

## Supporting Information for:

### **A simple and efficient method for the facile access of highly functionalized pyridines and their fluorescence property studies**

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## Fluorescence quantum yield of pyridine derivatives (1b-1p, 5b & 5c) in chloroform solvent:

Sr. No	Compound	$\lambda_{\text{max}}^{\text{abs}}$	$\lambda_{\text{max}}^{\text{em}}$	$\Phi_f$
01.	<b>1b</b>	343	432	0.03
02.	<b>1c</b>	346	386	0.05
03.	<b>1d</b>	343	386	0.04
04.	<b>1e</b>	348	389	0.02
05.	<b>1f</b>	344	425	0.01
06.	<b>1g</b>	356	401	0.00
07.	<b>1h</b>	345	392	0.02
08.	<b>1i</b>	350	389	0.00
09.	<b>1j</b>	346	425	0.01
10.	<b>1k</b>	329	386	0.01
11.	<b>1l</b>	336	386	0.01
12.	<b>1m</b>	341	451	0.03
13.	<b>1n</b>	343	422	0.01
14.	<b>1o</b>	344	422	0.01
15.	<b>1p</b>	347	423	0.02
16.	<b>5b</b>	314	417	0.10
17.	<b>5c</b>	346	424	0.27

<sup>a</sup>Quantum yields were calculated with respect to quinine sulphate dihydrate in water.

$\Phi_f$  = Quantum yield

$\lambda_{\text{max}}^{\text{abs}}$  = Absorbance maxima

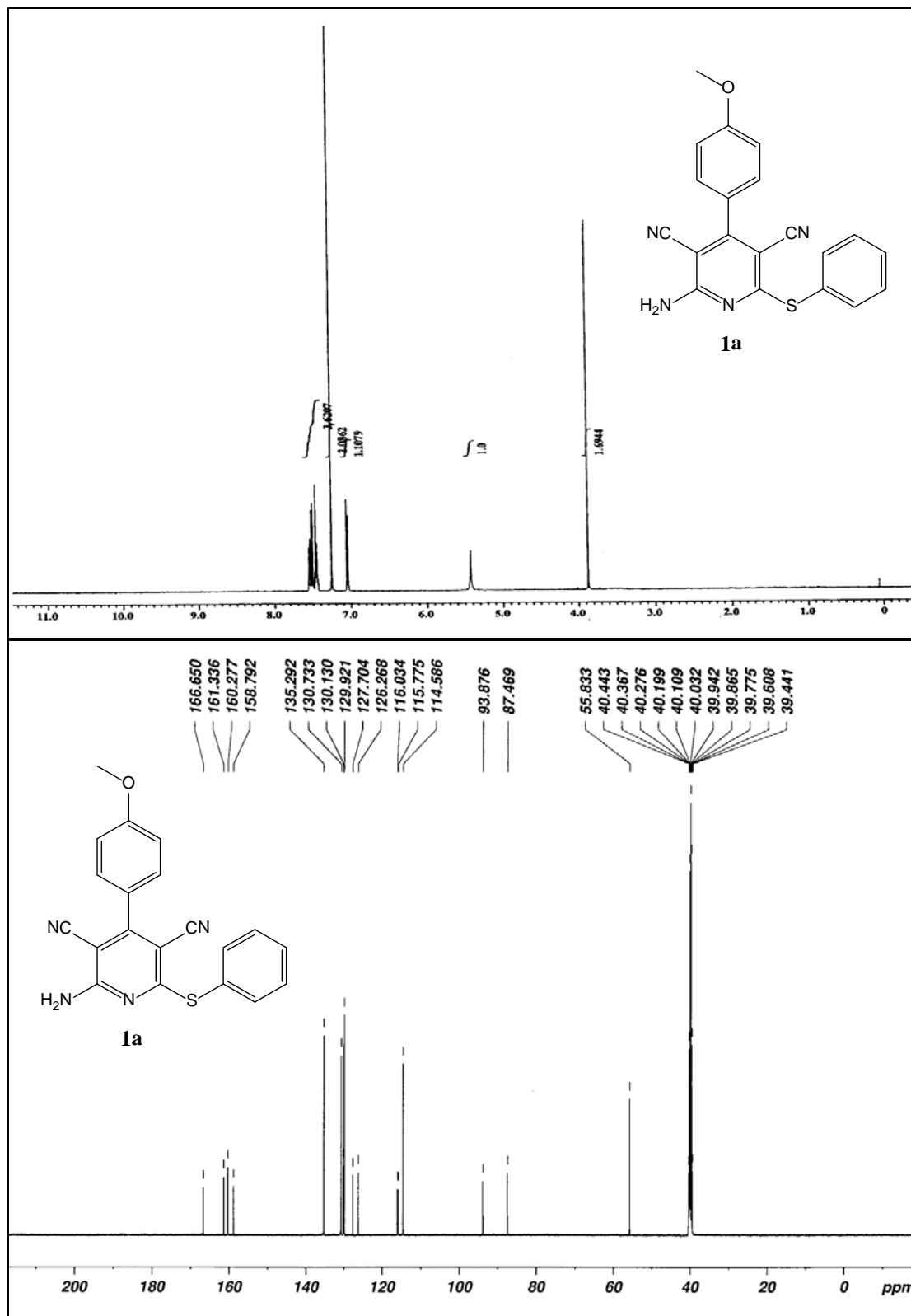
$\lambda_{\text{max}}^{\text{em}}$  = Fluorescence maxima

Fluorescence quantum yields ( $\Phi_f$ ) were calculated according to the equation.

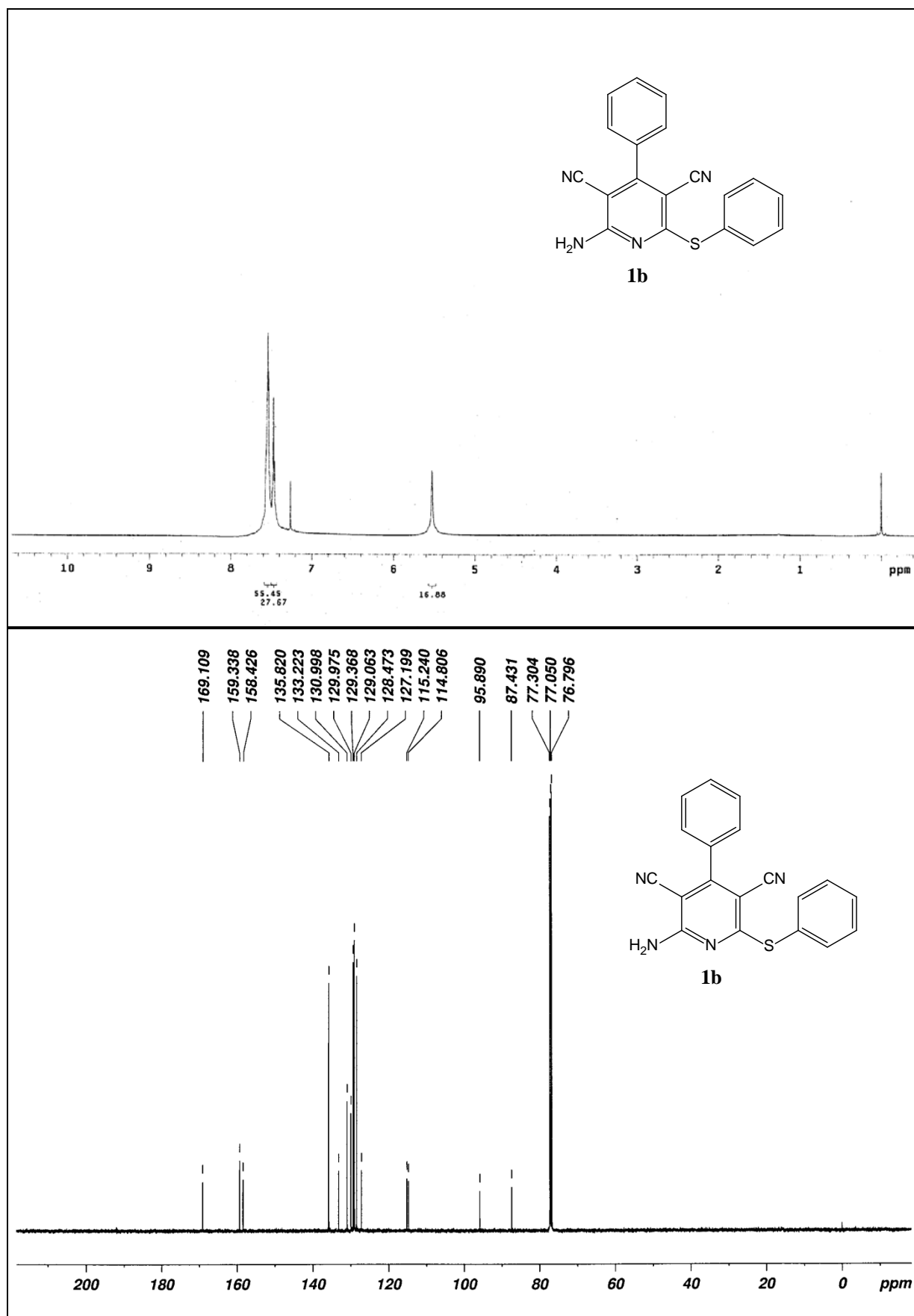
$$\Phi_{\text{unk}} = \Phi_{\text{std}} \times [I_{\text{unk}} / I_{\text{std}}] \times [A_{\text{std}} / A_{\text{unk}}] \times [\eta_{\text{unk}} / \eta_{\text{std}}]^2$$

