

Supplementary Material

An Alternating Donor-Acceptor Conjugated Polymer Based on Benzodithiophene and [3,4- c]pyrrole-4,6-dione: Synthesis, Characterization and Application in Photovoltaic Devices

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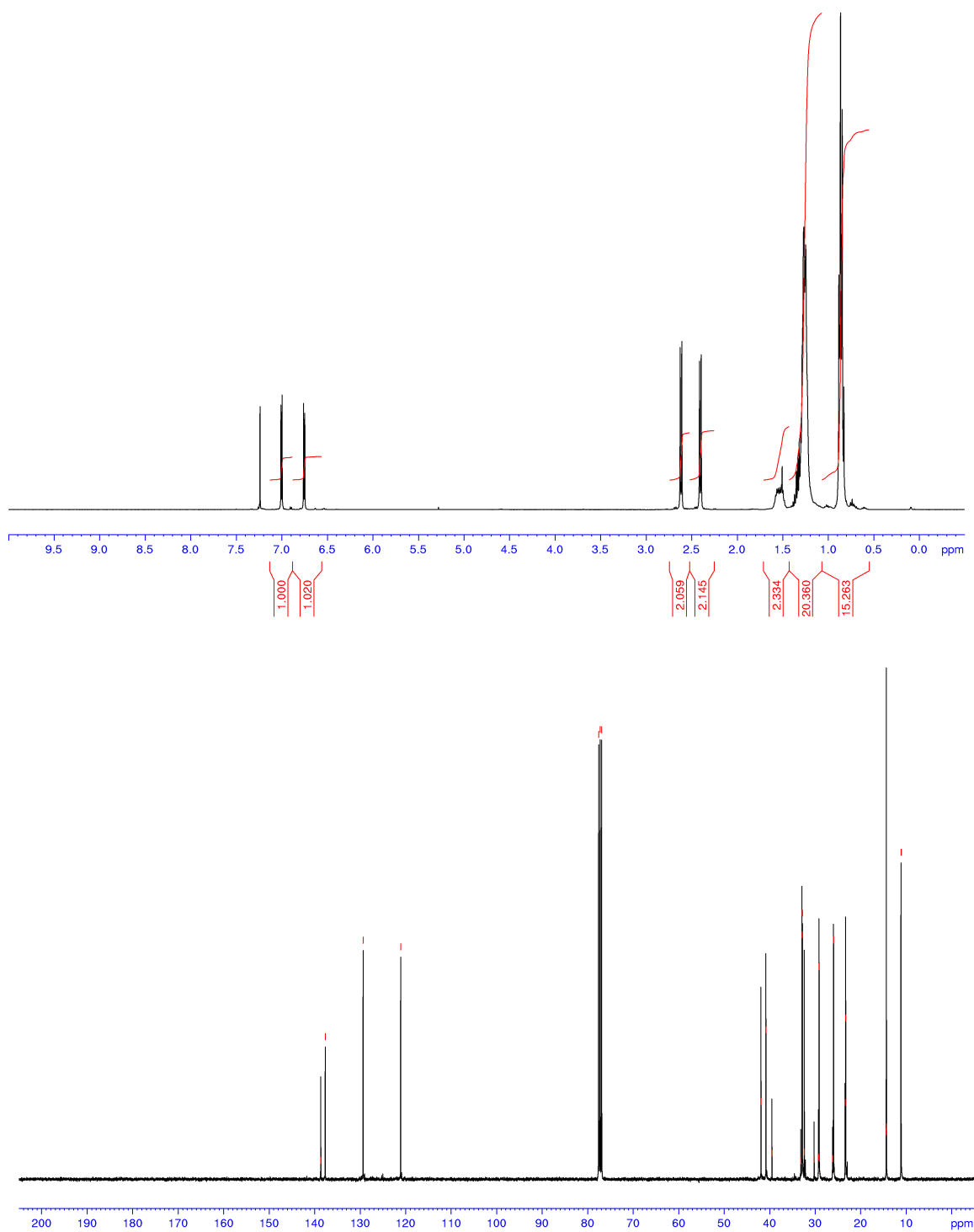


