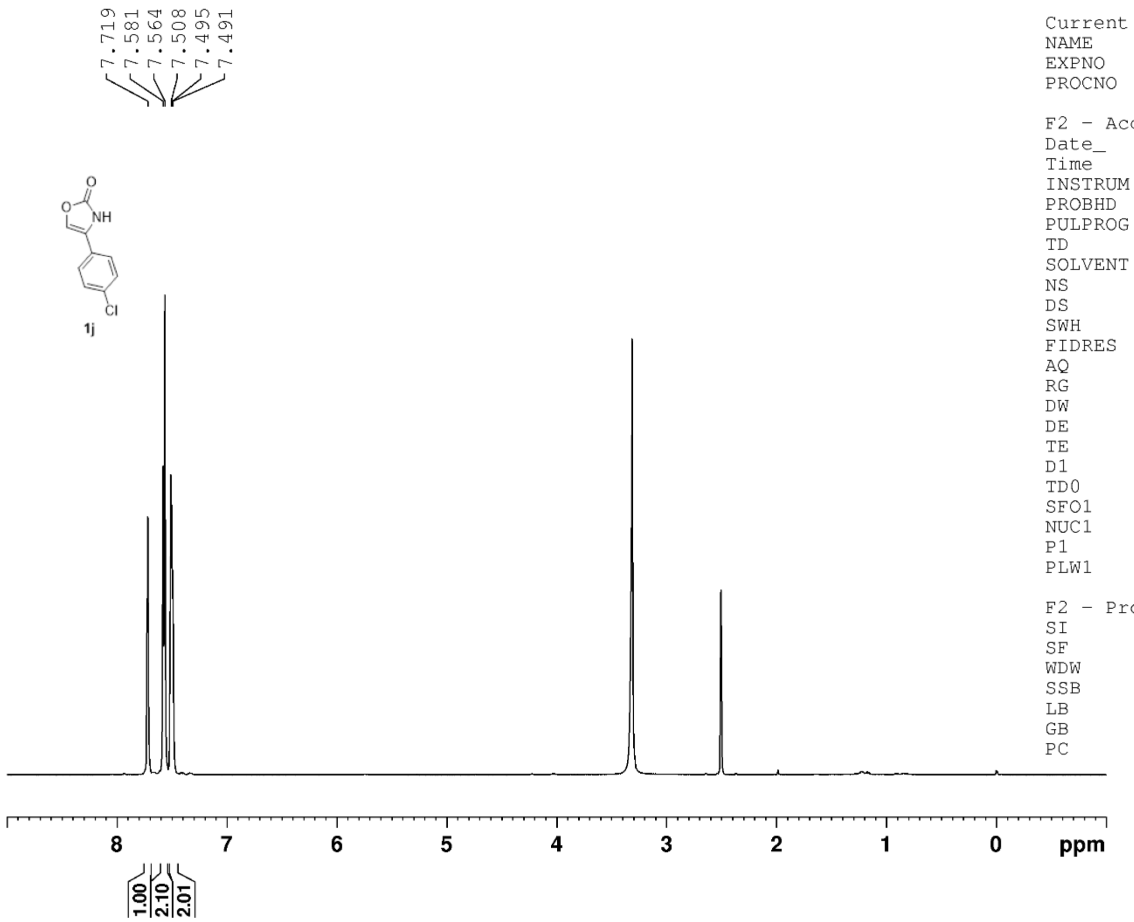
SI	32768
SF	125.7578573 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40



1i



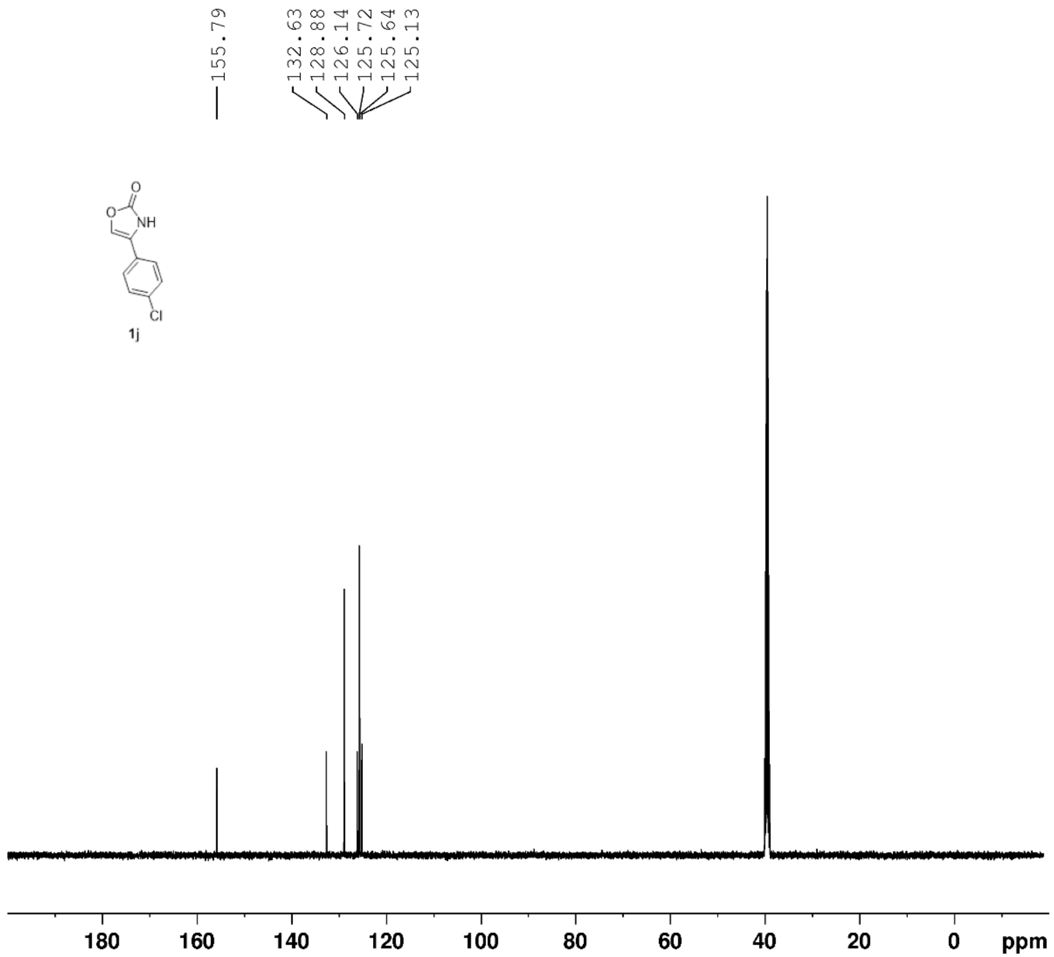
Current Data Parameters	
NAME	500 cgy-7
EXPNO	45
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220920
Time	15.11 h
INSTRUM	spect
PROBHD	5 mm PABBO BB/
PULPROG	zgfhigqn.2
TD	131072
SOLVENT	DMSO
NS	16
DS	4
SWH	89285.711 Hz
FIDRES	1.362392 Hz
AQ	0.7340032 sec
RG	206.33
DW	5.600 usec
DE	6.50 usec
TE	299.0 K
D1	1.00000000 sec
d11	0.03000000 sec
d12	0.00002000 sec
TD0	1
rdel	0.00000650 sec
SFO1	376.5642094 MHz
NUC1	19F
P1	14.50 usec
PLW1	17.98900032 W
SFO2	400.2416010 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	90.00 usec
PLW2	12.00000000 W
PLW12	0.30294999 W
F2 - Processing parameters	
SI	65536
SF	376.6018696 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   53
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220812
Time                 22.57 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT               DMSO
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

F2 - Processing parameters
SI                   65536
SF             500.1300030 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```



Current Data Parameters

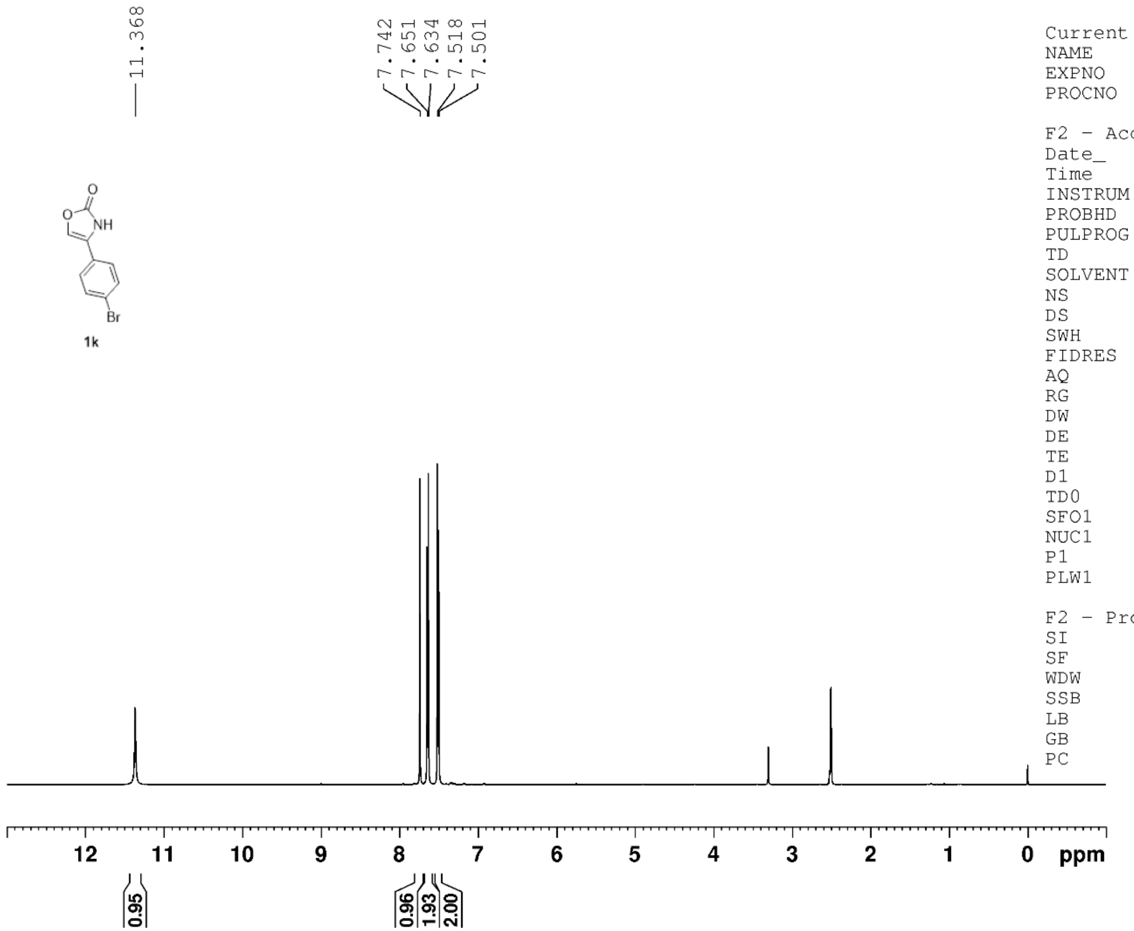
NAME	500 cgy-7	
EXPNO	54	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220812	
Time	23.19	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	DMSO	
NS	400	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W

F2 - Processing parameters

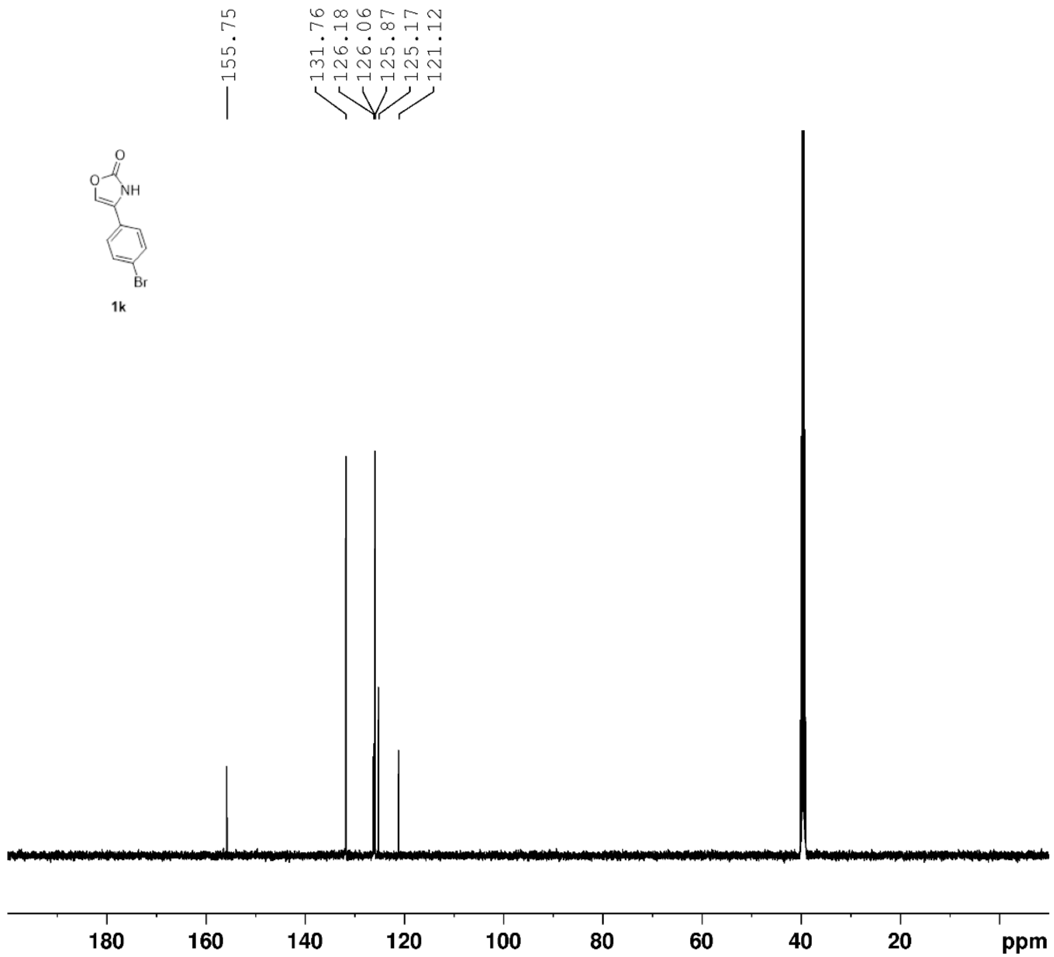
SI	32768	
SF	125.7578582	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   57
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220921
Time                 12.21 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT               DMSO
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

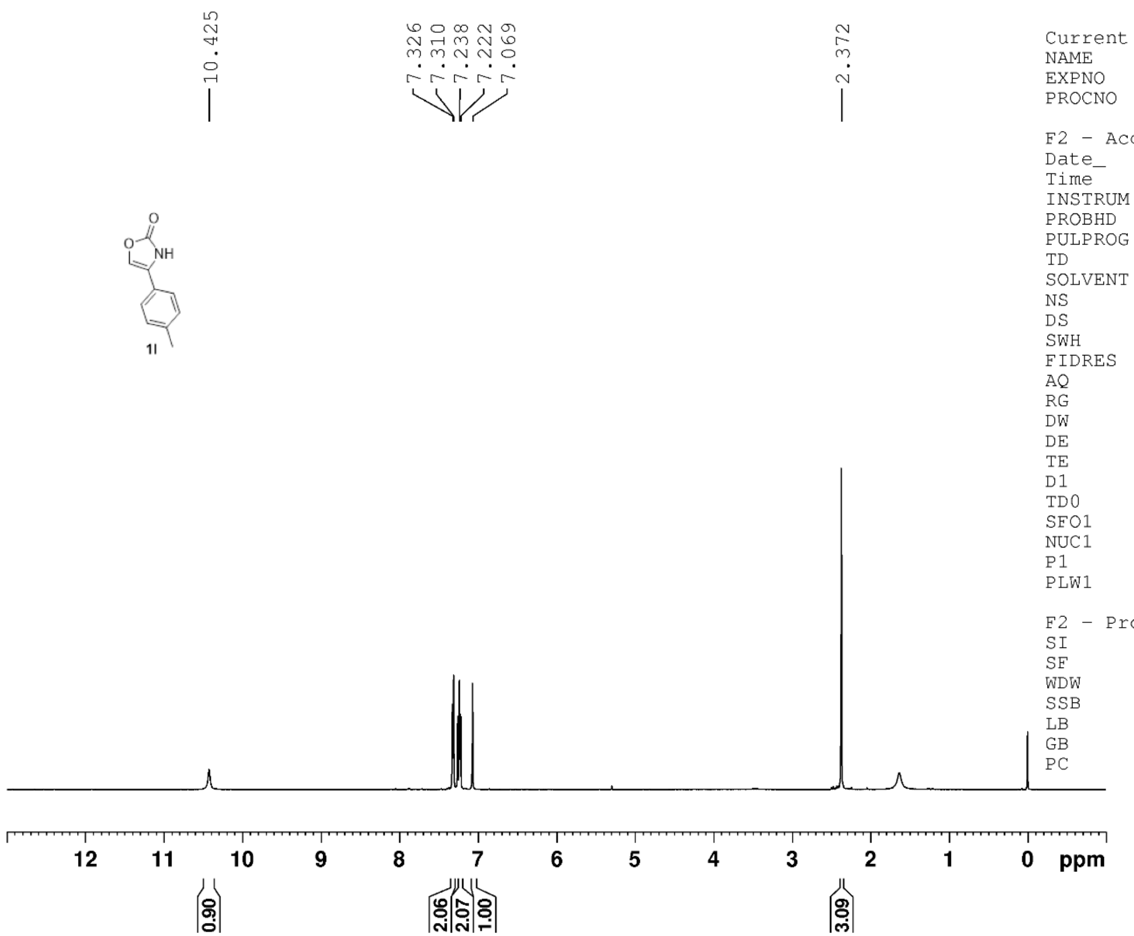
F2 - Processing parameters
SI                   65536
SF             500.1300015 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```



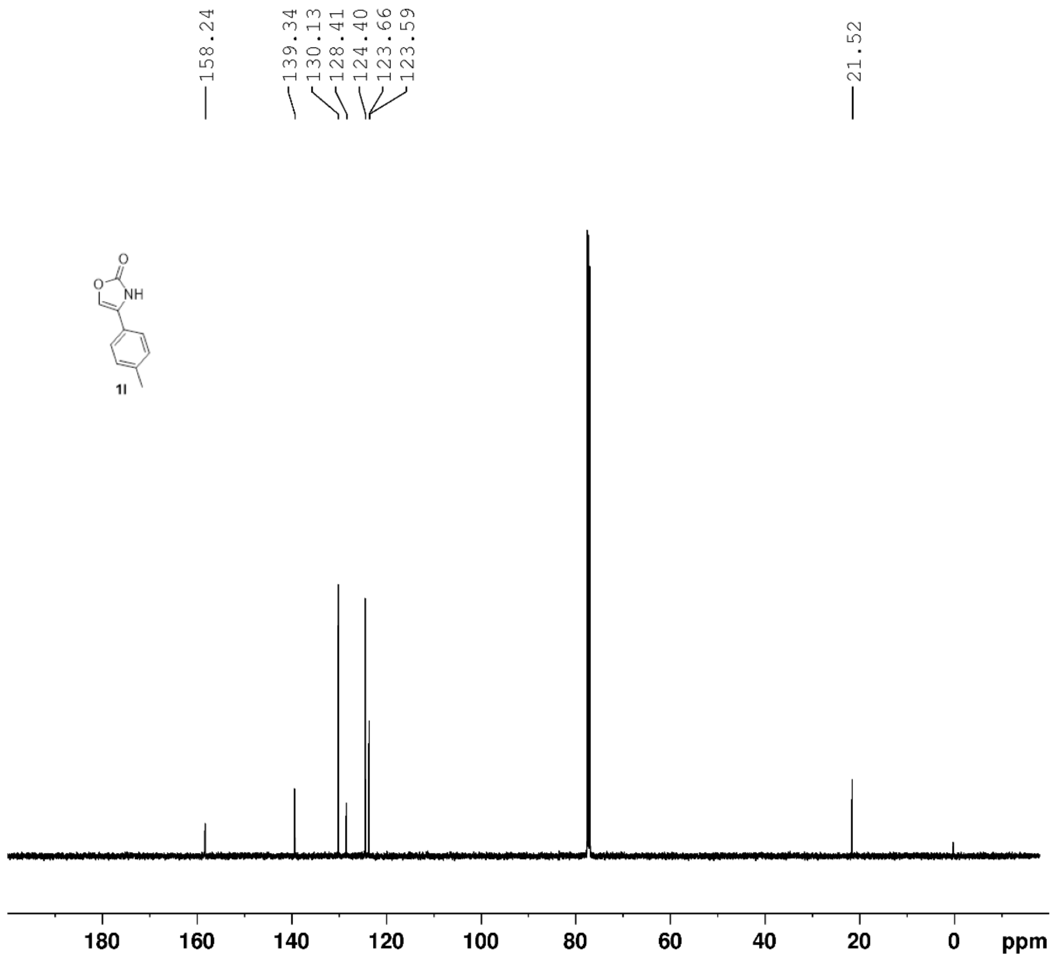

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                58
PROCNO                1

F2 - Acquisition Parameters
Date_          20220921
Time              12.49 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG         zgpg30
TD                65536
SOLVENT            DMSO
NS                  520
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7578610 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



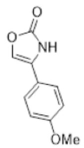
Current Data Parameters		
NAME	500 cgy-7	
EXPNO	24	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220811	
Time	1.36	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zg30	
TD	65536	
SOLVENT	CDCl3	
NS	16	
DS	2	
SWH	10000.000	Hz
FIDRES	0.305176	Hz
AQ	3.2767999	sec
RG	192.89	
DW	50.000	usec
DE	6.50	usec
TE	0	K
D1	1.00000000	sec
TD0	1	
SFO1	500.1330885	MHz
NUC1	1H	
P1	11.30	usec
PLW1	20.00000000	W
F2 - Processing parameters		
SI	65536	
SF	500.1300133	MHz
WDW	EM	
SSB	0	
LB	0.30	Hz
GB	0	
PC	1.00	



