

# An Efficient one-pot Multicomponent Approach for the Synthesis of Substituted Pyridines

*Xin Xin,<sup>a</sup> Yan Wang,<sup>a,b</sup> Santosh Kumar,<sup>a</sup> Xu Liu,<sup>a</sup> Yingjie Lin,<sup>b</sup> Dwen Dong<sup>a\*</sup>*

a. Changchun Institute of Applied Chemistry, Chinese Academy of Sciences,

Changchun, 130022, China

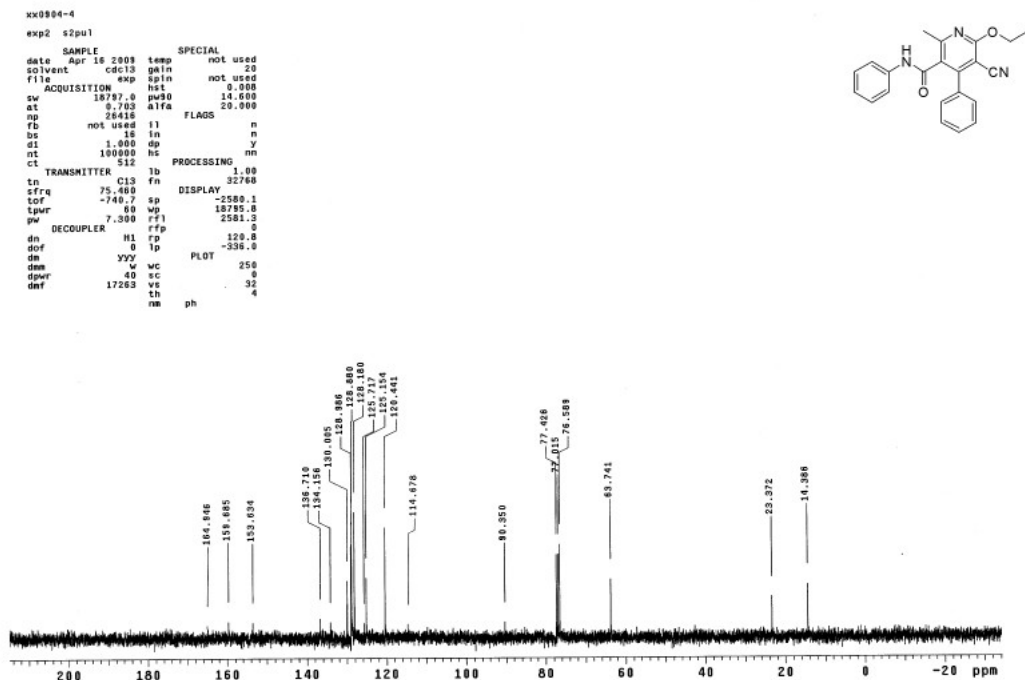
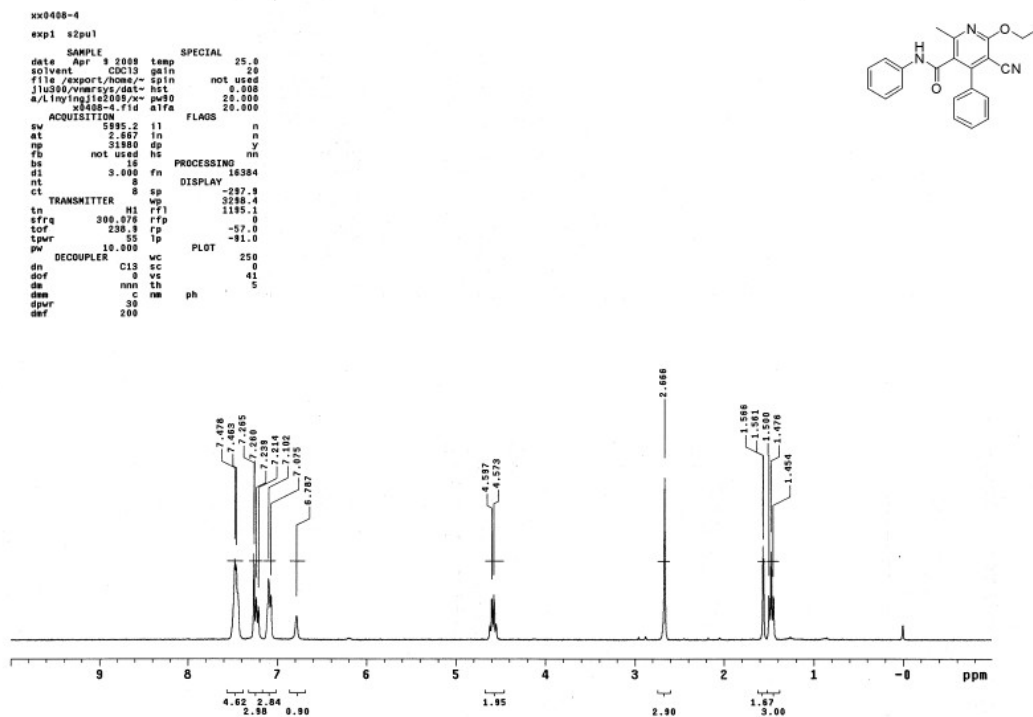
b. Department of Chemistry, Jilin University, 130012, Changchun, China

E-mail: [dwdong@ciac.jl.cn](mailto:dwdong@ciac.jl.cn)