Figure 1 ¹H-NMR (400 MHz) and ¹³C-NMR (100 MHz) in CDCl₃ of compound **2**

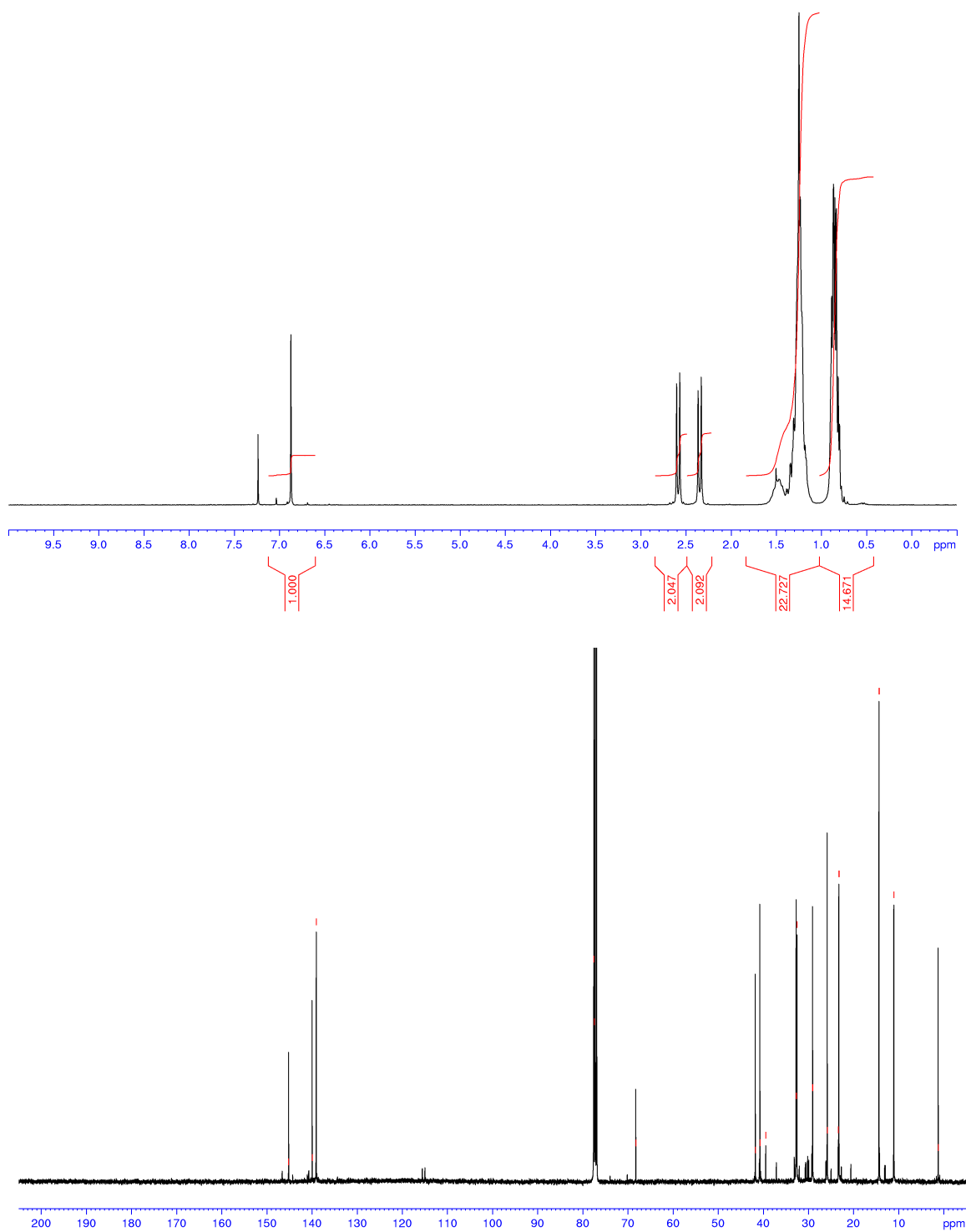


Figure 2 $^1\text{H-NMR}$ (200 MHz) and $^{13}\text{C-NMR}$ (100 MHz) in CDCl_3 of compound **3**

