

**Diastereoselective Pyrrolidine Synthesis *via* Copper Promoted Intramolecular
Aminooxygenation of Alkenes; Formal Synthesis of (+)-Monomorine**

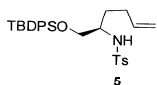
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University of New York, Buffalo, NY 14260
schemler@buffalo.edu

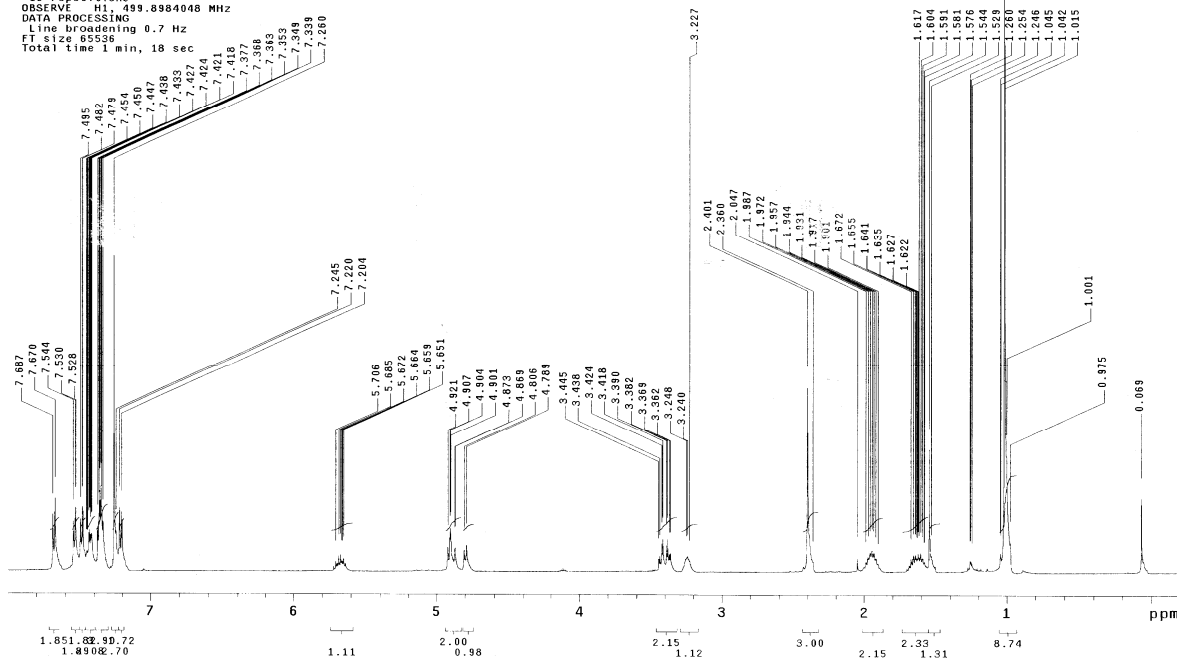
Supporting Information 2:

This contains ^1H , *nOe* and ^{13}C NMR spectra for all new compounds.

mcp-I-80
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"



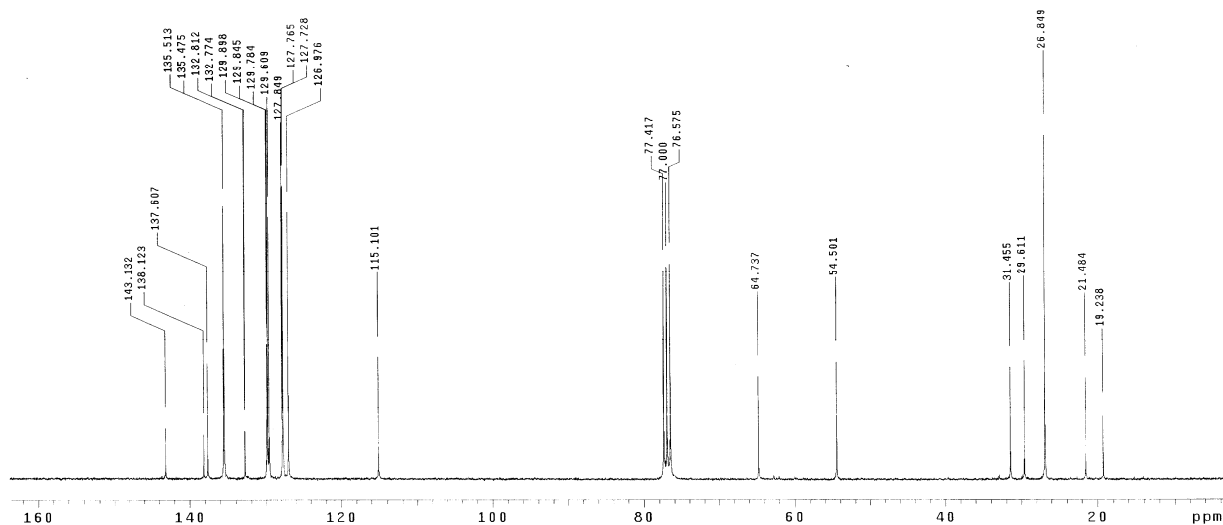
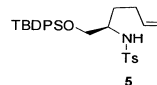
Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.031 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984048 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



mcp-I-82CNMR

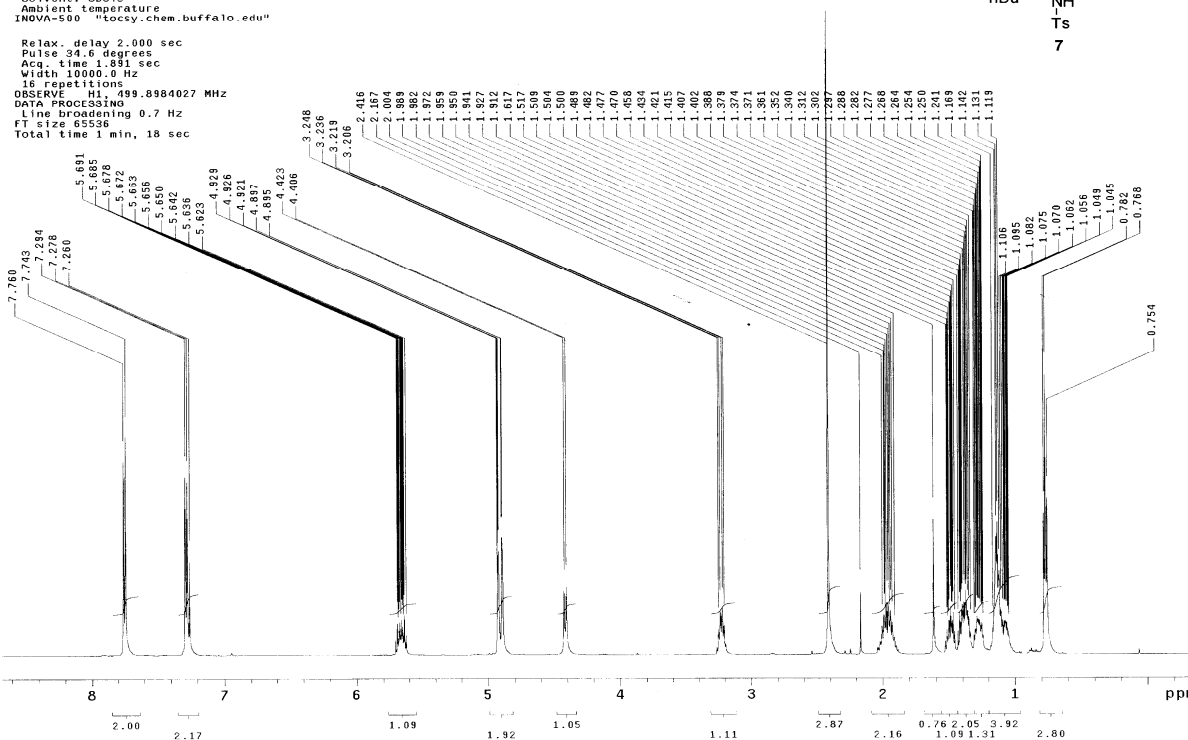
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 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-I-82CNMR2
 INOVA-500 "nrddata.chem.buffalo.edu"

Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.706 sec
 Width 18761.7 Hz
 5408 repetitions
 OBSERVE C13, 75.4536604 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 14 hr, 55 min, 42 sec



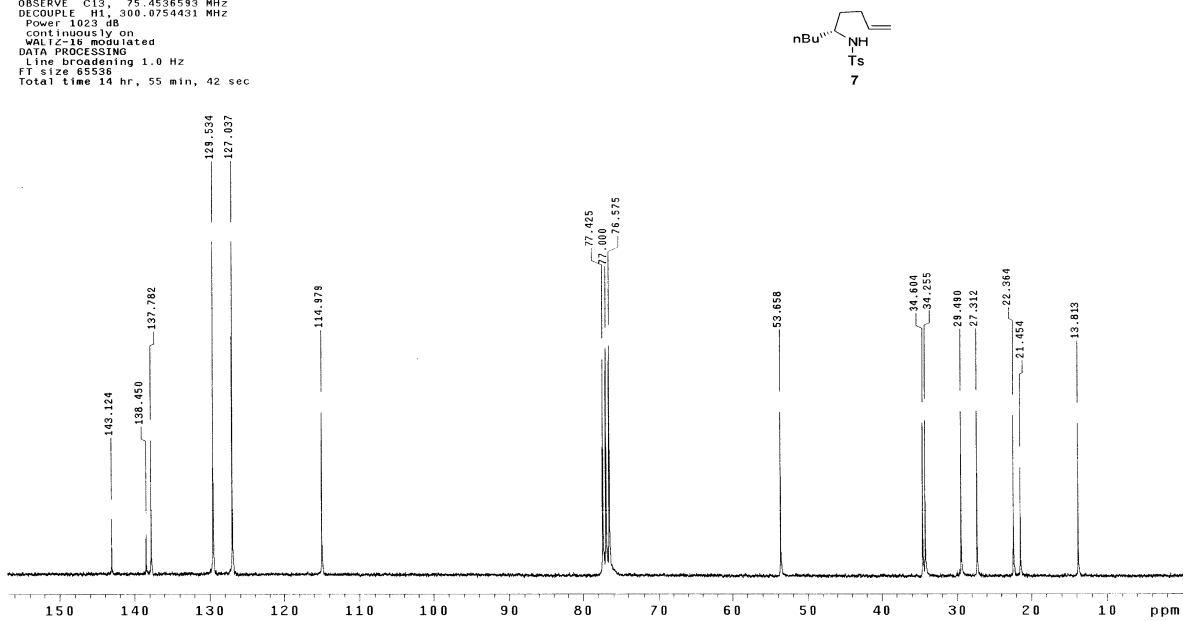
mcp-1-109
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"

Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984027 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



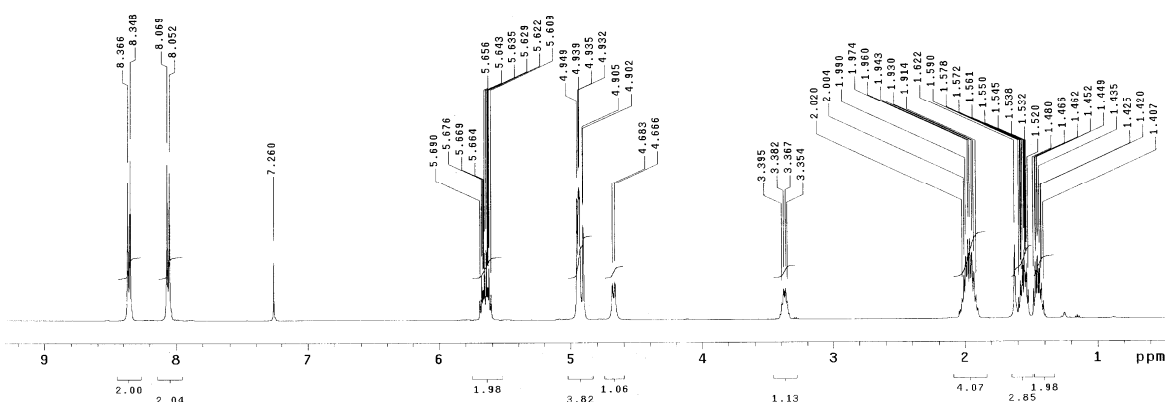
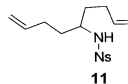
mcp-1-109CNMR
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-1-109CNMR
 INOVA-500 "mrdata.chem.buffalo.edu"

Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.796 sec
 Width 18761.7 Hz
 4880 repetitions
 OBSERVE C13, 75.4536593 MHz
 DECOUPLE H1, 500.0754431 MHz
 Power 1023 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 14 hr, 55 min, 42 sec



mcp-1-191

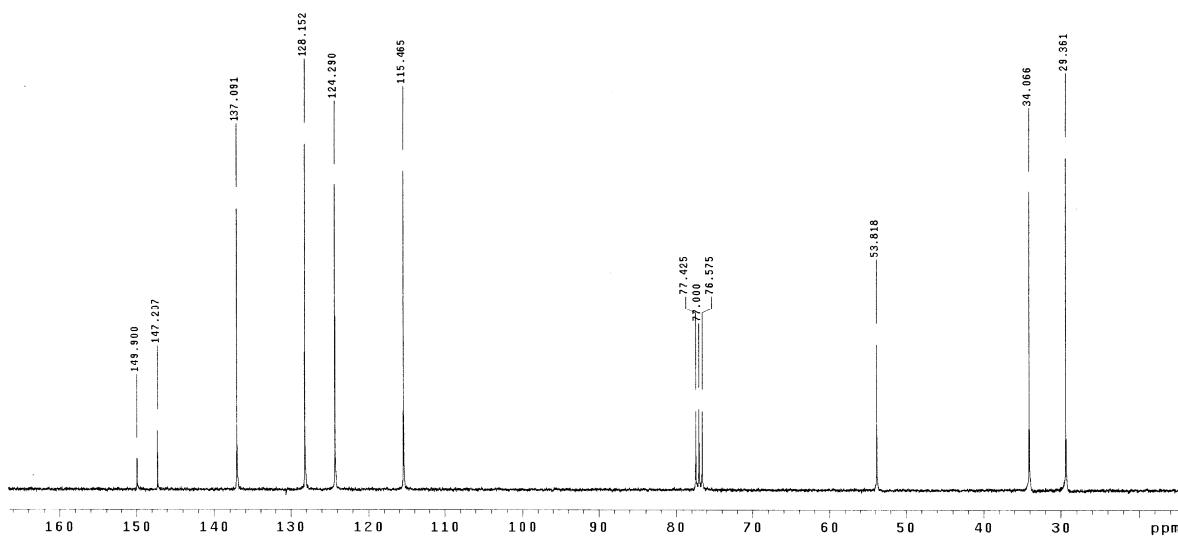
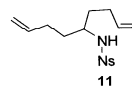
Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.831 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984027 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



