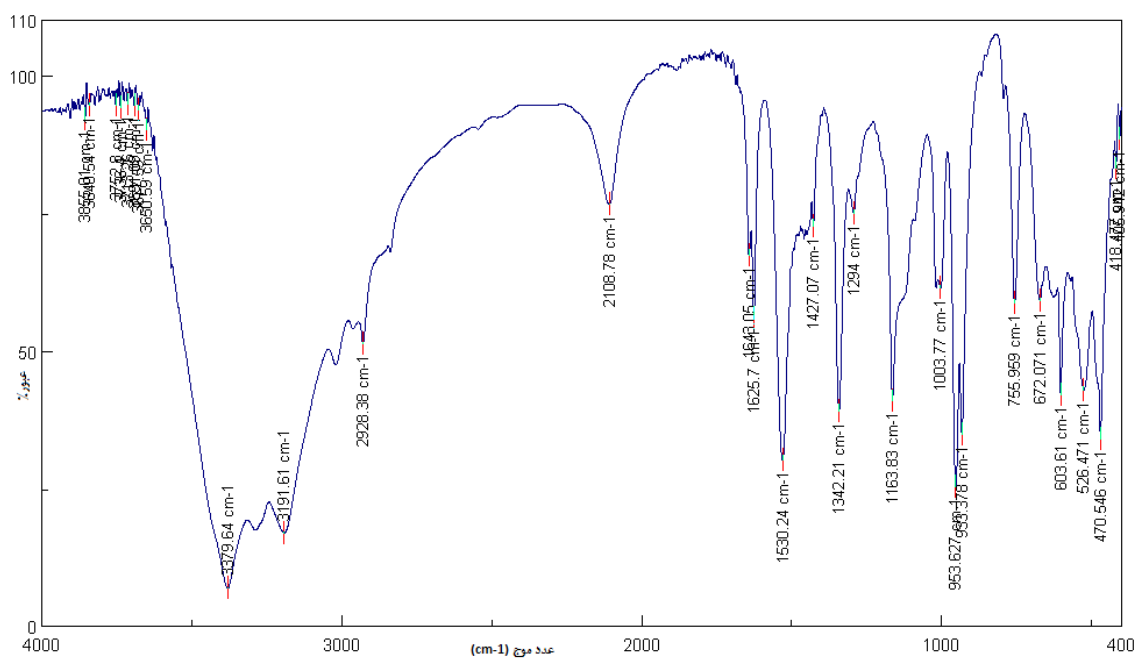
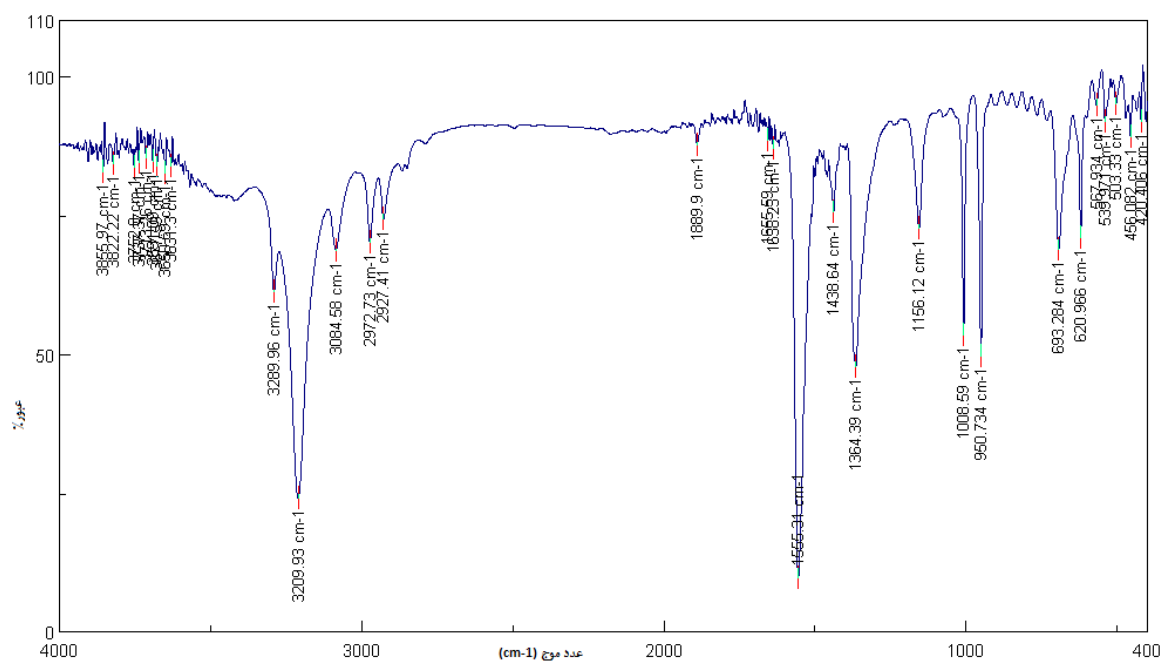