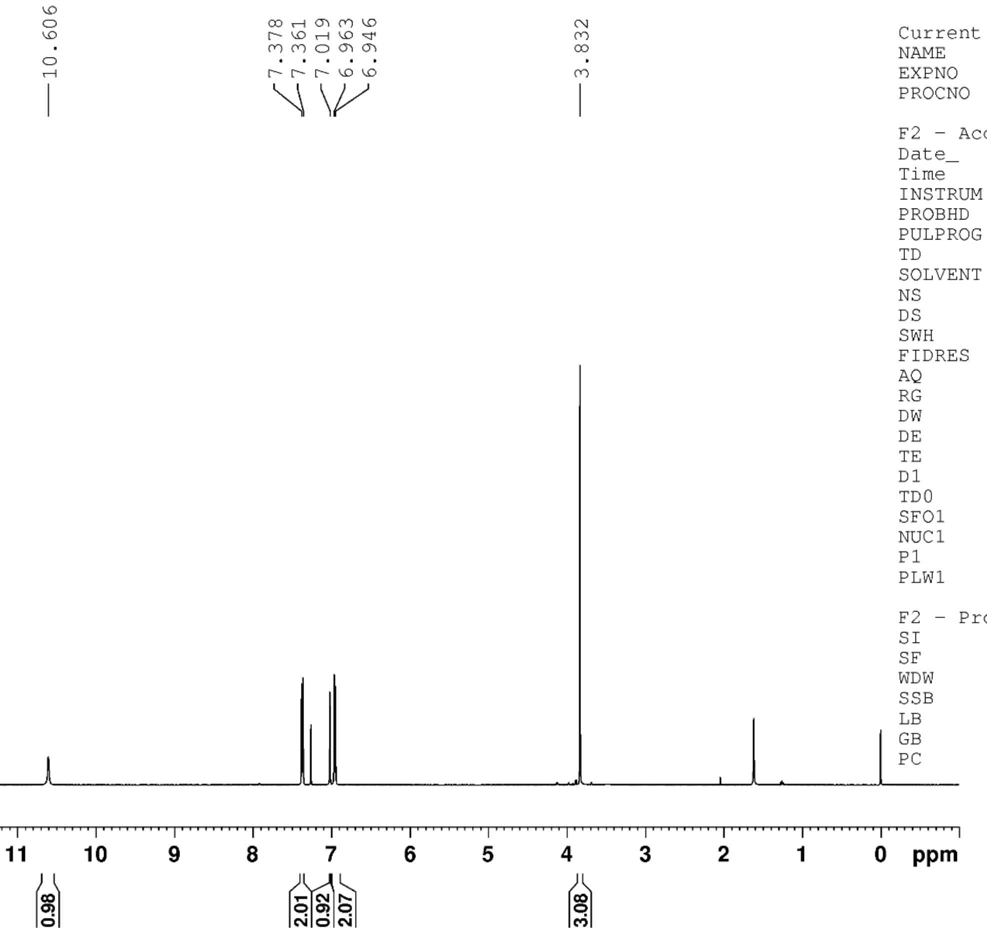

```
Current Data Parameters
NAME           500 cgy-7
EXPNO                 25
PROCNO                 1

F2 - Acquisition Parameters
Date_           20220921
Time                5.48 h
INSTRUM            spect
PROBHD   5 mm PADUL 13C
PULPROG          zgpg30
TD                 65536
SOLVENT            CDCl3
NS                   521
DS                     4
SWH            29761.904 Hz
FIDRES          0.908261 Hz
AQ             1.1010048 sec
RG                192.89
DW                16.800 usec
DE                  6.50 usec
TE                     0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         125.7703637 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         80.00000000 W
SFO2         500.1320005 MHz
NUC2                  1H
CPDPRG[2         waltz16
PCPD2              80.00 usec
PLW2         20.00000000 W
PLW12         0.39903000 W
PLW13         0.25538000 W

F2 - Processing parameters
SI                 32768
SF           125.7577582 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```



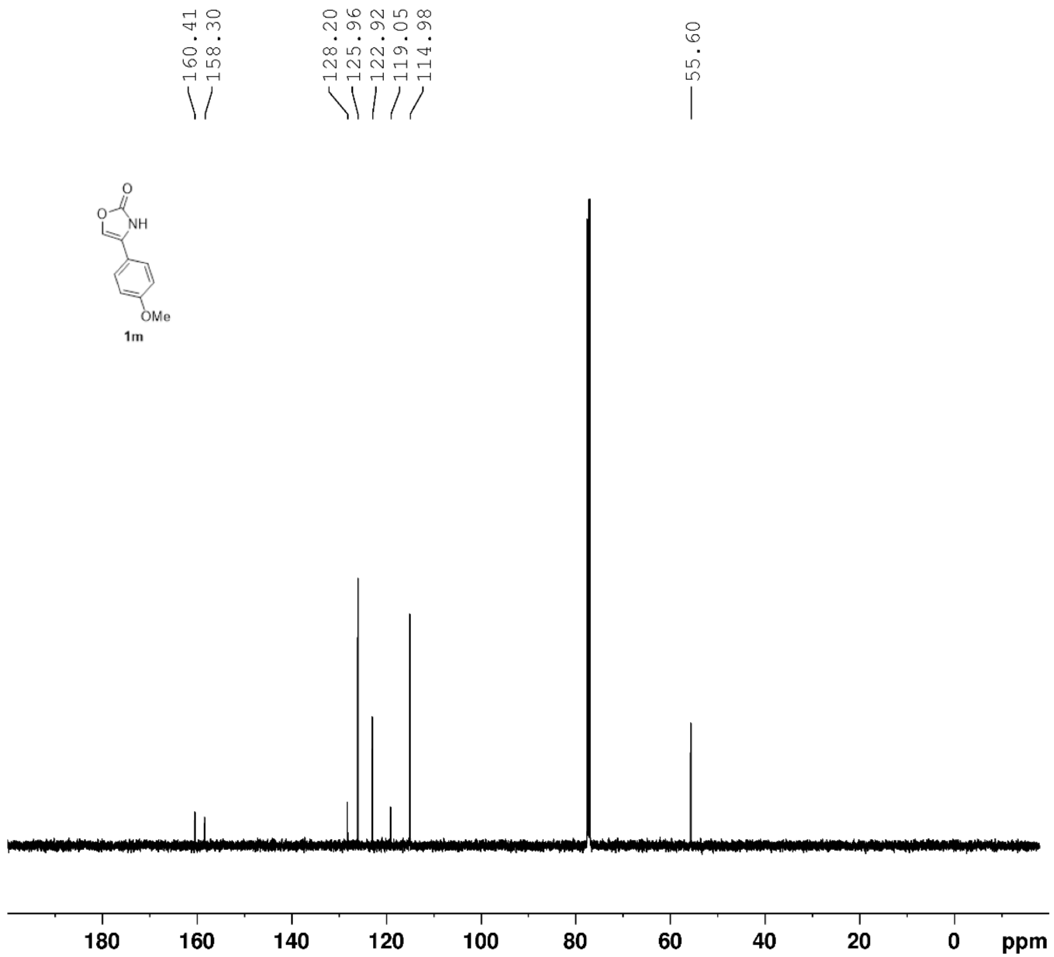
1m




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  12
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220809
Time                16.04 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1300128 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



Current Data Parameters

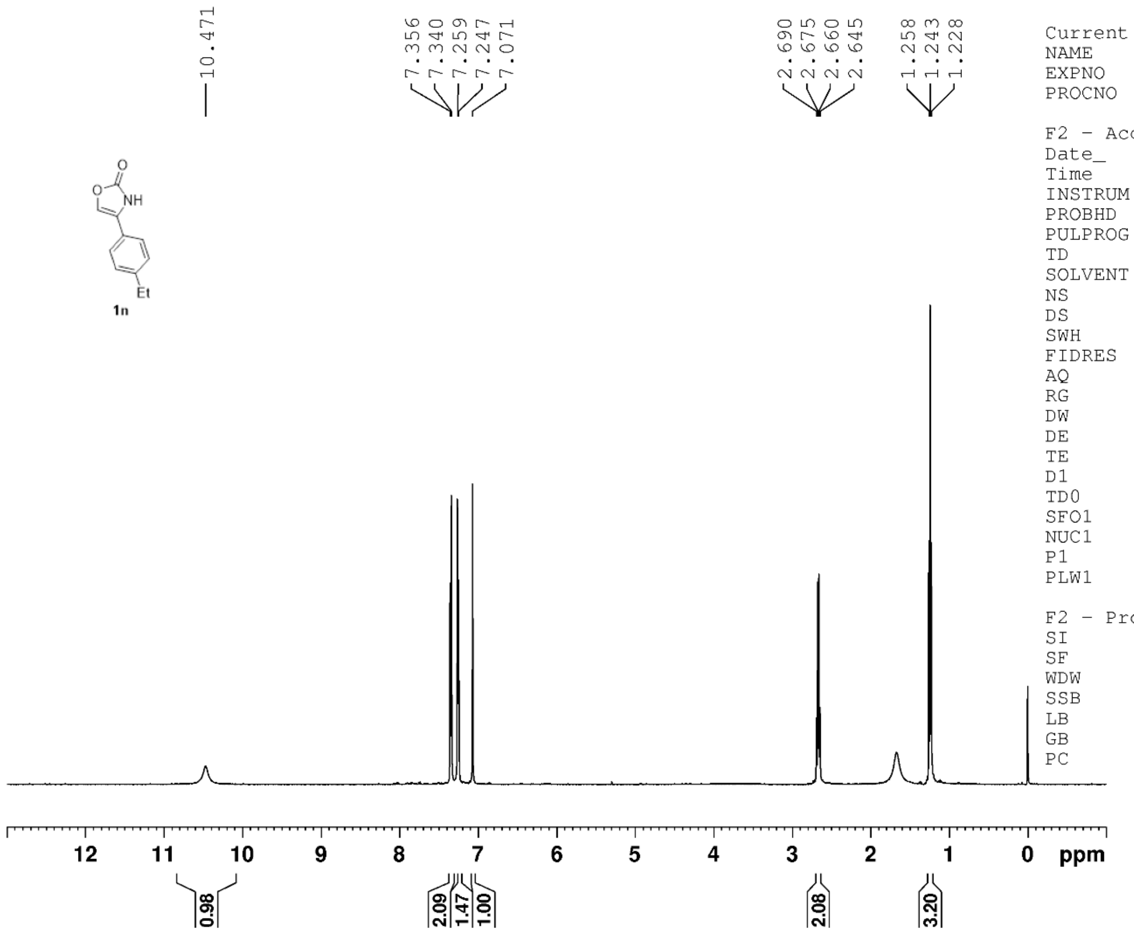
NAME	500 cgy-7
EXPNO	13
PROCNO	1

F2 - Acquisition Parameters

Date_	20220809
Time	16.18 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	256
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	1.1010048 sec
RG	192.89
DW	16.800 usec
DE	6.50 usec
TE	0 K
D1	2.00000000 sec
d11	0.03000000 sec
DELTA	1.89999998 sec
TD0	1
SFO1	125.7703637 MHz
NUC1	13C
P1	10.00 usec
PLW1	80.00000000 W
SFO2	500.1320005 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	80.00 usec
PLW2	20.00000000 W
PLW12	0.39903000 W
PLW13	0.25538000 W

F2 - Processing parameters

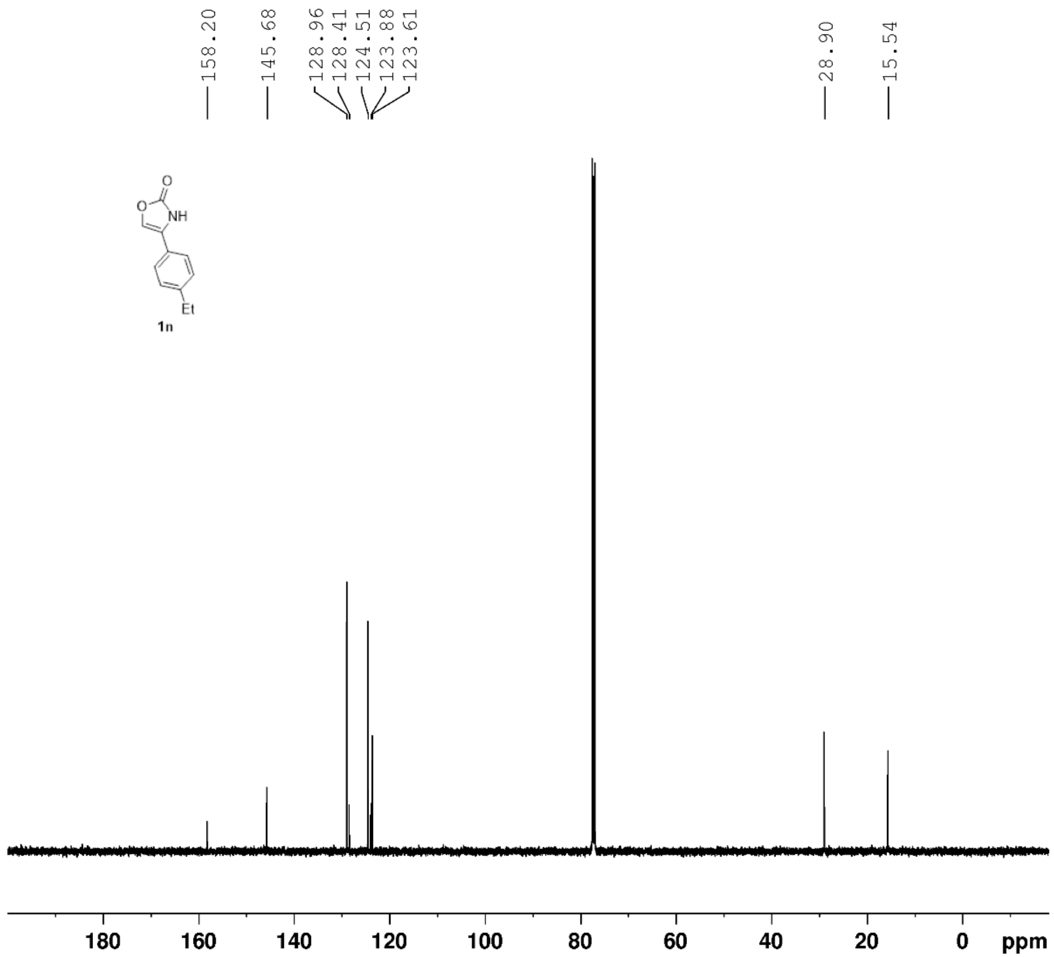
SI	32768
SF	125.7577587 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  68
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220815
Time                11.39 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1300139 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



Current Data Parameters

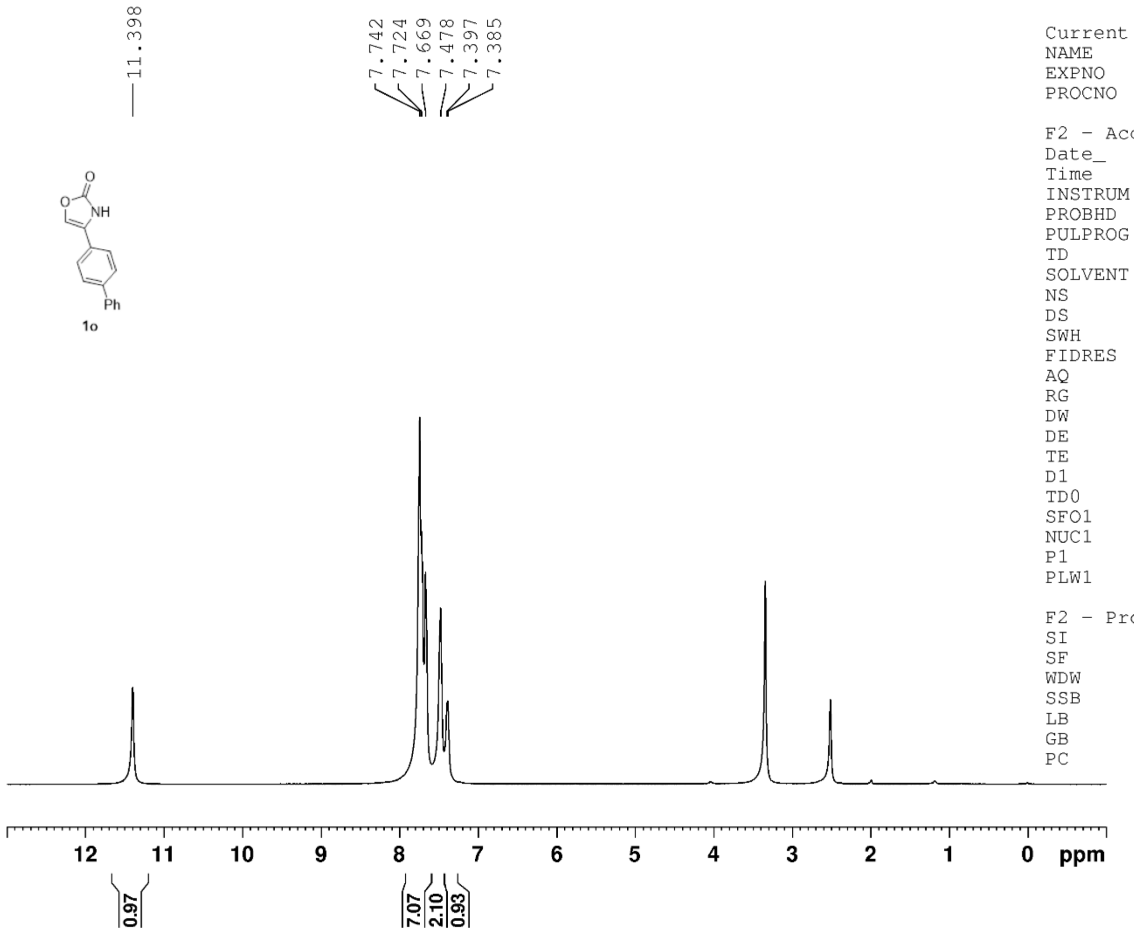
NAME	500 cgy-7
EXPNO	69
PROCNO	1

F2 - Acquisition Parameters

Date_	20220815
Time	12.01 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	400
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	1.1010048 sec
RG	192.89
DW	16.800 usec
DE	6.50 usec
TE	0 K
D1	2.00000000 sec
d11	0.03000000 sec
DELTA	1.89999998 sec
TD0	1
SFO1	125.7703637 MHz
NUC1	13C
P1	10.00 usec
PLW1	80.00000000 W
SFO2	500.1320005 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	80.00 usec
PLW2	20.00000000 W
PLW12	0.39903000 W
PLW13	0.25538000 W

F2 - Processing parameters

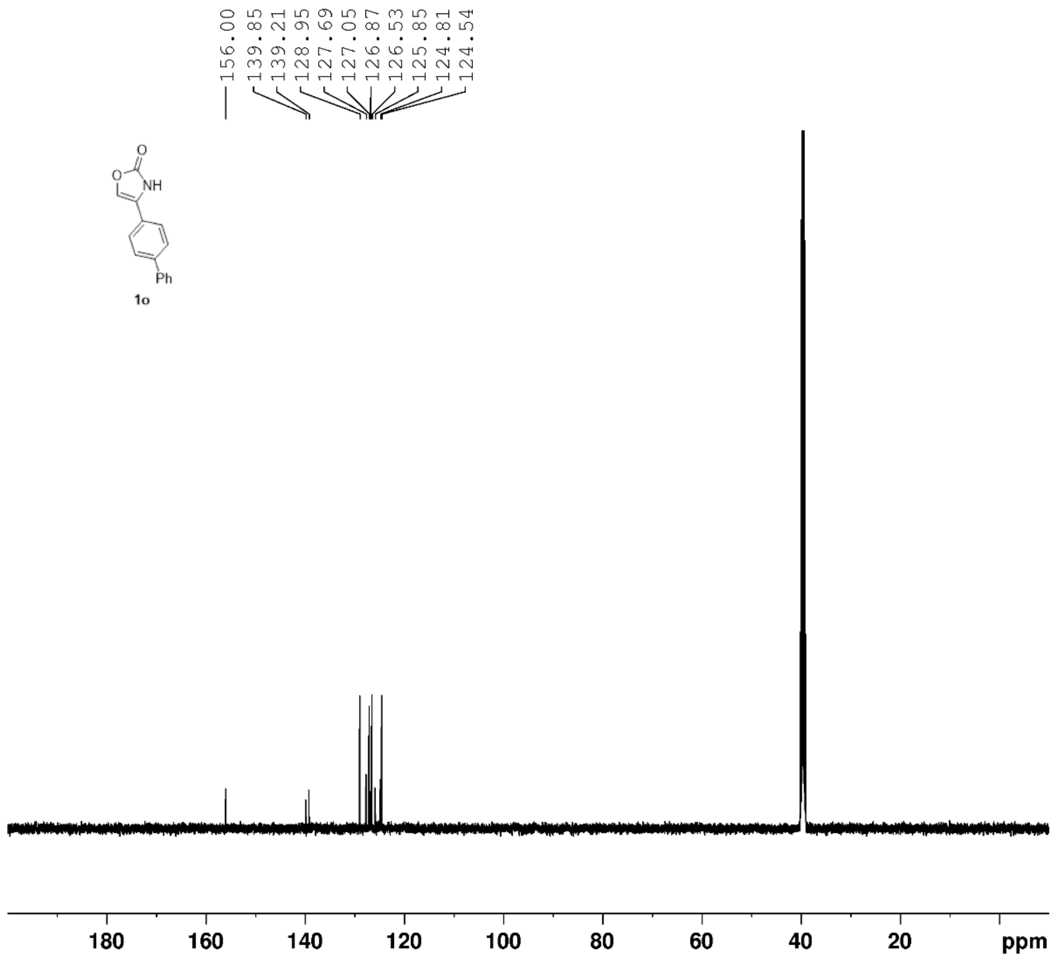
SI	32768
SF	125.7577589 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  64
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220922
Time                11.05 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT              DMSO
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                  152.7
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

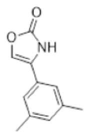
F2 - Processing parameters
SI                  65536
SF            500.1300022 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



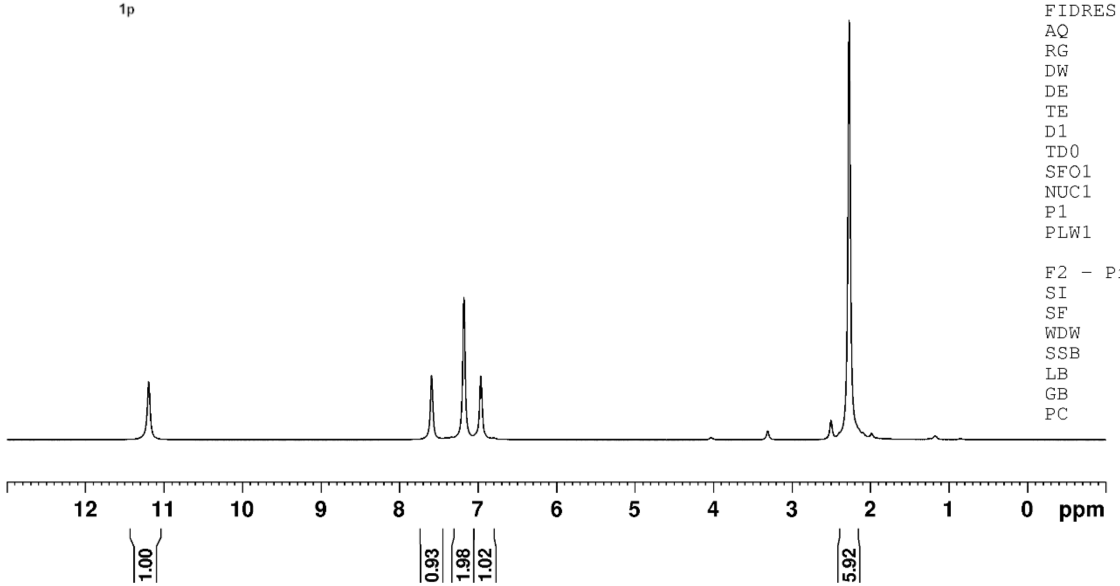
Current Data Parameters
NAME 500 cgy-7
EXPNO 65
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220815
Time 11.01 h
INSTRUM spect
PROBHD 5 mm PADUL 13C
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 400
DS 4
SWH 29761.904 Hz
FIDRES 0.908261 Hz
AQ 1.1010048 sec
RG 192.89
DW 16.800 usec
DE 6.50 usec
TE 0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
SFO1 125.7703637 MHz
NUC1 13C
P1 10.00 usec
PLW1 80.00000000 W
SFO2 500.1320005 MHz
NUC2 1H
CPDPRG[2 waltz16
PCPD2 80.00 usec
PLW2 20.00000000 W
PLW12 0.39903000 W
PLW13 0.25538000 W

F2 - Processing parameters
SI 32768
SF 125.7578515 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



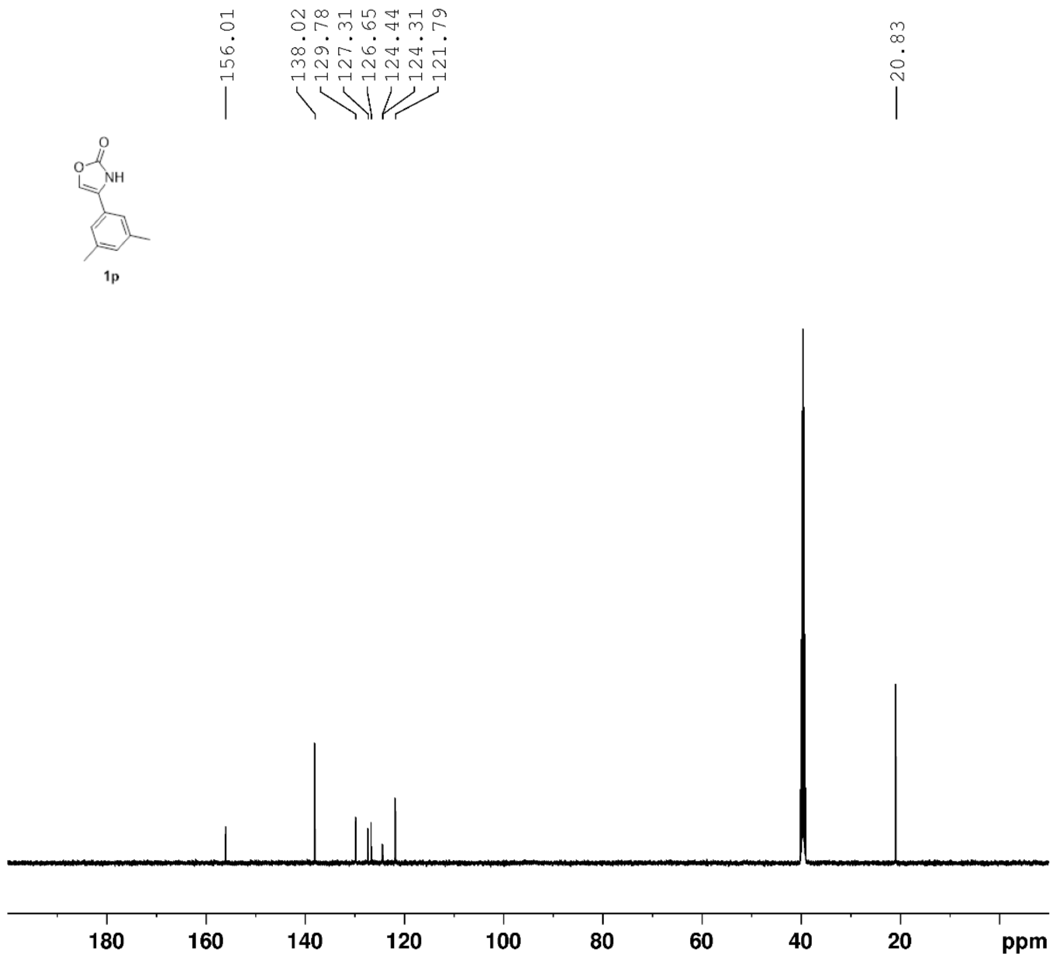
1p



Current Data Parameters
NAME 500 cgy-7
EXPNO 72
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220922
Time 10.52 h
INSTRUM spect
PROBHD 5 mm PADUL 13C
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 16
DS 2
SWH 10000.000 Hz
FIDRES 0.305176 Hz
AQ 3.2767999 sec
RG 171.28
DW 50.000 usec
DE 6.50 usec
TE 0 K
D1 1.00000000 sec
TD0 1
SFO1 500.1330885 MHz
NUC1 1H
P1 11.30 usec
PLW1 20.00000000 W

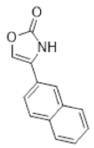
F2 - Processing parameters
SI 65536
SF 500.1300071 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



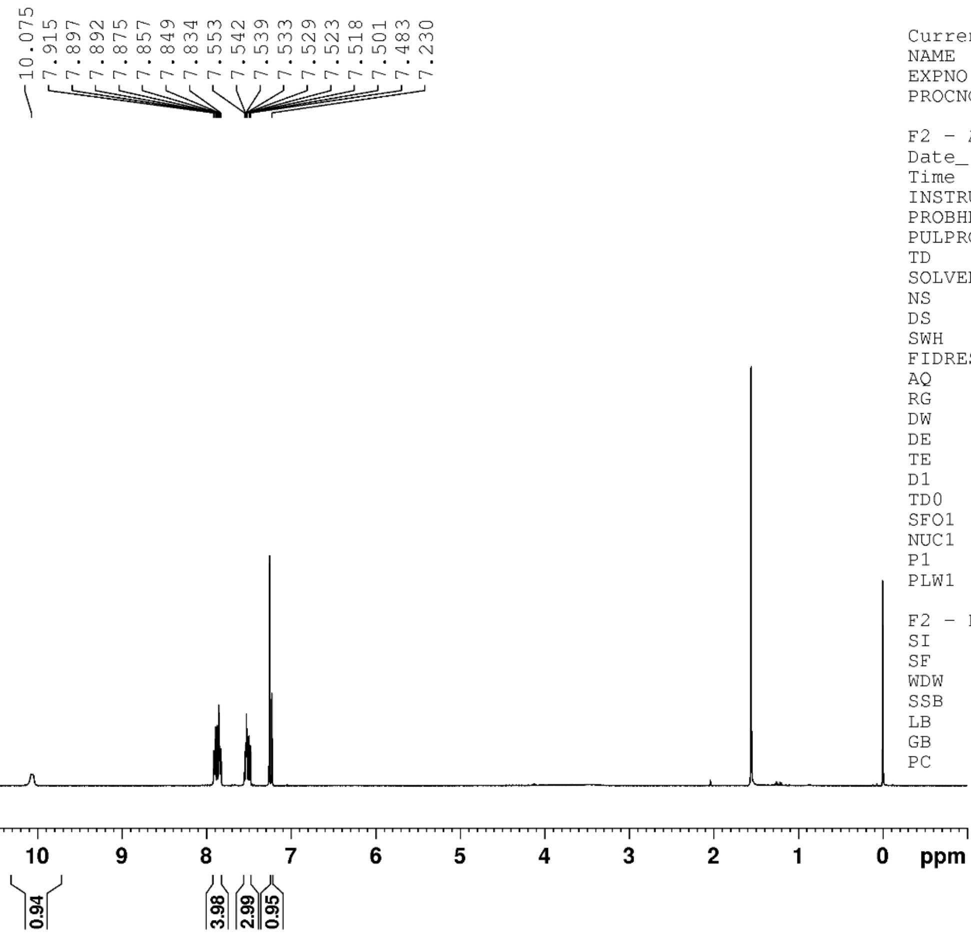

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                73
PROCNO                1

F2 - Acquisition Parameters
Date_          20220815
Time              12.53 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG         zgpg30
TD                65536
SOLVENT           CDCl3
NS                  400
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7584452 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



1q



Current Data Parameters

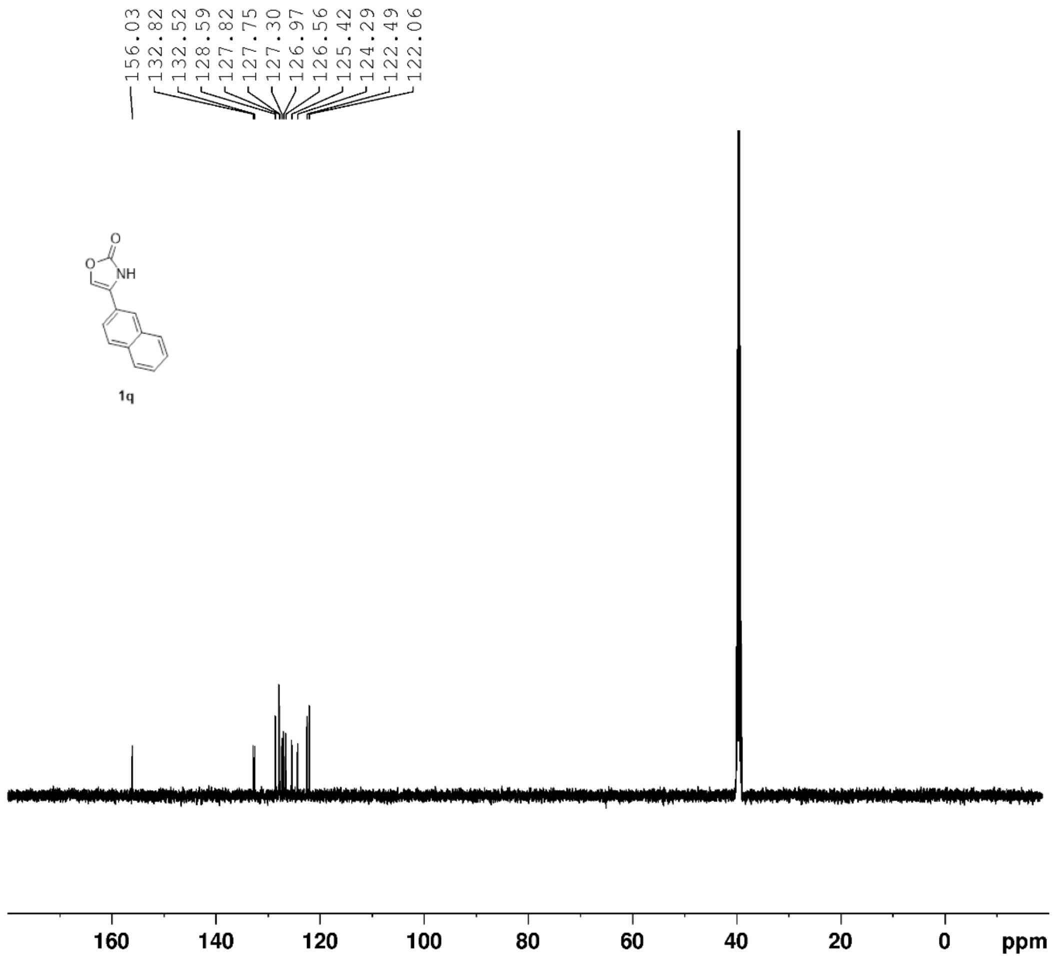
NAME	500 cgy-7
EXPNO	16
PROCNO	1

F2 - Acquisition Parameters

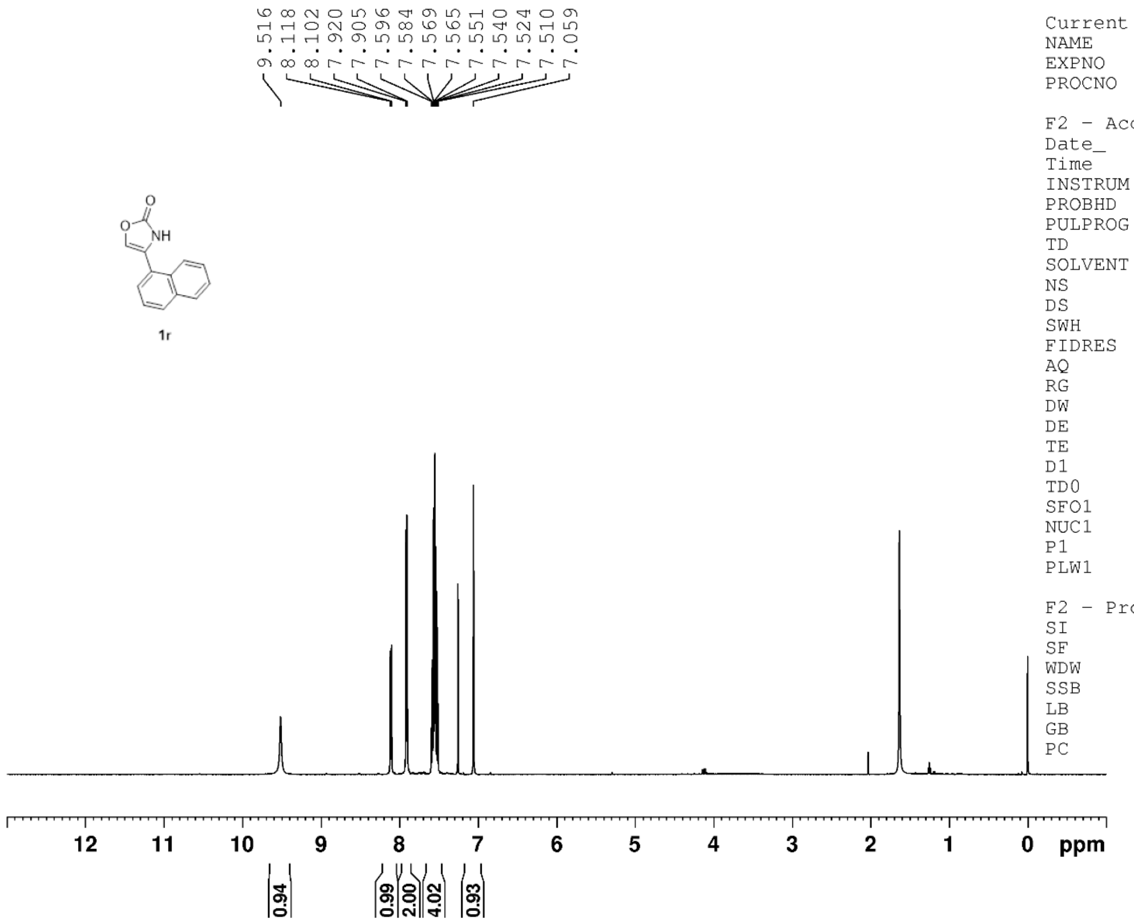
Date_	20220802
Time	18.57 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W

F2 - Processing parameters

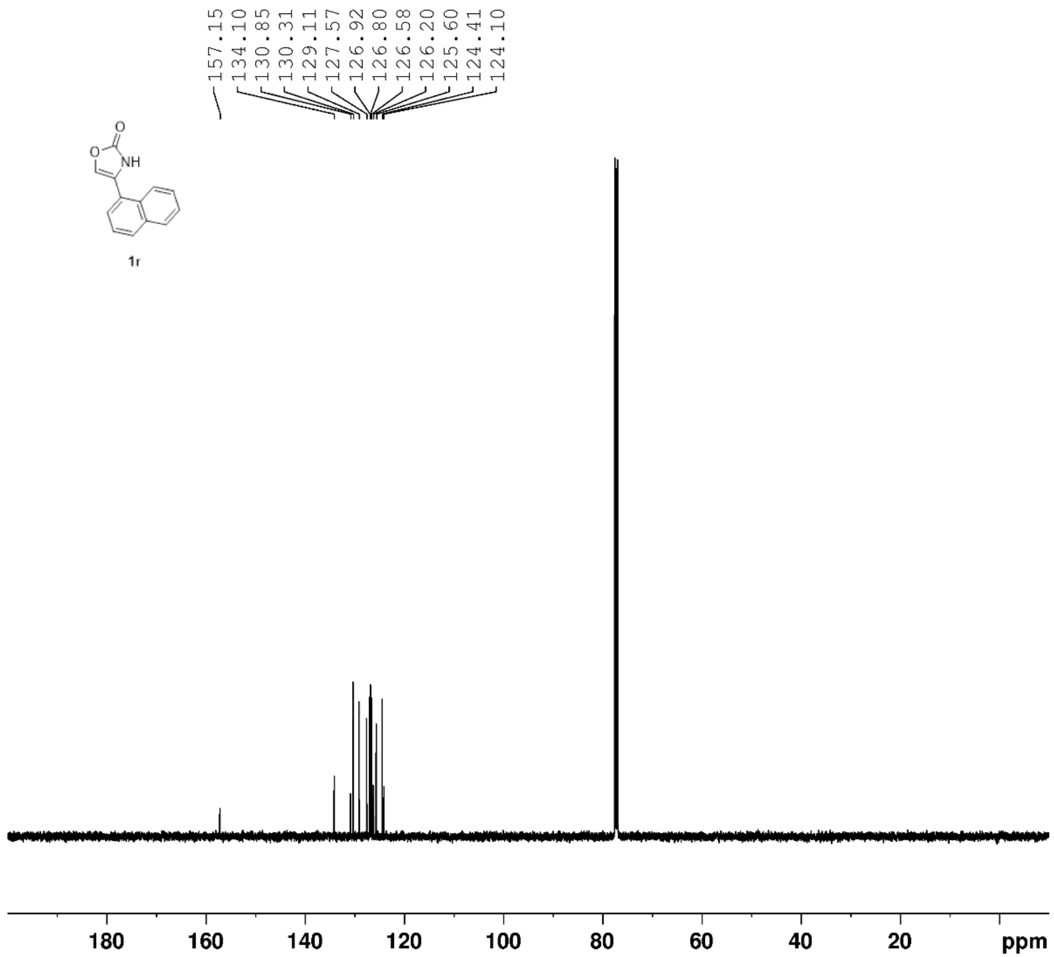
SI	65536
SF	500.1300140 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



Current Data Parameters		
NAME	500 cgy-7	
EXPNO	17	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220919	
Time	19.21	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	DMSO	
NS	256	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W
F2 - Processing parameters		
SI	32768	
SF	125.7578464	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	



Current Data Parameters	
NAME	500 cgy-7
EXPNO	76
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220815
Time	13.24 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W
F2 - Processing parameters	
SI	65536
SF	500.1300146 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



1r

Current Data Parameters

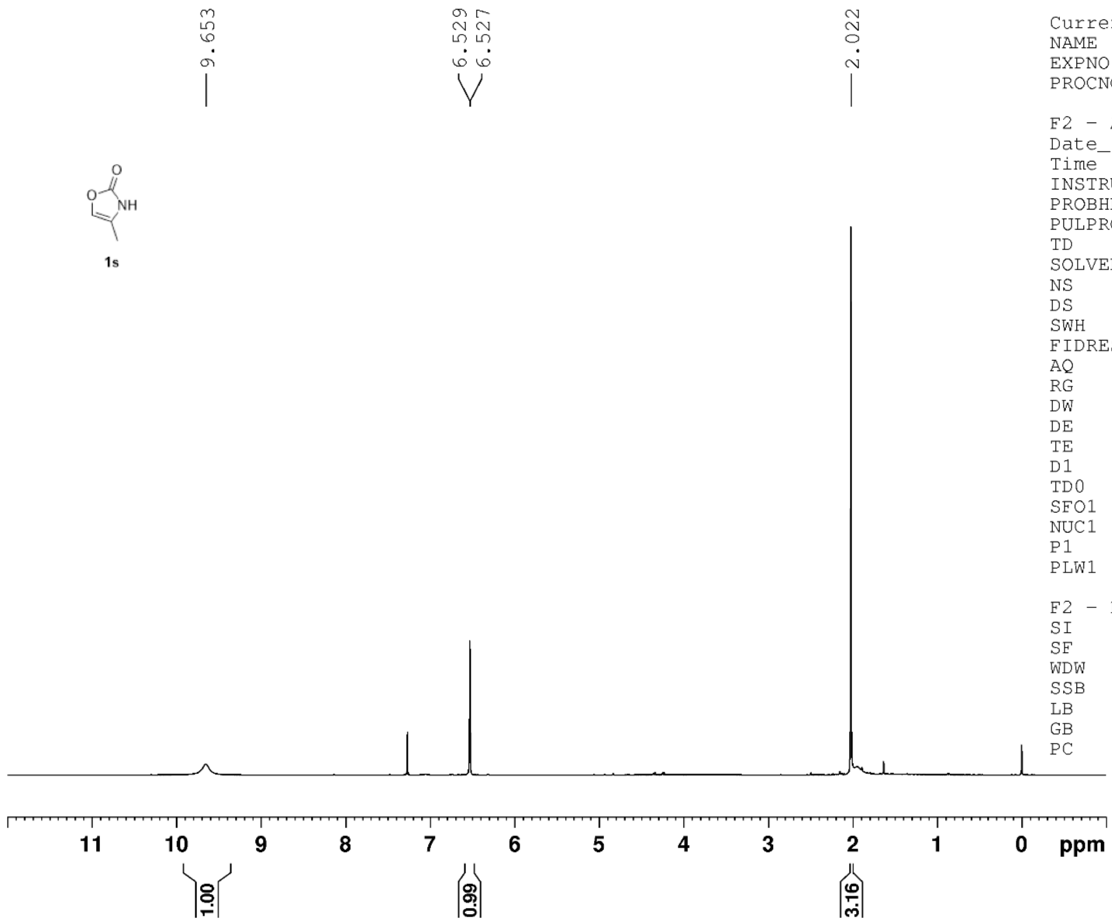
NAME	500 cgy-7	
EXPNO	77	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220815	
Time	13.46	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	400	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W

F2 - Processing parameters

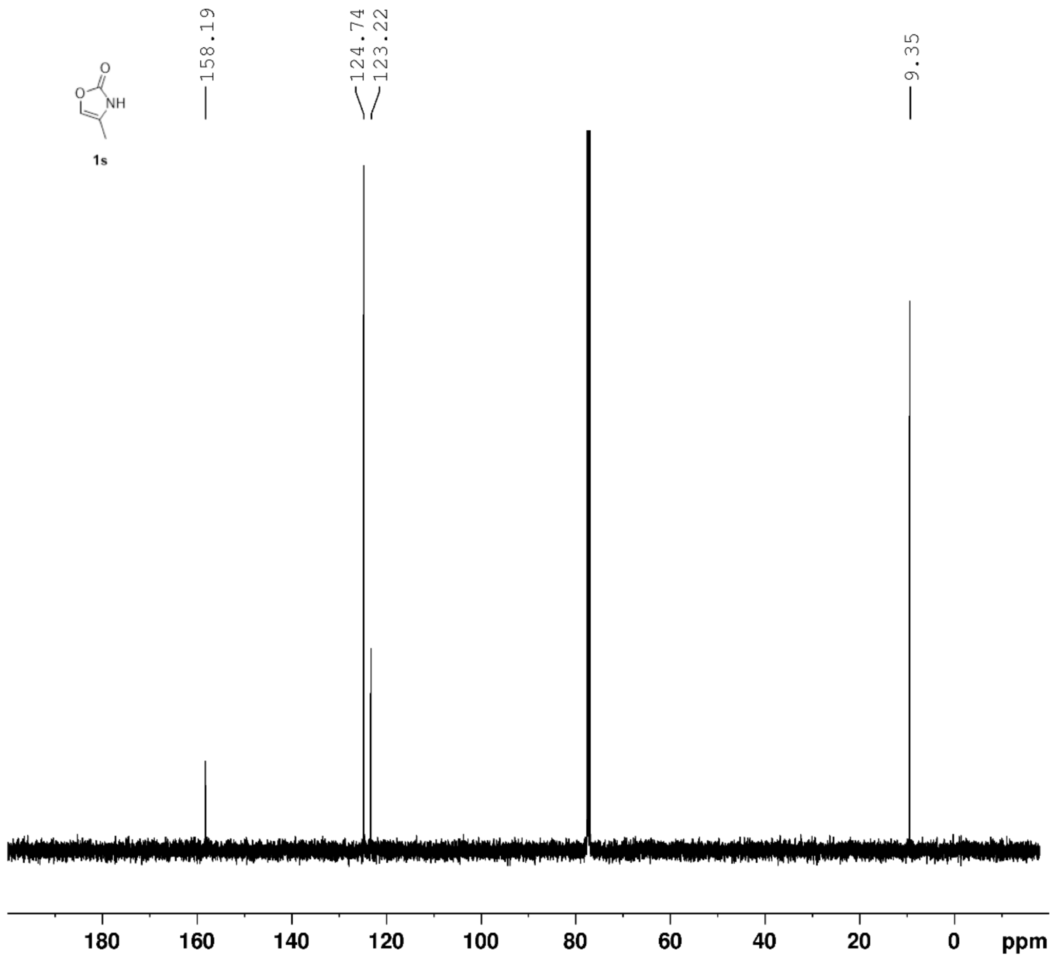
SI	32768	
SF	125.7577592	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                   8
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220815
Time                11.35 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

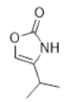
F2 - Processing parameters
SI                  65536
SF            500.1300089 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



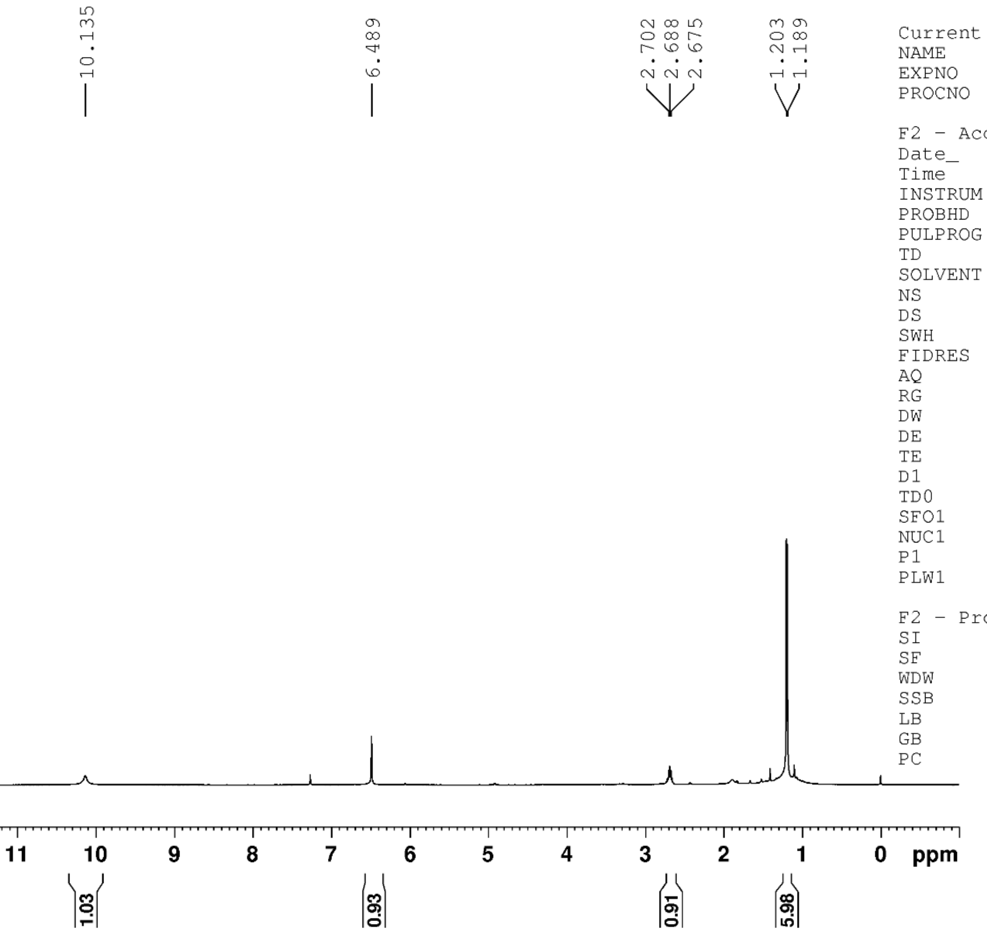

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                 9
PROCNO                1

F2 - Acquisition Parameters
Date_          20220812
Time               5.41 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG          zgpg30
TD                65536
SOLVENT           CDCl3
NS                  256
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7577595 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



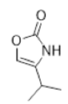
1t



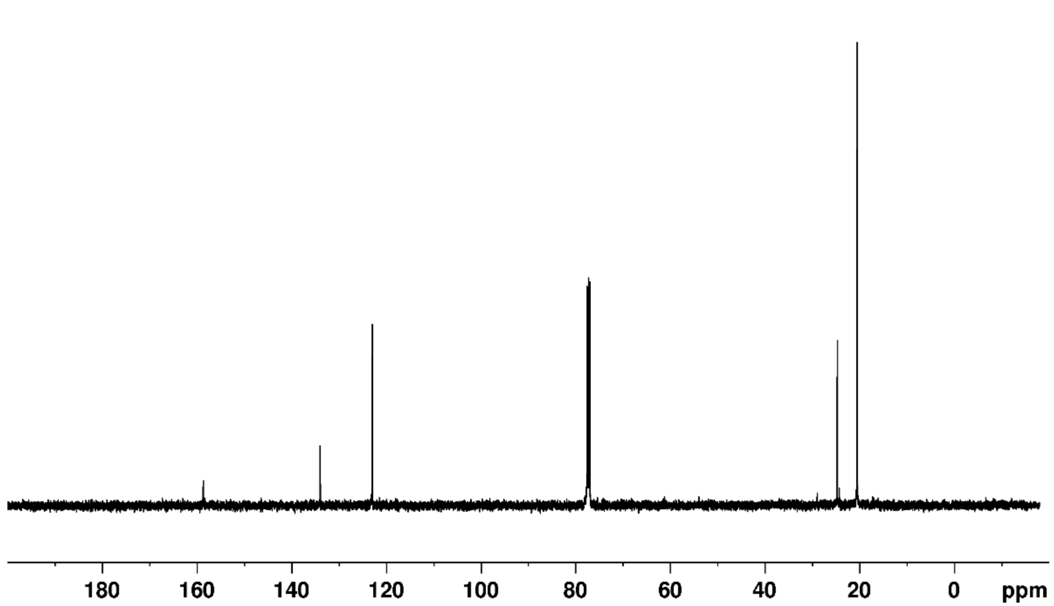

