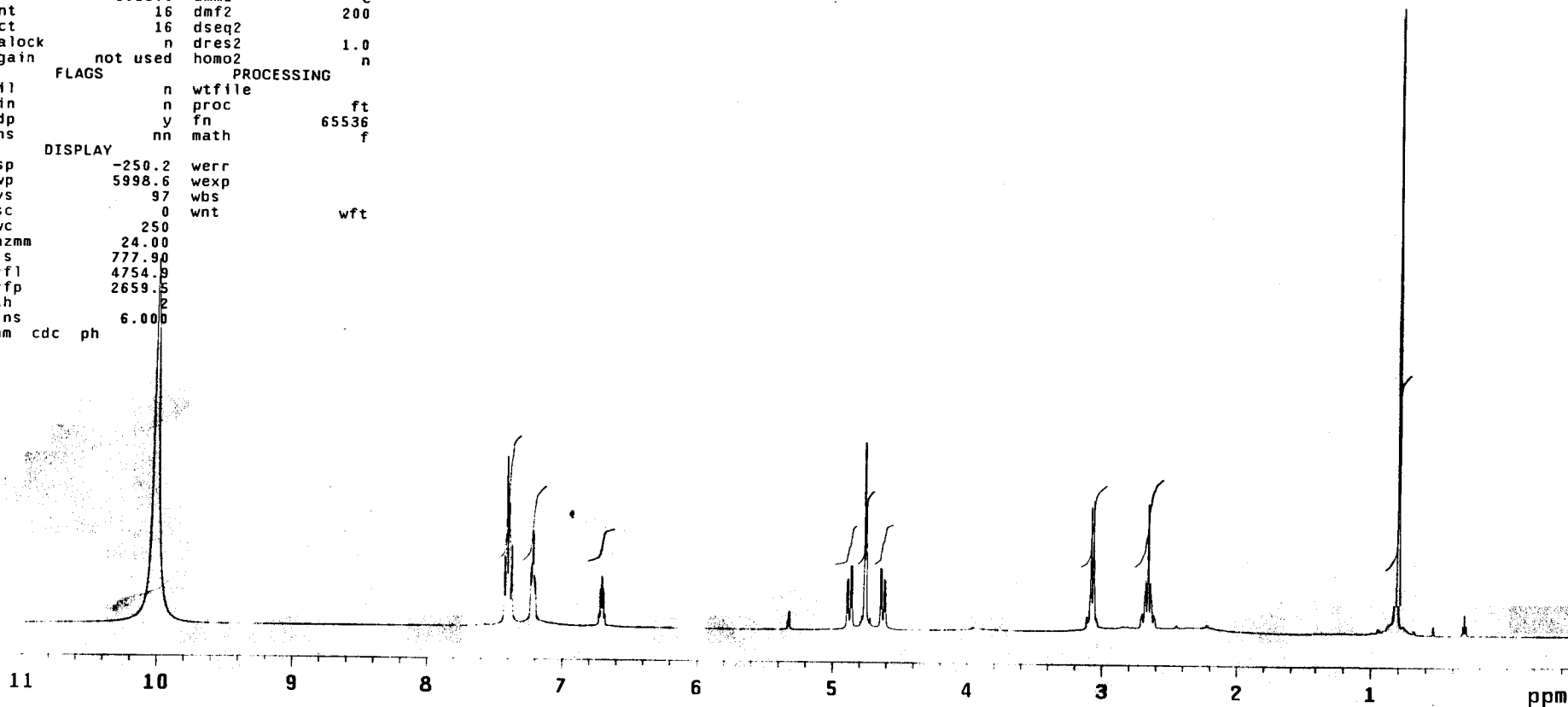
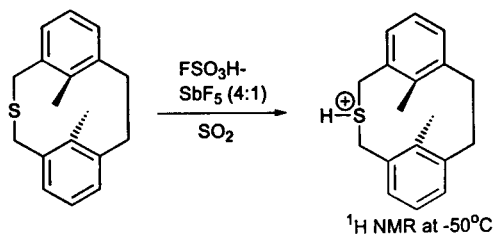


5mmsw,H lineshape
spin,7-8-98

exp9 s2pul

SAMPLE		DEC. & VT	
date	Jul 6 2000	dfrq	499.908
solvent	CD2CL2	dn	H1
file	/export/home/~	dpwr	30
laali/okazaki107/to~		dof	-284.2
00070605-H50-CD2Cl~		dm	n
	2-5.fid	dmm	c
		dmf	200
ACQUISITION			
sfrq	499.910	dseq	
tn		dres	1.0
at	1.383	homo	n
np	35968	temp	-50.0
sw	12999.7	DEC2	
fb	7000	dfrq2	0
bs	4	dn2	
tpwr	55	dpwr2	1
pw	12.0	dof2	0
d1	1.000	dm2	n
tof	1918.9	dmm2	c
nt	16	dmf2	200
ct	16	dseq2	
alock	n	dres2	1.0
gain	not used	homo2	n
FLAGS		PROCESSING	
il	n	wtfile	
in	n	proc	ft
dp	y	fn	65536
hs	nn	math	f
DISPLAY			
sp	-250.2	werr	
wp	5998.6	wexp	
vs	97	wbs	
sc	0	wnt	wft
wc	250		
hzmm	24.00		
is	777.90		
rfl	4754.9		
rfp	2659.5		
th	2		
ins	6.000		
nm	cdc ph		



okazaki/cation

Pulse Sequence: relayh

Solvent: CD2CL2

Temp. -50.0 C / 223.2 K

File: to00070605-COSY50-CD2C12-5

INOVA-500 "ksu500"