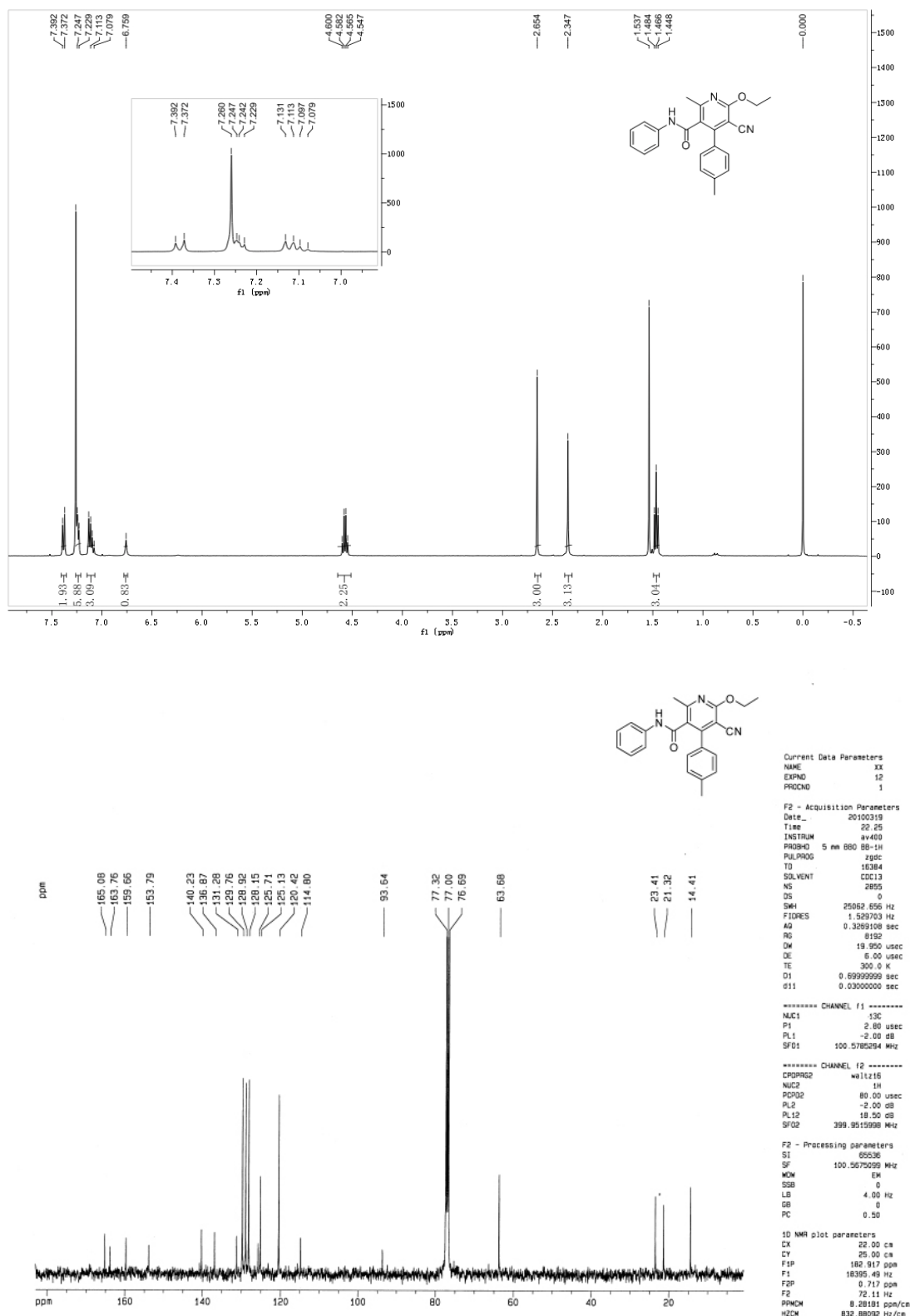
## Supplementary Information

## Copies of NMR spectra for compounds 5.

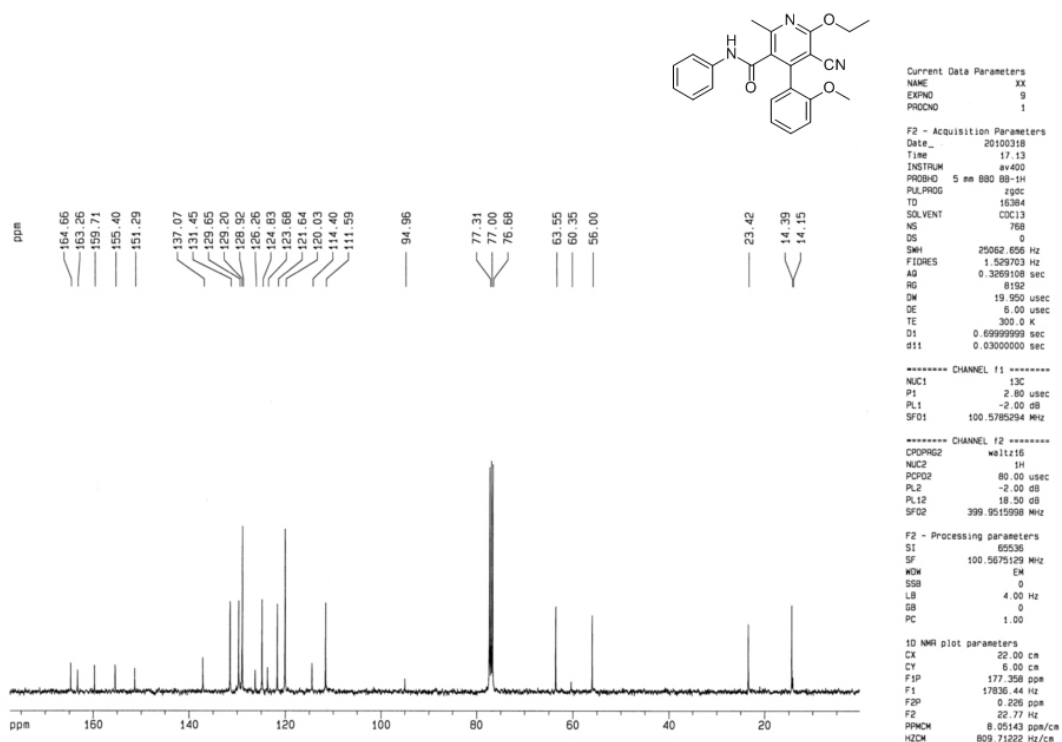
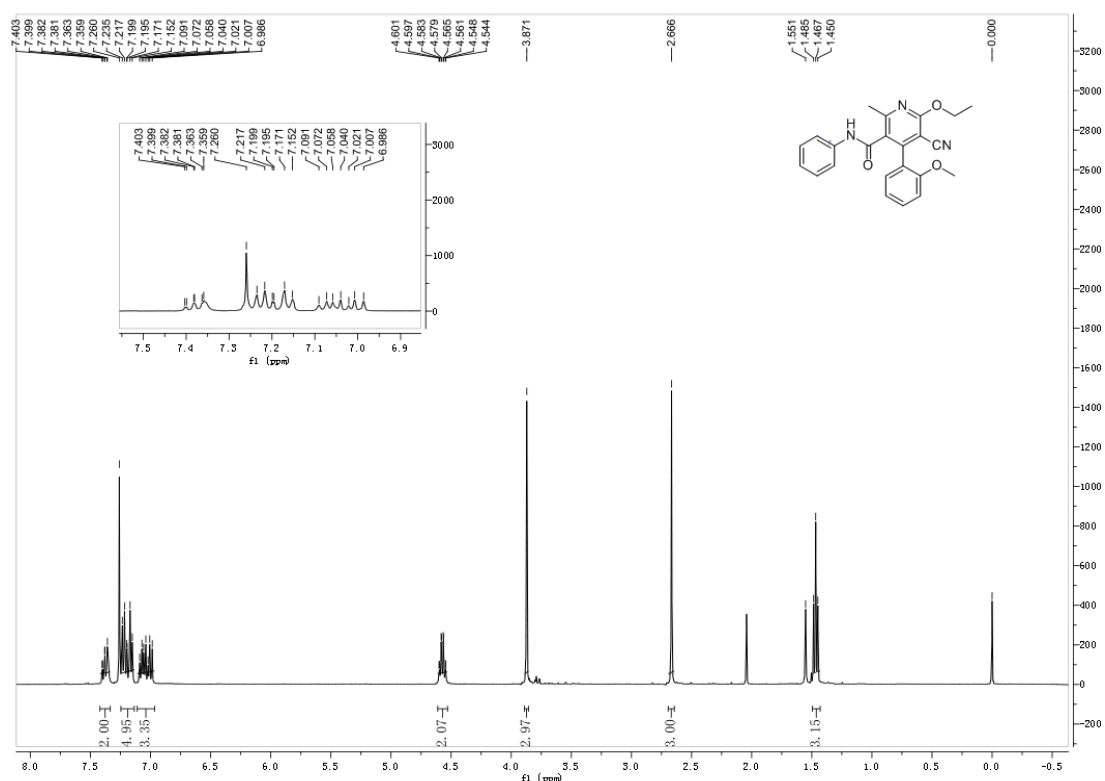
### 5a



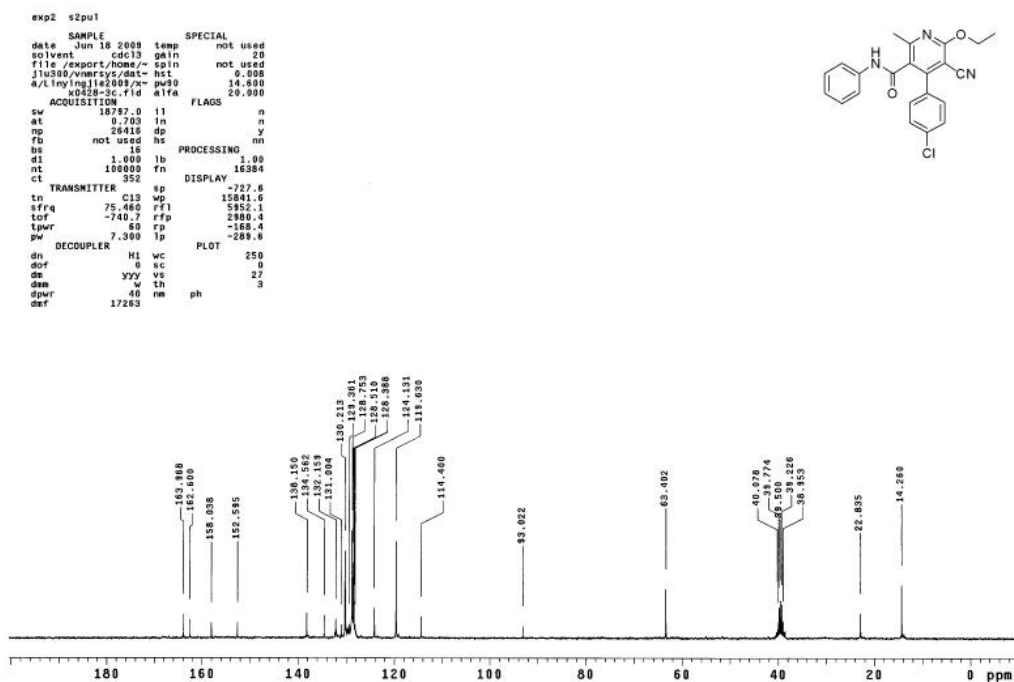
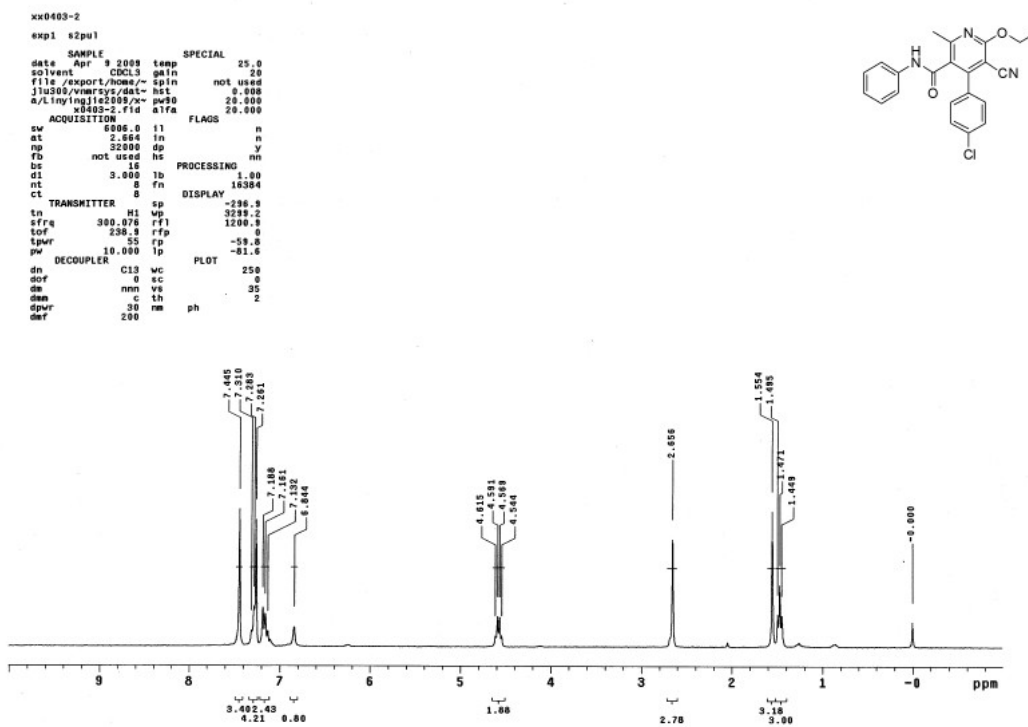
5b



