

Synthesis, anti-proliferative and apoptosis inducing studies of palladacycles containing a diphosphine and a Sn,As-based chelate ligand

N. Mirzadeh,* T. S. Reddy, S. H. Privér, S. K. Bhargava*

Centre for Advanced Materials & Industrial Chemistry (CAMIC),
School of Science, RMIT University, GPO BOX 2476, Melbourne 3001, Australia

³¹P NMR

[Pd(dppm)Br{κ²(Sn,As)-2-MeBrSnC₆F₄AsPh₂}] (3)

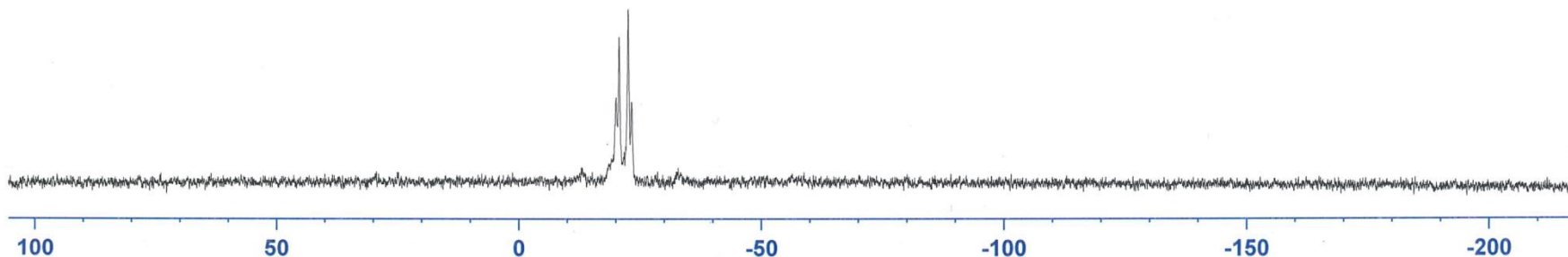


Current Data Parameters
NAME Pd-Sn dimer and 2-ex bis(diphenylphosphine)metahne isolated pro
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181025
Time 11:07 h
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PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 1320
DS 4
SFO1 400.14609 MHz
FIDRES 1.450560 MHz
AQ 0.4684672 sec
RG 320
RW 10.200 usec
RE 4.50 usec
TE 298.0 K
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D11 0.03000000 sec
TSD 1
SFO1 121.4928241 MHz
NUC1 31P
P1 12.25 usec
PL1 17.00000000 W
SFO2 200.1412004 MHz
NUC2 19F
PCPDW2 wait12.0
PCPDW 90.00 usec
PLAC 10.50000000 W
PWL2 0.23871000 W
PWL3 0.12007000 W

F2 - Processing parameters
SI 32768
SF 121.4903990 MHz
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SSB 0
LB 5.00 Hz
GB 0
PC 1.40