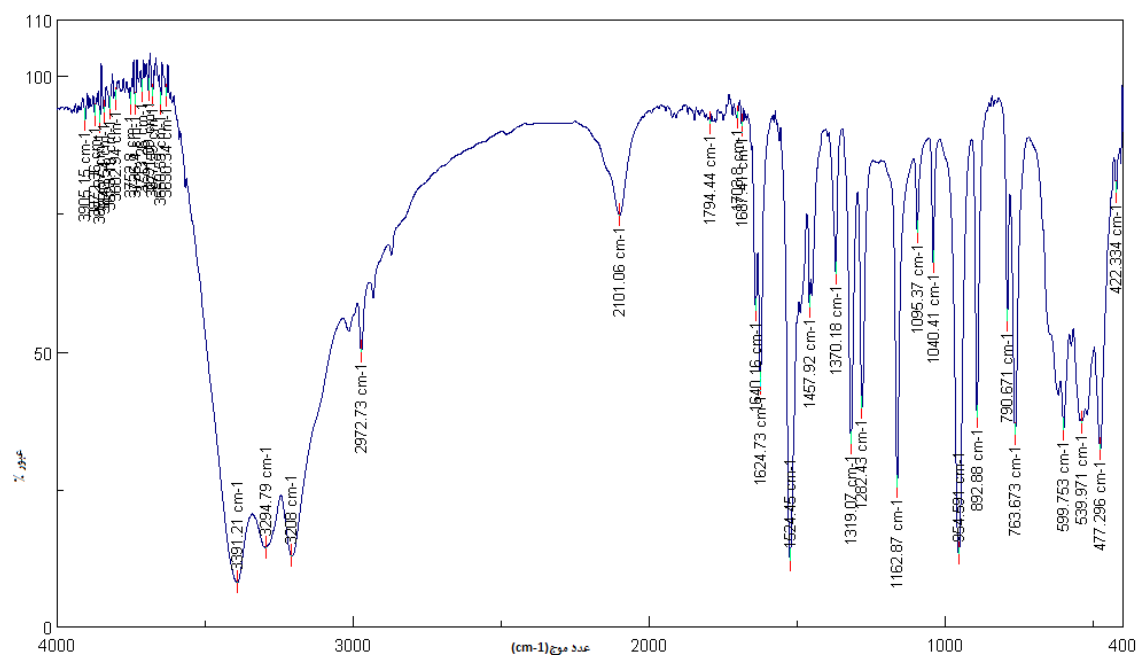
اطلاعات تکمیلی

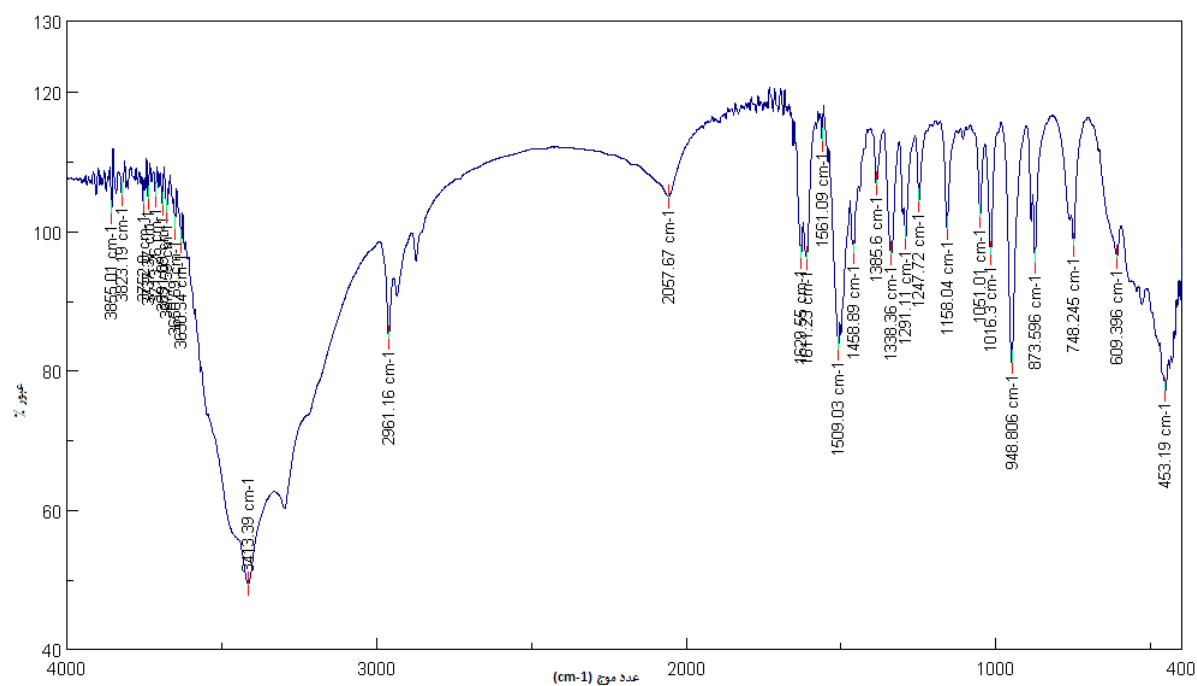


شکل ۱- طیف FT-IR لیگاند Me-dtcNa

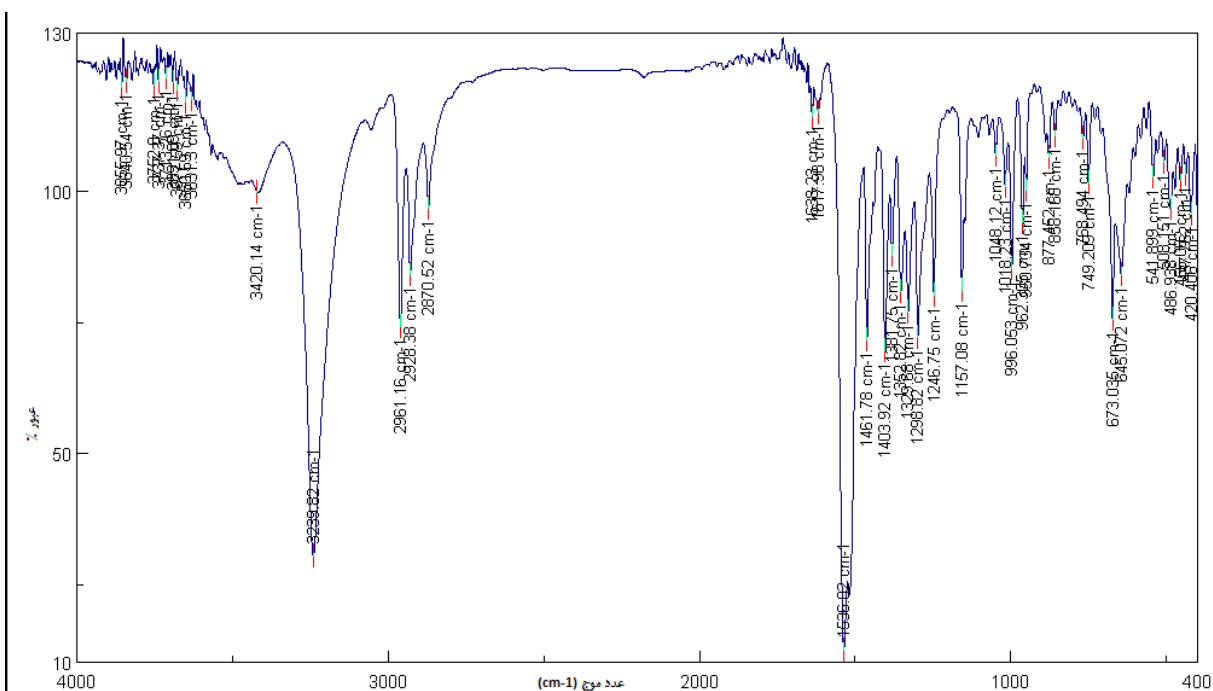


شکل ۲- طیف FT-IR کمپلکس $[\text{Ni}(\text{Me-dtc})_2]$

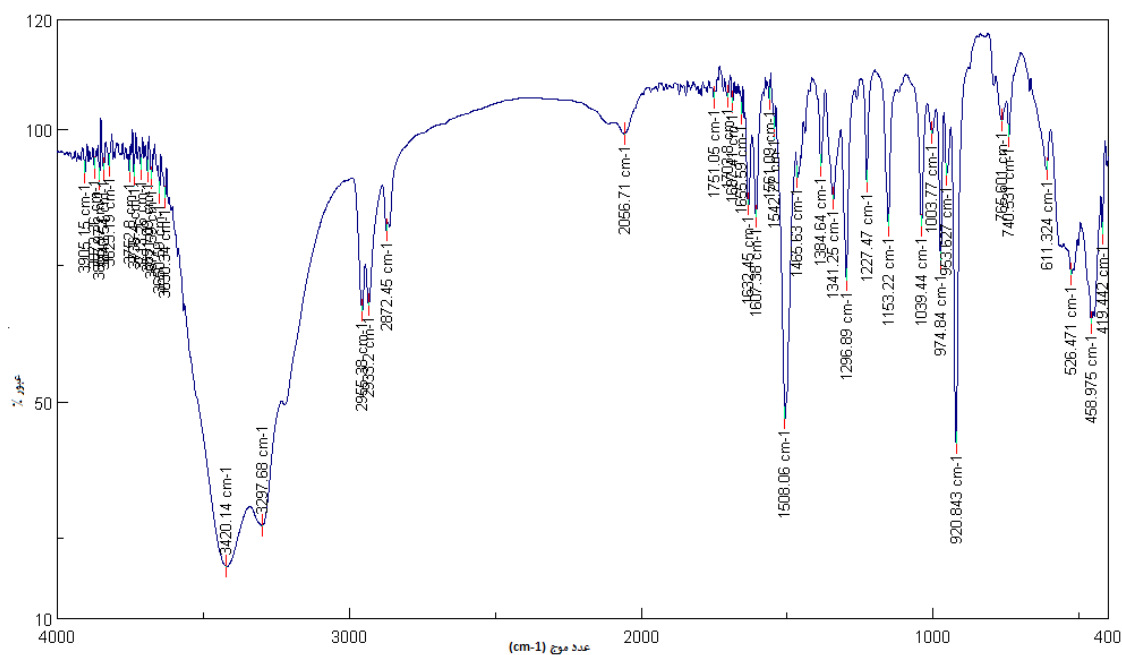




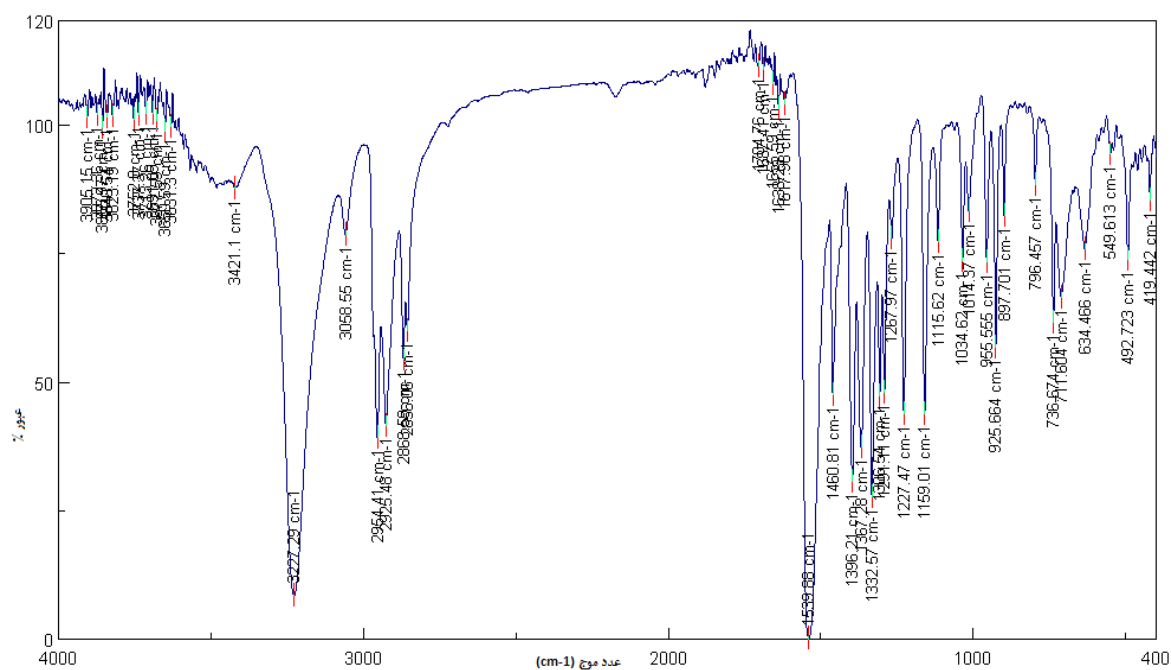
شکل ۵- طیف FT-IR لیگاند n-Pro-dtcNa



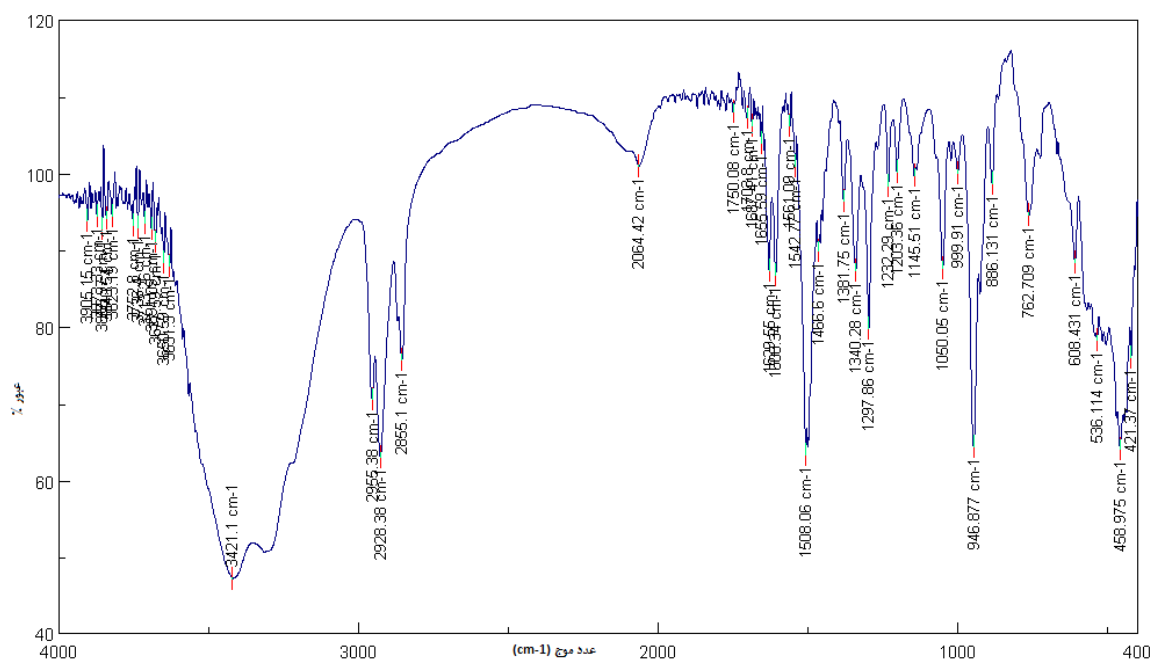
شکل ۶- طیف FT-IR کمپلکس [Ni(n-pro-dtc)₂]



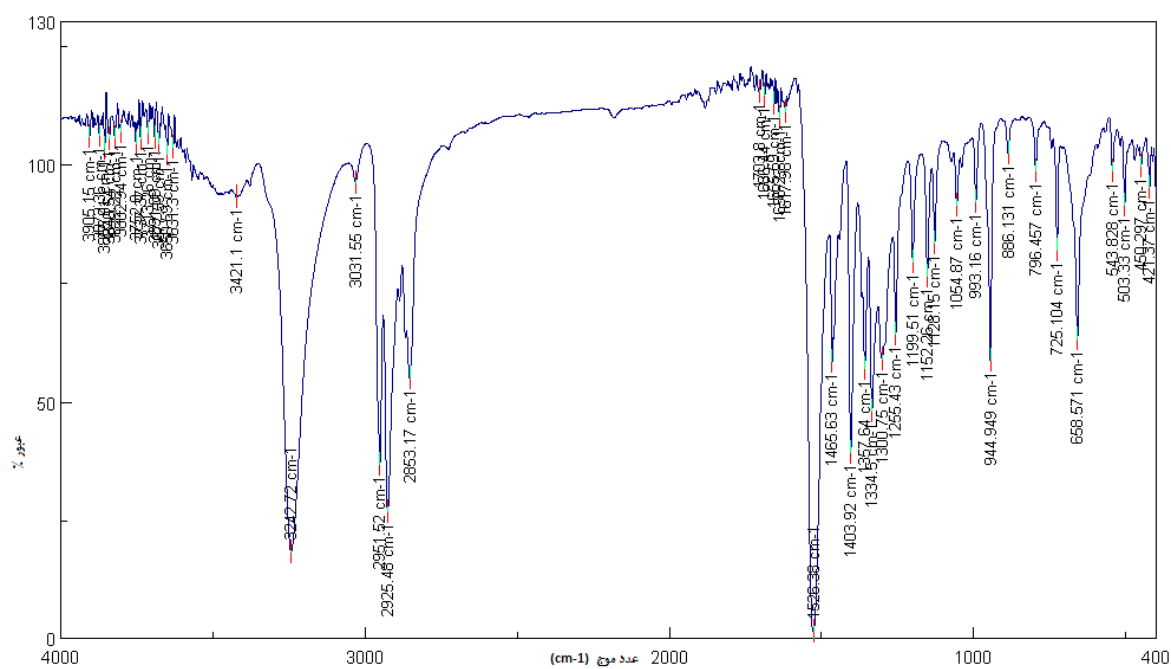
شکل ۷- طیف FT-IR لیگاند n-Bu-dtcNa



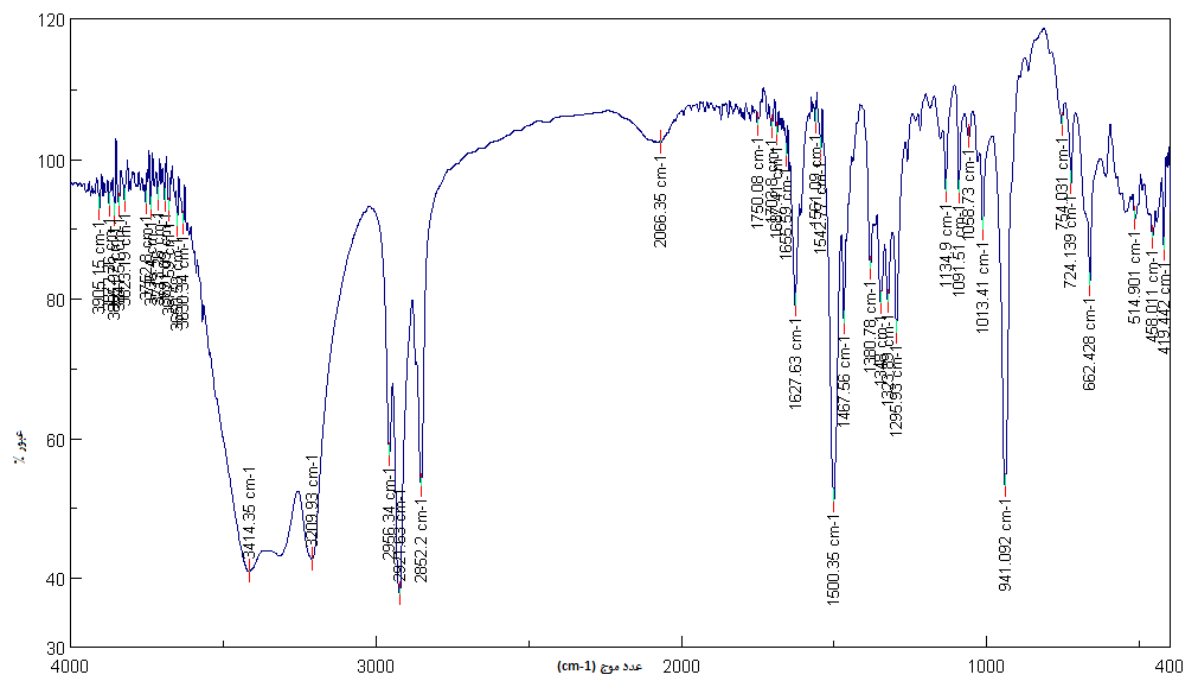
شکل ۸- طیف FT-IR کمپلکس [Ni(n-Bu-dtc)₂]