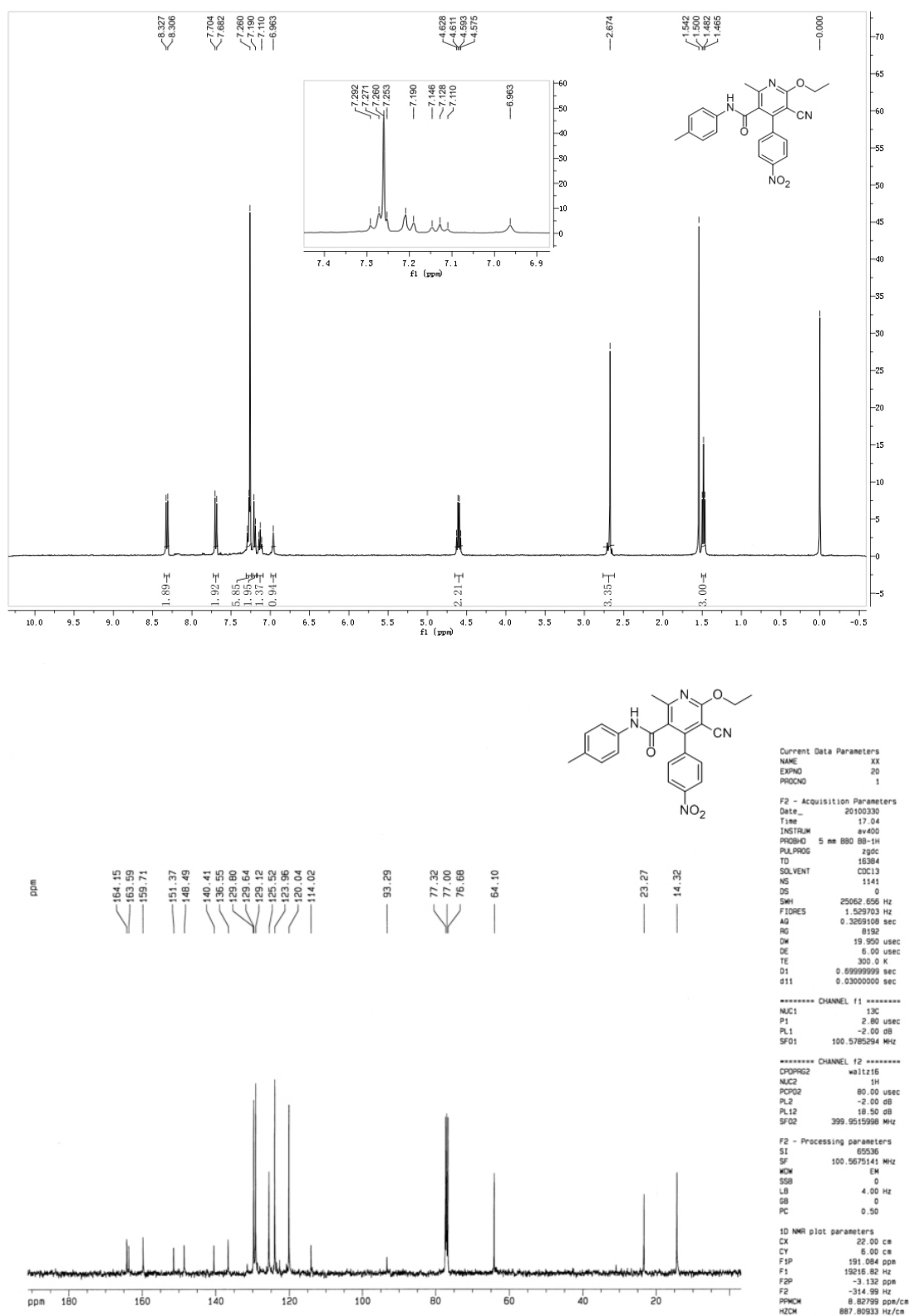
5c



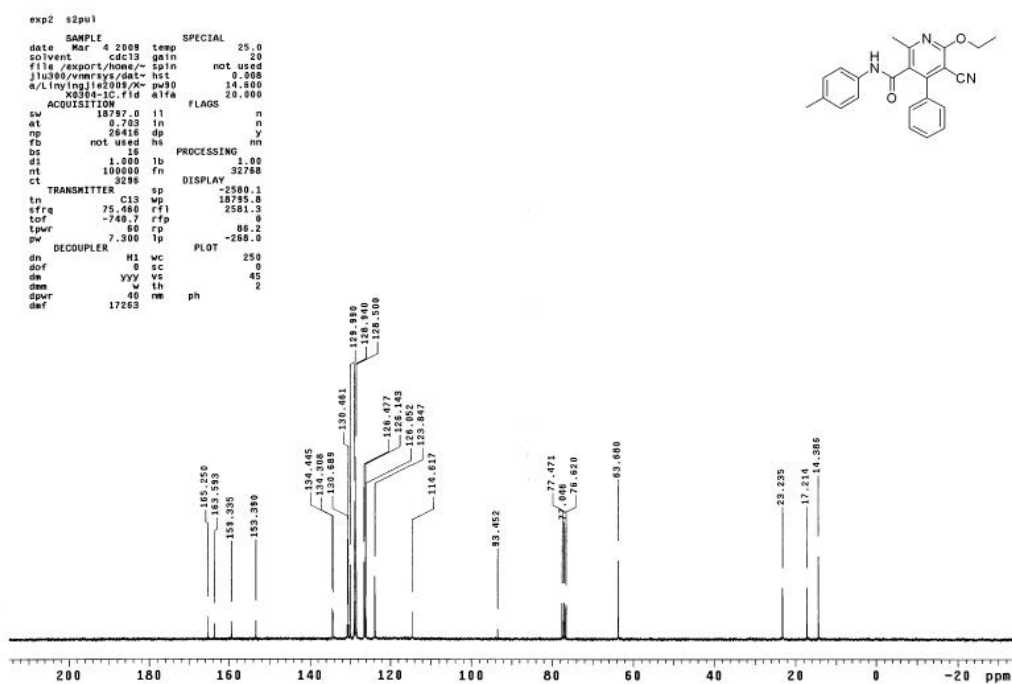
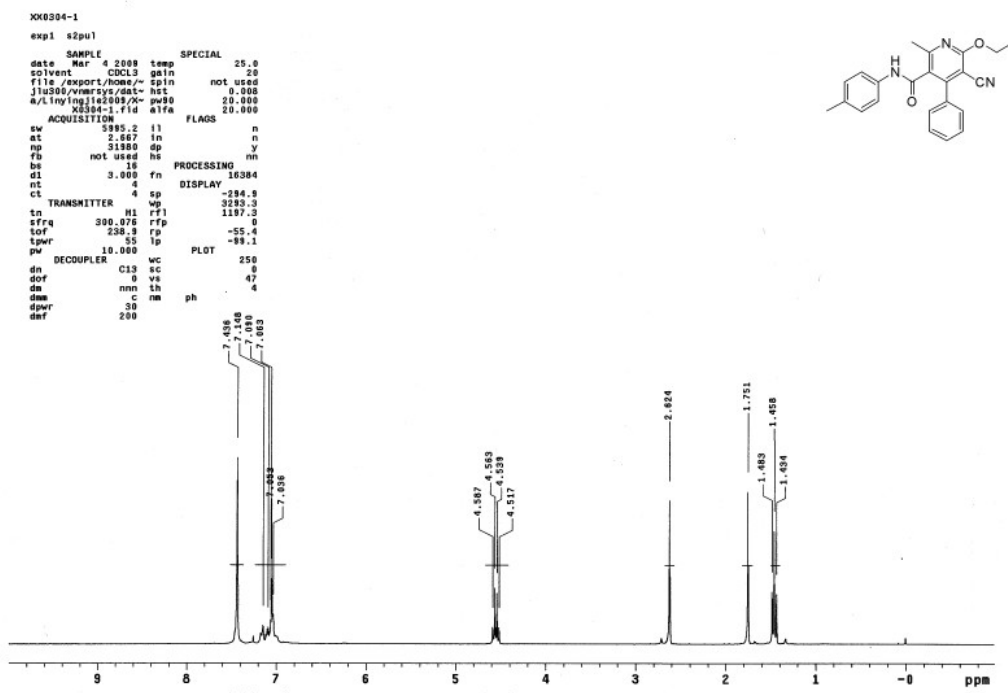
5d



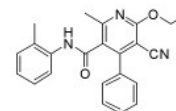
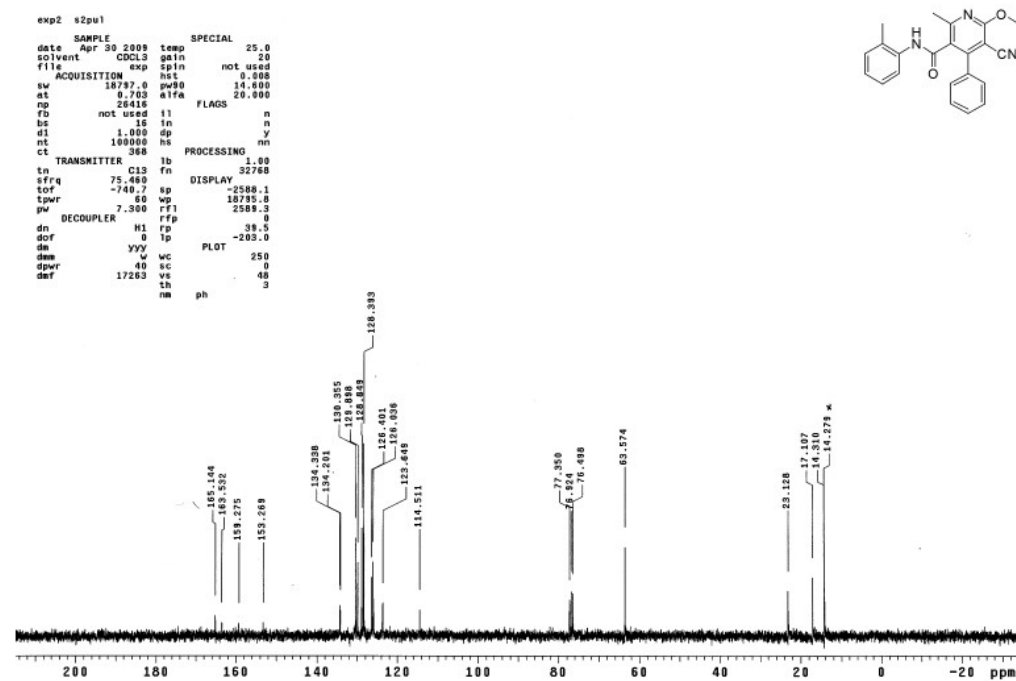
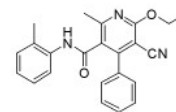
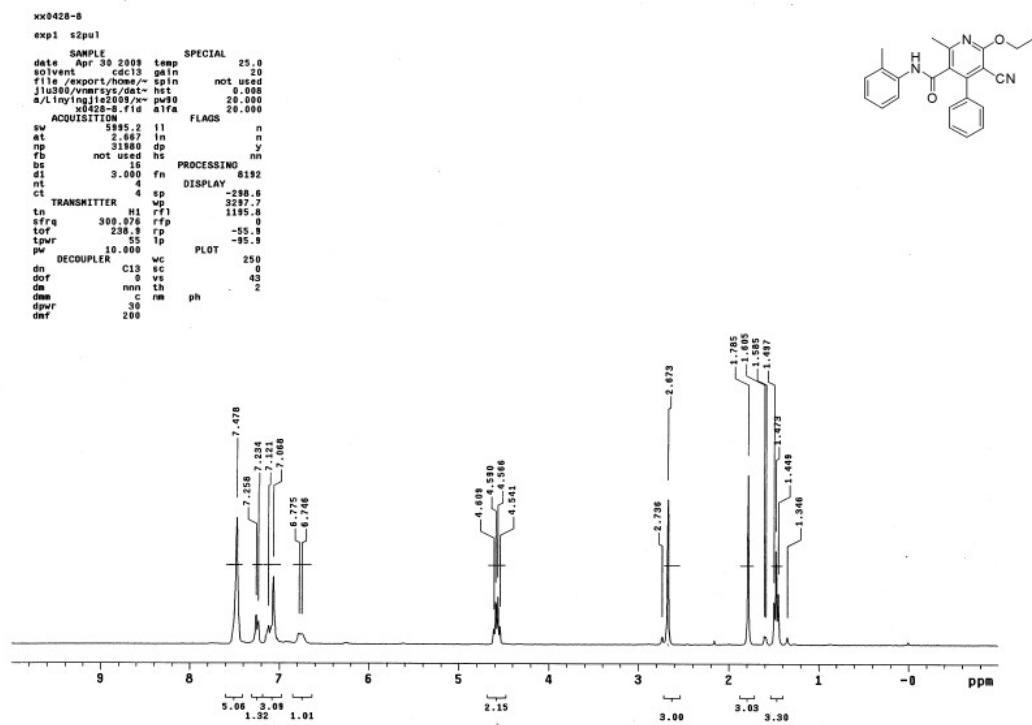
5e



