EDOT-Containing Azomethine – An Easily Prepared Electrochromically Active Material with Tuneable Colours

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Experimental Section

General Procedures

All reagents were commercially available and were used as received unless otherwise stated. Anhydrous and deaerated solvents were obtained with a solvent purification system. ^{1}H-NMR and ^{13}C-NMR spectra were recorded on a 400 MHz spectrometer with the appropriate deuterated solvents.

Spectroscopic Measurements

The absorption measurements were done on a spectrometer and the fluorescence studies were performed on a fluorimeter after deaerating the samples thoroughly with nitrogen for 20 minutes.

Electrochemical Measurements

Cyclic voltammetric measurements were done on a potentiostat system. Compounds were dissolved in anhydrous and deaerated dichloromethane at 10^{-4} M with 0.1 M NBu_4PF_6. A platinum electrode was used as the working electrode with a platinum wire as the auxiliairy electrode and an Ag/AgCl electrode as the reference electrode.

Spectroelectrochemical Measurements

Spectroelectrochemical measurements were done by coupling a potentiostat with a spectrometer using a cuvette designed for this experiment and a platinum mesh electrode as the working electrode. The other parameters are the same as in normal cyclic voltammery experiments that was described above.

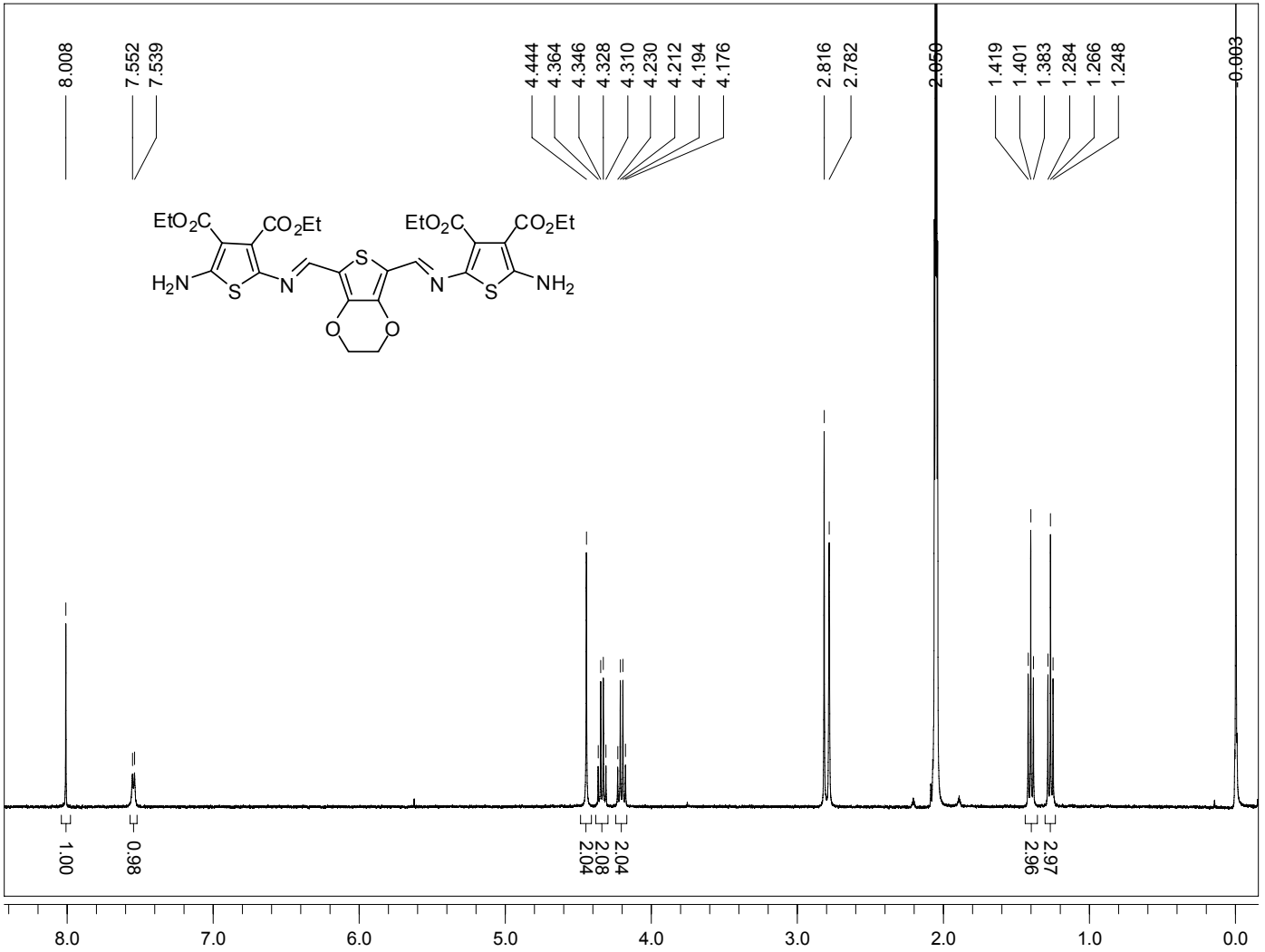

Figure 1. ^{1}H NMR spectra of **2** in acetone-d_6.