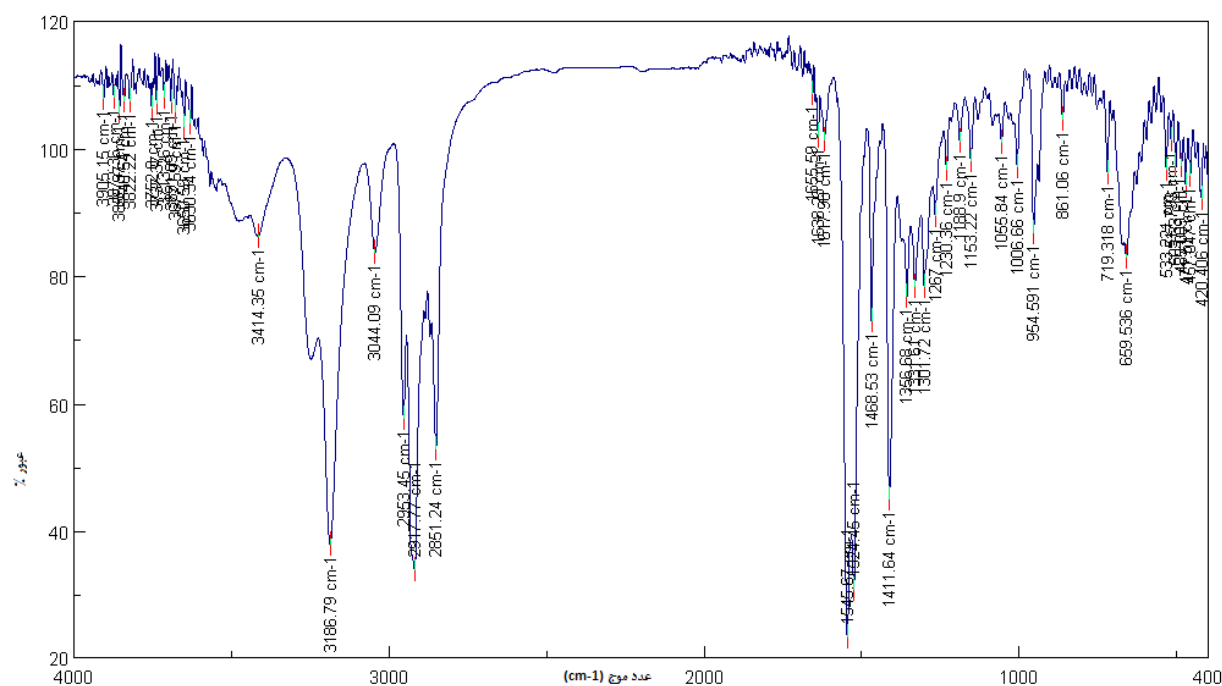
شکل ۹- طیف FT-IR لیگاند n-Hex-dtcNa



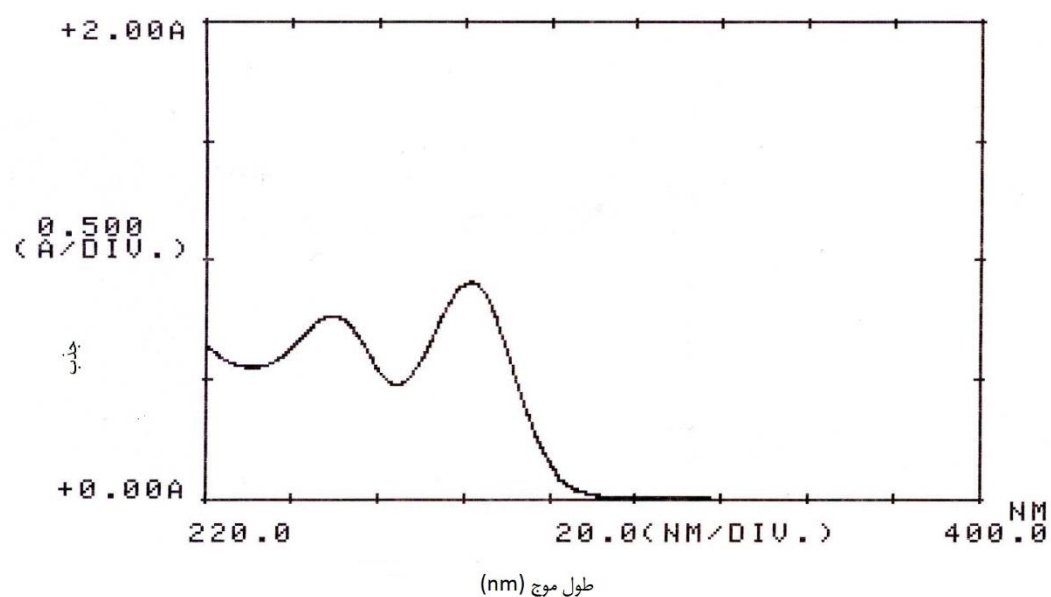
شکل ۱۰- طیف FT-IR کمپلکس [Ni(n-Hex-dtc)₂]



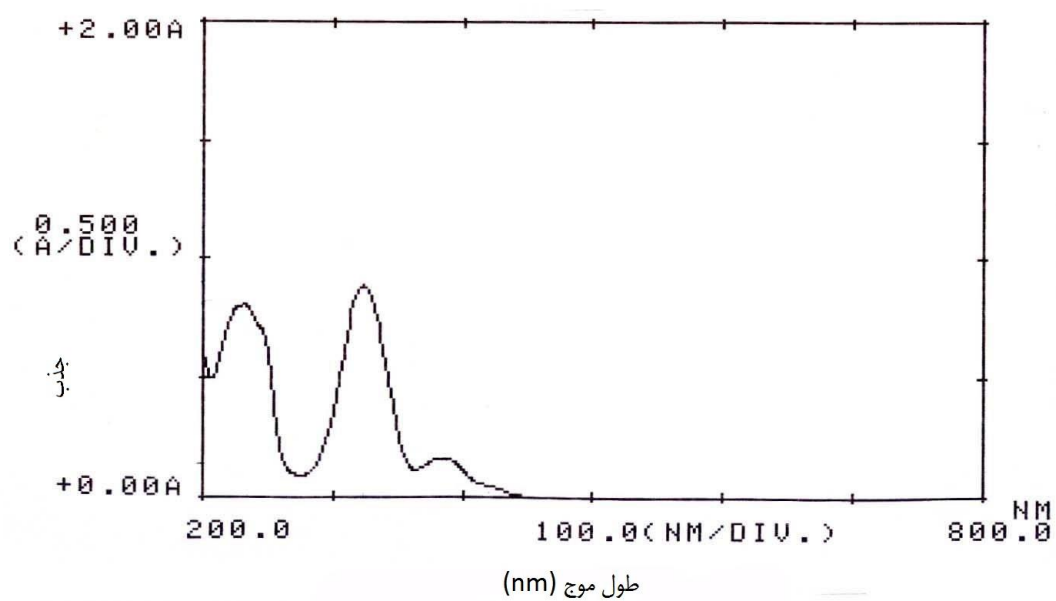
شکل ۱۱- طیف FT-IR لیگاند n-Oct-dtcNa



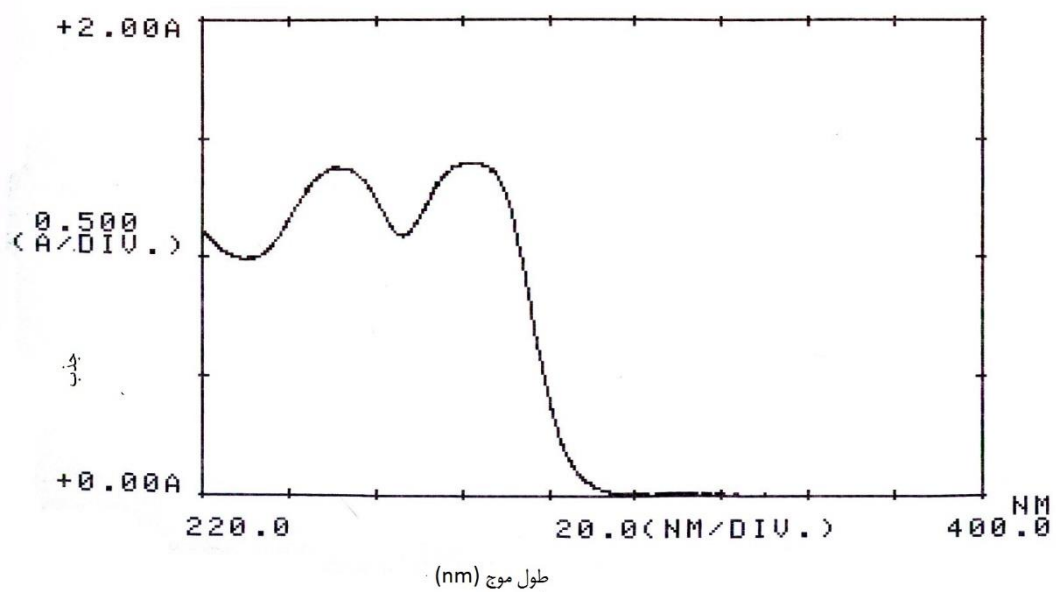
شکل ۱۲- طیف FT-IR کمپلکس [Ni(n-oct-dtc)₂]



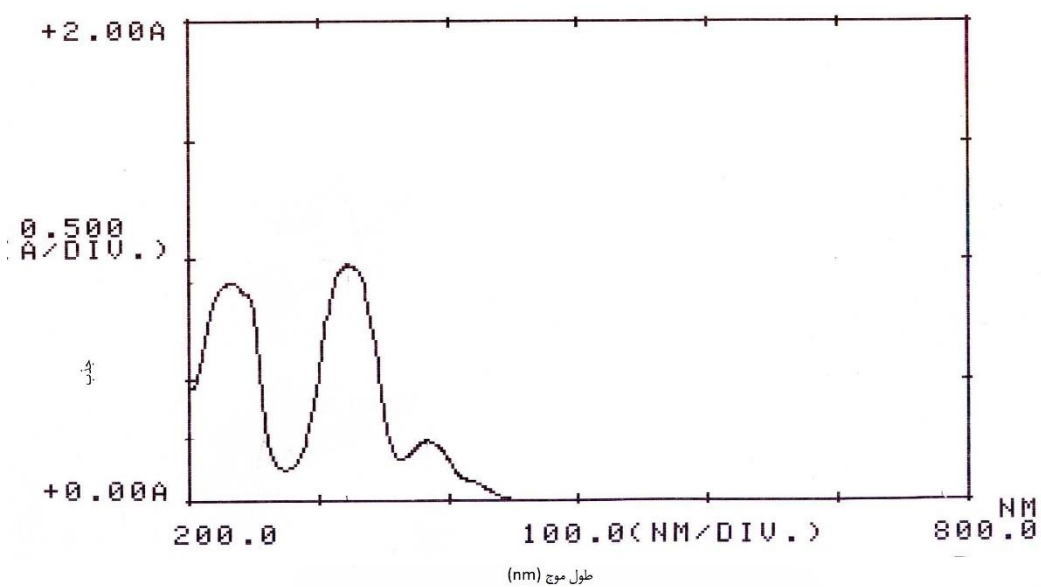
شکل ۱۵- طیف UV-Vis لیگاند (Me-dtcNa)



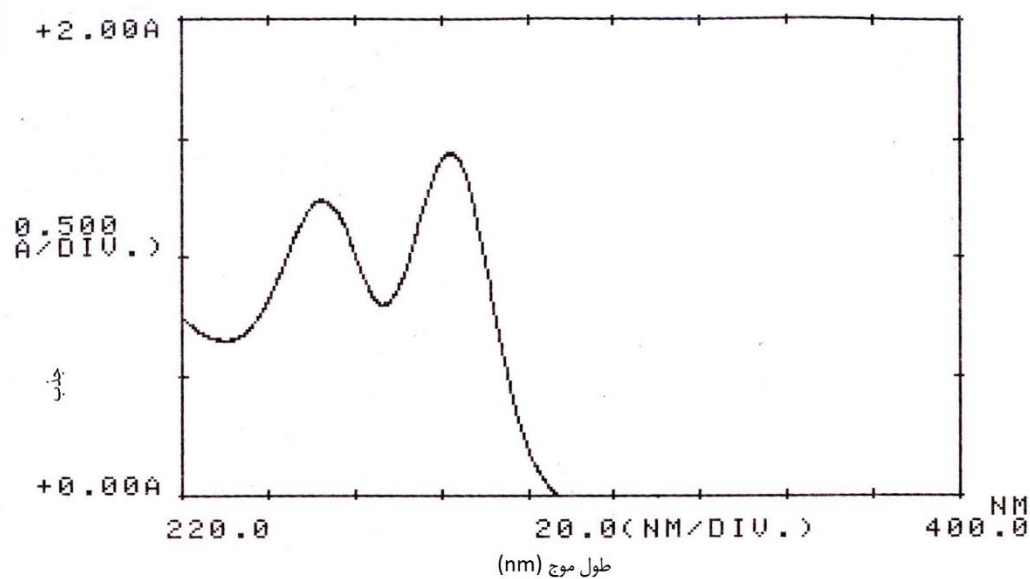
شکل ۱۶- طیف UV-Vis کمپلکس $[Ni(Me-dtc)_2]$