Where,  $\Phi_{\text{unk}}$  is the fluorescence quantum yield of the sample,  $\Phi_{\text{std}}$  is the quantum yield of the standard ( $\Phi_f = 0.55$ , quinine sulphate dihydrate in 0.1 N H<sub>2</sub>SO<sub>4</sub>),  $I_{\text{unk}}$  and  $I_{\text{std}}$  are the integrated emission intensities of the sample and the standard, respectively,  $A_{\text{unk}}$  and  $A_{\text{std}}$  are the absorbance of the sample and the standard at the excitation wavelength, respectively, and  $\eta_{\text{unk}}$  and  $\eta_{\text{std}}$  are the refractive index of the medium taken.

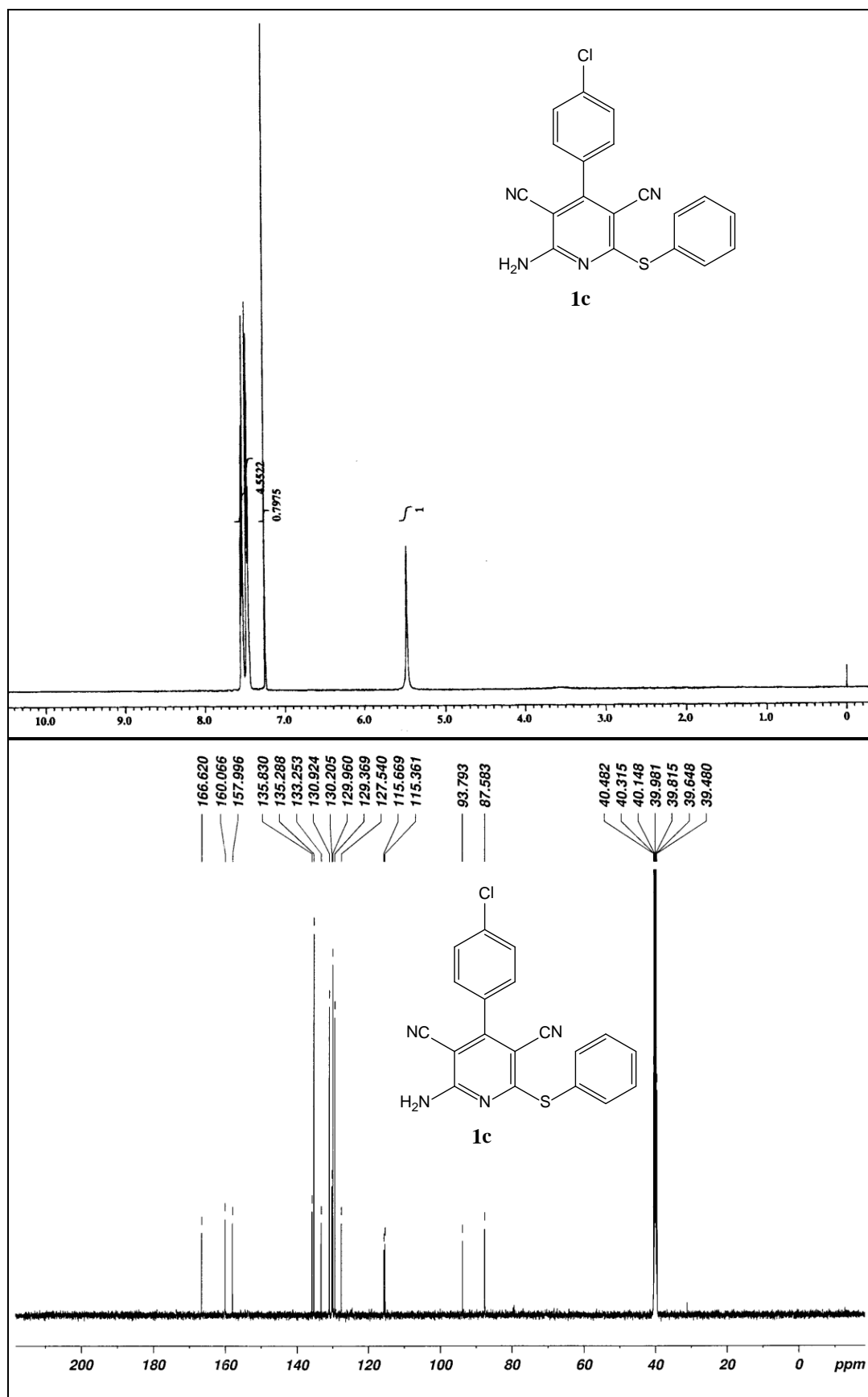
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1a**



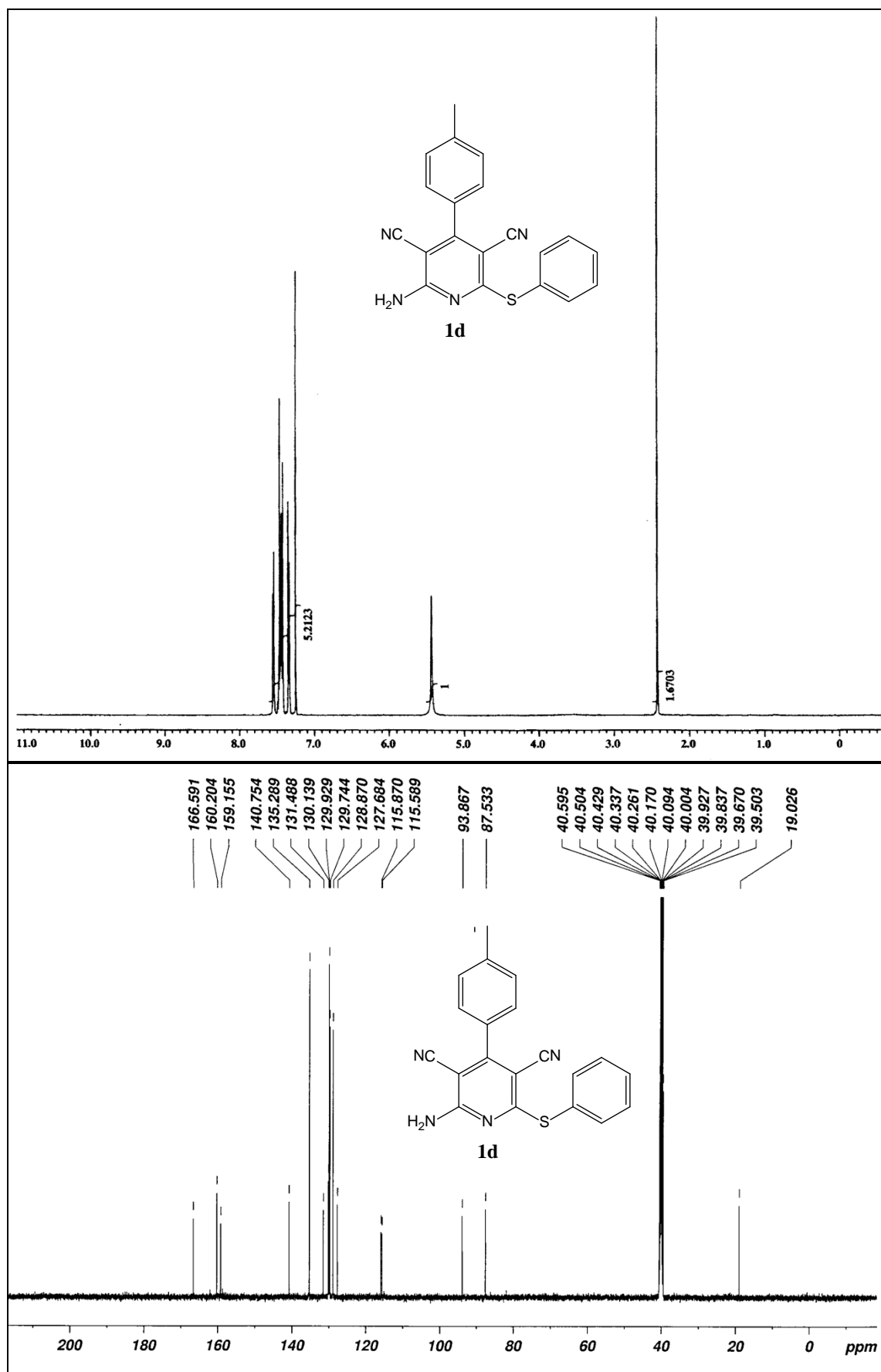
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1b**