-20.13
-20.80
-22.66
-23.31



^{19}F NMR

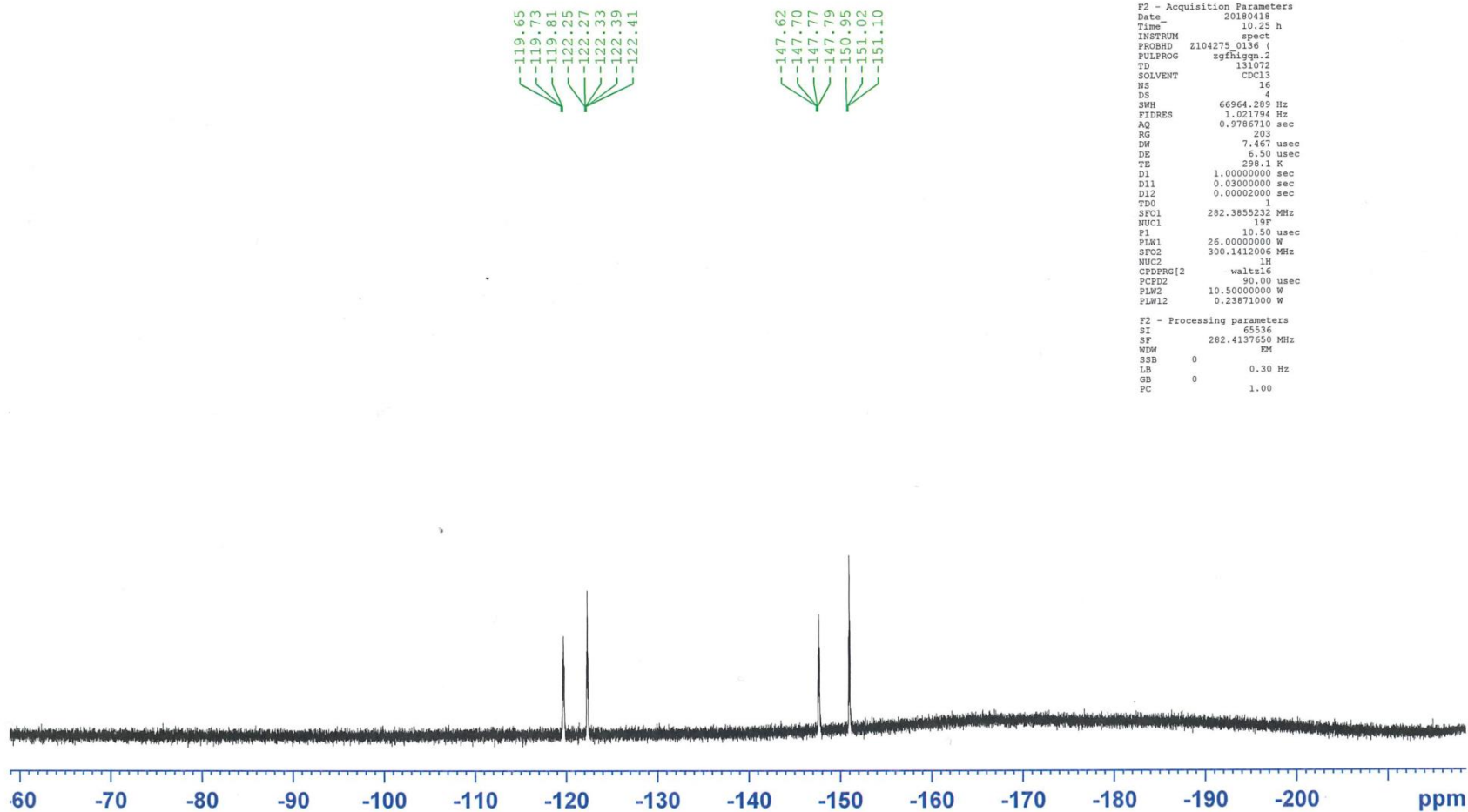
$[\text{Pd}(\text{dppm})\text{Br}\{\kappa^2(\text{Sn},\text{As})\text{-2-MeBrSnC}_6\text{F}_4\text{AsPh}_2\}](3)$



Current Data Parameters
NAME Pd-Sn dimer and dppm 1 to 2 dried F NMR
EXPNO 1
PROCNO 1