```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  20
PROCNO                  1

F2 - Acquisition Parameters
Date_           20220802
Time               19.34 h
INSTRUM            spect
PROBHD   5 mm PADUL 13C
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                    16
DS                     2
SWH            10000.000 Hz
FIDRES          0.305176 Hz
AQ             3.2767999 sec
RG                192.89
DW                50.000 usec
DE                  6.50 usec
TE                     0 K
D1            1.00000000 sec
TD0                    1
SFO1         500.1330885 MHz
NUC1                  1H
P1                 11.30 usec
PLW1         20.00000000 W

F2 - Processing parameters
SI                 65536
SF           500.1300092 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```



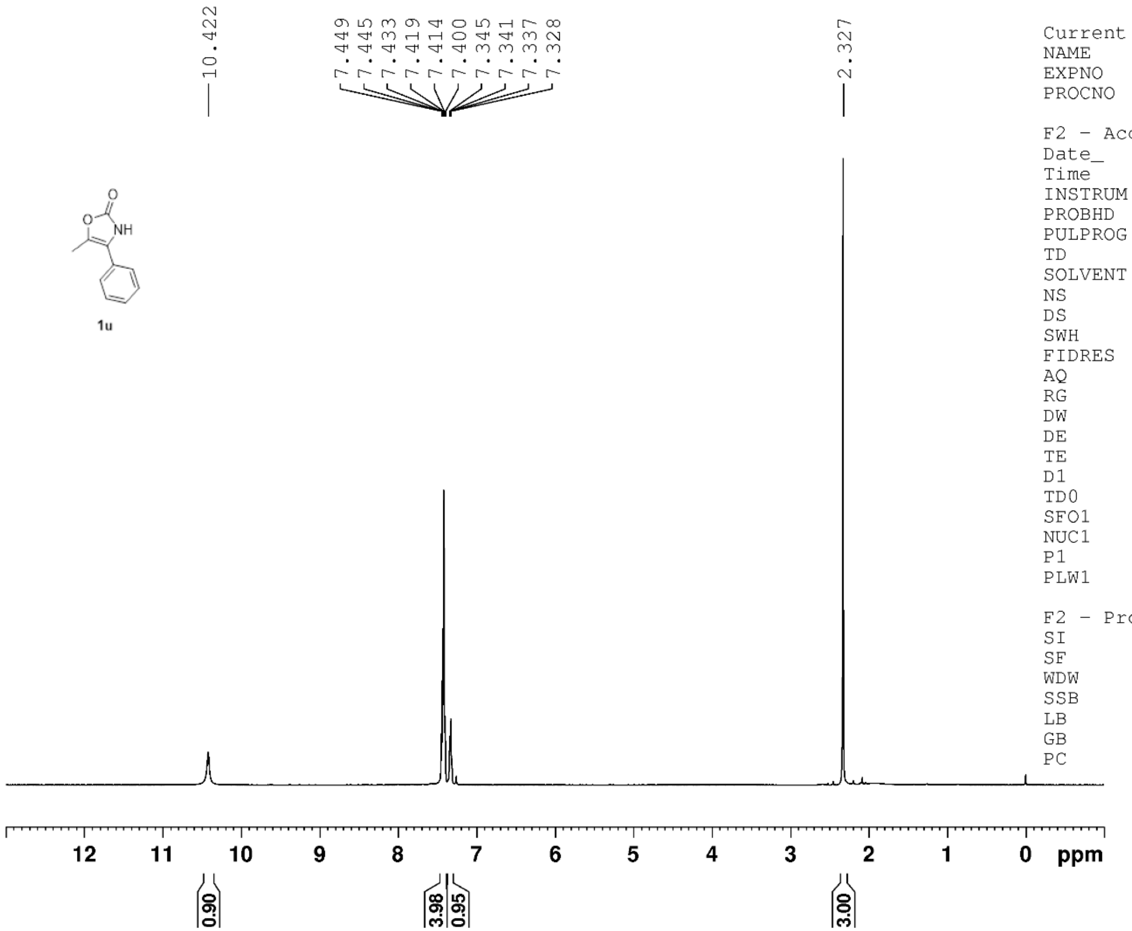
1t




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  21
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220802
Time                19.49 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG           zgpg30
TD                 65536
SOLVENT            CDCl3
NS                   256
DS                     4
SWH            29761.904 Hz
FIDRES          0.908261 Hz
AQ             1.1010048 sec
RG                192.89
DW                16.800 usec
DE                  6.50 usec
TE                     0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         125.7703637 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         80.00000000 W
SFO2         500.1320005 MHz
NUC2                  1H
CPDPRG[2         waltz16
PCPD2              80.00 usec
PLW2         20.00000000 W
PLW12         0.39903000 W
PLW13         0.25538000 W

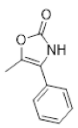
F2 - Processing parameters
SI                 32768
SF           125.7577599 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```



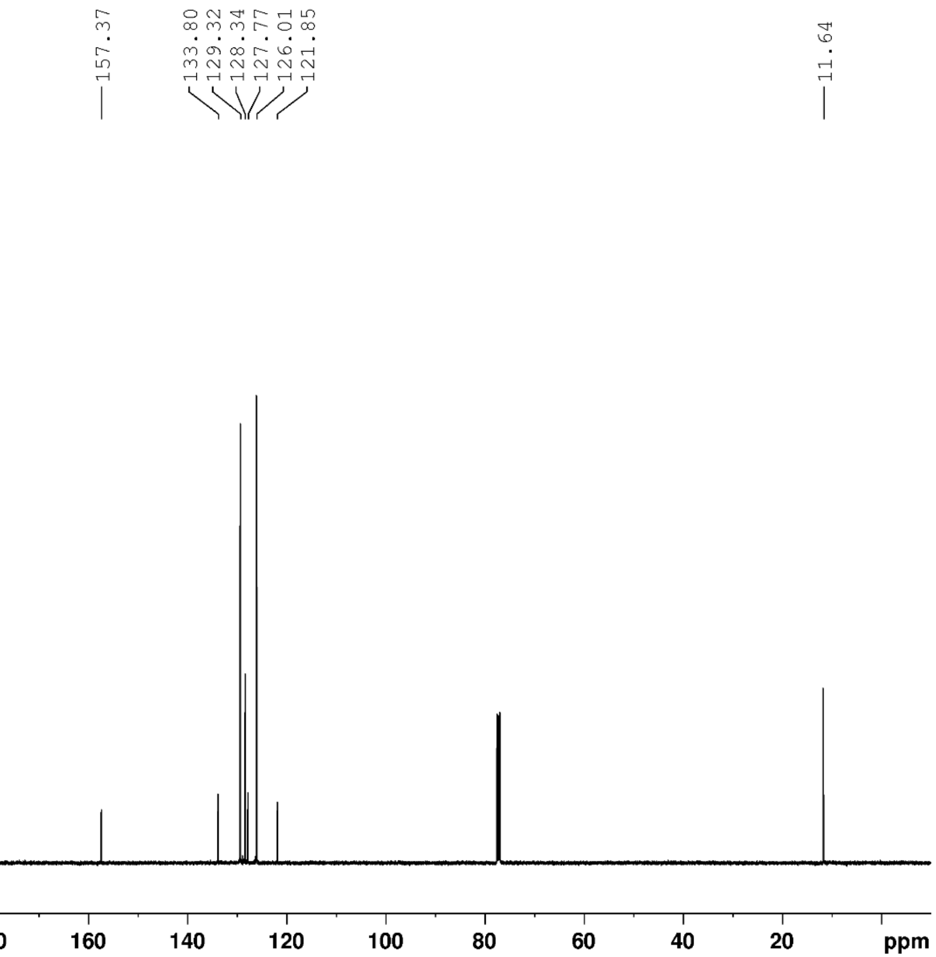

```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  84
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220816
Time                 2.23 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 171.28
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

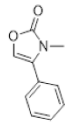
F2 - Processing parameters
SI                  65536
SF            500.1300137 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



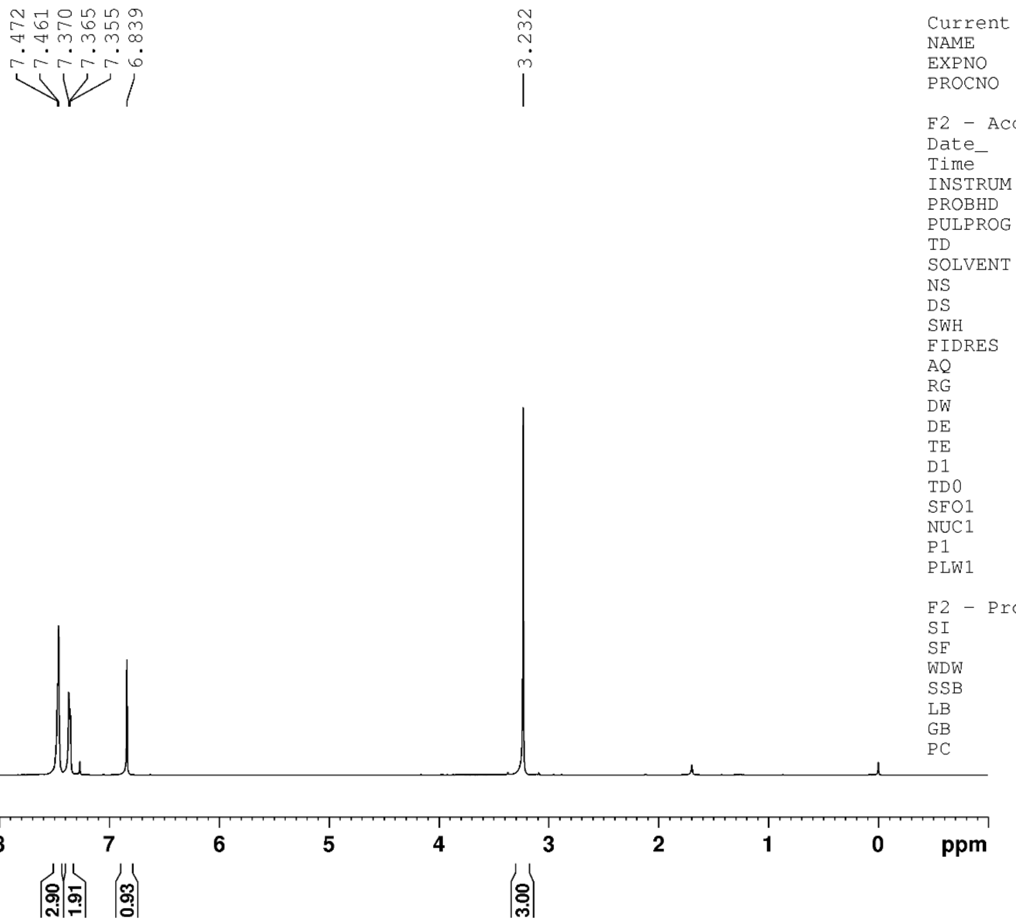
1u



Current Data Parameters		
NAME	500 cgy-7	
EXPNO	85	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220816	
Time	2.45	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	400	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W
F2 - Processing parameters		
SI	32768	
SF	125.7577618	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	



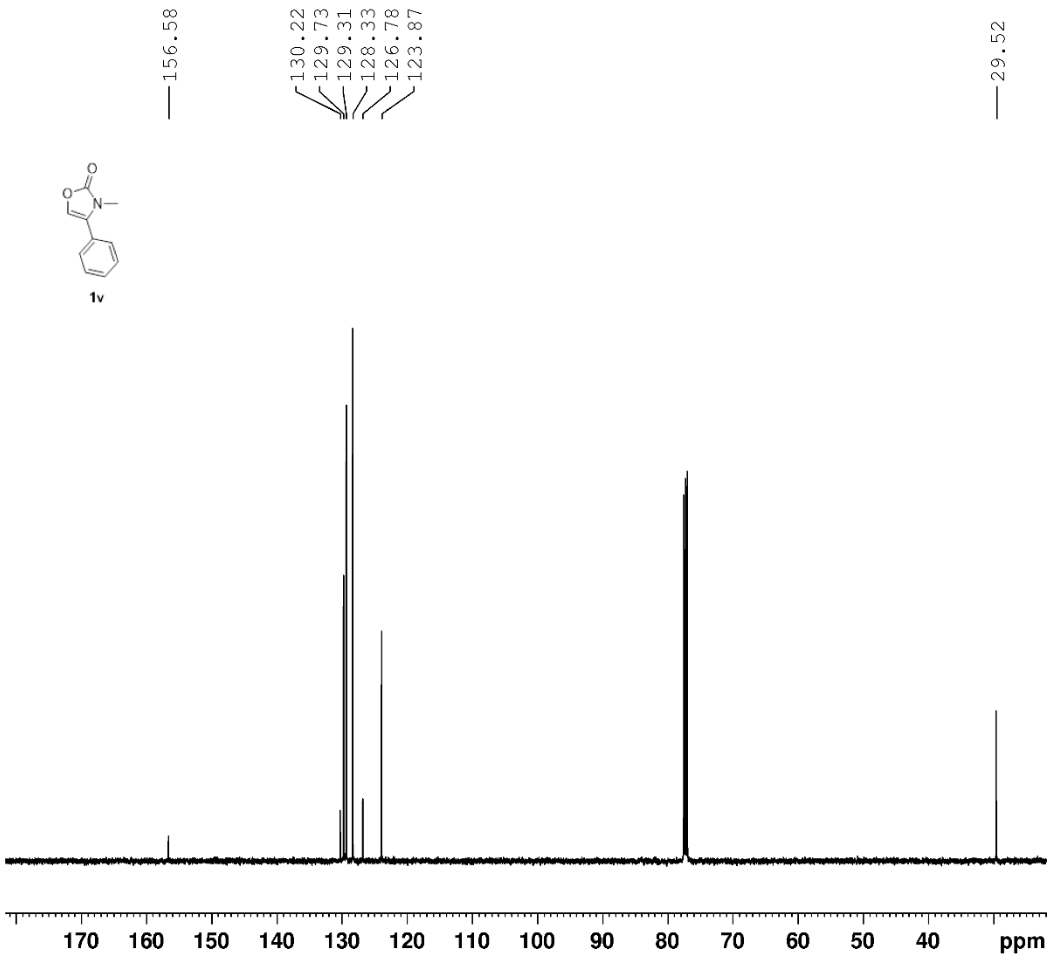
1v




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   94
PROCNO                   1

F2 - Acquisition Parameters
Date_             20221018
Time                 14.46 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

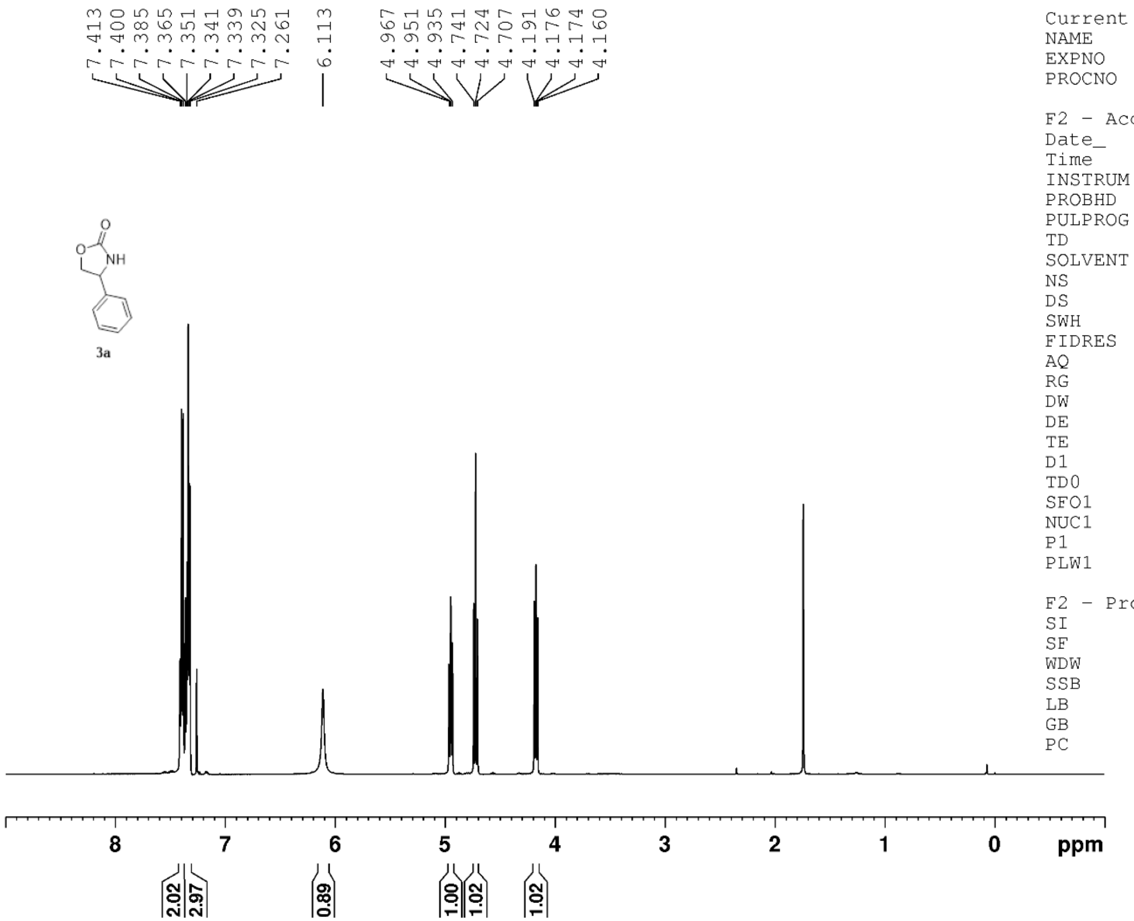
F2 - Processing parameters
SI                   65536
SF             500.1300100 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```




```
Current Data Parameters
NAME          500 cgy-7
EXPNO                95
PROCNO                1

F2 - Acquisition Parameters
Date_          20221018
Time              15.13 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG         zgpg30
TD                65536
SOLVENT           CDCl3
NS                  512
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7577622 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