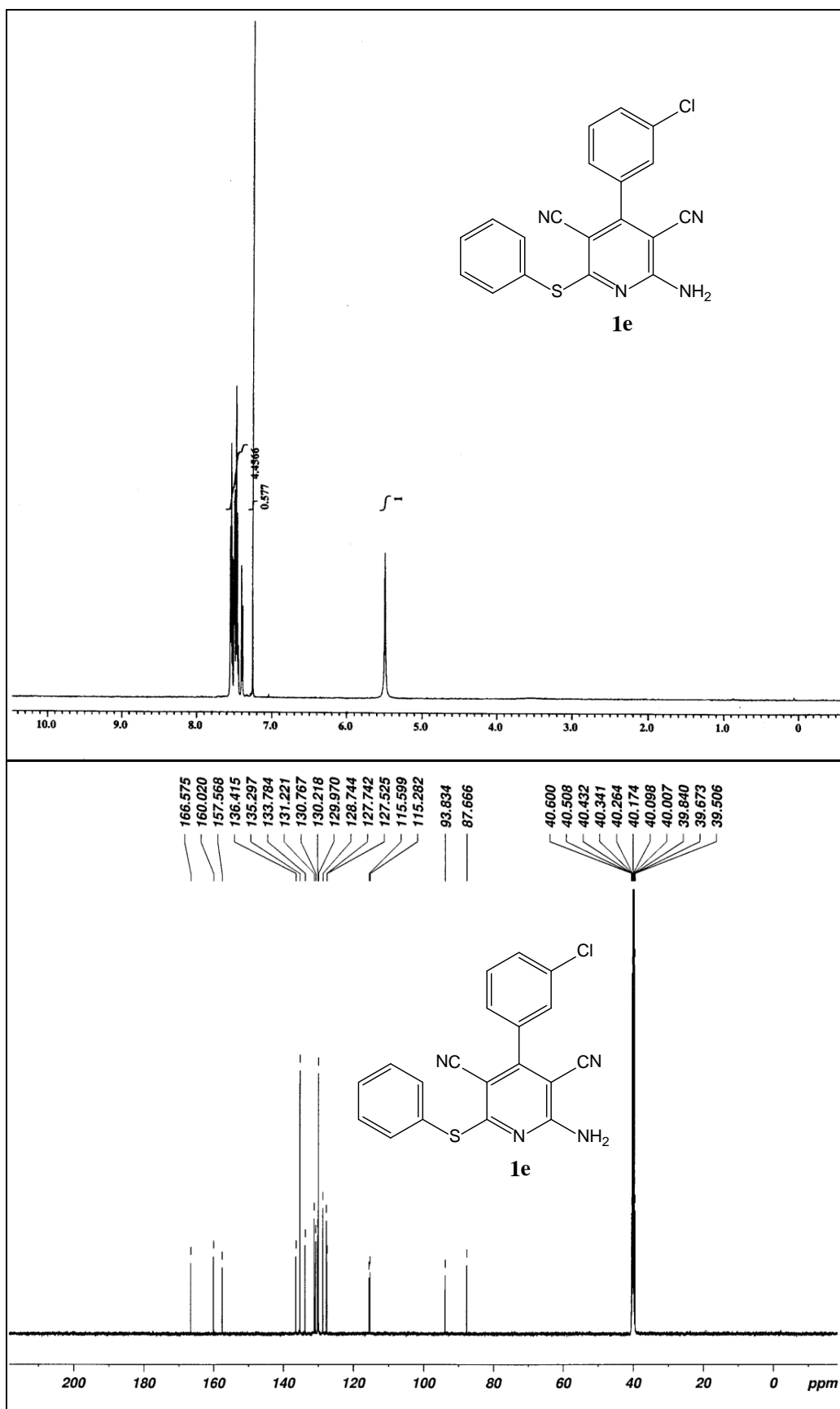
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1c**



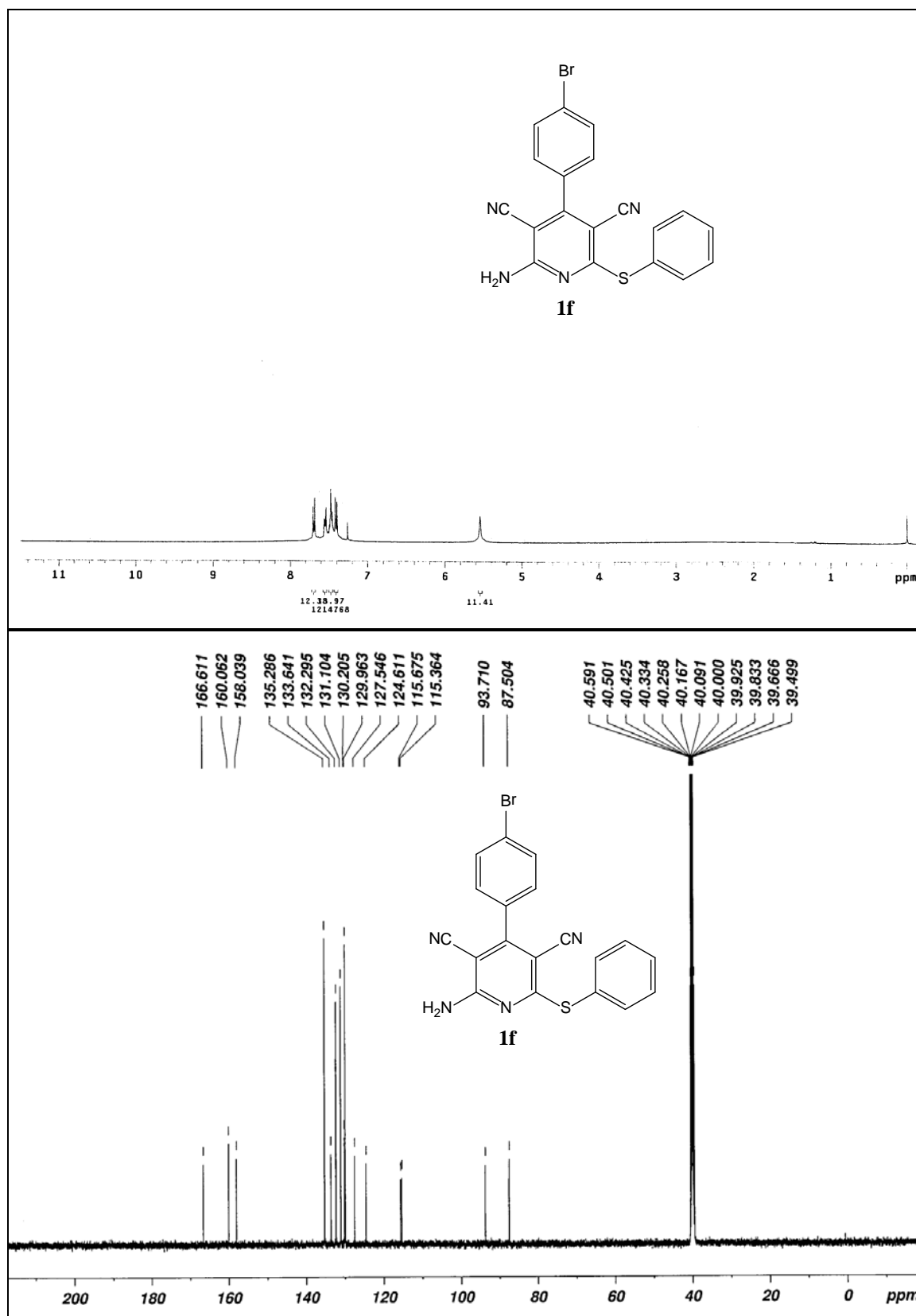
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1d**



### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1e**

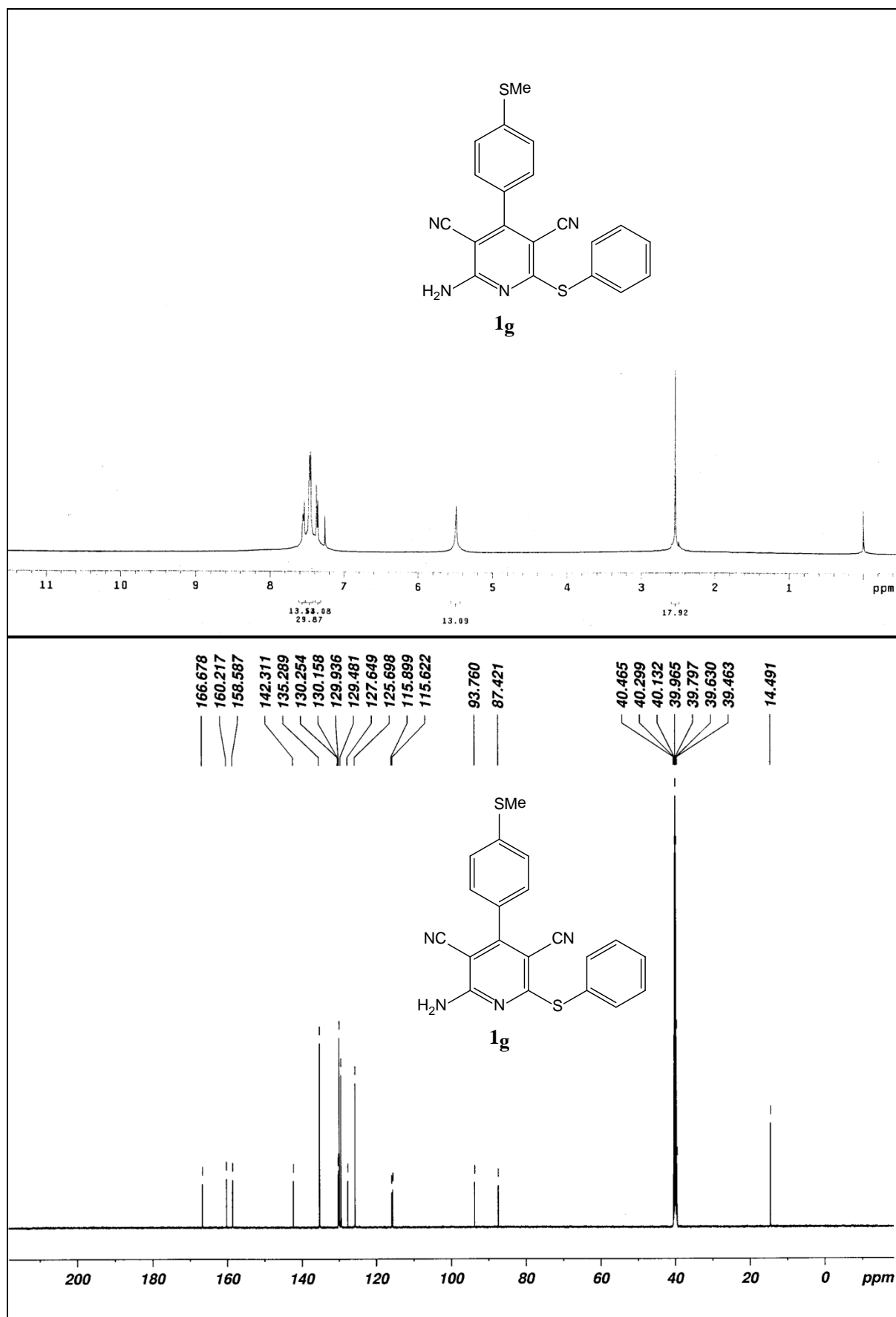


### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1f**

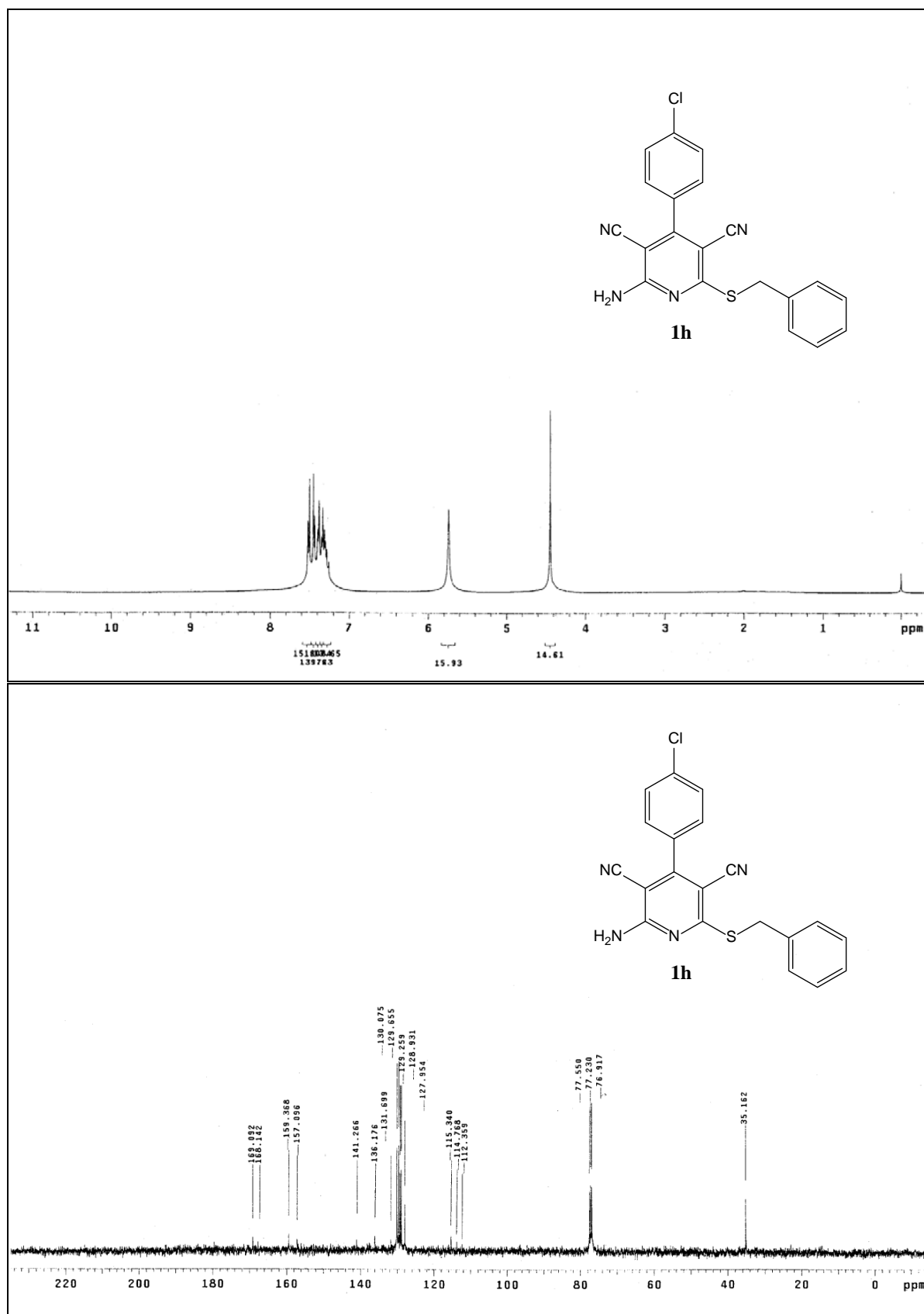




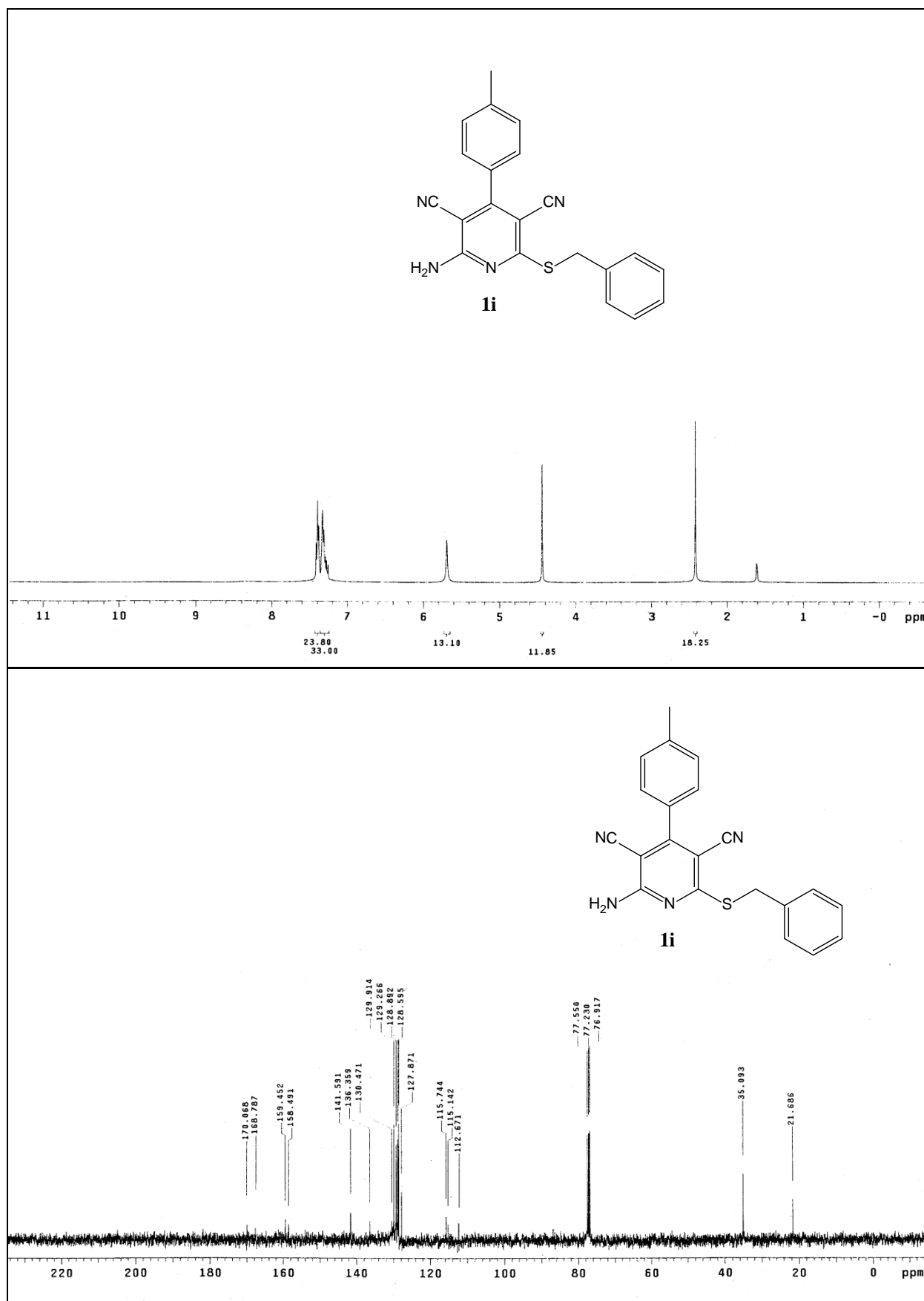
# $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1g**