PULSE SEQUENCE: relayh

Relax. delay 0.500 sec

COSY 90-90

Acq. time 0.677 sec

Width 3782.9 Hz

2D Width 3782.9 Hz

4 repetitions

128 increments

OBSERVE H1, 499.9058795 MHz

DATA PROCESSING

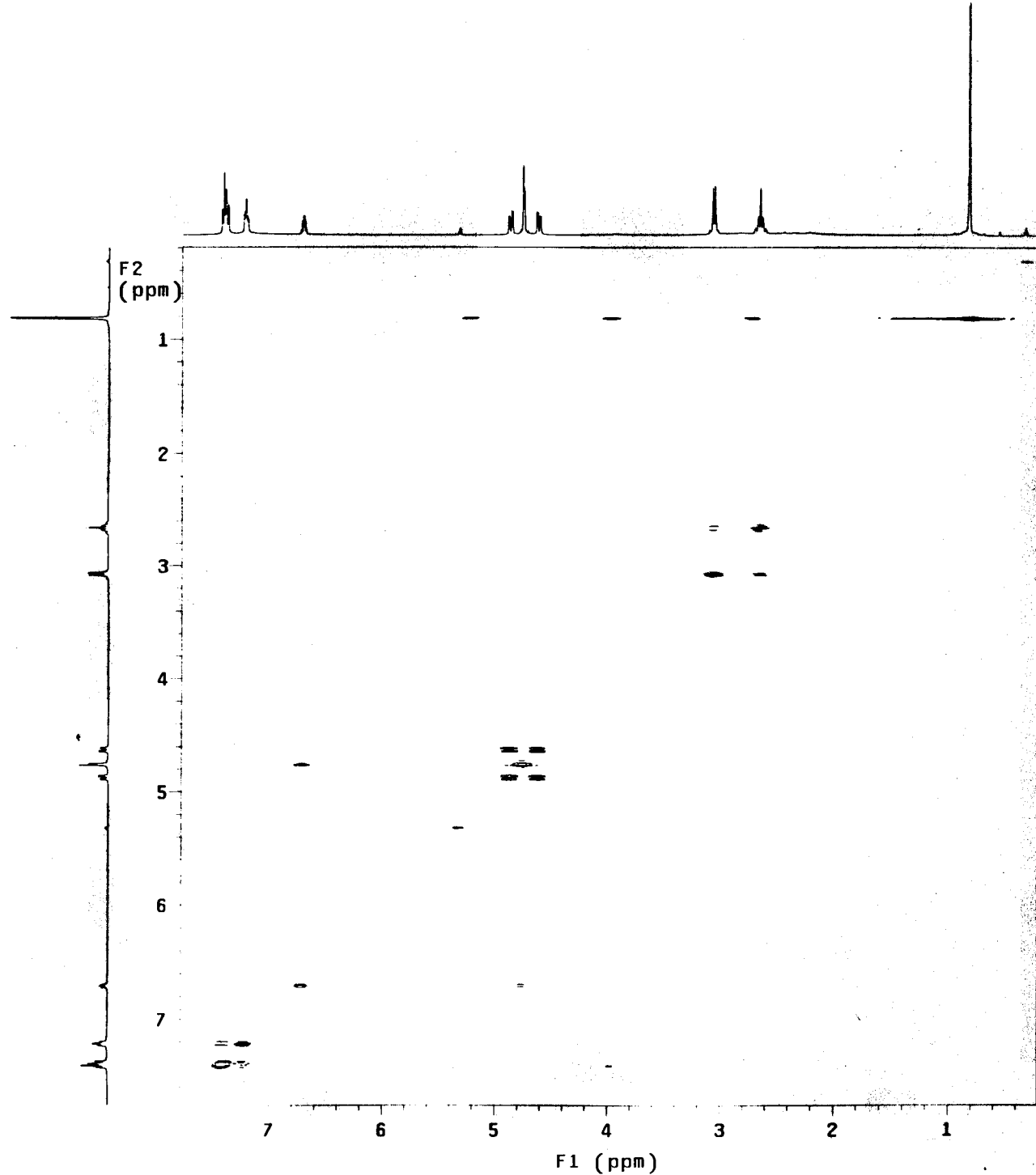
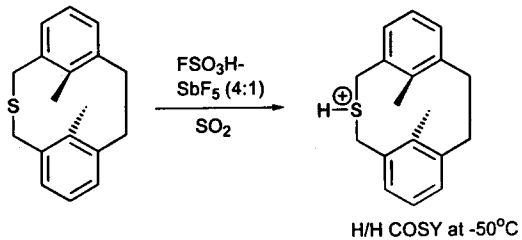
Sine bell 0.270 sec