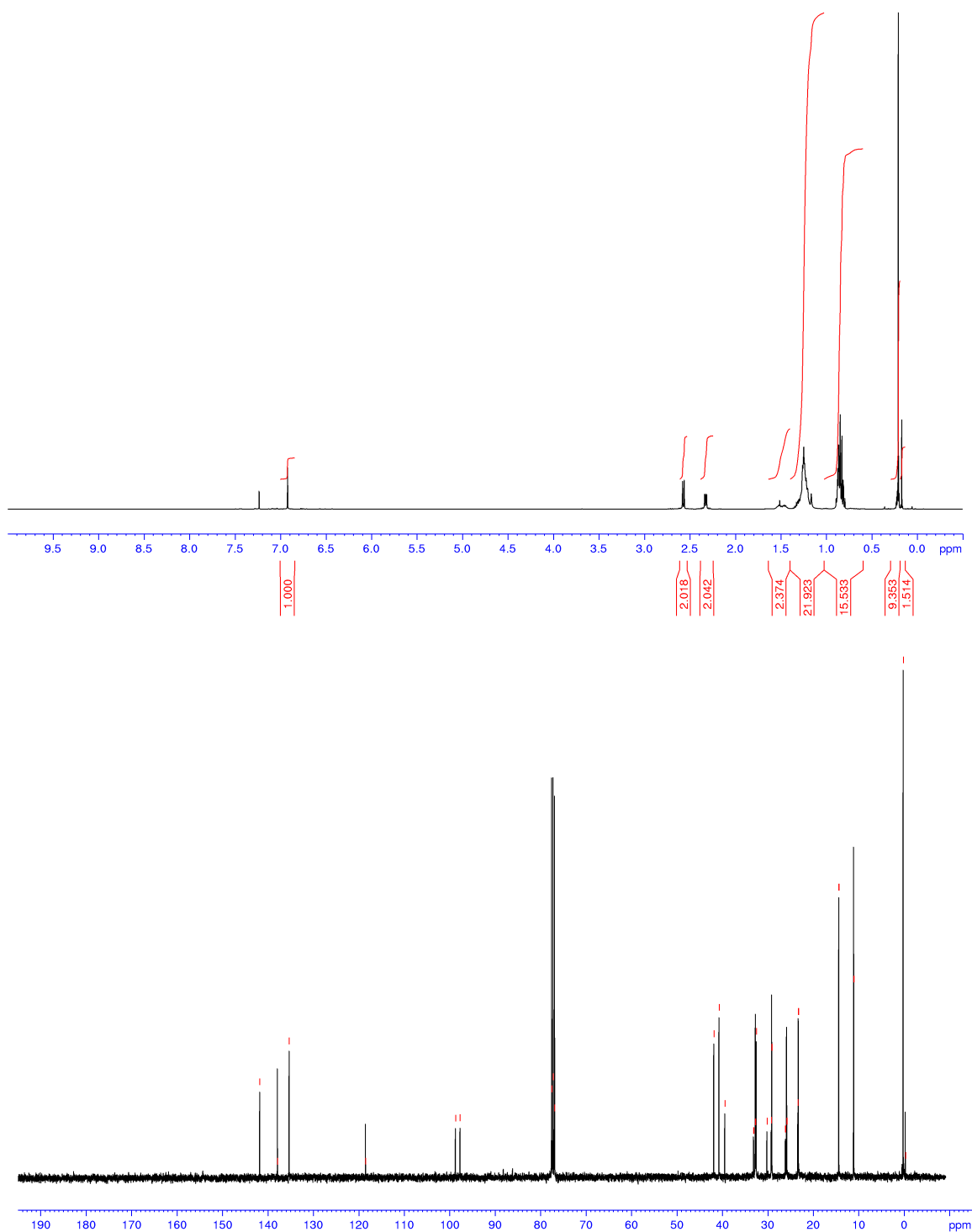


Figure 3 $^1\text{H-NMR}$ (400 MHz) and $^{13}\text{C-NMR}$ (100 MHz) in CDCl_3 of compound **4**