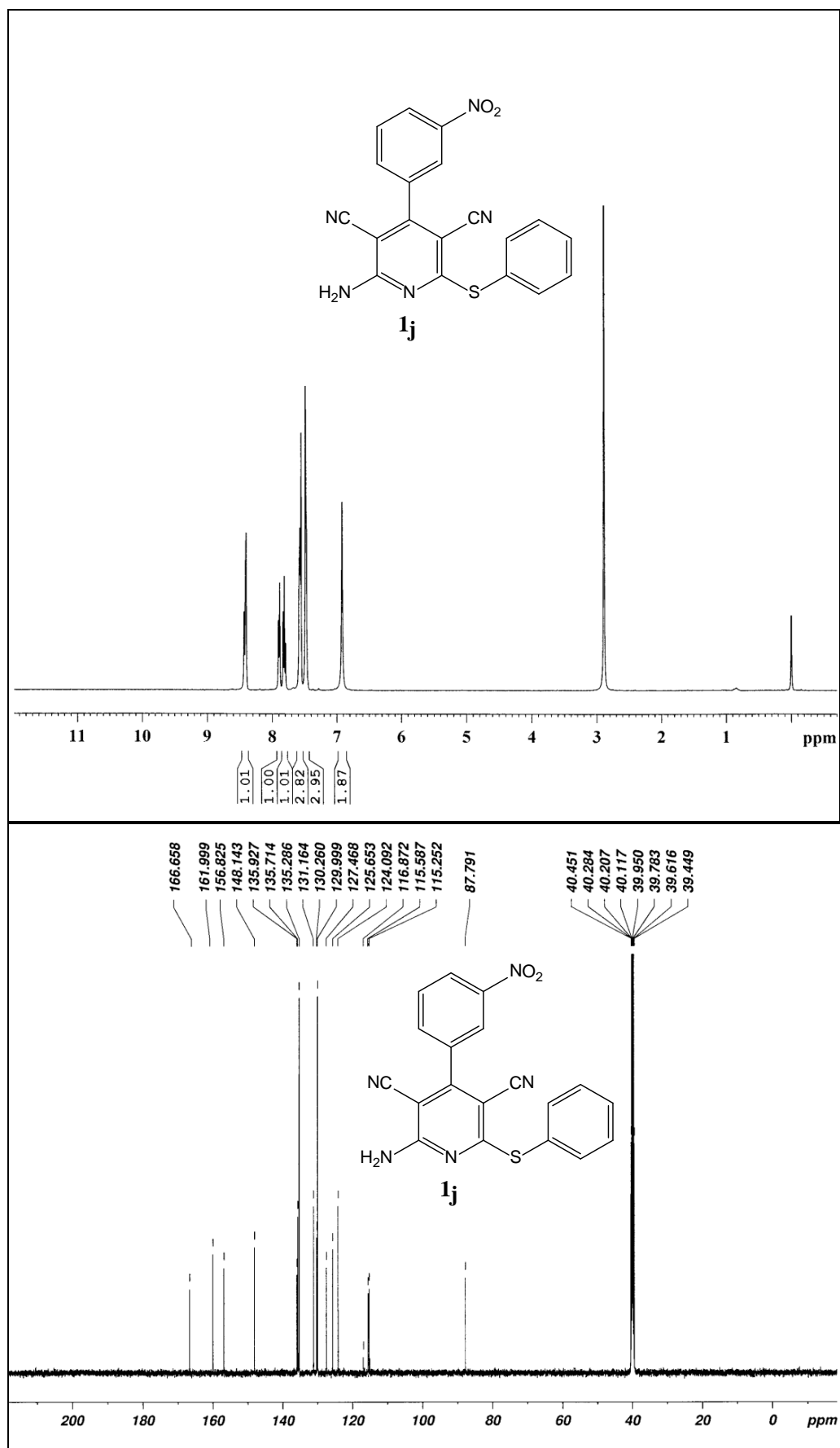
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1h**



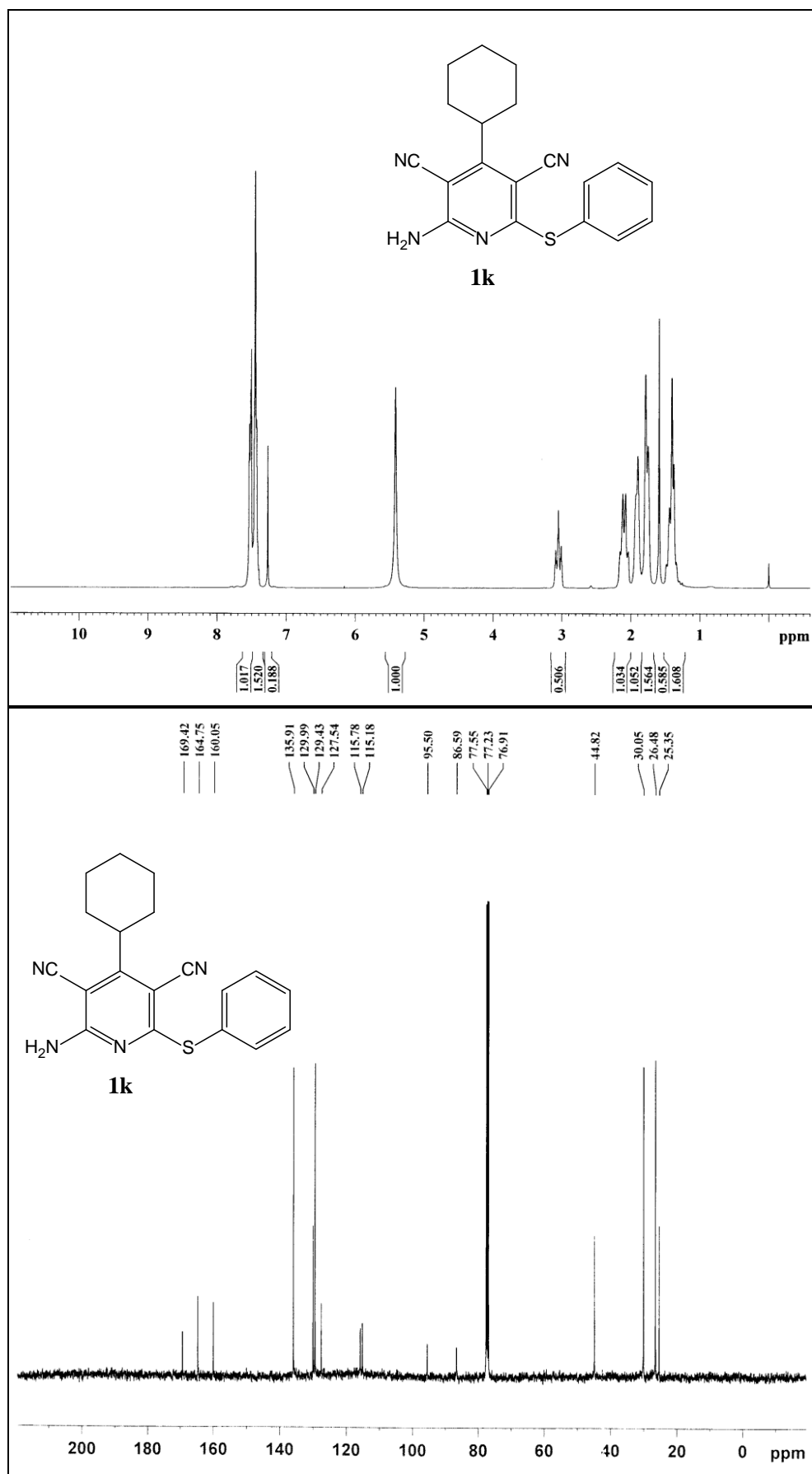
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1i**