5f

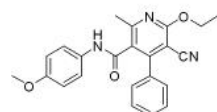
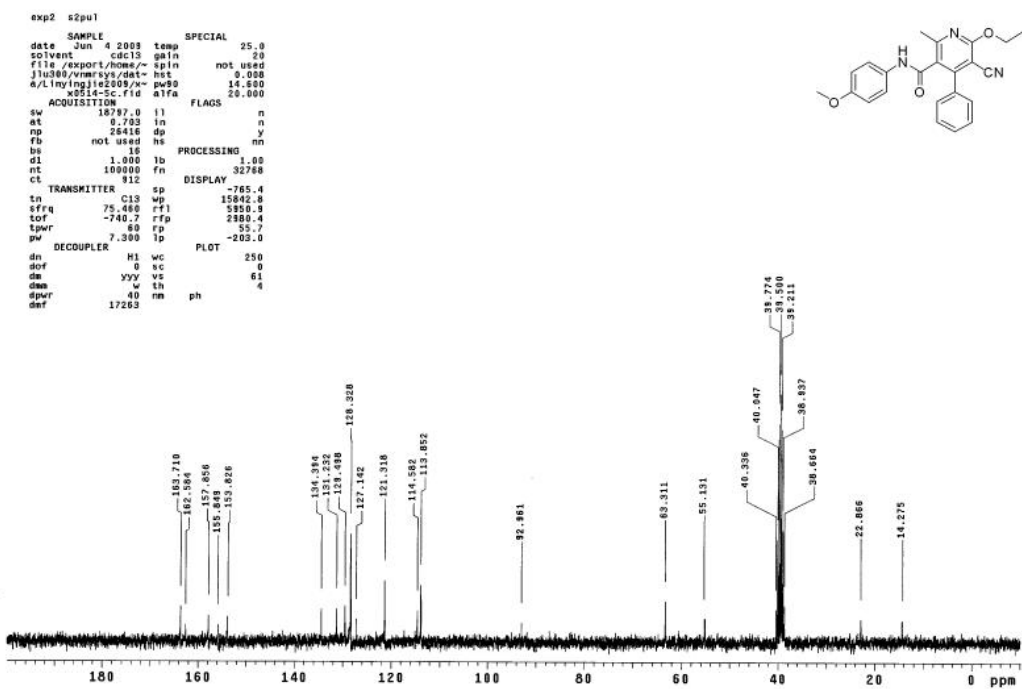
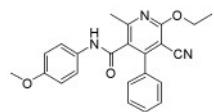
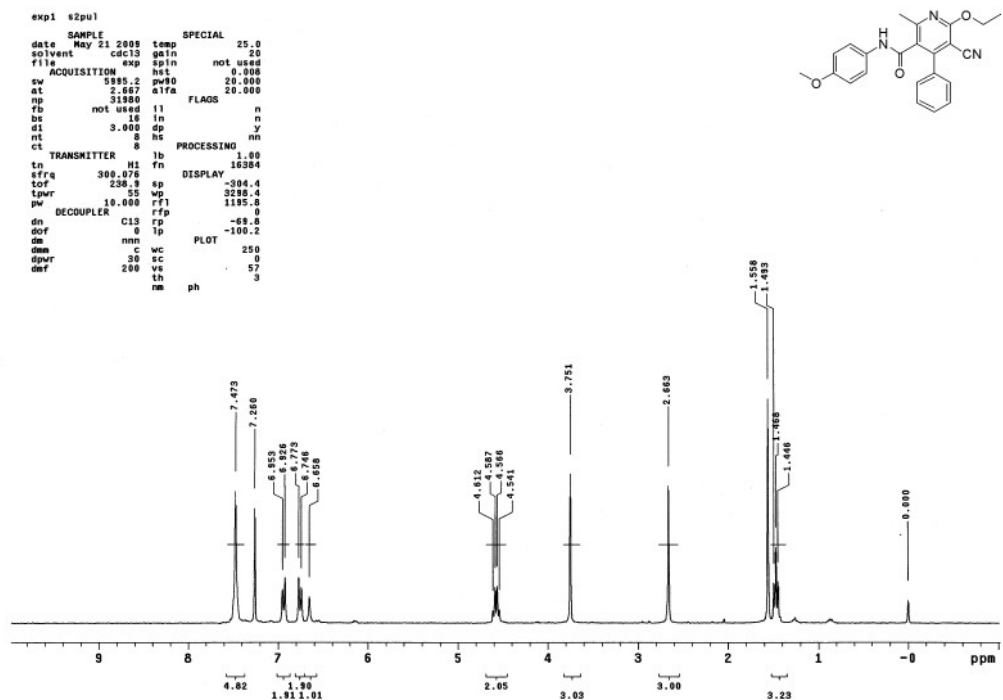


5g

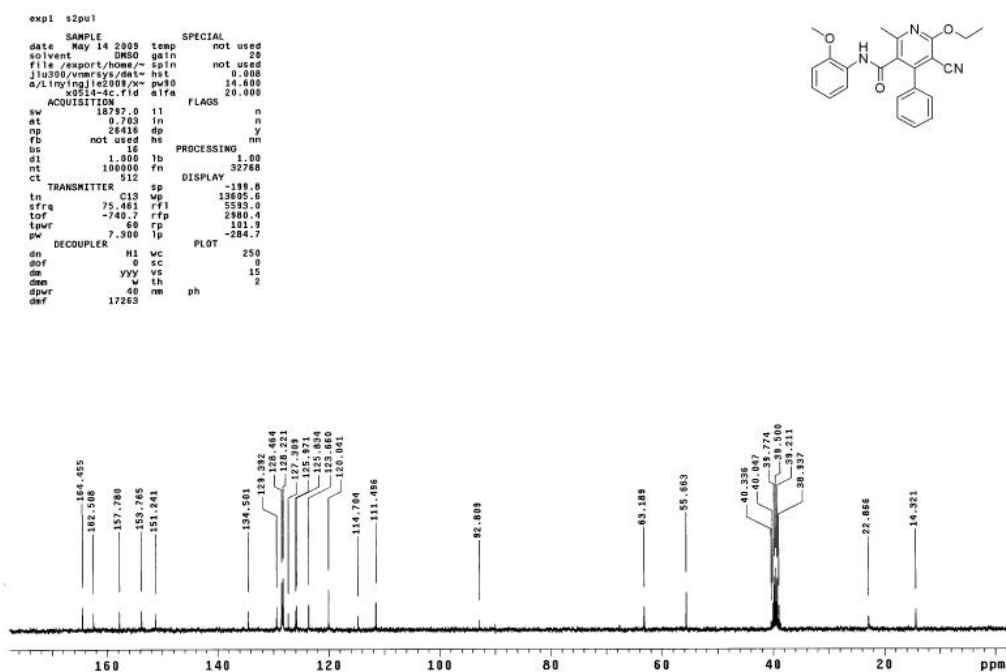
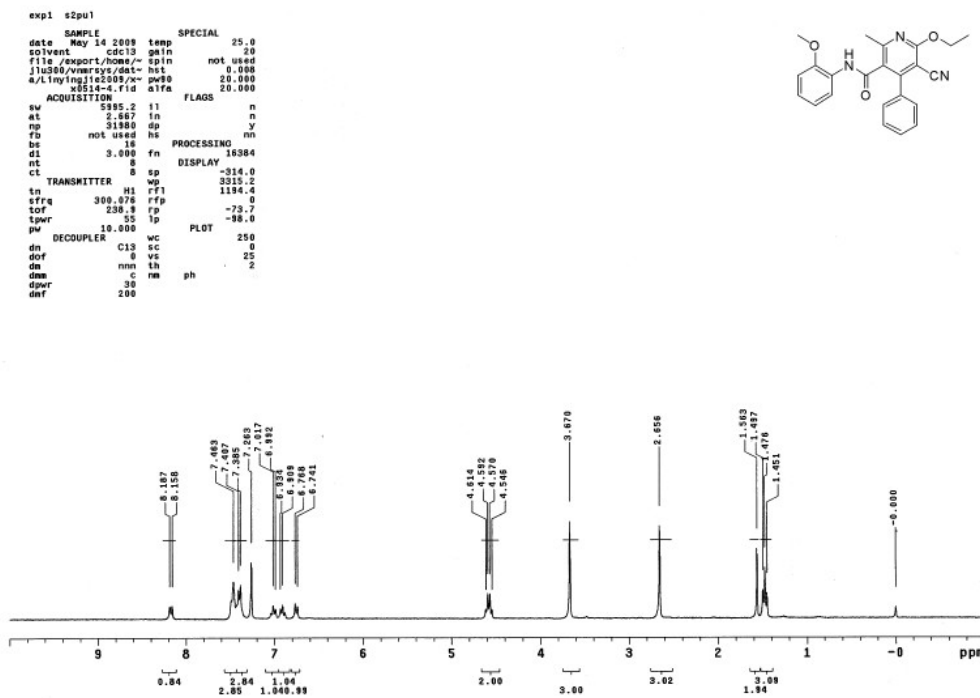




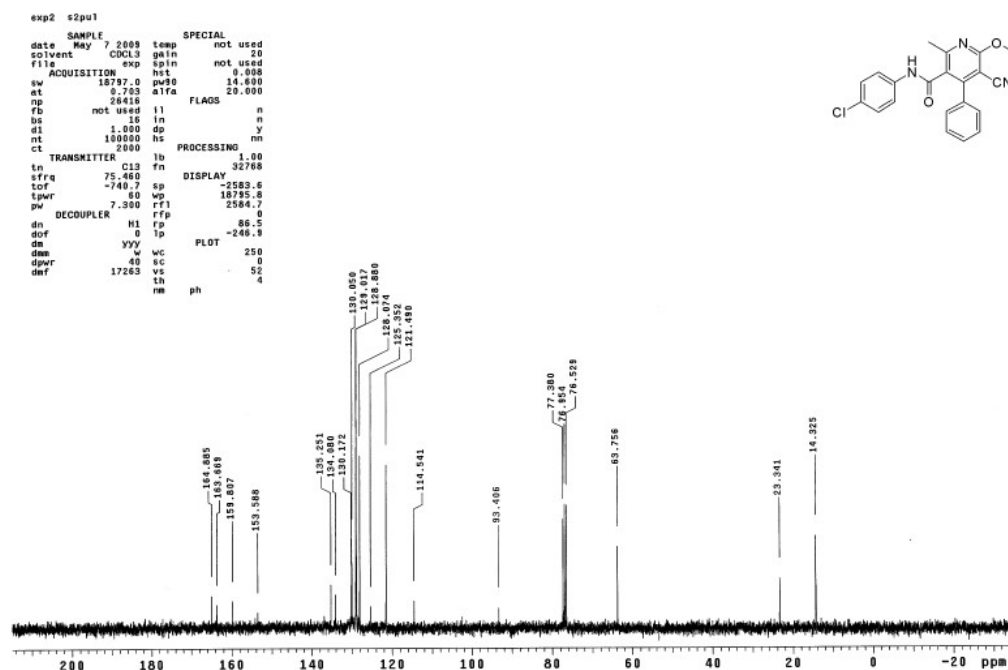
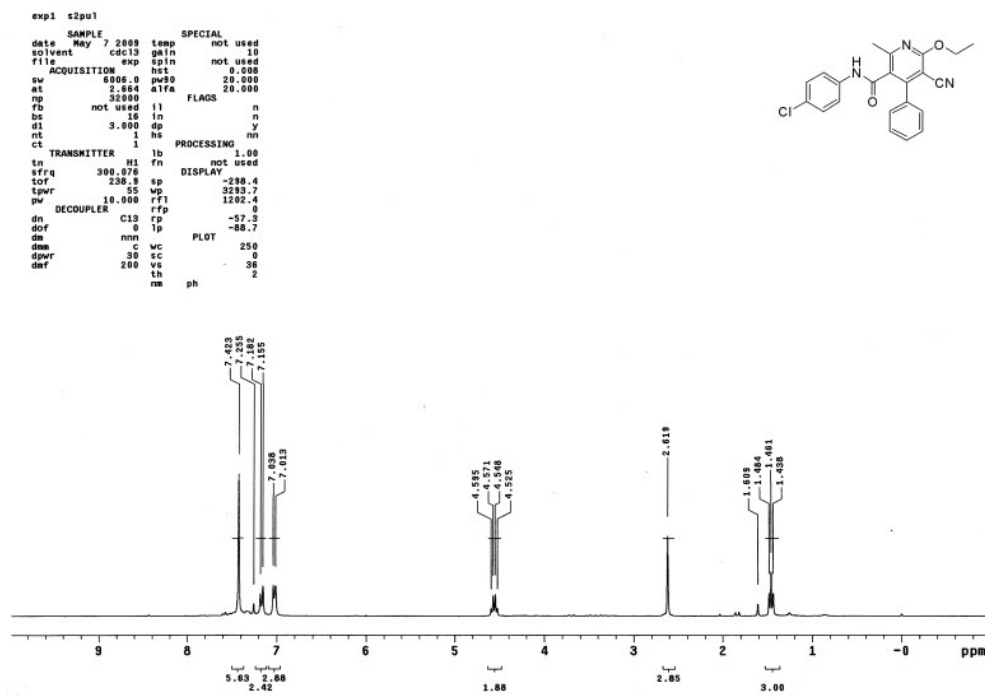
5h



