

Supporting Information

Synthesis of diverse β -(nitrooxy)-substituted amines by regioselective ring-opening of aziridines under neat conditions

Satyajit Samanta,^a Rana Chatterjee,^a Sachinta Mahato,^a Alakananda Hajra,^a Sougata Santra,^b

Grigory V. Zyryanov,^{b,c} and Adinath Majee^{*a}

^a *Department of Chemistry, Visva-Bharati (A Central University), Santiniketan 731235, India*

^b *Department of Organic and Biomolecular Chemistry, Chemical Engineering Institute, Ural Federal University, 19 Mira Str., 620002 Yekaterinburg, Russian Federation*

^c *I. Ya. Postovskiy Institute of Organic Synthesis, Ural Division of the Russian Academy of Sciences, 22 S. Kovalevskoy Str., 620219 Yekaterinburg, Russian Federation*

Email: adinath.majee@visva-bharati.ac.in

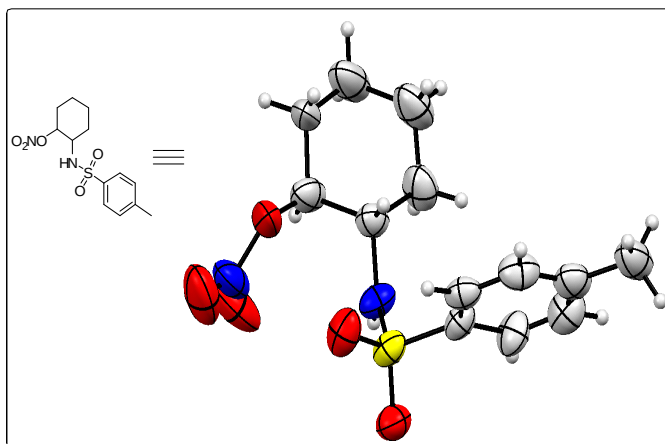
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A. General Information. All reagents were purchased from commercial sources and used without further purification. ^1H NMR spectra were determined on 400 MHz spectrometer as solutions in CDCl_3 . Chemical shifts are expressed in parts per million (δ) and the signals were reported as s (singlet), d (doublet), t (triplet), m (multiplet), dd (double doublet) and coupling constants (J) were given in Hz. ^{13}C NMR spectra were recorded at 100 MHz in CDCl_3 solution. Chemical shifts as internal standard are referenced to CDCl_3 ($\delta = 7.26$ for ^1H and $\delta = 77.16$ for ^{13}C NMR) as internal standard. TLC was done on silica gel coated glass slide. X-ray single crystal data were collected using Mo $\text{K}\alpha$ ($\lambda = 0.71073 \text{ \AA}$) radiation with a CCD area detector. All solvents were dried and distilled before use. All the aziridines were prepared according to the previously reported method.^[1]

B. Typical procedure for the synthesis of *N*-(2-hydroxycyclohexyl)-4-methylbenzenesulfonamide (2o).^[2] A mixture of **2j** (0.25 mmol), Zn dust (6 equiv) and NH_4Cl (10 equiv) in acetic acid (2 mL) were taken in a dry sealed tube and heated at 80°C for 1 h. After that the reaction mixture was neutralized by the saturated solution of NaHCO_3 . Then it was extracted with dichloromethane (5 mL) and the organic layer was dried over anhydrous Na_2SO_4 . After evaporation of the organic solvent, the crude product was subjected to column chromatography to obtain the pure product.

C. Structure Determination (X-ray crystallographic data of 2j):

The Colourless crystal of **2j** were obtained by crystallization from a solution in dichloromethane/ hexane. Chemical Formula: $C_{13}H_{18}N_2O_5S$

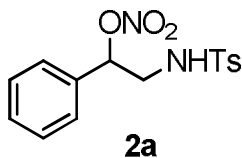


❖ ORTEP (with 50% probability) diagram for the structure 2-(4-Methylphenylsulfonamido)cyclohexyl nitrate (**2j**)

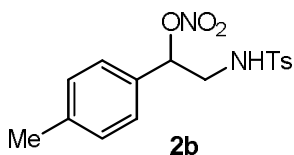
Crystal system	monoclinic	
Formula	$C_{13}H_{18}N_2O_5S$	
Space group	P 1 c 1	
Wavelength	0.71073 Å	
Unit cell dimensions	a = 8.623(2) Å	$\alpha = 90^\circ$
	b = 9.268(2) Å	$\beta = 101.362(14)^\circ$
	c = 19.565(5) Å	$\gamma = 90^\circ$
R-factor (%)	4.87	
Volume	1533.0(7) Å³	
Z	4	

The crystallographic data have been deposited with the Cambridge Crystallographic Data Centre as supplementary publication with a CCDC reference number **CCDC 1549293**.

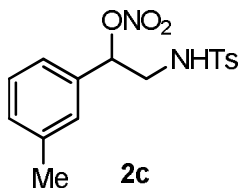
D. Analytical data for 2a-2n and 2o:



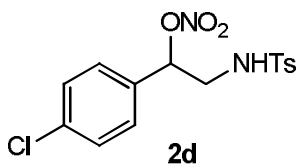
2-(4-Methylphenylsulfonamido)-1-phenylethyl nitrate (2a).^[3] Yellow solid (302 mg, 90%), mp: 85-87 °C; ¹H NMR (CDCl₃, 400 MHz): δ 7.74 (d, J = 8.4 Hz, 2H), 7.37-7.36 (m, 3H), 7.32-7.26 (m, 4H), 5.83-5.80 (m, 1H), 5.13 (s, 1H), 3.38-3.32 (m, 2H), 2.43 (s, 3H); ¹³C NMR (CDCl₃, 100 MHz): δ 144.1, 136.8, 134.8, 130.1, 129.8, 129.2, 127.1, 126.6, 83.6, 46.0, 21.7.



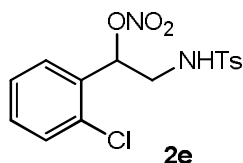
2-(4-Methylphenylsulfonamido)-1-(p-tolyl)ethyl nitrate (2b).^[3] Pale yellow gummy mass, (304 mg, 87%); ¹H NMR (CDCl₃, 400MHz): δ 7.73 (d, J = 8.4 Hz, 2H), 7.31 (d, J = 8.4 Hz, 2H), 7.16 (s, 4H), 5.79-5.75 (m, 1H), 4.97 (t, J = 6.4 Hz, 1H), 3.37-3.20 (m, 2H), 2.43 (s, 3H), 2.34 (s, 3H); ¹³C NMR (CDCl₃, 100 MHz): δ 144.1, 139.9, 136.9, 131.7, 130.0, 129.9, 127.1, 126.6, 83.6, 45.9, 21.7, 21.3.



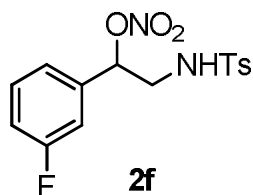
2-(4-Methylphenylsulfonamido)-1-(m-tolyl)ethyl nitrate (2c). White Solid, (322 mg, 92%), mp: 89-91 °C; ^1H NMR (CDCl_3 , 400 MHz): δ 7.78 (d, J = 8.4 Hz, 2H), 7.35 (d, J = 8.0 Hz, 2H), 7.30-7.27 (m, 1H), 7.20 (d, J = 7.2 Hz, 1H), 7.11-7.09 (m, 2H), 5.84-5.80 (m, 1H), 5.24 (s, 1H), 3.45-3.33 (m, 2H), 2.46 (s, 3H), 2.36 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz) δ 144.1, 139.0, 136.9, 134.7, 130.5, 130.0, 129.0, 127.2, 127.1, 123.6, 83.7, 46.0, 21.6, 21.4. Anal. Calcd For $\text{C}_{16}\text{H}_{18}\text{N}_2\text{O}_5\text{S}$: C, 54.85; H, 5.18; N, 8.00%; Found: C, 54.78; H, 5.12; N, 8.05%.



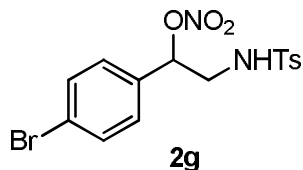
1-(4-Chlorophenyl)-2-(4-methylphenylsulfonamido)ethyl nitrate (2d). Light yellow gummy mass (289 mg, 78%); ^1H NMR (CDCl_3 , 400 MHz): δ 7.71 (d, J = 8.0 Hz, 2H), 7.35-7.30 (m, 4H), 7.23-7.21 (m, 2H), 5.81-5.78 (m, 1H), 4.90 (s, 1H), 3.37-3.30 (m, 2H), 2.44 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 144.3, 136.8, 135.9, 133.3, 130.1, 129.5, 128.0, 127.1, 82.9, 45.9, 21.7. Anal. Calcd For $\text{C}_{15}\text{H}_{15}\text{ClN}_2\text{O}_5\text{S}$: C, 48.59; H, 4.08; N, 7.55%; Found: C, 48.51; H, 4.01; N, 7.46%.



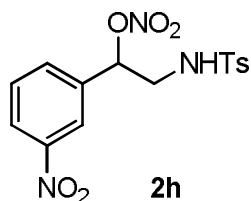
1-(2-Chlorophenyl)-2-(4-methylphenylsulfonamido)ethyl nitrate (2e).^[4] Pale yellow oil (322 mg, 87%) ; ¹H NMR (CDCl₃, 400 MHz): δ 7.76 (d, J = 8.4 Hz, 2H), 7.38-7.36 (m, 1H), 7.32-7.27 (m, 5H), 6.23-6.20 (m, 1H), 5.27-5.23 (m, 1H), 3.57-3.50 (m, 1H), 3.31-3.23 (m, 1H), 2.43 (s, 3H); ¹³C NMR (CDCl₃, 100 MHz): δ 144.1, 137.0, 132.9, 132.5, 130.5, 130.2, 130.0, 127.7, 127.1, 126.7, 79.9, 44.7, 21.6.



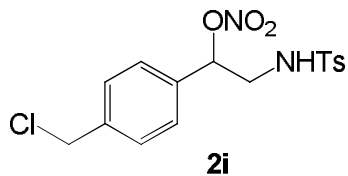
1-(3-Fluorophenyl)-2-(4-methylphenylsulfonamido)ethyl nitrate (2f). Colourless oil (290 mg, 82%); ¹H NMR (CDCl₃, 400 MHz): δ 7.73 (d, J = 8.0 Hz, 2H), 7.37-7.30 (m, 3H), 7.09-6.95 (m, 3H), 5.82-5.79 (m, 1H), 5.21 (s, 1H), 3.38-3.28 (m, 2H), 2.43 (s, 3H); ¹³C NMR (CDCl₃, 100 MHz): δ 163.0 (d, $^1J_{C-F}$ = 246 Hz), 144.3, 137.3 (2C), 136.7, 131.0 (d, $^4J_{C-F}$ = 8 Hz), 130.1, 127.1, 122.3 (d, $^3J_{C-F}$ = 3 Hz), 116.8, 116.6, 113.6 (d, $^2J_{C-F}$ = 22 Hz), 82.7, 45.9, 21.7. Anal. Calcd For C₁₅H₁₅FN₂O₅S: C, 50.84; H, 4.27; N, 7.91%; Found: C, 50.92; H, 4.20; N, 7.98%.



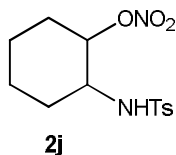
1-(4-Bromophenyl)-2-(4-methylphenylsulfonamido)ethyl nitrate (2g). Pale yellow oil (348 mg, 84%); ^1H NMR (CDCl_3 , 400 MHz): δ 7.71 (d, J = 8.0 Hz, 2H), 7.49-7.47 (m, 2H), 7.30 (d, J = 8.0 Hz, 2H), 7.15 (d, J = 8.4 Hz, 2H), 5.80-5.77 (m, 1H), 5.16 (s, 1H), 3.36-3.30 (m, 2H), 2.43 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 144.2, 136.7, 133.8, 132.4, 130.1, 128.3, 127.0, 123.9, 82.9, 45.8, 21.7. Anal. Calcd For $\text{C}_{15}\text{H}_{15}\text{BrN}_2\text{O}_5\text{S}$: C, 43.39; H, 3.64; N, 6.75%; Found: C, 43.29; H, 3.70; N, 6.68%.