Current Data Parameters

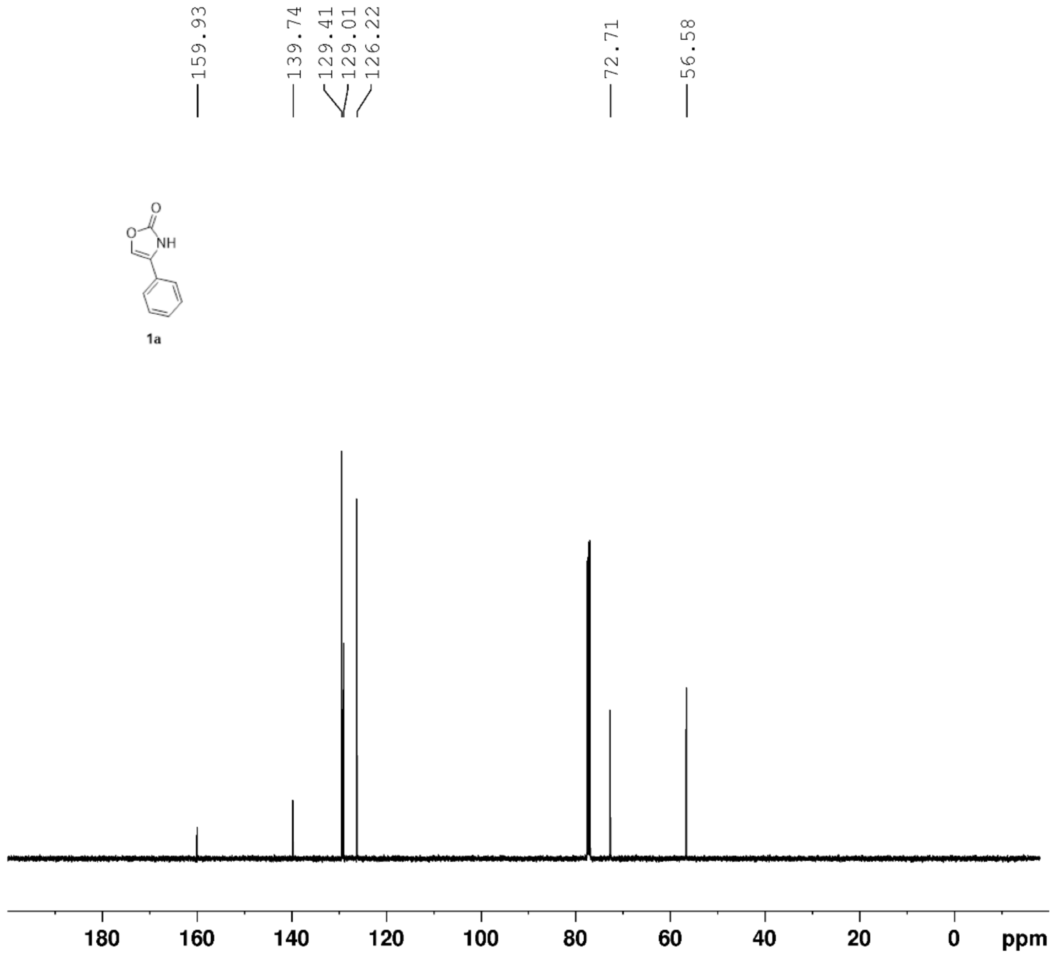
NAME	500 cgy-7
EXPNO	6
PROCNO	1

F2 - Acquisition Parameters

Date_	20220801
Time	19.52 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W

F2 - Processing parameters

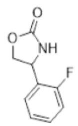
SI	65536
SF	500.1300119 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



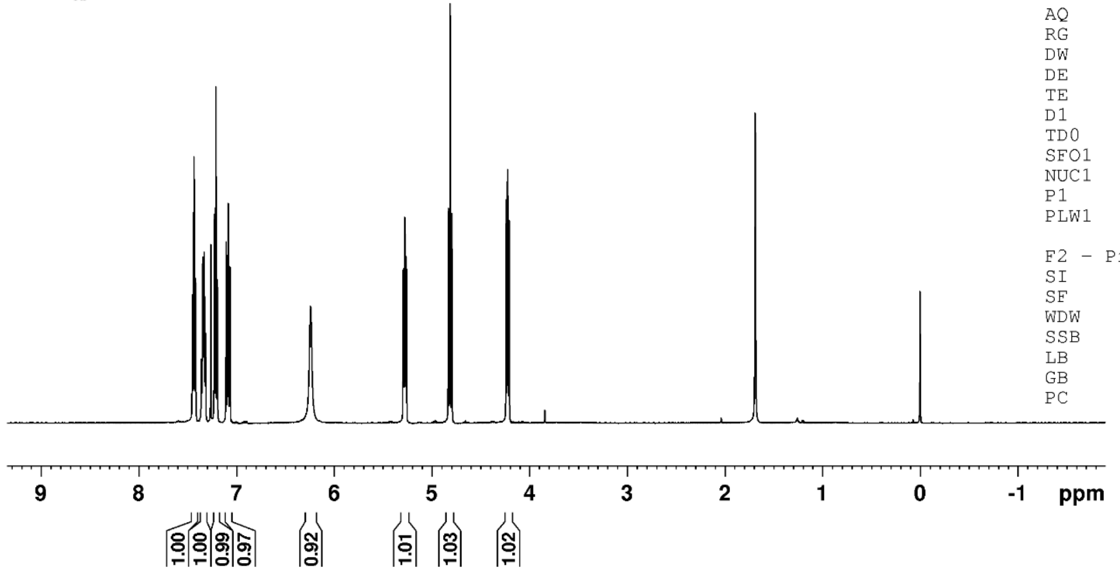

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                 7
PROCNO                1

F2 - Acquisition Parameters
Date_          20220801
Time              20.06 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG         zgpg30
TD               65536
SOLVENT          CDCl3
NS                 256
DS                   4
SWH          29761.904 Hz
FIDRES        0.908261 Hz
AQ           1.1010048 sec
RG              192.89
DW              16.800 usec
DE                6.50 usec
TE                   0 K
D1          2.00000000 sec
d11         0.03000000 sec
DELTA       1.89999998 sec
TD0                  1
SFO1       125.7703637 MHz
NUC1               13C
P1               10.00 usec
PLW1       80.00000000 W
SFO2       500.1320005 MHz
NUC2                1H
CPDPRG[2       waltz16
PCPD2            80.00 usec
PLW2       20.00000000 W
PLW12       0.39903000 W
PLW13       0.25538000 W

F2 - Processing parameters
SI               32768
SF         125.7577633 MHz
WDW                 EM
SSB                  0
LB                1.00 Hz
GB                   0
PC                1.40
```



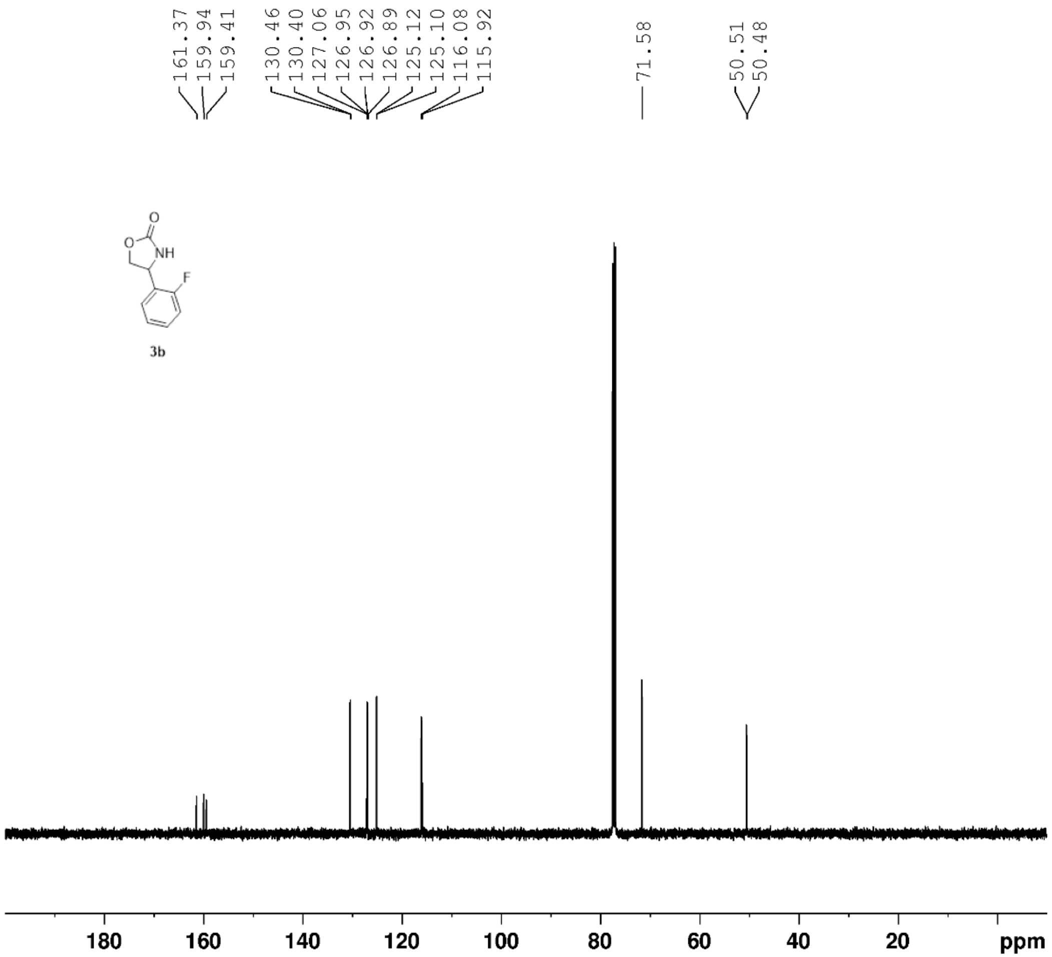
3b



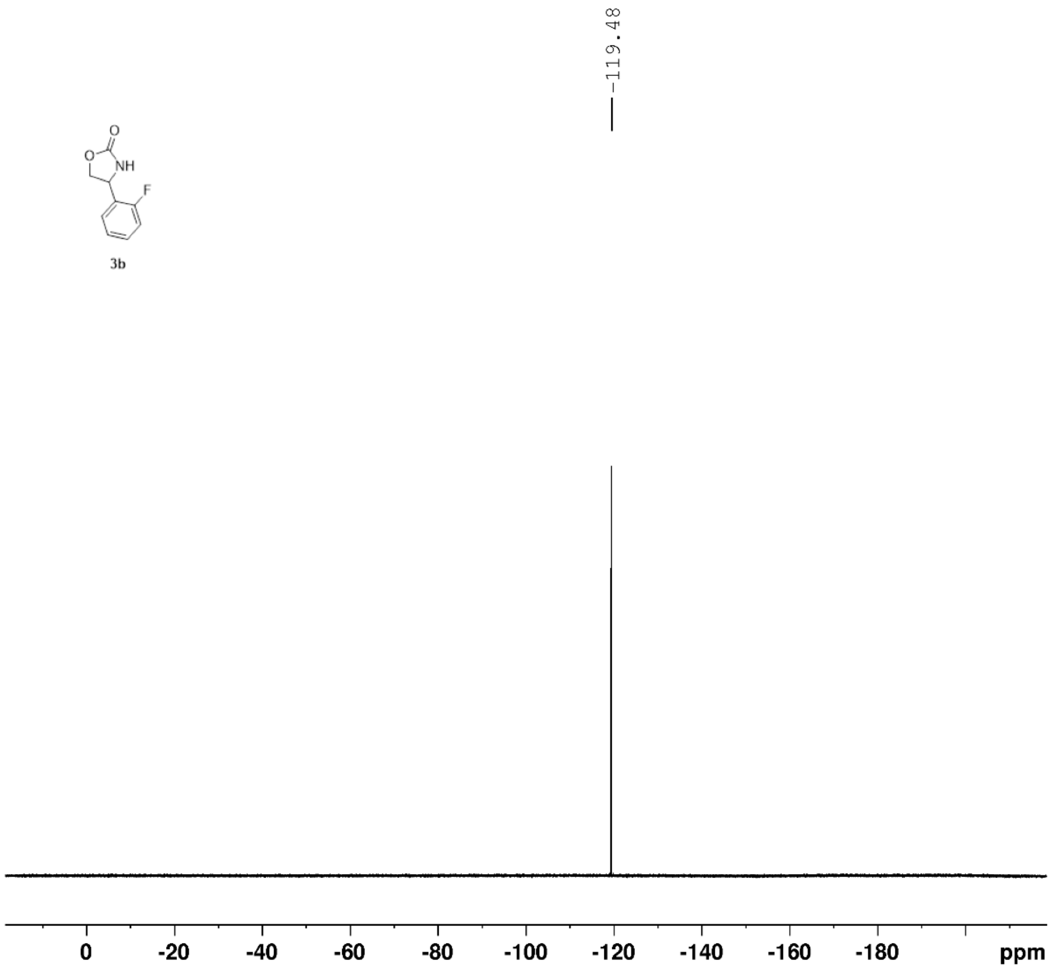
Current Data Parameters
NAME 500 cgy-7
EXPNO 35
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220812
Time 7.04 h
INSTRUM spect
PROBHD 5 mm PADUL 13C
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 10000.000 Hz
FIDRES 0.305176 Hz
AQ 3.2767999 sec
RG 192.89
DW 50.000 usec
DE 6.50 usec
TE 0 K
D1 1.00000000 sec
TD0 1
SFO1 500.1330885 MHz
NUC1 1H
P1 11.30 usec
PLW1 20.00000000 W

F2 - Processing parameters
SI 65536
SF 500.1300114 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

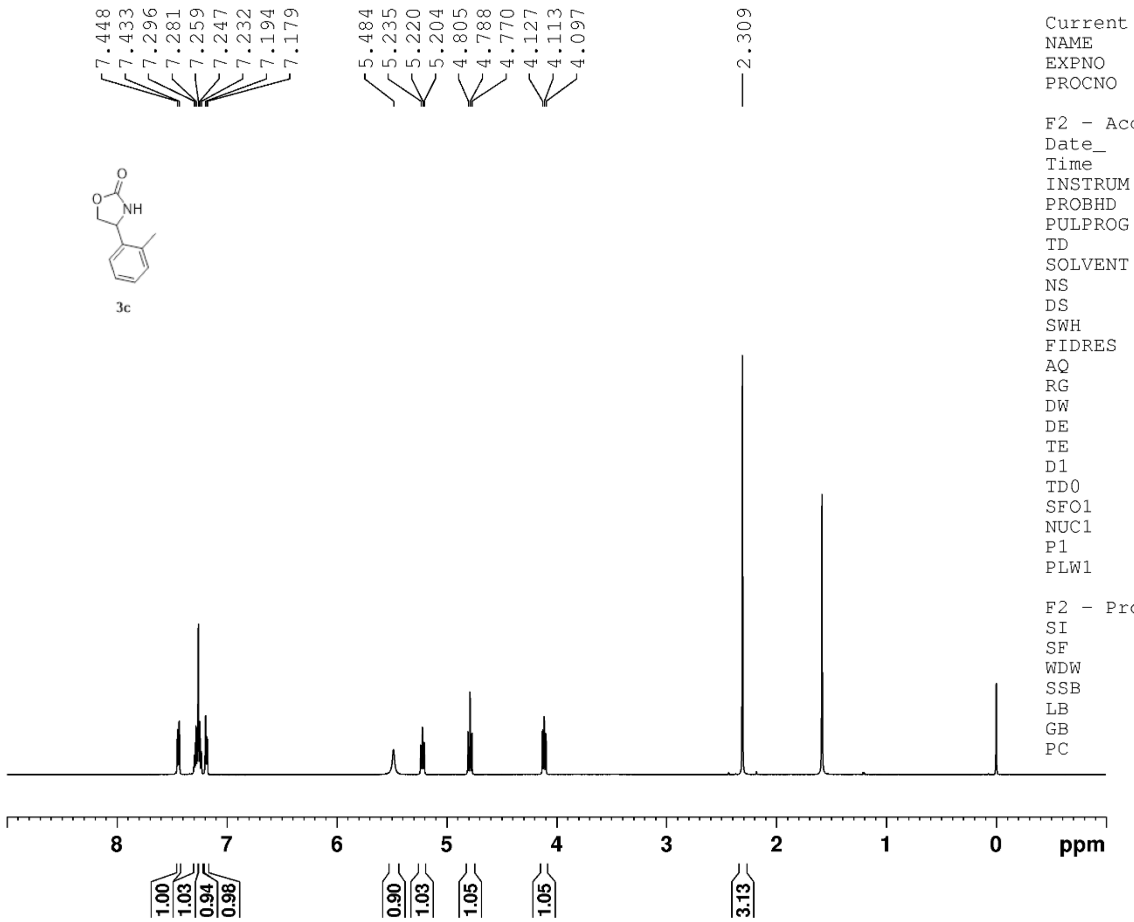


Current Data Parameters		
NAME	500 cgy-7	
EXPNO	36	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220812	
Time	7.19	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	256	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W
F2 - Processing parameters		
SI	32768	
SF	125.7577605	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	



3b

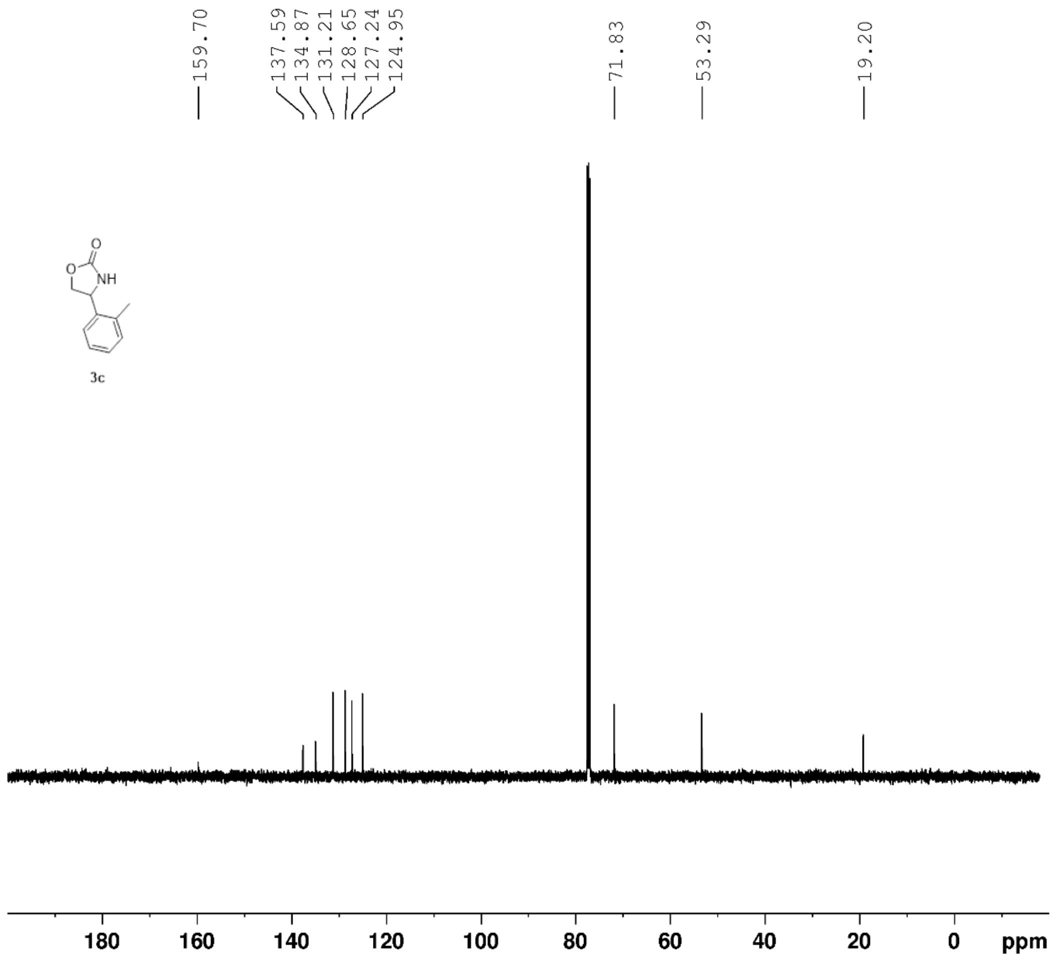
Current Data Parameters		
NAME	500 cgy-7	
EXPNO	93	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220812	
Time	21.26	h
INSTRUM	spect	
PROBHD	5 mm PABBO BB/	
PULPROG	zgfhigqn.2	
TD	131072	
SOLVENT	CDCl3	
NS	16	
DS	4	
SWH	89285.711	Hz
FIDRES	1.362392	Hz
AQ	0.7340032	sec
RG	206.33	
DW	5.600	usec
DE	6.50	usec
TE	298.2	K
D1	1.00000000	sec
d11	0.03000000	sec
d12	0.00002000	sec
TD0	1	
rdel	0.00000650	sec
SFO1	376.5642094	MHz
NUC1	19F	
P1	14.50	usec
PLW1	17.98900032	W
SFO2	400.2416010	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	90.00	usec
PLW2	12.00000000	W
PLW12	0.30294999	W
F2 - Processing parameters		
SI	65536	
SF	376.6018696	MHz
WDW	EM	
SSB	0	
LB	0.30	Hz
GB	0	
PC	1.00	




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  30
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220812
Time                 5.46 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

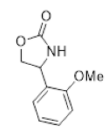
F2 - Processing parameters
SI                  65536
SF            500.1300132 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



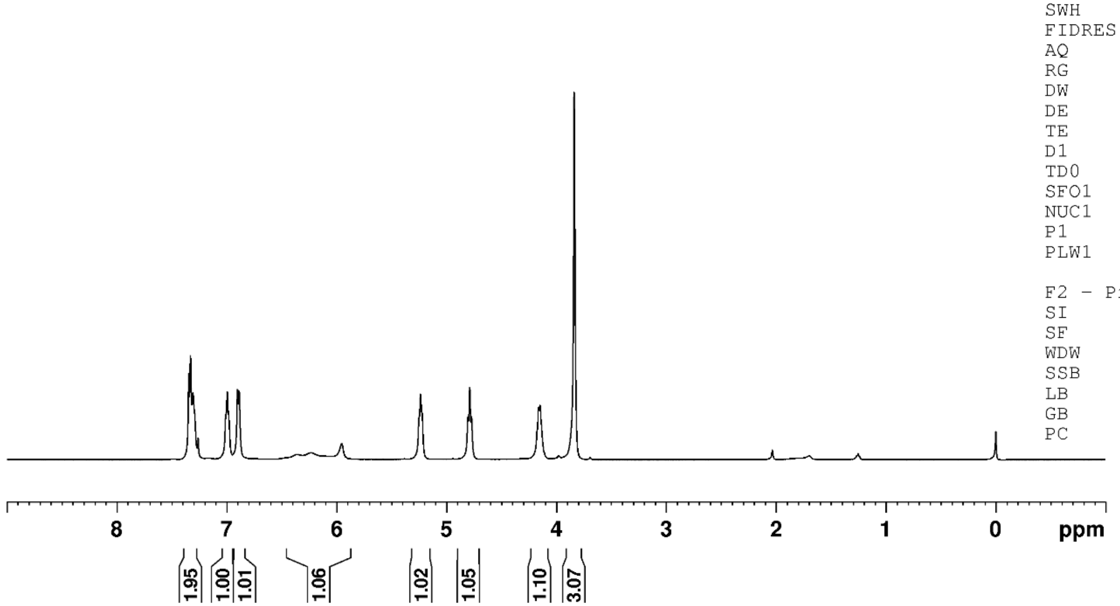

```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  31
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220812
Time                 6.00 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG           zgpg30
TD                 65536
SOLVENT             CDCl3
NS                    256
DS                      4
SWH            29761.904 Hz
FIDRES          0.908261 Hz
AQ             1.1010048 sec
RG                192.89
DW                16.800 usec
DE                  6.50 usec
TE                     0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         125.7703637 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         80.00000000 W
SFO2         500.1320005 MHz
NUC2                  1H
CPDPRG[2         waltz16
PLW2         20.00000000 W
PLW12         0.39903000 W
PLW13         0.25538000 W

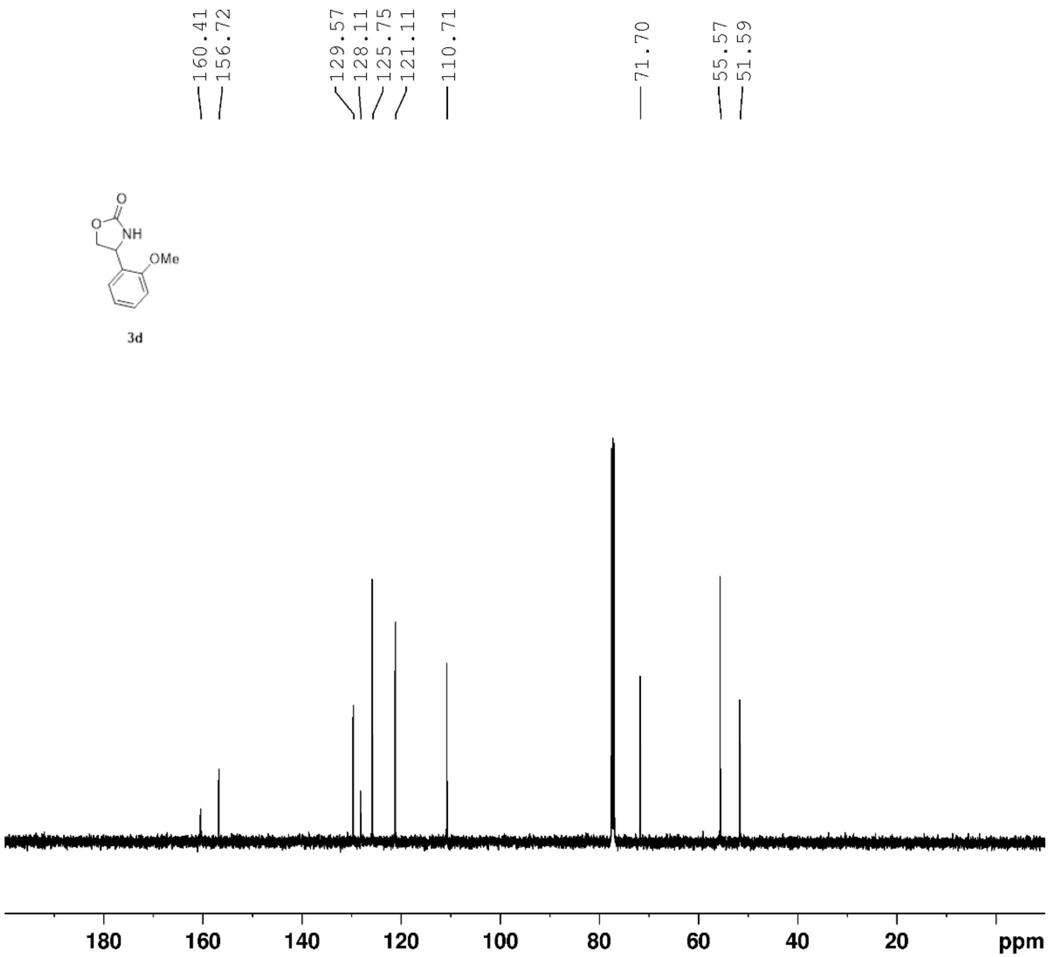
F2 - Processing parameters
SI                 32768
SF           125.7577587 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```



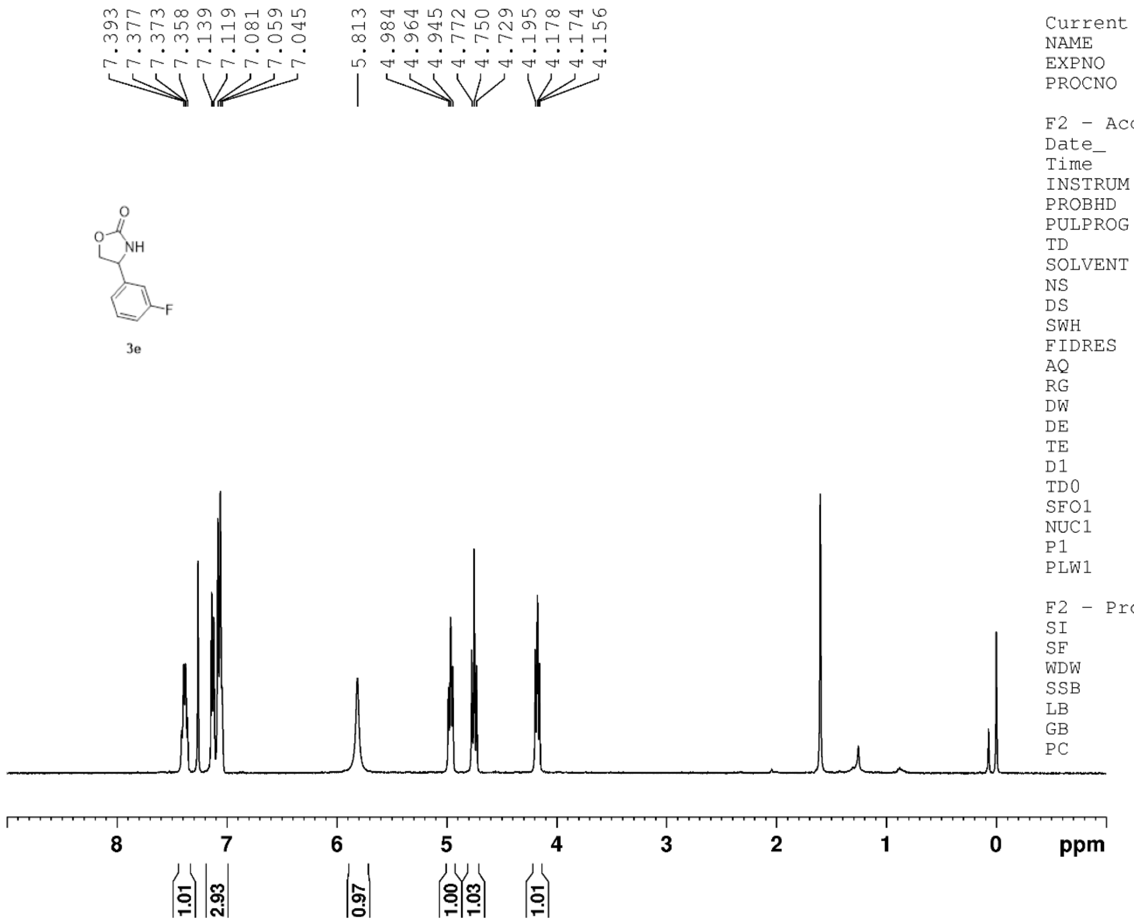
3d



Current Data Parameters	
NAME	500 cgy-7
EXPNO	82
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220921
Time	20.22 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W
F2 - Processing parameters	
SI	65536
SF	500.1300131 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



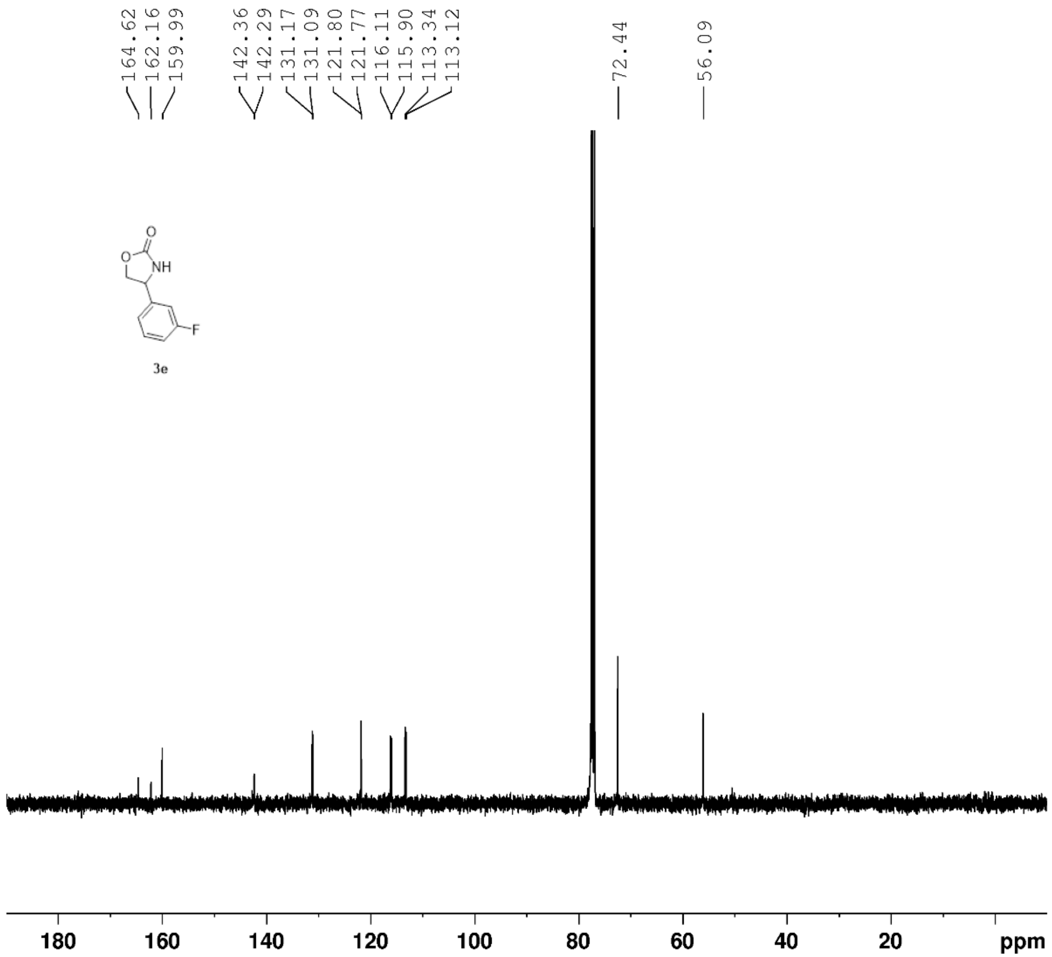
Current Data Parameters	
NAME	500 cgy-7
EXPNO	83
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220922
Time	11.23 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	194
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	1.1010048 sec
RG	192.89
DW	16.800 usec
DE	6.50 usec
TE	0 K
D1	2.00000000 sec
d11	0.03000000 sec
DELTA	1.89999998 sec
TD0	1
SFO1	125.7703637 MHz
NUC1	13C
P1	10.00 usec
PLW1	80.00000000 W
SFO2	500.1320005 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	80.00 usec
PLW2	20.00000000 W
PLW12	0.39903000 W
PLW13	0.25538000 W
F2 - Processing parameters	
SI	32768
SF	125.7577650 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40




```
Current Data Parameters
NAME              500 cgy-7
EXPNO                    40
PROCNO                    1

F2 - Acquisition Parameters
Date_              20221023
Time                  16.57 h
INSTRUM               spect
PROBHD   5 mm PABBO BB/
PULPROG                zg30
TD                    32768
SOLVENT               CDCl3
NS                       16
DS                        0
SWH                8012.820 Hz
FIDRES             0.489064 Hz
AQ                2.0447233 sec
RG                   206.33
DW                   62.400 usec
DE                     6.50 usec
TE                    298.0 K
D1               2.00000000 sec
TD0                       1
SFO1            400.2424716 MHz
NUC1                     1H
P1                    14.30 usec
PLW1            12.00000000 W

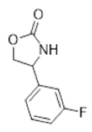
F2 - Processing parameters
SI                    65536
SF              400.2400087 MHz
WDW                      EM
SSB                       0
LB                     0.30 Hz
GB                        0
PC                     1.00
```

