Electronic Supporting information

Synthesis of Bis(propargyl) Aromatic Esters and Ethers: A Potential Replacement for Isocyanate Based Curators

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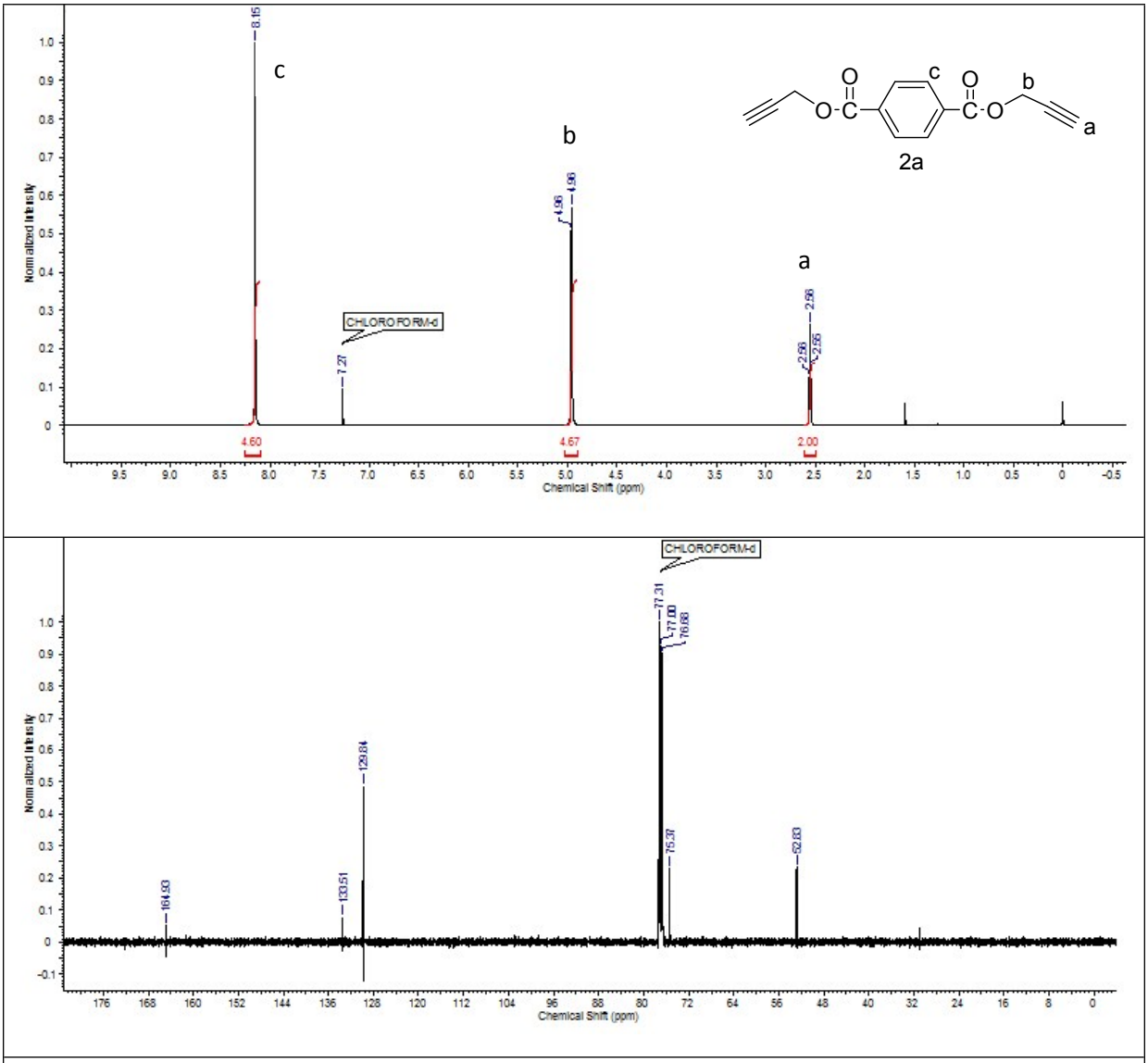
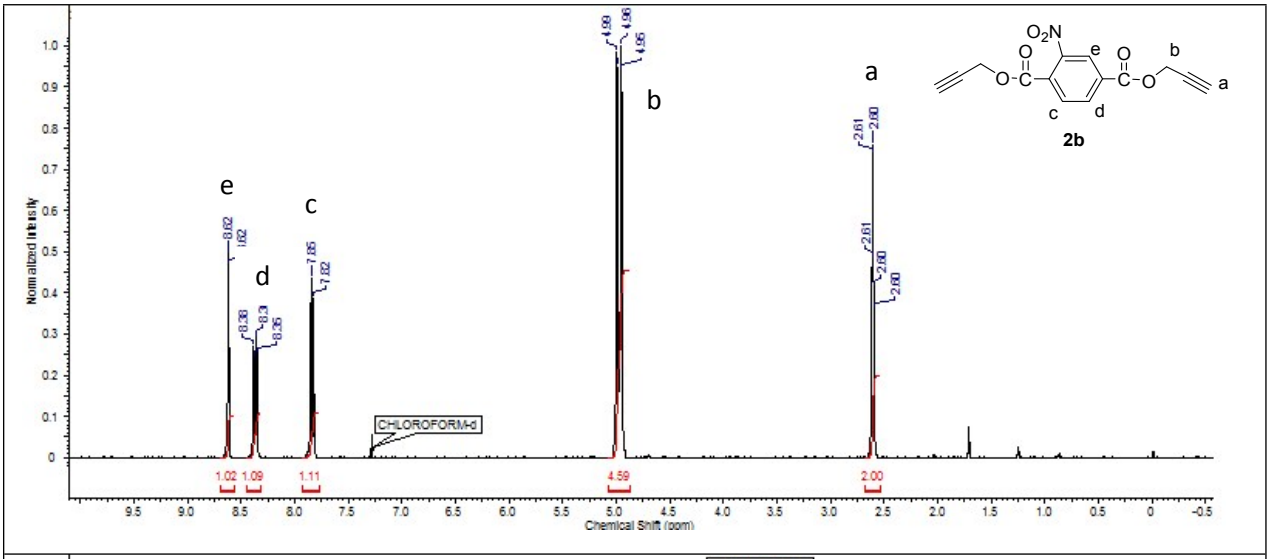
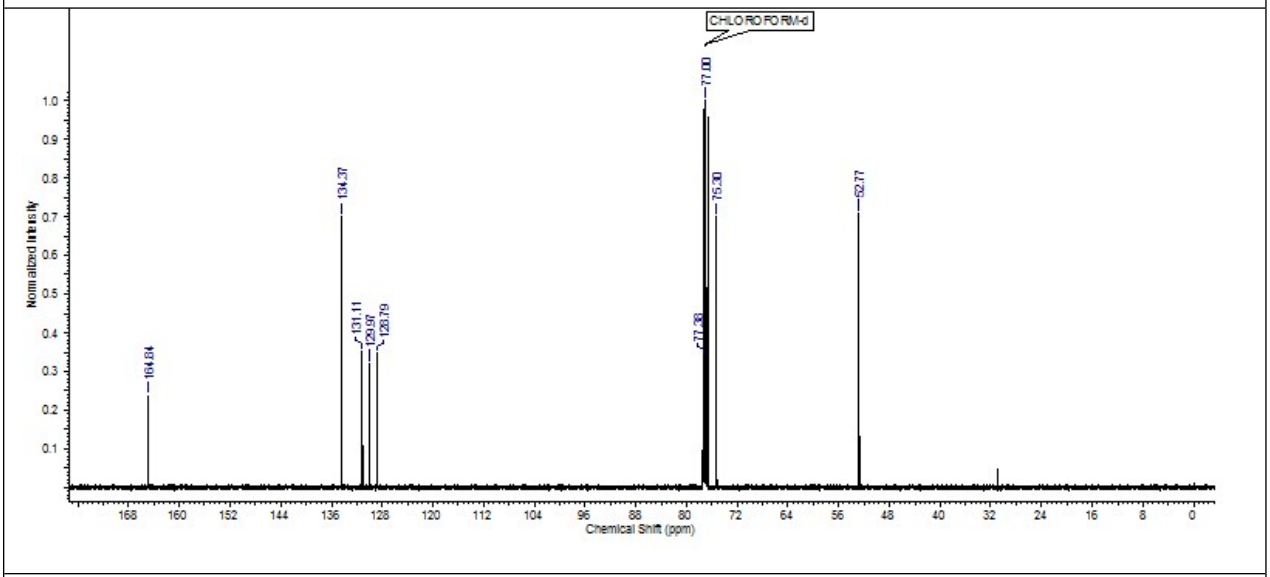
Methods