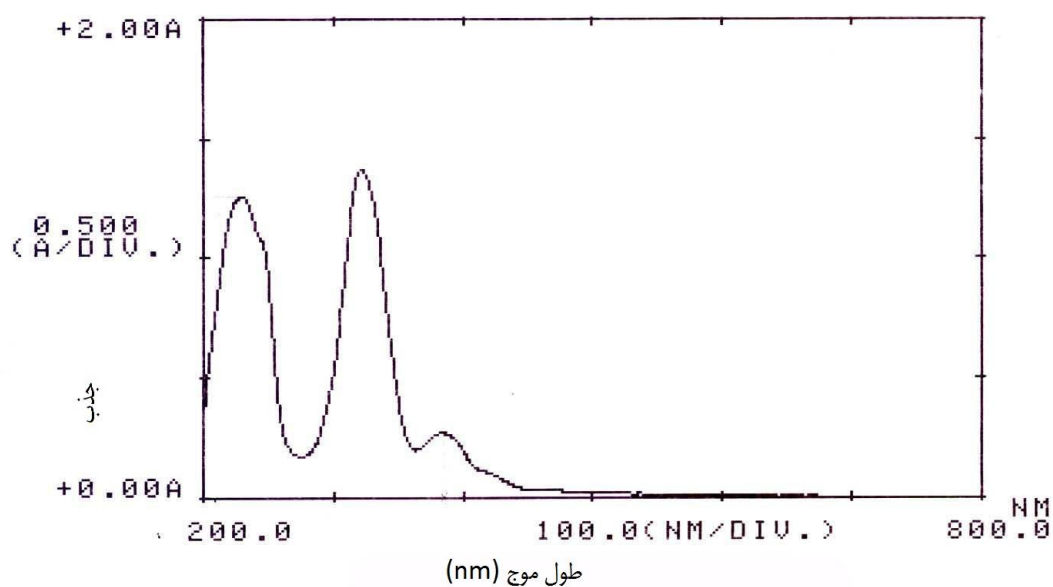
شکل ۱۷- طیف UV-Vis لیگاند (Et-dtcNa)



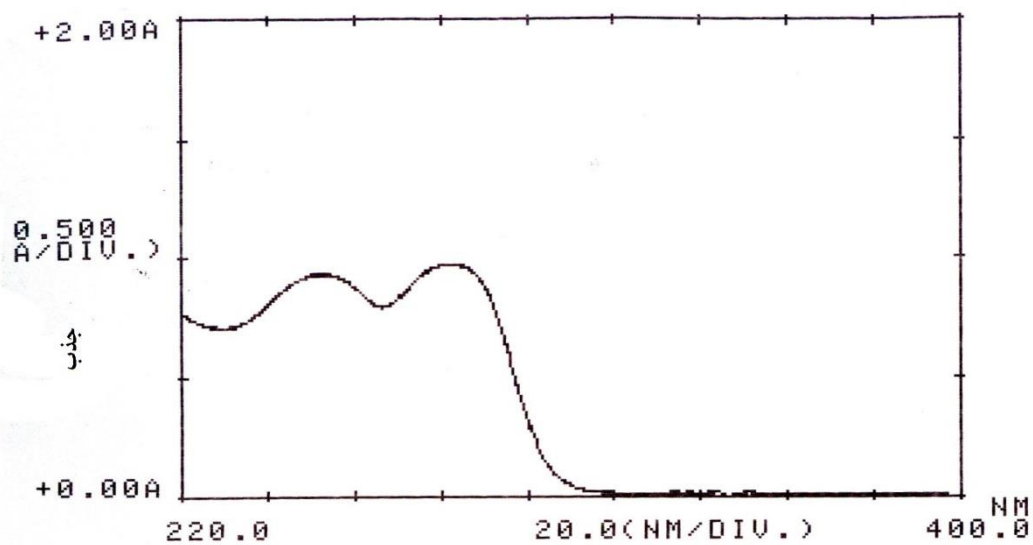
شکل ۱۸- طیف UV-Vis کمپلکس [Ni(Et-dtc)₂]



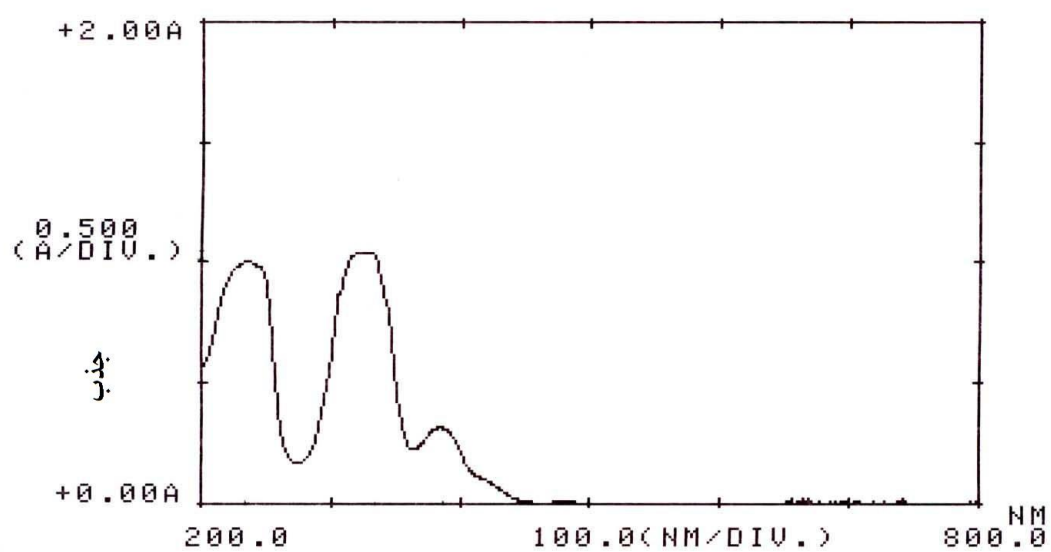
شکل ۱۹- طیف UV-Vis لیگاند (n-pro-dtcNa)



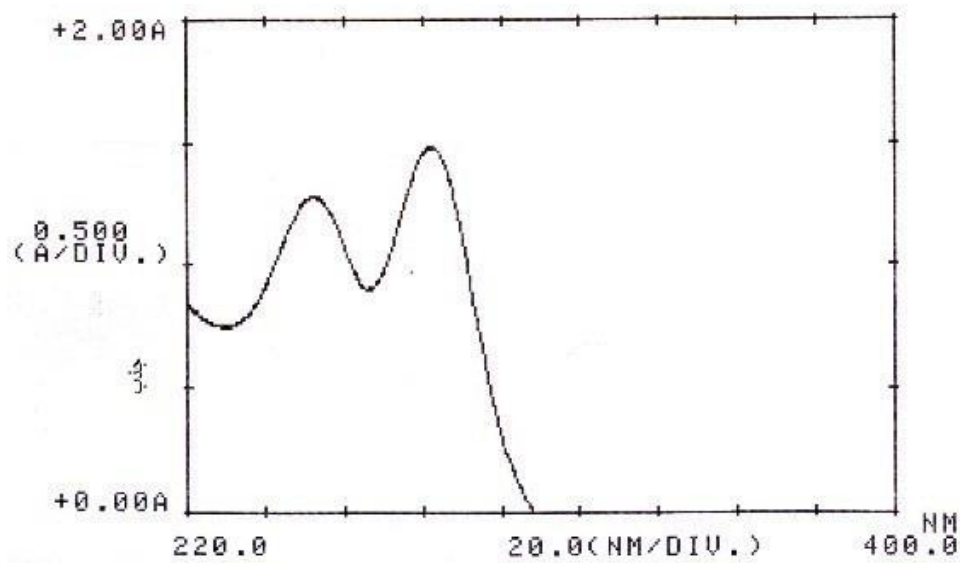
شکل ۲۰- طیف UV-Vis کمپلکس [Ni(n-Pro-dtc)₂]



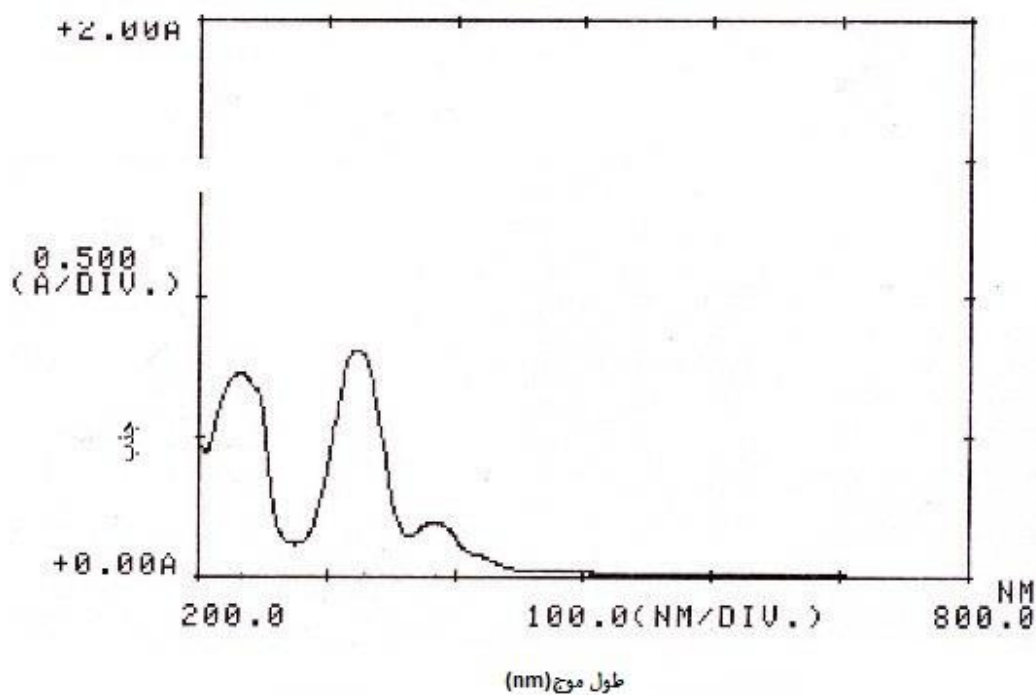
طول موج (nm)
 شکل ۲۱ - طیف UV-Vis لیگاند (n-Bu-dtcNa)



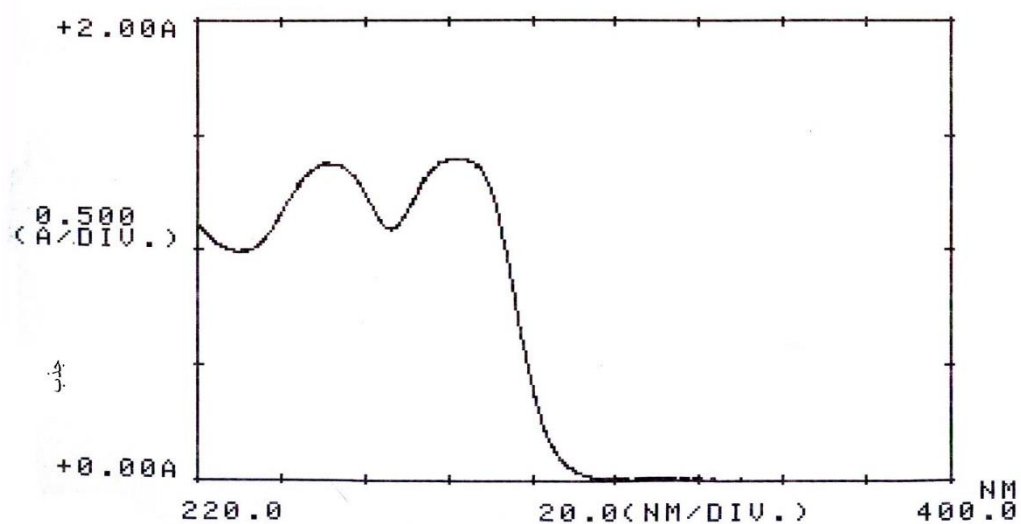
طول موج (nm)
 شکل ۲۲ - طیف UV-Vis کمپلکس $[Ni(n-Bu-dtc)_2]$