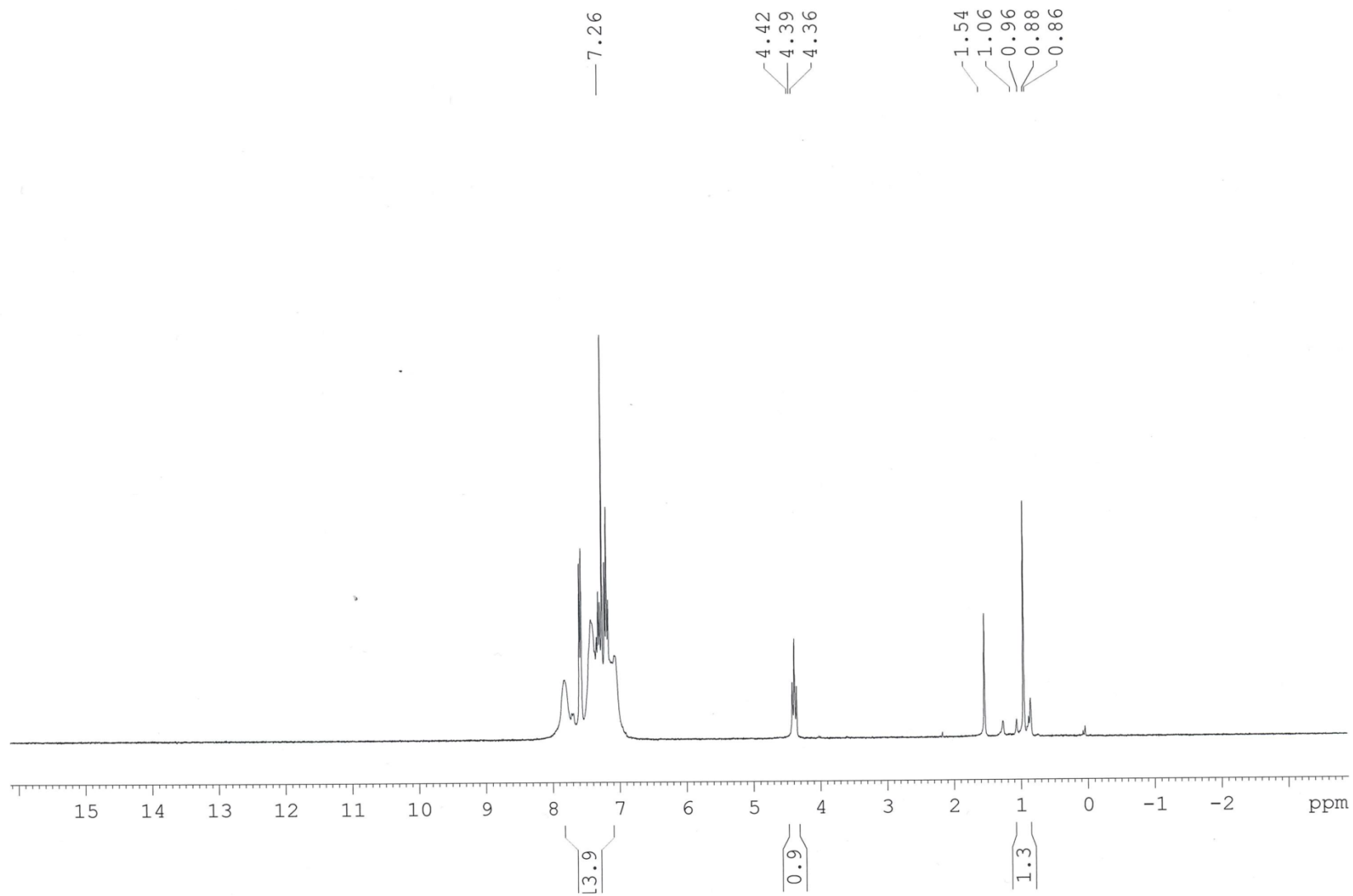
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PULPROG zgpg30
TD 131072
SOLVENT CDCl3
NS 16
DS 4
SWH 66964.289 Hz
FIDRES 1.021794 Hz
AQ 0.9786710 sec
RG 203
DW 7.467 usec
DE 6.50 usec
TE 298.1 K
D1 1.00000000 sec
D11 0.03000000 sec
D12 0.00002000 sec
TD0 1
SFO1 282.3855232 MHz
NUC1 19F
P1 10.50 usec
PLW1 26.00000000 W
SFO2 300.1412006 MHz
NUC2 1H
CPDPRG2 waltz16
PCPD2 90.00 usec
PLW2 10.50000000 W
PLW12 0.23871000 W

F2 - Processing parameters
SI 65536
SF 282.4137650 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



^1H NMR

$[\text{Pd}(\text{dppm})\text{Br}\{\kappa^2(\text{Sn},\text{As})\text{-2-MeBrSnC}_6\text{F}_4\text{AsPh}_2\}]\text{ (3)}$