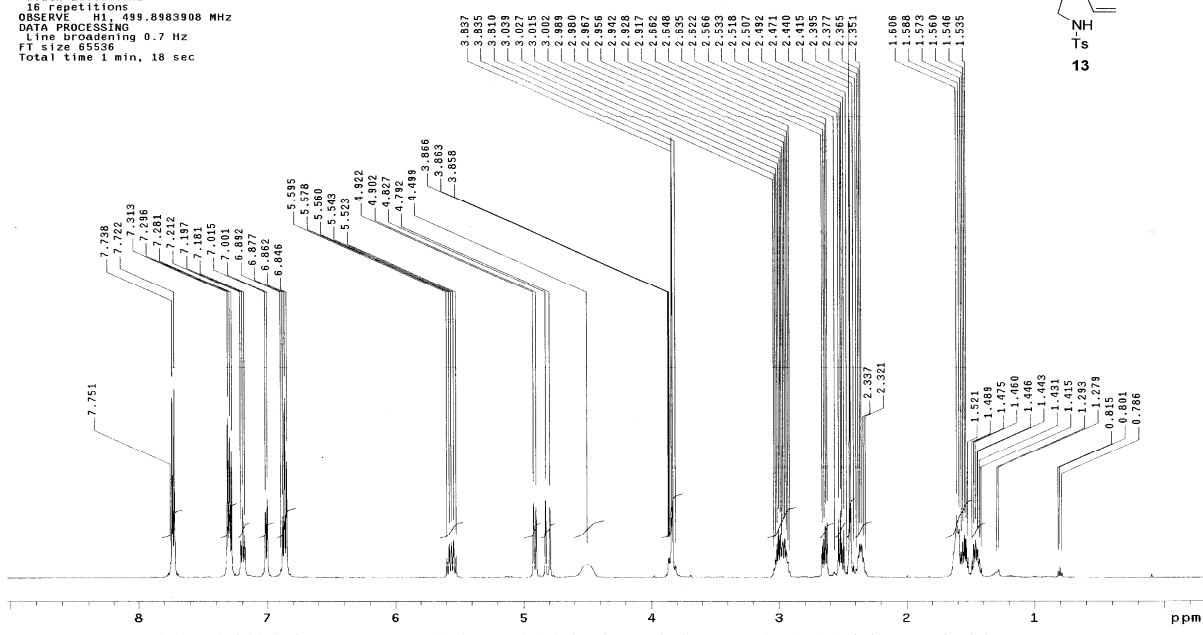
mcp-1-191CNMR

Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-1-191CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"

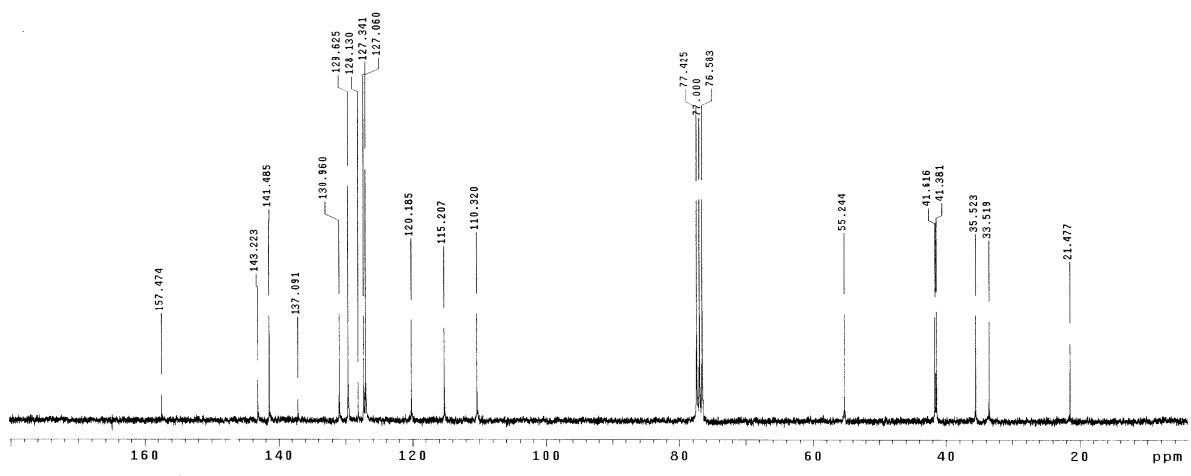
Relax. delay 5.000 sec
 Pulse 40.0 degrees
 Acq. time 1.705 sec
 Width 18761.7 Hz
 368 repetitions
 OBSERVE C13, 75.4536621 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023.48
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 1 hr, 52 min, 21 sec



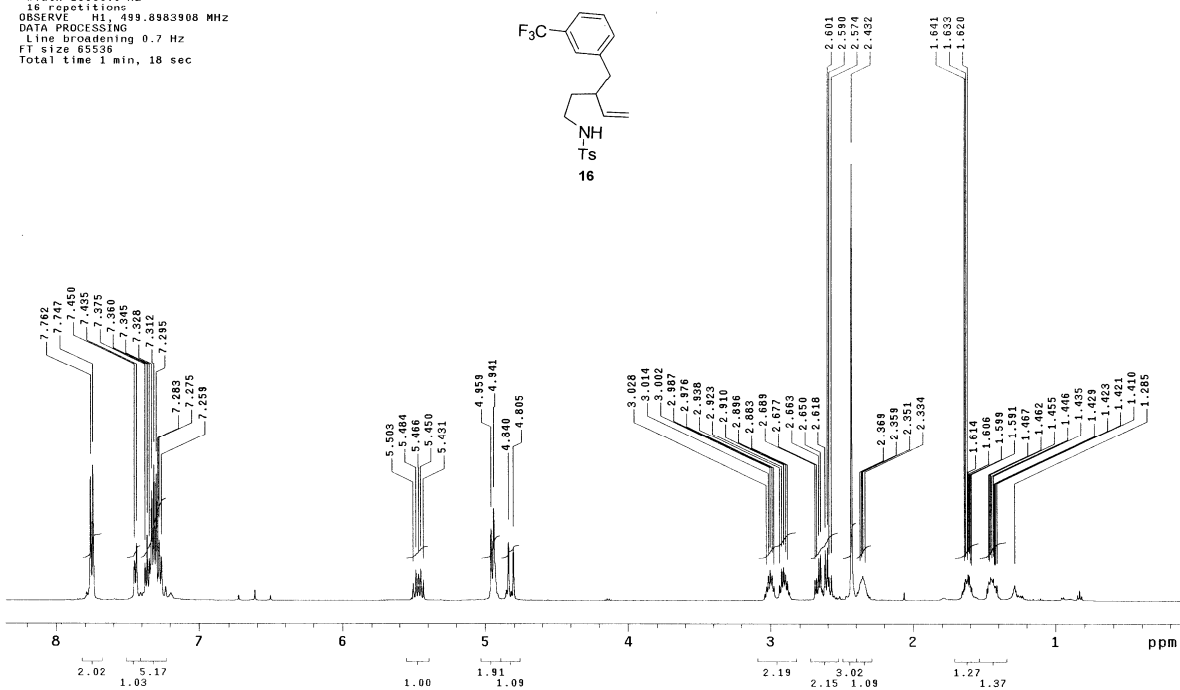
mcp-1-136
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 INOVA-500 "loxy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.8 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 18 repetitions
 OBSERVE H1, 499.8983908 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



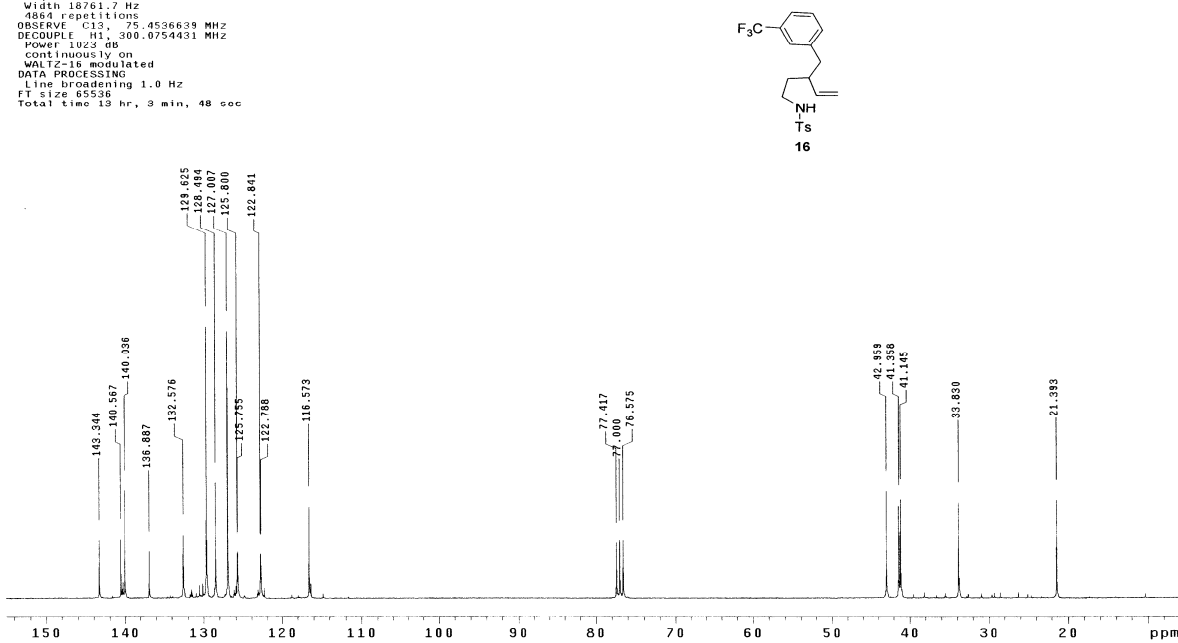
mcp-1-136CNMR
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 Sample #2
 File: mcp-1-136CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 5.000 sec
 Pulse 99.0 degrees
 Acq. time 1.706 sec
 Width 18761.7 Hz
 512 repetitions
 OBSERVE C13, 75.4536599 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 CONTINUOUSLY ON
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 1 hr, 29 min, 58 sec



mcp-1-293
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8983908 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec

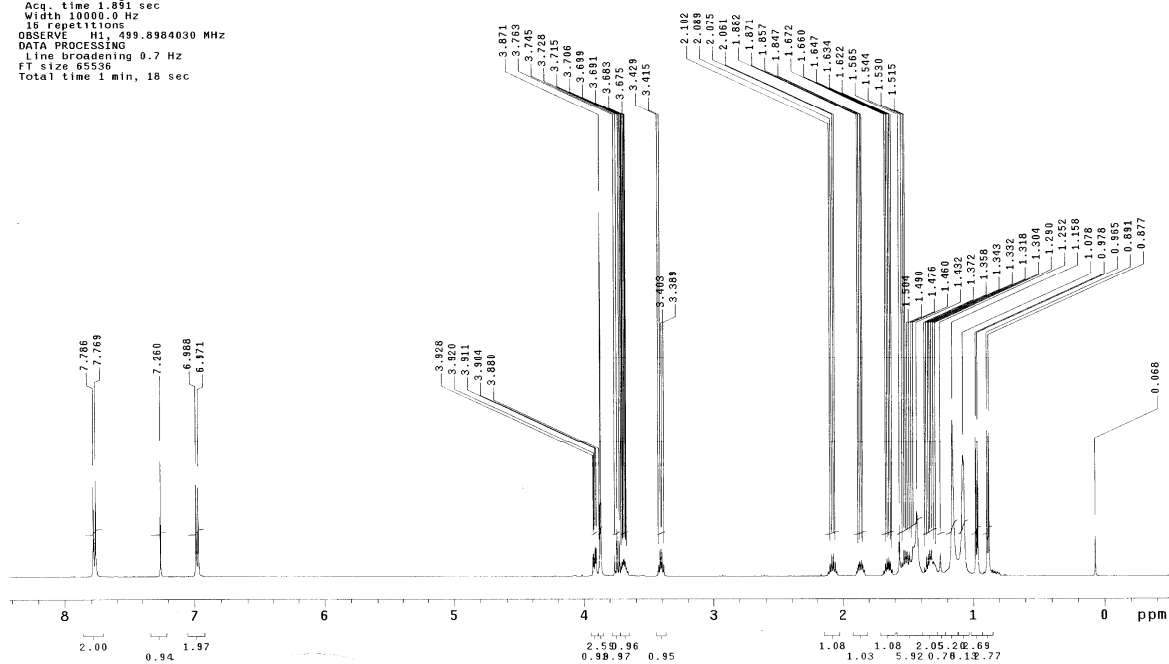
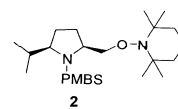


mcp-1-293CNMR
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-1-293CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.706 sec
 Width 19761.7 Hz
 4864 repetitions
 OBSERVE C13, 75.4536639 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 85536
 Total time 19 hr, 3 min, 48 sec