F1 DATA PROCESSING

Sine bell 0.017 sec

FT size 4096 x 512

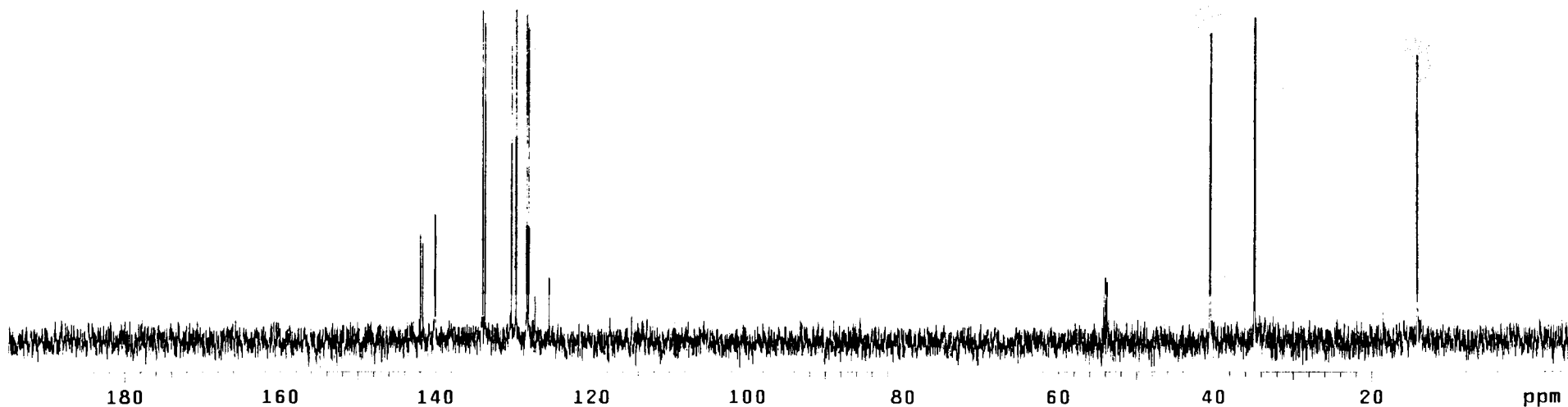
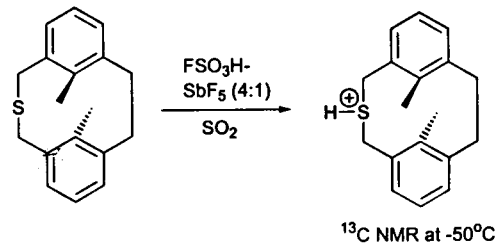
Total time 10 min, 18 sec