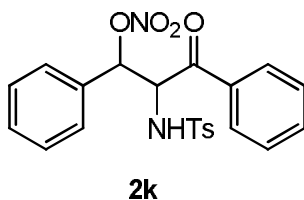
2-(4-Methylphenylsulfonamido)-1-(3-nitrophenyl)ethyl nitrate (2h). White gummy mass (324 mg, 85%); ^1H NMR (CDCl_3 , 400 MHz): δ 8.22-8.19 (m, 1H), 8.13-8.12 (m, 1H), 7.72-7.66 (m, 3H), 7.57 (t, J = 8.0 Hz, 1H), 7.30 (d, J = 8.0 Hz, 2H), 5.95-5.92 (m, 1H), 5.37 (t, J = 6.4 Hz, 1H), 3.43-3.38 (m, 2H), 2.43 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 148.6, 144.4, 137.1, 136.6, 132.8, 130.4, 130.1, 127.0, 124.6, 121.7, 82.1, 45.8, 21.6. Anal. Calcd For $\text{C}_{15}\text{H}_{15}\text{N}_3\text{O}_7\text{S}$: C, 47.24; H, 3.96; N, 11.02%; Found: C, 47.15; H, 3.82; N, 10.94%.



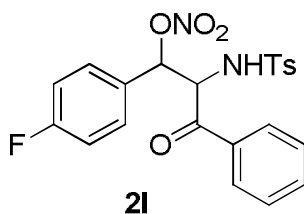
1-(4-(Chloromethyl)phenyl)-2-(4-methylphenylsulfonamido)ethyl nitrate (2i). Light yellow gummy mass (338 mg, 88%); ^1H NMR (CDCl_3 , 400 MHz): δ 7.73 (d, J = 8.0 Hz, 2H), 7.40-7.38 (m, 2H), 7.32-7.27 (m, 4H), 5.85-5.81 (m, 1H), 5.23-5.20 (m, 1H), 4.55 (s, 2H), 3.36-3.31 (m, 2H), 2.43 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 144.2, 139.1, 136.7, 135.0, 130.1, 129.3, 127.1, 127.0, 83.2, 45.9, 45.5, 21.6. Anal. Calcd For $\text{C}_{16}\text{H}_{17}\text{ClN}_2\text{O}_5\text{S}$: C, 49.94; H, 4.45; N, 7.28%; Found: C, 49.84; H, 4.36; N, 7.37%.



2-(4-Methylphenylsulfonamido)cyclohexyl nitrate (2j).^[5] Colourless solid (282 mg, 90%), mp: 116-117 °C; ^1H NMR (CDCl_3 , 400 MHz): δ 7.75 (d, J = 8.0 Hz, 2H), 7.30 (d, J = 8.0 Hz, 2H), 5.37 (s, 1H), 4.81-4.75 (m, 1H), 3.29-3.21 (m, 1H), 2.42 (s, 3H), 2.04-1.98 (m, 2H), 1.70-1.61 (m, 2H), 1.42-1.31 (m, 4H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 143.7, 137.6, 129.8, 127.0, 82.9, 54.0, 32.4, 29.0, 23.4, 23.1, 21.6.

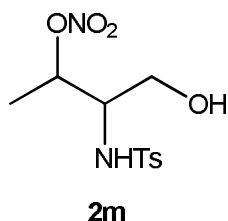


2-(4-Methylphenylsulfonamido)-3-oxo-1,3-diphenylpropyl nitrate (2k). White gummy mass (317 mg, 72%); ^1H NMR (CDCl_3 , 400 MHz): δ 7.81-7.78 (m, 2H), 7.67-7.63 (m, 3H), 7.59-7.57 (m, 1H), 7.51-7.47 (m, 2H), 7.25-7.24 (m, 2H), 7.15 (d, $J = 8.4$ Hz, 2H), 7.03-7.00 (m, 2H), 6.06-6.03 (m, 1H), 5.62 (d, $J = 8.4$ Hz, 1H), 5.57-5.54 (m, 1H), 2.31 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 193.8, 144.0, 134.8, 129.9, 129.8, 129.3 (2C), 128.9, 128.8, 128.6, 127.7, 127.3, 127.2, 83.1, 59.2, 21.6. Anal. Calcd For $\text{C}_{22}\text{H}_{20}\text{N}_2\text{O}_6\text{S}$: C, 59.99; H, 4.58; N, 6.36%; Found: C, 59.90; H, 4.47; N, 6.30%.

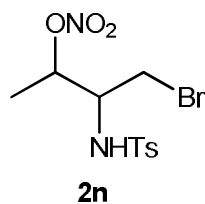


1-(4-Fluorophenyl)-2-(4-methylphenylsulfonamido)-3-oxo-3-phenylpropyl nitrate (2l). Yellow gummy mass (343 mg, 75%); ^1H NMR (CDCl_3 , 400 MHz): δ 7.83-7.80 (m, 2H), 7.70-7.61 (m, 3H), 7.52-7.48 (m, 2H), 7.14 (d, $J = 8.0$ Hz, 2H), 7.05-7.01 (m, 2H), 6.95-6.90 (m, 2H), 6.03 (d, $J = 4.8$ Hz, 1H), 5.73 (d, $J = 8.8$ Hz, 1H), 5.54-5.51 (m, 1H), 2.31 (s, 3H); ^{13}C NMR (CDCl_3 , 100 MHz): δ 194.0, 163.5 (d, $^1J_{\text{C-F}} = 248$ Hz), 144.1, 136.7, 135.0, 134.2, 129.8 (d, $^3J_{\text{C-F}} = 4$ Hz), 129.4 (d, $^4J_{\text{C-F}} = 9$ Hz), 128.8, 128.6, 128.5, 127.1, 115.9 (d, $^2J_{\text{C-F}} = 22$ Hz), 82.5, 58.9,

21.6. Anal. Calcd For C₂₂H₁₉FN₂O₆S: C, 57.64; H, 4.18; N, 6.11%; Found: C, 57.54; H, 4.06; N, 6.03%.



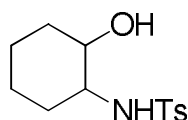
4-Hydroxy-3-(4-methylphenylsulfonamido)butan-2-yl nitrate (2m). Brown gummy mass (234 mg, 77%); ¹H NMR (CDCl₃, 400 MHz): δ 7.74 (d, *J* = 8.4 Hz, 2H), 7.33 (d, *J* = 8.0 Hz, 2H), 5.22 (d, *J* = 9.2 Hz, 1H), 5.15-5.08 (m, 1H), 4.48-4.38 (m, 2H), 3.83-3.79 (m, 1H), 2.44 (s, 3H), 1.37 (d, *J* = 6.4 Hz, 3H); ¹³C NMR (CDCl₃, 100 MHz): δ 144.7, 136.7, 130.2, 127.1, 78.9, 69.8, 53.4, 21.7, 15.3. Anal. Calcd For C₁₁H₁₆N₂O₆S: C, 43.42; H, 5.30; N, 9.21%; Found: C, 43.31; H, 5.22; N, 9.26%.



4-Bromo-3-(4-methylphenylsulfonamido)butan-2-yl nitrate (2n). Light yellow oil (308 mg, 84%); ¹H NMR (CDCl₃, 400 MHz): δ 7.74 (d, *J* = 8.4 Hz, 2H), 7.33 (d, *J* = 8.0 Hz, 2H), 5.31-5.25 (m, 2H), 4.14-4.10 (m, 1H), 3.42-3.28 (m, 2H), 2.43 (s, 3H), 1.46 (d, *J* = 6.4 Hz, 3H);

^{13}C NMR (CDCl_3 , 100 MHz): δ 144.3, 136.5, 130.1, 127.1, 78.8, 52.4, 45.9, 21.7, 16.0. Anal.

Calcd For $\text{C}_{11}\text{H}_{15}\text{BrN}_2\text{O}_5\text{S}$: C, 35.98; H, 4.12; N, 7.63%; Found: C, 35.87; H, 4.04; N, 7.56%.



2o

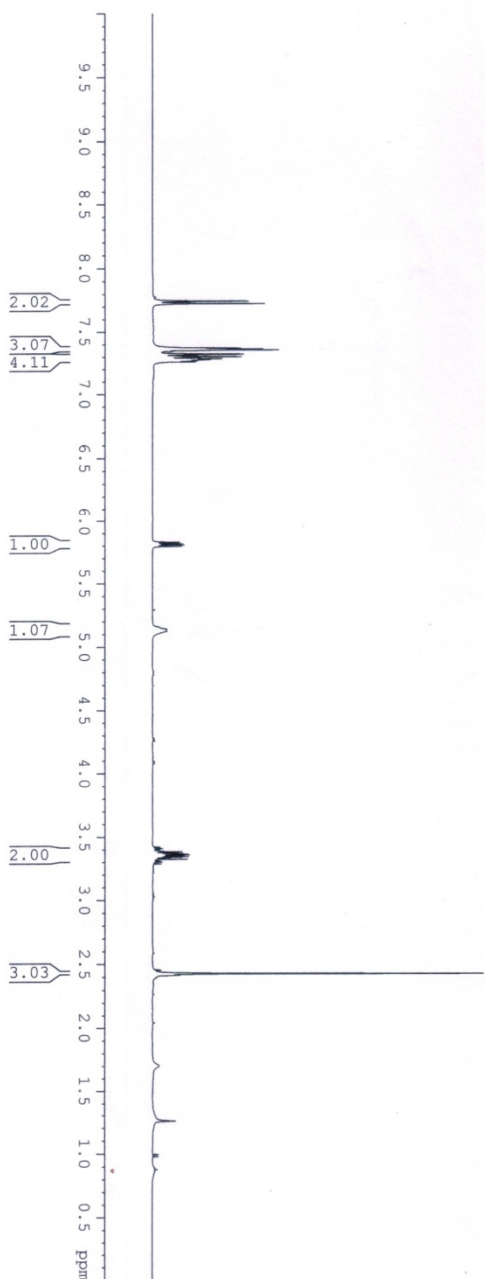
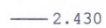
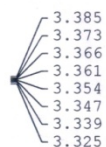
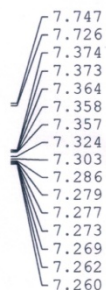
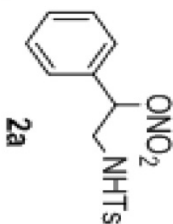
N-(2-hydroxycyclohexyl)-4-methylbenzenesulfonamide (2o).^[2] White solid (50.50 mg, 75%), mp: 128-130 °C; ^1H NMR (400 MHz, CDCl_3): δ 7.79 (d, J = 8.0 Hz, 2H), 7.31 (d, J = 8.0 Hz, 2H), 4.96 (d, J = 6.8 Hz, 1H), 3.31-3.26 (m, 1H), 2.89-2.81 (m, 1H), 2.66 (s, 1H), 2.43 (s, 3H), 2.03-1.99 (m, 1H), 1.74-1.58 (m, 3H), 1.25-1.11 (m, 4H); ^{13}C NMR (100 MHz, CDCl_3): δ 143.8, 137.5, 129.9, 127.3, 73.5, 59.8, 33.5, 32.0, 24.8, 24.0, 21.7.

E. References:

1. Thakur, V. V.; Sudalai, A. *Tetrahedron Lett.* **2003**, 44, 989–992.
2. Prasad, B. A. B.; Sanghi, R.; Singh, V. K. *Tetrahedron.* **2002**, 58, 7355–7363.
3. Das, B.; Krishnaiah, M.; Venkateswarlu, K.; Reddy, V.S. *Helv. Chim. Acta.* **2007**, 90, 110-113.
4. Volkova, Y.A.; Averina, E.B.; Kuznetsova, T.S.; Zefirov, N.S. *Tetrahedron Lett.* **2010**, 51, 2254–2257.
5. Liu, Z-Q.; Fan, Y.; Li, R.; Zhou, B.; Wu, L-M. *Tetrahedron Lett.* **2005**, 46, 1023-1025.