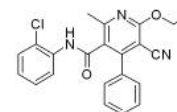
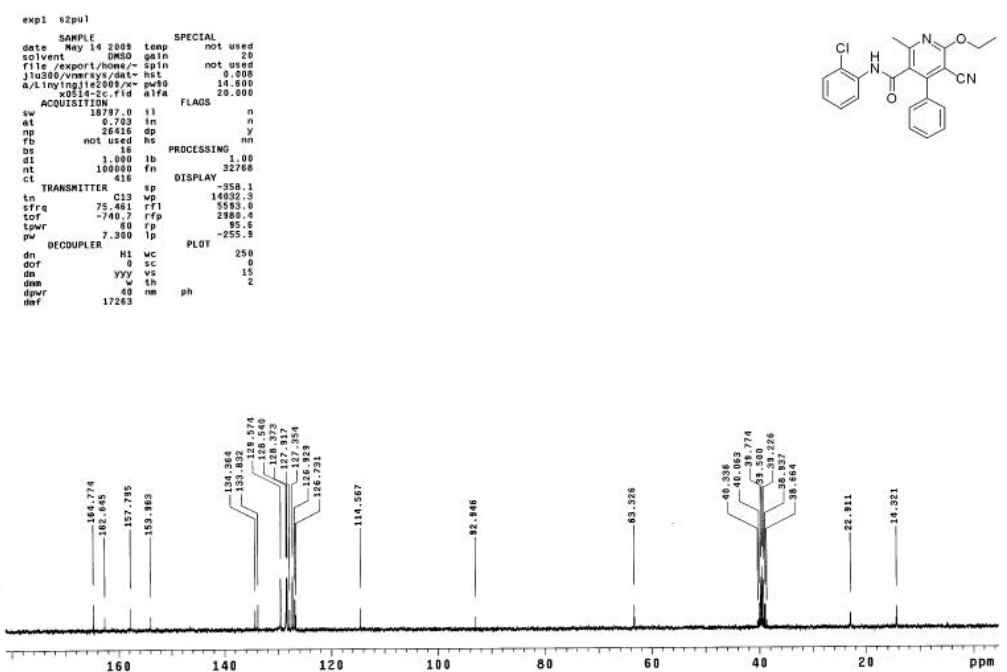
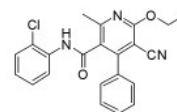
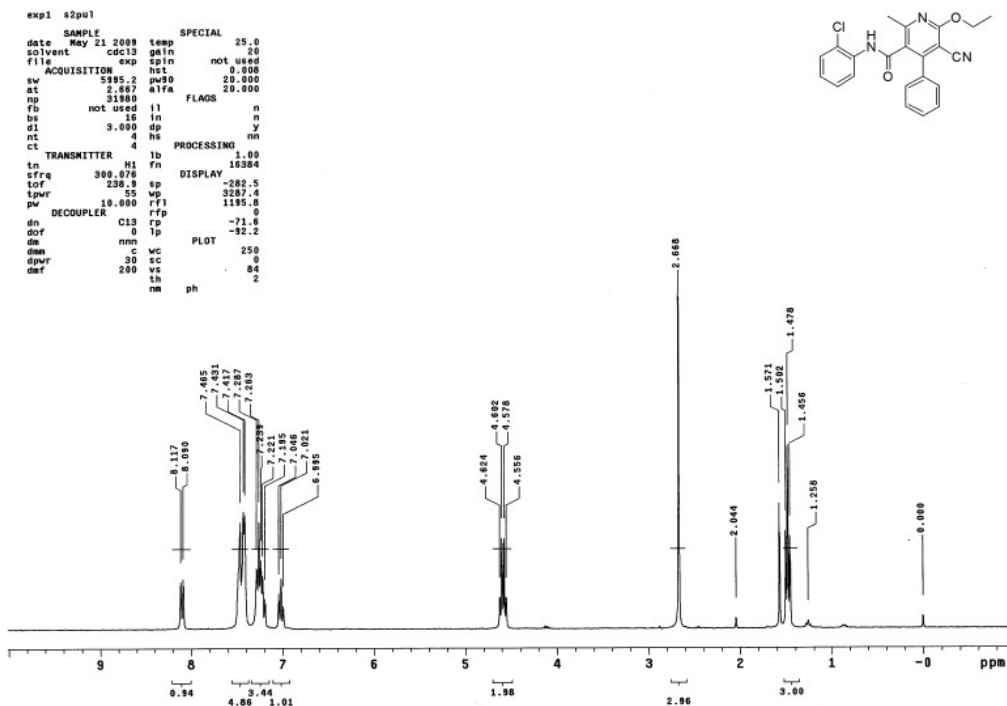
5i



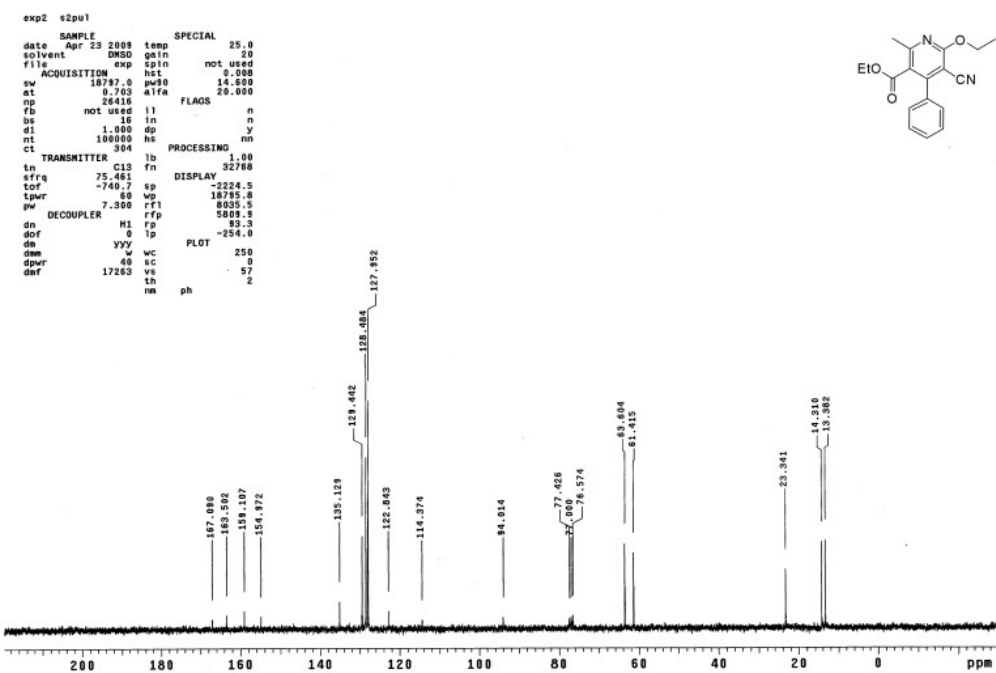
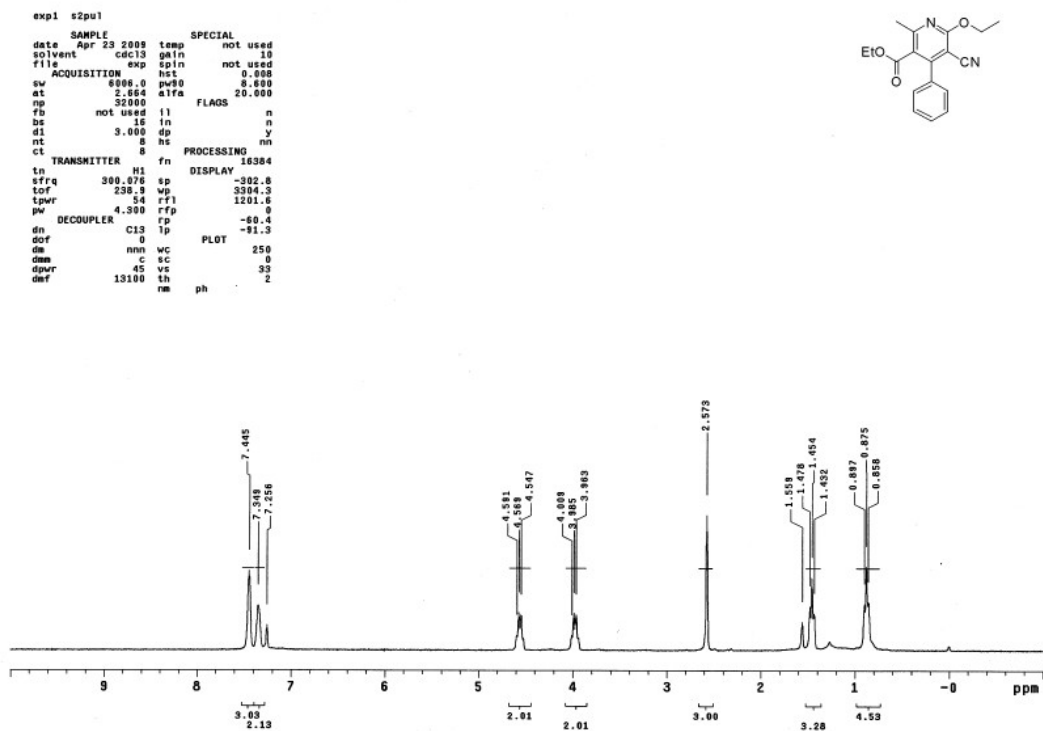
5j



5k



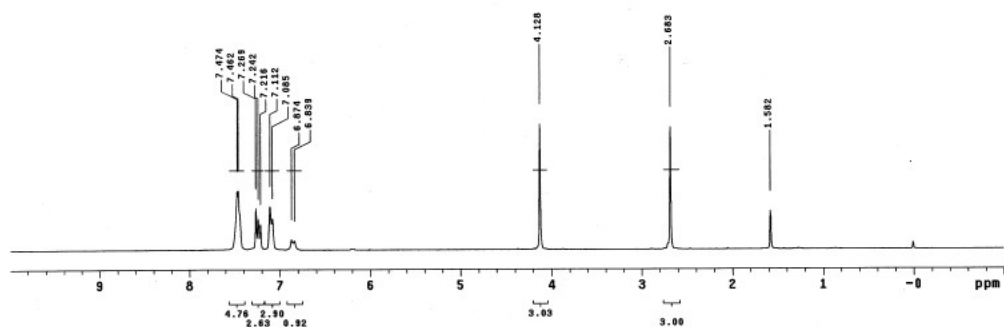
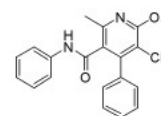
51