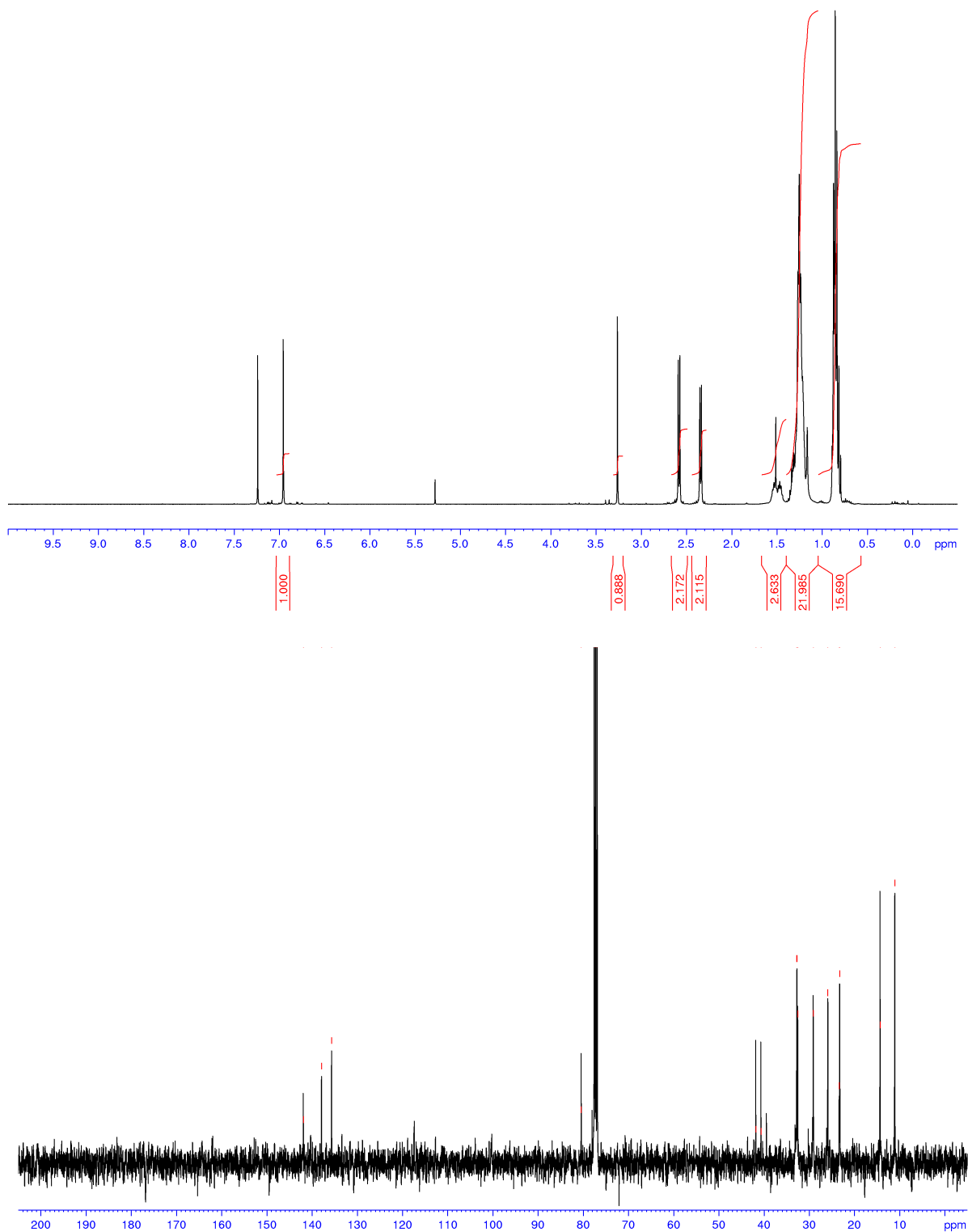


Figure 4 $^1\text{H-NMR}$ (400 MHz) and $^{13}\text{C-NMR}$ (100 MHz) in CDCl_3 of compound **5**