^{1}H and ^{13}C NMR spectra were recorded using Varian 300 MHz instrument in deuterated chloroform/dimethyl sulfoxide (DMSO) where Tetramethylsilane(TMS) was used as internal standard. FT-IR spectra were recorded on Nicolet FTIR-5700 spectrophotometer using ATR mode. High performance liquid chromatography (HPLC) studies were undertaken on Ultimate_3000 Dionex HPLC system, at operating temperature 25°C by using reverse phase C-18 column (4mm x 250mm), mobile phase acetonitrile/water (60:40), flow rate 1 ml/minute, injection volume 10 µl in isocratic mode. Gas chromatography-mass spectroscopy (GC-MS) studies were carried out on a Perkin Elmer, Clarus 500 instrument operating at source temperature 200 °C and helium is used as carrier gas.

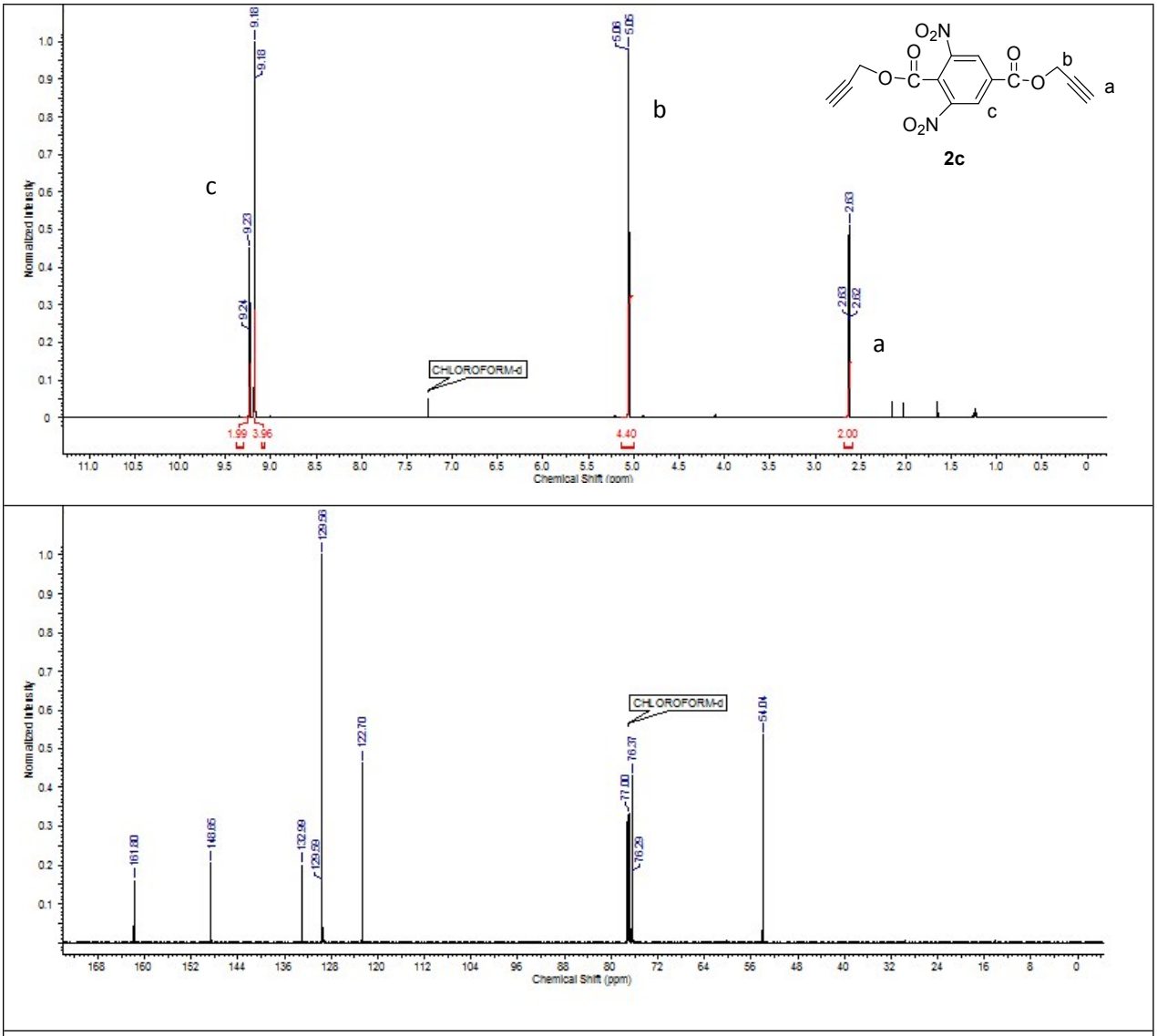


^{1}H & ^{13}C-NMR(300 MHz, $CDCl_3$) of compound of **2a**

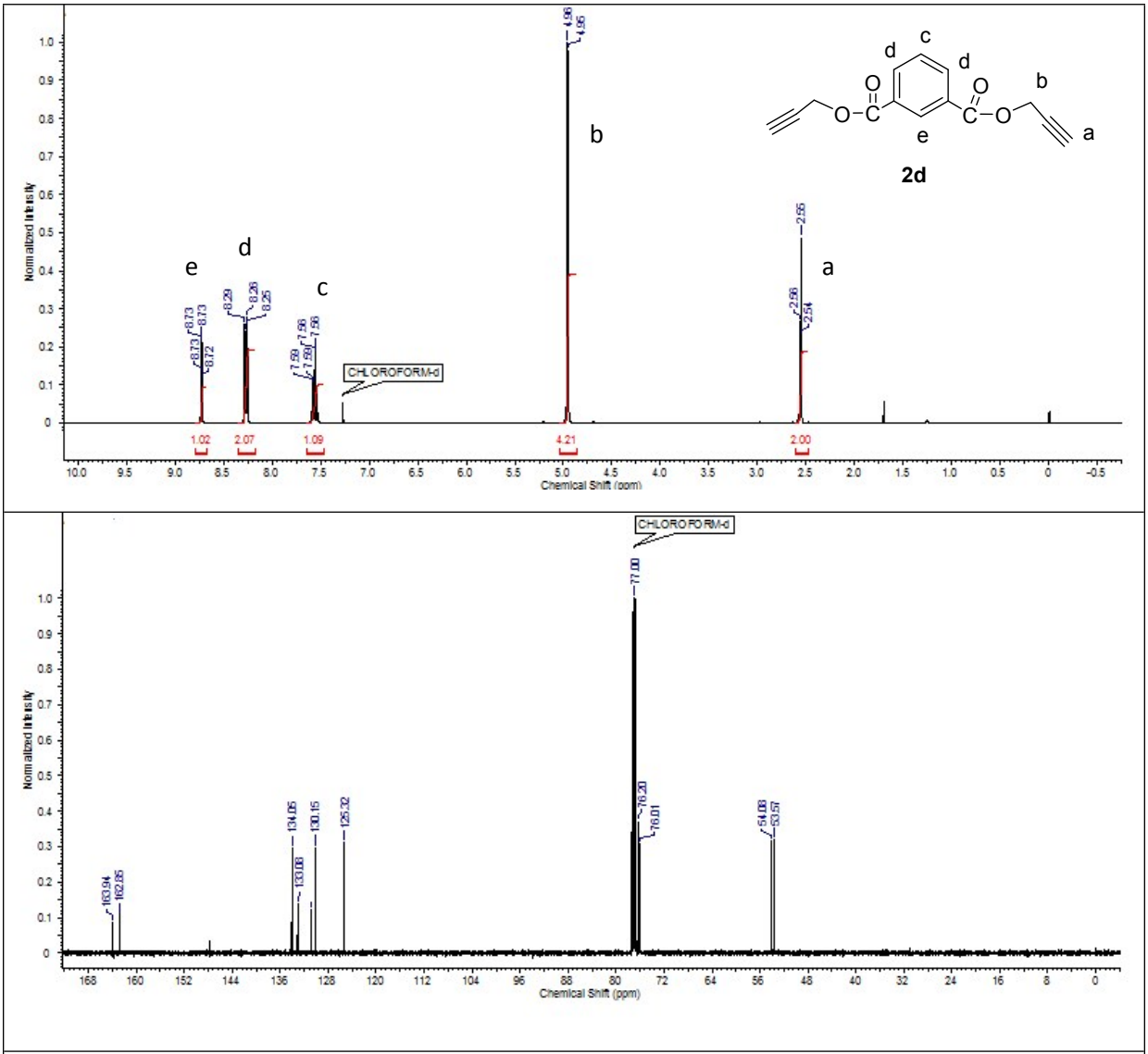




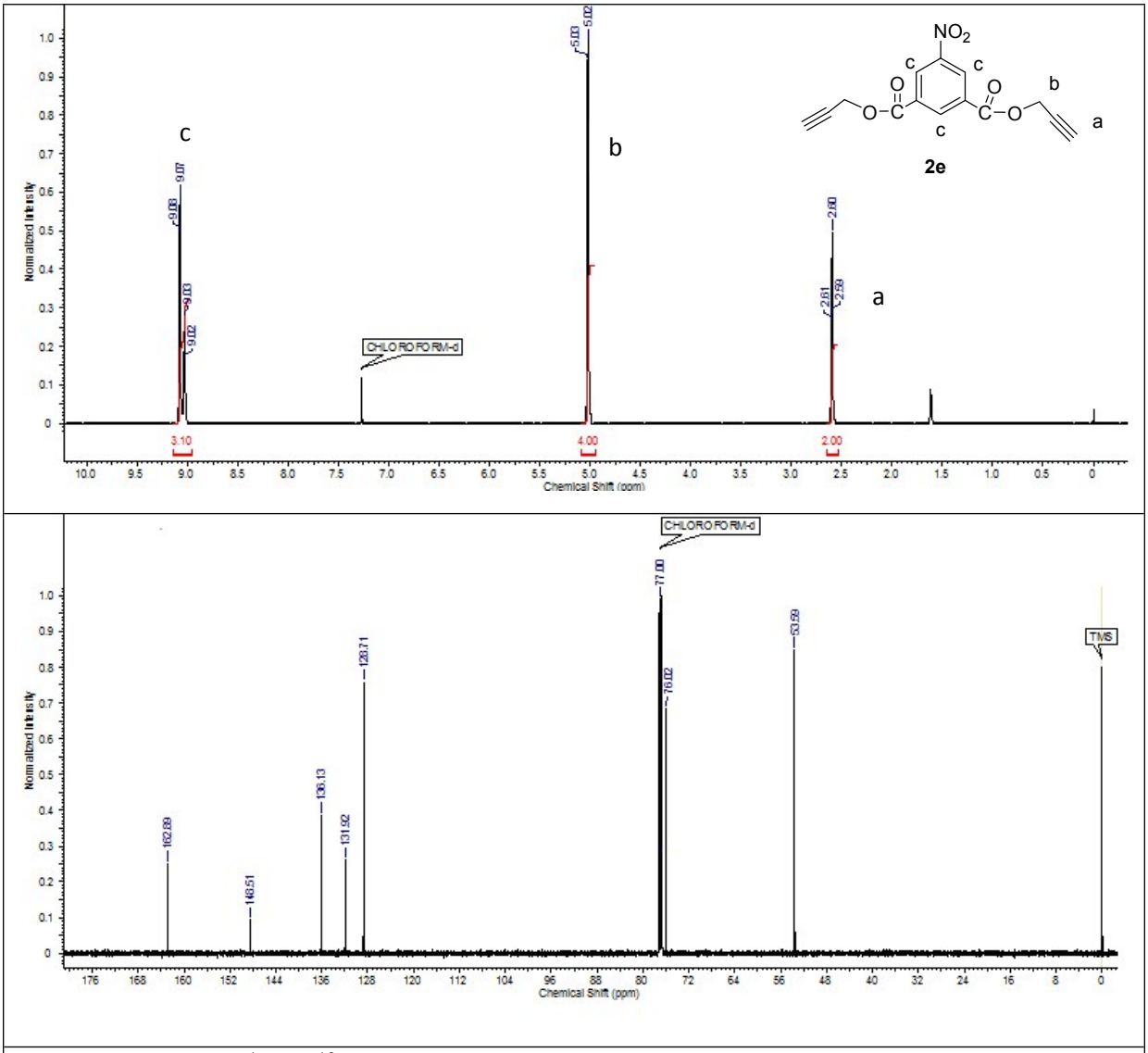
^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **2b**



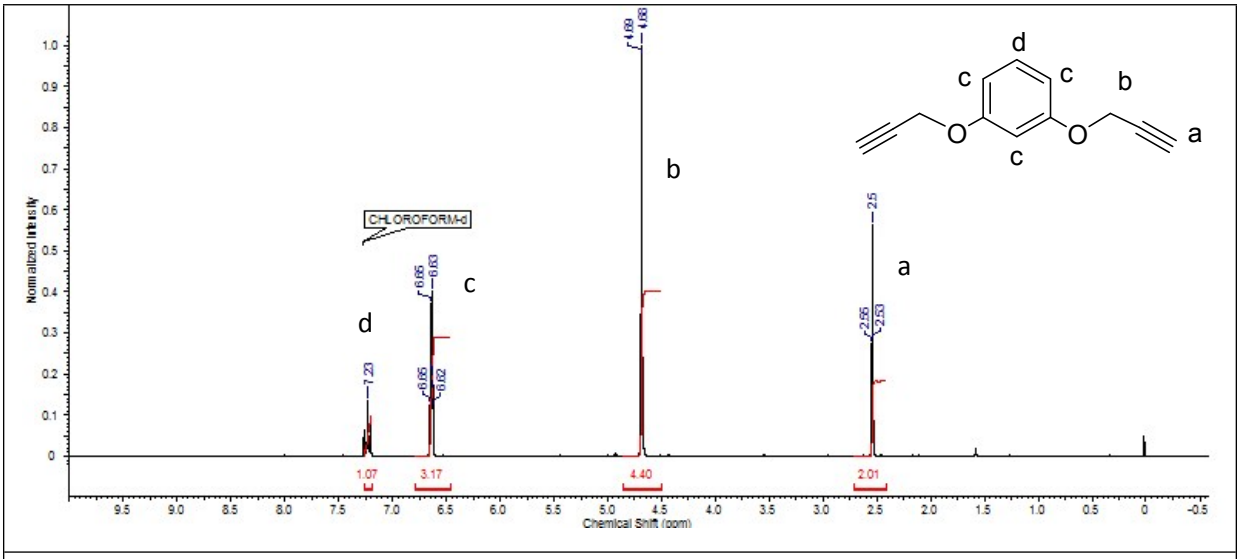
^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **2c**