STANDARD CARBON PARAMETERS

exp8 s2pu1

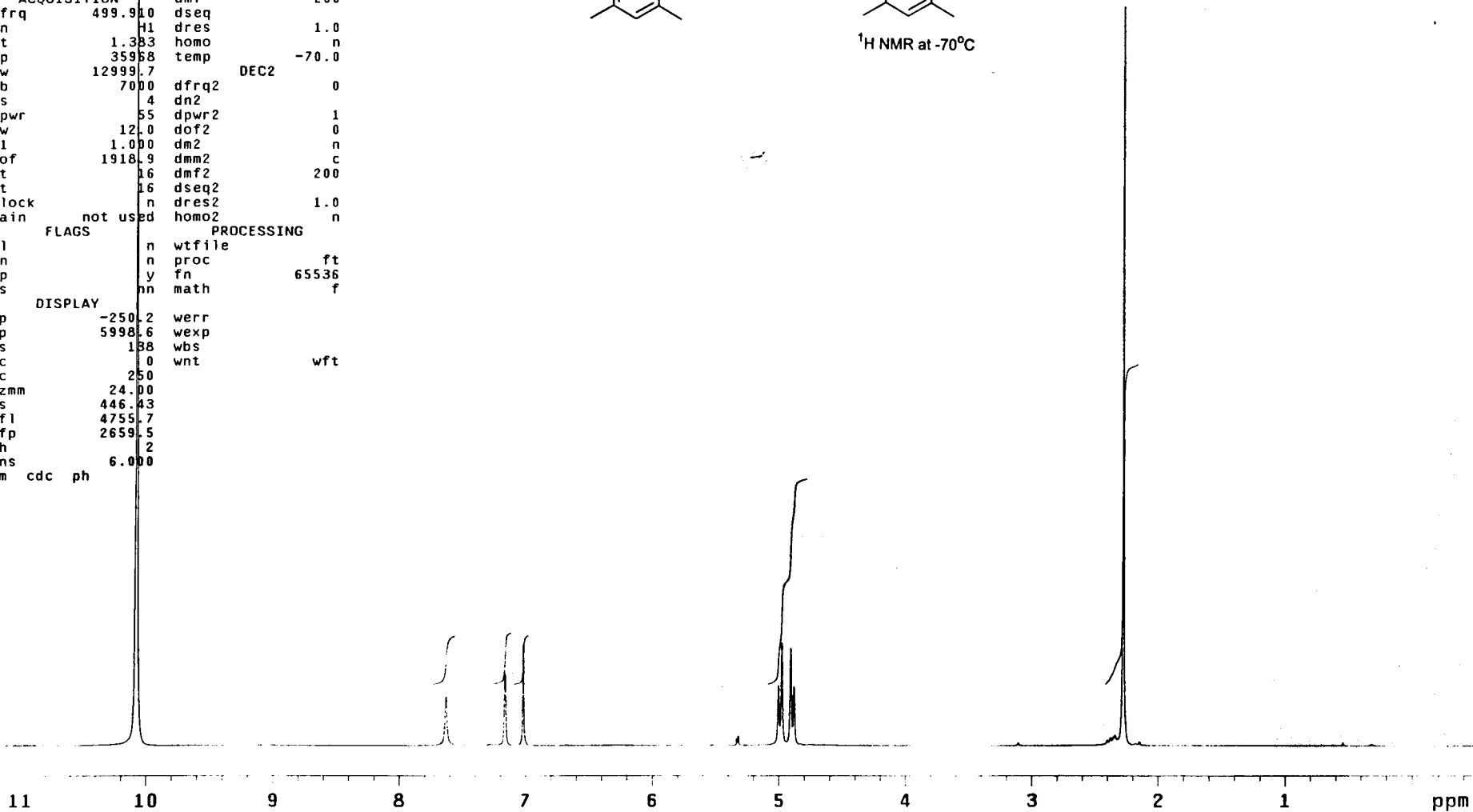
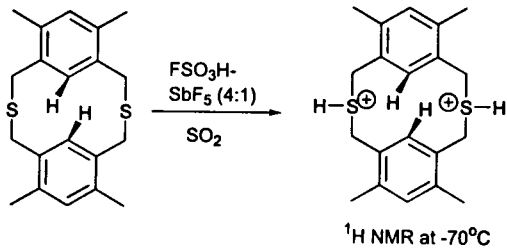
SAMPLE		DEC. & VT	
date	Jul 6 2000	dfrq	499.908
solvent	CD2CL2	dn	H1
file	/export/home/~	dpwr	35
laali/okazak107/to~		dof	0
00070605-C50-CD2C1~		dm	nny
	2-5.fid	dmm	w
ACQUISITION		dmf	10800
sfrq	125.716	dseq	
tn	C13	dres	1.0
at	0.640	homo	n
np	64000	temp	-50.0
sw	50000.0	DEC2	
fb	not used	dfrq2	0
bs	4	dn2	
tpwr	52	dpwr2	1
pw	16.0	dof2	0
d1	0.500	dm2	n
d2	0.500	dmm2	c
tof	2423.4	dmf2	10000
nt	10000	dseq2	
ct	284	dres2	1.0
alock	n	homo2	n
gain	26	PROCESSING	
FLAGS		lb	2.00
il	n	wtfile	
in	n	proc	ft
dp	y	fn	131072
hs	nn	math	f
DISPLAY			
sp	-629.0	werr	
wp	25140.0	wexp	
vs	53	wbs	
sc	0	wnt	
wc	250		
hzmm	100.56		
is	4250.00		
rfl	17416.8		
rfp	6787.9		
th	6		
ins	1.000		
nm	cdc ph		