F. NMR spectra for the synthesized compounds:

1H of VBSAS-19-A/1

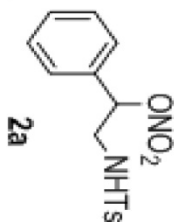


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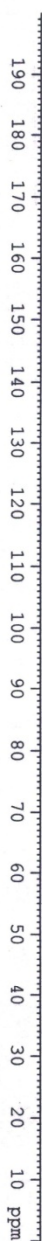
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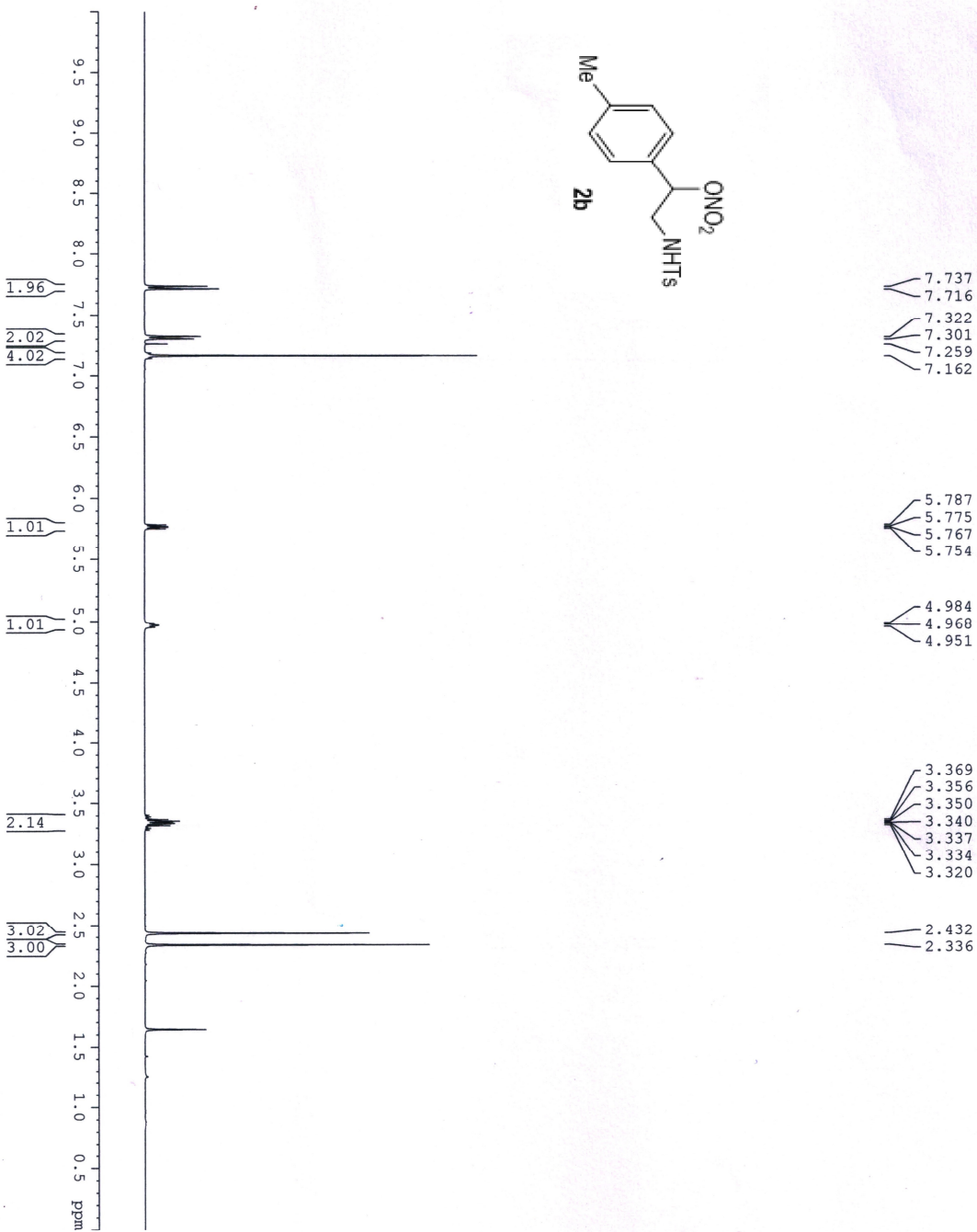
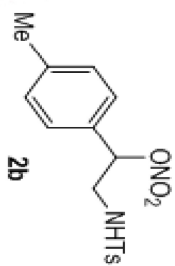
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NUC2 1H
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW3 0.32231000 W
PLW4 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177875 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40





Current Data Parameters
NAME Dr. A MAJEE 2017
EXPNO 406
PROCNO 1

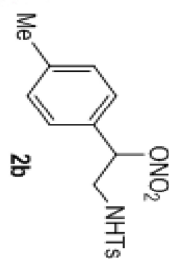
F2 - Acquisition Parameters
Date_ 20170503
Time 19.07

INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1

SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 87.66
DW 60.800 usec
DE 6.50 usec
TE 297.1 K
D1 1.00000000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500100 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



144.13
139.90
136.91
131.70
130.05
129.87
127.11
126.63

83.63
77.47
77.15
76.83

45.93

21.67
21.33



Current Data Parameters
NAME Dr. A. MAJEE 2017
EXPNO 407
PROCNO 1

F2 - Acquisition Parameters

Date_ 20170503
Time_ 19.29
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 400
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 47.25
DW 20.800 usec
DE 6.50 usec
TE 297.8 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

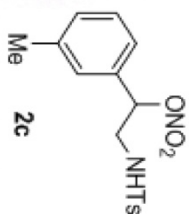
===== CHANNEL f1 =====
SF01 100.627858 MHz
NUC1 13C
P1 8.90 usec
PL1 54.00000000 W

===== CHANNEL f2 =====
SF02 400.151606 MHz
NUC2 1H
PCPBRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

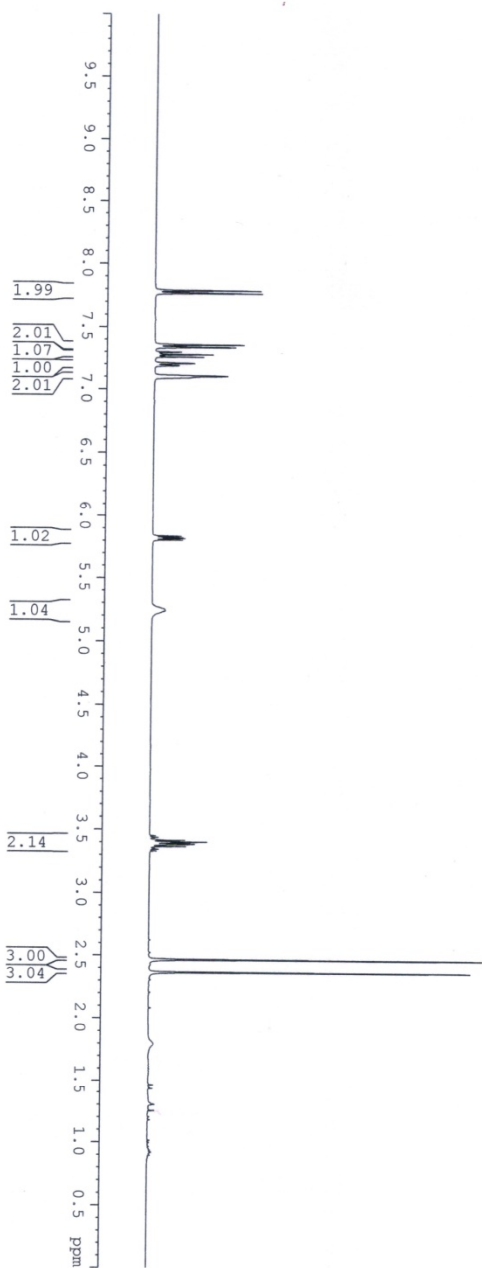
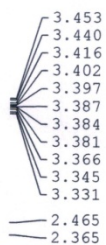
F2 - Processing parameters
SI 16384
SF 100.6177858 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



¹H of VBSAS-19A-21



5.240



Current Data Parameters
NAME Dr. A MAJEE 2017
EXPNO 395
PROCNO 1

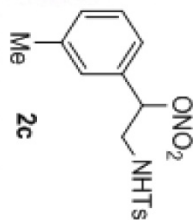
F2 - Acquisition Parameters

Date_ 20170429
Time 15.48
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 47.25
DW 60.800 usec
DE 6.50 usec
TE 301.6 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.149947 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹³C of VBSAS-19A-21



144.06
139.04
136.94
134.72
130.48
130.02
129.05
127.16
127.08
123.60

83.72
77.47
77.15
76.83

46.00

21.61
21.42

190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ppm

Current Data Parameters
NAME De. A MAJE 2017
EXPNO 396
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170423
Time 16:00
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 212
DS 2
SWH 24038.461 Hz
FIDRES 0.733566 Hz
AQ 0.6815744 sec
RG 47.25
DE 20.800 usec
TE 302.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

CHANNEL F1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PL1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 1H
CPRPG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177883 MHz
WDW EM
SSB 0
GB 1.00 Hz
PC 1.40

1H OF VBSAS-24p

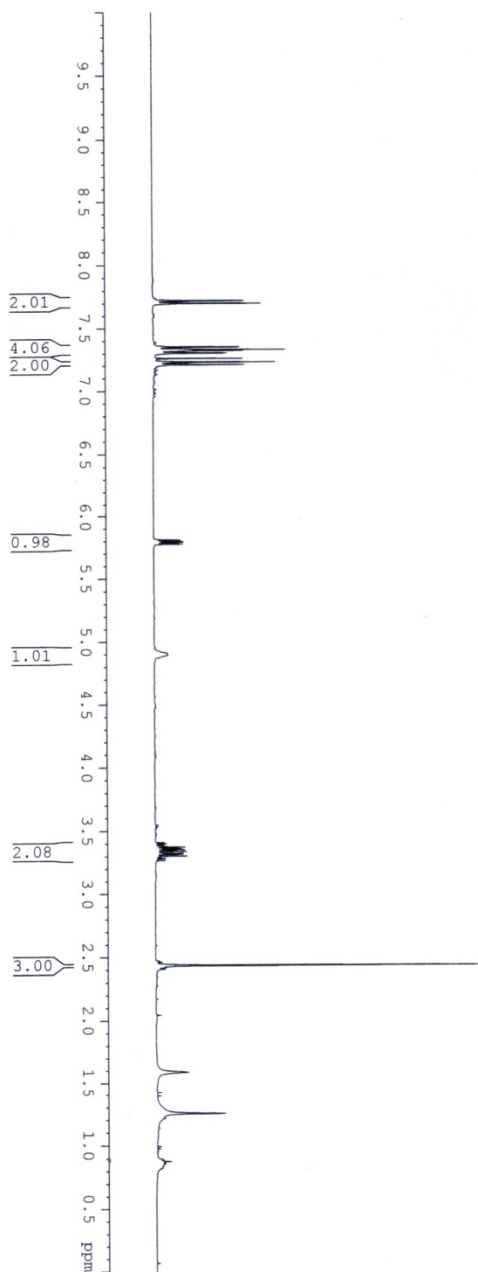
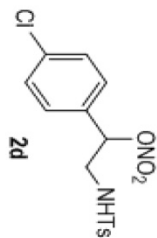
7.720
7.700
7.353
7.348
7.337
7.332
7.324
7.303
7.260
7.231
7.226
7.215
7.210

5.810
5.798
5.789
5.777

4.905

3.375
3.363
3.355
3.343
3.339
3.325
3.318
3.304

2.437



Current Data Parameters
NAME DT. A MAYBE 2017
EXPNO 113
PROCNO 1

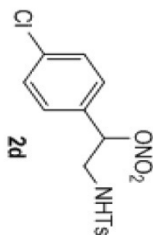
F2 - Acquisition Parameters

Date_ 20170209
Time 12.53
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 120.16
DW 60.800 usec
DE 6.50 usec
TE 295.8 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SF01 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