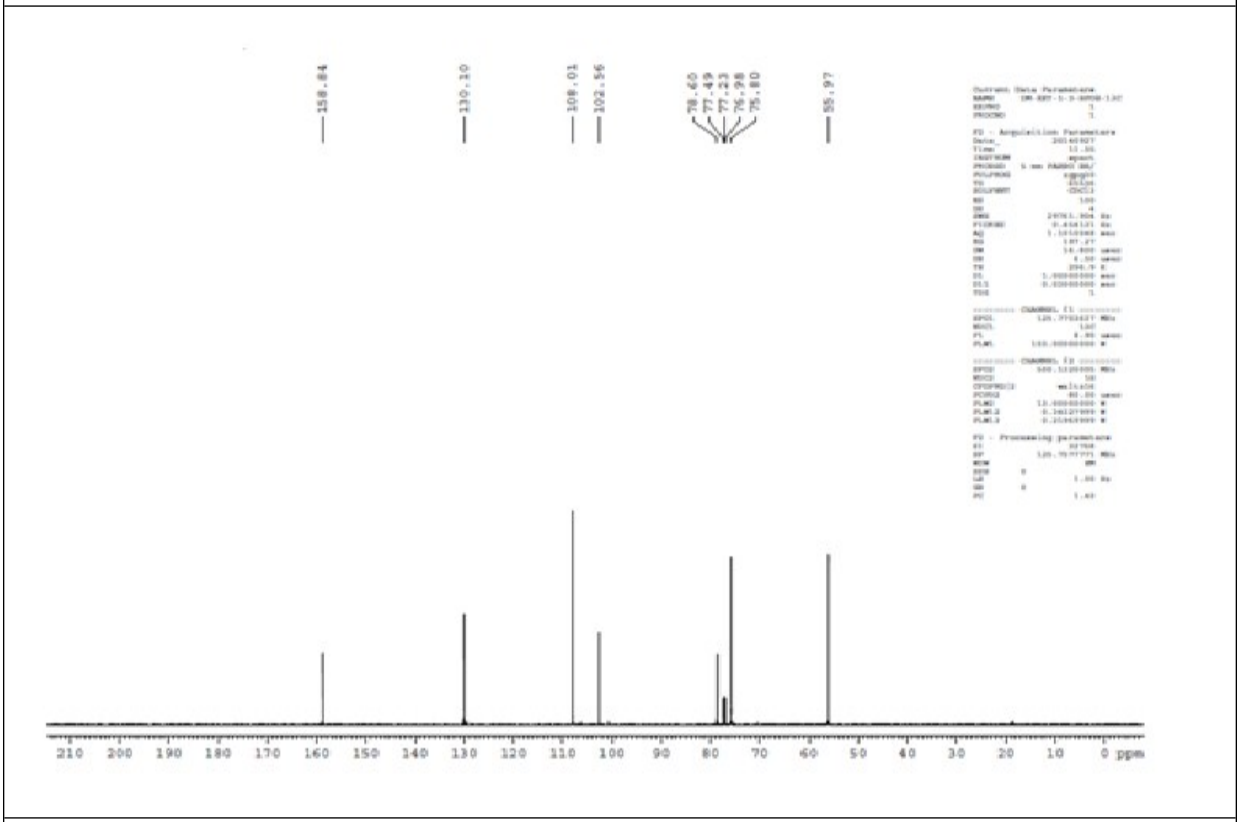


^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **2d**

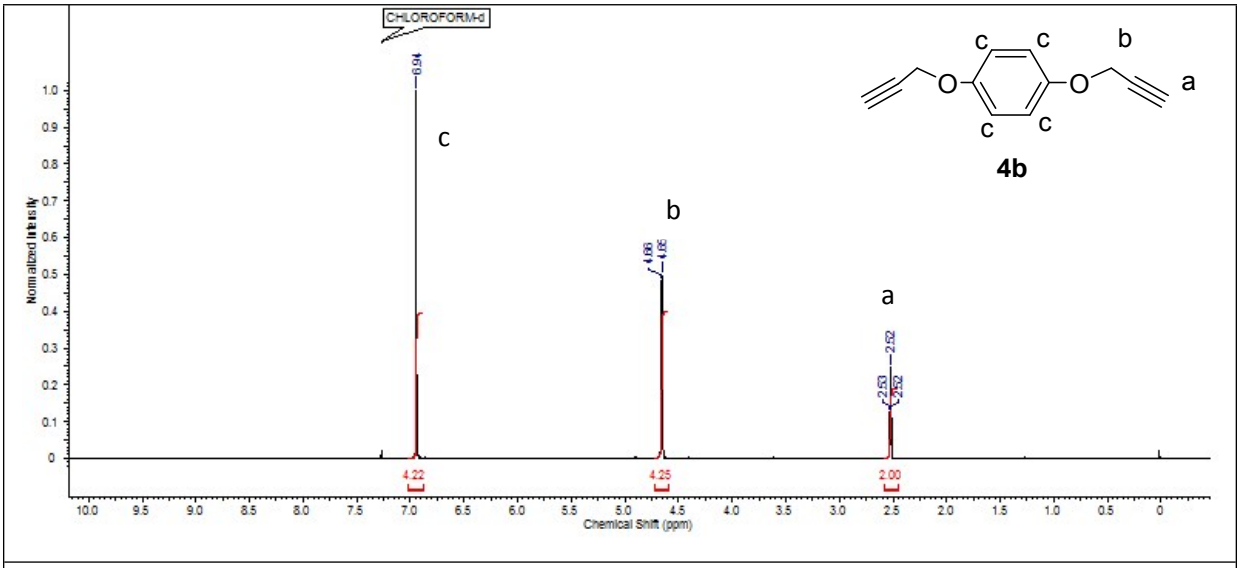