5mmsw,H lineshape
spin,7-8-98

exp9 s2pul

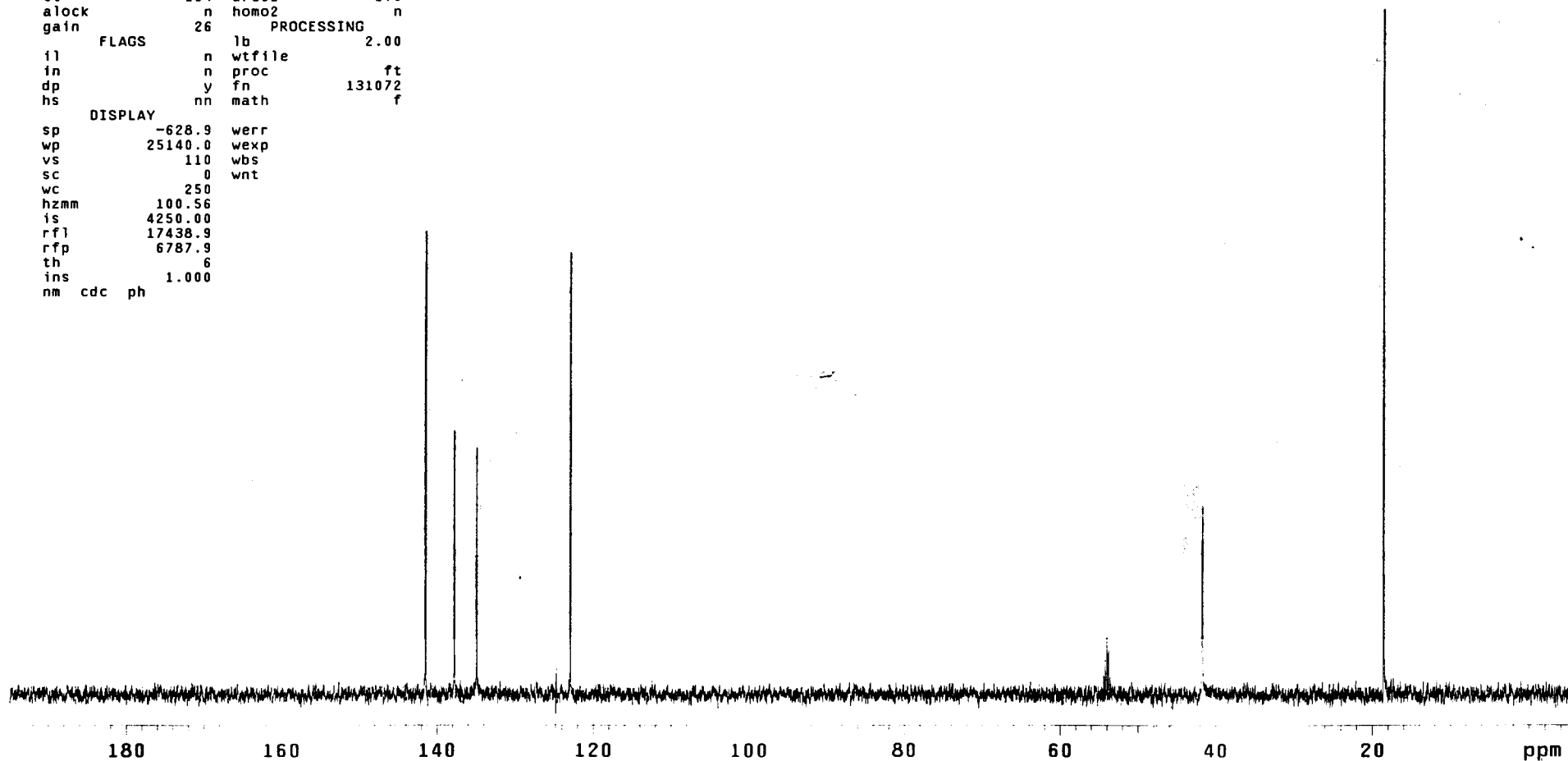
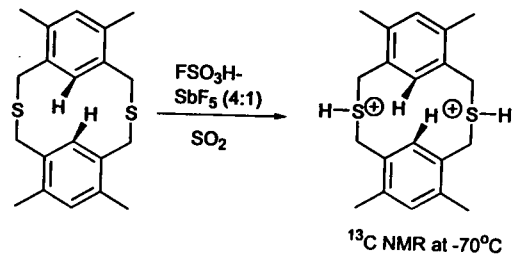
SAMPLE		DEC. & VT	
date	Jun 29 2000	dfrq	499.908
solvent	CD2Cl2	dn	H1
file	/export/home/~	dpwr	30
laali/okazaki06/to~		dof	-284.2
00062902-H70-CD2Cl~		dm	n
	2-5.fid	dmm	c
ACQUISITION			
sfrq	499.910	dseq	
tn	H1	dres	1.0
at	1.383	homo	n
np	35968	temp	-70.0
sw	12999.7	DEC2	
fb	7000	dfrq2	0
bs	4	dn2	
tpwr	55	dpwr2	1
pw	12.0	dof2	0
d1	1.000	dm2	n
tof	1918.9	dmm2	c
nt	16	dmf2	200
ct	16	dseq2	
alock	n	dres2	1.0
gain	not used	homo2	n
FLAGS		PROCESSING	
il	n	wtfile	
in	n	proc	ft
dp	y	fn	65536
hs	nn	math	f
DISPLAY			
sp	-250.2	werr	
wp	5998.6	wexp	
vs	138	wbs	
sc	0	wnt	wft
wc	250		
hzmm	24.00		
is	446.43		
rfl	4755.7		
rfp	2659.5		
th	2		
ins	6.000		
nm	cdc ph		