³¹P NMR

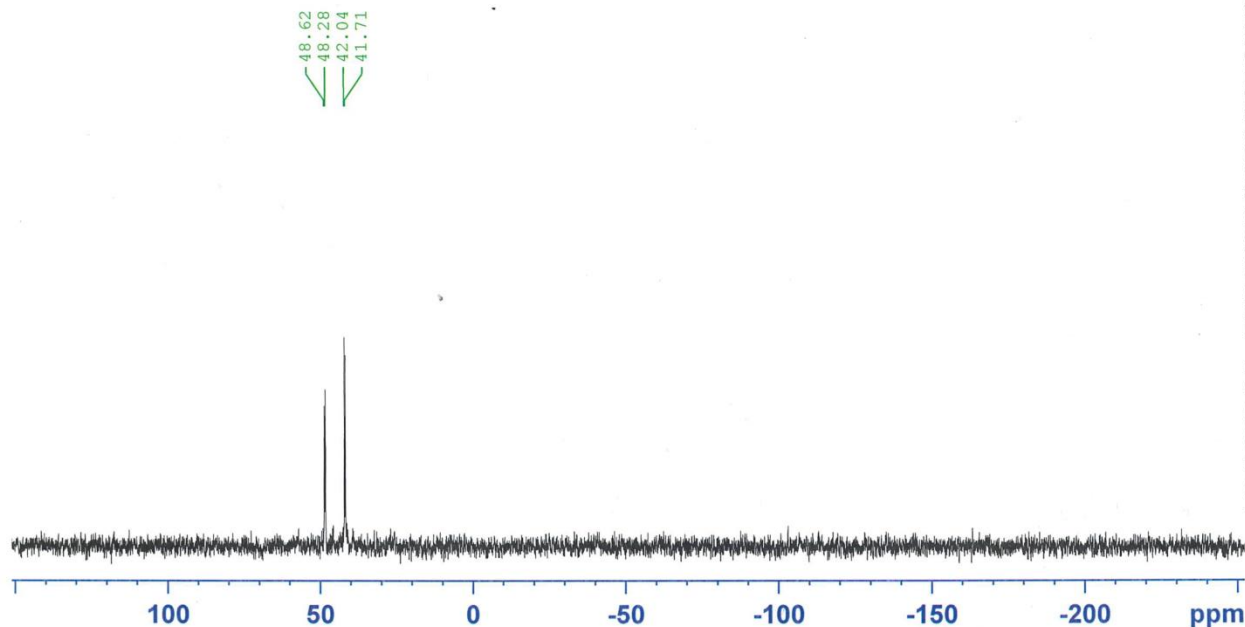
[Pd(*ortho*-dppBz)Br{κ²(*Sn*,*As*)-2-MeBrSnC₆F₄AsPh₂}] (4)



Current Data Parameters
NAME pd ortho new prep
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20181015
Time_ 11.14 h
INSTRUM spect
PROBHD Z104275_0136 (
PULPROG zgpg30
TD 65536
SOLVENT CDC13
NS 32
DS 4
SWH 49019.609 Hz
FIDRES 1.495960 Hz
AQ 0.6684672 sec
RG 203
DW 10.200 usec
DE 6.50 usec
TE 298.1 K
D1 2.00000000 sec
D11 0.03000000 sec
TD0 1
SFO1 121.4928241 MHz
NUC1 31P
P1 12.25 usec
PLW1 17.00000000 W
SFO2 300.1412006 MHz
NUC2 1H
CPDPRG[2] waltz16
PCPD2 90.00 usec
PLW2 10.50000000 W
PLW12 0.23871000 W
PLW13 0.12007000 W

F2 - Processing parameters
SI 32768
SF 121.4989579 MHz
WDW EM
SSB 0
LB 5.00 Hz
GB 0
PC 1.40



¹⁹F NMR

[Pd(*ortho*-dppBz)Br{κ²(Sn,As)-2-MeBrSnC₆F₄AsPh₂}] (4)



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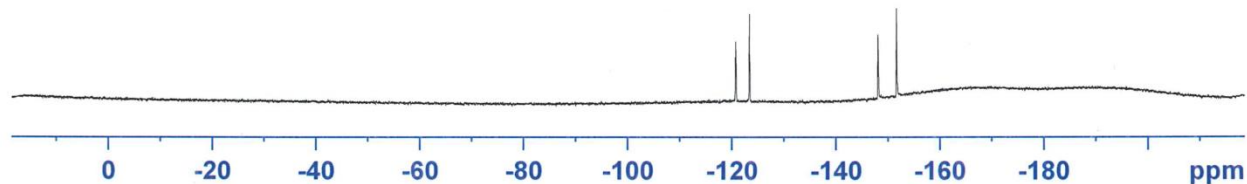
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PROCNO    1