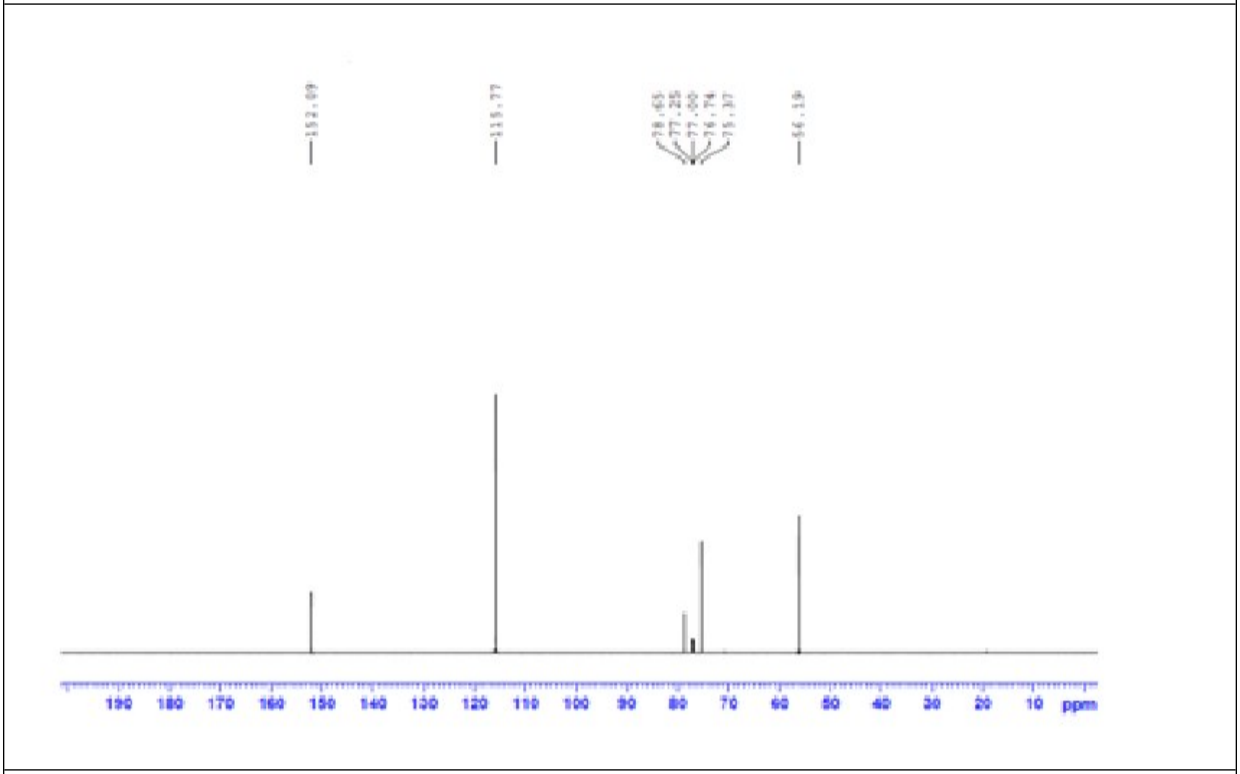
^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **2e**