STANDARD CARBON PARAMETERS

exp8 s2pu1

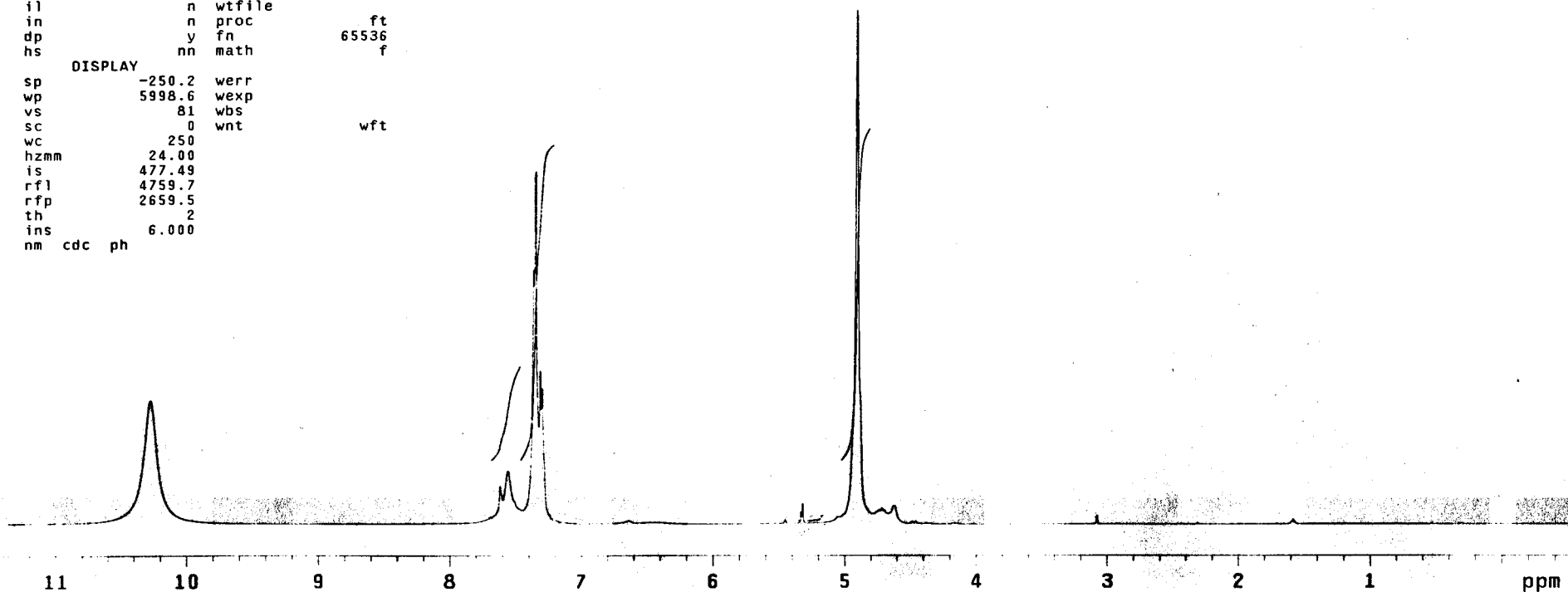
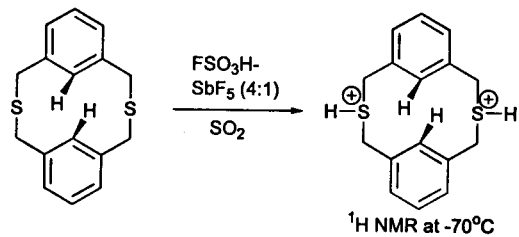
SAMPLE		DEC. & VT	
date	Jun 29 2000	dfrq	499.908
solvent	CD2CL2	dn	H1
file	/export/home/~	dpwr	35
laali/okazaki06/to~		dof	0
00062902-C70-CD2C1~		dm	nny
	2-5.fid	dmm	w
ACQUISITION		dmf	10800
sfrq	125.716	dseq	
tn	C13	dres	1.0
at	0.640	homo	n
np	64000	temp	-70.0
sw	50000.0	DEC2	
fb	not used	dfrq2	0
bs	4	dn2	
tpwr	52	dpwr2	1
pw	16.0	dof2	0
d1	0.500	dm2	n
d2	0.500	dmm2	c
tof	2423.4	dmf2	10000
nt	10000	dseq2	
ct	164	dres2	1.0
alock	n	homo2	n
gain	26	PROCESSING	
FLAGS		lb	2.00
il	n	wtfile	
in	n	proc	ft
dp	y	fn	131072
hs	nn	math	f
DISPLAY			
sp	-628.9	werr	
wp	25140.0	wexp	
vs	110	wbs	
sc	0	wnt	
wc	250		
hzmm	100.56		
is	4250.00		
rfl	17438.9		
rfp	6787.9		
th	6		
ins	1.000		
nm	cdc ph		