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INSTRUM   spect
PROBHD    2104275 0136 (
PULPROG   zgpg30p-c
TD        131072
SOLVENT   CDCl3
NS        16
DS        4
SWH        64964.289 Hz
FIDRES    1.001794 Hz
AQ        0.9784710 sec
RG        256
DE        7.447 dB
TE        4.90 usec
D1        1.00000000 sec
d11       0.33000000 sec
d12       0.00002000 sec
TD0
SFO1      282.3655232 MHz
NUC1       19F
P1         0.50 usec
PLA1      26.00000000 W
SFO2      300.1412004 MHz
NUC2       1H
CPDPRG2   waltz16
NUC3       31P, 100 usec
PLA2      10.00000000 W
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F2 - Processing Parameters
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PC         1.00
  
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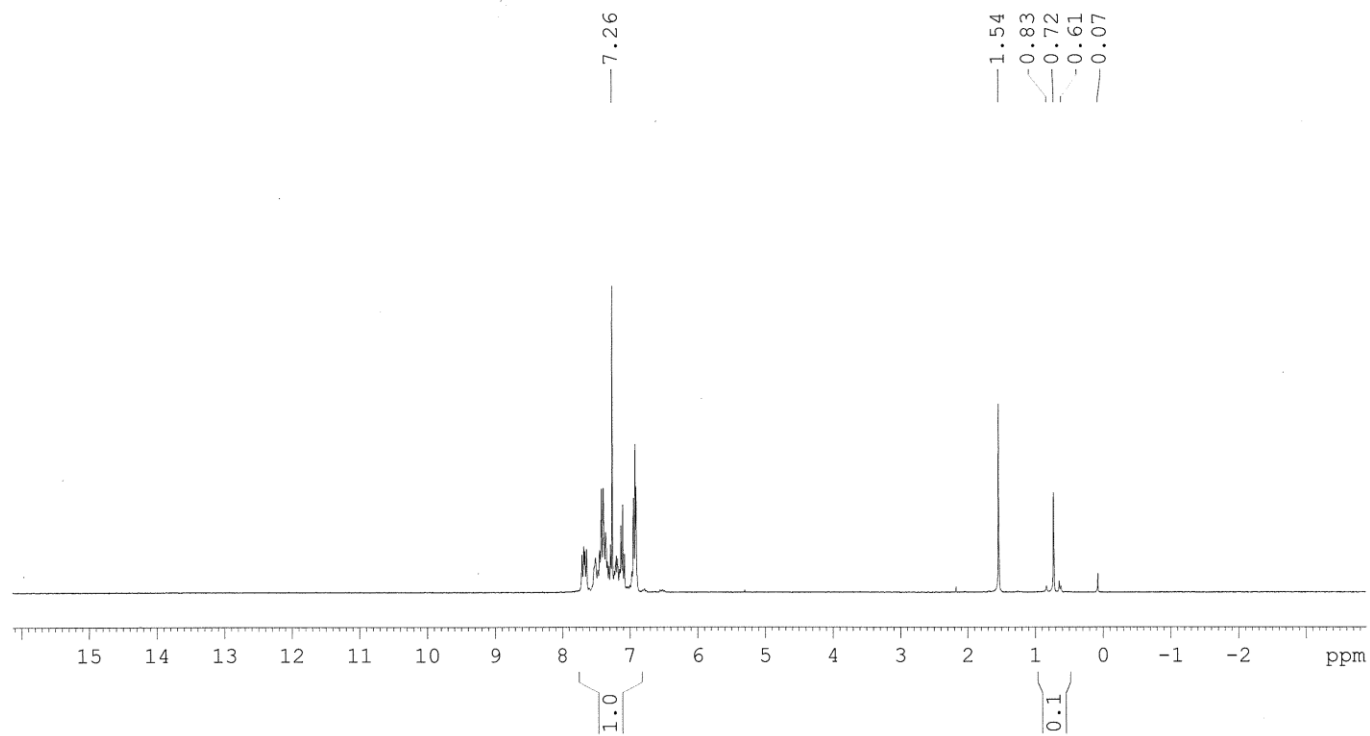
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 -120.91
 -123.40
 -123.46
 -123.53