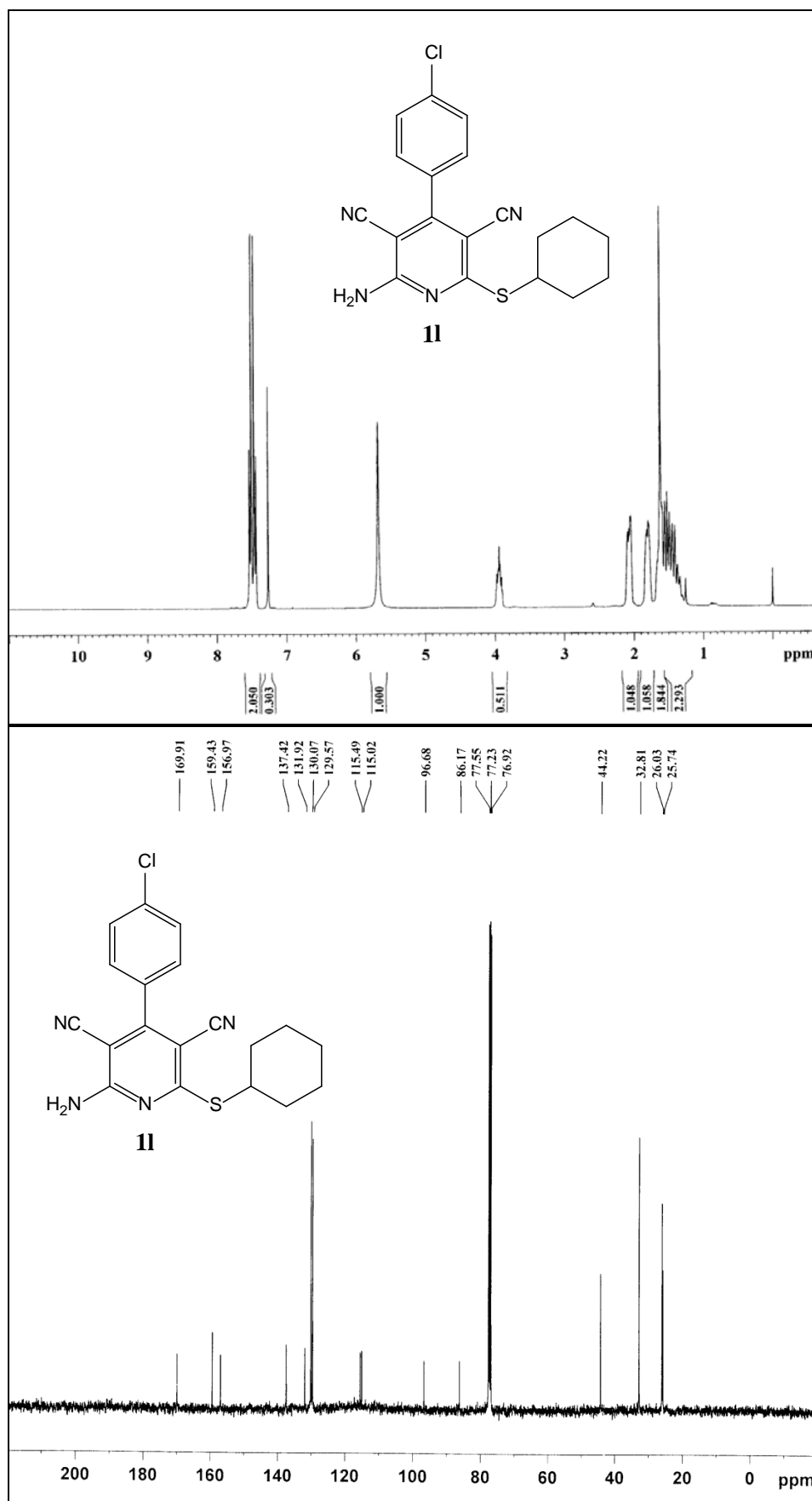
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1j**



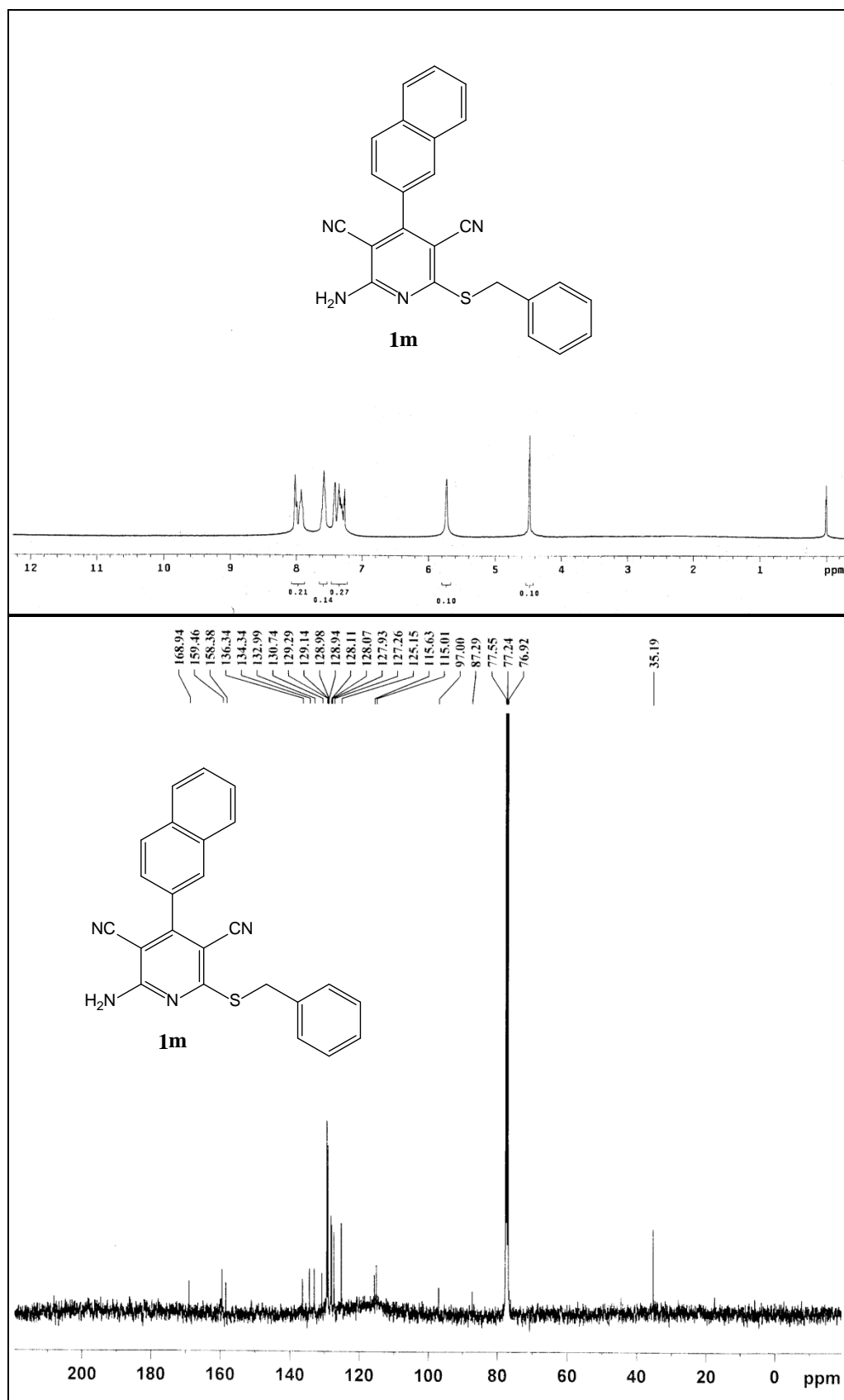
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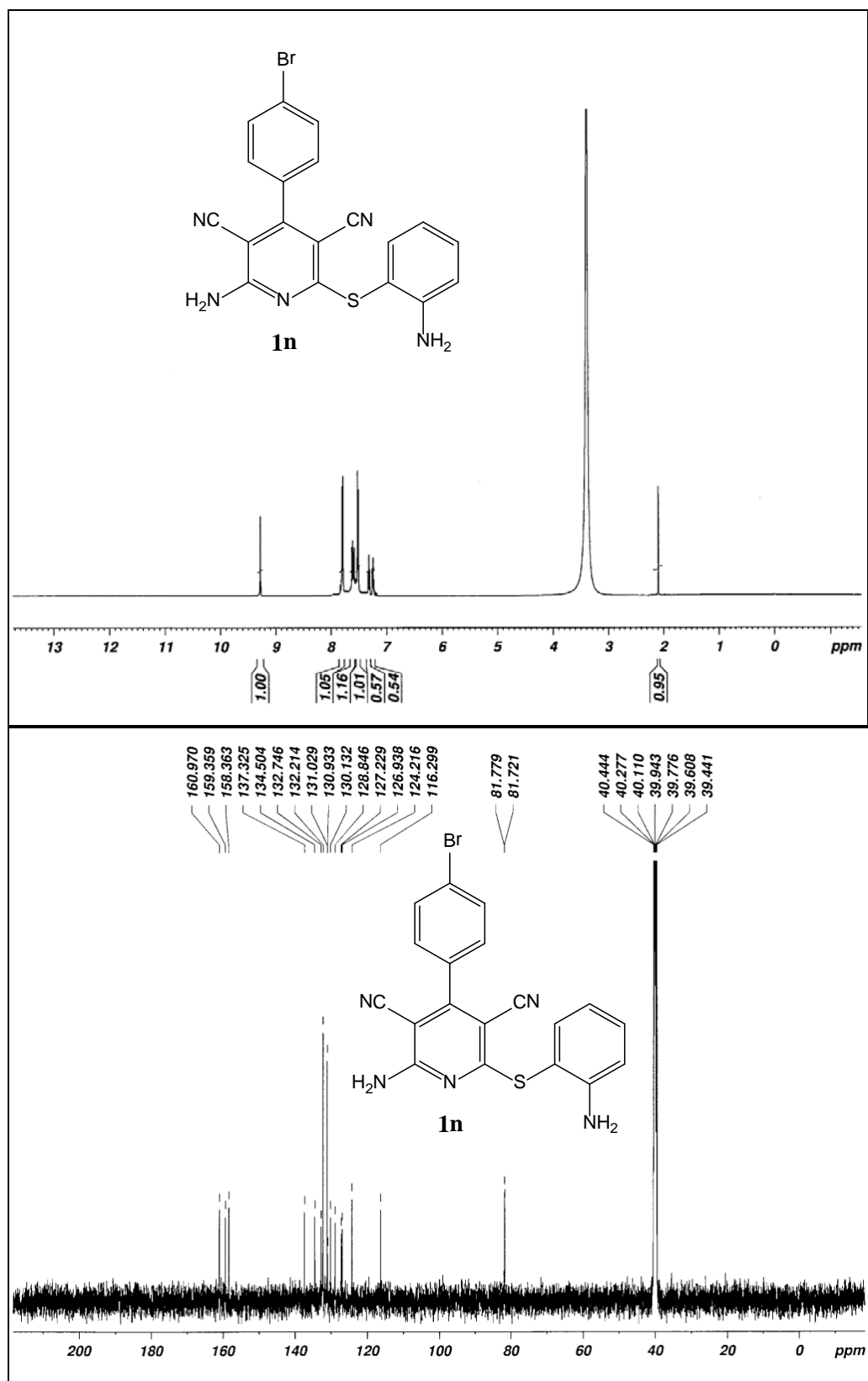
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **11**



### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1m**

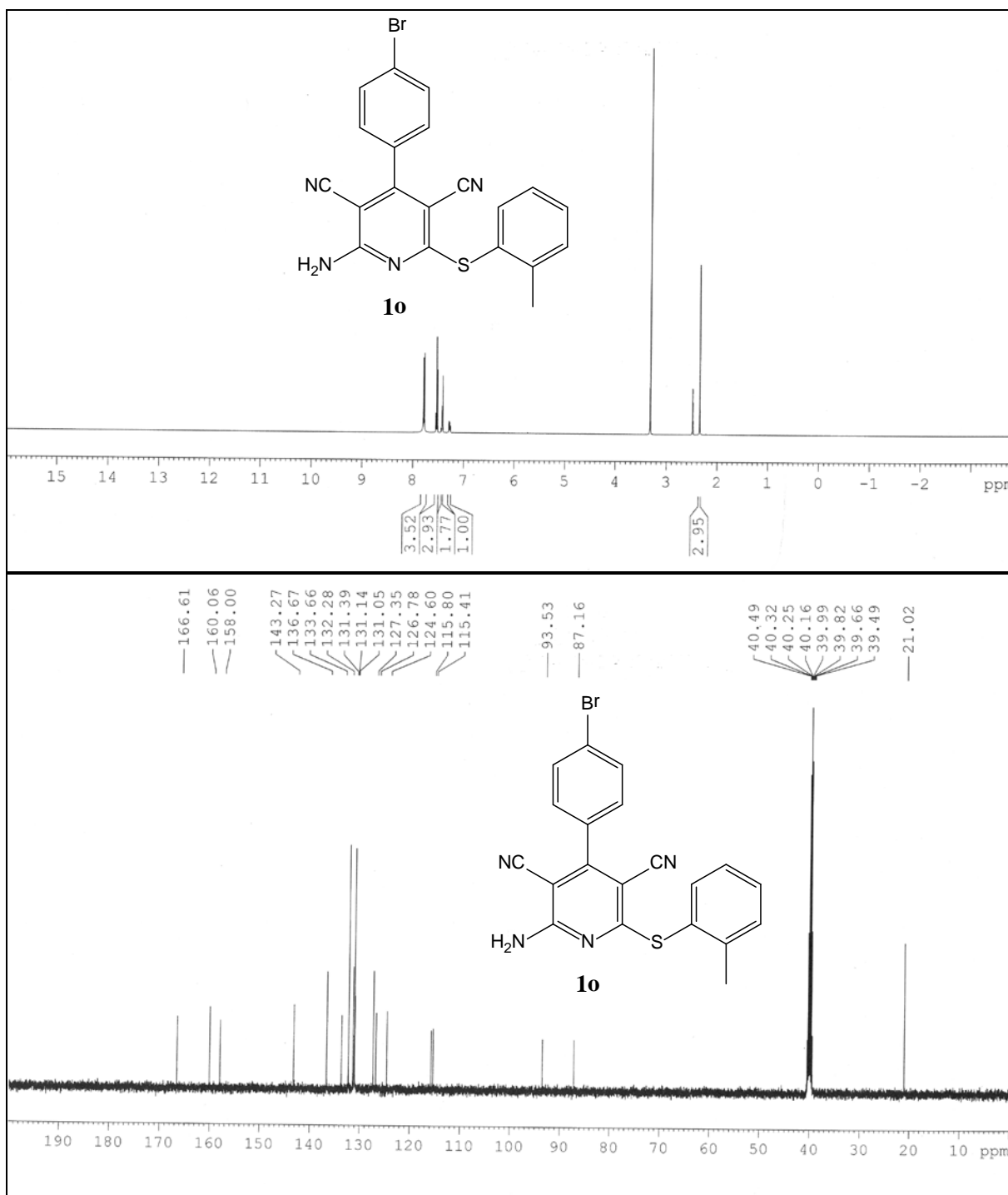


### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1n**