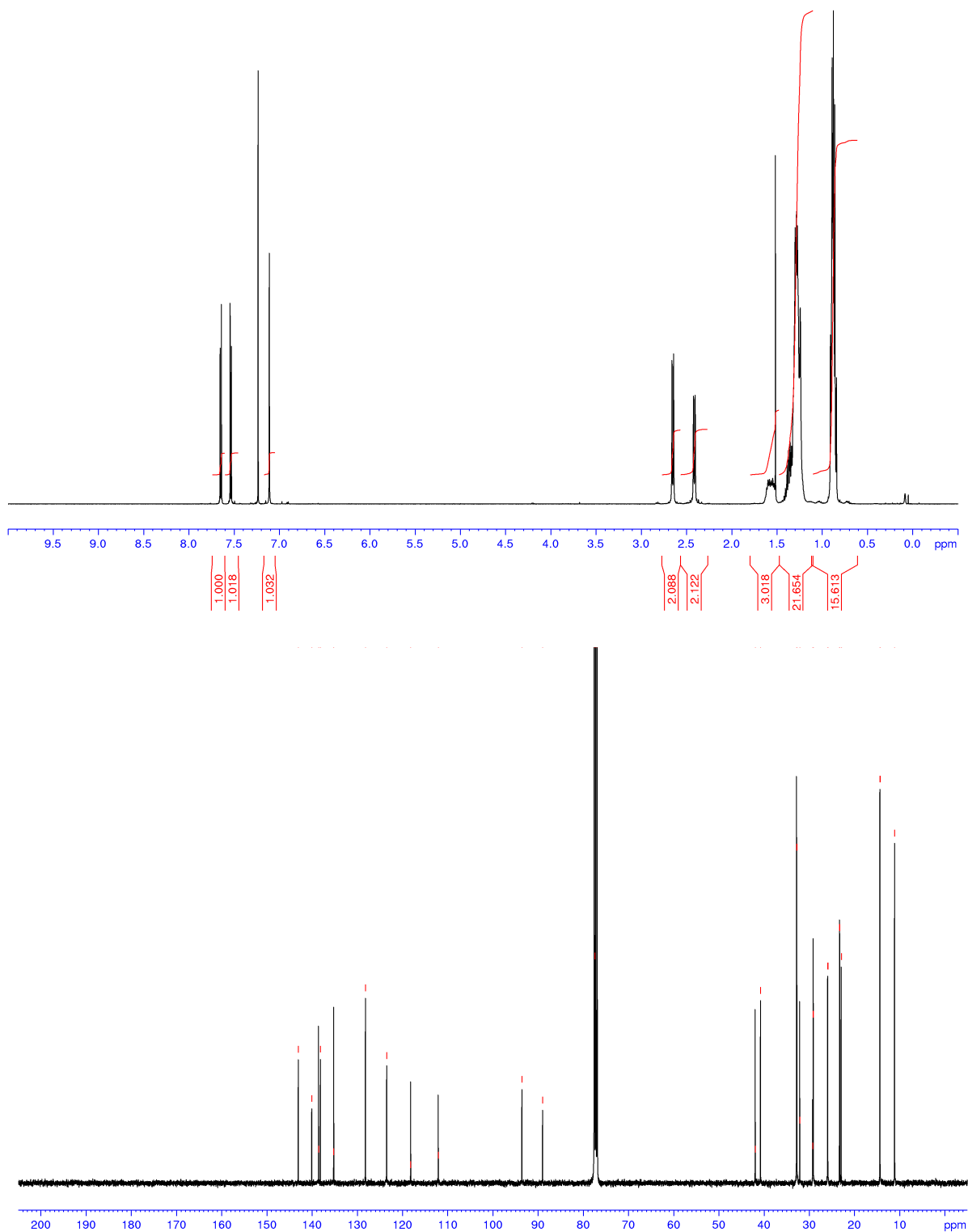


Figure 5 $^1\text{H-NMR}$ (400 MHz) and $^{13}\text{C-NMR}$ (100 MHz) in CDCl_3 of compound 7