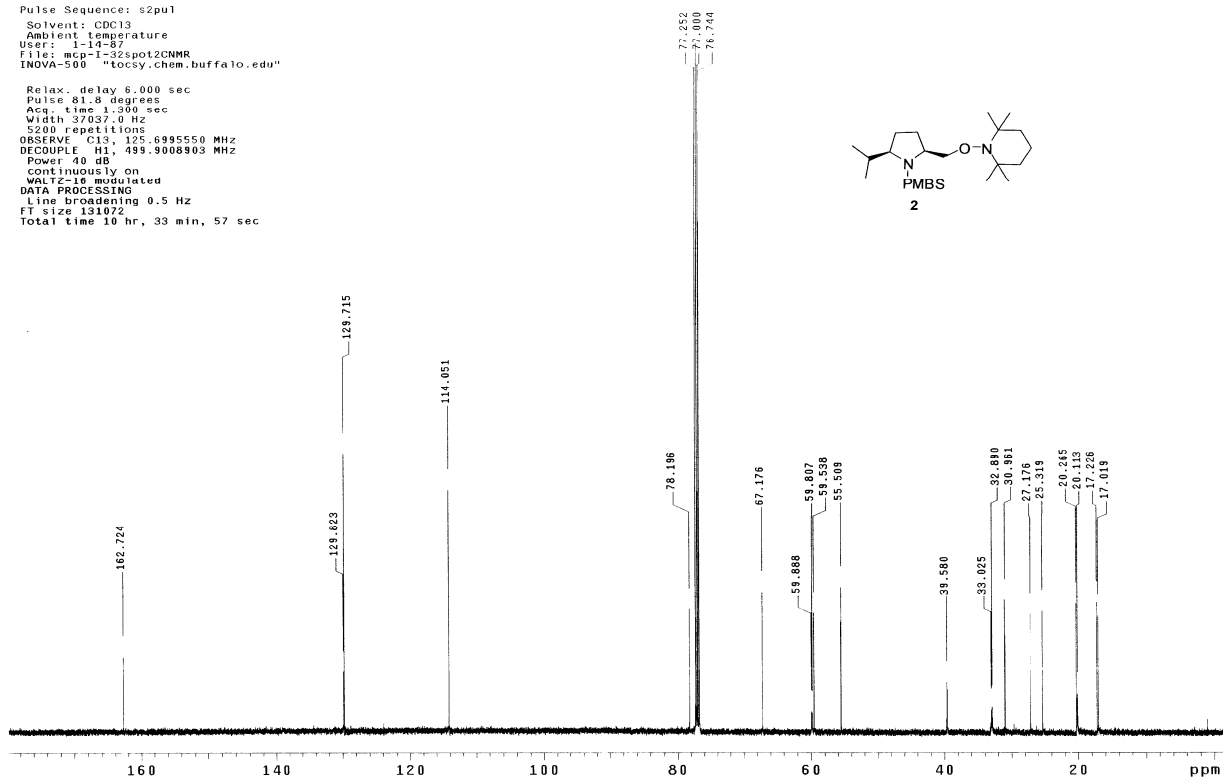
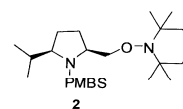
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 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-I-32spot2run2
 INOVA-500 "nmrdata.chem.buffalo.edu"

Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.851 sec
 Width 10000.0 Hz
 18 repetitions
 OBSERVE H1, 499.8984030 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec

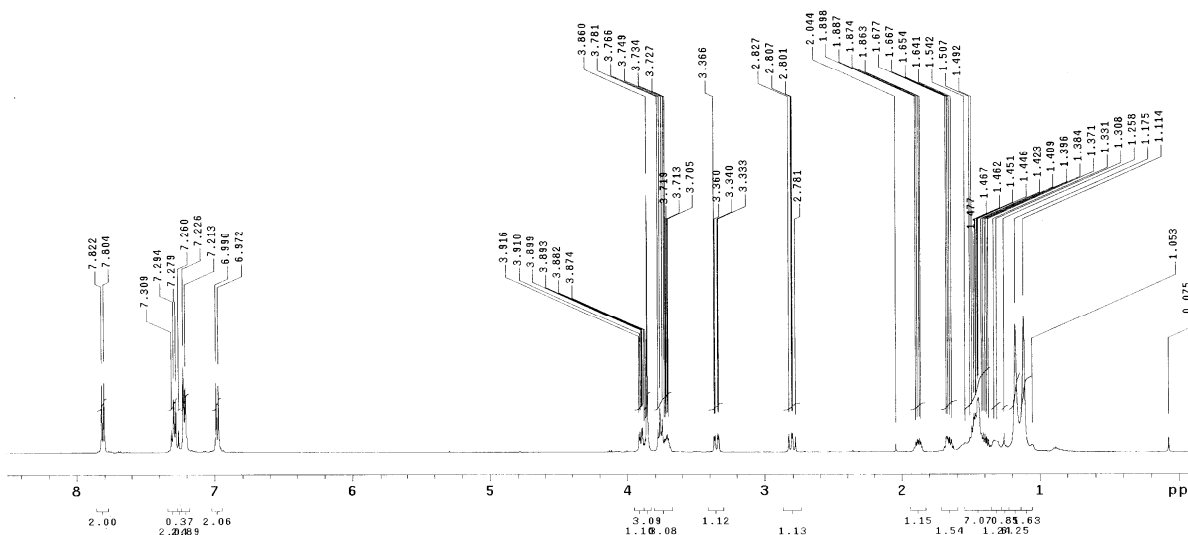
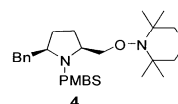


mcp-I-32spot2 CNMR
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 User: 1-14-87
 File: mcp-I-32spot2CNMR
 INOVA-500 "tocsy.chem.buffalo.edu"

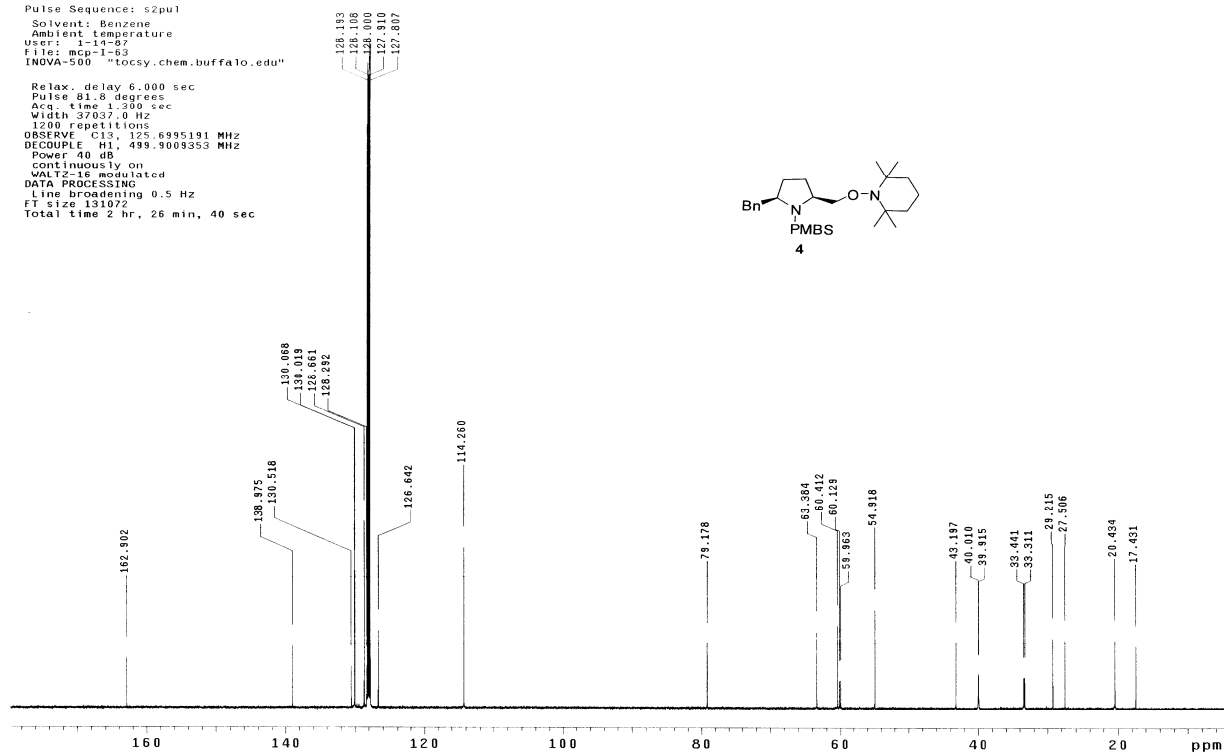
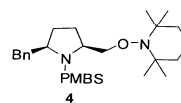
Relax. delay 8.000 sec
 Pulse 81.8 degrees
 Acq. time 1.300 sec
 Width 37037.0 Hz
 5200 repetitions
 OBSERVE C13, 125.6995550 MHz
 DECOUPLE H1, 499.9008903 MHz
 Power 40 dB
 CONTINUOUSLY ON
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 131072
 Total time 10 hr, 33 min, 57 sec



mcp-1-62
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient Temperature
 Sample #2
 File: mcp-1-62
 INOVA-500 "mardata.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 8 repetitions
 OBSERVE H1, 499.8984027 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec

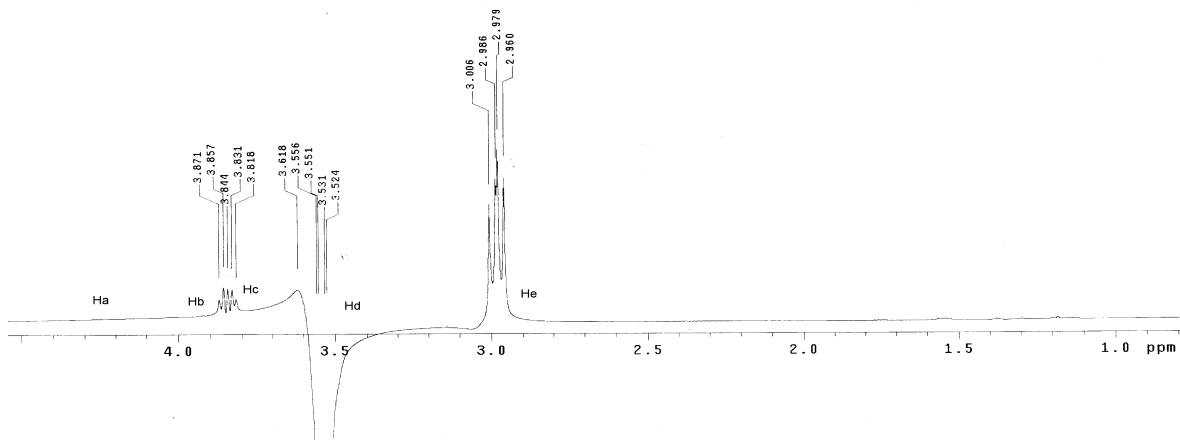
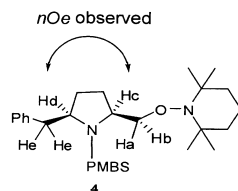


mcp-1-63
 Pulse Sequence: s2pu1
 Solvent: Benzene
 Ambient Temperature
 User: i-14-07
 File: mcp-1-63
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 6.000 sec
 Pulse 81.8 degrees
 Acq. time 1.300 sec
 Width 37037.0 Hz
 1200 repetitions
 OBSERVE C13, 125.6995191 MHz
 DECOUPLE H1, 499.3003253 MHz
 Power 40 dB
 Continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 131072
 Total time 2 hr, 26 min, 40 sec

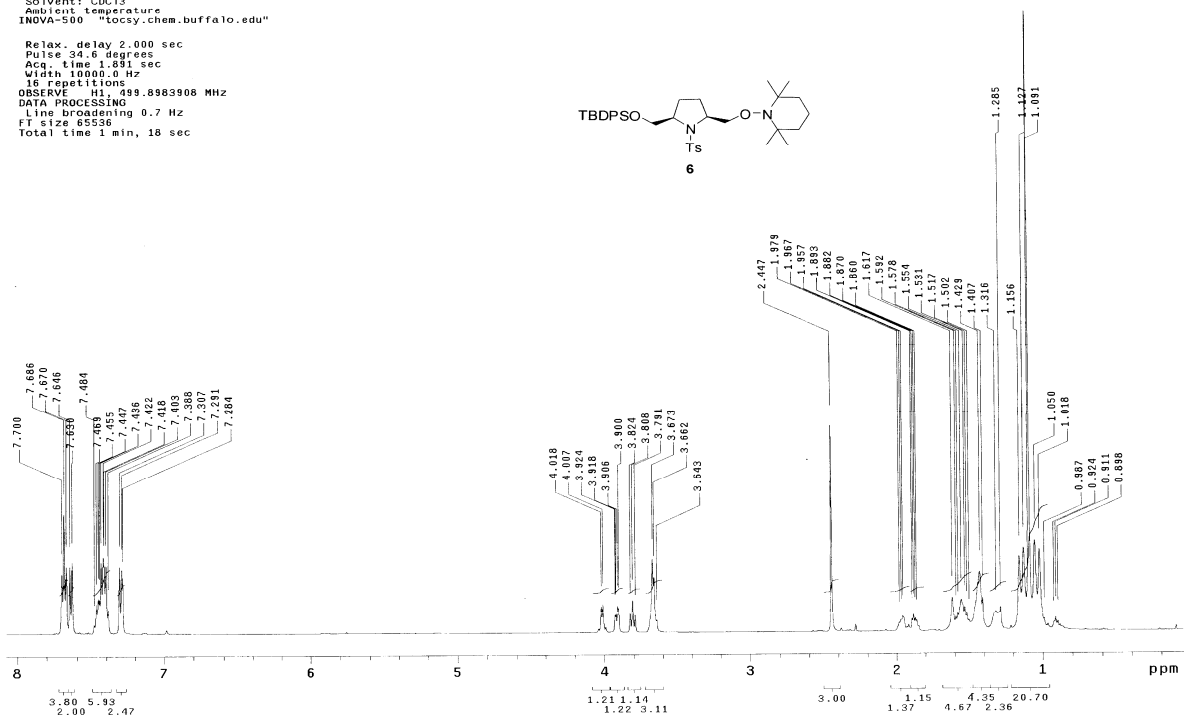
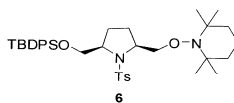