5n

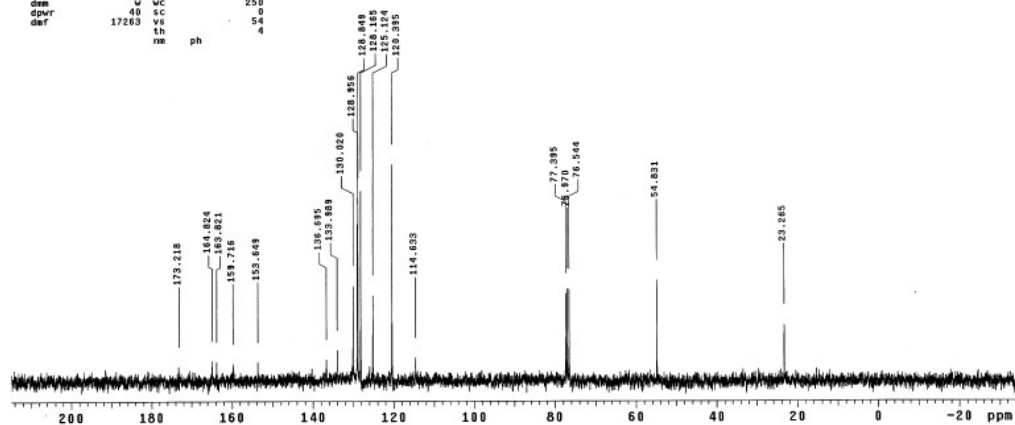
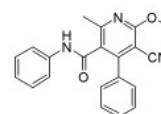
```

xx0507-3
exp1 s2pu1
SAMPLE
date May 7 2009 temp not used
solvent cdcl3 gain 20
file /export/home/... spin not used
jlus86/vmr/sys/dat hst 0.000
a/1/ny/ing/ie2009/w... pwr 20.000
x5597-3.fid a1fa 20.000
ACQUISITION 11 FLAGS n
sv 1006.0 i1 n
at 2.664 in n
np 32000 gain y
fb not used hb nn
bs 16 n
d1 3.000 lb PROCESSING 1.00
nt 8 fn DISPLAY not used
ct 0
TRANSMITTER 0 sp -301.0
tn H1 wp 3299.2
sFq 300.075 rF1 1198.4
tof 238.9 rFp 0
tpwr 55 rp -58.0
pw 10.000 lp -85.4
DECOUPLER C13 wc PLOT 250
dn 0 sc 0
ds mm vs 31
dsm c th 2
dpwr 38 nm
def 200
    
```

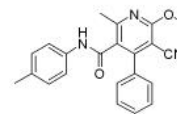
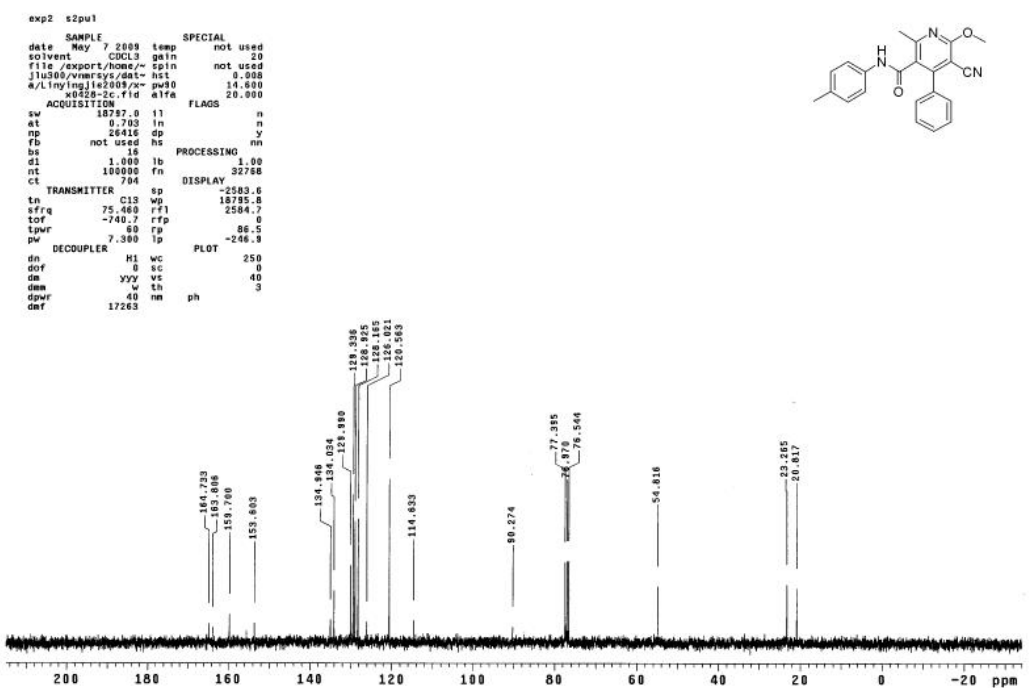
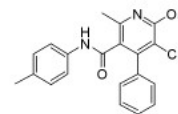
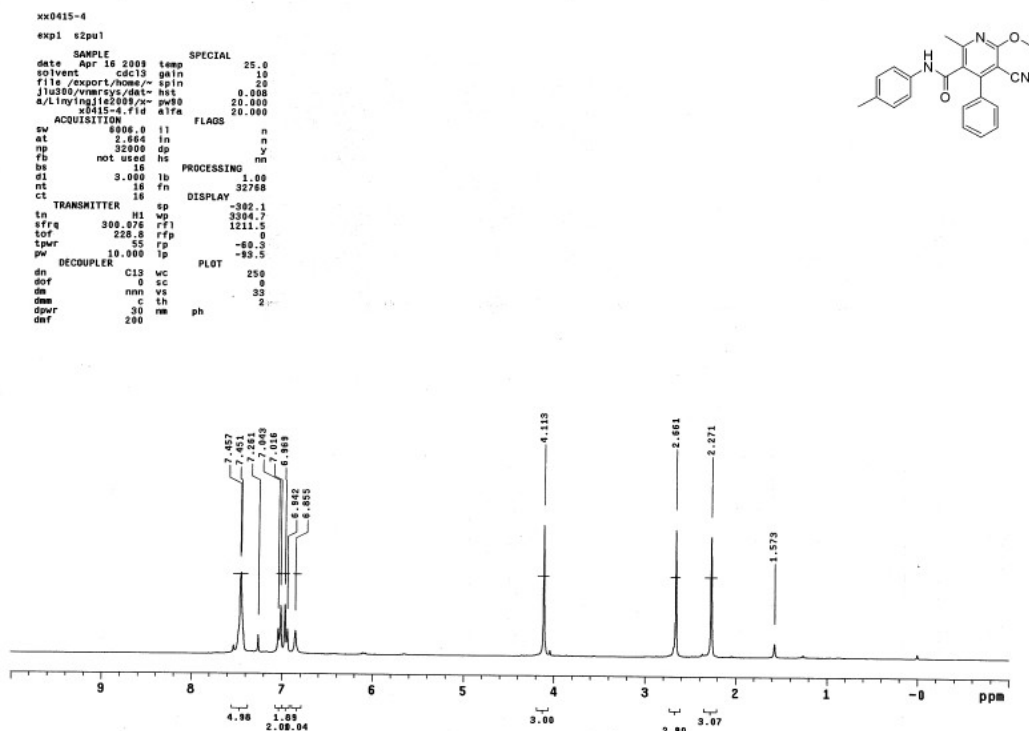


```

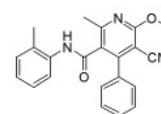
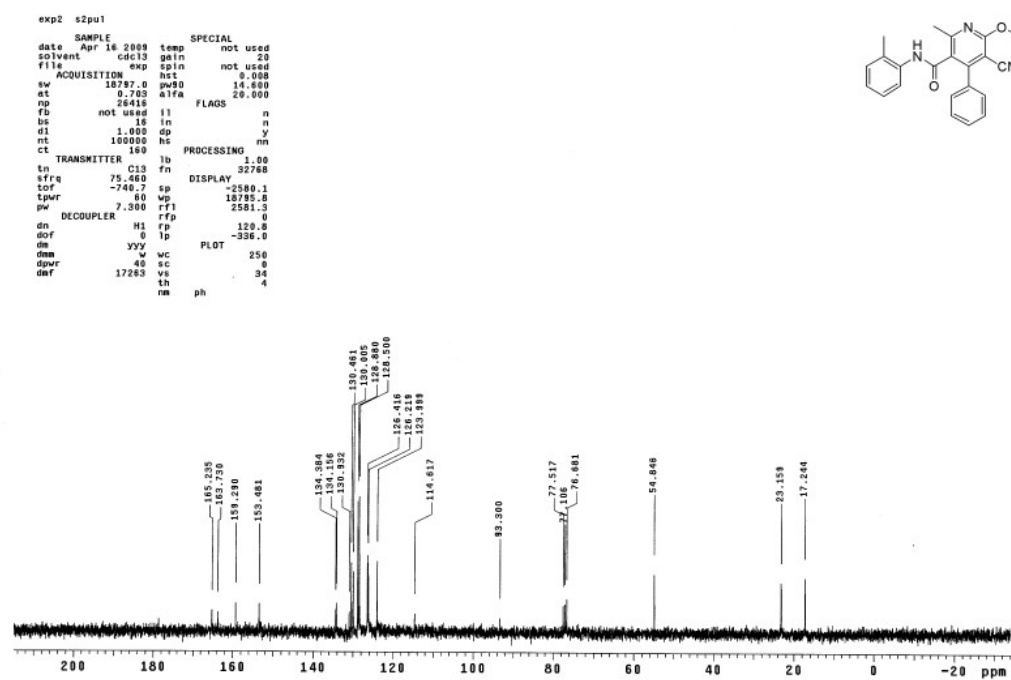
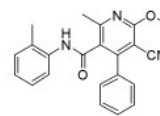
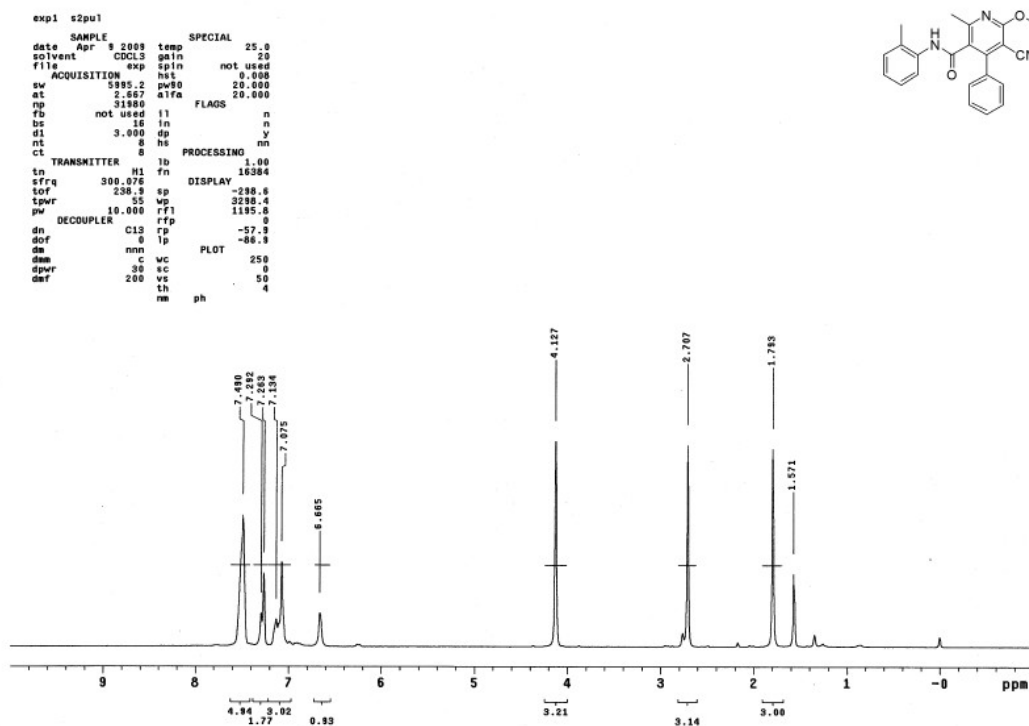
xx0507-3c
exp2 s2pu1
SAMPLE
date May 7 2009 temp not used
solvent CDCl3 gain 20
file exp spin not used
ACQUISITION 11 hst 0.000
sv 19797.0 pwr 14.800
at 0.703 a1fa 20.000
np 26416 n
fb not used i1 n
bs 16 i3 n
d1 1.000 sp y
nt 100000 hs PROCESSING nn
ct 526
TRANSMITTER C13 lb 2.00
tn 75.460 fn DISPLAY 32768
sFq -748.7 sp -2583.8
tof 60 mp 1875.8
tpwr 7.300 rF1 2584.7
DECOUPLER H1 rFp 86.5
dn 0 lp -246.8
ds yyv PLOT 250
dsm w wc 54
dpwr 40 sc 4
def 17263 nm ph 4
    
```