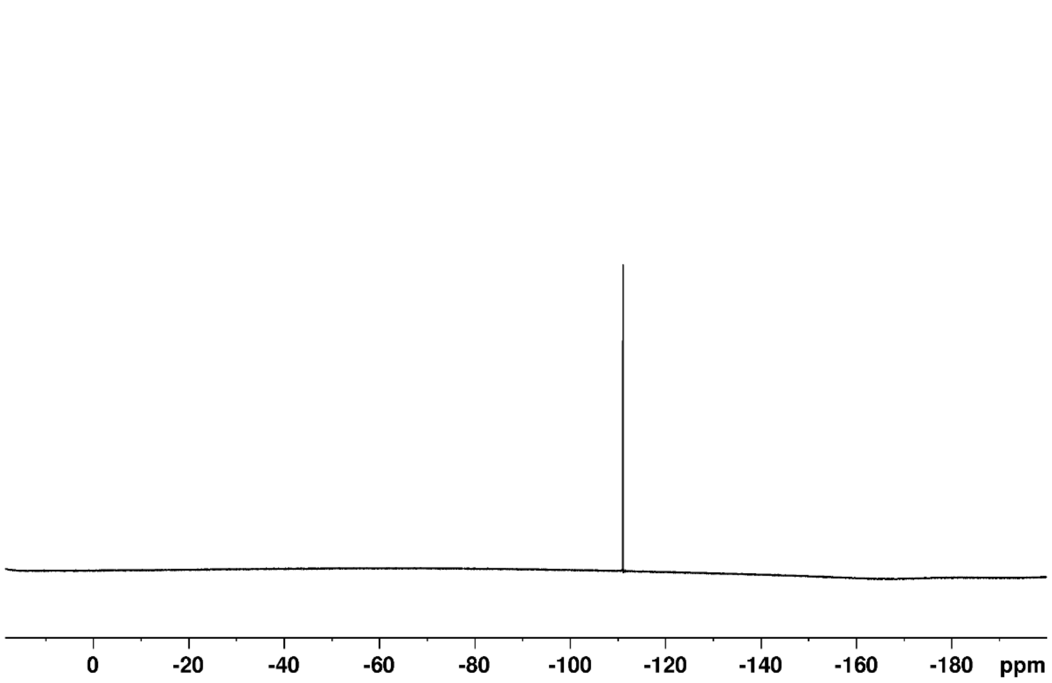



```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  41
PROCNO                  1

F2 - Acquisition Parameters
Date_            20221024
Time                12.01 h
INSTRUM             spect
PROBHD   5 mm PABBO BB/
PULPROG           zgpg30
TD                 65536
SOLVENT            CDCl3
NS                   514
DS                     4
SWH            24038.461 Hz
FIDRES          0.733596 Hz
AQ             1.3631488 sec
RG                206.33
DW                20.800 usec
DE                  6.50 usec
TE                 298.0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         100.6504916 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         54.00000000 W
SFO2         400.2416010 MHz
NUC2                  1H
CPDPRG[2         waltz16
PCPD2              90.00 usec
PLW2         12.00000000 W
PLW12         0.30294999 W
PLW13         0.24539000 W

F2 - Processing parameters
SI                 32768
SF           100.6404103 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```

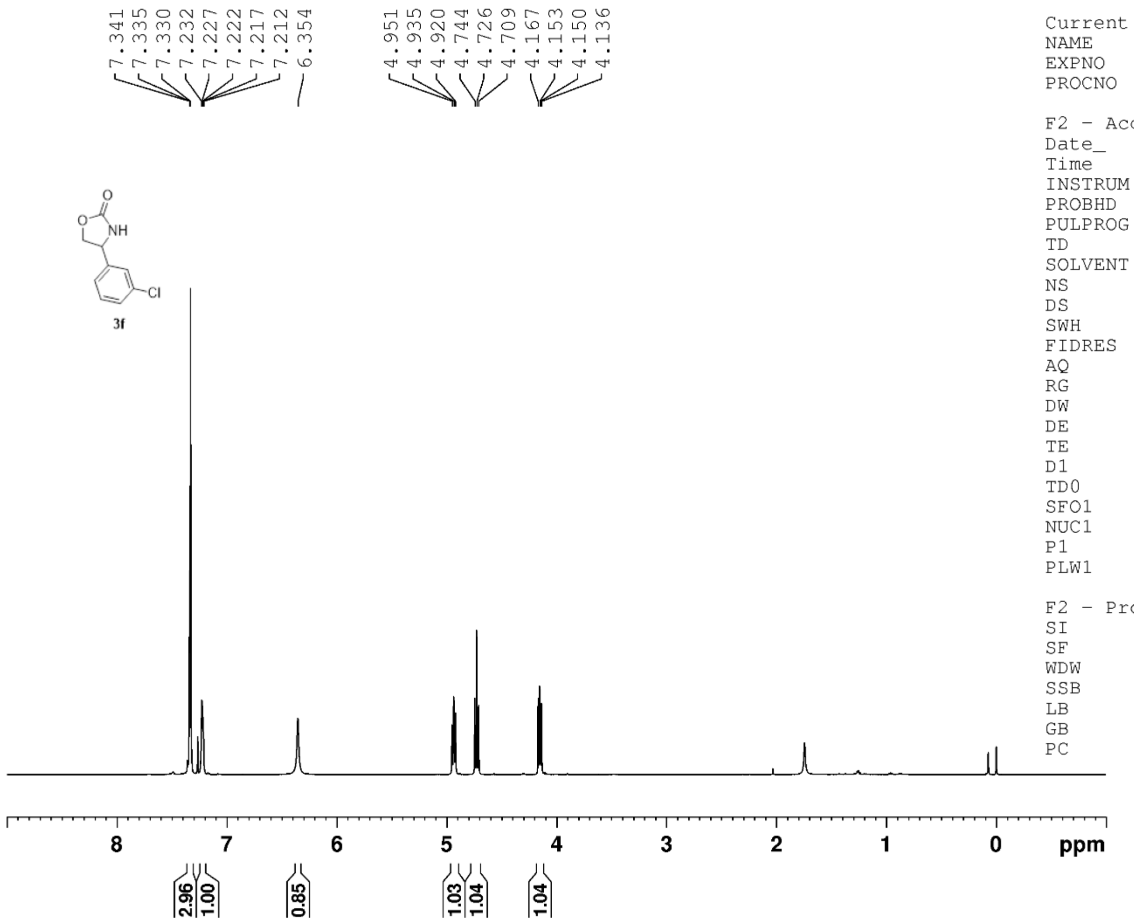

3e



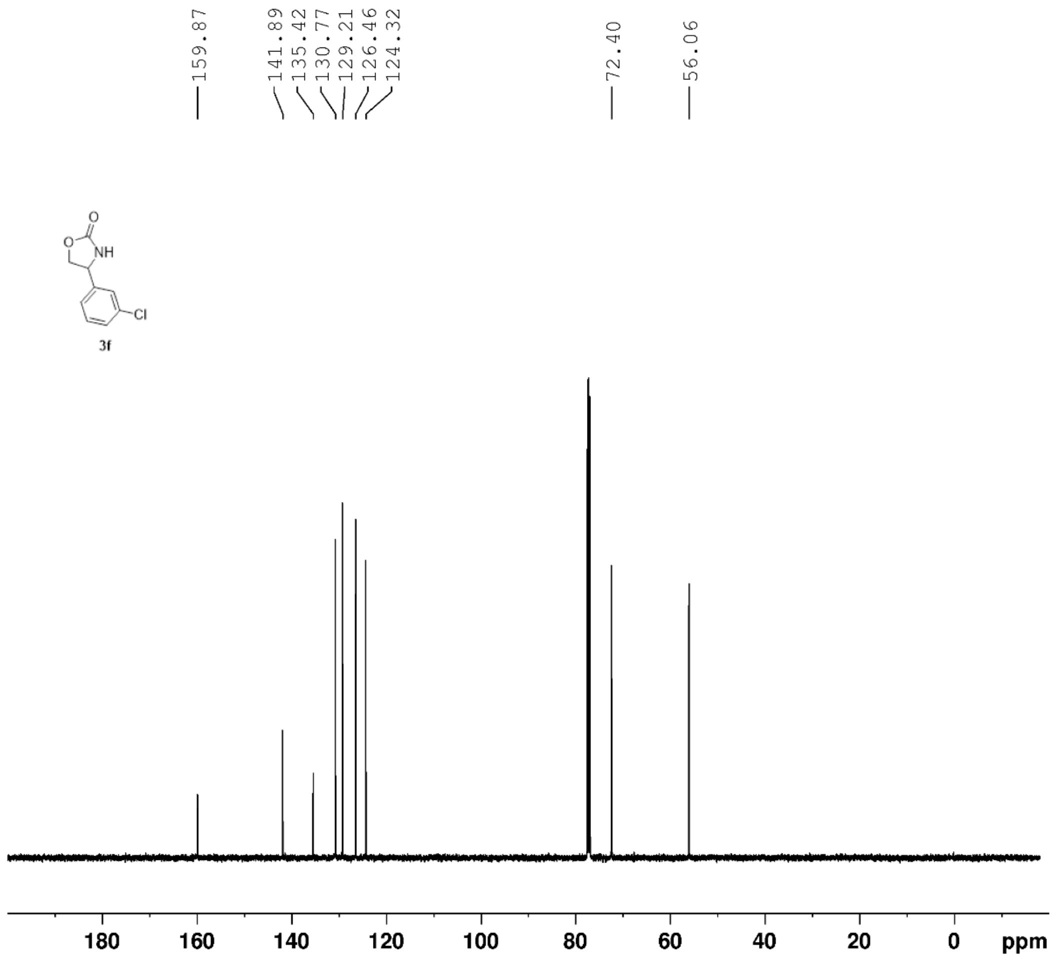

```
Current Data Parameters
NAME              500 cgy-7
EXPNO                    42
PROCNO                    1

F2 - Acquisition Parameters
Date_              20221023
Time                  16.51 h
INSTRUM               spect
PROBHD   5 mm PABBO BB/
PULPROG          zgfhigqn.2
TD                   131072
SOLVENT               CDCl3
NS                       16
DS                        4
SWH              89285.711 Hz
FIDRES            1.362392 Hz
AQ               0.7340032 sec
RG                   206.33
DW                    5.600 usec
DE                     6.50 usec
TE                    298.0 K
D1               1.00000000 sec
d11              0.03000000 sec
d12              0.00002000 sec
TD0                       1
rdel             0.00000650 sec
SFO1           376.5642094 MHz
NUC1                    19F
P1                    14.50 usec
PLW1            17.98900032 W
SFO2           400.2416010 MHz
NUC2                     1H
CPDPRG[2            waltz16
PCPD2                 90.00 usec
PLW2            12.00000000 W
PLW12            0.30294999 W

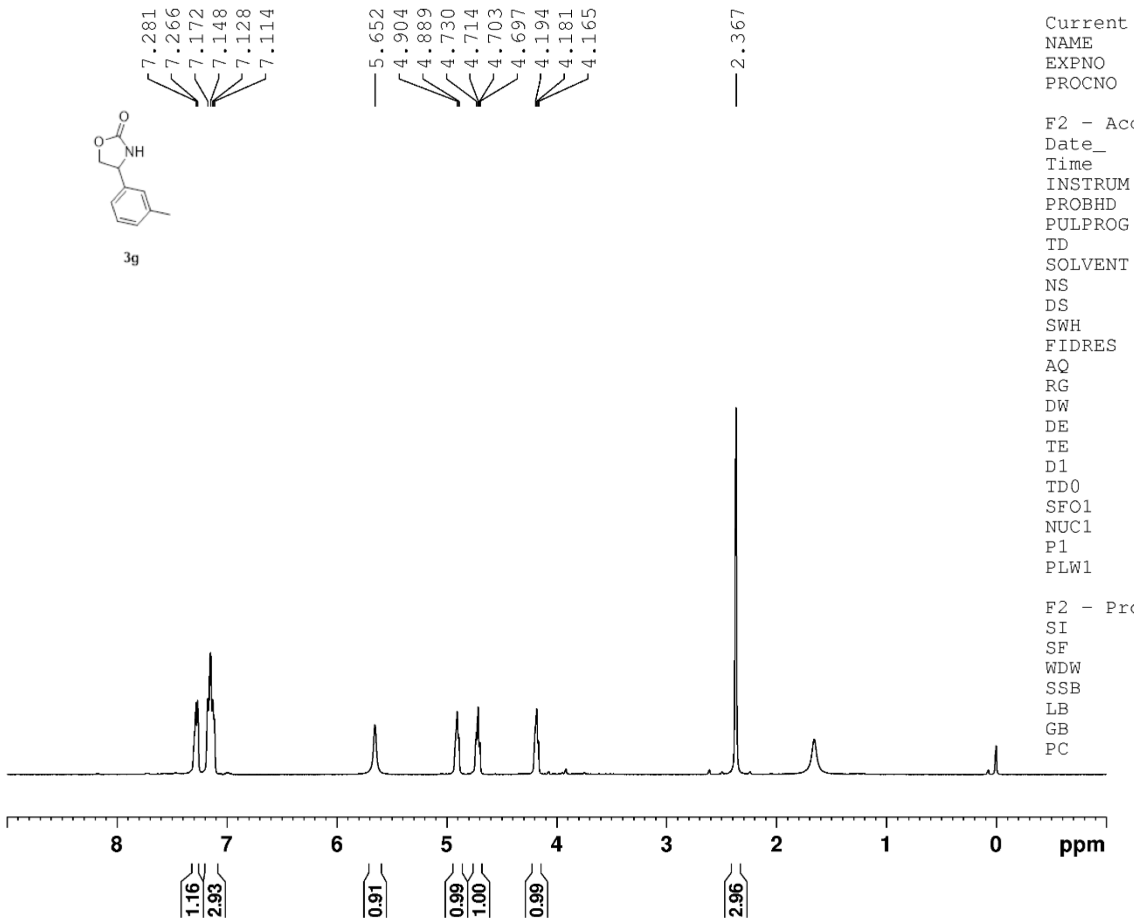
F2 - Processing parameters
SI                    65536
SF             376.6018696 MHz
WDW                      EM
SSB                       0
LB                     0.30 Hz
GB                        0
PC                     1.00
```



Current Data Parameters	
NAME	500 cgy-7
EXPNO	51
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220812
Time	22.31 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W
F2 - Processing parameters	
SI	65536
SF	500.1300105 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



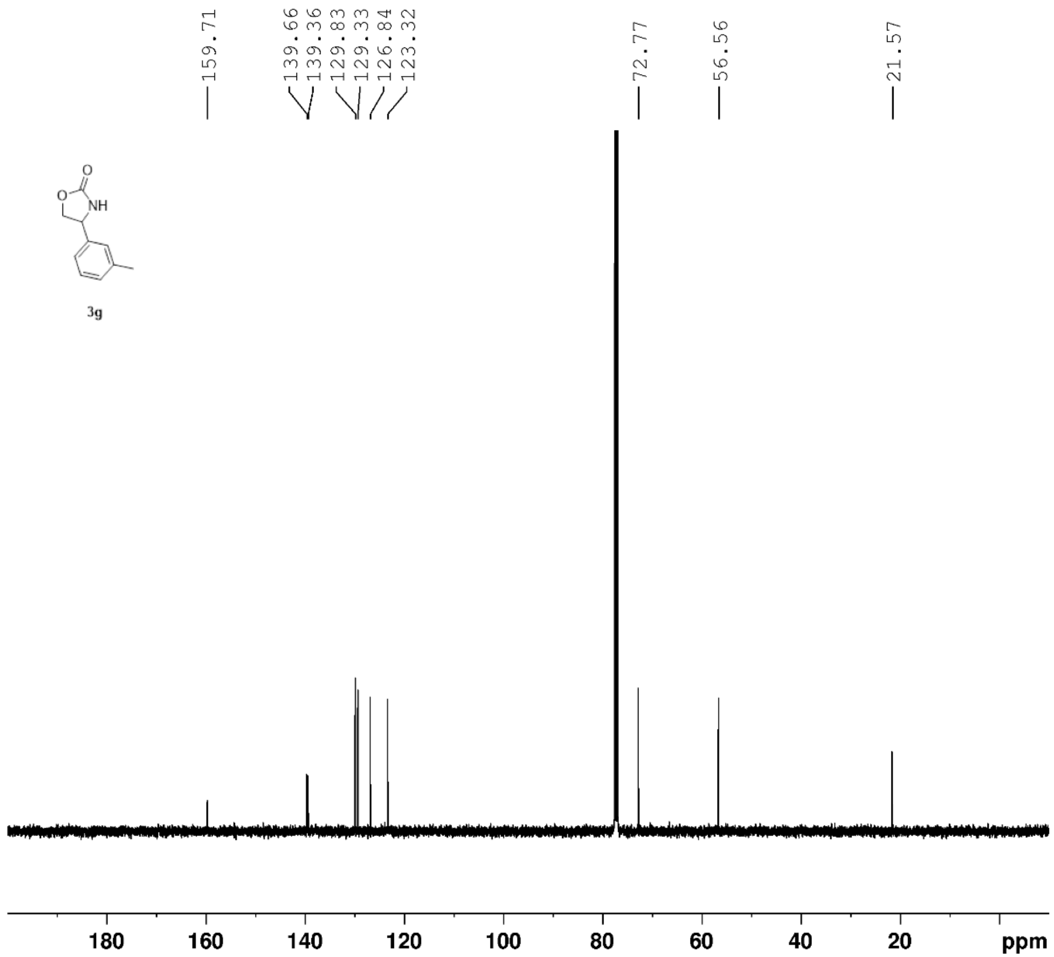
Current Data Parameters		
NAME	500 cgy-7	
EXPNO	52	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220812	
Time	22.53	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	400	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W
F2 - Processing parameters		
SI	32768	
SF	125.7577621	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  62
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220813
Time                23.29 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

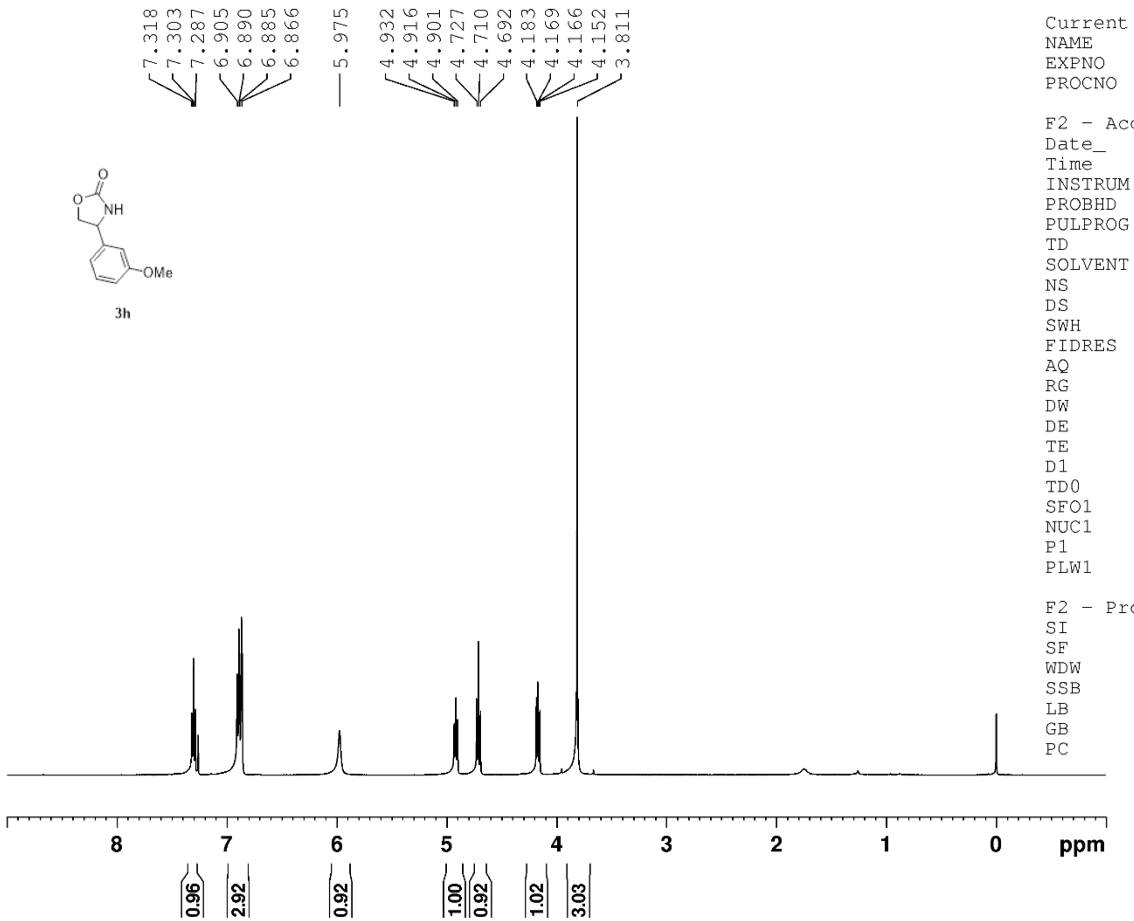
F2 - Processing parameters
SI                  65536
SF            500.1300128 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  63
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220813
Time                23.51 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG           zgpg30
TD                  65536
SOLVENT             CDCl3
NS                    400
DS                      4
SWH             29761.904 Hz
FIDRES           0.908261 Hz
AQ              1.1010048 sec
RG                 192.89
DW                 16.800 usec
DE                   6.50 usec
TE                      0 K
D1             2.00000000 sec
d11            0.03000000 sec
DELTA          1.89999998 sec
TD0                     1
SFO1          125.7703637 MHz
NUC1                  13C
P1                  10.00 usec
PLW1          80.00000000 W
SFO2          500.1320005 MHz
NUC2                   1H
CPDPRG[2          waltz16
PCPD2               80.00 usec
PLW2          20.00000000 W
PLW12          0.39903000 W
PLW13          0.25538000 W

F2 - Processing parameters
SI                  32768
SF            125.7577603 MHz
WDW                    EM
SSB                     0
LB                   1.00 Hz
GB                      0
PC                   1.40
```



Current Data Parameters

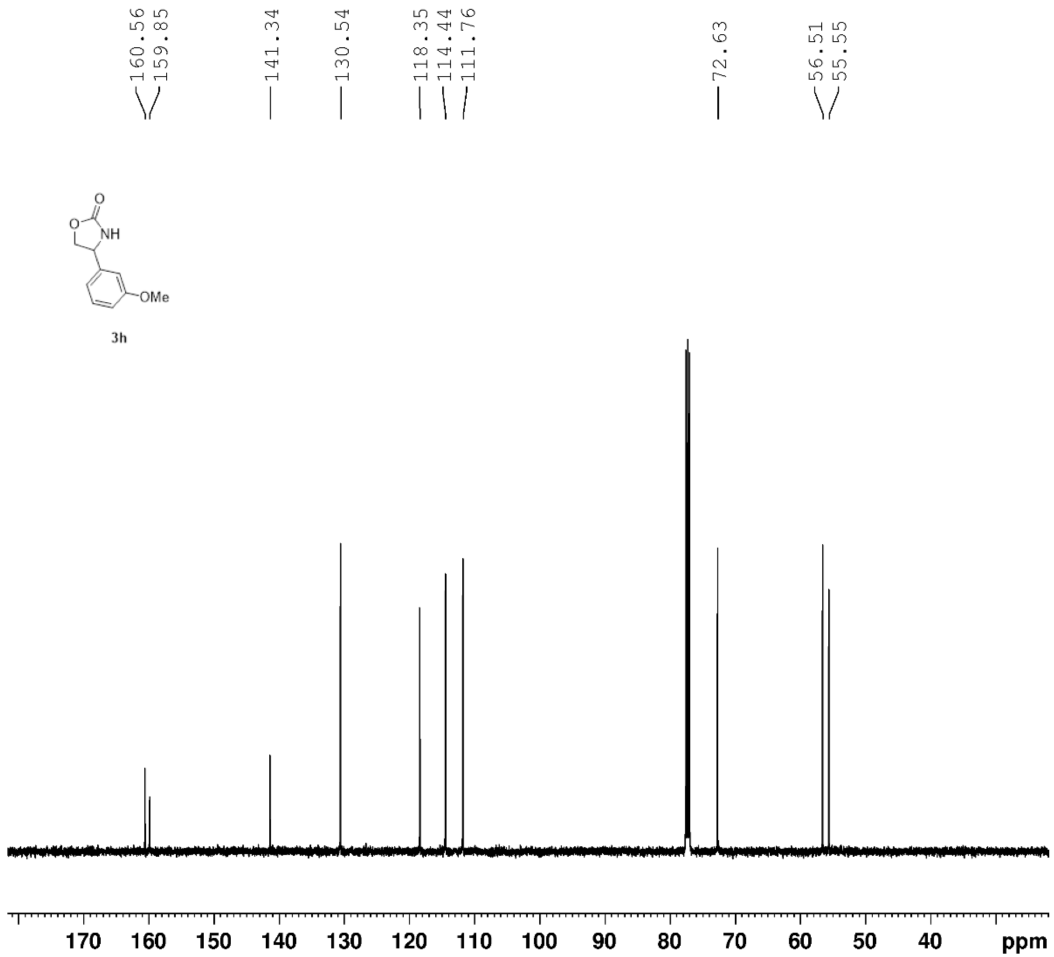
NAME	500 cgy-7
EXPNO	90
PROCNO	1

F2 - Acquisition Parameters

Date_	20220921
Time	20.54 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W

F2 - Processing parameters

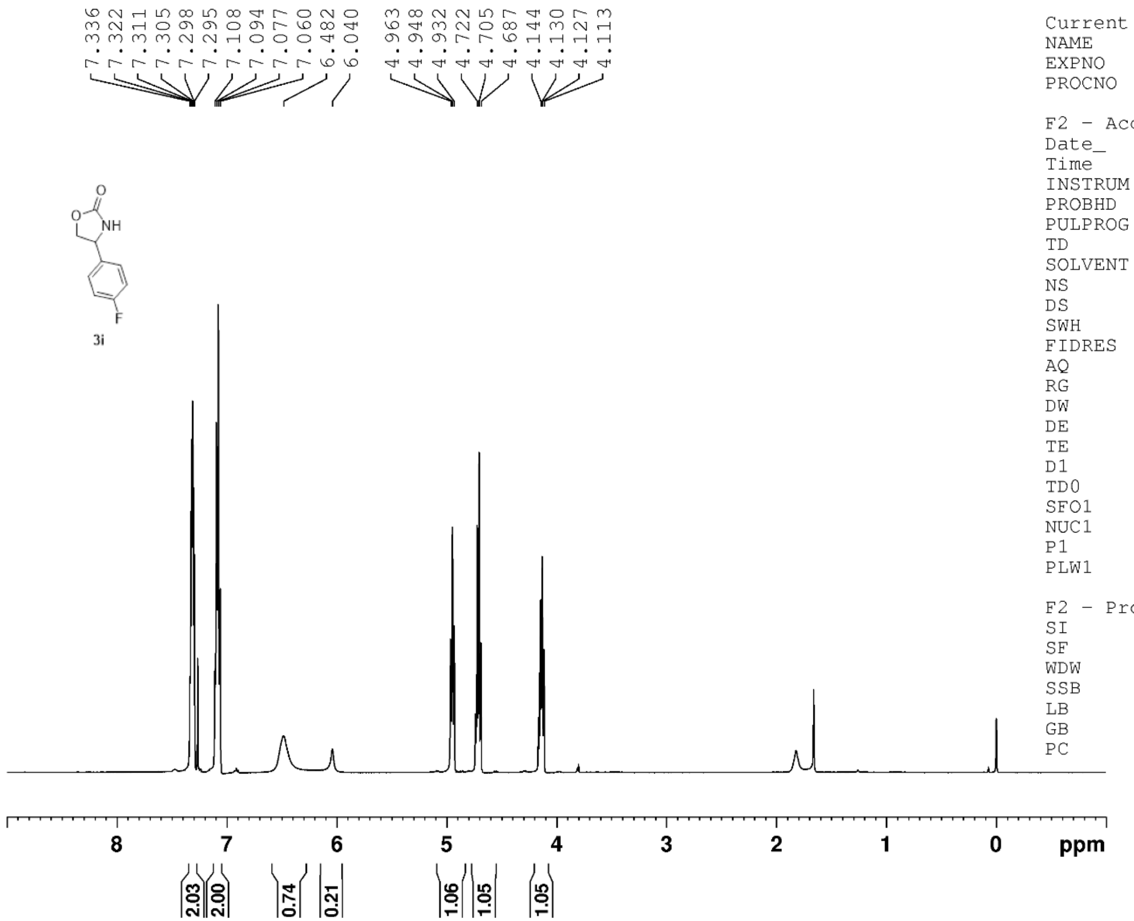
SI	65536
SF	500.1300121 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   91
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220921
Time                 21.22 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG            zgpg30
TD                   65536
SOLVENT              CDCl3
NS                     512
DS                       4
SWH              29761.904 Hz
FIDRES            0.908261 Hz
AQ               1.1010048 sec
RG                  192.89
DW                  16.800 usec
DE                    6.50 usec
TE                       0 K
D1              2.00000000 sec
d11             0.03000000 sec
DELTA           1.89999998 sec
TD0                      1
SFO1          125.7703637 MHz
NUC1                   13C
P1                   10.00 usec
PLW1           80.00000000 W
SFO2          500.1320005 MHz
NUC2                    1H
CPDPRG[2           waltz16
PCPD2                80.00 usec
PLW2           20.00000000 W
PLW12           0.39903000 W
PLW13           0.25538000 W