STANDARD PROTON PARAMETERS

Pulse Sequence: N0ESY1D
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 1.000 sec
 Pulse 90.0 degrees
 Mixing 0.500 sec
 Acq. time 1.891 sec
 Width 1876.3 Hz
 1100 repetitions
 OBSERVE H1, 499.8984261 MHz
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 8192
 Total time 11 hr, 1 min, 59 sec



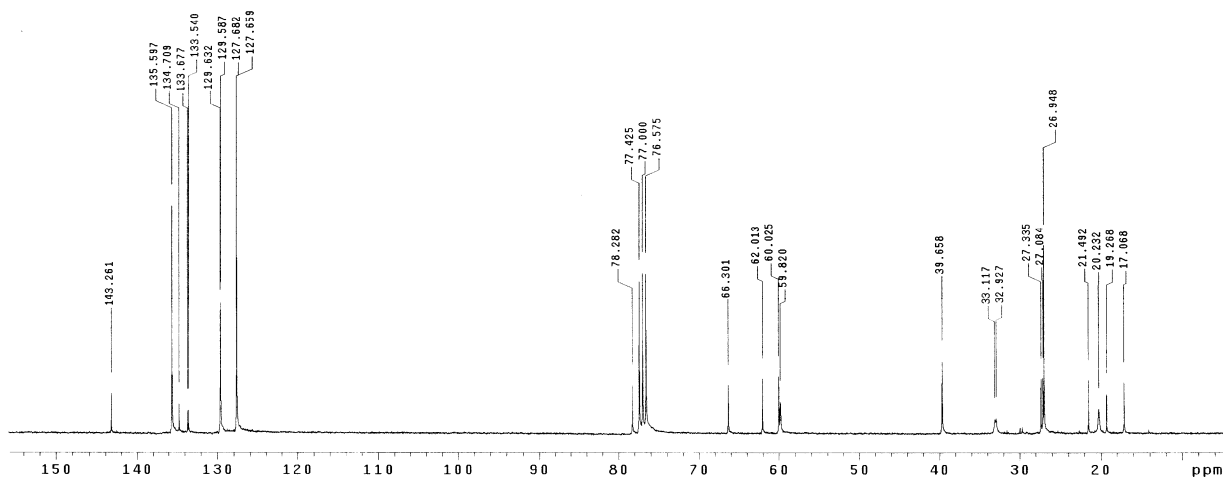
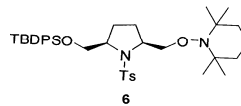
mcp-I-88afterhpic
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.8 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 18 repetitions
 OBSERVE H1, 499.8983908 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



mcp-I-88CNMR

Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-I-88CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"

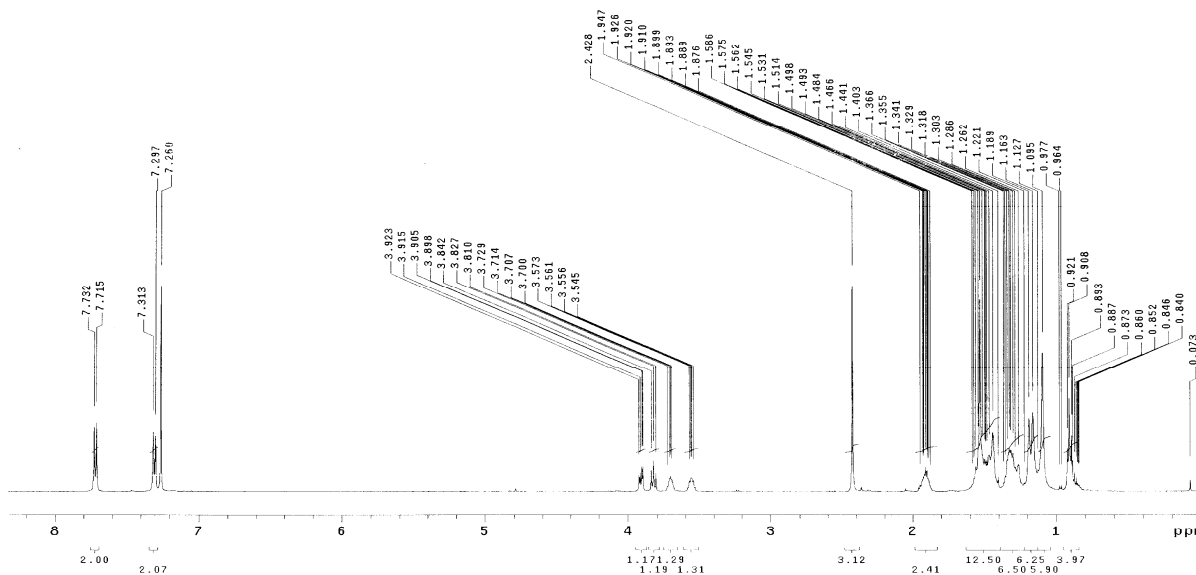
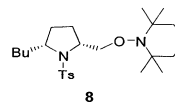
Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.706 sec
 Width 18761.7 Hz
 5312 repetitions
 OBSERVE C13, 75.4536589 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 14 hr, 55 min, 42 sec



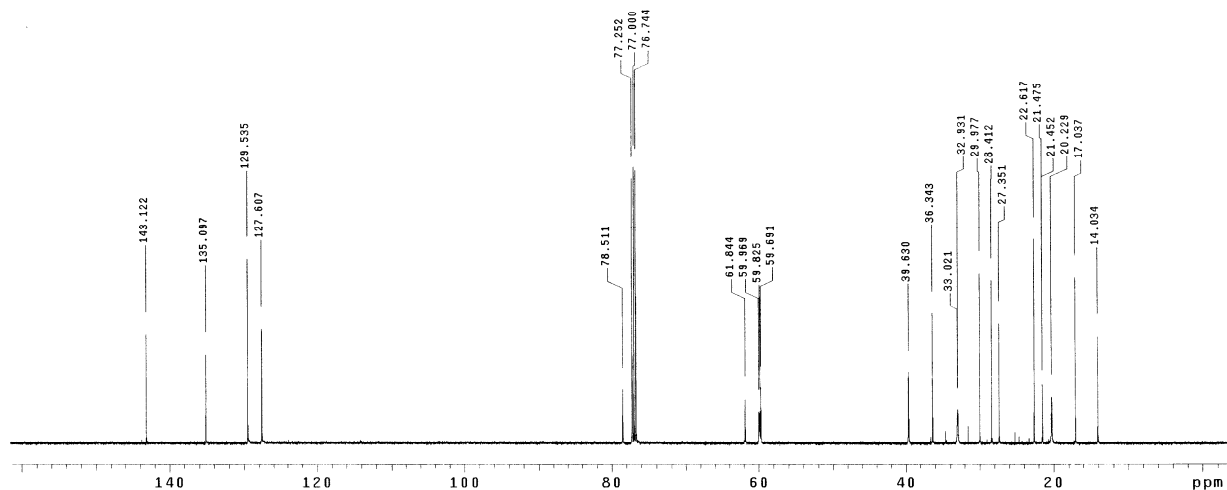
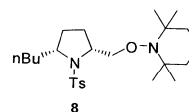
mcp-I-101

Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"

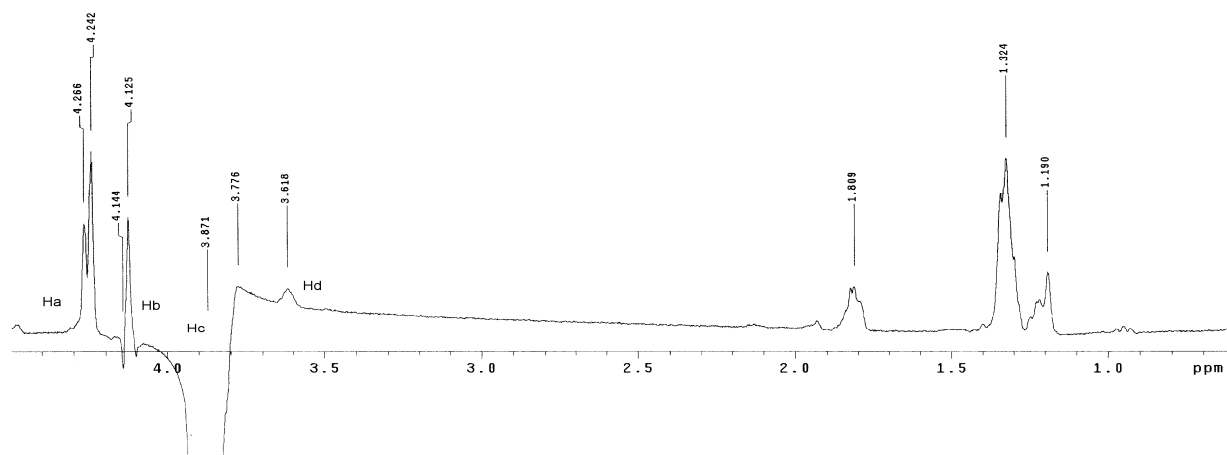
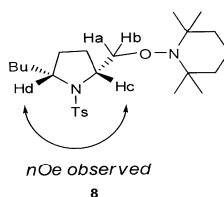
Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.831 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984024 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



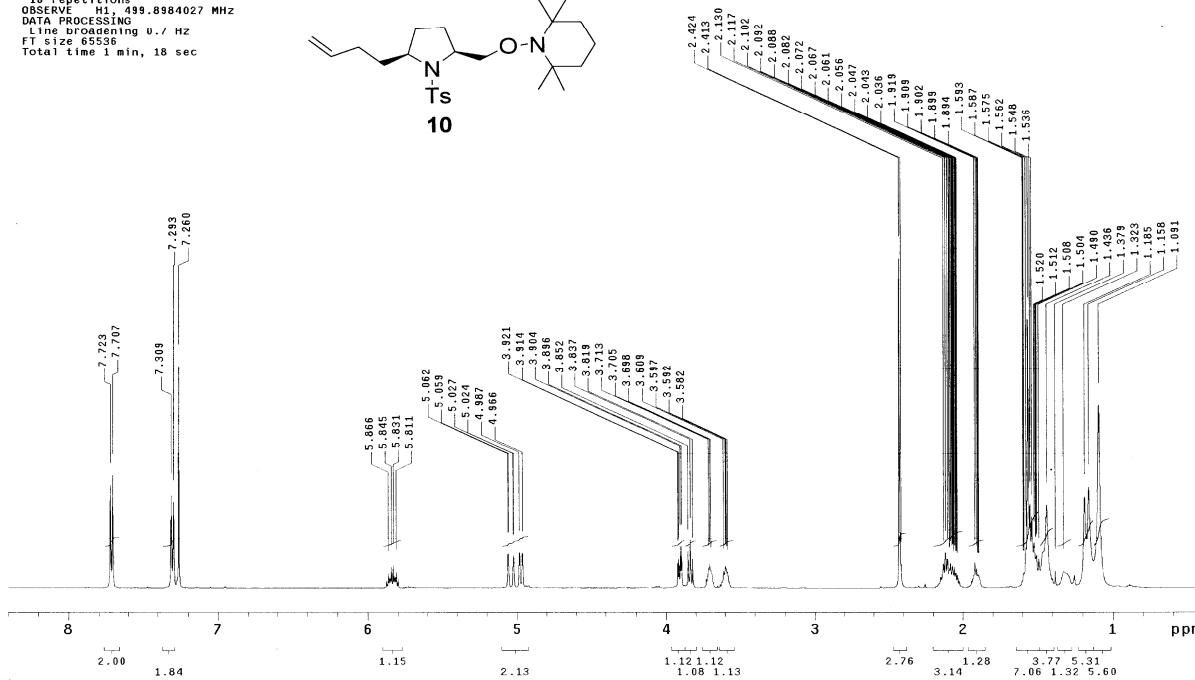
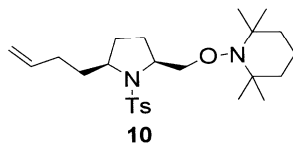
mcp-I-186CNMR
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 Sample #2, User: 1-14-87
 File: mcp-I-186CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 6.000 sec
 Pulse 81.8 degrees
 Acq. time 1.390 sec
 Width 37037.0 Hz
 7000 repetitions
 OBSERVE C13, 125.695533 MHz
 DECOUPLE H1, 499.9008903 MHz
 Power 40 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 131072
 Total time 14 hr, 13 min, 13 sec