13C of VBSAS-24p



144.29
136.81
135.87
133.30
130.12
129.52
128.02
127.09

82.86
77.48
77.16
76.85

45.89

21.72

190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ppm



Current Data Parameters
NAME Dr. A. MAJEE 2017
EXPNO 114
PROCNO 1

F2 - Acquisition Parameters

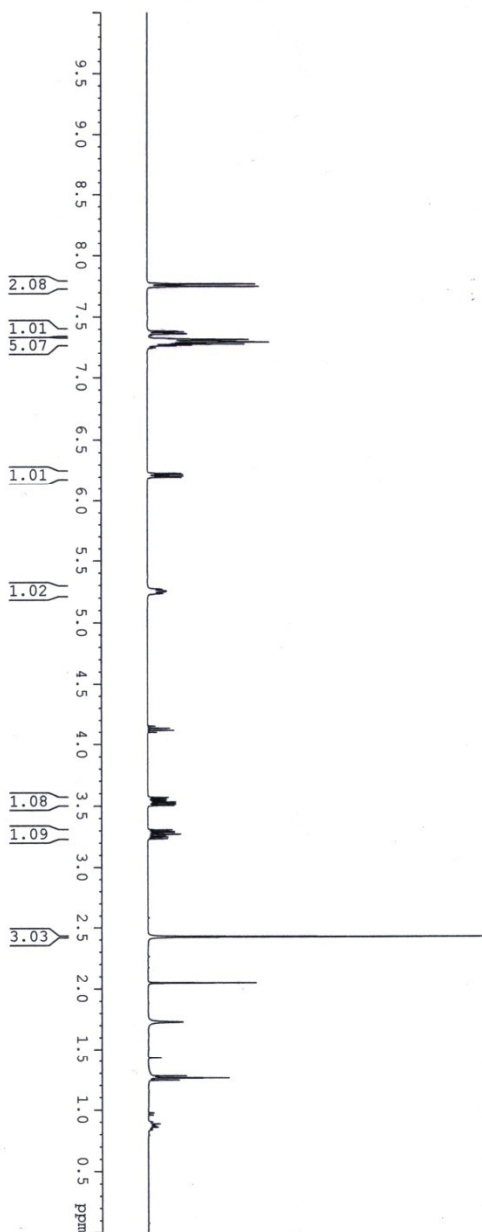
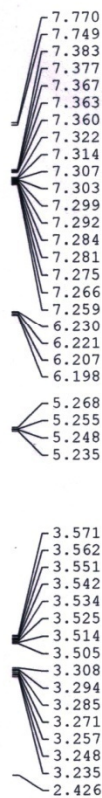
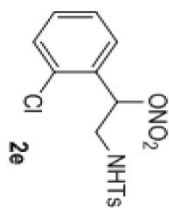
Date_ 20170209
Time 13.19
INSTRUM spect
PROBHD 5 mm PABO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 512
DS 2
SWH 24038.461 Hz
FIDRES 0.733594 Hz
AQ 0.6815744 sec
RG 120.16
DE 20.800 usec
TE 296.3 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177837 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

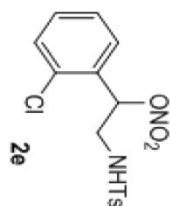
1H OF VBSAS 19A 14 P



Current Data Parameters
NAME Dr. A. MATE 2017
EXPNO 287
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170401
Time 20.07
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 62.69
DW 60.800 usec
DE 6.50 usec
TE 300.8 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500067 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 11.00

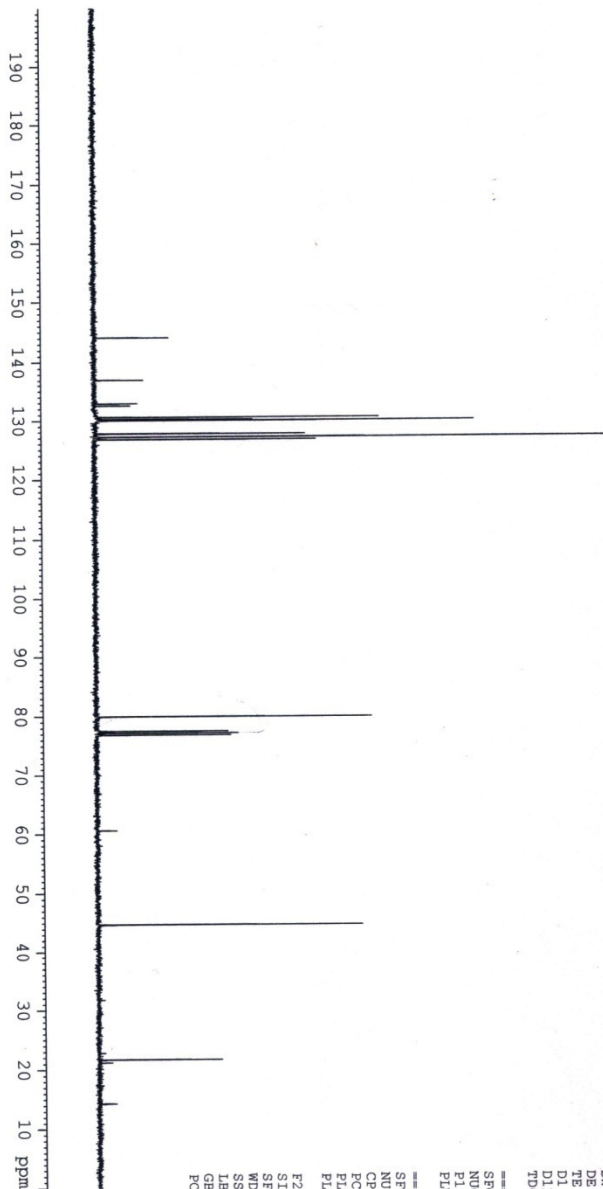


144.08
137.03
132.87
132.52
130.55
130.20
130.00
127.71
127.15
126.73

79.91
77.47
77.15
76.83

44.68

21.63



Current Data Parameters
NAME Dr. A. MAJEE 2017
EXPNO 288
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170401

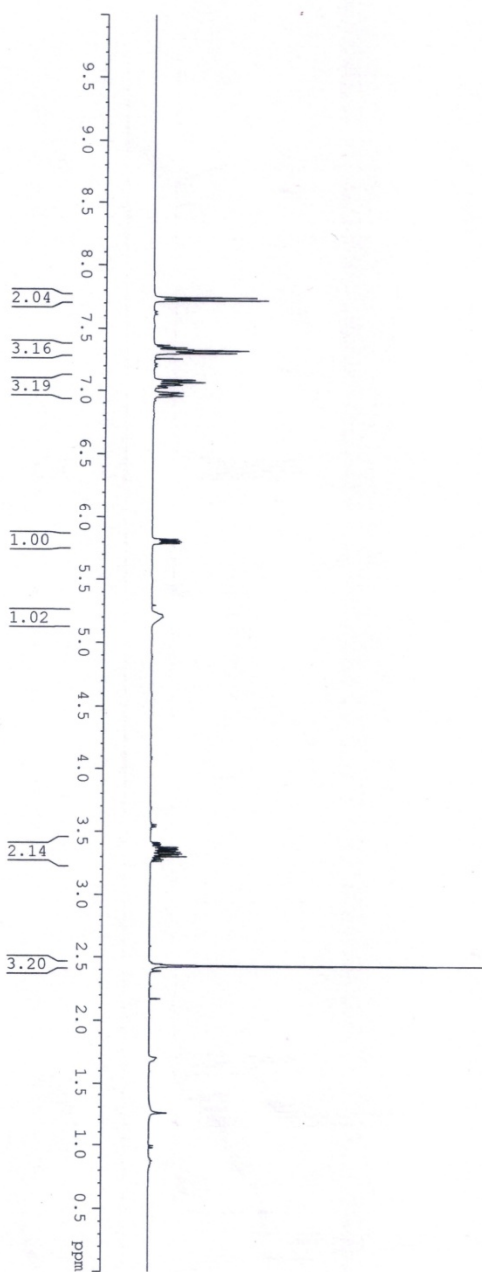
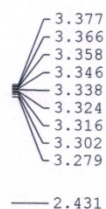
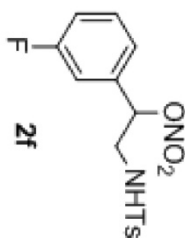
Time 20.33
INSTRUM spect
PROBHD 5 mm PABBO-286C
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 320
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 62.69
DW 20.800 usec
DE 6.50 usec
TE 300.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PL1 54.00000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
P2 11.00 usec
PL2 1.00 W
PCPD2 12.00000000 W
PLM12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6177859 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
FC 1.40

1H of VBSAS-A 9



Current Data Parameters
NAME Dr. A. MAYER 2017
EXPNO 186
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170224
Time_ 20:55

INSTRUM spect
PROBHD 5 mm PABBO BH/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 32

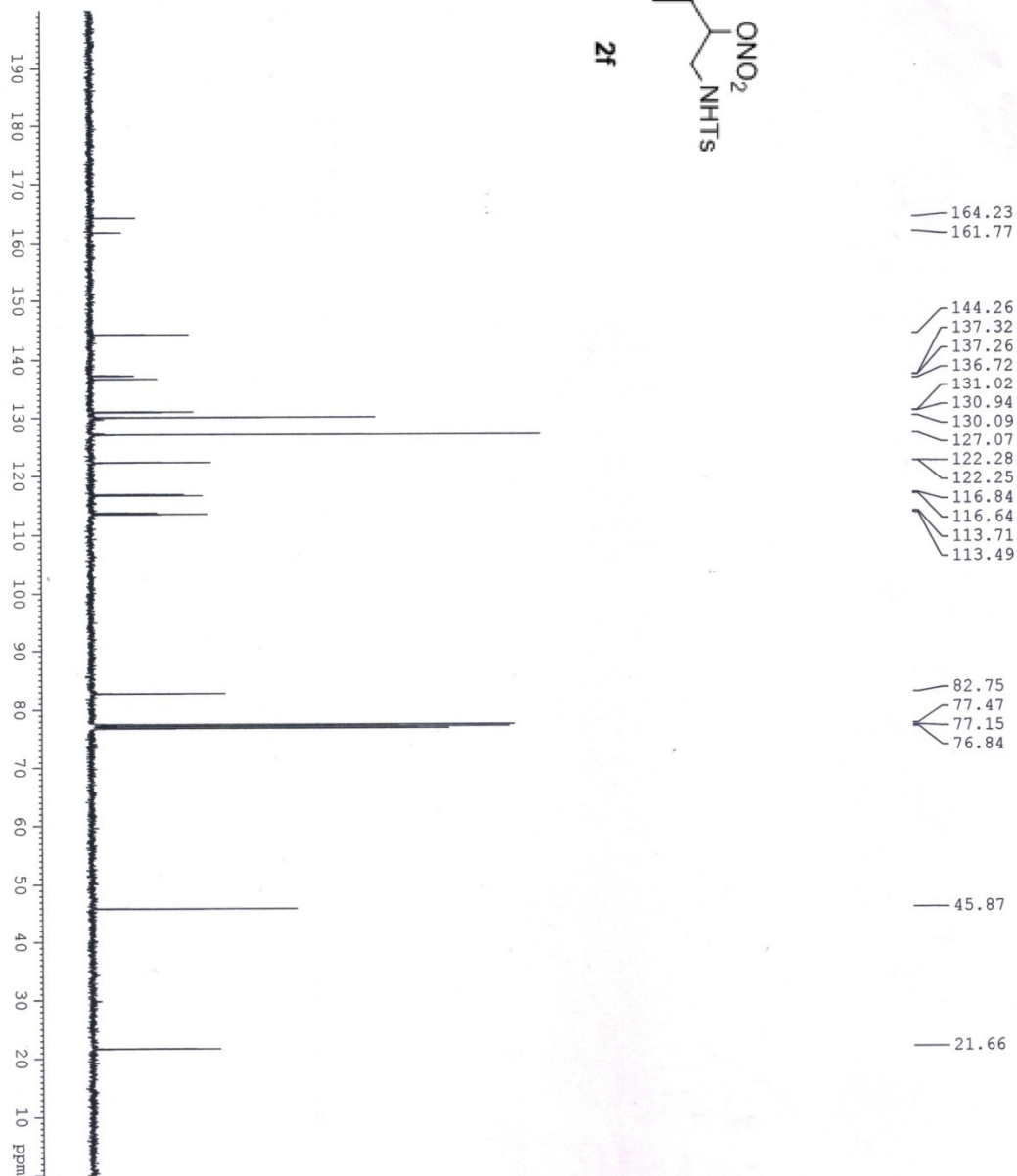
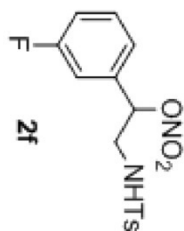
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec

RG 57.28
DM 60.800 usec
DE 6.50 usec
TE 296.6 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing Parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