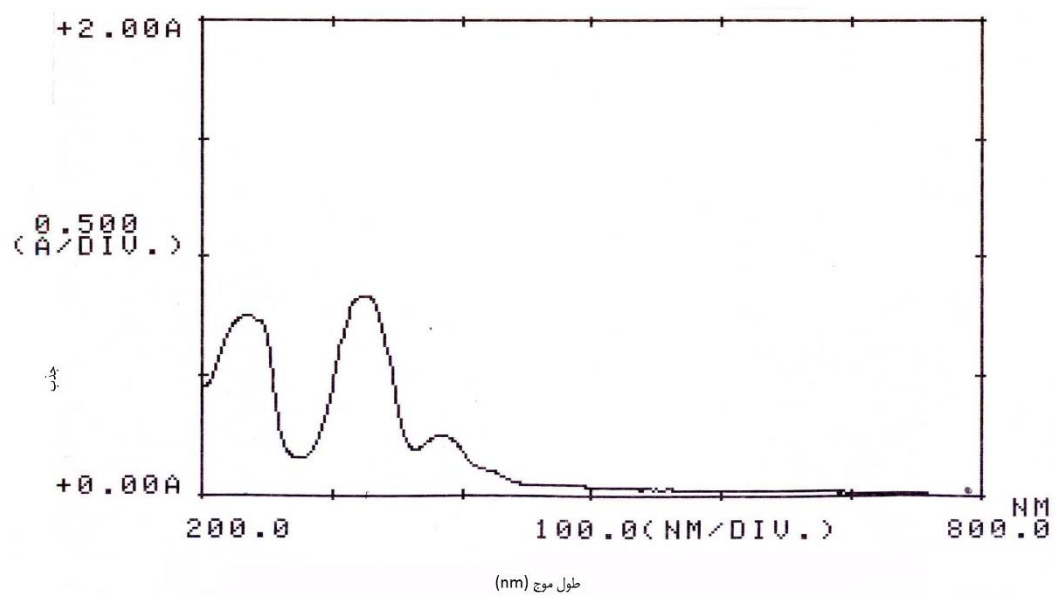
شکل ۲۳- طیف UV-Vis لیگاند (n-Hex-dtcNa)



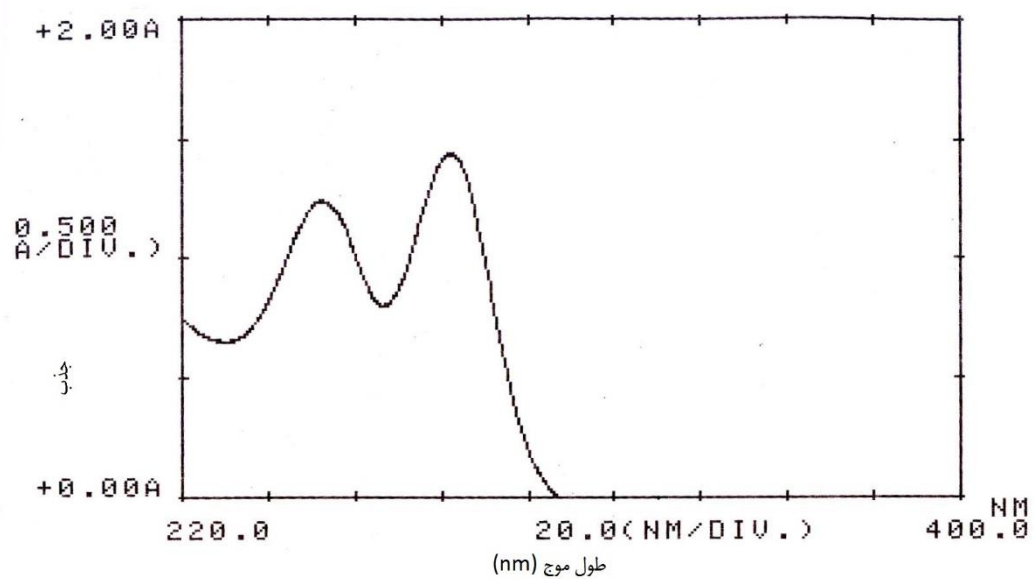
شکل ۲۴- طیف UV-Vis کمپلکس $[Ni(n-Hex-dtc)_2]$



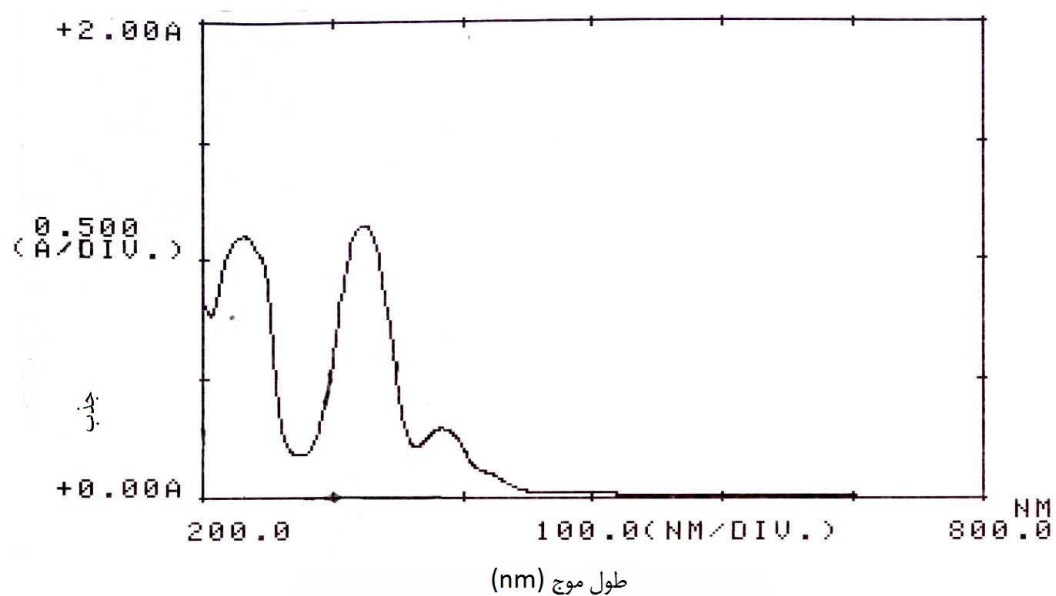
شکل ۲۵ - طیف UV-Vis لیگاند (n-Oct-dtcNa)



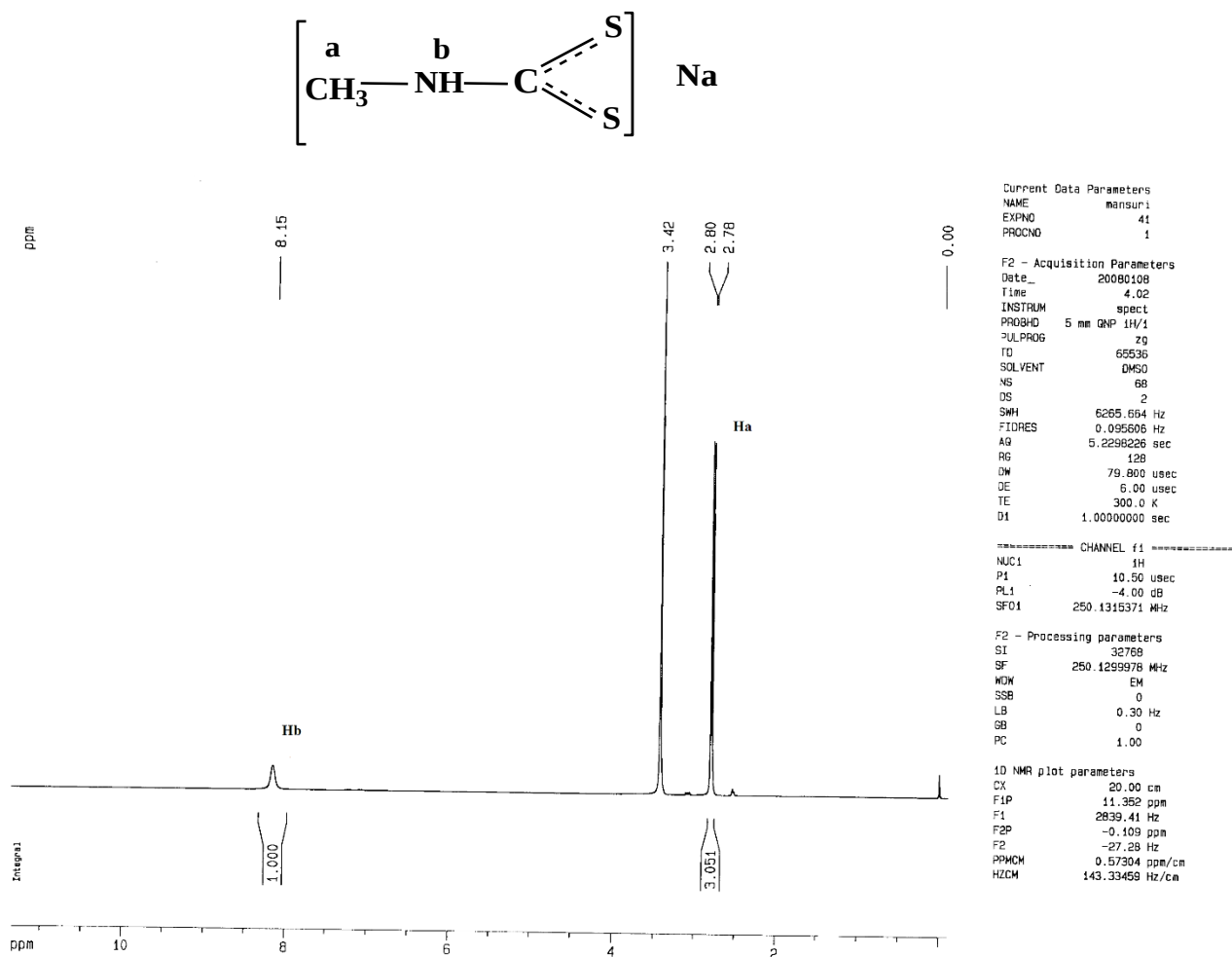
شکل ۲۶ - طیف UV-Vis کمپلکس [Ni(n-Oct-dtc)₂]



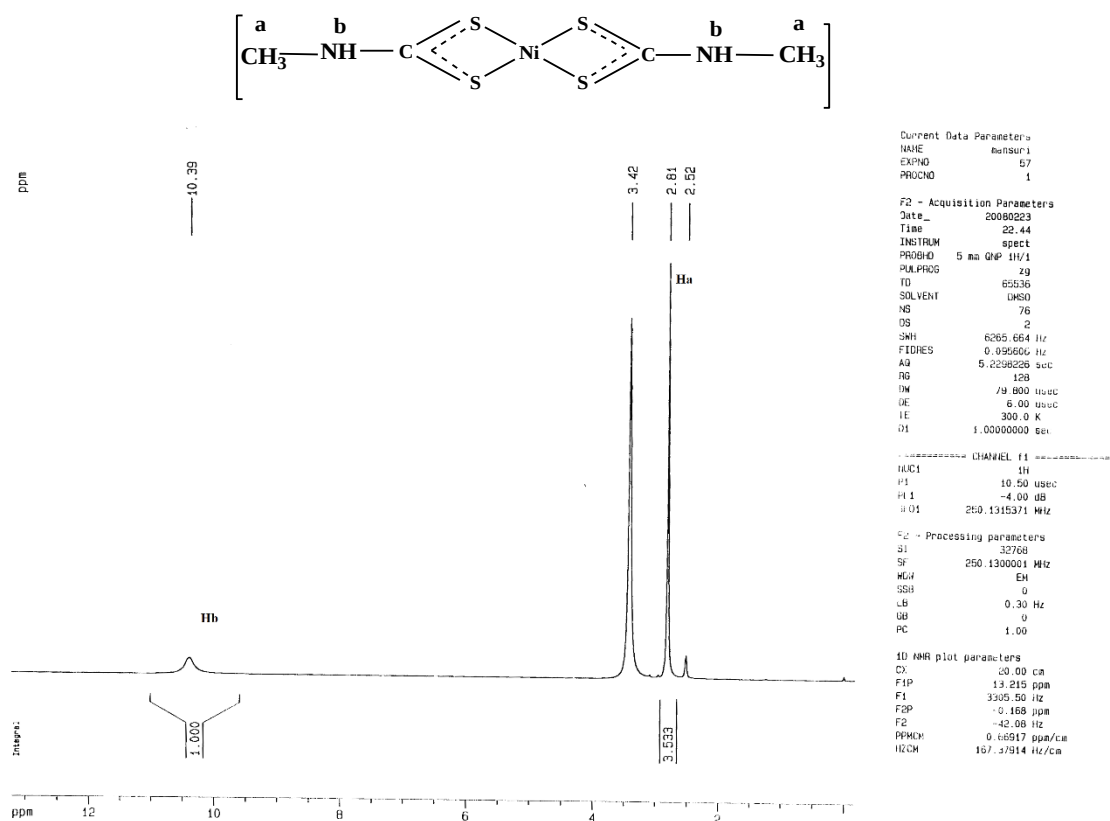
شکل ۲۷- طیف UV-Vis لیگاند (n-Non-dtcNa)