 -148.16
 -148.23
 -148.32
 -151.72
 -151.79
 -151.87



^1H NMR

$[\text{Pd}(\text{ortho-dppBz})\text{Br}\{\kappa^2(\text{Sn,As})\text{-2-MeBrSnC}_6\text{F}_4\text{AsPh}_2\}]\text{ (4)}$



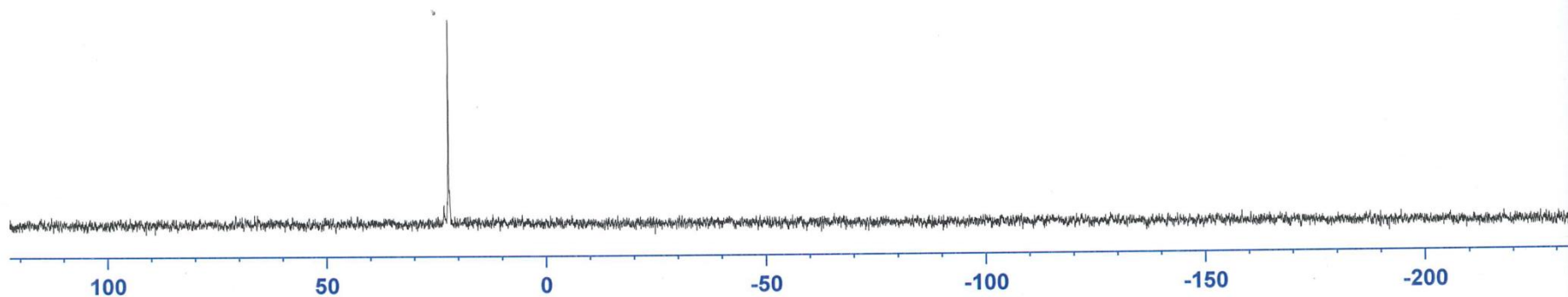
³¹P NMR

[Pd₂Br₂(*para*-dppBz){κ²(Sn,As)-2-MeBrSnC₆F₄AsPh₂}₂] (5)



Current Data Parameters
NAME Pd-Sn dimer and 1,0-bisphosphino-benzene ligand 1 to 1 after 1 h
EXPNO 1
PROCNO 1
F2 - Acquisition Parameters
Date_ 20100314
Time 15:25 h
INSTRUM spect
PROBHD 1H/4275 QNP 5
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 143
DS 4
SWH 49015.600 MHz
FIDRES 1.455940 MHz
AQ 0.6684872 sec
RG 320
RW 10.200 usec
SE 6.50 usec
TE 298.1 K
D1 2.00000000 sec
d11 0.03000000 sec
TD0
SFO1 121.4928241 MHz
NUC1 31P
P1 2.25 usec
PLA1 17.00000000 W
SFO2 300.1412006 MHz
NUC2 1H
CPCORR012 Wait1s10
PCPD1 10.50000000 W
PLA2 0.2871000 W
PCPD2 0.12007000 W
F2 - Processing parameters
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SF 121.4988990 MHz
WDW EM
SSB 0 5.00 MHz
GB 0
PC 1.40