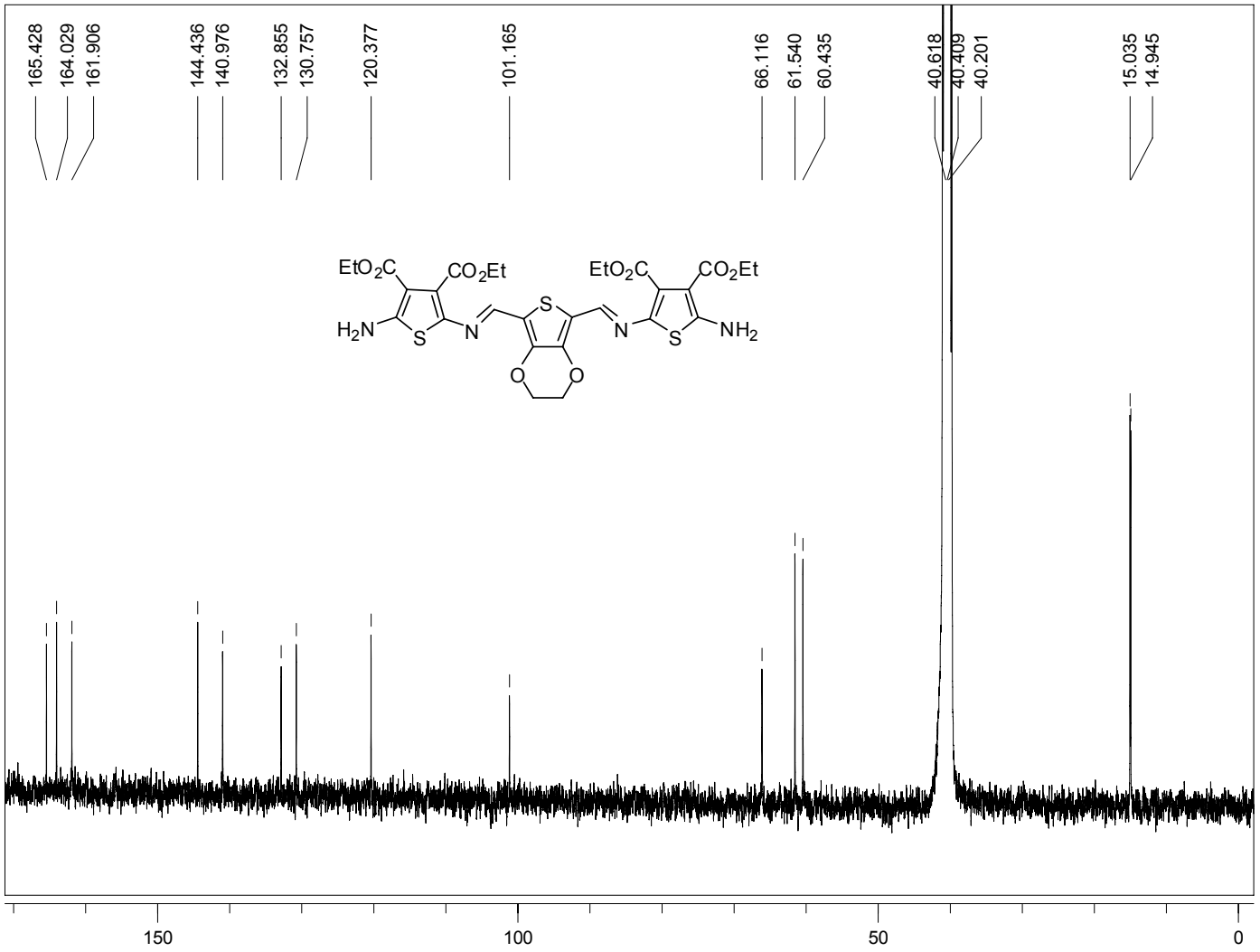

Figure 2. ^{13}C NMR spectra of **3** in DMSO-d_6