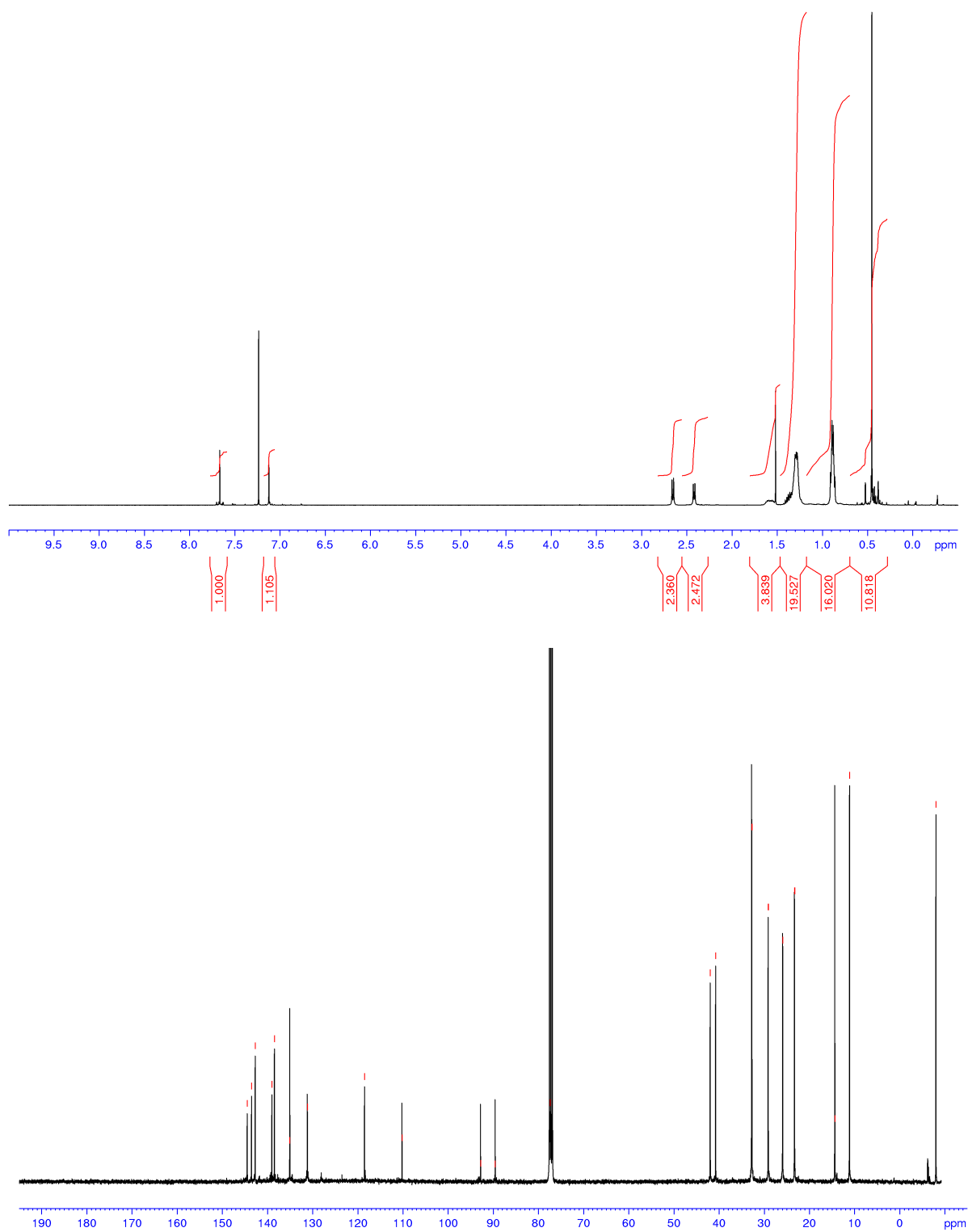


Figure 6 $^1\text{H-NMR}$ (400 MHz) and $^{13}\text{C-NMR}$ (100 MHz) in CDCl_3 of compound **8**