50

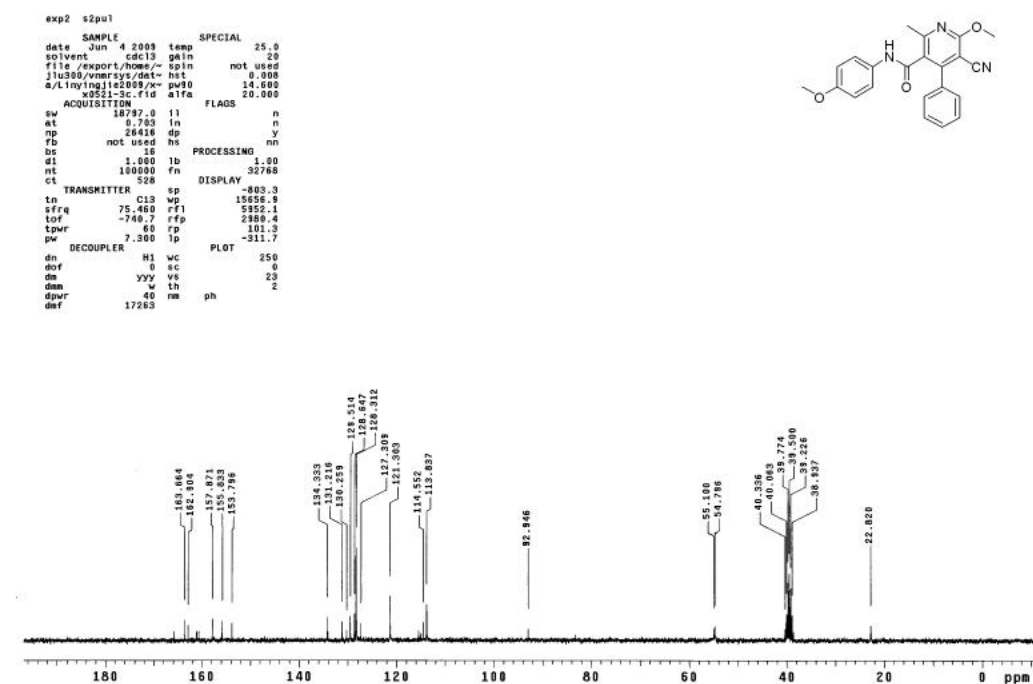
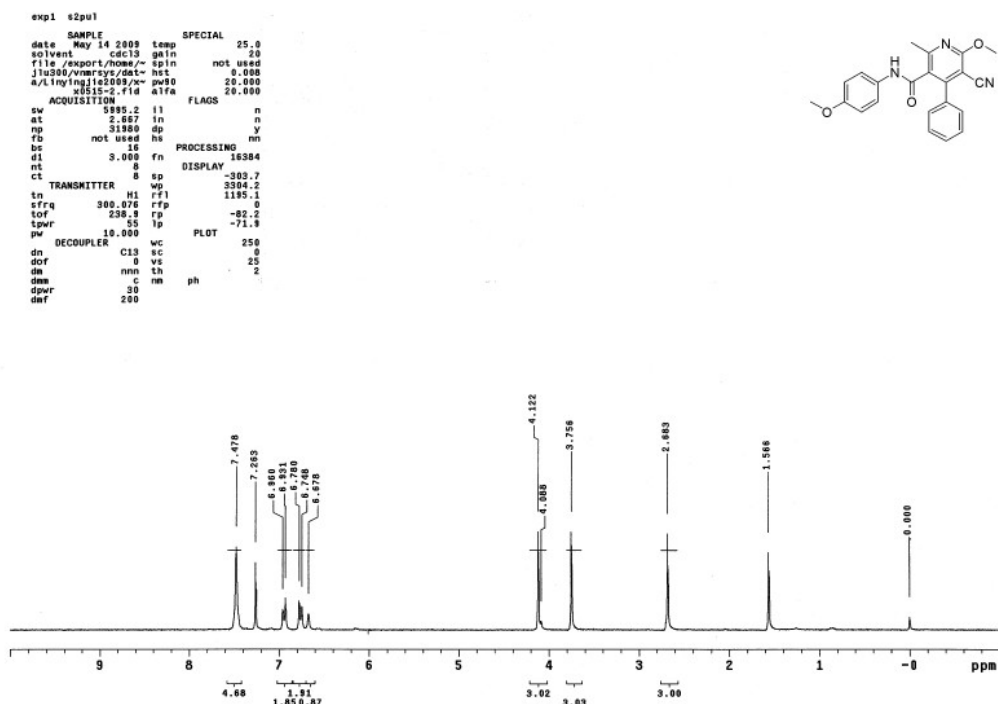


5p

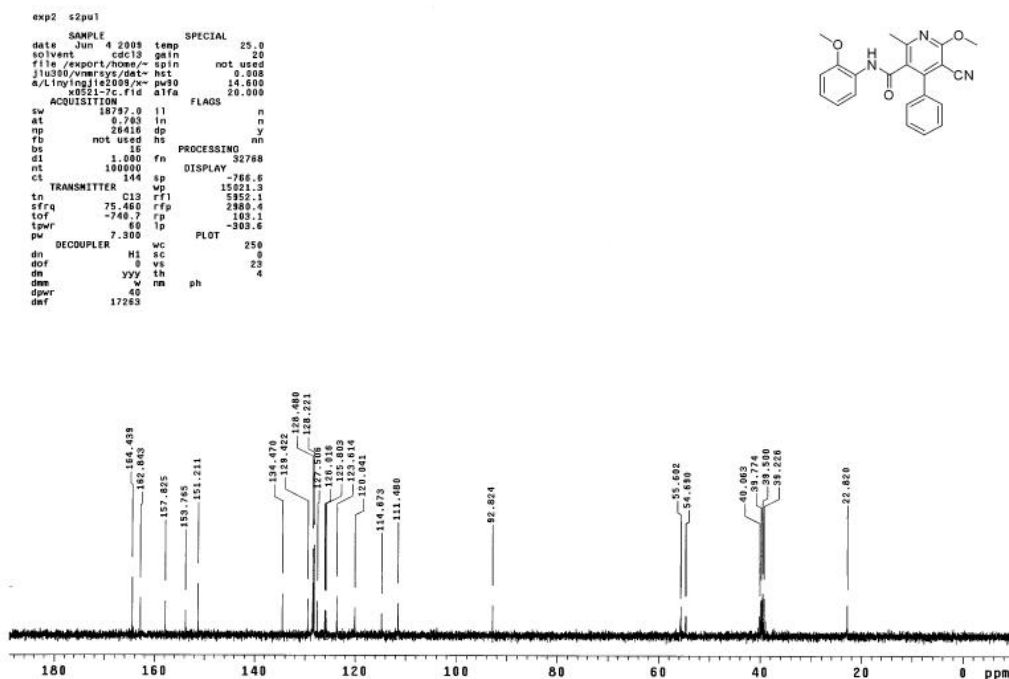
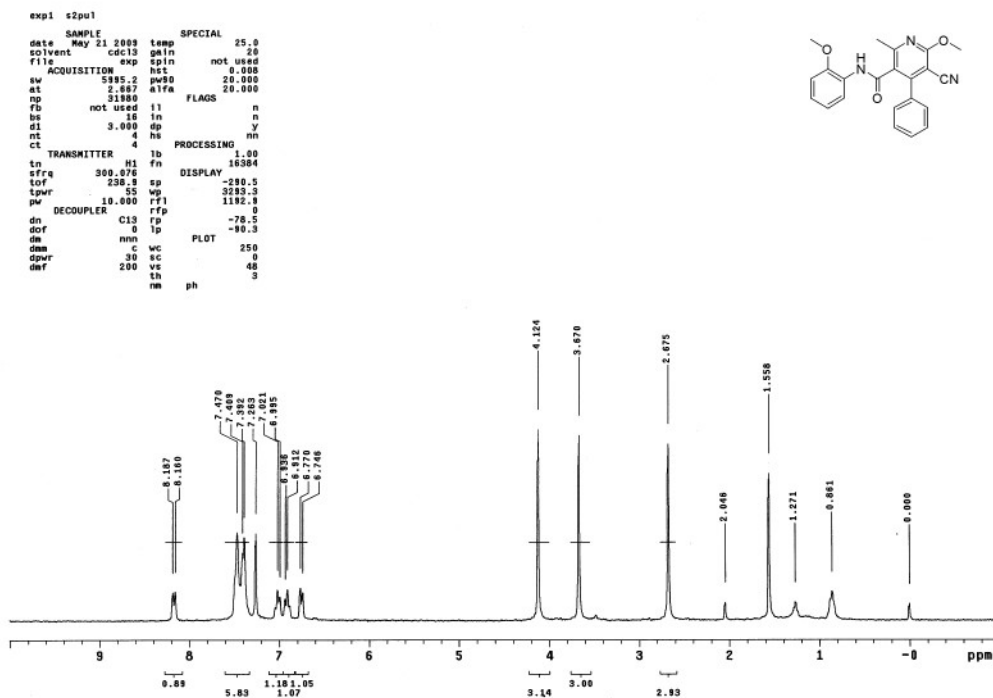