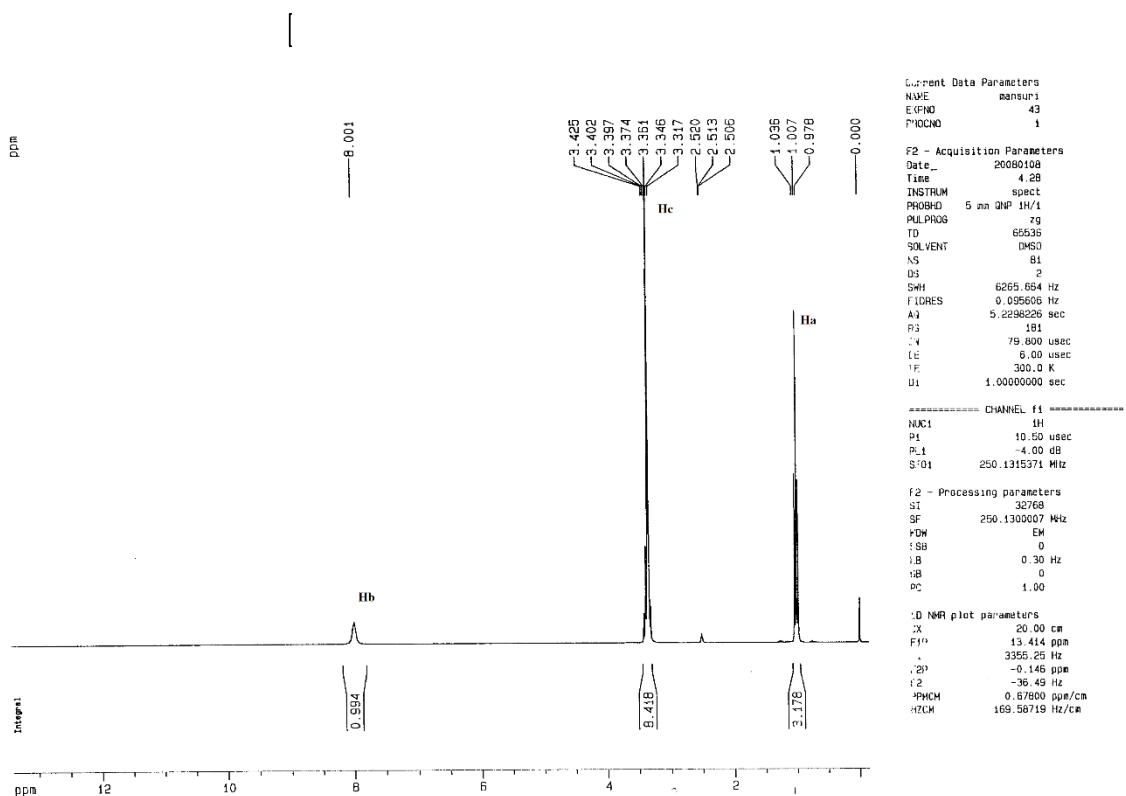
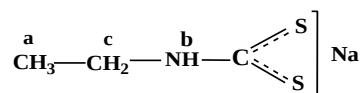
شکل ۲۸- طیف UV-Vis کمپلکس $[\text{Ni}(n\text{-Non-dtc})_2]$



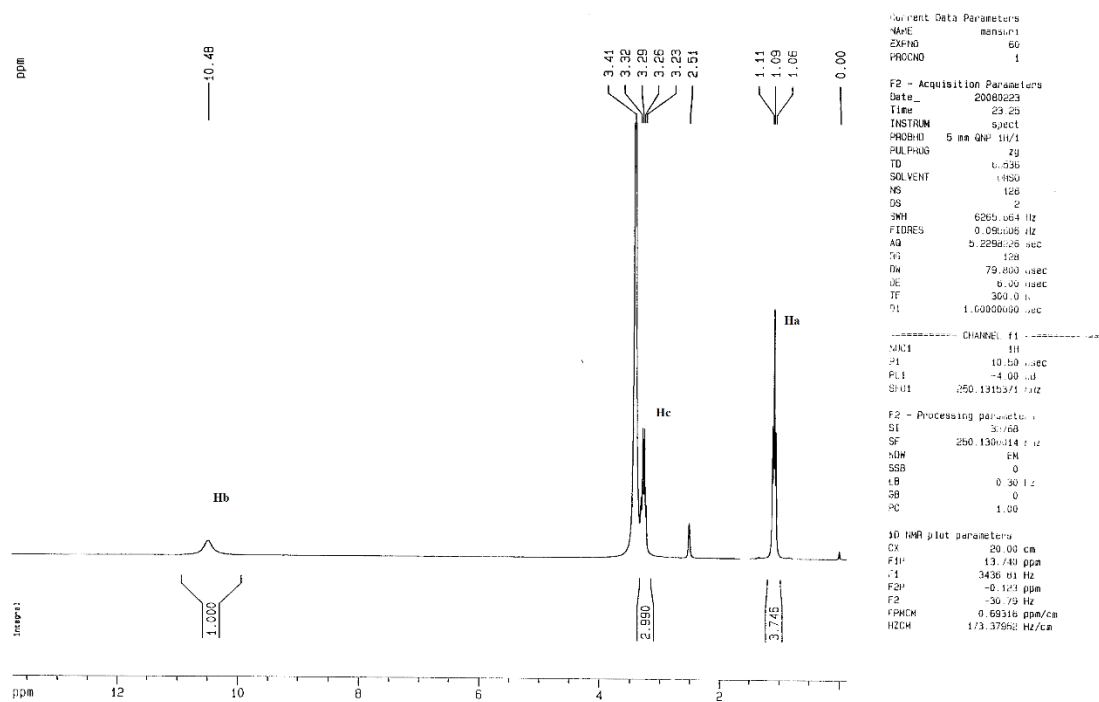
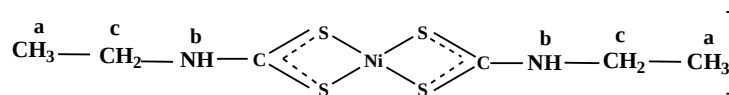
شکل ۲۹- طیف ^1H NMR لیگاند (Me-dtcNa)



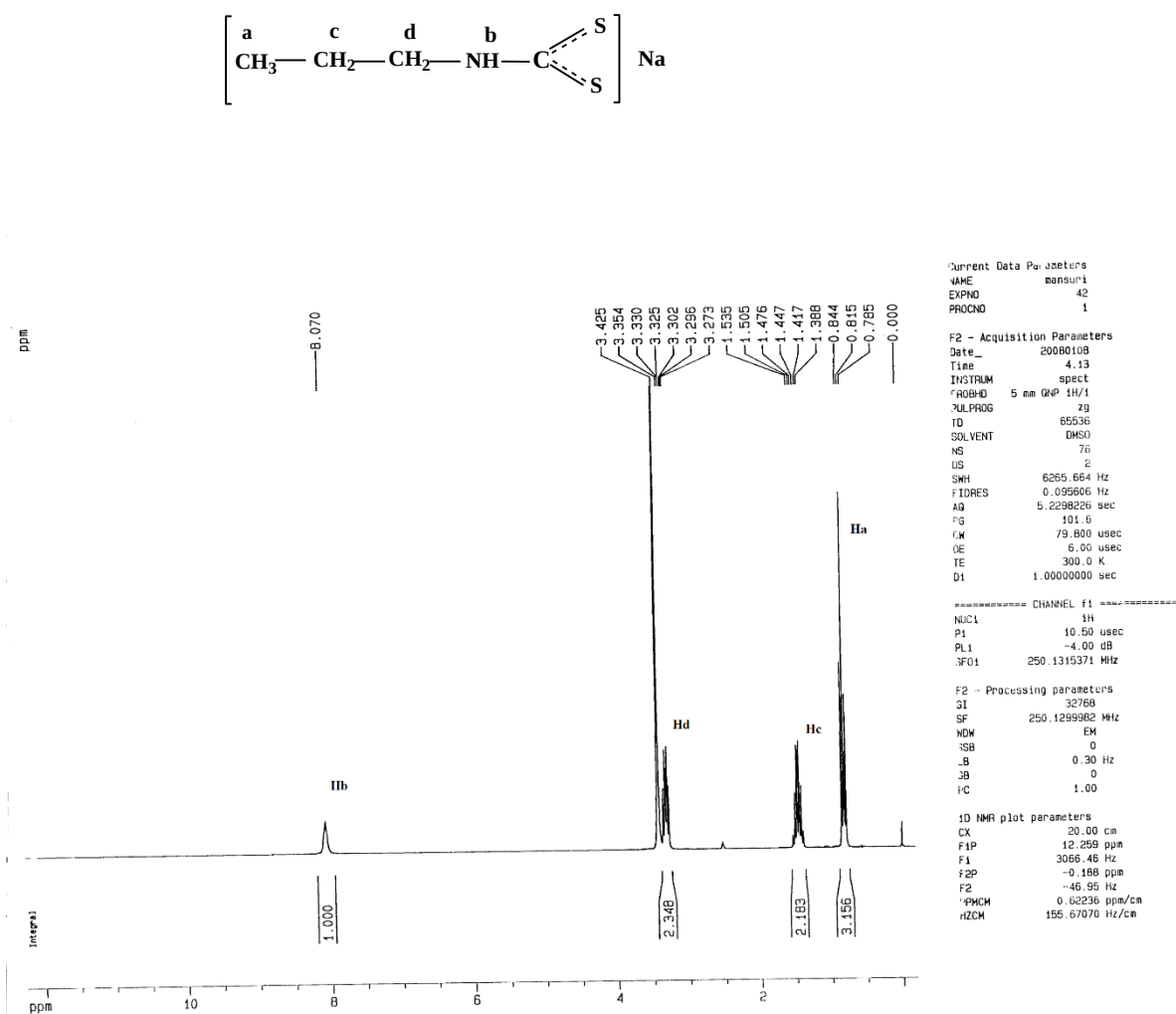
شکل ۳- طیف ^1H NMR کمپلکس $[\text{Ni}(\text{Me-dtc})_2]$



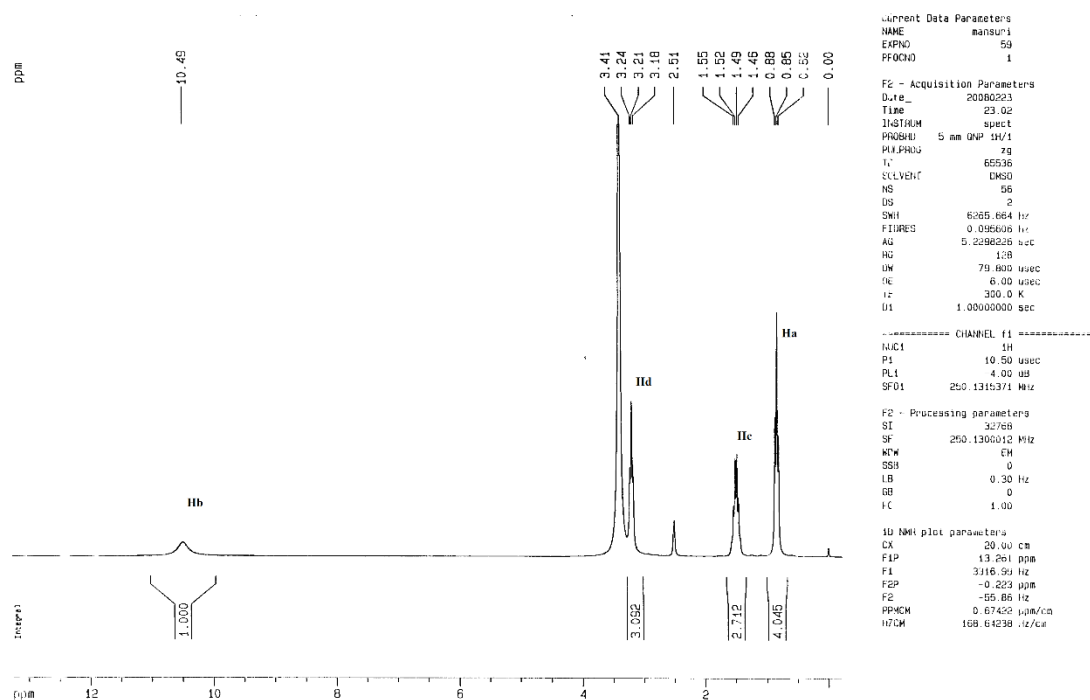
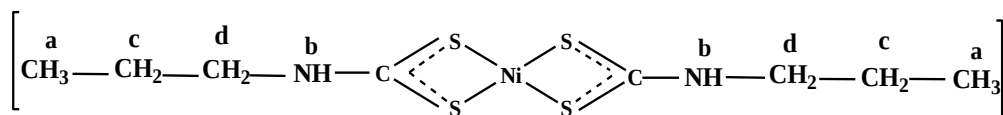
شکل ۳۱- طیف ^1H NMR لیگاند (Et-dtcNa)