¹³C of VBSAS-19-A9



Current Data Parameters
NAME Dr. A. WATJE 2017
EXPERNO 191
PROCNO 1

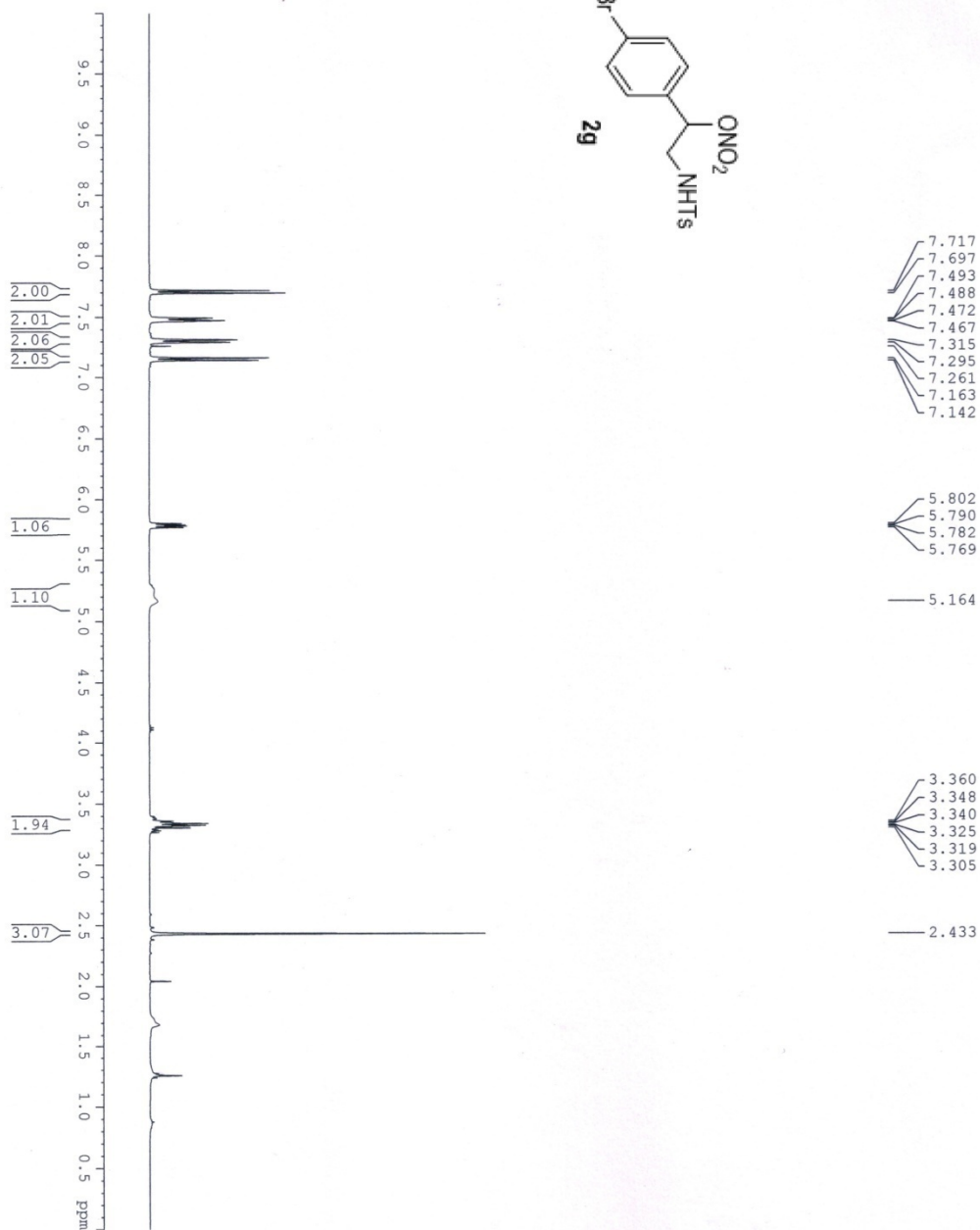
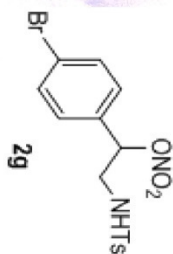
F2 - Acquisition Parameters
Date_ 20170226
Time_ 11:56
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 256
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 517.28
RM 20.900 usec
DN 4.50 usec
TE 296.5 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

CHANNEL F1
SFO1 100.6278588 MHz
NUC1 ¹³C
P1 8.90 usec
PL1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 ¹H
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.617973 MHz
WDW EM
SSB 0
GB 0
PC 1.40

1H OF VBSAS-19A/15



7.717
7.697
7.493
7.488
7.472
7.467
7.315
7.295
7.261
7.163
7.142

5.802
5.790
5.782
5.769

5.164

3.360
3.348
3.340
3.325
3.319
3.305

2.433

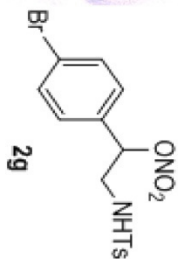


Current Data Parameters
NAME Dr. A MAUER 2017
EXPNO 304
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170405
Time 18.44
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 93.46
DW 60.800 usec
DE 6.50 usec
TE 299.7 K
D1 1.00000000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.150093 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

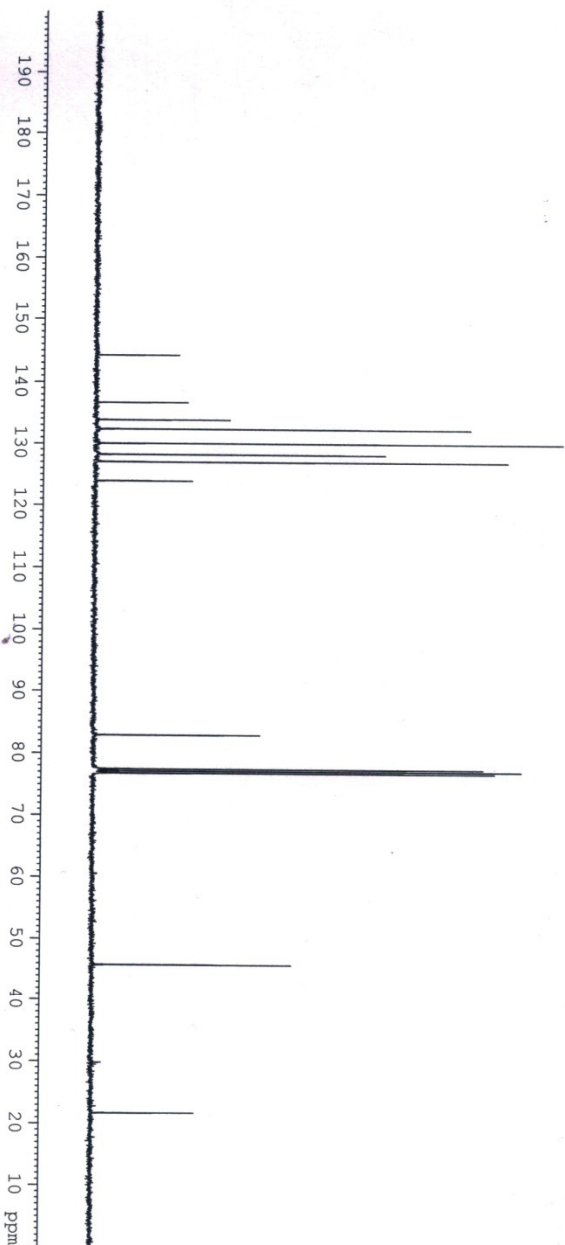


144.23
136.72
133.85
132.39
130.07
128.26
127.05
123.93

82.87
77.47
77.15
76.83

45.77

21.68



Current Data Parameters
NAME Dr. A MAJEE 2017
EXPNO 305
PROCNO 1

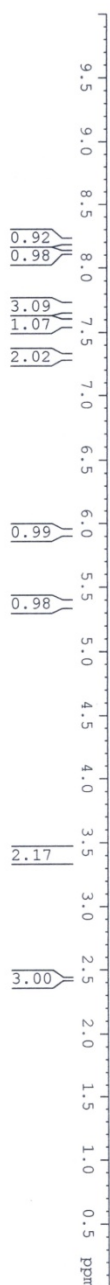
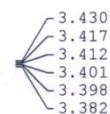
F2 - Acquisition Parameters
Date_ 20170406
Time 11.11
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 512
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.683744 sec
RG 327.68
DM 20.800 usec
DE 6.50 usec
TE 298.3 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL F1
SF01 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLM1 54.00000000 W

CHANNEL F2
SF02 400.151606 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing Parameters
SI 16384
SF 100.617873 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1H OF VBSAS-19A/16



Current Data Parameters
NAME Dr. A MAJEE 2017
EXPNO 311
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170406
Time_ 19.41

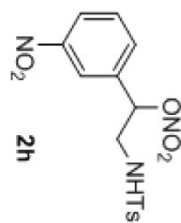
INSTRUM 5 mm PABBO BB/
PROBHD zg30
PULPROG 32/68
TD 32
SOLVENT CDCl3
NS 32
DS 1

SWH 8223.685 Hz
FIDRES 0.25067 Hz
AQ 1.9922944 sec
RG 93.46
DW 60.800 usec
DE 6.50 usec
TE 299.3 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PL1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
TB 0.30 Hz
CB 0
PC 1.00

13C of VBSAS 19A/16

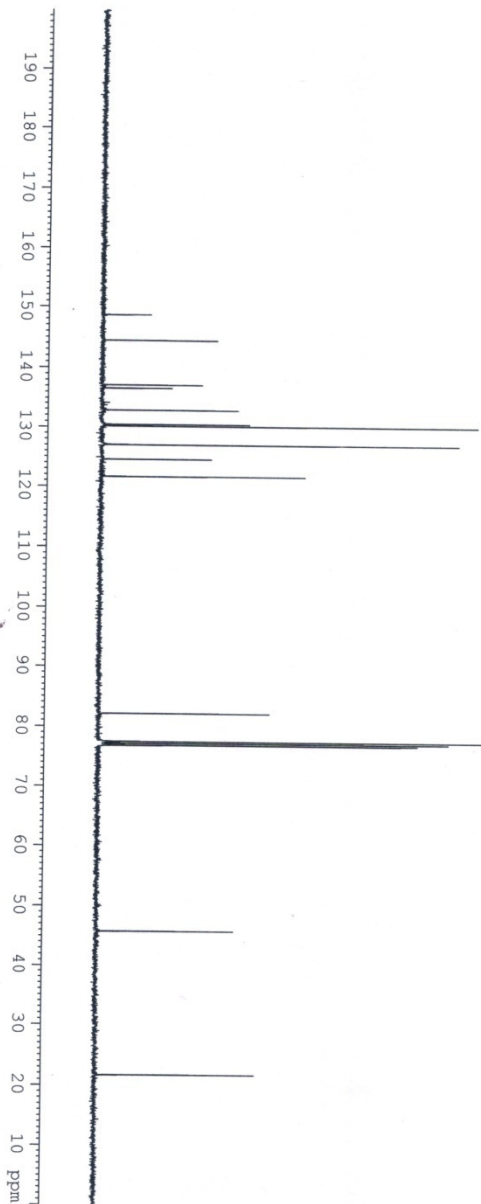


148.64
144.42
137.13
136.60
132.80
130.42
130.14
127.04
124.57
121.66

82.11
77.47
77.16
76.84

45.76

21.65



Current Data Parameters
NAME Dt. A NAMEB 2017
EXPNO 312
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170406
Time 20.19

INSTRUM spect
PROBHD 5 mm PABBO BB/

PULPROG zgpg30
TD 32768

SOLVENT CDCl3
DS 512

SWH 24038.461 Hz
FIDRES 0.733596 Hz

AQ 0.6815744 sec
RG 93.46

DW 20.800 usec
DE 6.50 usec

TE 300.1 K
D1 2.00000000 sec

D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 100.6279588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.00000000 W

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
NUC2 1H
CEPRG12 waitz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 32768
SF 100.6177858 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1H of SAS-19A 24

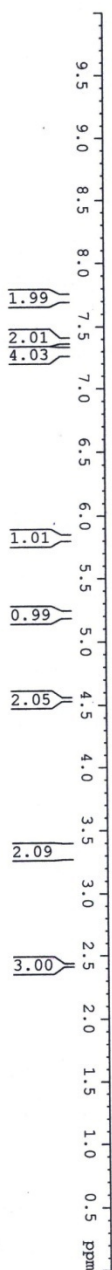
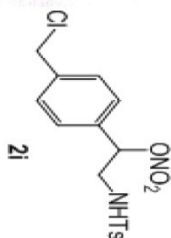
7.737
7.717
7.398
7.396
7.382
7.377
7.321
7.301
7.294
7.290
7.269
7.260