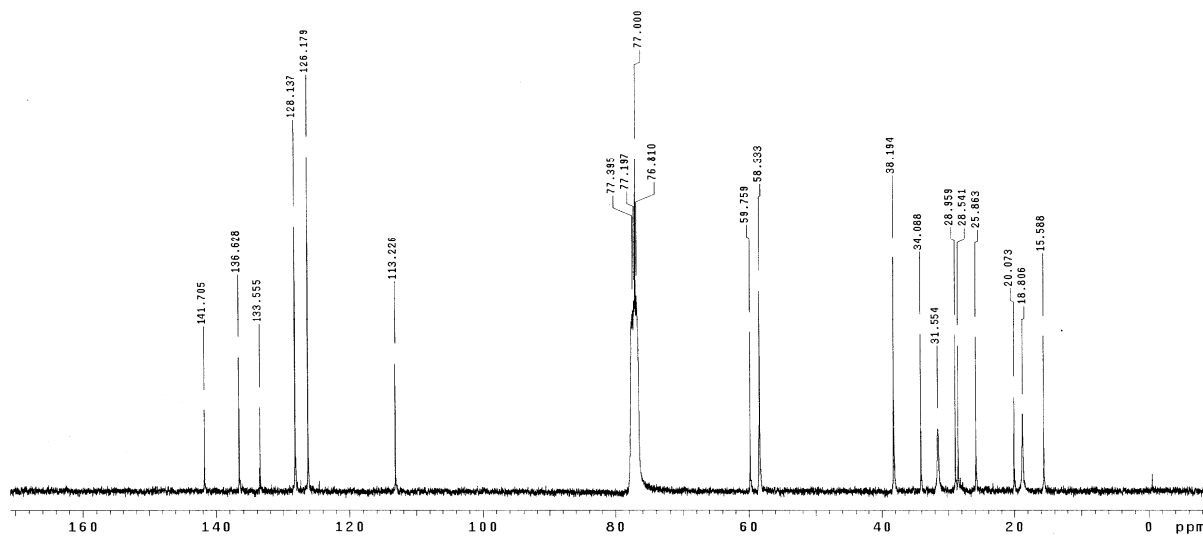
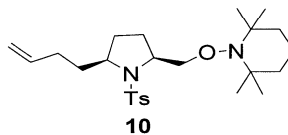
mcp-I-114NOESY
 Pulse Sequence: NOESY1D
 Solvent: Benzene
 Ambient temperature
 Sample #2
 File: mcp-I-114NOESY
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 1.000 sec
 Pulse 30.0 degrees
 Mixing 0.500 sec
 Acq. time 1.890 sec
 Width 1338.2 Hz
 11800 repetitions
 OBSERVE H1, 499.8984254 MHz
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 8192
 Total time 11 hr, 36 min, 50 sec



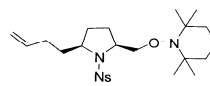
mcp-I-181-1-afterhplc
 Pulse Sequence: s2pu1
 Solvent: CDC13
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.881 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984027 MHz
 DATA PROCESSING
 Line broadening 0. / Hz
 FT size 65536
 Total time 1 min, 18 sec



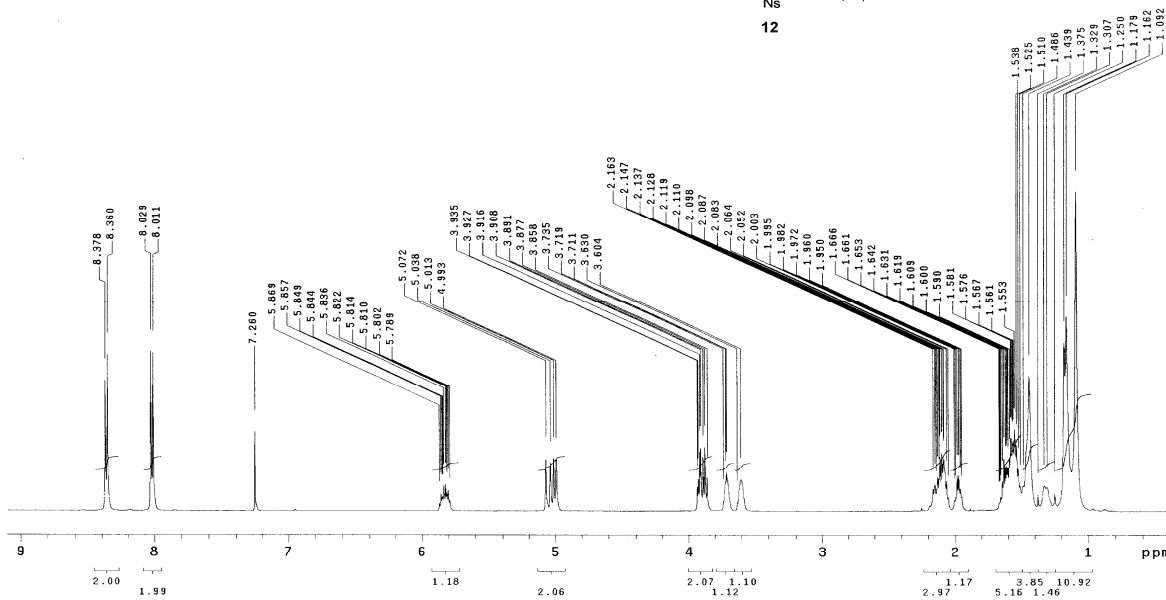
mcp-I-181CNMR
 Pulse Sequence: s2pu1
 Solvent: CDC13
 Ambient temperature
 Sample #2
 File: mcp-I-181CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.705 sec
 Width 18761.7 Hz
 240 repetitions
 OBSERVE C13, 75.4637897 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 continuous by on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 56 min, 24 sec



mcp-I-194
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.881 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1 499.8984027 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec

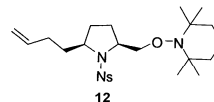


12

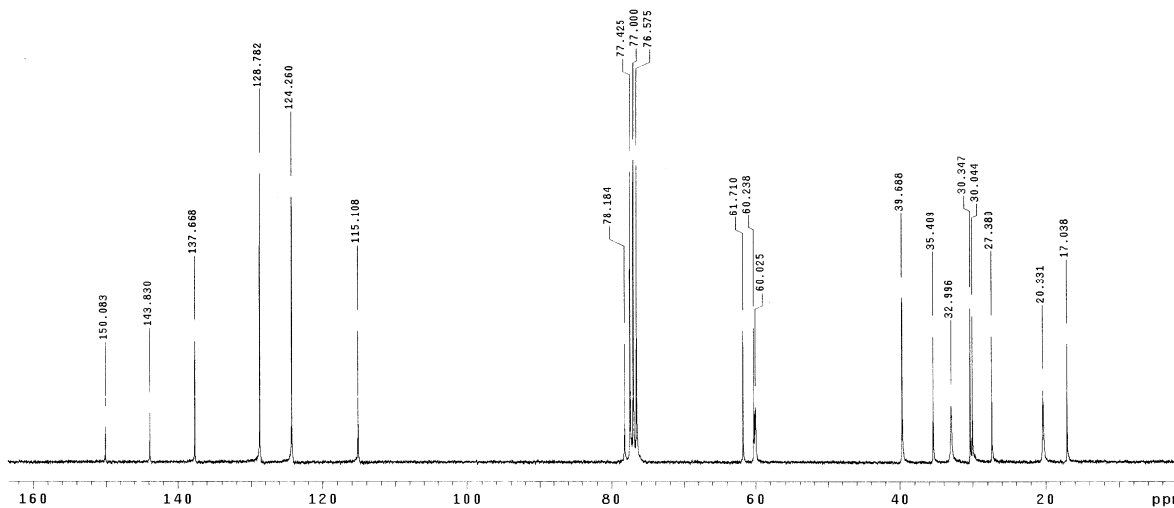


mcp-I-194
 Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-I-194
 INOVA-500 "mrdata.chem.buffalo.edu"

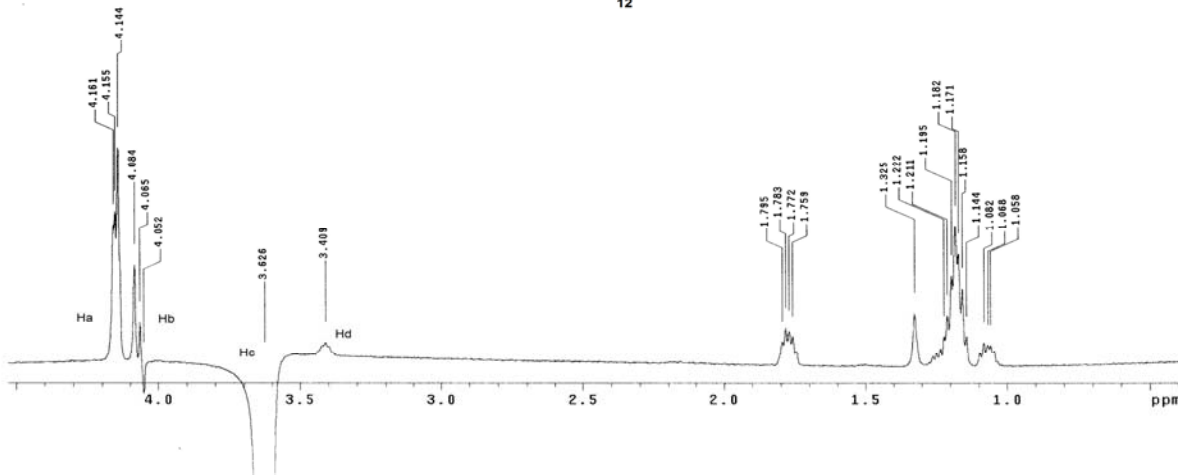
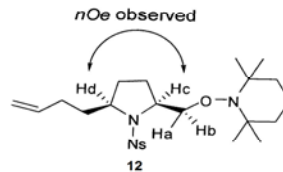
Relax. delay 5.000 sec
 Pulse 30.0 degrees
 Acq. time 1.708 sec
 Width 18761.7 Hz
 812 repetitions
 OBSERVE C13, 75.4536593 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 13 hr, 3 min, 48 sec



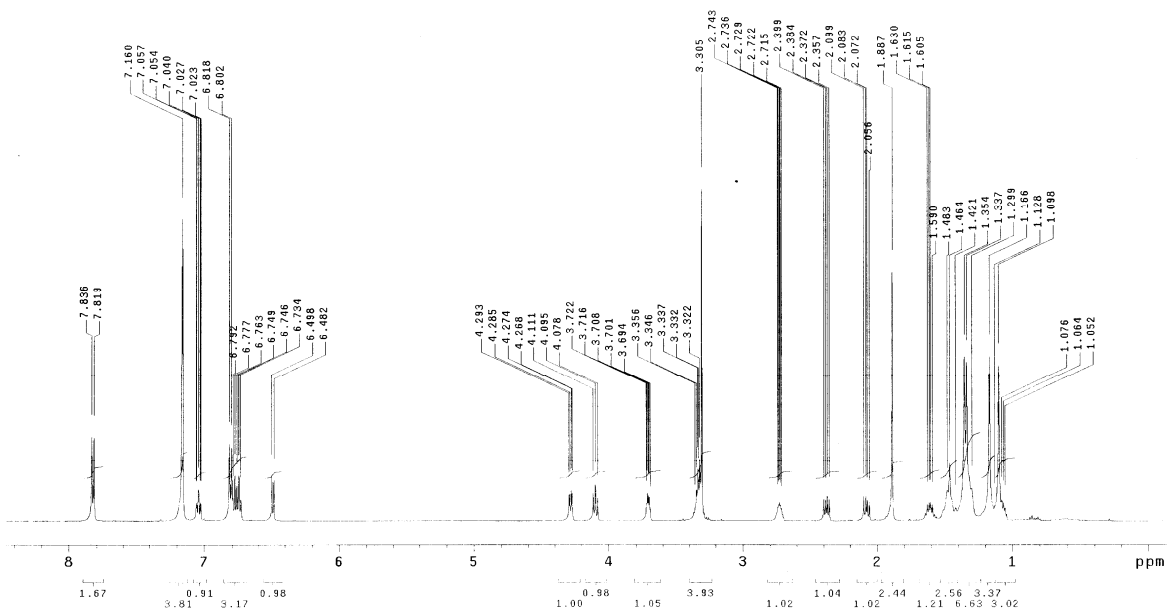
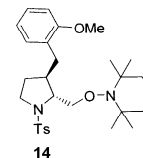
12



mcp-1-199NOESY2
 Pulse Sequence: NOESY1D
 Solvent: Benzene
 Ambient temperature
 Sample #2
 File: mcp-1-199NOESY2
 INOVA-500 "nar\data.chem.buffalo.edu"
 Relax. delay 1.000 sec
 Pulse 50.0 degrees
 Mixing 0.500 sec
 Acq. time 1.890 sec
 Width 2078.6 Hz
 12000 repetitions
 OBSERVE H1: 499.8984266 MHz
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 8192
 Total time 12 hr, 7 min, 37 sec