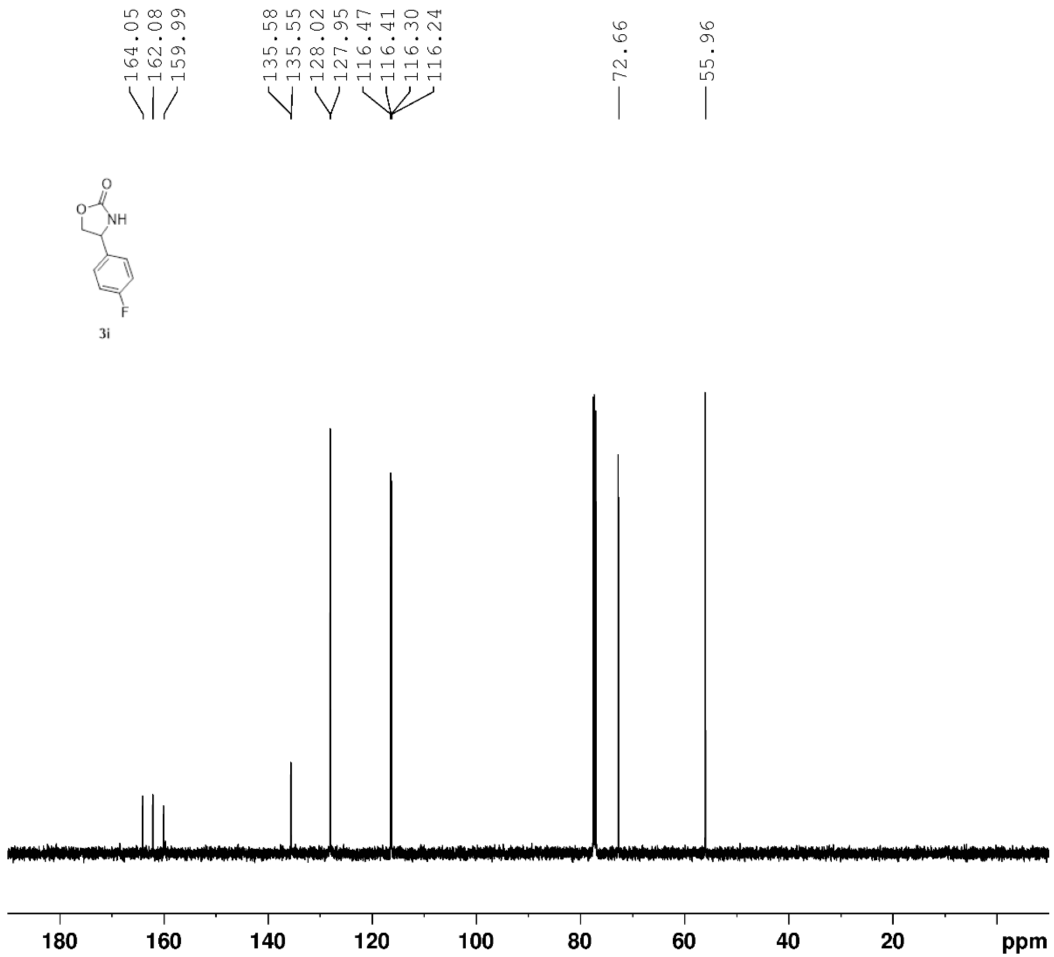
F2 - Processing parameters
SI                   32768
SF            125.7577614 MHz
WDW                     EM
SSB                      0
LB                    1.00 Hz
GB                       0
PC                    1.40
```




```
Current Data Parameters
NAME           500 cgy-7
EXPNO                 46
PROCNO                 1

F2 - Acquisition Parameters
Date_           20220812
Time               17.52 h
INSTRUM            spect
PROBHD   5 mm PADUL 13C
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                    16
DS                     2
SWH            10000.000 Hz
FIDRES          0.305176 Hz
AQ             3.2767999 sec
RG                192.89
DW                50.000 usec
DE                  6.50 usec
TE                     0 K
D1            1.00000000 sec
TD0                    1
SFO1         500.1330885 MHz
NUC1                  1H
P1                 11.30 usec
PLW1         20.00000000 W

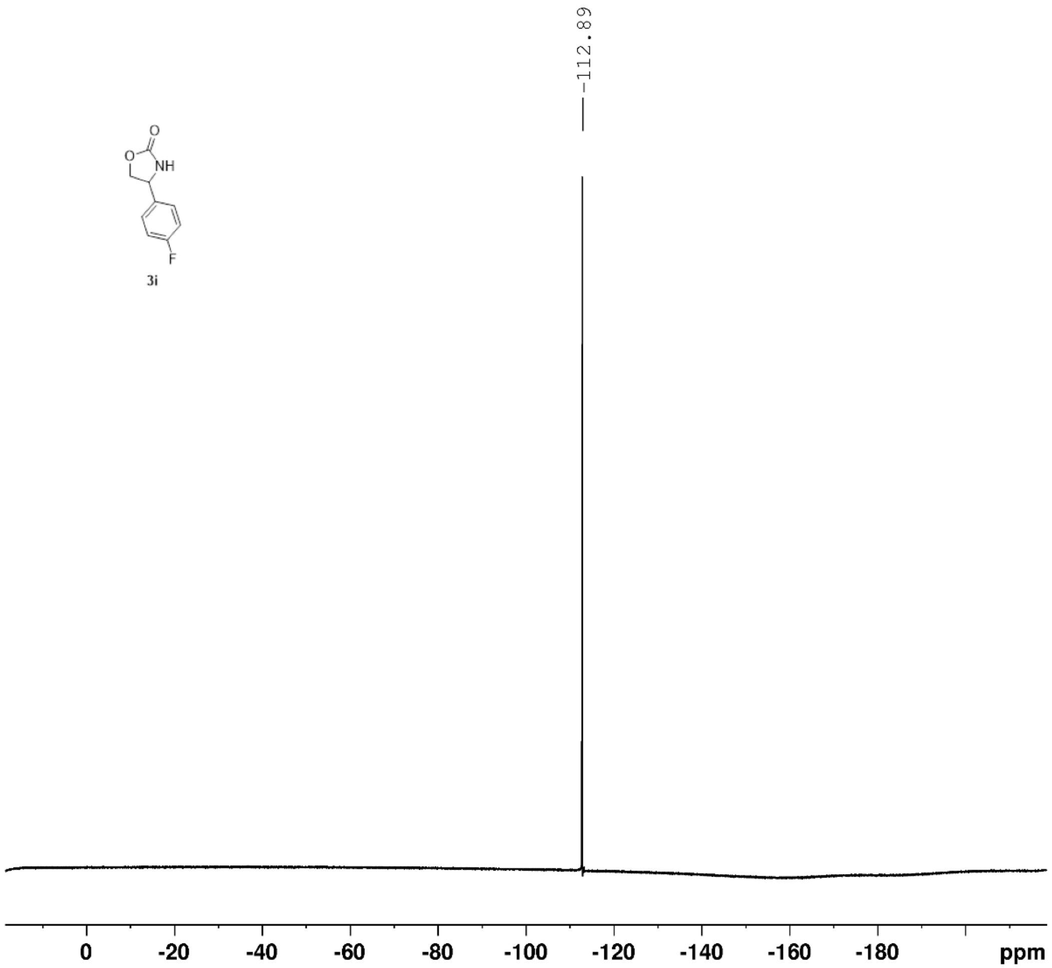
F2 - Processing parameters
SI                 65536
SF           500.1300105 MHz
WDW                   EM
SSB                    0
LB                  0.30 Hz
GB                     0
PC                  1.00
```



Current Data Parameters
NAME 500 cgy-7
EXPNO 47
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220812
Time 18.06 h
INSTRUM spect
PROBHD 5 mm PADUL 13C
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 256
DS 4
SWH 29761.904 Hz
FIDRES 0.908261 Hz
AQ 1.1010048 sec
RG 192.89
DW 16.800 usec
DE 6.50 usec
TE 0 K
D1 2.00000000 sec
d11 0.03000000 sec
DELTA 1.89999998 sec
TD0 1
SFO1 125.7703637 MHz
NUC1 13C
P1 10.00 usec
PLW1 80.00000000 W
SFO2 500.1320005 MHz
NUC2 1H
CPDPRG[2 waltz16
PCPD2 80.00 usec
PLW2 20.00000000 W
PLW12 0.39903000 W
PLW13 0.25538000 W

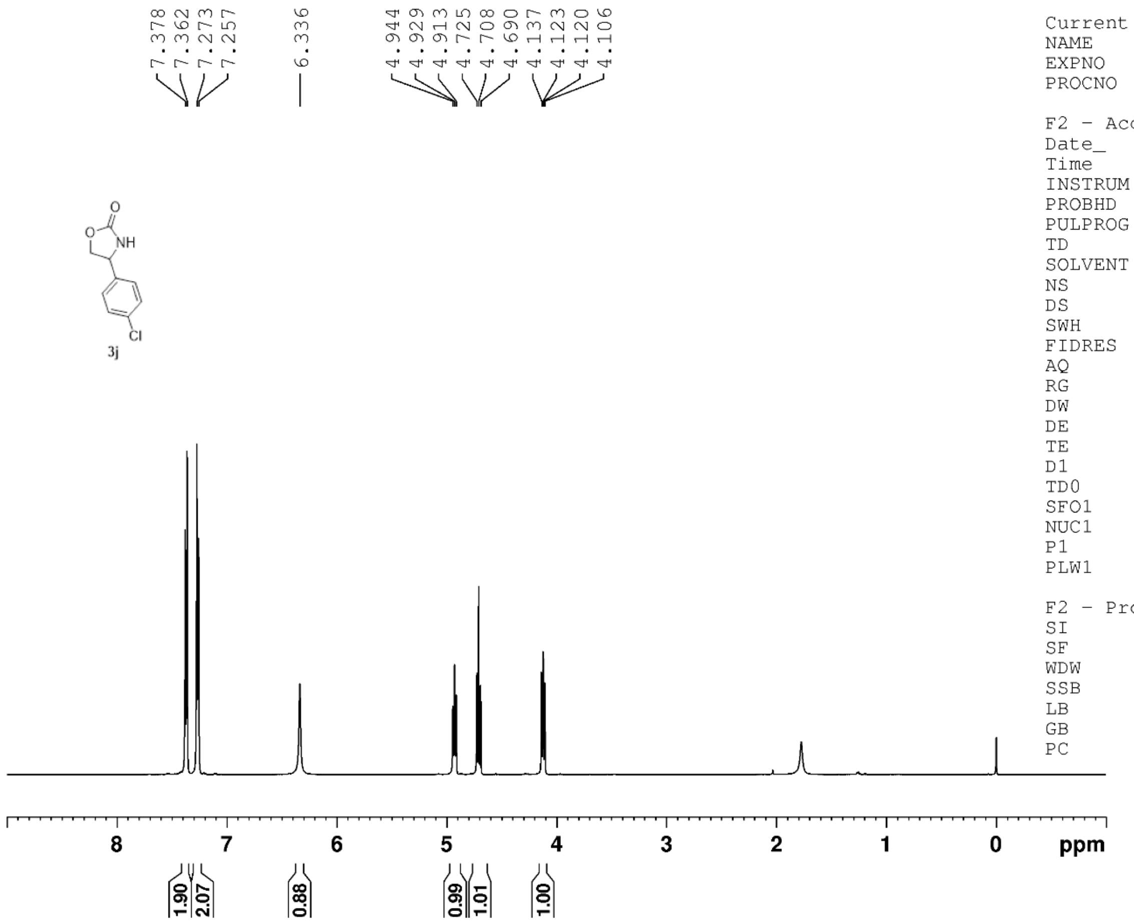
F2 - Processing parameters
SI 32768
SF 125.7577655 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  48
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220920
Time                19.24 h
INSTRUM             spect
PROBHD   5 mm PABBO BB/
PULPROG        zgfhigqn.2
TD                 131072
SOLVENT             CDCl3
NS                     16
DS                      4
SWH             89285.711 Hz
FIDRES           1.362392 Hz
AQ              0.7340032 sec
RG                 206.33
DW                  5.600 usec
DE                   6.50 usec
TE                  298.8 K
D1             1.00000000 sec
d11            0.03000000 sec
d12            0.00002000 sec
TD0                     1
rdel           0.00000650 sec
SFO1         376.5642094 MHz
NUC1                  19F
P1                  14.50 usec
PLW1          17.98900032 W
SFO2         400.2416010 MHz
NUC2                   1H
CPDPRG[2          waltz16
PCPD2               90.00 usec
PLW2          12.00000000 W
PLW12          0.30294999 W

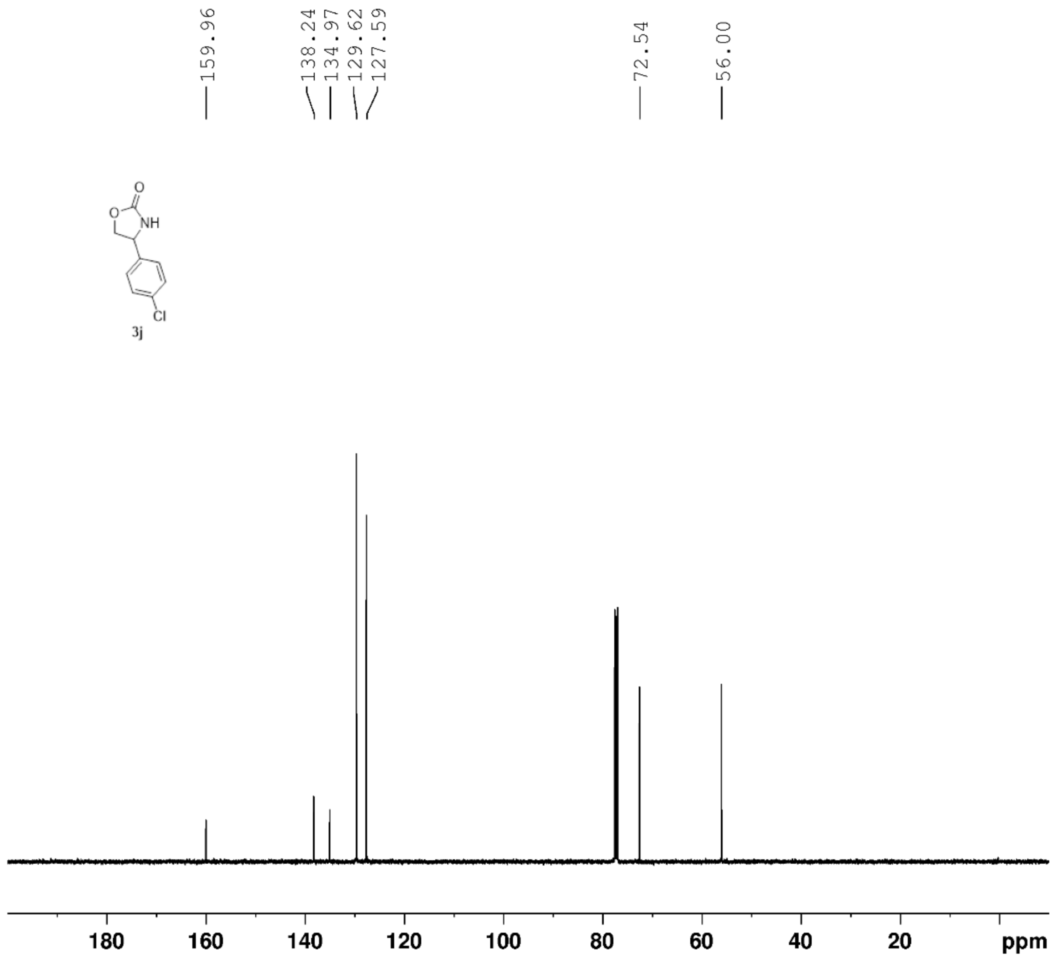
F2 - Processing parameters
SI                  65536
SF           376.6018696 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   55
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220812
Time                 23.24 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

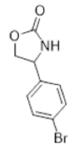
F2 - Processing parameters
SI                   65536
SF             500.1300110 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```



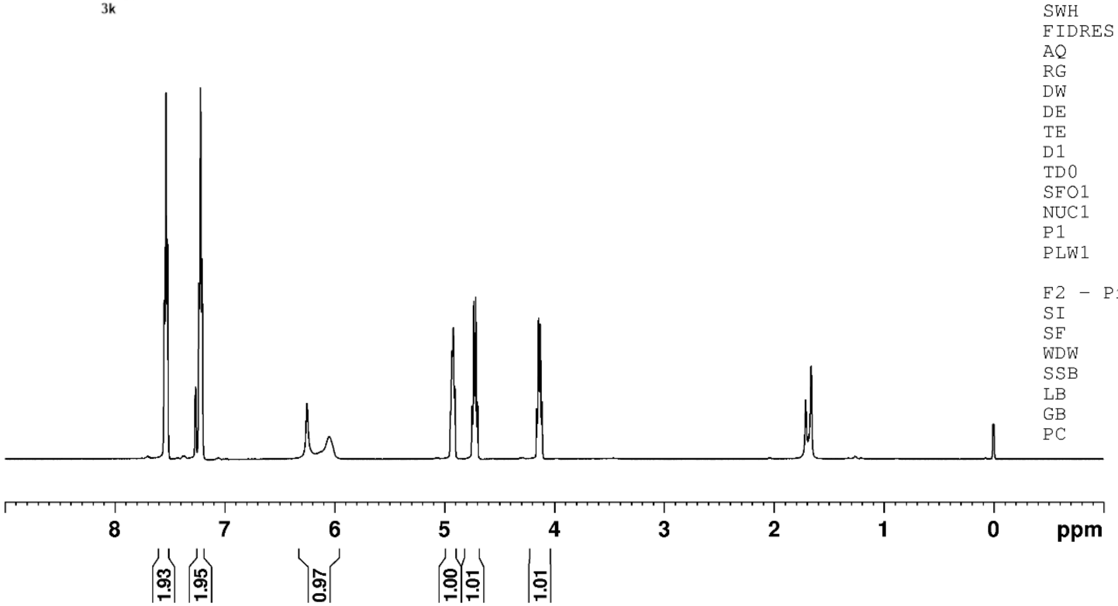

```
Current Data Parameters
NAME          500 cgy-7
EXPNO                56
PROCNO                1

F2 - Acquisition Parameters
Date_          20220812
Time              23.46 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG          zgpg30
TD                65536
SOLVENT           CDCl3
NS                  400
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7577623 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



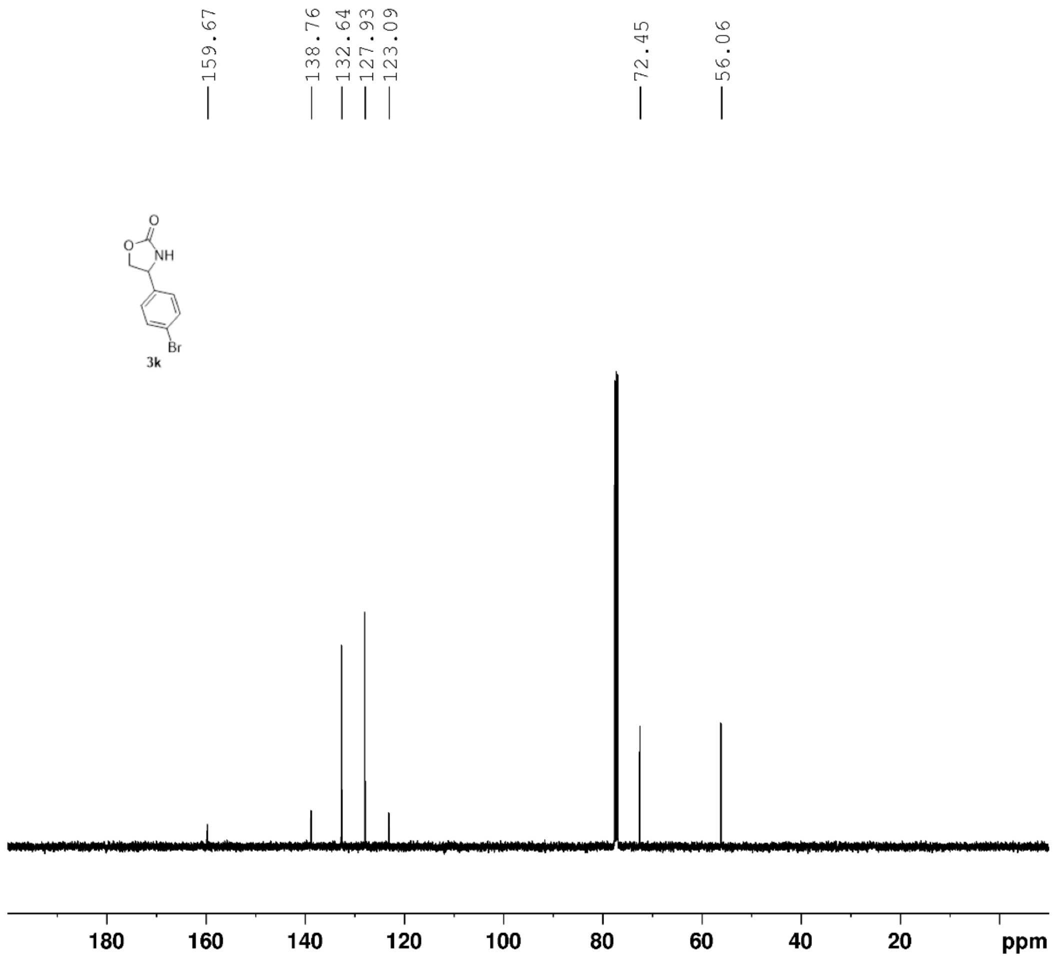
3k




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  59
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220815
Time                10.10 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

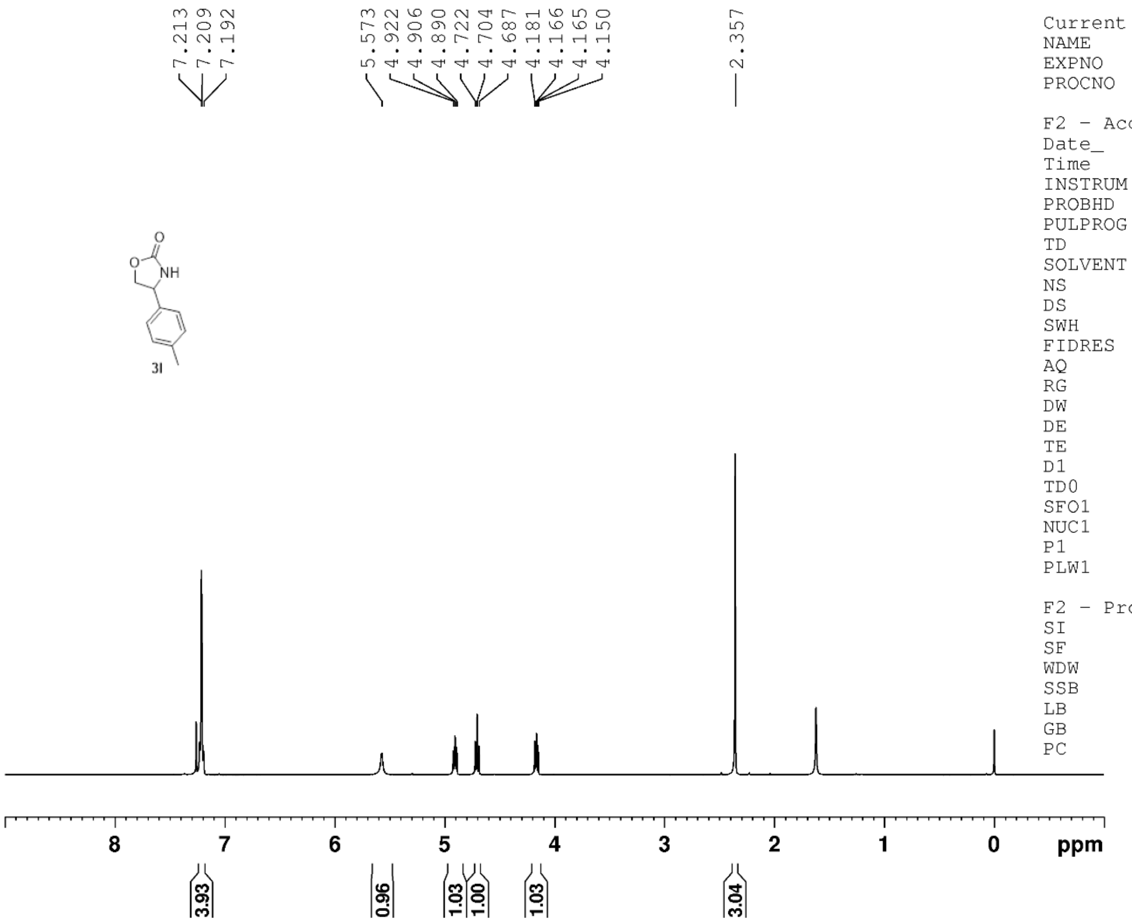
F2 - Processing parameters
SI                  65536
SF            500.1300109 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```




```
Current Data Parameters
NAME          500 cgy-7
EXPNO                92
PROCNO                1

F2 - Acquisition Parameters
Date_          20220815
Time              10.22 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG          zgpg30
TD                65536
SOLVENT           CDCl3
NS                  400
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7577613 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



Current Data Parameters

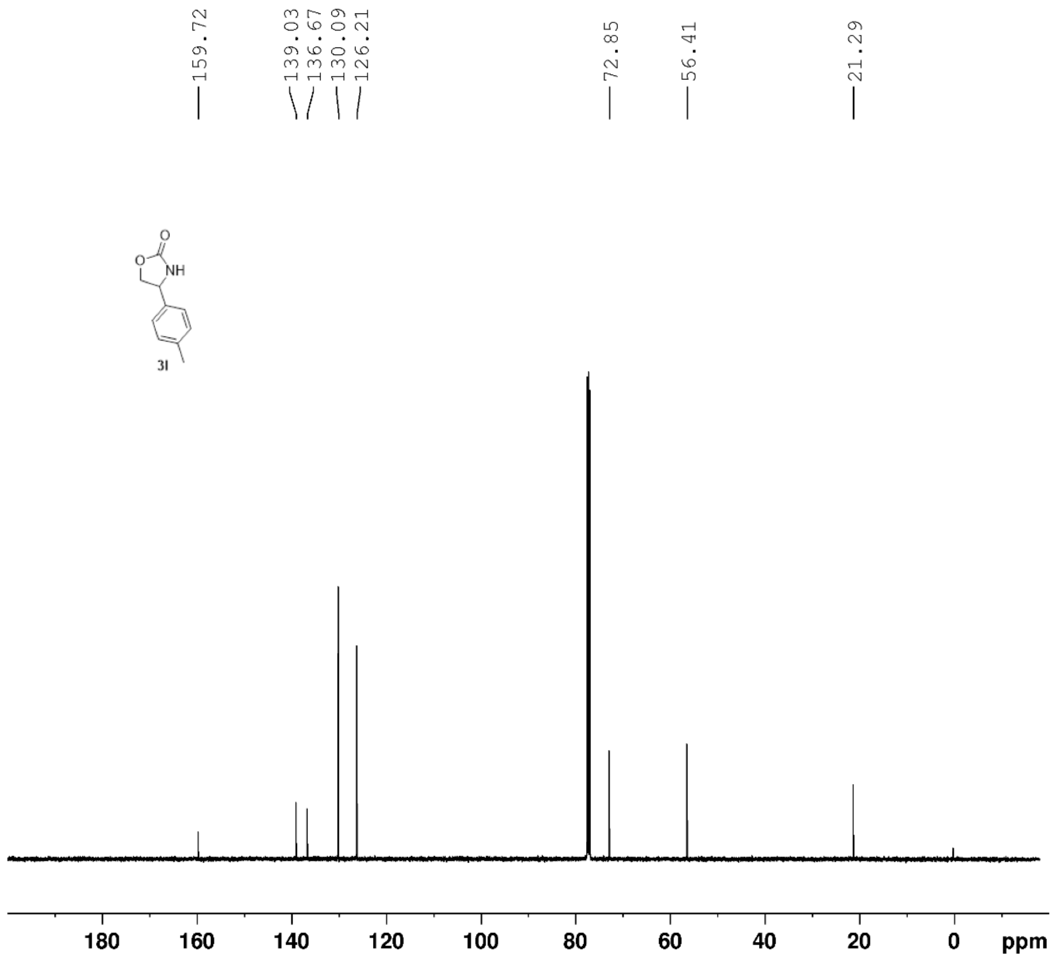
NAME	500 cgy-7
EXPNO	26
PROCNO	1

F2 - Acquisition Parameters

Date_	20220811
Time	1.41 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W

F2 - Processing parameters

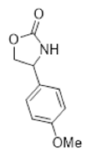
SI	65536
SF	500.1300131 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



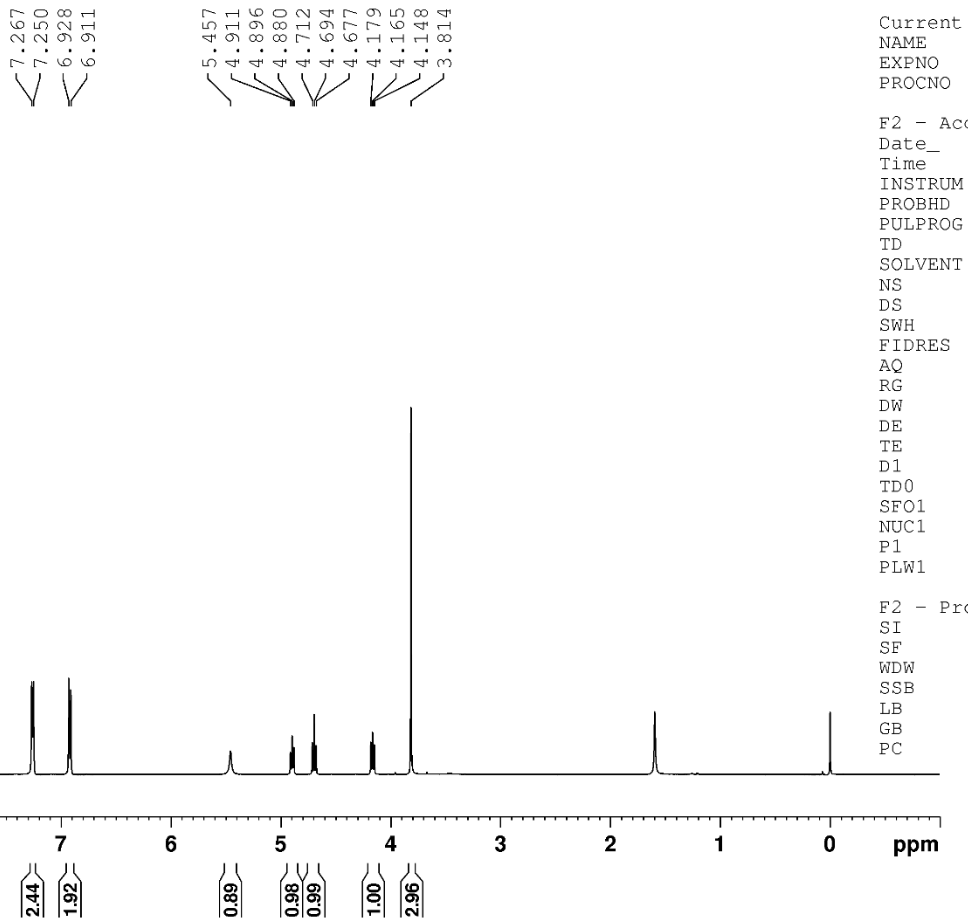

```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  27
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220920
Time                19.22 h
INSTRUM             spect
PROBHD    5 mm PADUL 13C
PULPROG           zgpg30
TD                 65536
SOLVENT            CDCl3
NS                   946
DS                     4
SWH            29761.904 Hz
FIDRES          0.908261 Hz
AQ             1.1010048 sec
RG                192.89
DW                16.800 usec
DE                  6.50 usec
TE                     0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         125.7703637 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         80.00000000 W
SFO2         500.1320005 MHz
NUC2                  1H
CPDPRG[2         waltz16
PCPD2              80.00 usec
PLW2         20.00000000 W
PLW12         0.39903000 W
PLW13         0.25538000 W