5.846
5.834
5.825
5.813
5.231
5.216
5.212
5.197

4.551

3.363
3.351
3.344
3.332
3.329
3.322
3.308

2.427



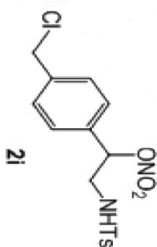
Current Data Parameters
NAME Dr. A MAUER 2017
EXPNO 411
PROCNO 1

F2 - Acquisition Parameters

Date_ 20170504
Time 19.26
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 62.69
DM 60.800 usec
DE 6.50 usec
TE 297.1 K
D1 1.00000000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
PI 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

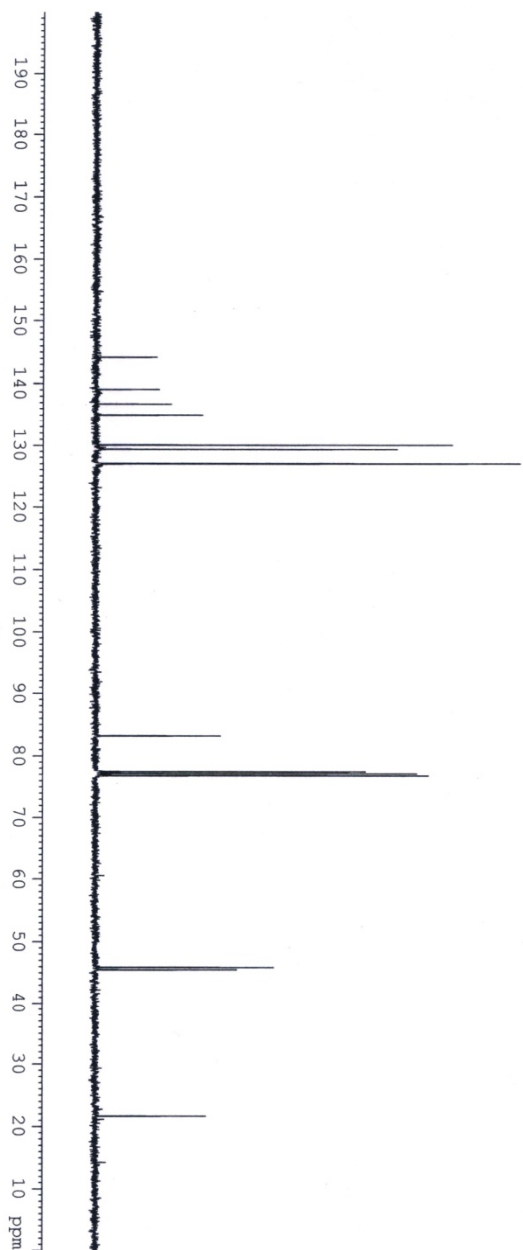


144.18
139.08
136.75
135.00
130.06
129.35
127.07
126.99

83.21
77.47
77.15
76.83

45.89
45.51

21.64



Current Data Parameters
NAME Dr. A. MAYE 2017
EXPNO 414
PROCNO 1

F2 - Acquisition Parameters

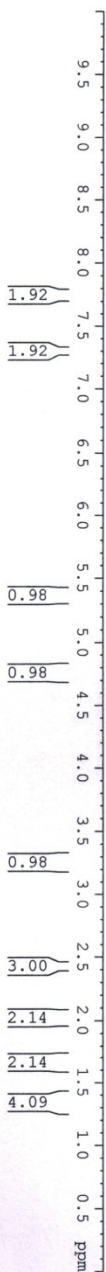
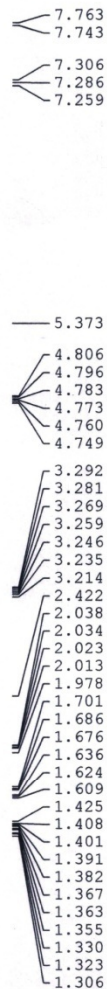
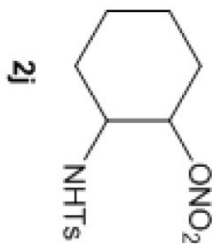
Date_ 20170504
Time 19.55
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
DS 180
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B997 2
B998 2
B999 2
B1000 2

CHANNEL f1
SFO1 100.627858 MHz
NUC1 13C
P1 8.90 usec
PL1 54.00000000 W

CHANNEL f2
SFO2 400.151606 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLM2 12.00000000 W
PLM12 0.32231000 W
PLM13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.617787 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1H of VBSAS-19a4

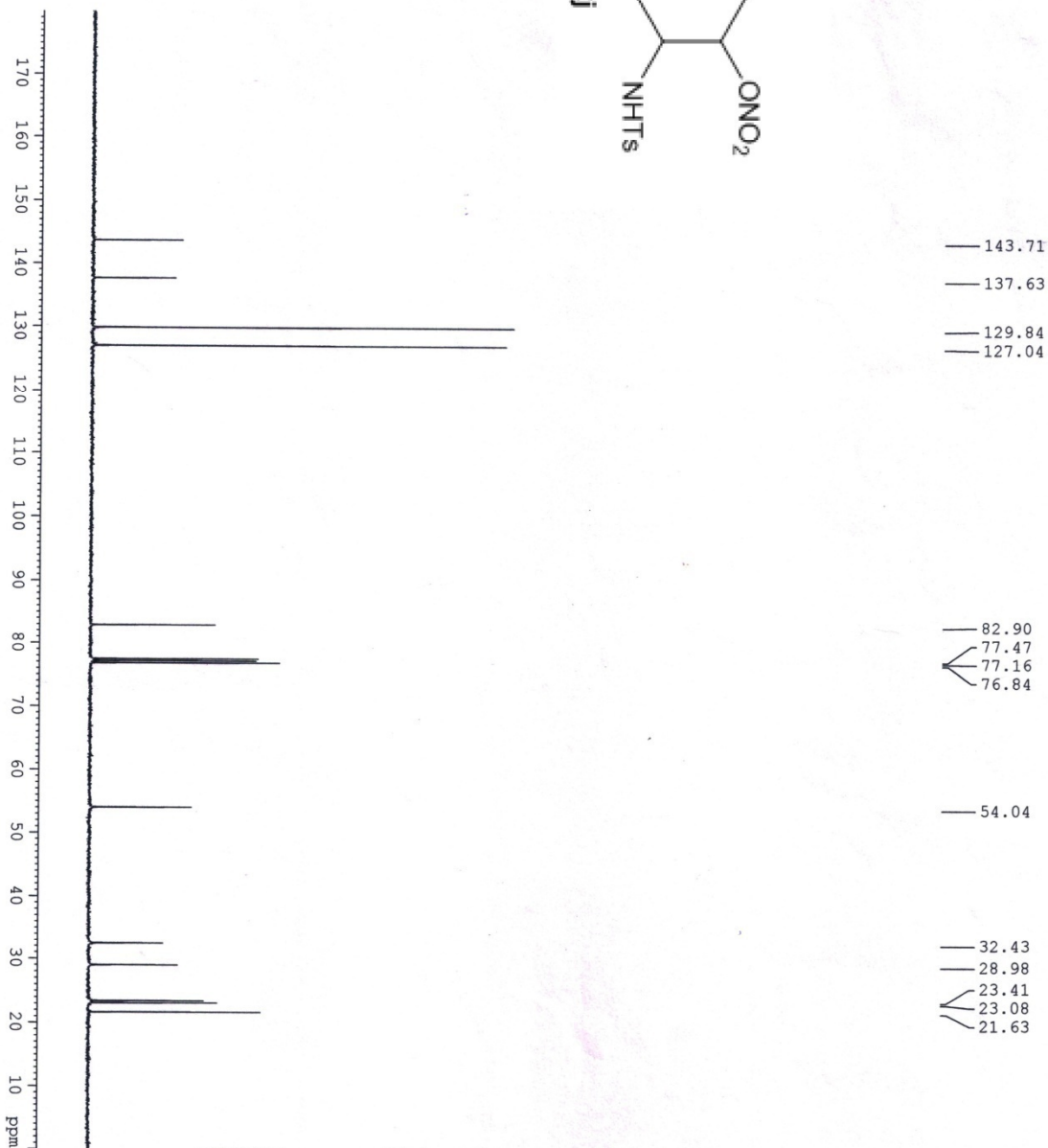
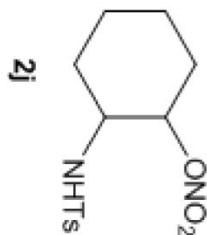


Current Data Parameters
NAME Dr. A MAUE 2017
EXPNO 125
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170211
Time 19.36
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 47.25
DW 60.800 usec
DE 6.50 usec
TE 295.8 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 11.00

¹³C of SAS-ZnNO₃



Current Data Parameters
NAME Dr. A. MATEE 2017
EXPNO 324
PROCNO 1

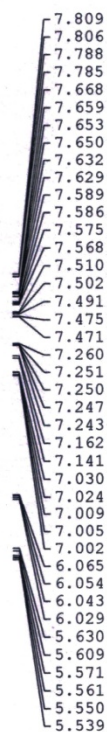
F2 - Acquisition Parameters
Date_ 20170412
Time_ 1.20
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl₃
NS 320
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.615744 sec
RG 67.81
DM 20.800 usec
DE 30.50 usec
TE 30.2 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
SF01 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PL1 54.00000000 W
F1M1

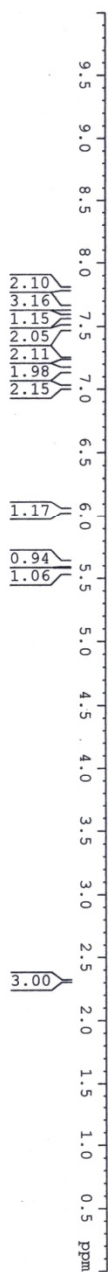
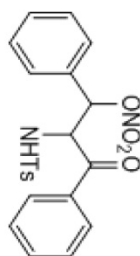
===== CHANNEL f2 =====
SF02 400.1516006 MHz
NUC2 1H
P2 19.00 usec
PL2 12.00000000 W
F2M1 0.32231000 W
F2M2 0.16212000 W
F2M3

F2 - Processing parameters
SI 16384
SF 100.6177880 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1H of VESAS 19A/18



2.315



Current Data Parameters
NAME Dr. A MAJEE 2017
EXPERNO 320
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170411
Time_ 18.26

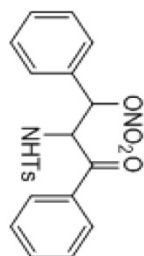
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 46

DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 168.31
DW 60.800 usec
DE 6.50 usec
TE 299.4 K
D1 1.0000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.150097 MHz
WDW EM
SSB 0
GB 0
PC 1.00

13C of VBSAS 19A\



193.82

144.02
134.85
129.90
129.85
129.32
129.28
128.93
128.77
128.62
127.73
127.35
127.19

83.14
77.46
77.15
76.83

59.21

21.59



Current Data Parameters
NAME Dr. A MAUE 2017
EXPNO 322
PROCNO 1

F2 - Acquisition Parameters

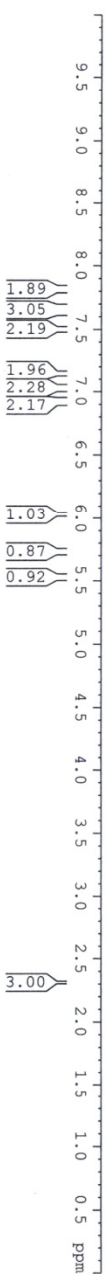
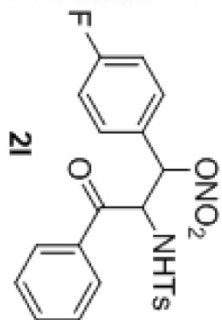
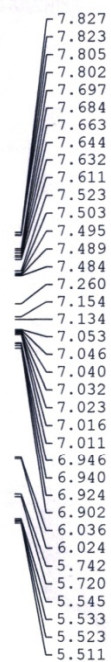
Date_ 20170413
Time 19.10
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 720
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 168.31
DW 20.800 usec
DE 6.50 usec
TE 300.7 K
D1 2.0000000 sec
D11 0.0300000 sec
TD0 1