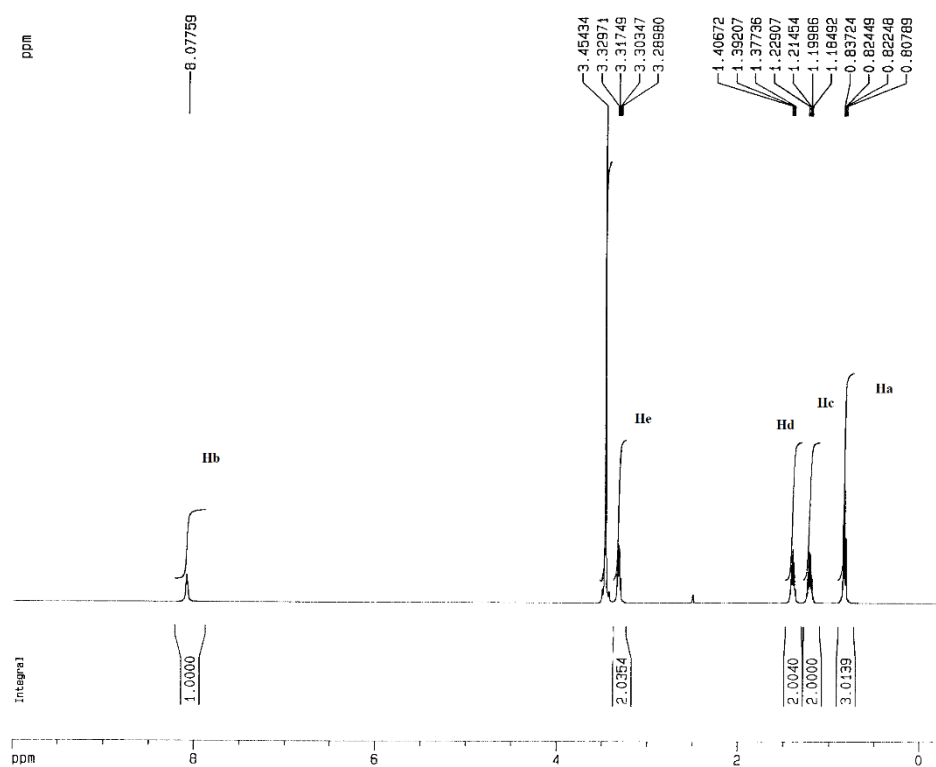
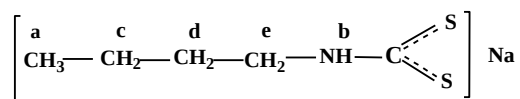
شکل ۳۲ - طیف ^1H NMR کمپلکس $[\text{Ni}(\text{Et-dtc})_2]$



شکل ۳۳- طیف ^1H NMR لیگاند (n-pro-dtcNa)



شکل ۳۴- طیف ^1H NMR کمپلکس $[\text{Ni}(\text{n-pro-dtc})_2]$



Current Data Parameters
NAME zahedan
EXPNO 1977
PROCNO 1

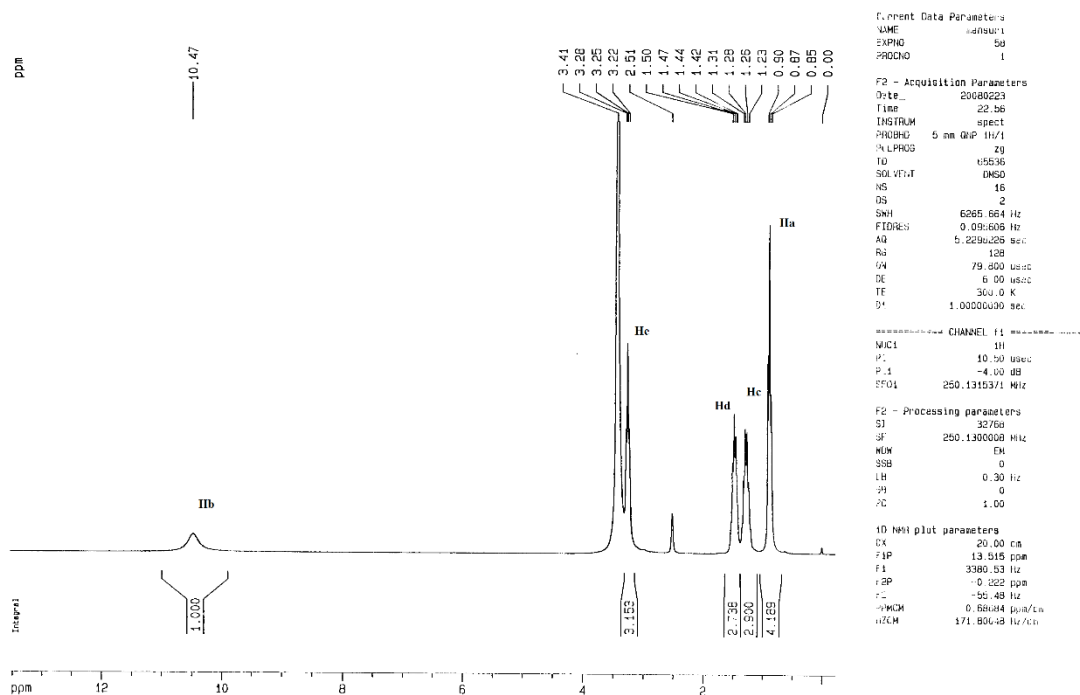
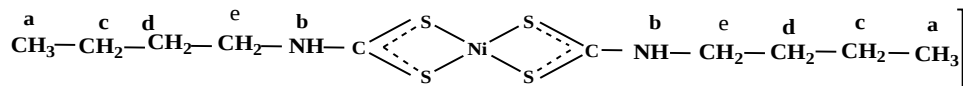
F2 - Acquisition Parameters
Date_ 20030818
Time 8.21
INSTRUM spect
PROBHD 5 mm BBI 1H-B
PULPROG zg
TD 32768
SOLVENT DMSO
NS 16
DS 2
SWH 10330.578 Hz
FIDRES 0.315264 Hz
AQ 1.5860212 sec
RG 20.2
BW 48.400 usec
DE 6.00 usec
TE 295.0 K
D1 6.0000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 8.02 usec
PL1 3.00 dB
SFO1 500.1347512 MHz

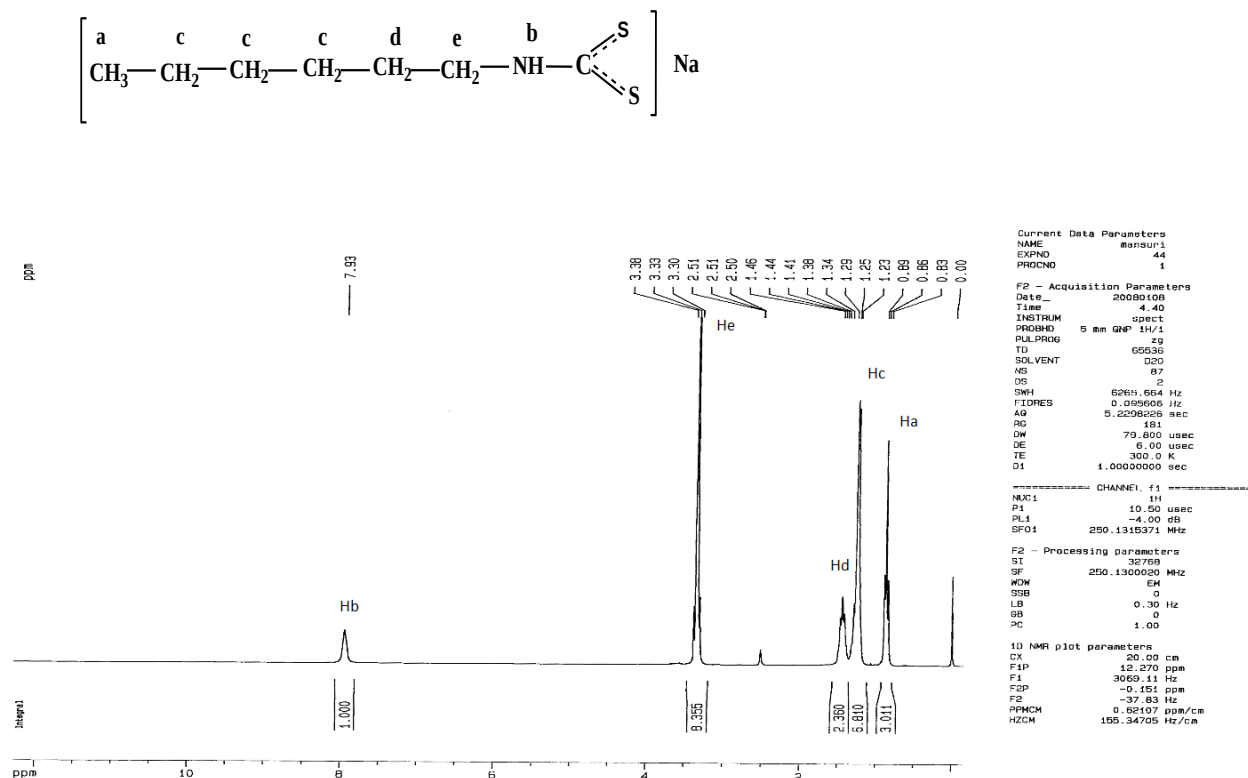
F2 - Processing parameters
SI 65536
SF 500.1300093 MHz
WDW EM
SSB 0
LB 0.70 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
F1P 10.000 ppm
F1 5001.30 Hz
F2P -0.300 ppm
F2 -150.04 Hz
PPMCM 0.51500 ppm/cm
HZCM 257.56696 Hz/cm

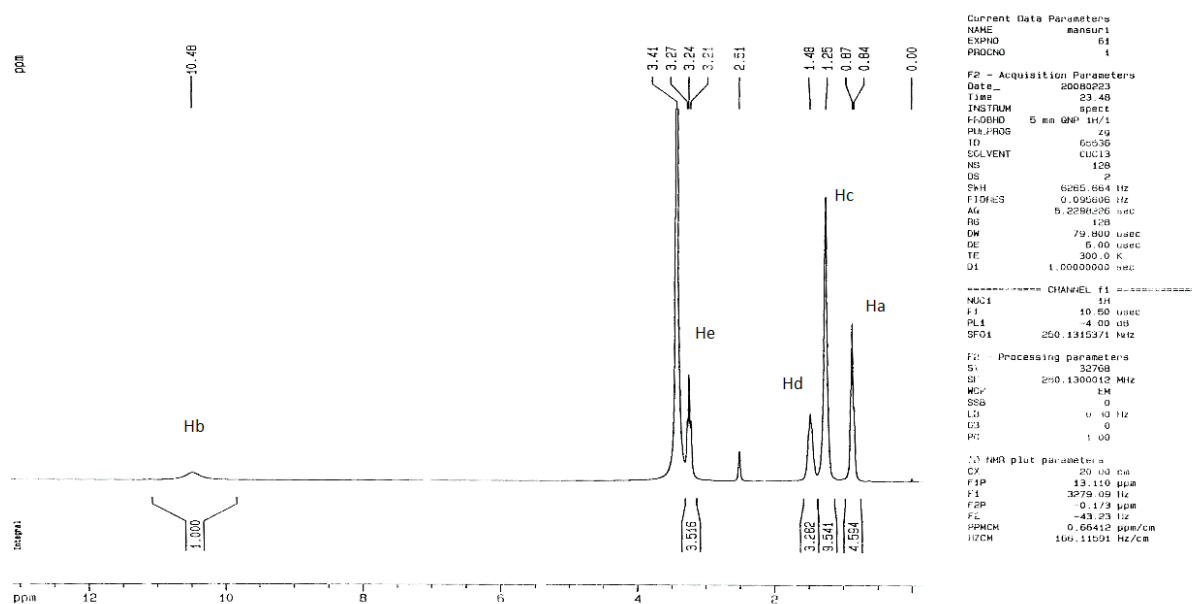
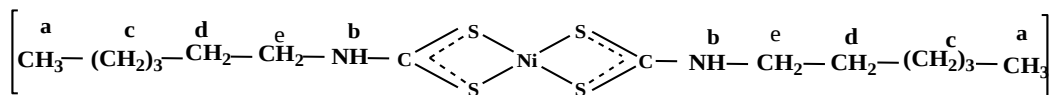
شکل ۳۵- طیف ¹H NMR لیگاند (n-Bu-dtcNa)



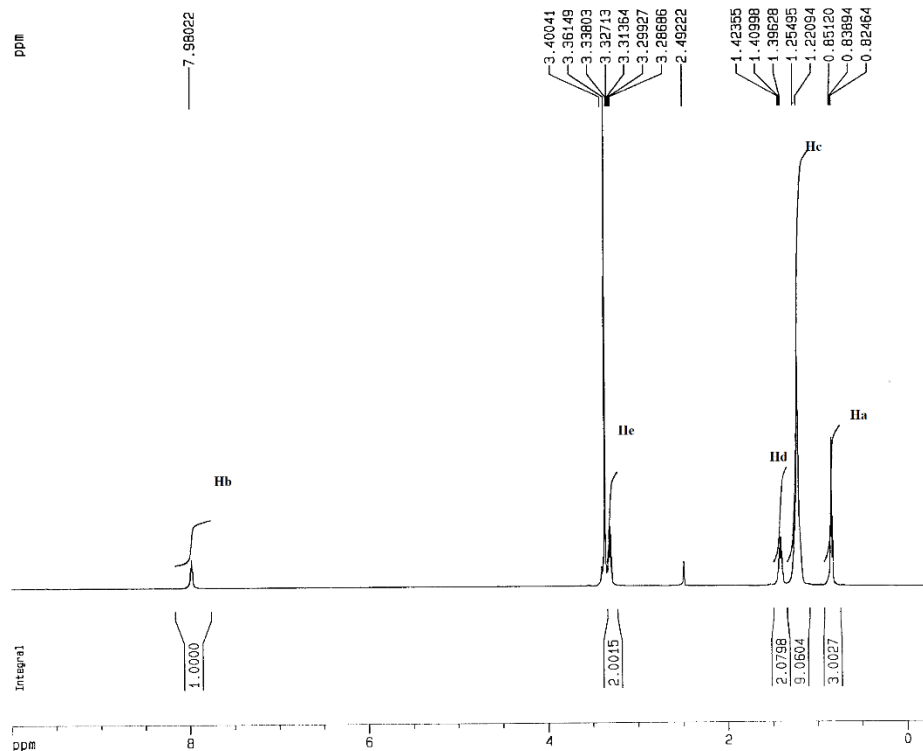
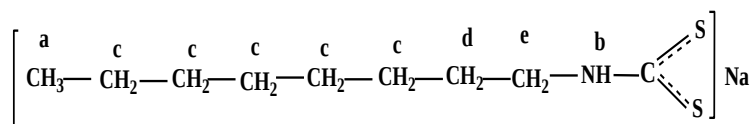
شکل ۳۶- طیف ¹H NMR کمپلکس [Ni(n-Bu-dtc)₂]