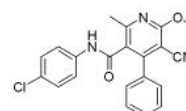
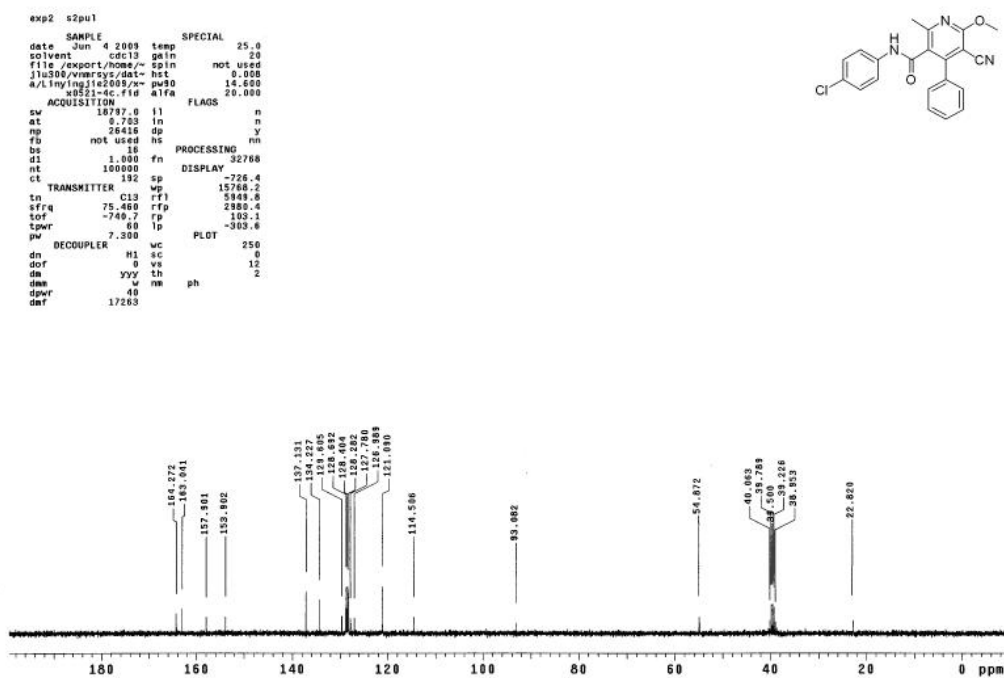
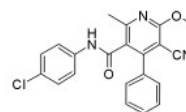
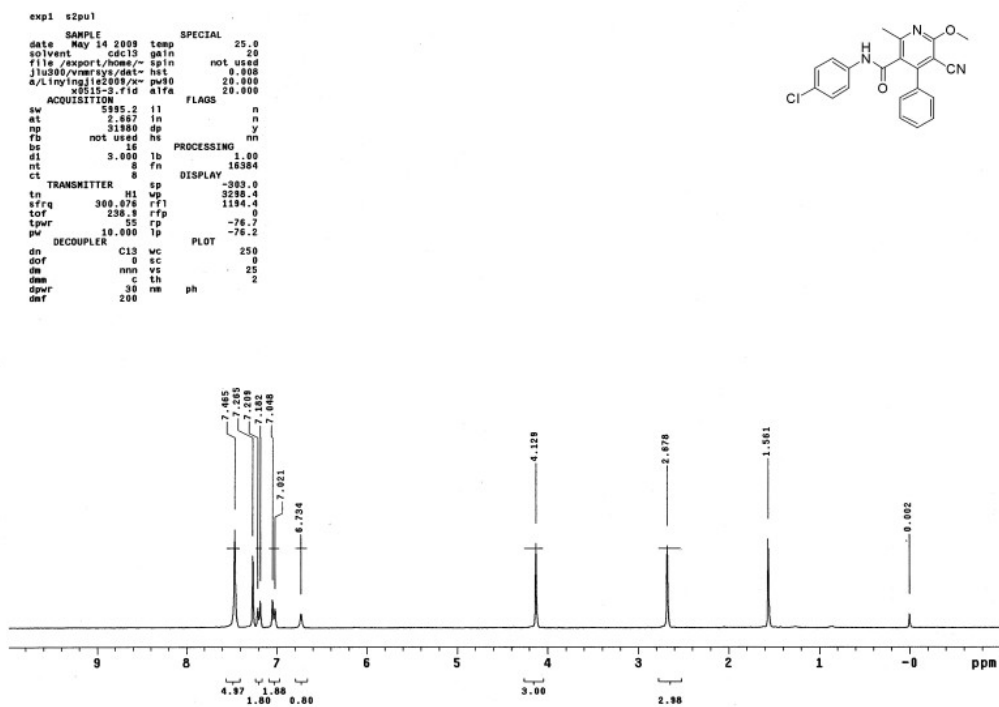
5q



5r



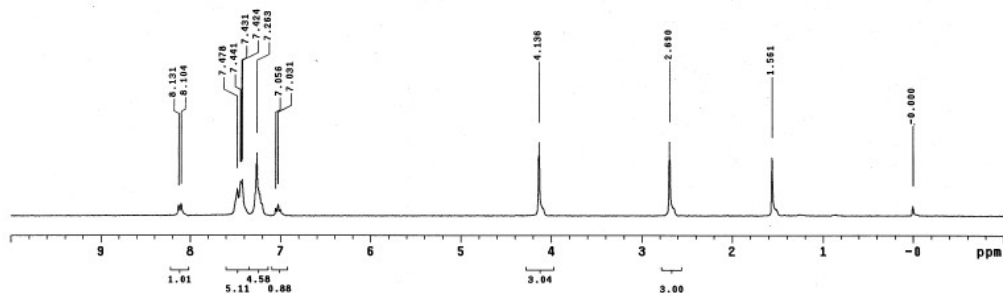
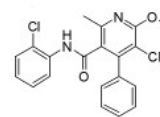
5s



5t

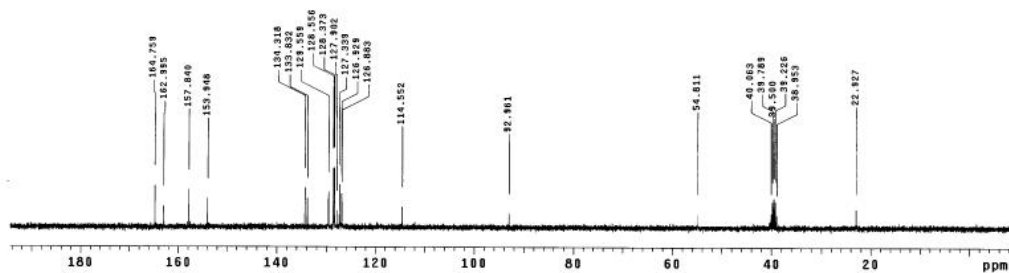
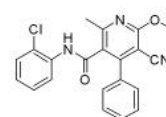
```

exp1 s2pu1
SAMPLE
date May 14 2009 temp 25.0
solvent cdcl3 gdn 20
file /export/home/~ spin not used
j1u300/vnmrsvs/det hct 0.908
a/Linyngj1e2009/x~ pw90 20.000
v0515-1.fid a1fa 20.000
ACQUISITION
sw 5985.2 f1 n
at 2.847 in n
np 31986 dp y
fb not used hs nn
bs 16 PROCESSING
d1 3.000 f2 1.000
nt 6 fn 16384
ct 4 DISPLAY
TRANSMITTER -308.1
tn H1 wp 3309.4
sfrq 300.076 rfl 1194.4
tof 238.9 rfp 0
tpwr 55 fp -76.7
pw 10.000 lp -76.2
DECOUPLER C13 wc PLOT
dn C13 wc 250
dor 0 sc 0
dm nnn vs 19
dmc c th 2
dpwr 30 nm ph
dnf 200
    
```

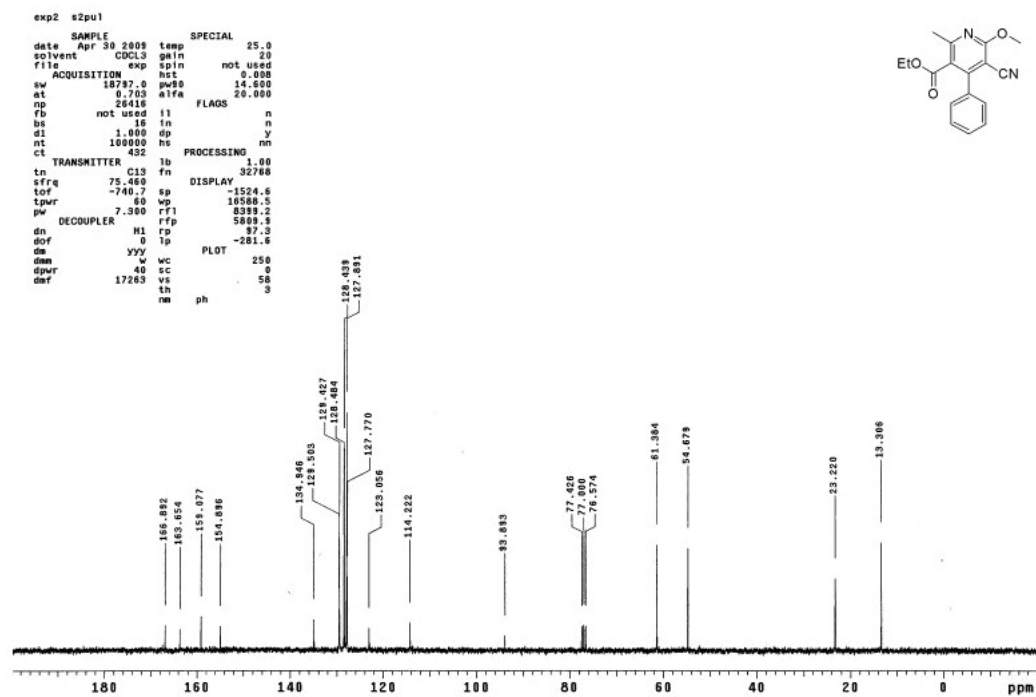
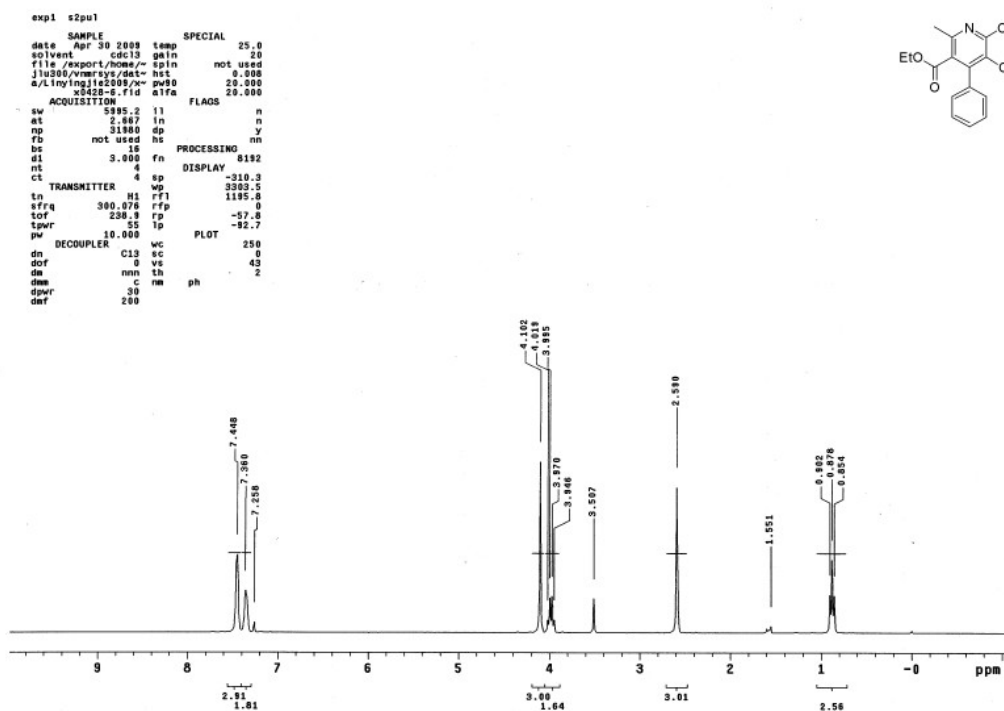


```

exp2 s2pu1
SAMPLE
date Jun 4 2009 temp 25.0
solvent cdcl3 gdn 20
file /export/home/~ spin not used
j1u300/vnmrsvs/det hct 0.908
a/Linyngj1e2009/x~ pw90 14.600
v0521-2c.fid a1fa 20.000
ACQUISITION
sw 18797.0 f1 n
at 0.743 in n
np 26416 dp y
fb not used hs nn
bs 16 PROCESSING
d1 1.000 fn 32768
nt 109000 DISPLAY
ct 176 sp -854.1
TRANSMITTER C13 wp 15318.6
tn C13 rfl 5952.1
sfrq 25.000 rfp 2389.4
tof -740.7 rfp 103.1
tpwr 60 lp -303.8
pw 7.300 lp PLOT
dn H1 wc 250
dor 0 sc 15
dm yyy th 2
dmc w nm ph
dpwr 40
dnf 17263
    
```



5u



5v