CHANNEL f1
SFO1 100.6278588 MHz
NUC1 13C
P1 8.90 usec
PLW1 54.0000000 W

CHANNEL f2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.0000000 W
PLM12 0.32231000 W

F2 - Processing parameters
SI 16384
SF 100.6177834 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

1H of VBSAS-19A-26



Current Data Parameters
NAME : Dr. A MAJEE 2017
EXPNO 465
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170518
Time 18.05

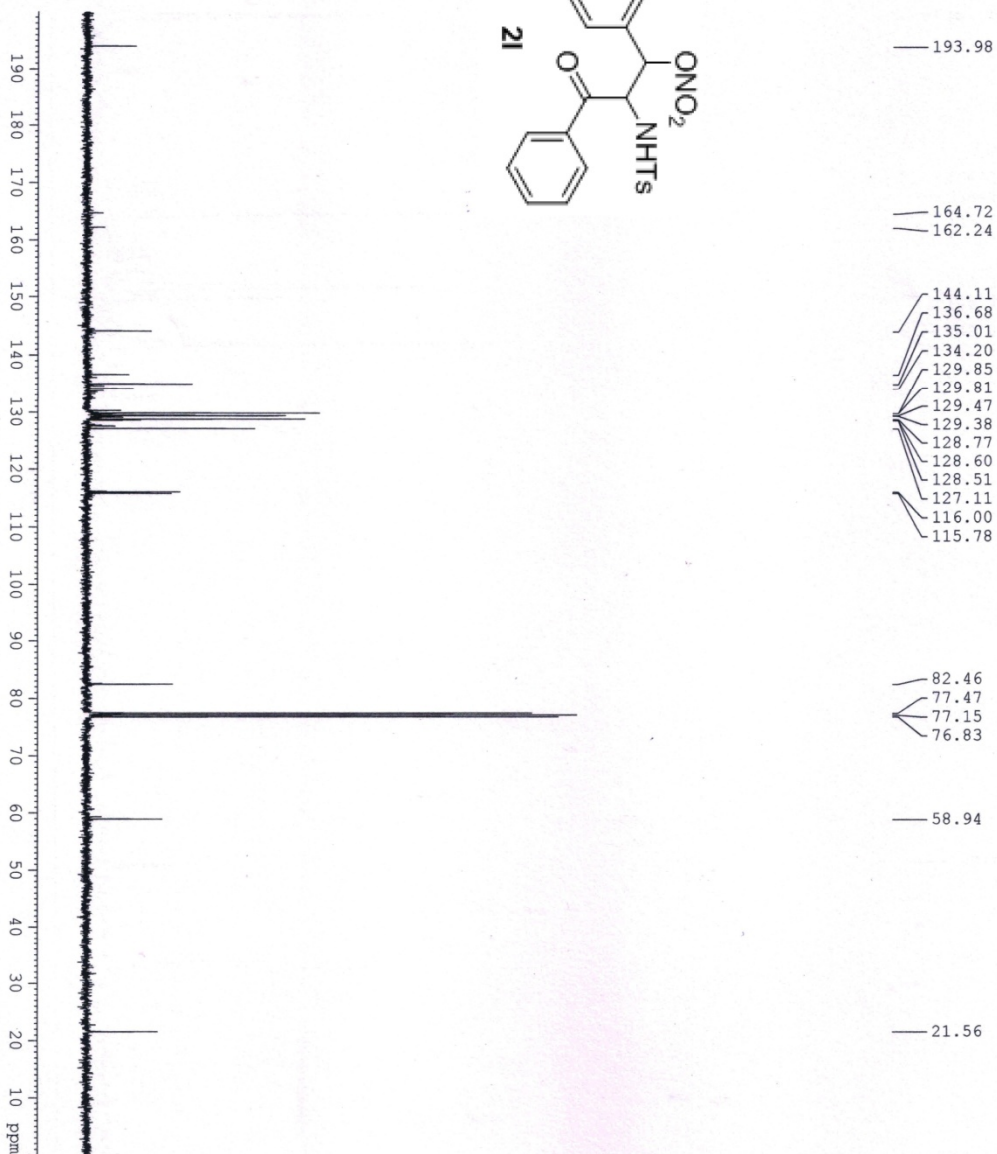
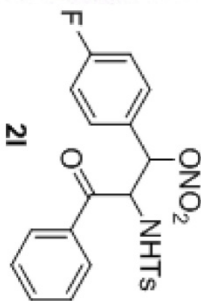
INSTRUM 5 mm PABBO B5/
PROBHD spect
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1

SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 62.69
DW 60.800 usec
DE 6.50 usec
TE 298.0 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLM1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

13C of VBSAS-19A-26



Current Data Parameters
NAME Dr. A. MAYER 2017
EXPNO 466
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170518
Time 18.24
INSTRUM spect
PROBHD 5 mm PABBO
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 256
DS 2
SWH 24038.461 Hz
FIDRES 0.133296 Hz
AQ 0.68142 sec
RG 186.42
DW 20.800 usec
DE 6.50 usec
TE 298.7 K
D11 2.00000000 sec
D1 0.03000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 100.627858 MHz
NUC1 13C
P1 8.90 usec
PLM1 54.00000000 W

===== CHANNEL f2 =====
SFO2 400.1516006 MHz
CPDPR2 12.00000000 W
PLM2 0.32231000 W
PLM3 0.16212000 W
===== CHANNEL f3 =====
SFO3 100.6177829 MHz
NUC3 13C
P1 8.90 usec
PLM1 54.00000000 W

F2 - Processing parameters
SI 16384
SF 100.6177829 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

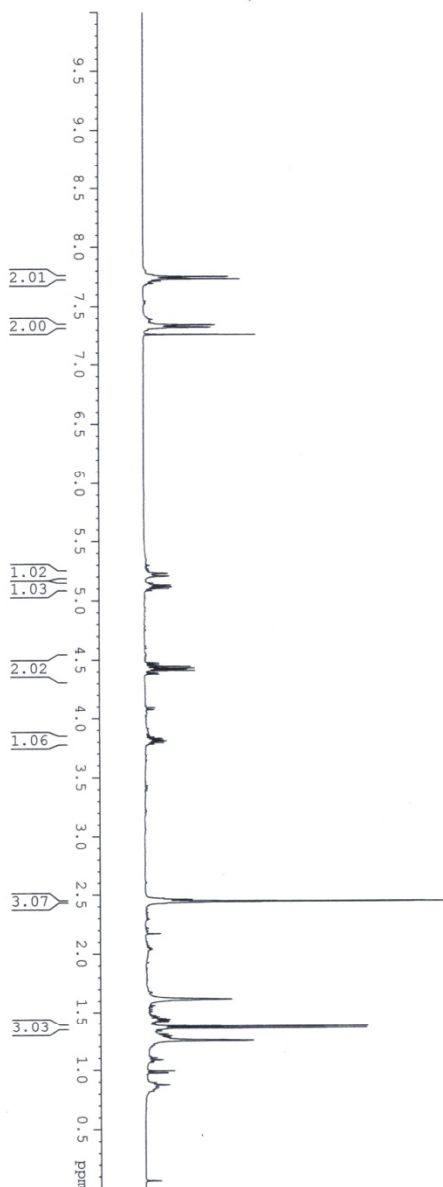
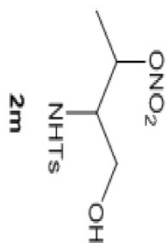
1H of VBSAS-19a5 P

7.753
7.732
7.344
7.324
7.259

5.228
5.205
5.148
5.130
5.118
5.114
5.102
5.085
4.477
4.462
4.447
4.432
4.423
4.411
4.393
4.381
3.831
3.820
3.817
3.808
3.807
3.796
3.794

2.445

1.377
1.361



Current Data Parameters
NAME DE. A. MAUE 2017
EXPNO 136
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170213
Time 19.44
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 106.66
DW 60.800 usec
DE 6.50 usec
TE 297.3 K
DI 1.00000000 sec
TDO 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
PI 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

20



Current Data Parameters	
NAME	Dr. A MAJEE 2017
EXPNO	143
PROCNO	1

F2 - Acquisition Parameters
Date 20170216

Time	INSTRUM
11.55	INSTRUM

INSIROM	5 mm	PABBO BB/	spec
PROBHD			
PROBHD			

PULPEROG
TD
zgpg30
32768

SOLVENT	CDC13
NS	800

DS 2
SWH 24038.461

FIDRES	0.733596
AO	0.6815744

106.66

20.800
6.50

TE	296.0
D1	2.00000000

D11	0.03000000
TD0	1

===== CHANNEL, f1 =====

100.6278588

NOCL	130
P1	8.90
PRIN	1.0000

PLMT 54.000000000

```
===== CHANNEL F2 =====
SFO2      400.1516006
```

NUC2	1H
CPDPRG12	waitz16

PCPD2	90.00
PM2	12 00000000

E LMI	12.00000000
PLM12	0.32231000
PLM13	0.16012000

FLM13 0.1612000

F2 - Processing paramet	SI
	16384

SE	100.6177850
WDM	FM

SSB	0	1.00
IR		

20	0	1.40
GB		
PC		

U
E
T

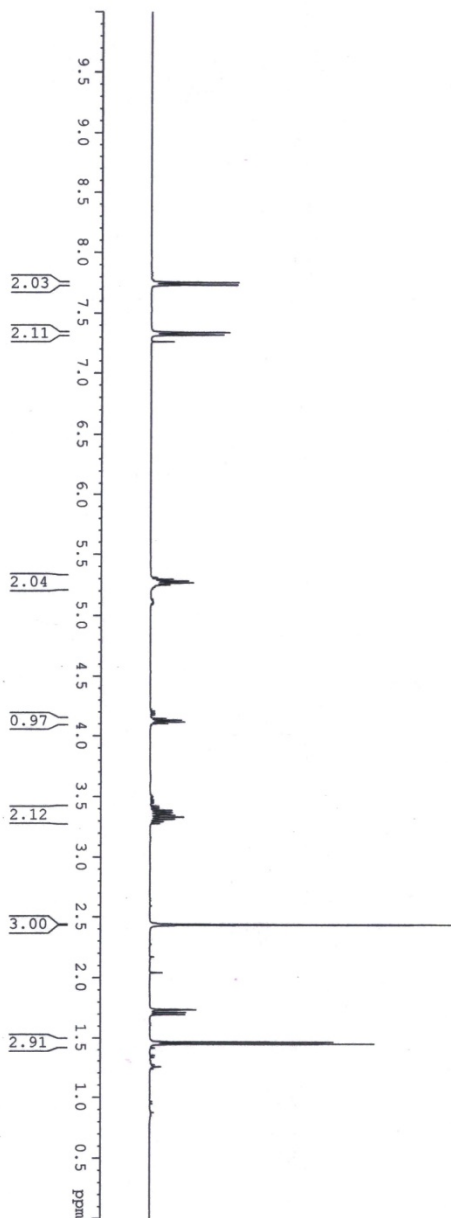
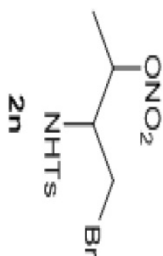
1H of VBSAS-19-A6

7.753
7.732
7.339
7.319
7.260

5.310
5.294
5.280
5.264
5.248

4.145
4.132
4.128
4.119
4.115
4.102
3.423
3.387
3.373
3.368
3.355
3.346
3.330
3.314
3.294
3.279
2.435

1.464
1.448



Current Data Parameters
NAME Dr. A MAJEE 2017
EXPNO 170
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170221
Time_ 21.23
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 32
DS 1
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 62.66
DW 60.800 usec
DE 6.50 usec
TE 281.1 K
D1 1.00000000 sec
TDO 1