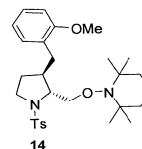
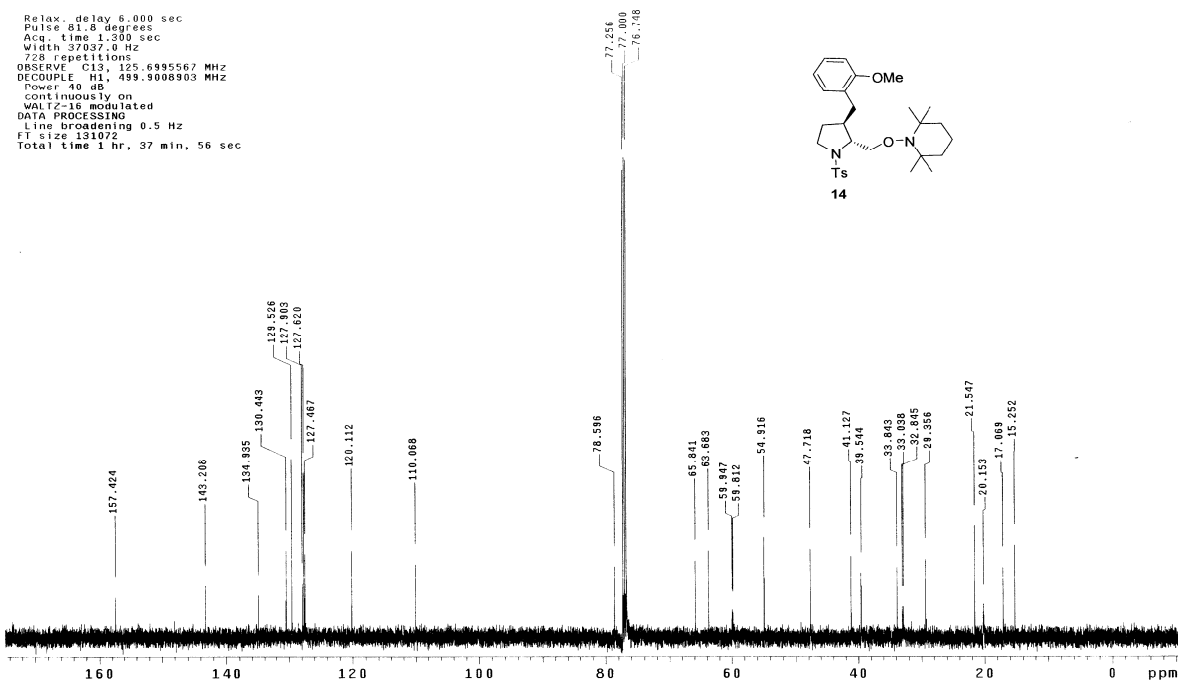


mcp-1-141NOESY2
 Pulse Sequence: s2pul
 Solvent: Benzene
 Ambient temperature
 INOVA-500 "tossy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.881 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1: 499.8984266 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 6536
 Total time 1 min, 18 sec



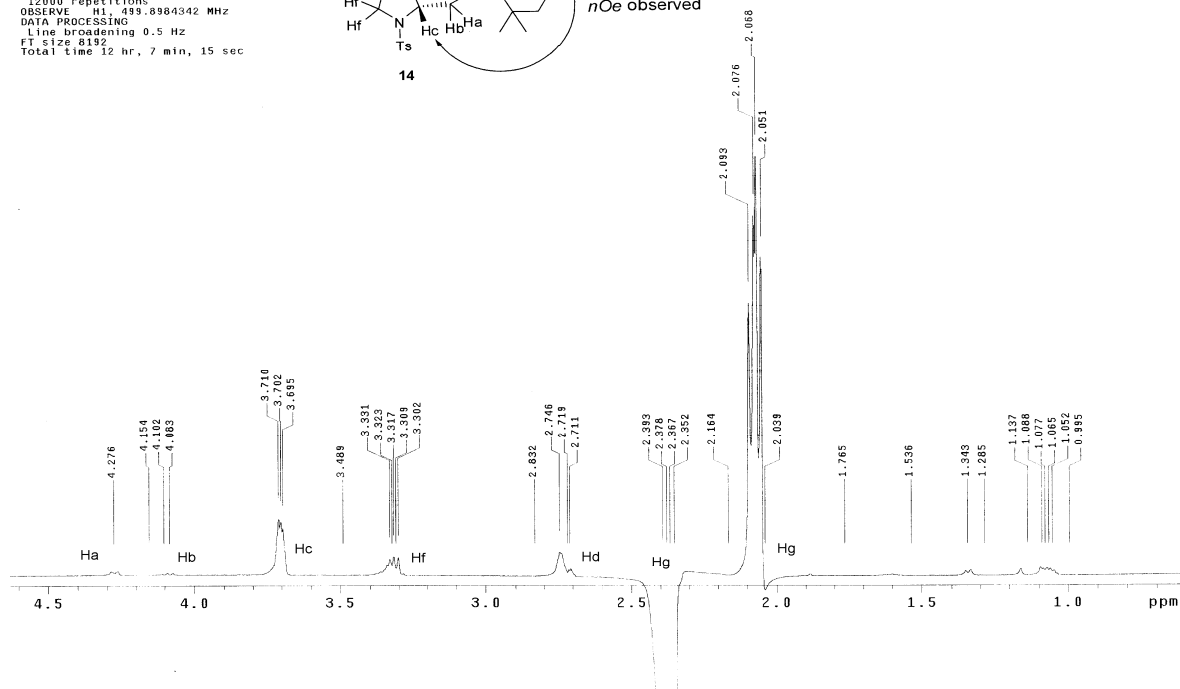
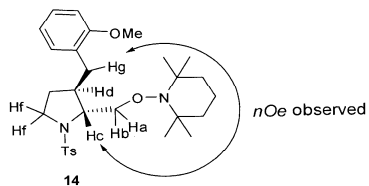
STANDARD CARBON PARAMETERS

Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 Sample #: 1-14-87
 File: mcp-1-136CNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 6.000 sec
 Pulse 81.8 degrees
 Acq. time 1.300 sec
 Width 37037.0 Hz
 728 repetitions
 OBSERVE C13, 125.6985567 MHz
 DECOUPLE H1, 499.9006903 MHz
 Power 49 dB
 Continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 131072
 Total time 1 hr, 37 min, 56 sec



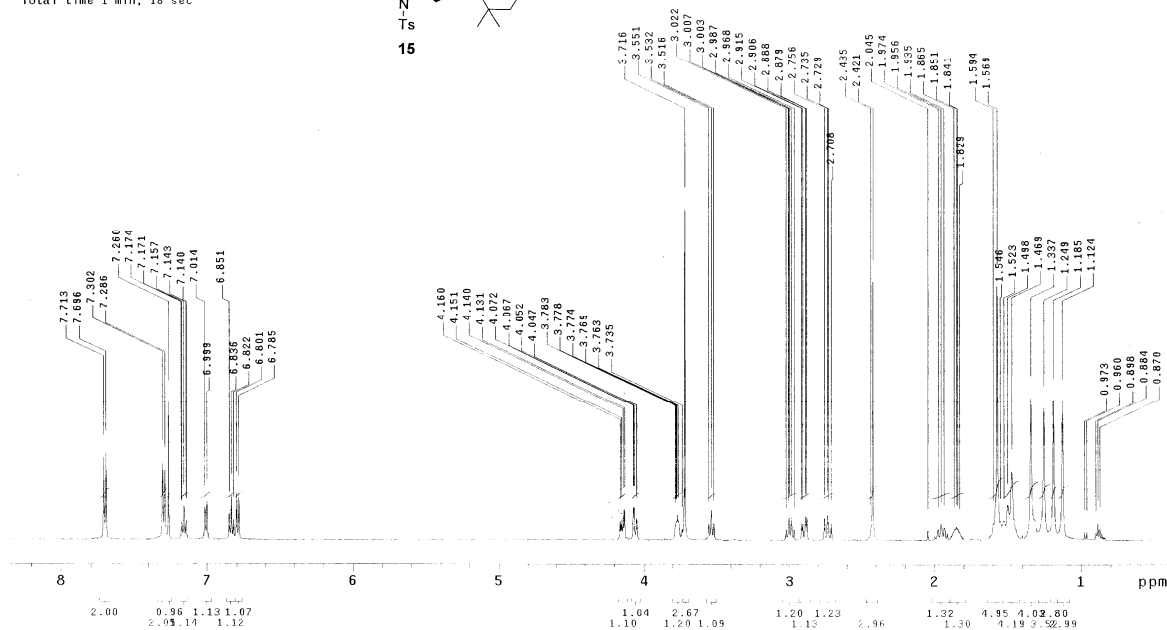
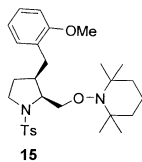
STANDARD PROTON PARAMETERS

Pulse Sequence: NOESY1D
 Solvent: Benzene
 Ambient Temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 1.000 sec
 Pulse 90.0 degrees
 Mixing 0.500 sec
 Acq. time 1.093 sec
 Width 2011.1 Hz
 12000 repetitions
 OBSERVE H1, 499.8984342 MHz
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 8192
 Total time 12 hr, 7 min, 15 sec



mp-1-131-2
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 INOVA-500 "tocsy.chem.buffalo.edu"

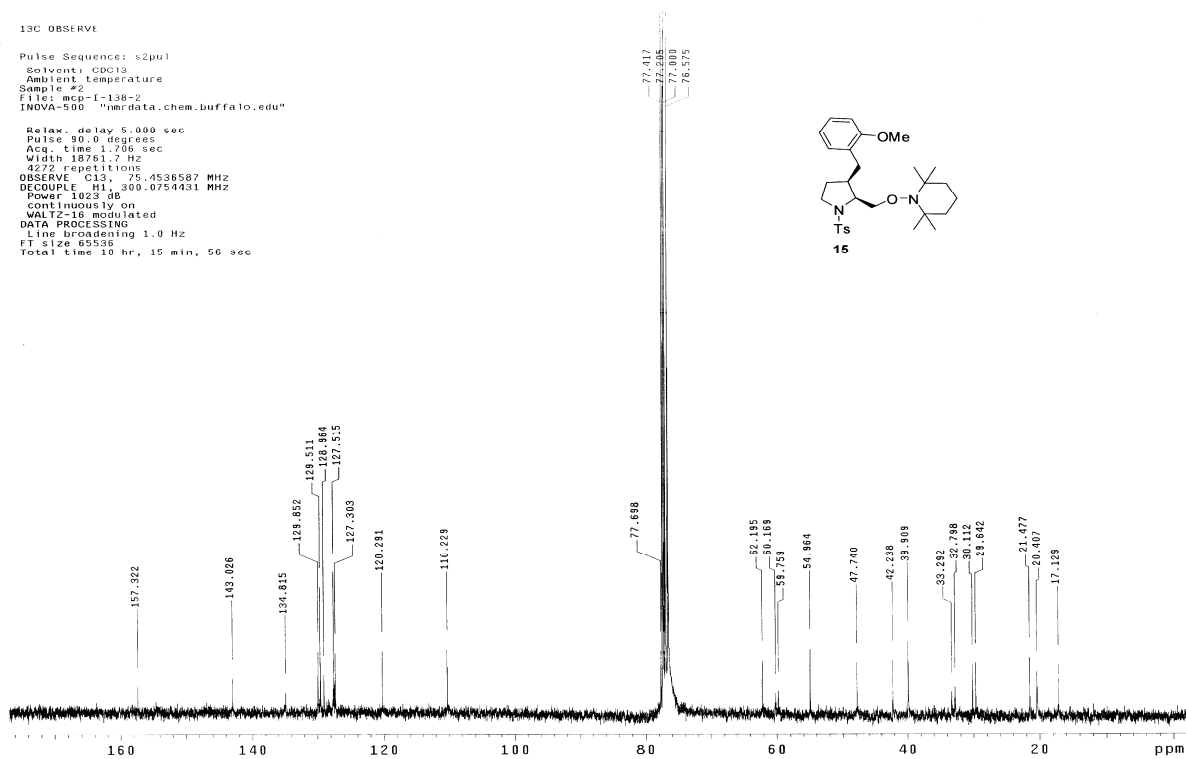
Relax. delay 2.000 sec
 Pulse 34.8 degrees
 Acq. time 1.831 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984021 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



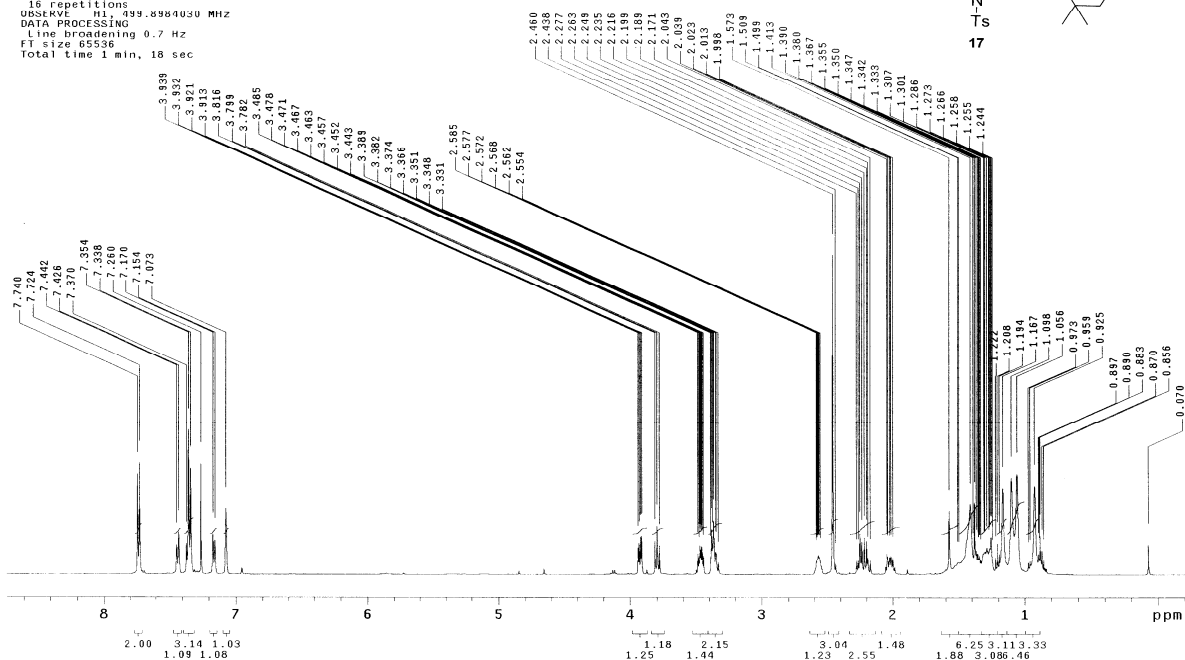
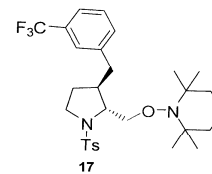
13C OBSERVE

Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 Sample #2
 File: mp-1-138-2
 INOVA-500 "nmrdata.chem.buffalo.edu"

Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.706 sec
 Width 18781.7 Hz
 4272 repetitions
 OBSERVE C13, 75.4536587 MHz
 DECOUPLE H1, 300.0754431 MHz
 POWER 1023 dB
 Continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 10 hr, 15 min, 56 sec

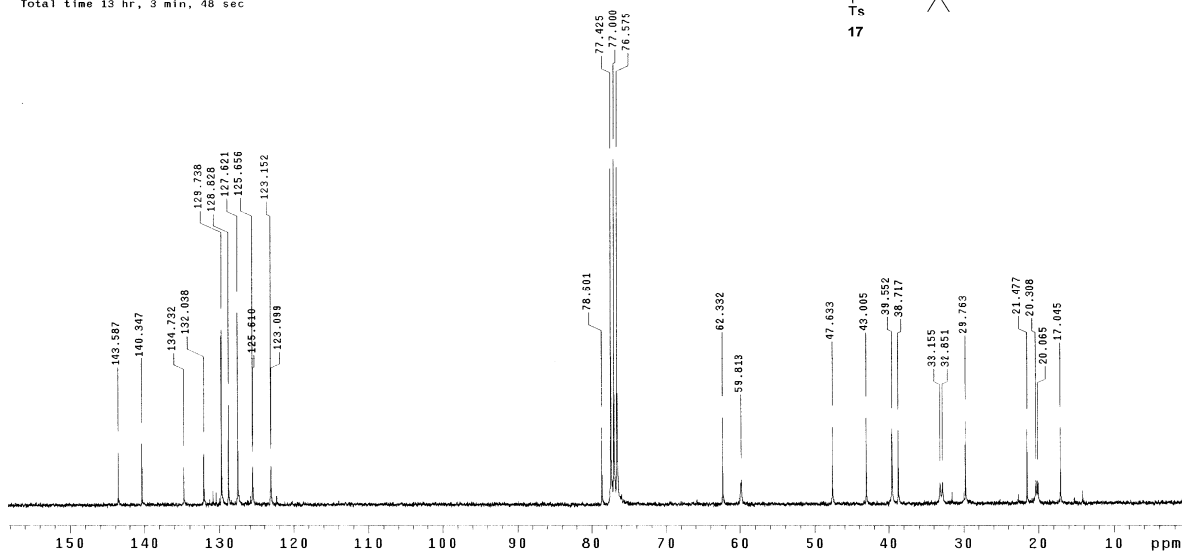
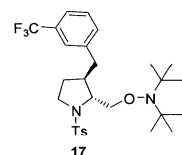


mcp-I-294-2
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
INOVA-500 "tccsy.chem.buffalo.edu"
Relax. delay 2.000 sec
Pulse 34.6 degrees
Acq. time 1.881 sec
Width 10000.0 Hz
16 repetitions
USBSKVt H1: 499.8984050 MHz
DATA PROCESSING
Line broadening 0.7 Hz
FT size 65536
Total time 1 min, 18 sec

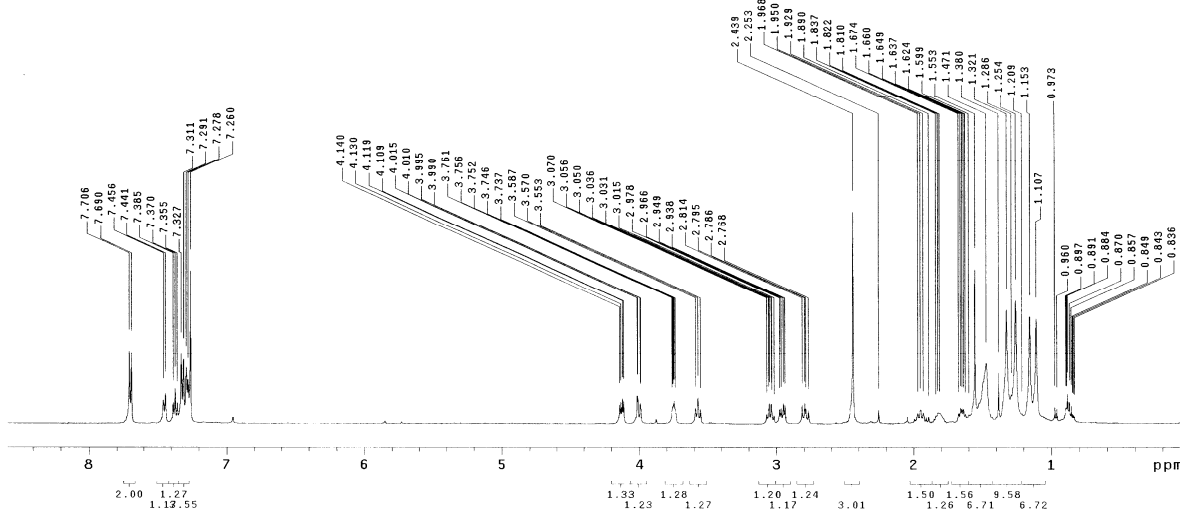
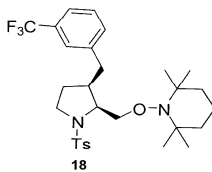


13C OBSERVE

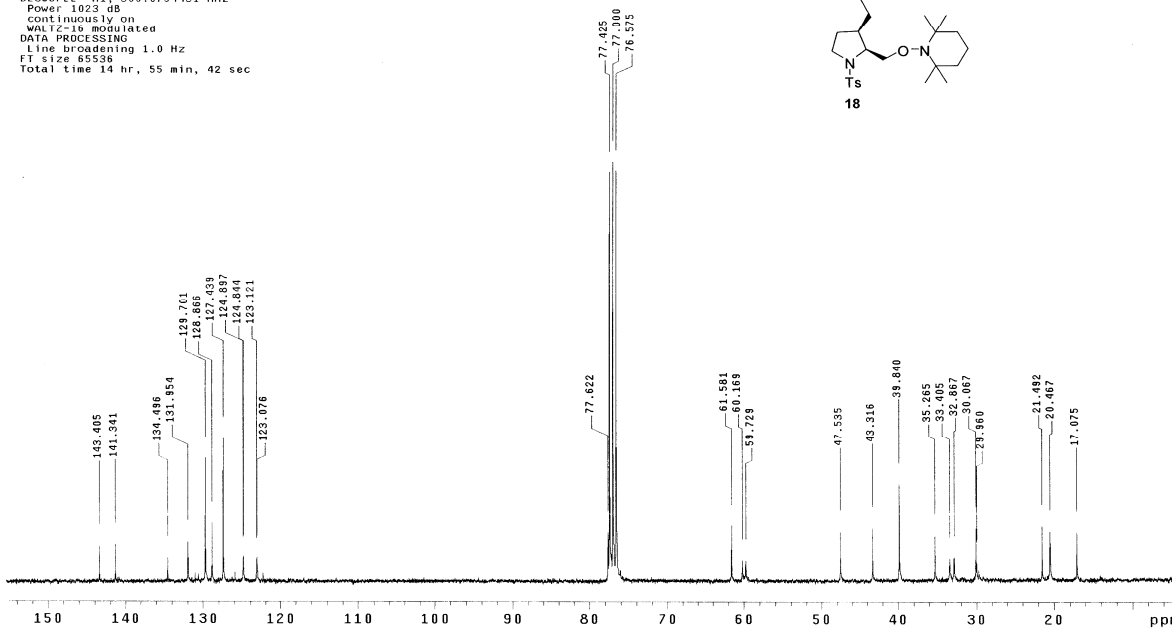
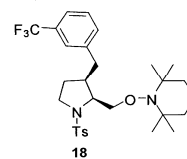
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Sample #2
File: mcp-I-294-2CNMR
INOVA-500 "nmrdata.chem.buffalo.edu"
Relax. delay 5.000 sec
Pulse 90.0 degrees
Acq. time 1.706 sec
Width 18761.7 Hz
4864 repetitions
OBSERVE C13: 75.4536593 MHz
DECOUPLE H1: 300.0754431 MHz
Power 1023 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 15 hr, 3 min, 48 sec



mcp-I-294-1
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 IS repetitions
 OBSERVE H1, 499.8984027 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec

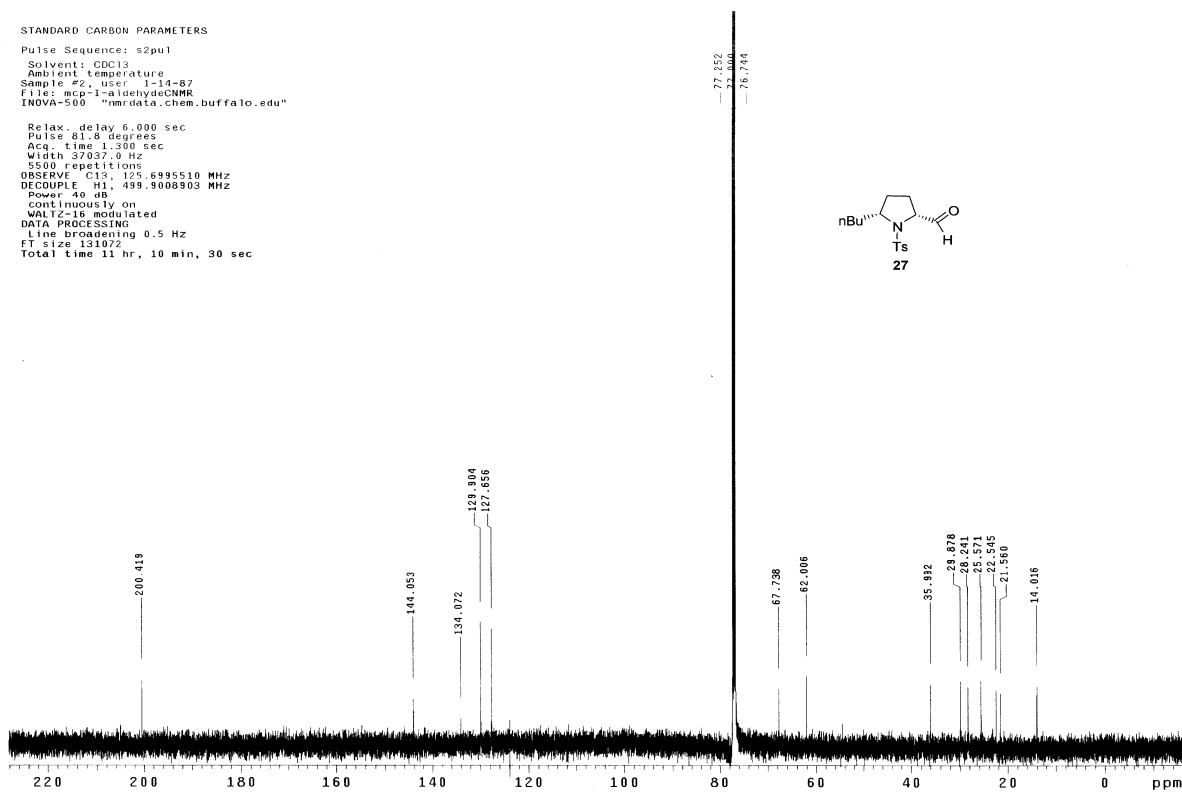


mcp-I-295-1CNMR
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 Sample #2
 File: mcp-I-295-1CNMR
 INOVA-500 "nmr.data.chem.buffalo.edu"
 Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.700 sec
 Width 18761.7 Hz
 5378 repetitions
 OBSERVE C13, 75.4536593 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 65536
 Total time 14 hr, 55 min, 42 sec



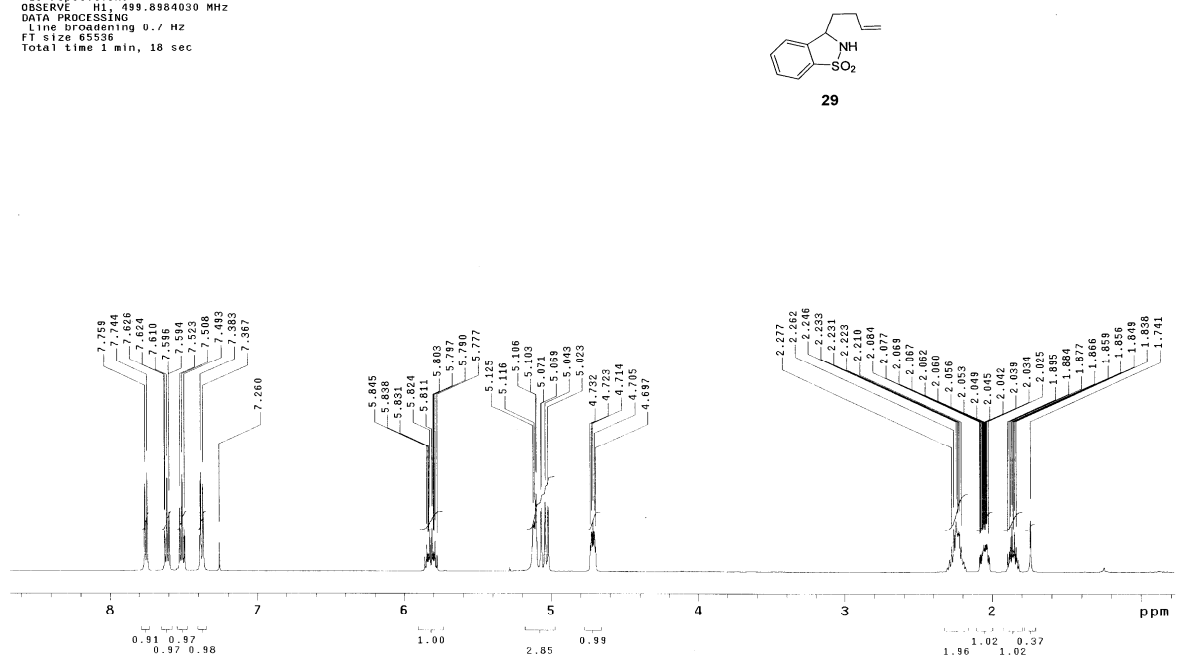
STANDARD CARBON PARAMETERS

Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 Sample #2, user: 1-14-87
 File: mcp-1-aldehydeCNMR
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 6.000 sec
 Pulse 81.0 degrees
 Acq. time 1.300 sec
 Width 37037.0 Hz
 5500 repetitions
 OBSERVE C13, 125.6995510 MHz
 DECOUPLE H1, 499.9008903 MHz
 Power 40 dB
 Continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 131072
 Total time 11 hr, 10 min, 30 sec