F2 - Processing parameters
SI                 32768
SF           125.7577595 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```



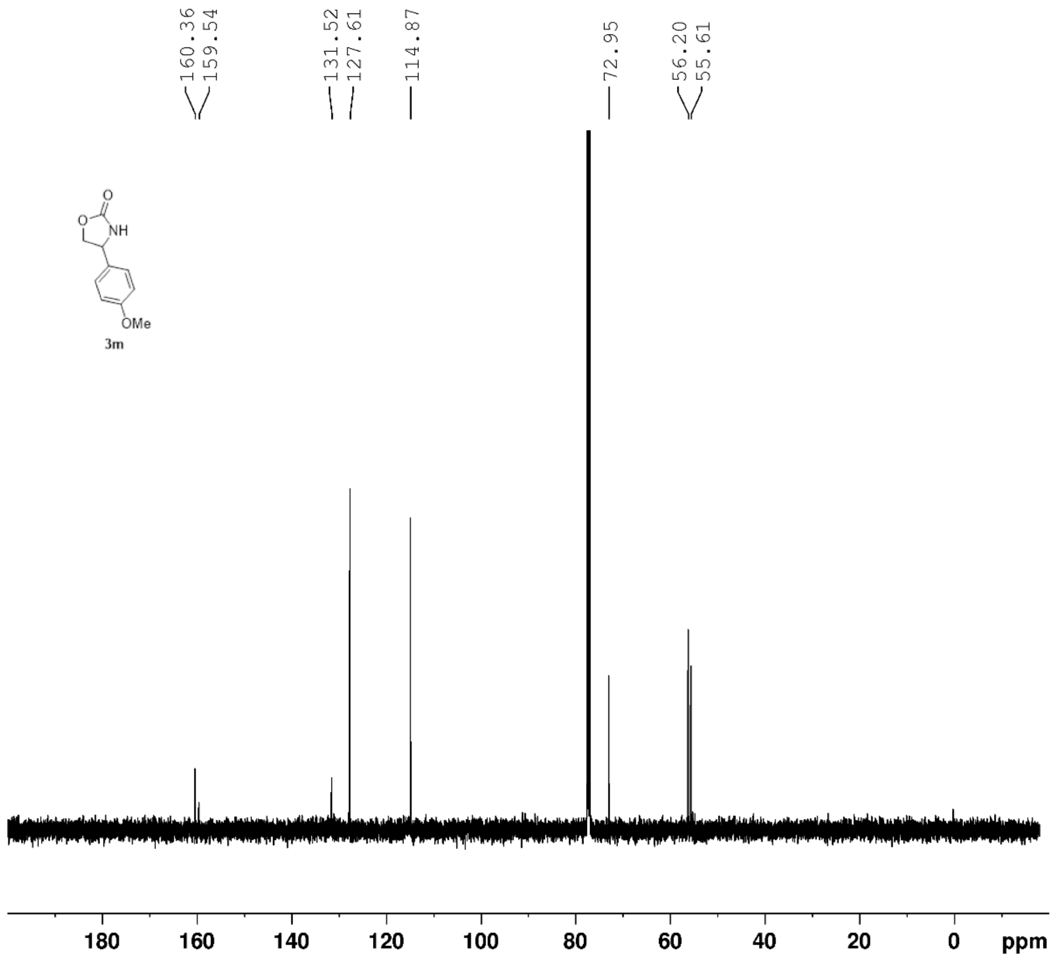
3m




```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   14
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220802
Time                 18.39 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG               zg30
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       2
SWH              10000.000 Hz
FIDRES            0.305176 Hz
AQ               3.2767999 sec
RG                  192.89
DW                  50.000 usec
DE                    6.50 usec
TE                       0 K
D1              1.00000000 sec
TD0                      1
SFO1           500.1330885 MHz
NUC1                    1H
P1                   11.30 usec
PLW1           20.00000000 W

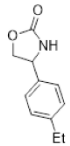
F2 - Processing parameters
SI                   65536
SF             500.1300129 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```



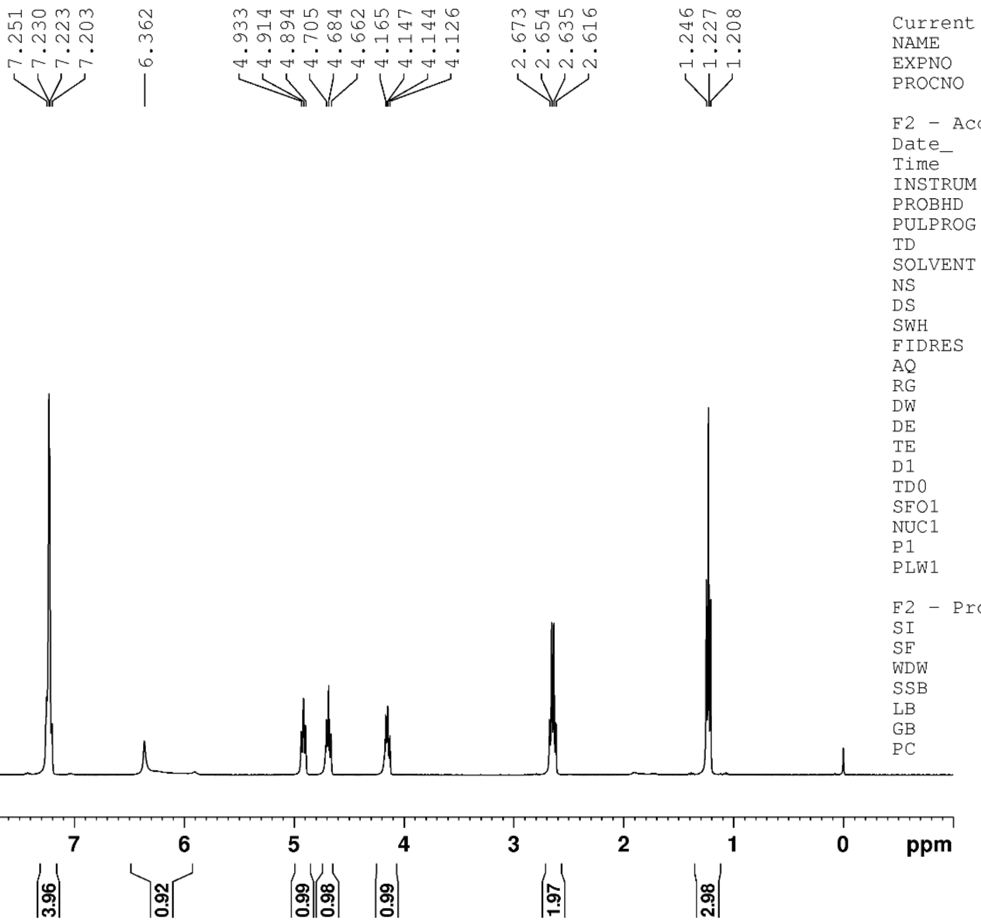

```
Current Data Parameters
NAME             500 cgy-7
EXPNO                   15
PROCNO                   1

F2 - Acquisition Parameters
Date_             20220802
Time                 18.53 h
INSTRUM              spect
PROBHD   5 mm PADUL 13C
PULPROG            zgpg30
TD                   65536
SOLVENT              CDCl3
NS                     256
DS                       4
SWH              29761.904 Hz
FIDRES            0.908261 Hz
AQ               1.1010048 sec
RG                  192.89
DW                  16.800 usec
DE                    6.50 usec
TE                       0 K
D1              2.00000000 sec
d11             0.03000000 sec
DELTA           1.89999998 sec
TD0                      1
SFO1           125.7703637 MHz
NUC1                   13C
P1                   10.00 usec
PLW1           80.00000000 W
SFO2           500.1320005 MHz
NUC2                    1H
CPDPRG[2           waltz16
PCPD2                80.00 usec
PLW2           20.00000000 W
PLW12           0.39903000 W
PLW13           0.25538000 W

F2 - Processing parameters
SI                   32768
SF             125.7577586 MHz
WDW                     EM
SSB                      0
LB                    1.00 Hz
GB                       0
PC                    1.40
```



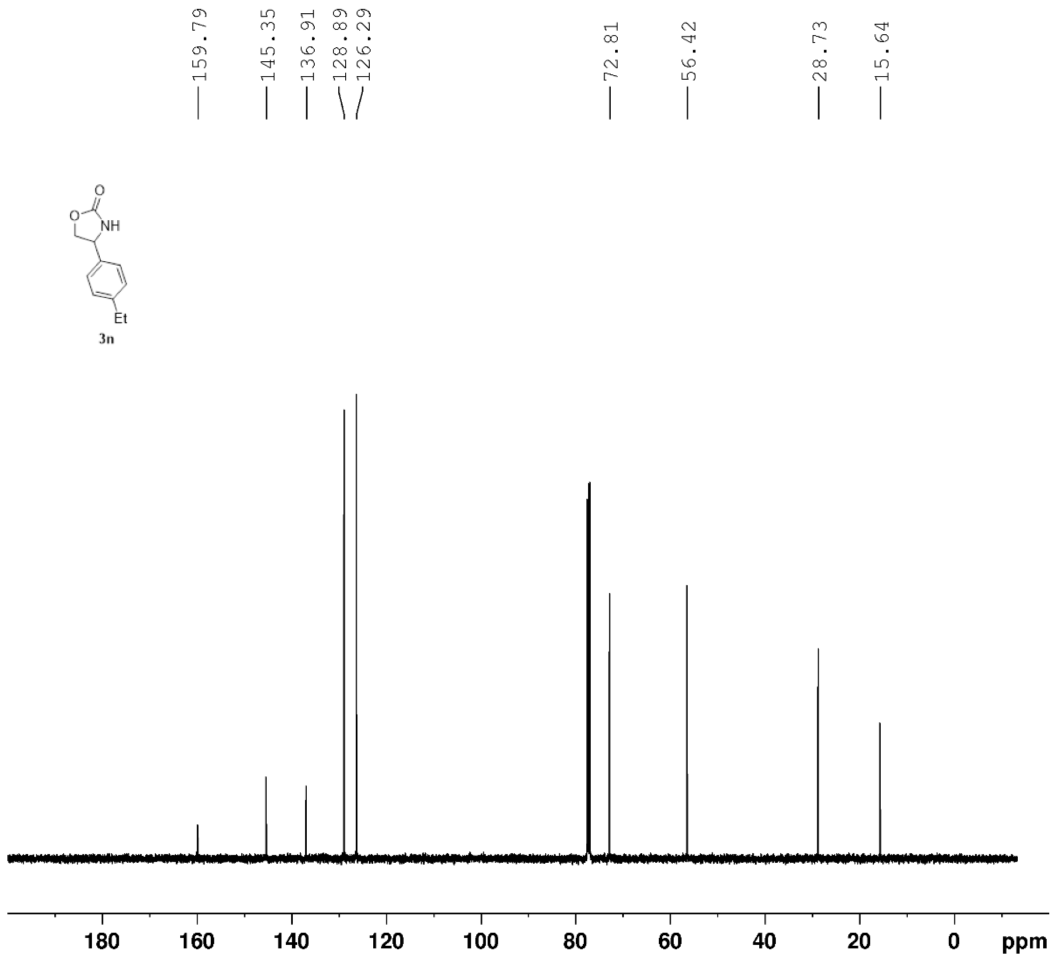
3n



Current Data Parameters
NAME 500 cgy-7
EXPNO 70
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220922
Time 11.20 h
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 0
SWH 8012.820 Hz
FIDRES 0.489064 Hz
AQ 2.0447233 sec
RG 92.09
DW 62.400 usec
DE 6.50 usec
TE 300.4 K
D1 2.00000000 sec
TD0 1
SFO1 400.2424716 MHz
NUC1 1H
P1 14.30 usec
PLW1 12.00000000 W

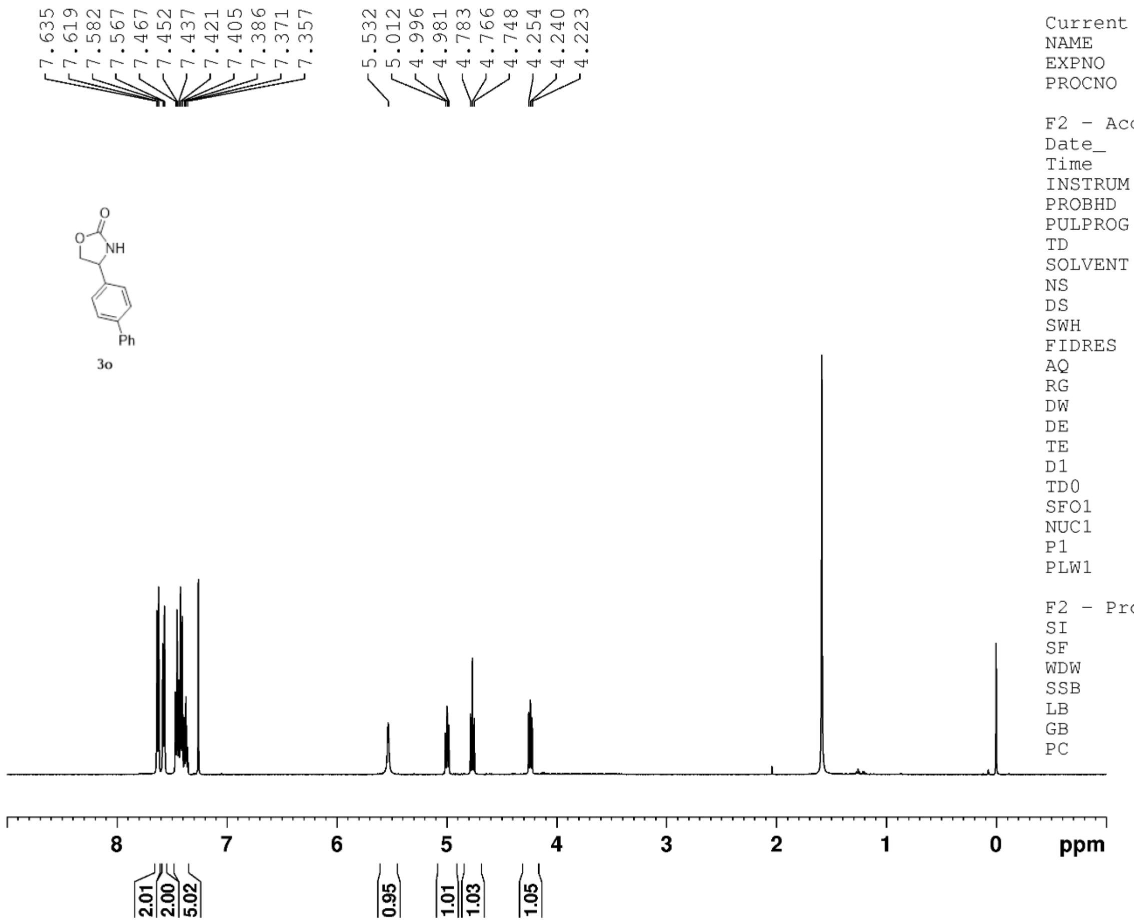
F2 - Processing parameters
SI 65536
SF 400.2400095 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00




```
Current Data Parameters
NAME              500 cgy-7
EXPNO                    71
PROCNO                    1

F2 - Acquisition Parameters
Date_              20220815
Time                  12.27 h
INSTRUM               spect
PROBHD   5 mm PADUL 13C
PULPROG             zgpg30
TD                    65536
SOLVENT                DMSO
NS                      400
DS                        4
SWH               29761.904 Hz
FIDRES             0.908261 Hz
AQ                1.1010048 sec
RG                   192.89
DW                   16.800 usec
DE                     6.50 usec
TE                        0 K
D1               2.00000000 sec
d11              0.03000000 sec
DELTA            1.89999998 sec
TD0                       1
SFO1            125.7703637 MHz
NUC1                    13C
P1                    10.00 usec
PLW1            80.00000000 W
SFO2            500.1320005 MHz
NUC2                     1H
CPDPRG[2            waltz16
PCPD2                 80.00 usec
PLW2            20.00000000 W
PLW12            0.39903000 W
PLW13            0.25538000 W

F2 - Processing parameters
SI                    32768
SF              125.7571638 MHz
WDW                      EM
SSB                       0
LB                     1.00 Hz
GB                        0
PC                     1.40
```

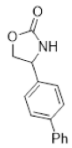


3o

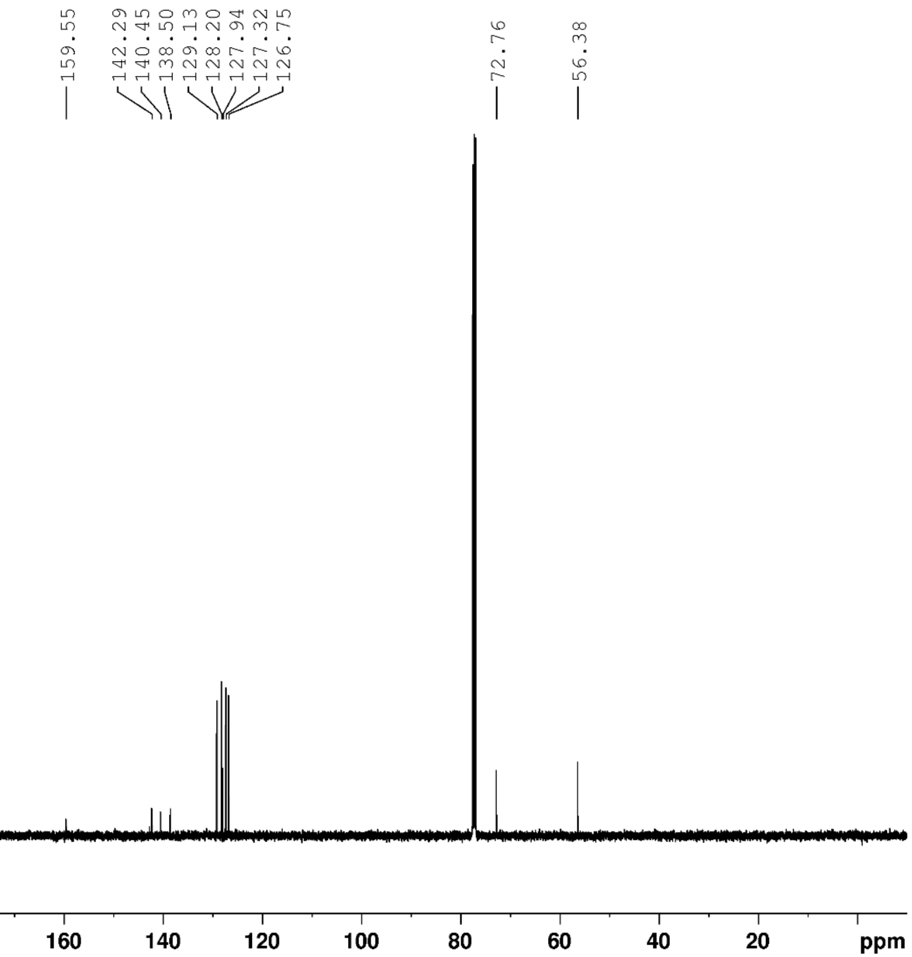
Current Data Parameters
NAME 500 cgy-7
EXPNO 66
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220815
Time 11.09 h
INSTRUM spect
PROBHD 5 mm PADUL 13C
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 10000.000 Hz
FIDRES 0.305176 Hz
AQ 3.2767999 sec
RG 192.89
DW 50.000 usec
DE 6.50 usec
TE 0 K
D1 1.00000000 sec
TD0 1
SFO1 500.1330885 MHz
NUC1 1H
P1 11.30 usec
PLW1 20.00000000 W

F2 - Processing parameters
SI 65536
SF 500.1300132 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



3o



Current Data Parameters

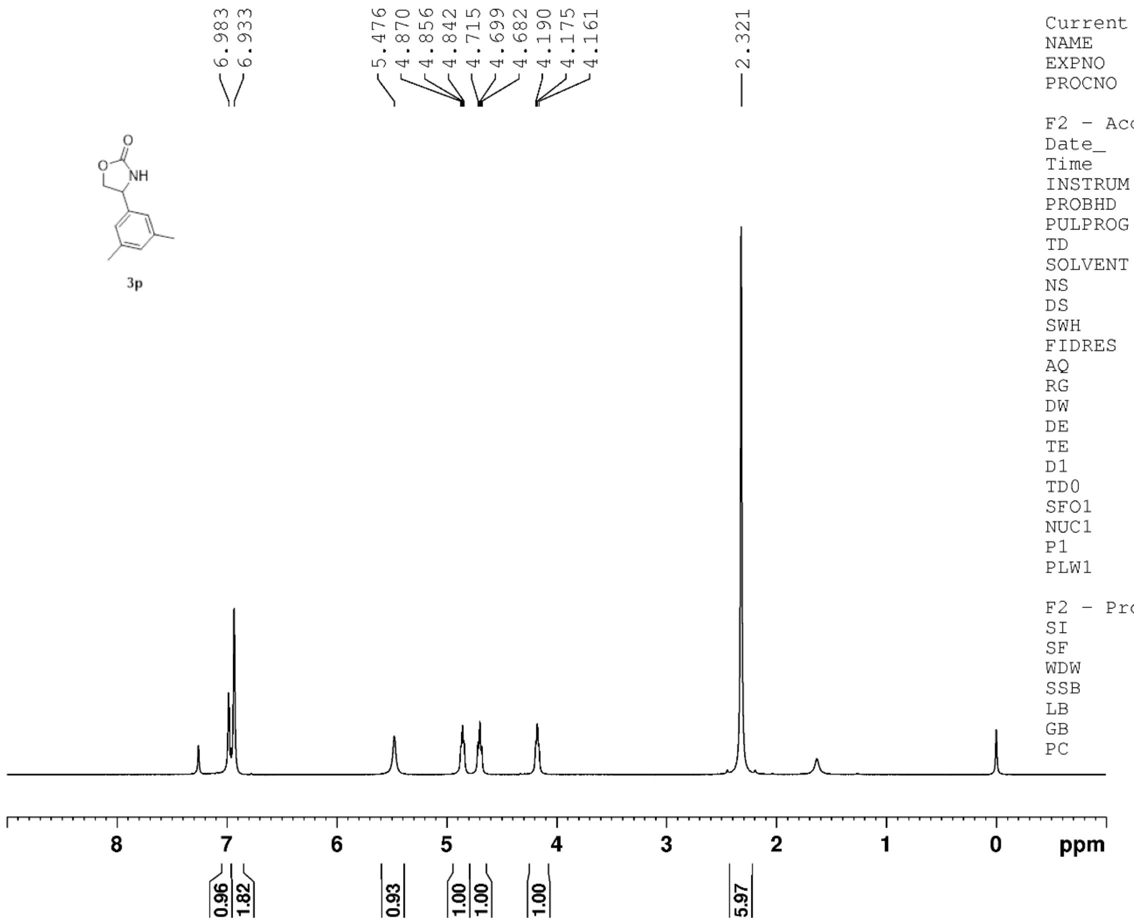
NAME	500 cgy-7
EXPNO	67
PROCNO	1

F2 - Acquisition Parameters

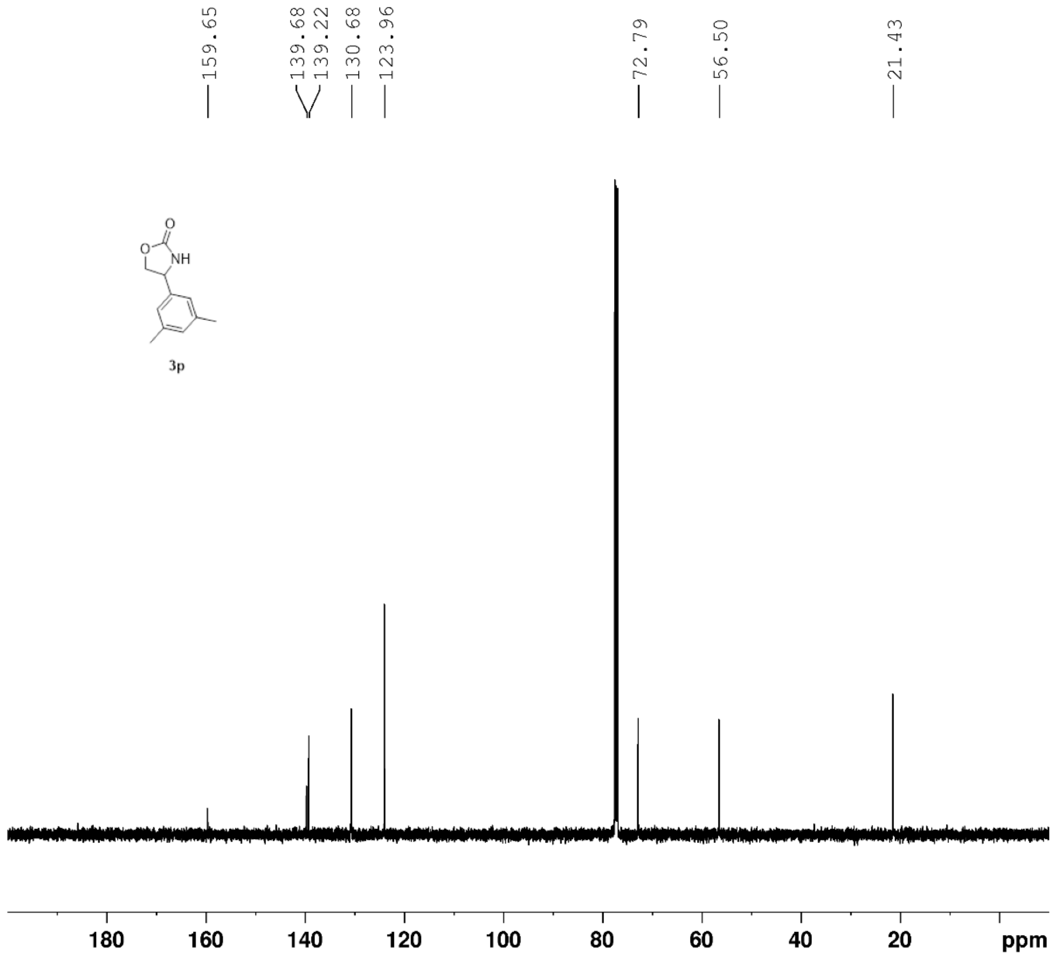
Date_	20220815
Time	11.30 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl3
NS	400
DS	4
SWH	29761.904 Hz
FIDRES	0.908261 Hz
AQ	1.1010048 sec
RG	192.89
DW	16.800 usec
DE	6.50 usec
TE	0 K
D1	2.00000000 sec
d11	0.03000000 sec
DELTA	1.89999998 sec
TD0	1
SFO1	125.7703637 MHz
NUC1	13C
P1	10.00 usec
PLW1	80.00000000 W
SFO2	500.1320005 MHz
NUC2	1H
CPDPRG[2	waltz16
PCPD2	80.00 usec
PLW2	20.00000000 W
PLW12	0.39903000 W
PLW13	0.25538000 W

F2 - Processing parameters

SI	32768
SF	125.7577585 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40



Current Data Parameters	
NAME	500 cgy-7
EXPNO	74
PROCNO	1
F2 - Acquisition Parameters	
Date_	20220922
Time	11.00 h
INSTRUM	spect
PROBHD	5 mm PADUL 13C
PULPROG	zg30
TD	65536
SOLVENT	CDCl3
NS	16
DS	2
SWH	10000.000 Hz
FIDRES	0.305176 Hz
AQ	3.2767999 sec
RG	192.89
DW	50.000 usec
DE	6.50 usec
TE	0 K
D1	1.00000000 sec
TD0	1
SFO1	500.1330885 MHz
NUC1	1H
P1	11.30 usec
PLW1	20.00000000 W
F2 - Processing parameters	
SI	65536
SF	500.1300141 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00



Current Data Parameters

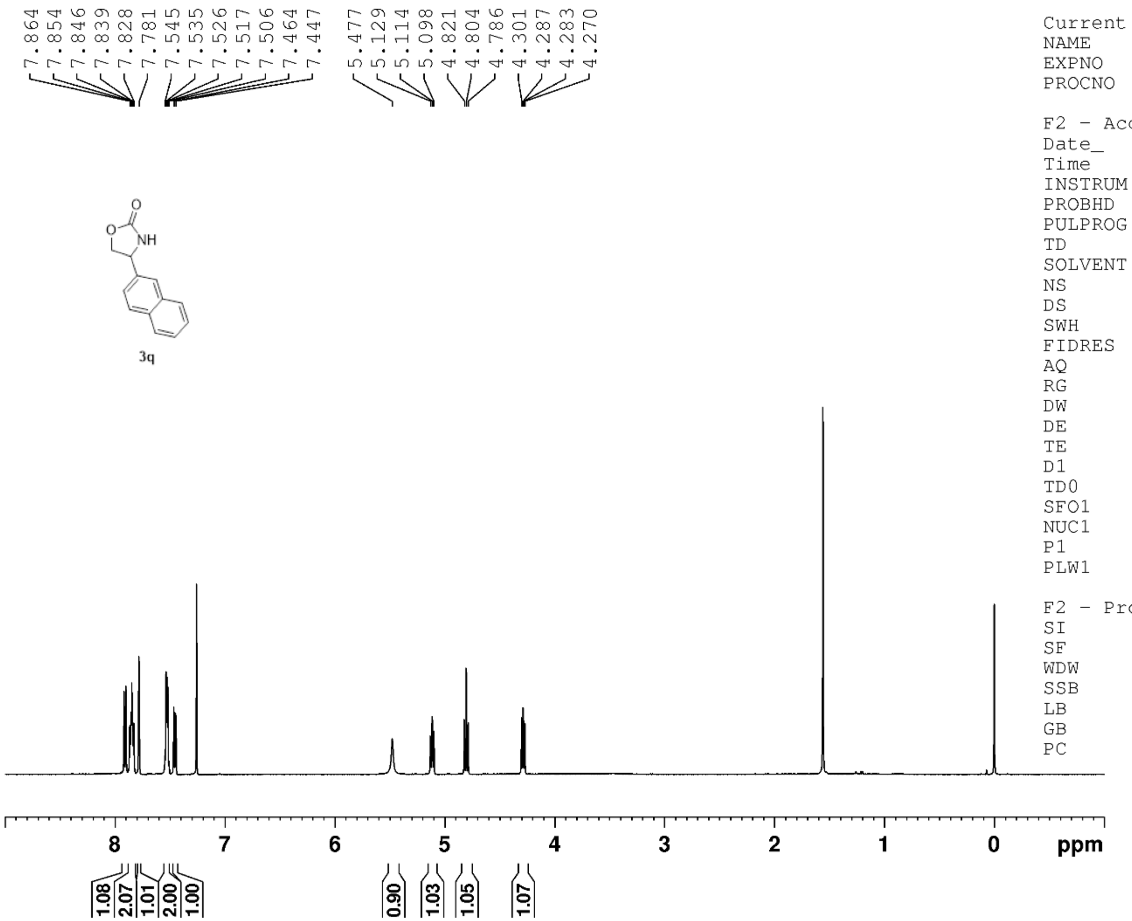
NAME	500 cgy-7	
EXPNO	75	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220815	
Time	13.20	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	400	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W

F2 - Processing parameters

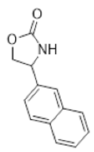
SI	32768	
SF	125.7577602	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	



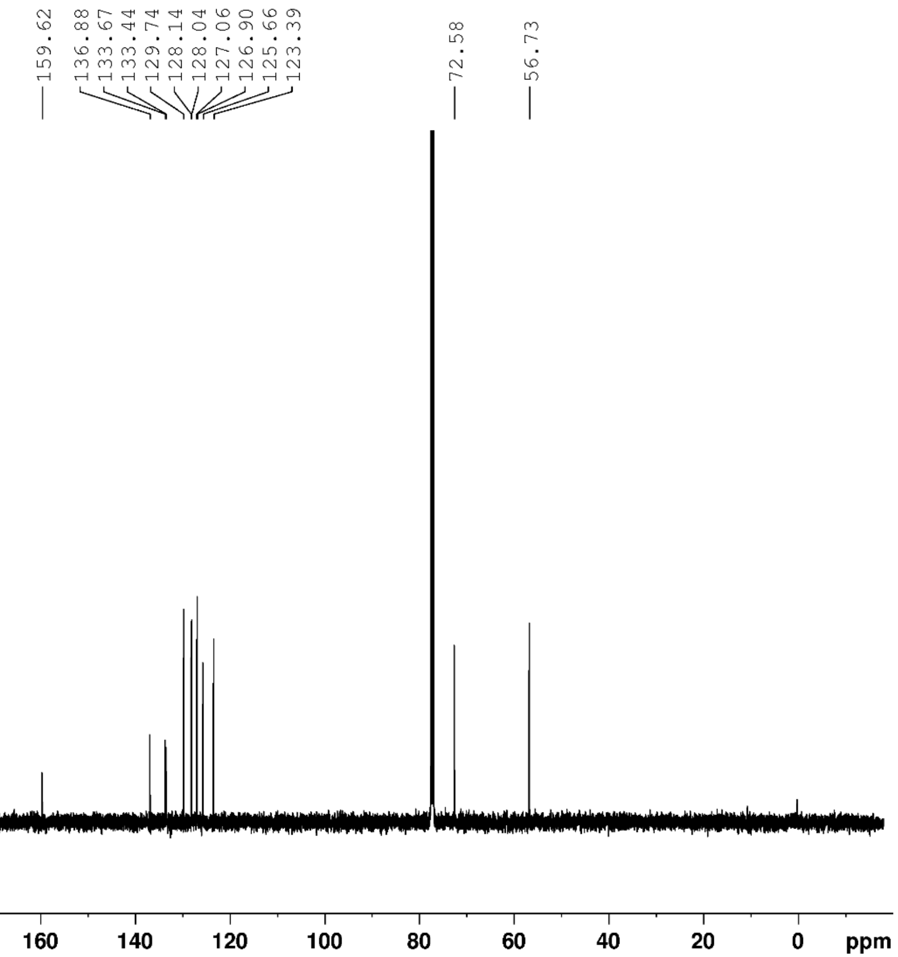
Current Data Parameters
NAME 500 cgy-7
EXPNO 18
PROCNO 1

F2 - Acquisition Parameters
Date_ 20220802
Time 19.16 h
INSTRUM spect
PROBHD 5 mm PADUL 13C
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 10000.000 Hz
FIDRES 0.305176 Hz
AQ 3.2767999 sec
RG 192.89
DW 50.000 usec
DE 6.50 usec
TE 0 K
D1 1.00000000 sec
TD0 1
SFO1 500.1330885 MHz
NUC1 1H
P1 11.30 usec
PLW1 20.00000000 W

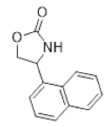
F2 - Processing parameters
SI 65536
SF 500.1300142 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



3q



Current Data Parameters		
NAME	500 cgy-7	
EXPNO	19	
PROCNO	1	
F2 - Acquisition Parameters		
Date_	20220919	
Time	14.51	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zgpg30	
TD	65536	
SOLVENT	CDCl3	
NS	256	
DS	4	
SWH	29761.904	Hz
FIDRES	0.908261	Hz
AQ	1.1010048	sec
RG	192.89	
DW	16.800	usec
DE	6.50	usec
TE	0	K
D1	2.00000000	sec
d11	0.03000000	sec
DELTA	1.89999998	sec
TD0	1	
SFO1	125.7703637	MHz
NUC1	13C	
P1	10.00	usec
PLW1	80.00000000	W
SFO2	500.1320005	MHz
NUC2	1H	
CPDPRG[2	waltz16	
PCPD2	80.00	usec
PLW2	20.00000000	W
PLW12	0.39903000	W
PLW13	0.25538000	W
F2 - Processing parameters		
SI	32768	
SF	125.7577605	MHz
WDW	EM	
SSB	0	
LB	1.00	Hz
GB	0	
PC	1.40	



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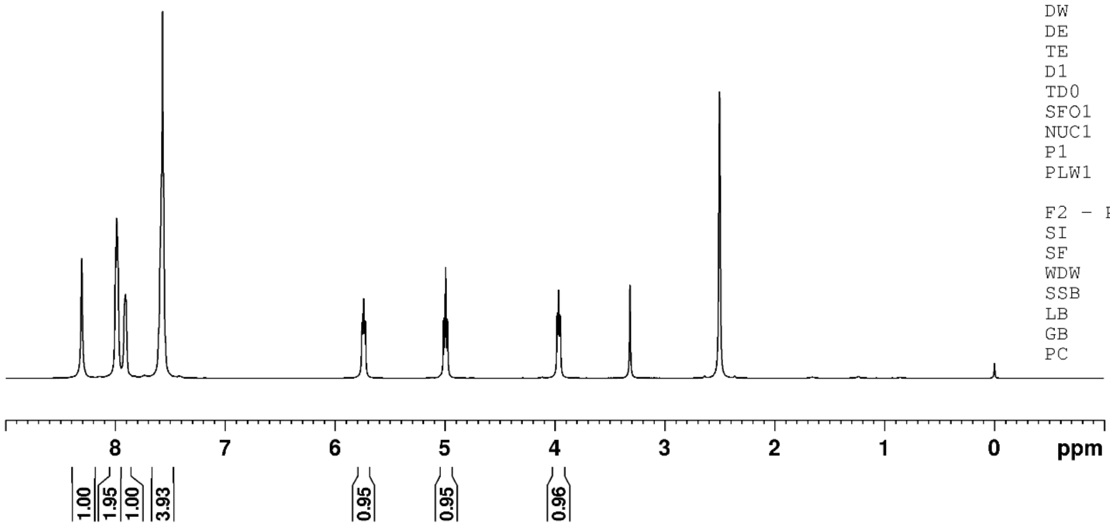
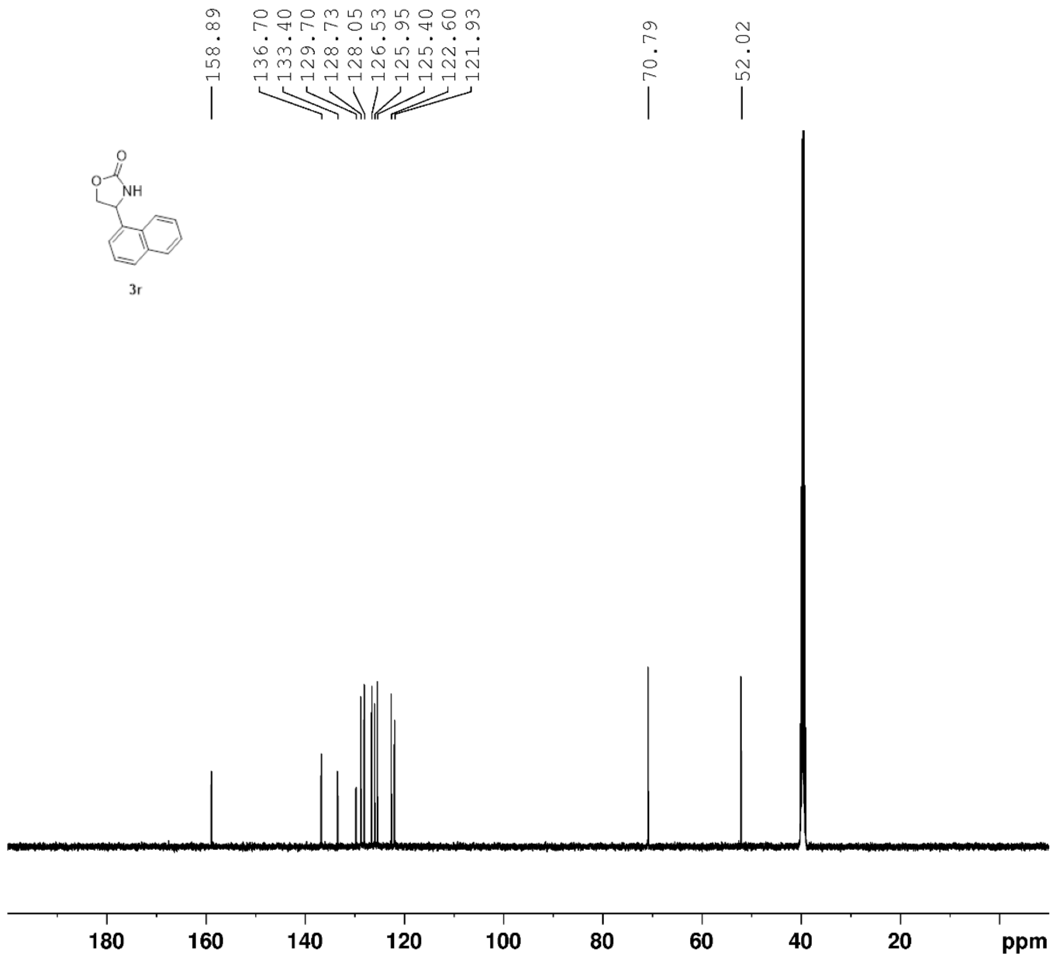