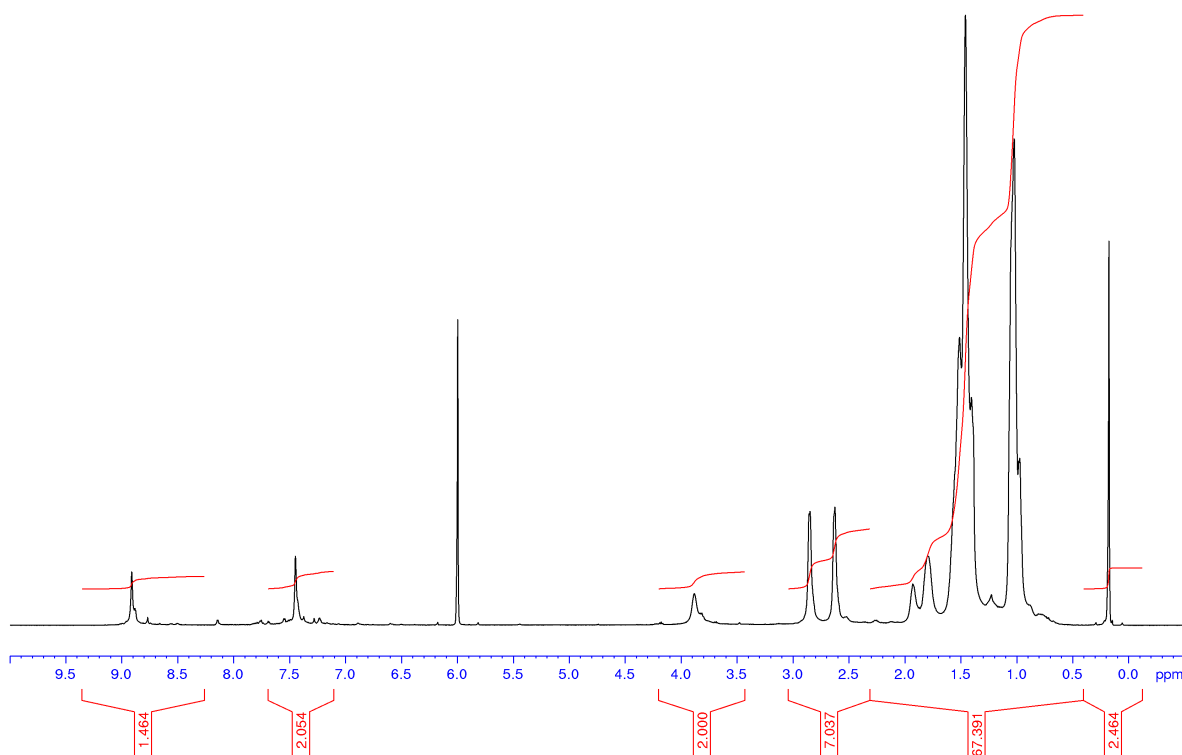
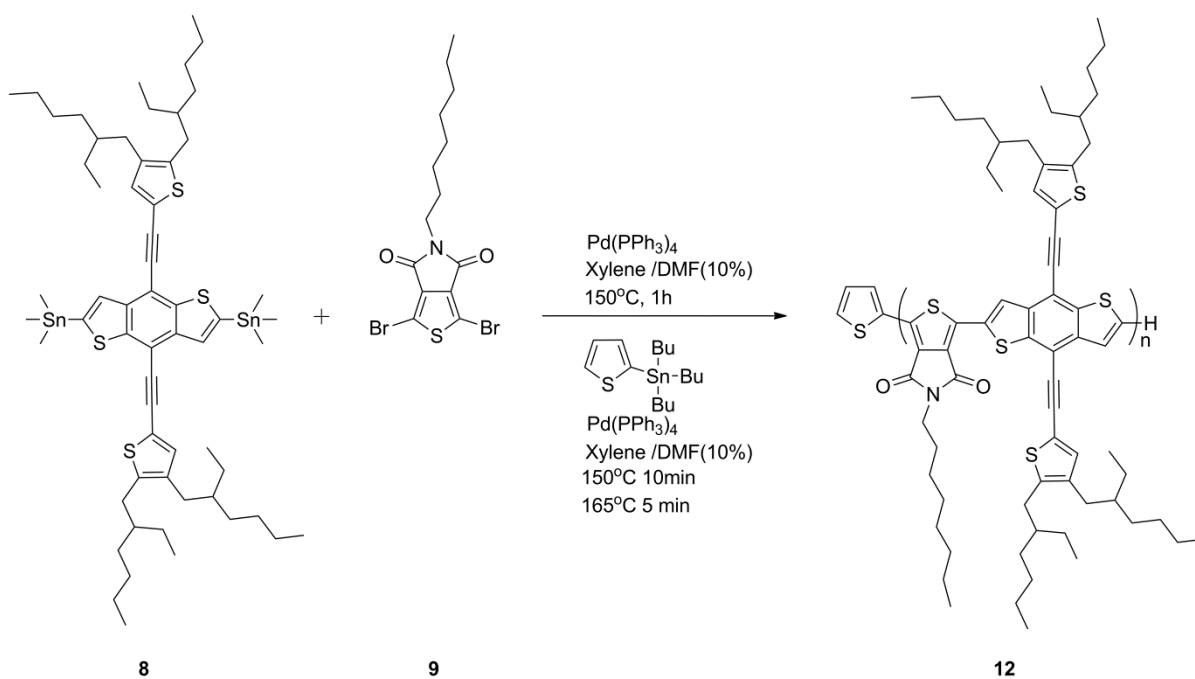


Figure 7 $^1\text{H-NMR}$ (500 MHz) spectrum in 1,1,2,2-tetrachloroethane (TCE) at 150 °C of rod polymer **12**



Scheme 1 Synthesis of the new D-A conjugated polymer **12**.