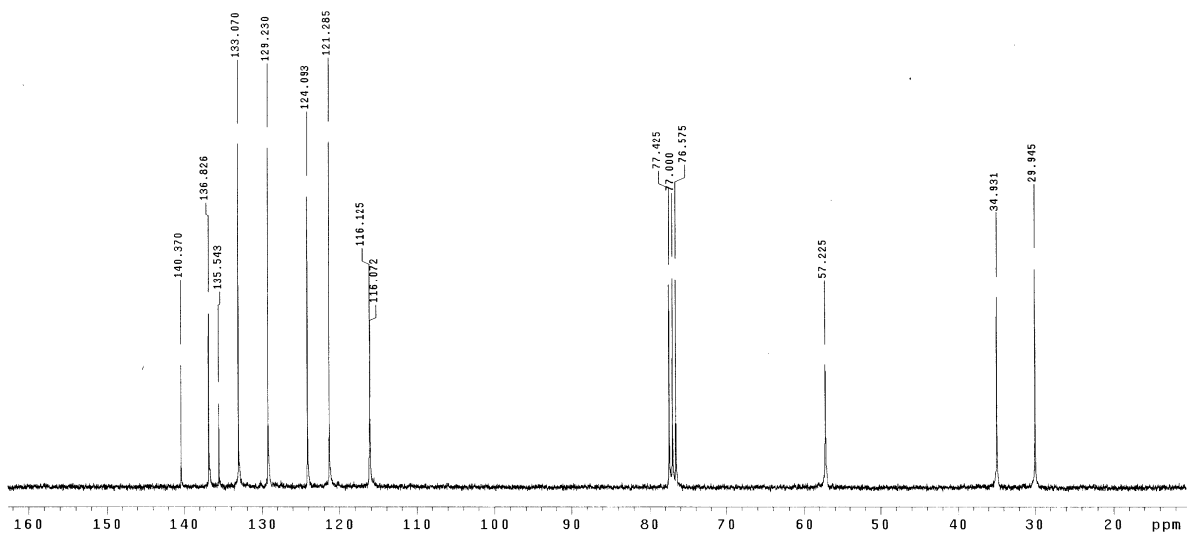
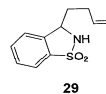


mcp-1-206

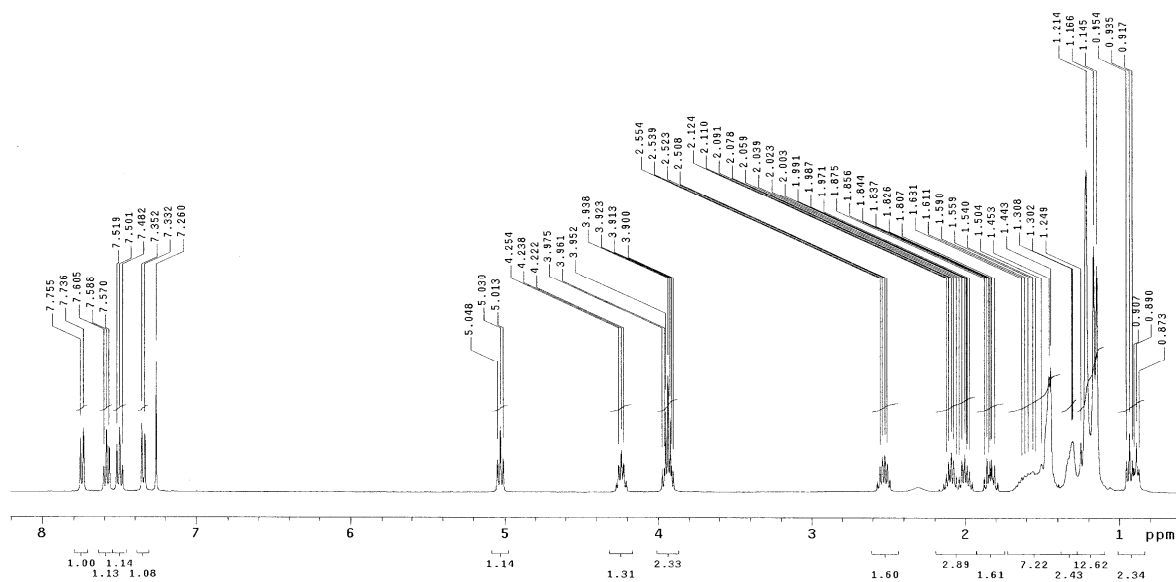
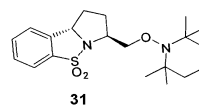
Pulse Sequence: s2pu1
 Solvent: CDCl3
 Ambient temperature
 INOVA-500 "tocsy.chem.buffalo.edu"
 Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.891 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984030 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



mcp-I-206
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 Sample #2
 File: mcp-I-206
 INOVA-500 "nmrdata.chem.buffalo.edu"
 Relax. delay 5.000 sec
 Pulse 90.0 degrees
 Acq. time 1.700 sec
 Width 18761.7 Hz
 800 repetitions
 OBSERVE C13, 75.4536633 MHz
 DECOUPLE H1, 300.0754431 MHz
 Power 1023 db
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 1.0 Hz
 FT size 85536
 Total time 3 hr, 21 min, 52 sec



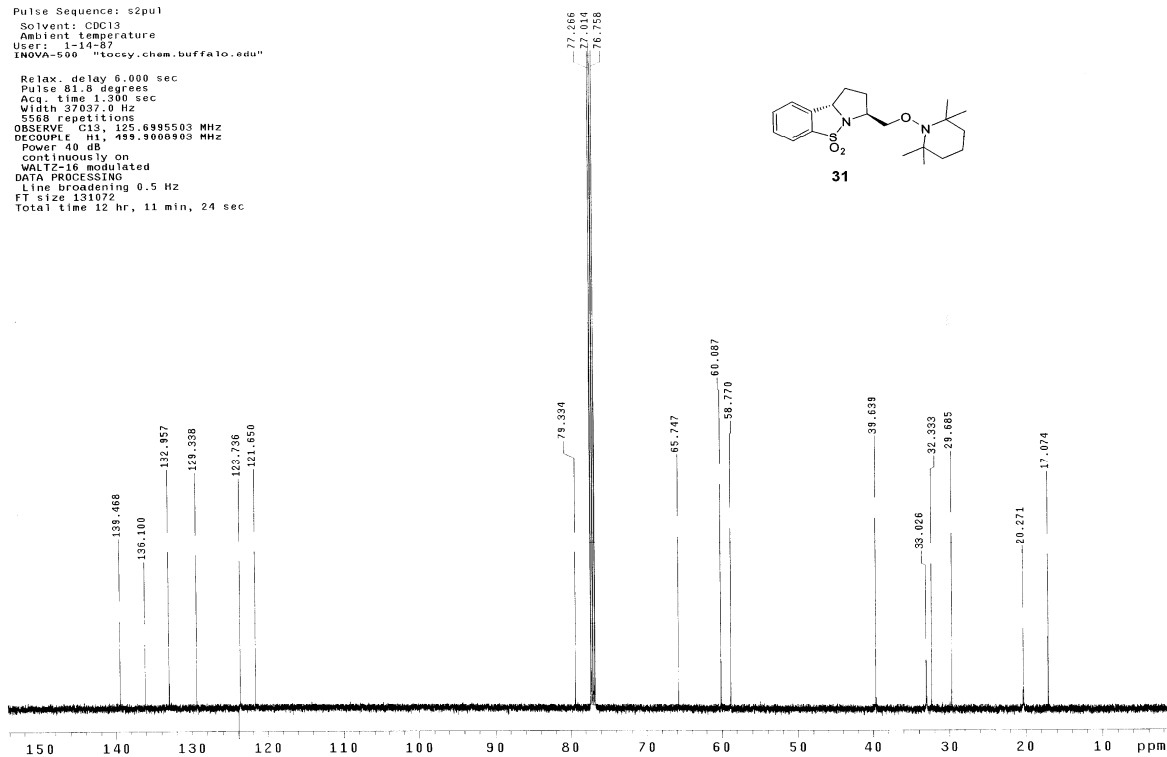
mcp-I-245
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 File: mcp-I-245
 INOVA-400 "cosy.chem.buffalo.edu"
 Relax. delay 1.000 sec
 Pulse 71.4 degrees
 Acq. time 1.800 sec
 Width 6000.6 Hz
 16 repetitions
 OBSERVE H1, 399.9399022 MHz
 DATA PROCESSING
 Line broadening 0.9 Hz
 FT size 32768
 Total time 0 min, 44 sec



STANDARD CARBON PARAMETERS

Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 User: 1-14-87
 INOVA-500 "tocsy.chem.buffalo.edu"

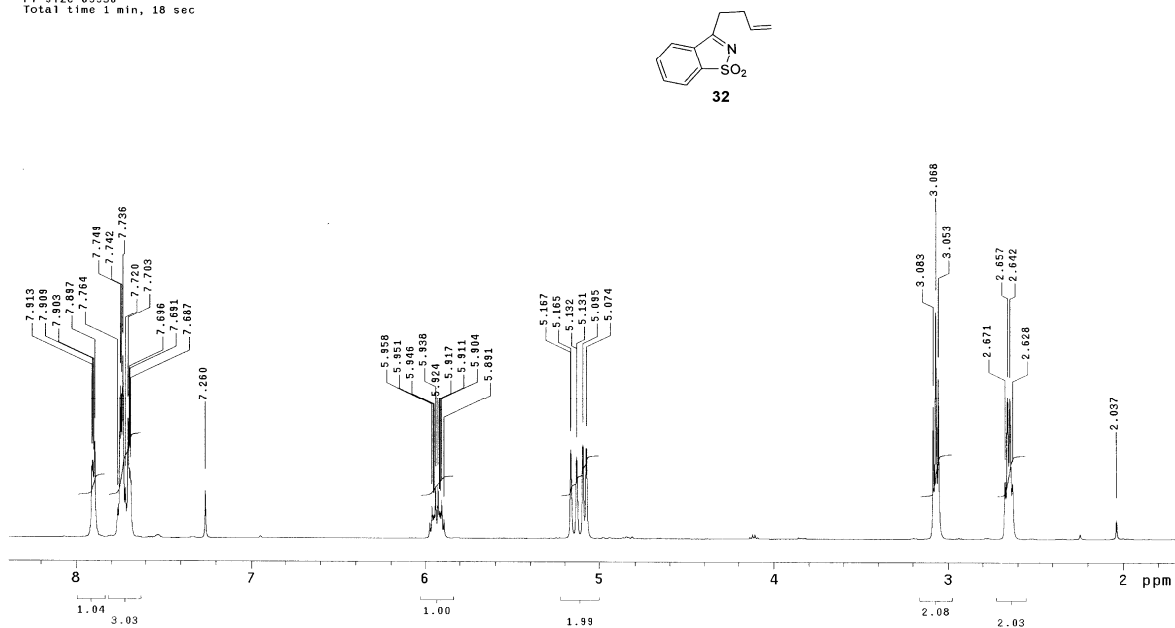
Relax. delay 6.000 sec
 Pulse 81.8 degrees
 Acq. time 1.300 sec
 Width 37037.0 Hz
 5568 repetitions
 OBSERVE C13, 125.6995503 MHz
 DECOUPLE H1, 499.9068903 MHz
 Power 40 dB
 continuously on
 WALTZ-16 modulated
 DATA PROCESSING
 Line broadening 0.5 Hz
 FT size 131072
 Total time 12 hr, 11 min, 24 sec



mcp-I-241afterhplc

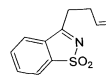
Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient Temperature
 File: mcp-I-241afterhplc
 INOVA-500 "tocsy.chem.buffalo.edu"

Relax. delay 2.000 sec
 Pulse 34.6 degrees
 Acq. time 1.694 sec
 Width 10000.0 Hz
 16 repetitions
 OBSERVE H1, 499.8984030 MHz
 DATA PROCESSING
 Line broadening 0.7 Hz
 FT size 65536
 Total time 1 min, 18 sec



mcp-1-241afterhplc
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Sample #2
File: mcp-1-241afterhplc
INOVA-500 "nmrdata.chem.buffalo.edu"

Relax. delay 5.000 sec
Pulse 90.0 degrees
Acq. time 1.706 sec
Width 18761.7 Hz
5296 repetitions
OBSERVE C13, 75.4536610 MHz
DECOUPLE H1, 300.0754431 MHz
Power 1023 uB
Continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 14 hr, 55 min, 42 sec



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