5mmsw,H lineshape
spin,7-8-98

exp9 s2pu1

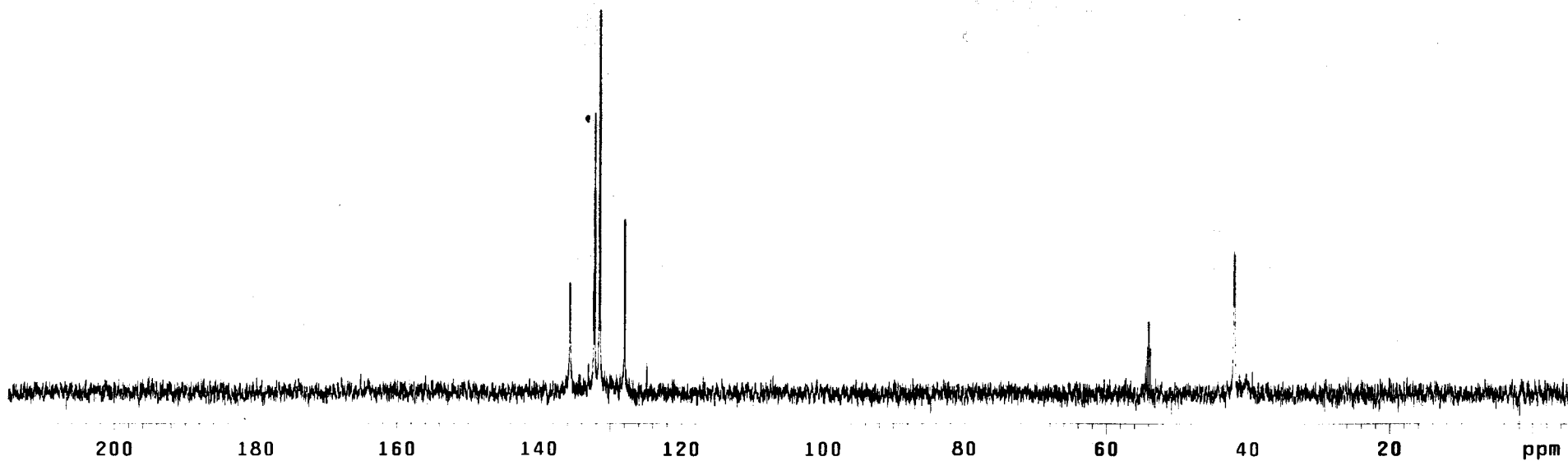
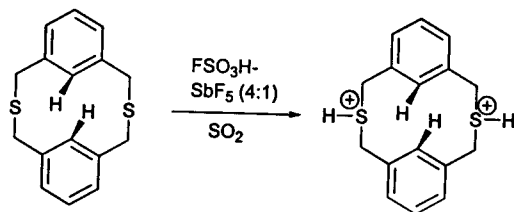
SAMPLE		DEC. & VT	
date	Jun 28 2000	dfrq	499.908
solvent	CD2CL2	dn	H1
file	/export/home/~	dpwr	30
laa11/okazaki06/to		dof	-284.2
00062803-H70-CD2C1~		dm	n
	2-5.fid	dmm	c
ACQUISITION		dmf	200
sfrq	499.910	dseq	
tn	H1	dres	1.0
at	1.383	homo	n
np	35968	temp	-70.0
sw	12999.7	DEC2	
fb	7000	dfrq2	0
bs	4	dn2	
tpwr	55	dpwr2	1
pw	12.0	dof2	0
d1	1.000	dm2	n
tof	1918.9	dmm2	c
nt	16	dmf2	200
ct	16	dseq2	
alock	n	dres2	1.0
gain	not used	homo2	n
FLAGS		PROCESSING	
il	n	wfile	
in	n	proc	ft
dp	y	fn	65536
hs	nn	math	f
DISPLAY			
sp	-250.2	werr	
wp	5998.6	wexp	
vs	81	wbs	
sc	0	wnt	wft
wc	250		
hzmm	24.00		
is	477.49		
rfl	4759.7		
rpf	2659.5		
th	2		
ins	6.000		
nm	cdc ph		



STANDARD CARBON PARAMETERS

exp8 s2pul

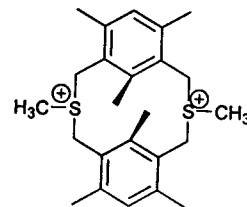
SAMPLE		DEC. & VT		
date	Jun 28 2000	dfrq	499.908	
solvent	CD2CL2	dn	H1	
file	/export/home/~	dpwr	35	
laali/okazaki06/to~		doF	0	
00062803-C70-CD2C1~		dm	nny	
	2-5.fid	dmm	w	
ACQUISITION				
sfrq	125.716	dseq	10800	
tn	C13	dres	1.0	
at	0.640	homo	n	
np	64000	temp	-70.0	
sw	50000.0	DEC2		
fb	not used	dfrq2	0	
bs	4	dn2		
tpwr	52	dpwr2	1	
pw	16.0	doF2	0	
d1	0.500	dm2	n	
d2	0.500	dmm2	c	
tof	2423.4	dmf2	10000	
nt	10000	dseq2		
ct	136	dres2	1.0	
alock	n	homo2	n	
gain	26	PROCESSING		
	FLAGS		lb	2.00
il	n	wtfile		
in	n	proc	ft	
dp	y	fn	131072	
hs	nn	math	f	
DISPLAY				
sp	-628.6	werr		
wp	27653.9	wexp		
vs	61	wbs		
sc	0	wnt		
wc	250			
hzmm	110.62			
is	4250.00			
rfl	17427.9			
rfp	6787.9			
th	6			
ins	1.000			
nm	cdc ph			