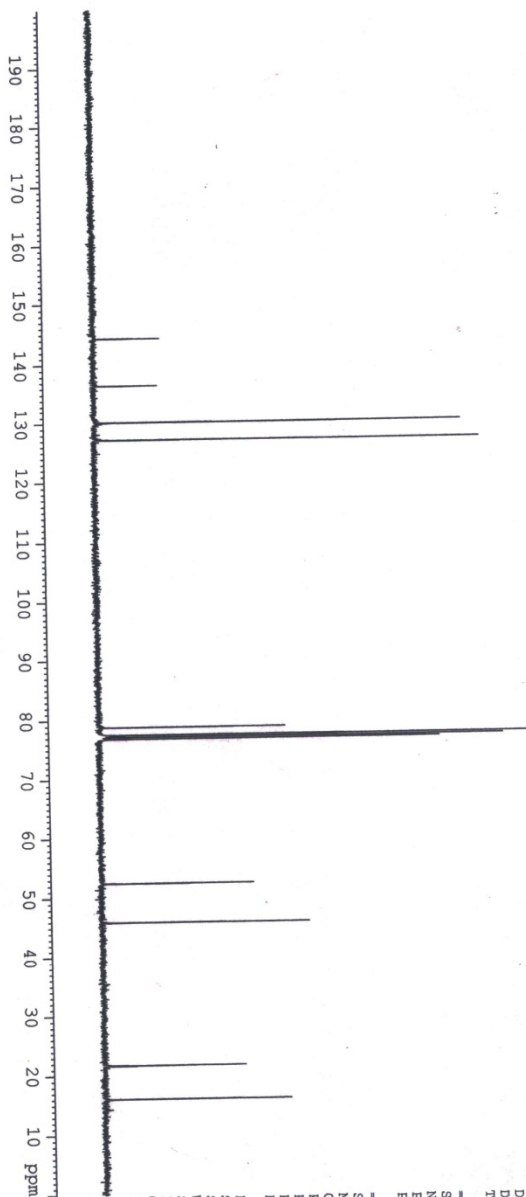
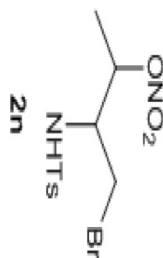
===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W
F2 - Processing parameters
SI 16384
SF 400.1500095 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

— 144.32
— 136.48
— 130.13
— 127.13

$\begin{array}{l} \diagup 78.79 \\ \diagup 77.48 \\ \diagup 77.16 \\ \diagup 76.84 \end{array}$

— 52.41
— 45.89

— 21.68
— 16.02



Current	Data Parameters
NAME	Dr. A MAJEE 2017
EXPNO	171
PROCNO	1

F2 - Acquisition Parameters
Date 20170221

Date	Time	INSTRUM	snect
2010-08-20	21.50		

PROBHD 5 mm PABBO BB/

FDL	TD	CDG
32768	32768	32768

400

24038.461
0.73359

0.6815744
62.6

20:80
6:51

DE 296.1
TE 2 000000001
D1

D1	0.0300000
D11	0.0300000
D10	0.0300000

CHANNEL #1

SFO1 100.627858
N11C1 13

NOCL 8.9
P1
PTW1 54-00000000

F L W T C A R D O O O O O O

CHANNET, f2

SFO2 400.151600
NITC2 1

INOC2	waltz1
CPDPRG12	90.0
PCPD2	

PLW2	12.0000000
PLW1	0.3223100

PLM13 0.1621200

F2 - Processing parameters 1638

100.617786

SSB 0

0
२६८

EC

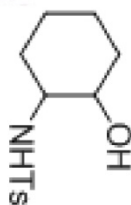
1

100

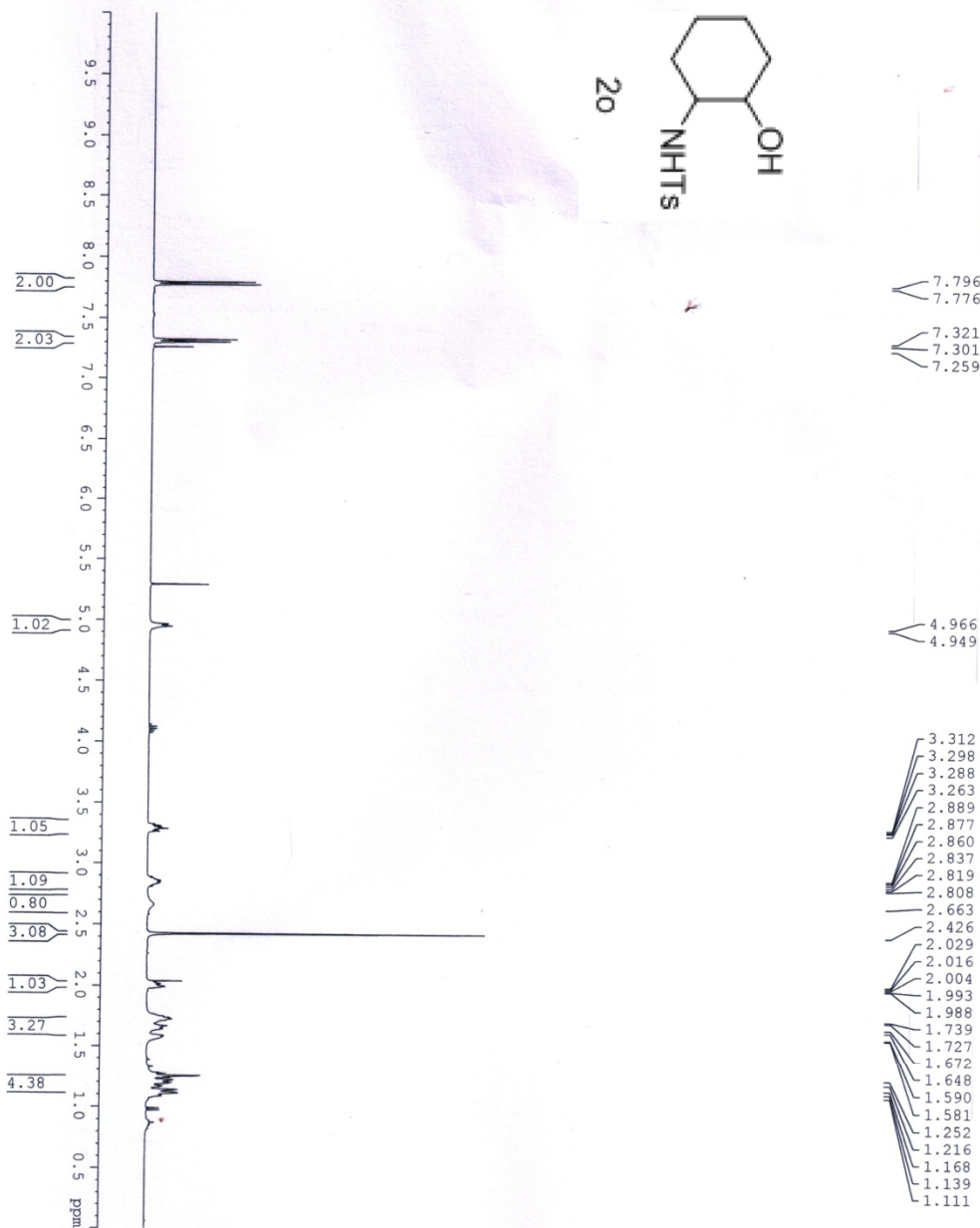
width

10

1H of SAS-APP



20



Current Data Parameters
NAME Dr. A MAJEE 2017
EXPNO 342
PROCNO 1

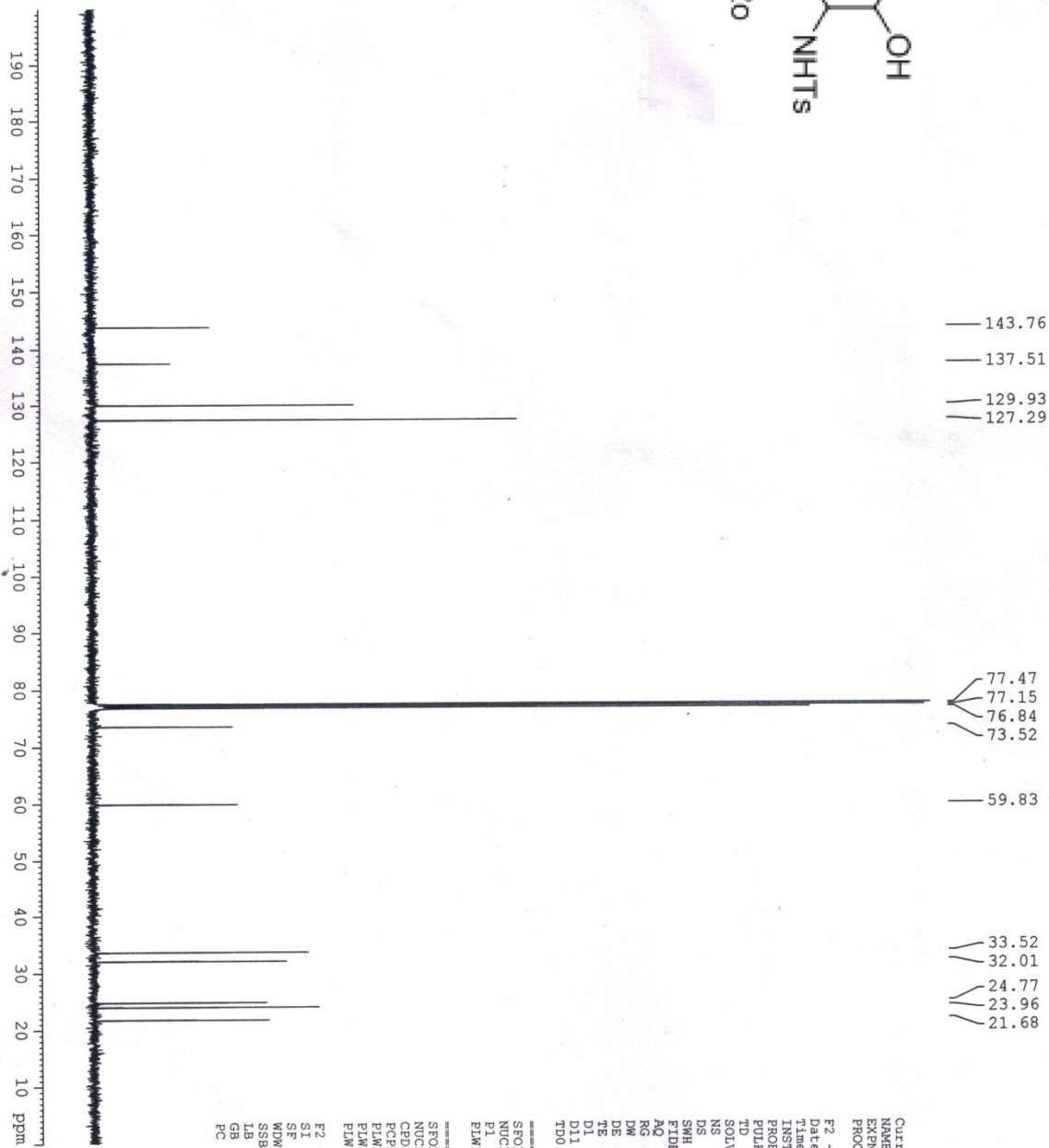
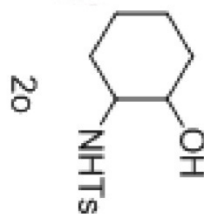
F2 - Acquisition Parameters
Date_ 20170416
Time 19.54

INSTRUM spect
PROBHD 5 mm PABBO BH/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 24
DS 1

SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9922944 sec
RG 87.66
DW 60.800 usec
DE 6.50 usec
TE 299.2 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
SFO1 400.1524711 MHz
NUC1 1H
P1 14.75 usec
PLW1 12.00000000 W

F2 - Processing parameters
SI 16384
SF 400.1500097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 1.00
PC



Current Data Parameters
NAME Dr. A. WUJE 2017
EXNO 343
PROCNO 1

F2 - Acquisition Parameters
Date_ 20170416
Time_ 20:58
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zgpg30
TD 32768
SOLVENT CDCl3
NS 640
DS 2
SWH 24038.461 Hz
FIDRES 0.733596 Hz
AQ 0.6815744 sec
RG 77.59
DW 20.800 usec
DE 6.50 usec
TE 300.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1

CHANNEL F1
SFO1 100.627858 MHz
NUC1 13C
P1 8.30 usec
PLW1 54.00000000 W

CHANNEL F2
SFO2 400.1516006 MHz
NUC2 1H
CPDPRG12 waltz16
PCPD2 90.00 usec
PLW2 12.00000000 W
PLW12 0.32231000 W
PLW13 0.16212000 W

F2 - Processing parameters
SI 16384
SF 100.6177843 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40