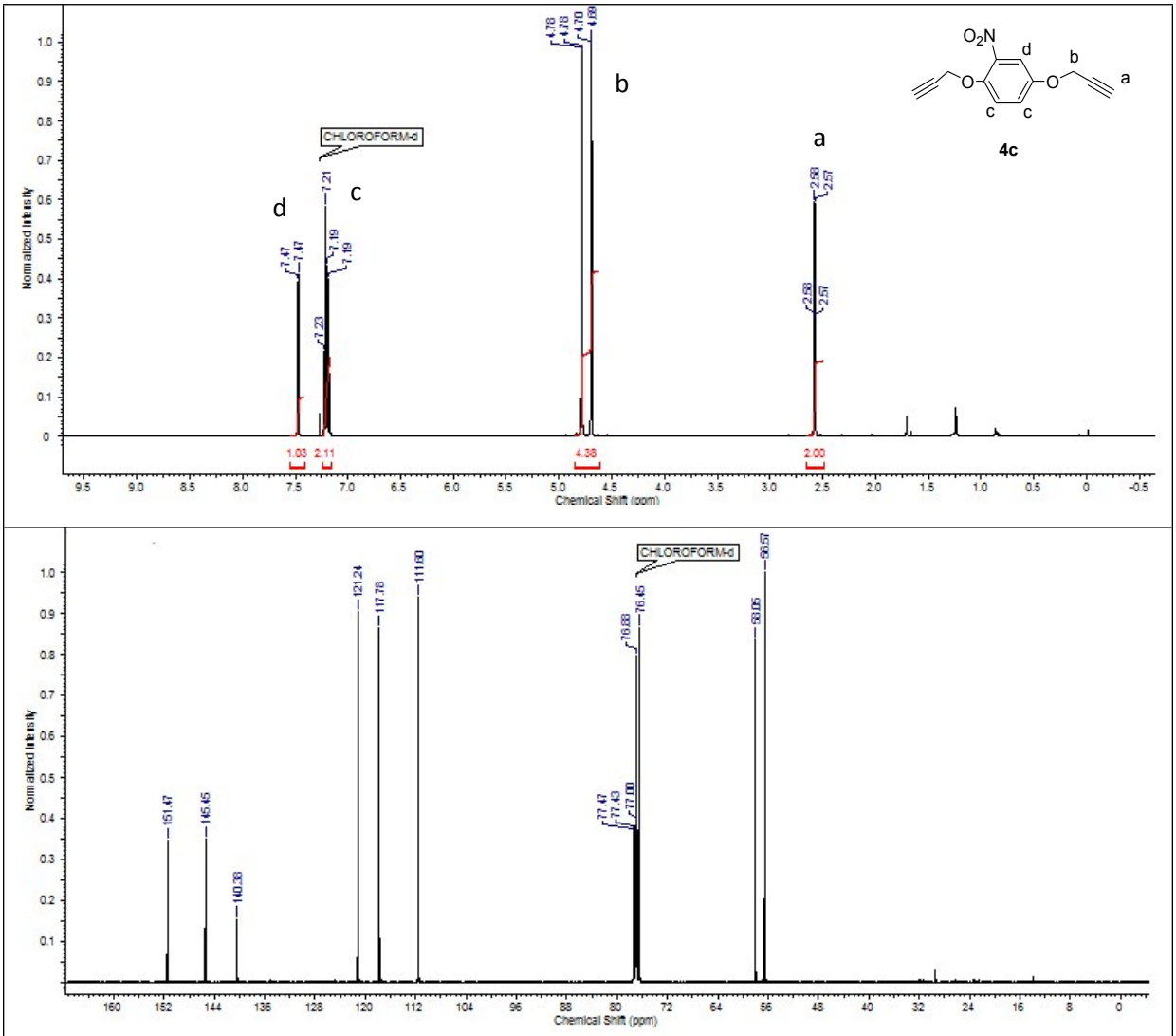


^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **4a**

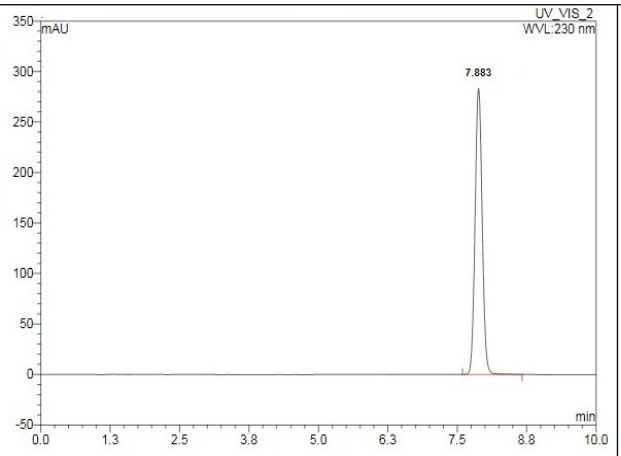




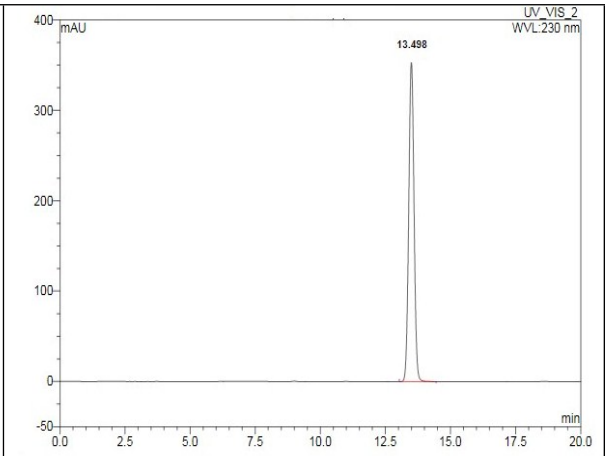
^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **4b**



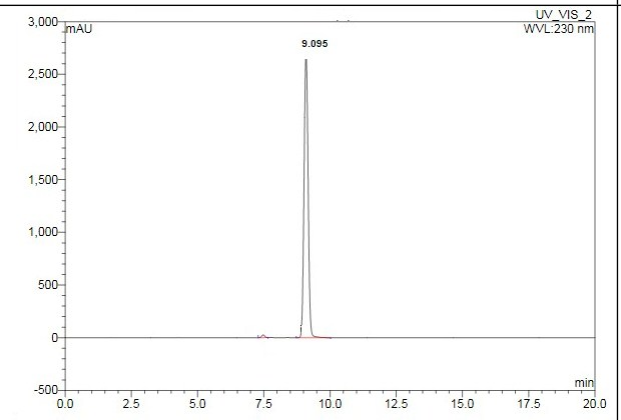
^{1}H & ^{13}C-NMR (300 MHz, $CDCl_3$) of compound of **4c**