شکل ۳۷- طیف ¹H NMR لیگاند (n-Hex-dtcNa)



شکل ۳۸- طیف ¹H NMR کمپلکس [Ni(n-Hex-dtc)₂]



Current Data Parameters
NAME zahedan
EXPNO 1979
PROCNO 1

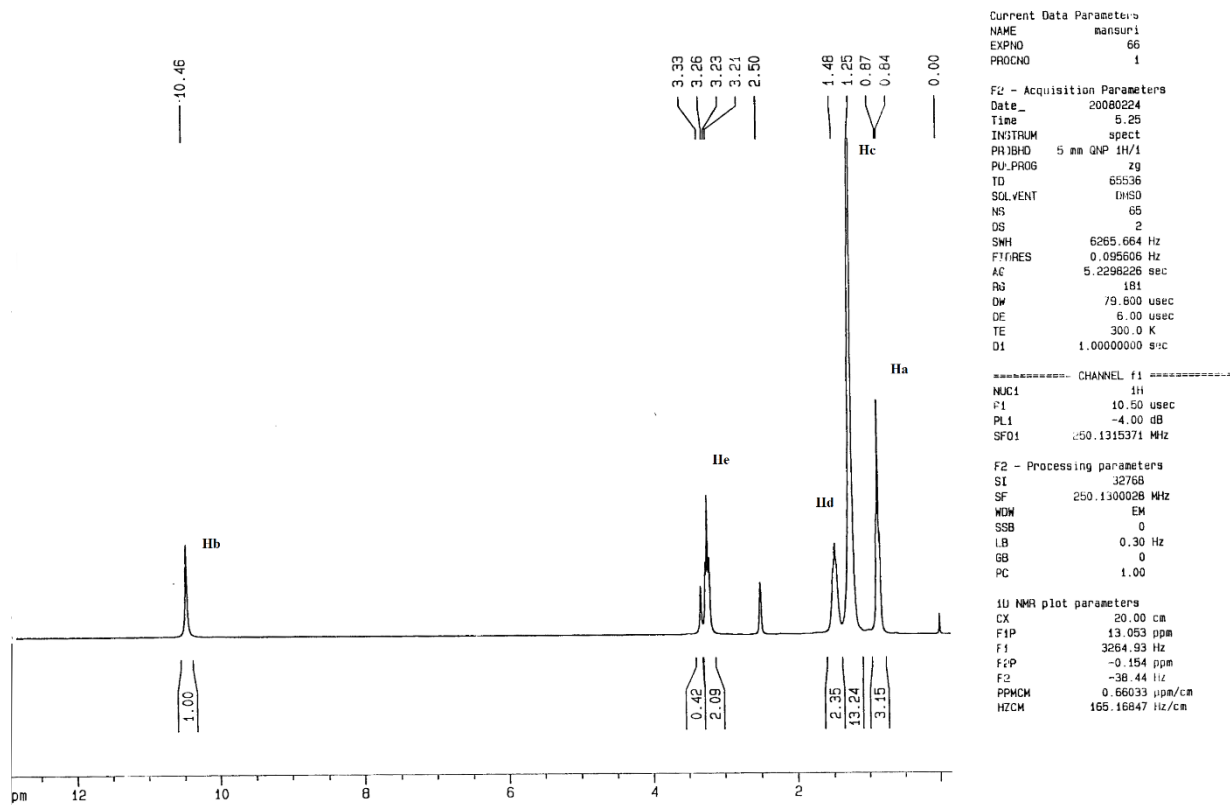
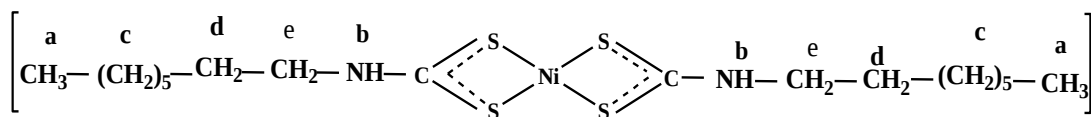
F2 - Acquisition Parameters
Date_ 20030818
Time 8.38
INSTRUM spect
PROBHD 5 mm BBI 1H-B
PULPROG zg
TD 32768
SOLVENT DMSO
NS 16
DS 2
SWH 10330.578 Hz
FIDRES 0.315264 Hz
AQ 1.5850212 sec
RG 46.3
DM 48.400 usec
DE 6.00 usec
TE 295.0 K
D1 6.00000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 8.02 usec
PL1 3.00 dB
SF01 500.1347512 MHz

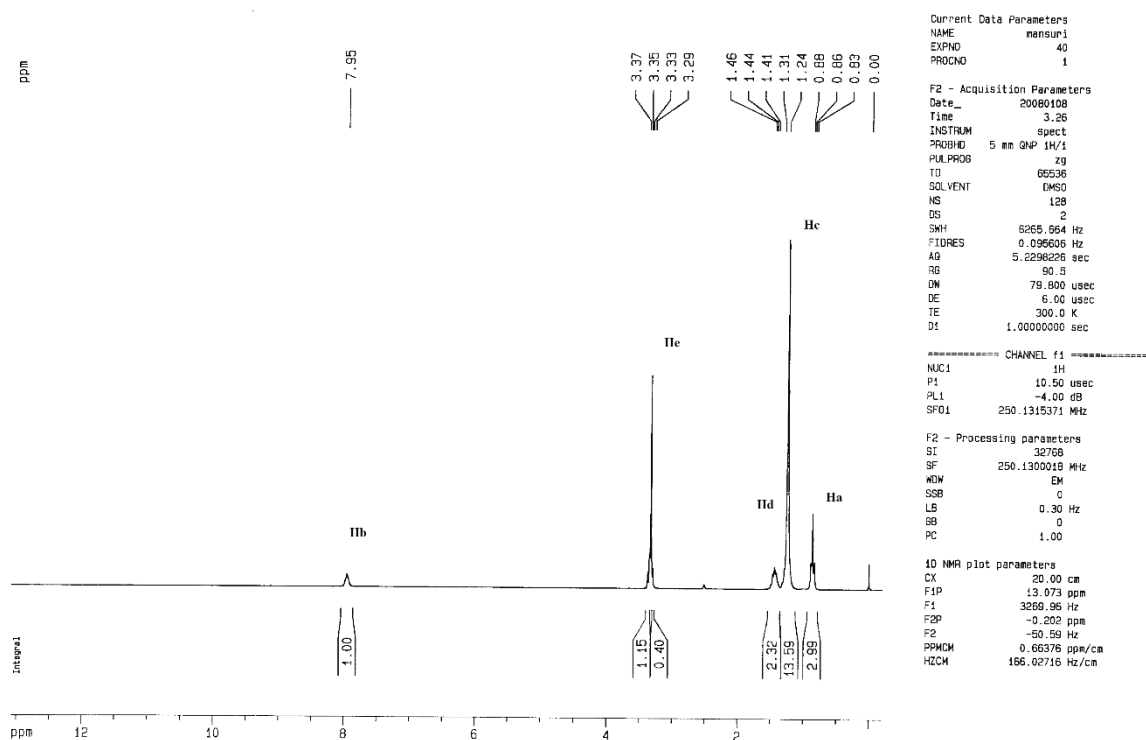
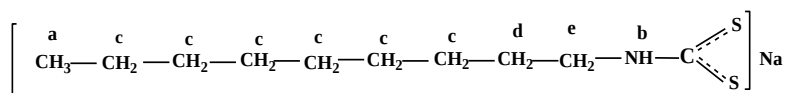
F2 - Processing parameters
SI 65536
SF 500.1300093 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
F1P 10.000 ppm
F1 5001.30 Hz
F2P -0.300 ppm
F2 -150.04 Hz
PPMCM 0.51500 ppm/cm
HZCM 257.56896 Hz/cm

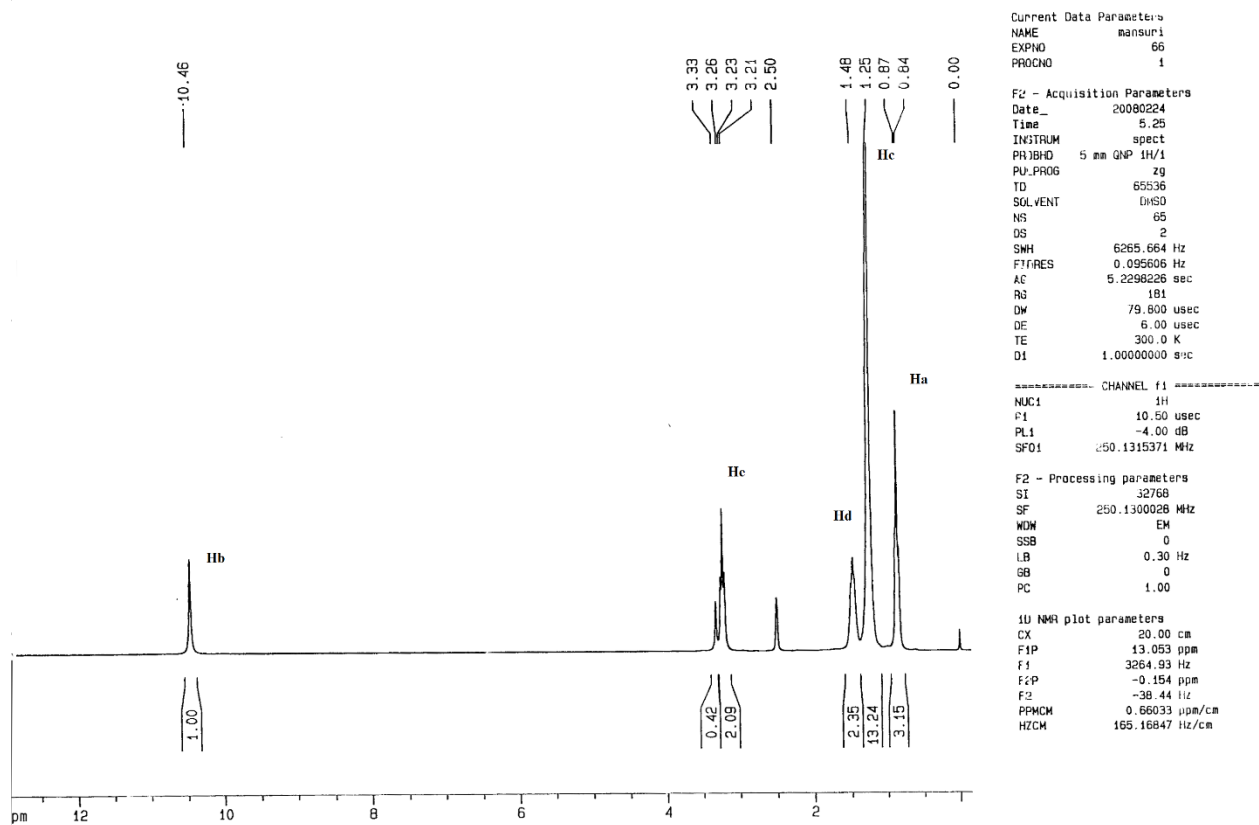
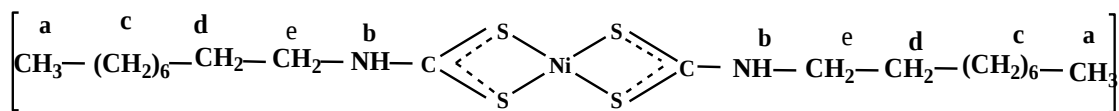
شکل ۳۹- طیف ^1H NMR لیگاند (n-Oct-dtcNa)



شکل ۴۰- طیف ^1H NMR کمپلکس $[\text{Ni}(\text{n-Oct-dtc})_2]$



شکل ۴۱- طیف ^1H NMR لیگاند (n-Non-dtcNa)



شکل ۴۲- طیف ¹H NMR کمپلکس [Ni(n-Non-dtc)₂]