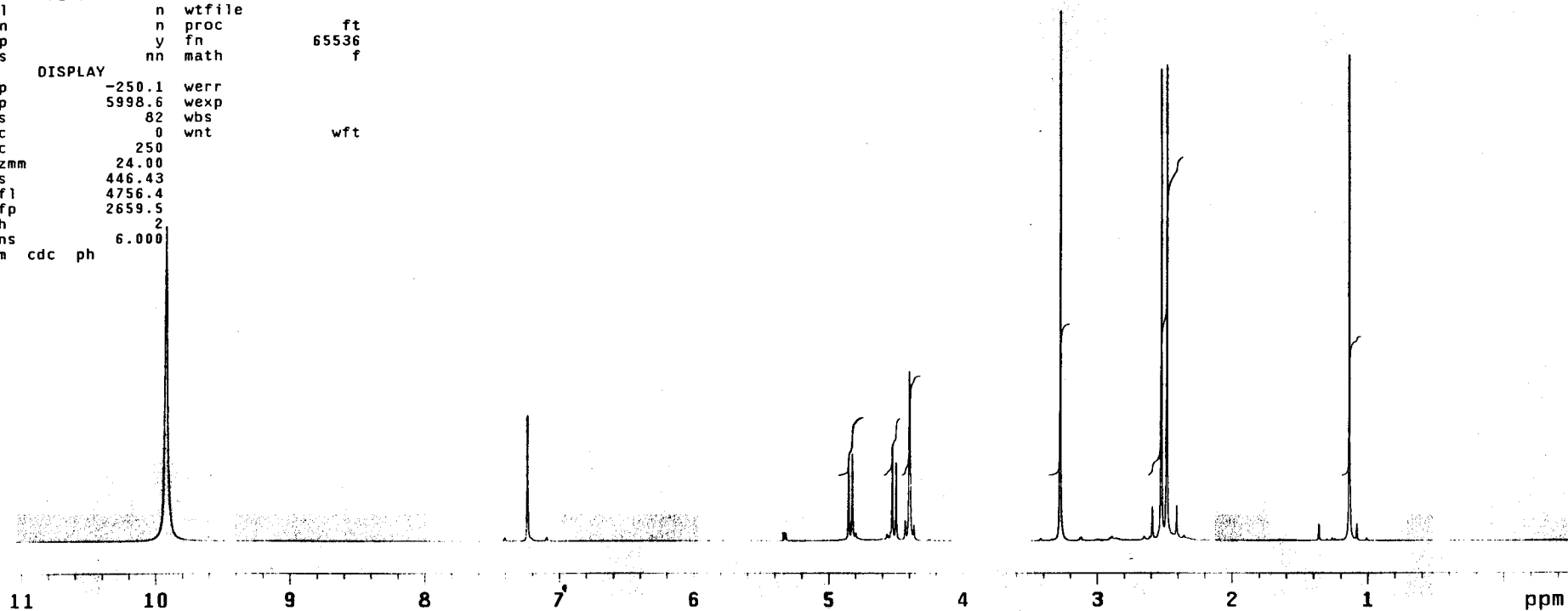
5mmw,H lineshape
spin,7-8-98

exp9 s2pul

SAMPLE		DEC. & VT	
date	Jul 12 2000	dfrq	499.908
solvent	CD2CL2	dn	H1
file	/export/home/~	dpwr	30
laali/okazaki07/to~		dof	-284.2
00071209-H50-CD2C1~		dm	n
2-5.fid		dmm	c
ACQUISITION			
sfrq	499.910	dseq	200
tn	H1	dres	1.0
at	1.383	homo	n
np	35968	temp	-50.0
sw	12999.7	DEC2	
fb	7000	dfrq2	0
bs	4	dn2	
tpwr	55	dpwr2	1
pw	12.0	dof2	0
d1	1.000	dm2	n
tof	1918.9	dmm2	c
nt	16	dmf2	200
ct	16	dseq2	
alock	n	dres2	1.0
gain	not used	homo2	n
FLAGS		PROCESSING	
il	n	wfile	
in	n	proc	ft
dp	y	fn	65536
hs	nn	math	f
DISPLAY			
sp	-250.1	werr	
wp	5998.6	wexp	
vs	82	wbs	
sc	0	wnt	wft
wc	250		
hzmm	24.00		
is	446.43		
rfl	4756.4		
rfp	2659.5		
th	2		
ins	6.000		
nm	cdc ph		



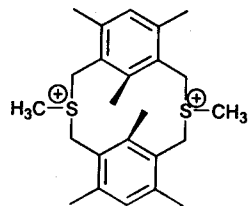
¹H NMR at -50°C
in FSO₃H-SbF₅ (4:1)/SO₂



STANDARD CARBON PARAMETERS

exp8 s2pu1

SAMPLE		DEC. & VT	
date	Jul 12 2000	dfrq	499.908
solvent	CD2CL2	dn	H1
file	/export/home/~	dpwr	35
laali/okazaki07/to~		dof	0
00071209-C50-CD2C1~		dm	nyy
	2-5.fid	dmm	w
ACQUISITION		dmf	10800
sfrq	125.716	dseq	
tn	C13	dres	1.0
at	0.640	homo	n
np	64000	temp	-50.0
sw	50000.0	DEC2	
fb	not used	dfrq2	0
bs	4	dn2	
tpwr	52	dpwr2	1
pw	16.0	dof2	0
d1	0.500	dm2	n
d2	0.500	dmm2	c
tof	2423.4	dmf2	10000
nt	10000	dseq2	
ct	116	dres2	1.0
alock	n	homo2	n
gain	60	PROCESSING	
FLAGS		lb	2.00
il	n	wtfile	
in	n	proc	ft
dp	y	fn	131072
hs	nn	math	f
DISPLAY		werr	
sp	-628.8	wexp	
wp	25140.0	wbs	
vs	46	wnt	
sc	0		
wc	250		
hzmm	100.56		
is	4250.00		
rfl	17415.2		
rfp	6787.9		
th	6		
ins	1.000		
nm	cdc ph		



^{13}C NMR at -50°C
in $\text{FSO}_3\text{H-SbF}_5$ (4:1)/ SO_2