23.27
22.23



¹⁹F NMR

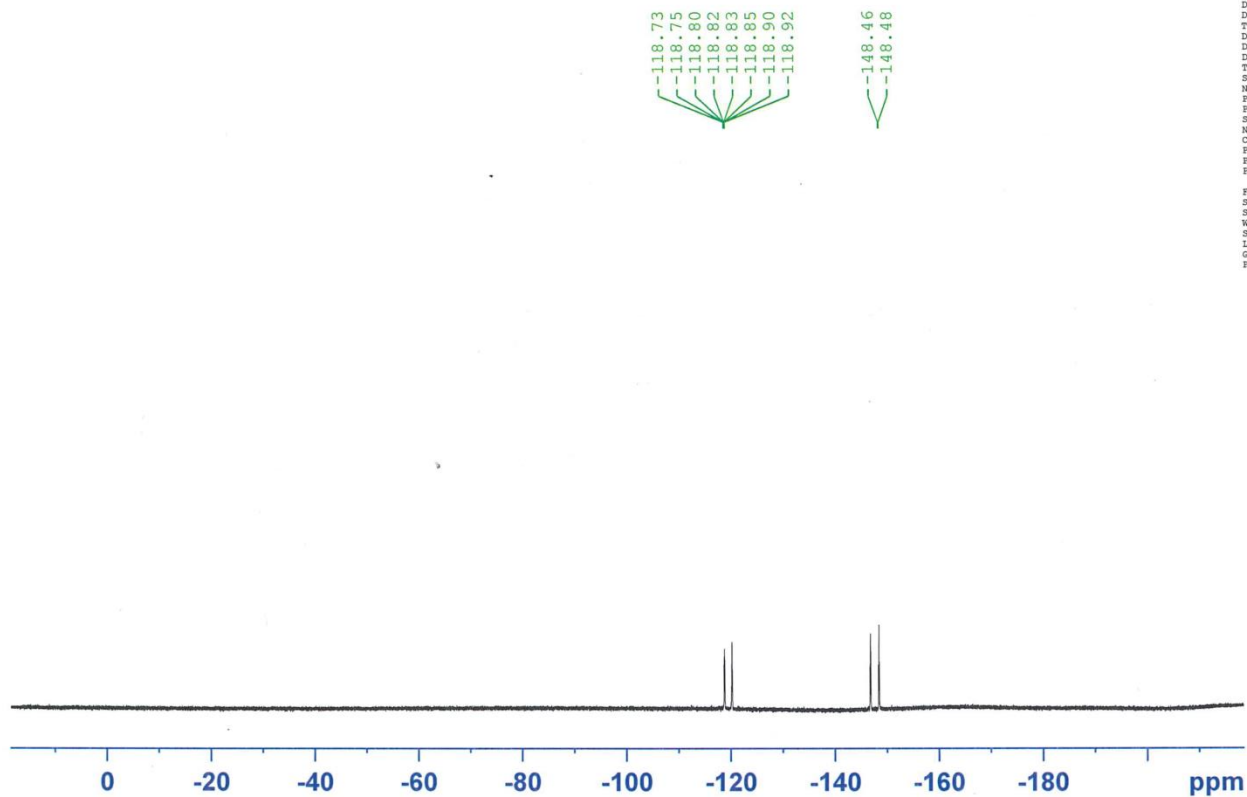
[Pd₂Br₂(*para*-dppBz){κ²(Sn,As)-2-MeBrSnC₆F₄AsPh₂}₂](5)



Current Data Parameters
NAME Pd-Sn and para bis phosphine isolated dried
EXPNO 4
PROCNO 1

F2 - Acquisition Parameters
Date_ 20180321
Time 11.47 h
INSTRUM spect
PROBHD 2104275 0136 (4
PULPROG zgpg30
TD 131072
SOLVENT CDCl₃
NS 16
DS 4
SWH 66964.289 Hz
FIDRES 1.021794 Hz
AQ 0.9786710 sec
RG 303
DW 7.467 usec
DE 6.50 usec
TE 298.1 K
D1 1.00000000 sec
D11 0.03000000 sec
D12 0.00002000 sec
TD0 1
SFO1 282.3855132 MHz
NUC1 19F
P1 10.50 usec
PLM1 26.00000000 W
SFO2 300.1412006 MHz
NUC2 1H
CDEPRG2 waltz16
PCPD2 90.00 usec
PLM2 10.50000000 W
PLM12 0.23871000 W

F2 - Processing parameters
SI 65536
SF 282.4137650 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



^1H NMR

$[\text{Pd}_2\text{Br}_2(\textit{para}\text{-dppBz})\{\kappa^2(\text{Sn,As})\text{-2-MeBrSnC}_6\text{F}_4\text{AsPh}_2\}_2]$ (**5**)