```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  78
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220921
Time                 8.44 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT              DMSO
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

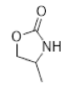
F2 - Processing parameters
SI                  65536
SF            500.1300036 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



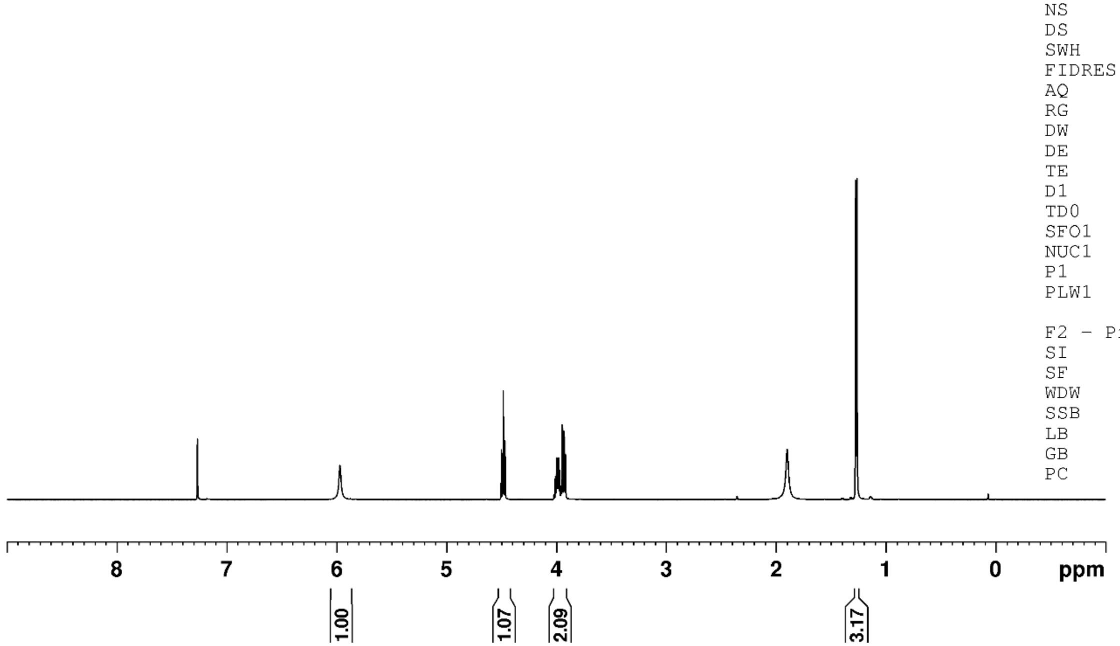

```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  79
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220921
Time                 9.12 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG           zgpg30
TD                 65536
SOLVENT             DMSO
NS                   520
DS                     4
SWH            29761.904 Hz
FIDRES          0.908261 Hz
AQ             1.1010048 sec
RG                192.89
DW                16.800 usec
DE                  6.50 usec
TE                     0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         125.7703637 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         80.00000000 W
SFO2         500.1320005 MHz
NUC2                  1H
CPDPRG[2         waltz16
PCPD2              80.00 usec
PLW2         20.00000000 W
PLW12         0.39903000 W
PLW13         0.25538000 W

F2 - Processing parameters
SI                 32768
SF           125.7578596 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```



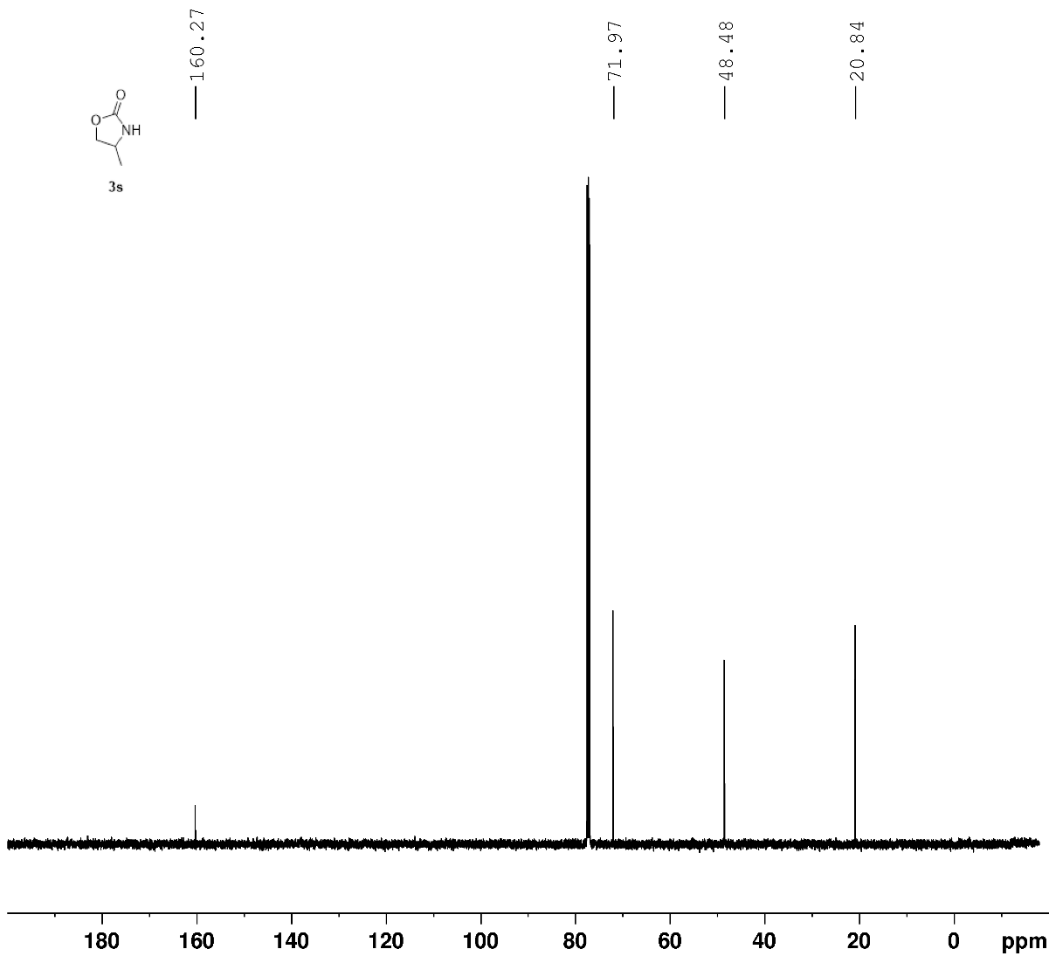
3s




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  10
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220801
Time                20.29 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

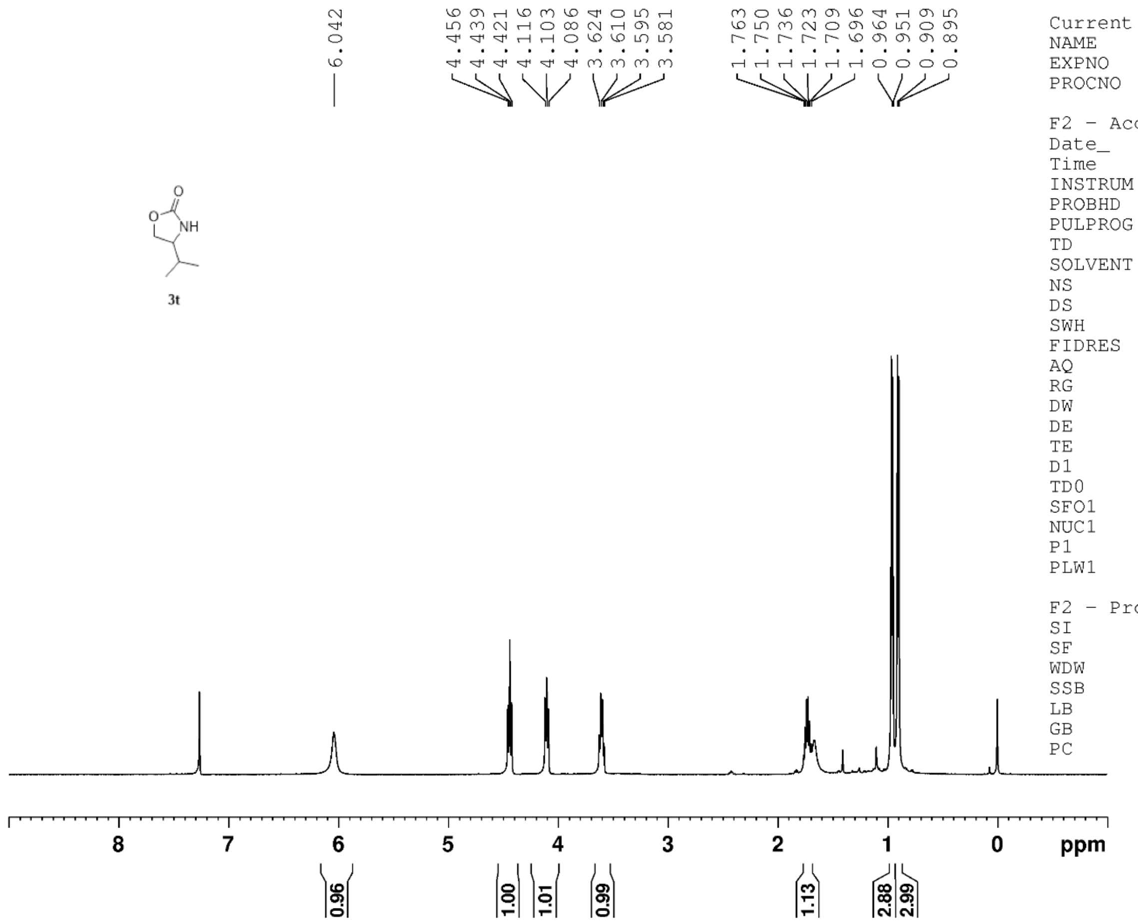
F2 - Processing parameters
SI                  65536
SF            500.1300096 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```




```
Current Data Parameters
NAME          500 cgy-7
EXPNO                11
PROCNO                1

F2 - Acquisition Parameters
Date_          20220801
Time              20.43 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG          zgpg30
TD                65536
SOLVENT           CDCl3
NS                  256
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PCPD2             80.00 usec
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

F2 - Processing parameters
SI                32768
SF          125.7577603 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



Current Data Parameters

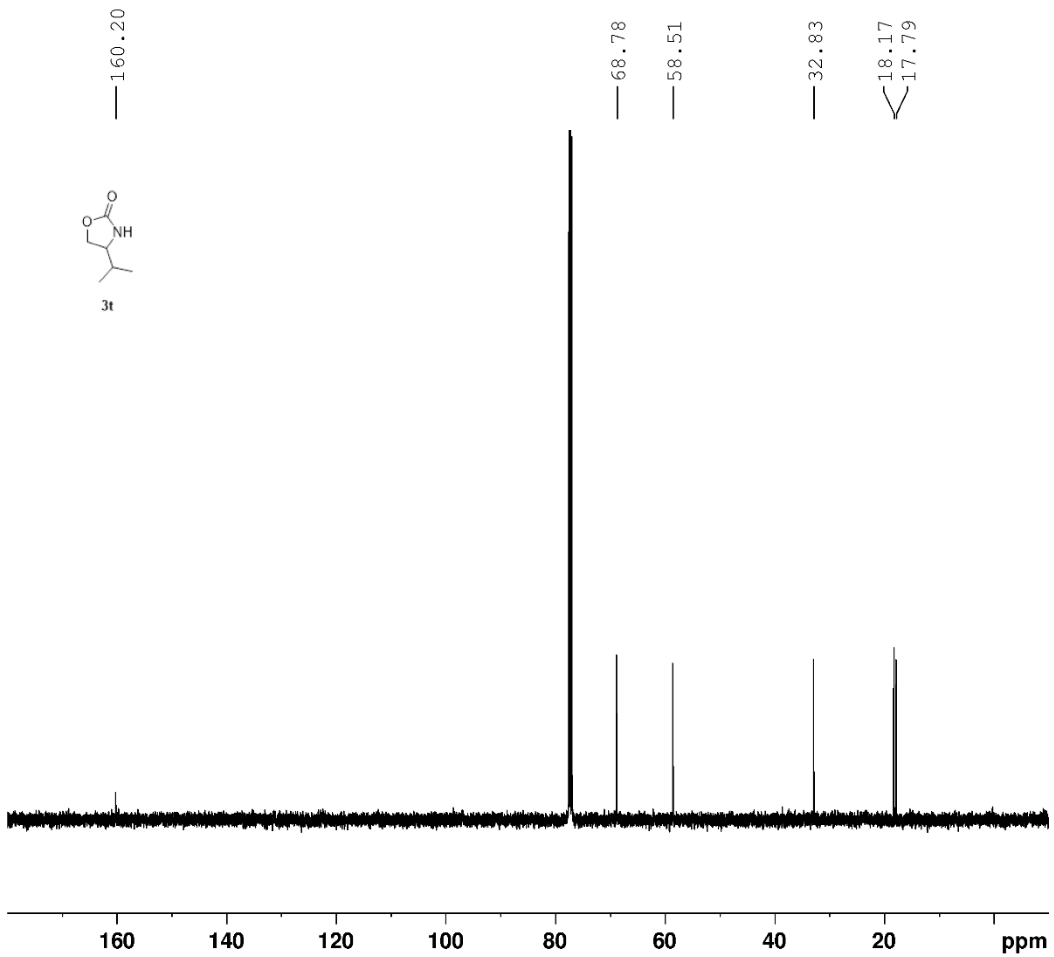
NAME	500 cgy-7	
EXPNO	22	
PROCNO	1	

F2 - Acquisition Parameters

Date_	20220809	
Time	16.22	h
INSTRUM	spect	
PROBHD	5 mm PADUL 13C	
PULPROG	zg30	
TD	65536	
SOLVENT	CDCl3	
NS	16	
DS	2	
SWH	10000.000	Hz
FIDRES	0.305176	Hz
AQ	3.2767999	sec
RG	192.89	
DW	50.000	usec
DE	6.50	usec
TE	0	K
D1	1.00000000	sec
TD0	1	
SFO1	500.1330885	MHz
NUC1	1H	
P1	11.30	usec
PLW1	20.00000000	W

F2 - Processing parameters

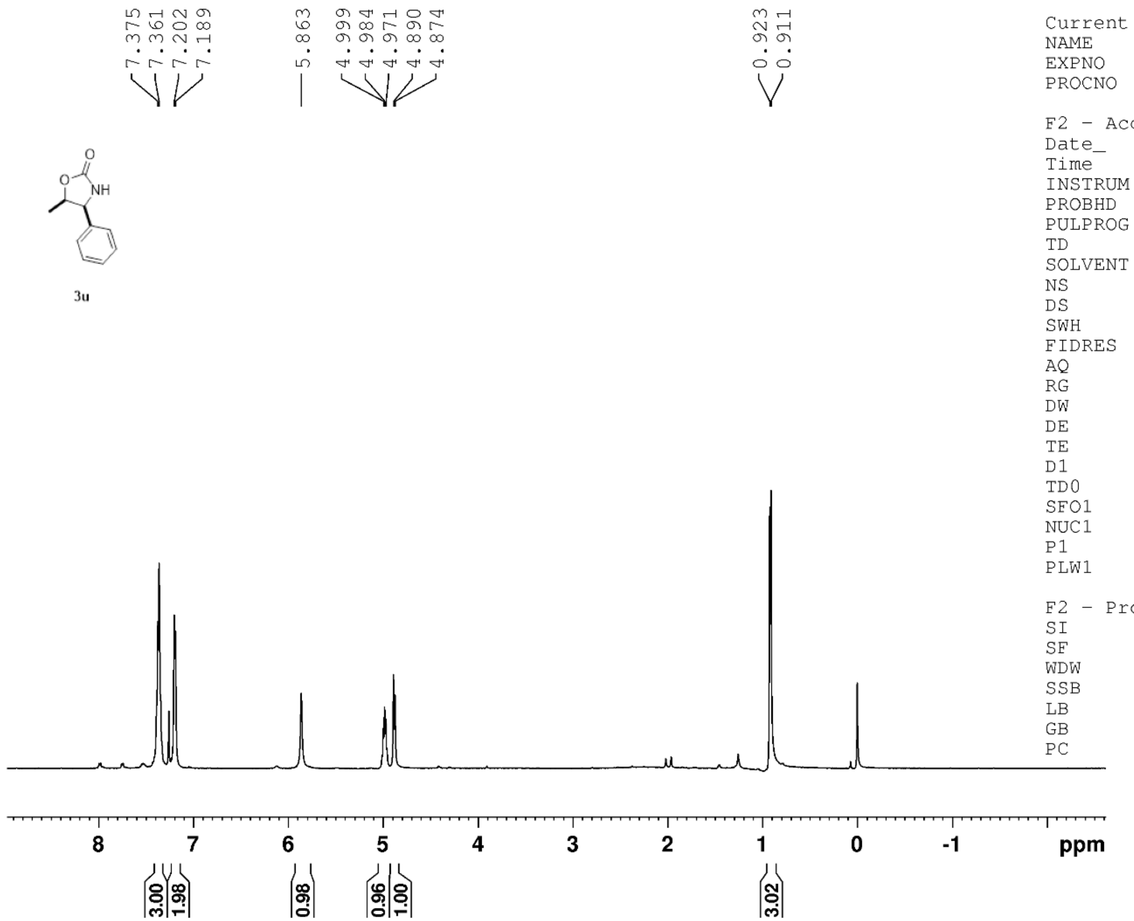
SI	65536	
SF	500.1300114	MHz
WDW	EM	
SSB	0	
LB	0.30	Hz
GB	0	
PC	1.00	




```
Current Data Parameters
NAME          500 cgy-7
EXPNO                23
PROCNO                1

F2 - Acquisition Parameters
Date_          20220809
Time              16.37 h
INSTRUM           spect
PROBHD   5 mm PADUL 13C
PULPROG          zgpg30
TD                65536
SOLVENT           CDCl3
NS                  256
DS                    4
SWH           29761.904 Hz
FIDRES         0.908261 Hz
AQ            1.1010048 sec
RG               192.89
DW               16.800 usec
DE                 6.50 usec
TE                    0 K
D1           2.00000000 sec
d11          0.03000000 sec
DELTA        1.89999998 sec
TD0                   1
SFO1        125.7703637 MHz
NUC1                13C
P1                10.00 usec
PLW1        80.00000000 W
SFO2        500.1320005 MHz
NUC2                 1H
CPDPRG[2        waltz16
PLW2        20.00000000 W
PLW12        0.39903000 W
PLW13        0.25538000 W

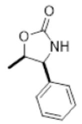
F2 - Processing parameters
SI                32768
SF          125.7577597 MHz
WDW                  EM
SSB                   0
LB                 1.00 Hz
GB                    0
PC                 1.40
```



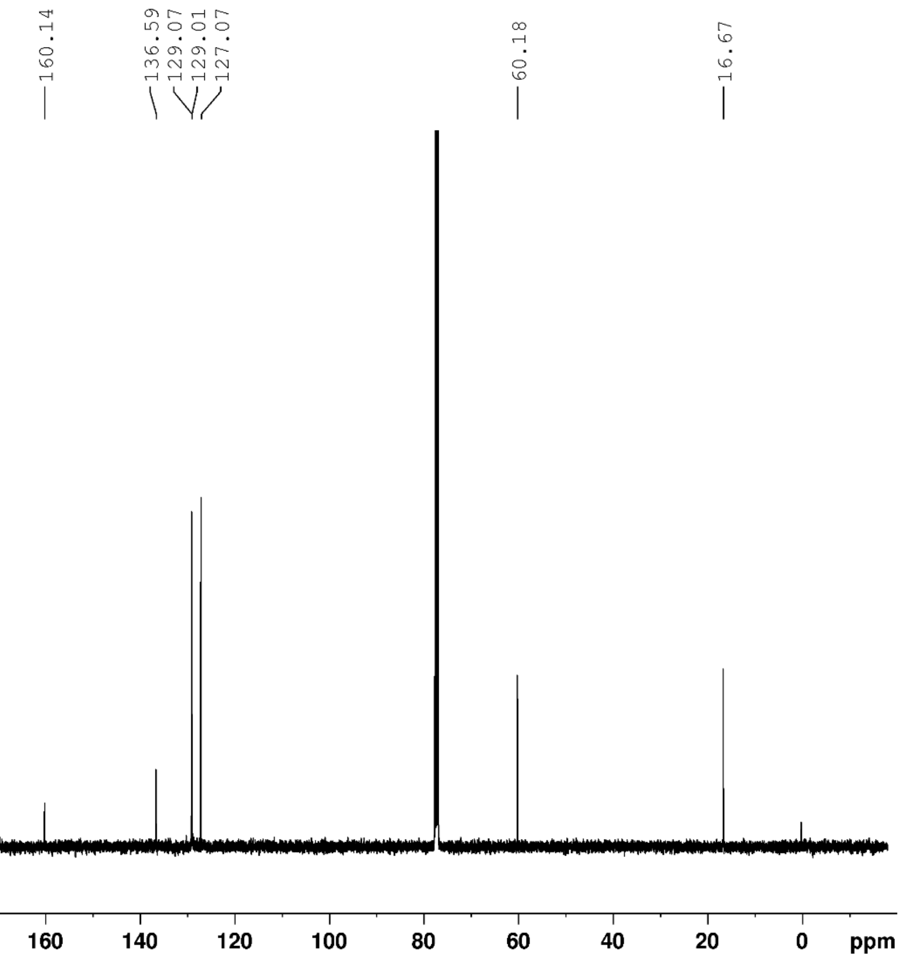

```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  86
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220921
Time                21.27 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10000.000 Hz
FIDRES           0.305176 Hz
AQ              3.2767999 sec
RG                 192.89
DW                 50.000 usec
DE                   6.50 usec
TE                      0 K
D1             1.00000000 sec
TD0                     1
SFO1          500.1330885 MHz
NUC1                   1H
P1                  11.30 usec
PLW1          20.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1300129 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



3u




```
Current Data Parameters
NAME            500 cgy-7
EXPNO                  87
PROCNO                  1

F2 - Acquisition Parameters
Date_            20220921
Time                21.54 h
INSTRUM             spect
PROBHD   5 mm PADUL 13C
PULPROG           zgpg30
TD                 65536
SOLVENT            CDCl3
NS                   512
DS                     4
SWH            29761.904 Hz
FIDRES          0.908261 Hz
AQ             1.1010048 sec
RG                192.89
DW                16.800 usec
DE                  6.50 usec
TE                     0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.89999998 sec
TD0                    1
SFO1         125.7703637 MHz
NUC1                 13C
P1                 10.00 usec
PLW1         80.00000000 W
SFO2         500.1320005 MHz
NUC2                  1H
CPDPRG[2         waltz16
PCPD2              80.00 usec
PLW2         20.00000000 W
PLW12         0.39903000 W
PLW13         0.25538000 W

F2 - Processing parameters
SI                 32768
SF           125.7577589 MHz
WDW                   EM
SSB                    0
LB                  1.00 Hz
GB                     0
PC                  1.40
```