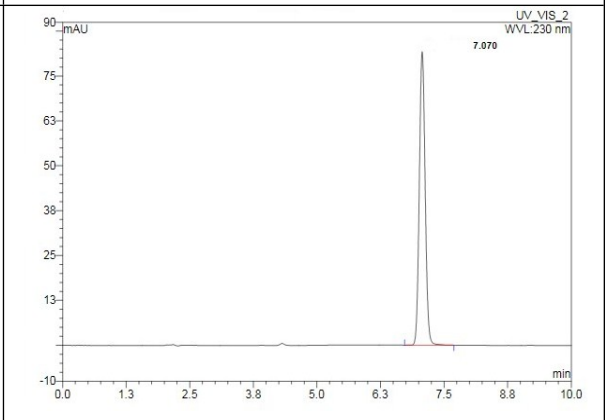
HPLC Chromatograph of 2b



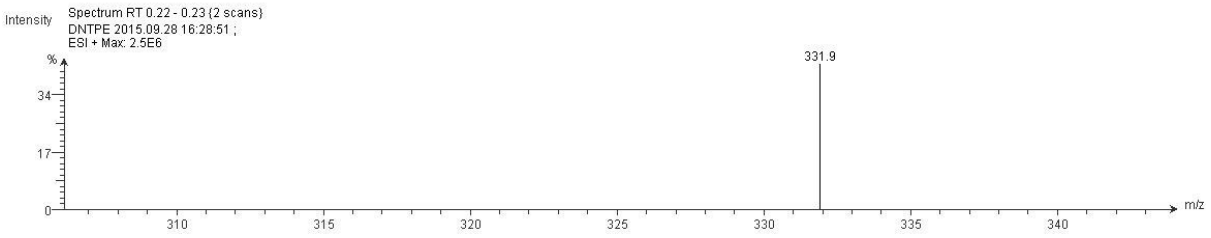
HPLC Chromatograph of 2c



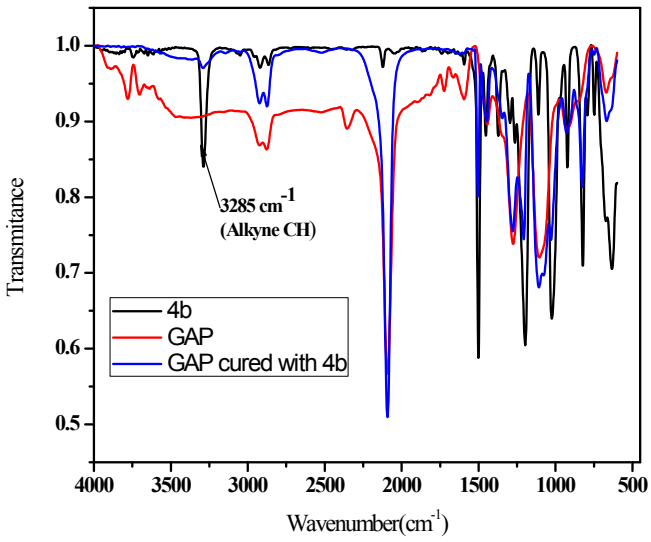
HPLC Chromatograph of 2e



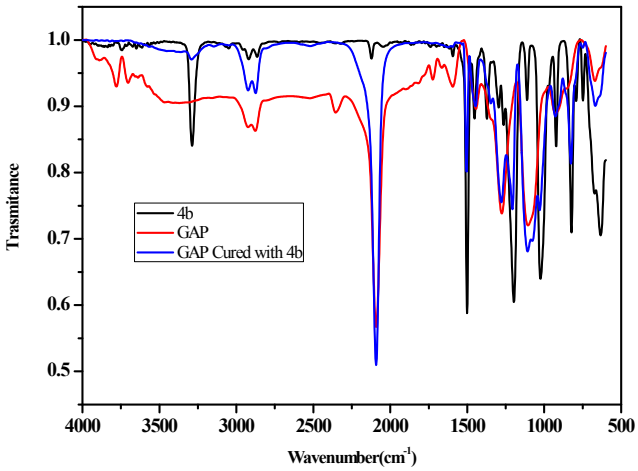
HPLC Chromatograph of 4c



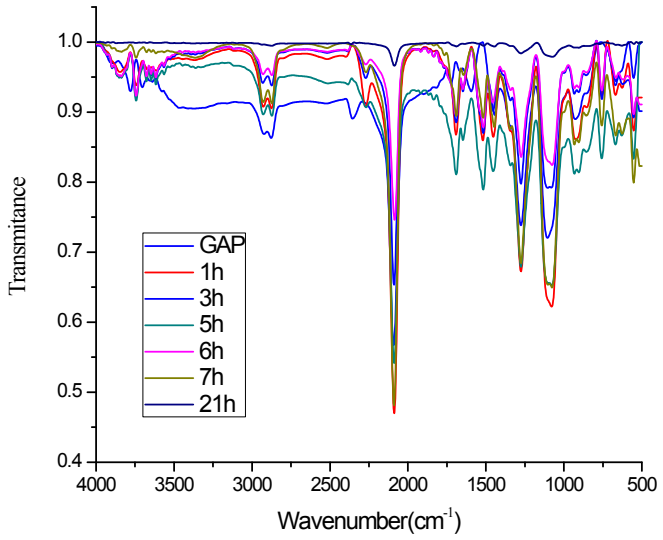
MS of 2c



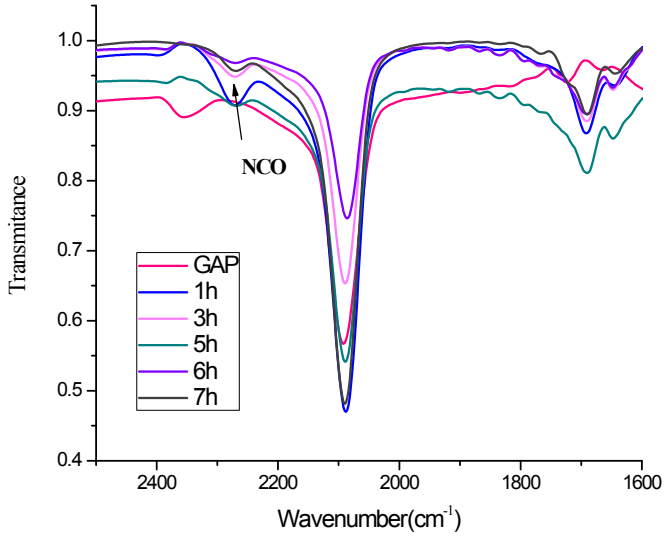
FTIR Spectrum of 4b, GAP and GAP cured with 4b at 30 °C



FTIR Spectrum of 4b, GAP and GAP cured with 4b at 50 °C



FTIR Spectrum of GAP and GAP cured with Desmodur N-100 presence of catalyst DBTDL



FTIR spectrum of mixture of GAP and Desmodur N-100 presence of catalyst DBTDL