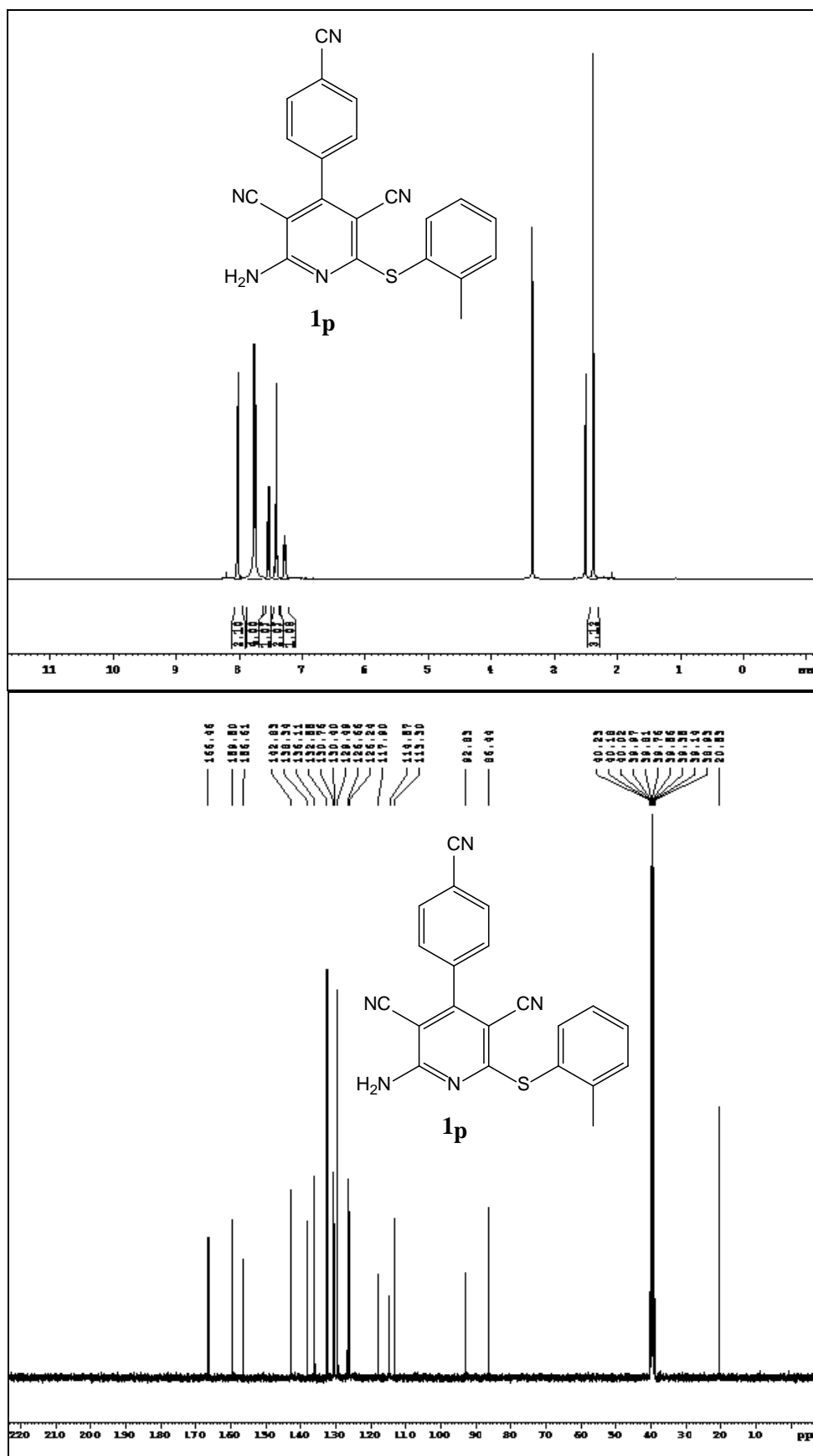




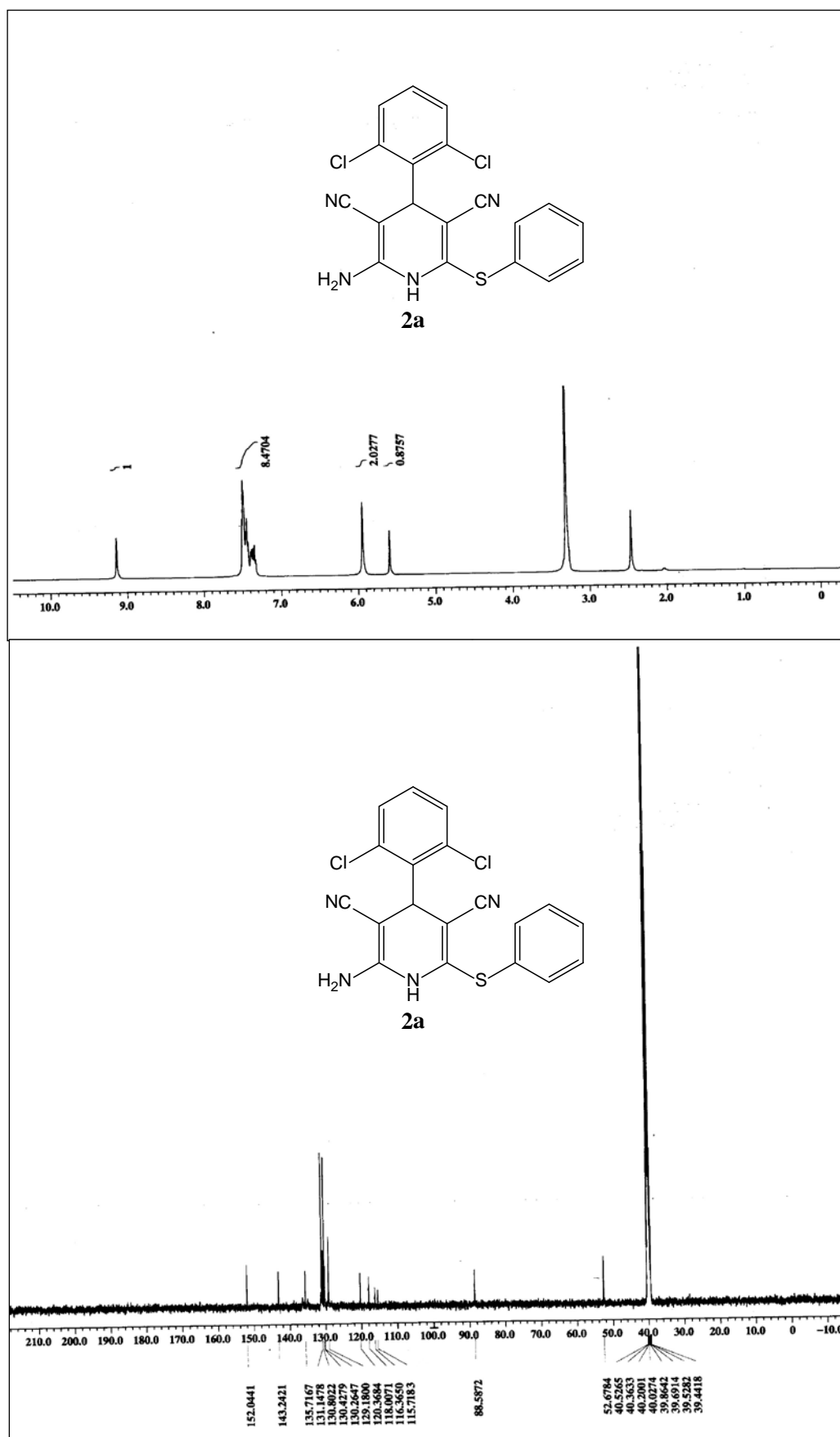
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1o**



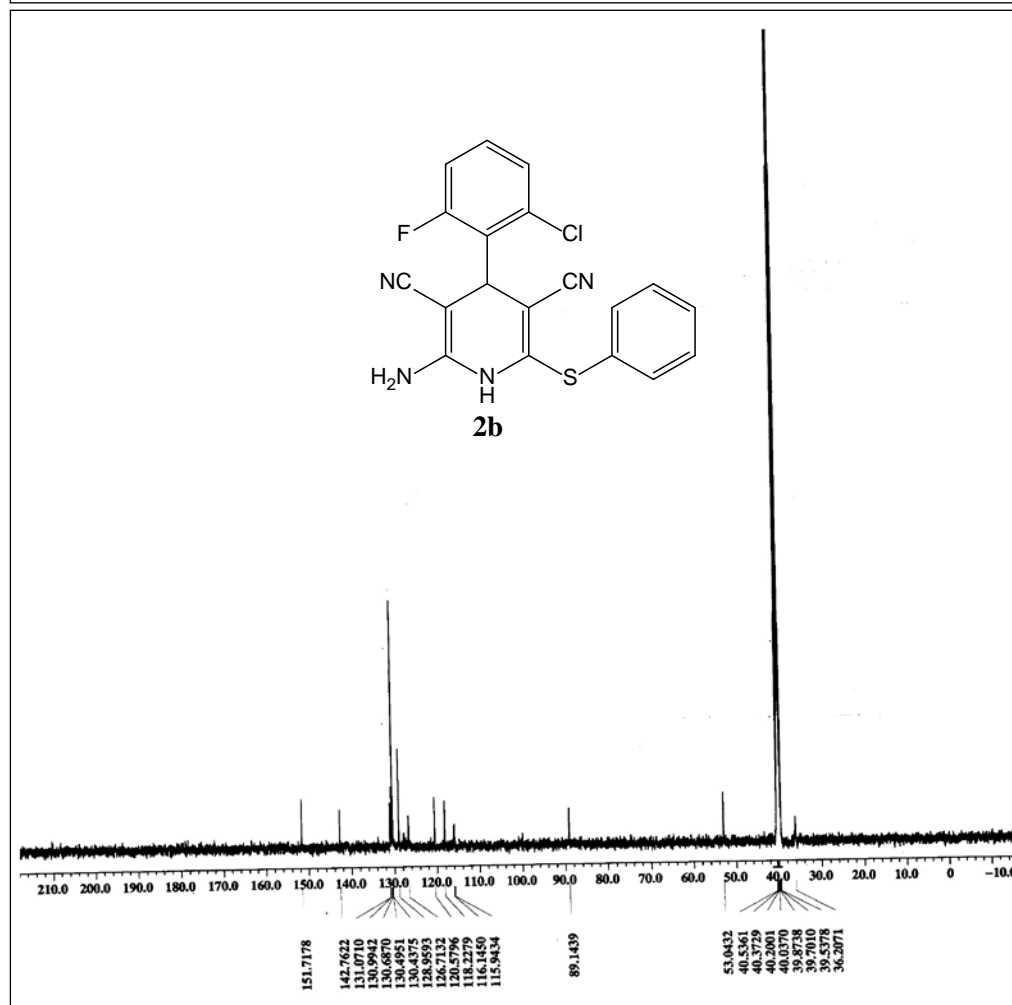
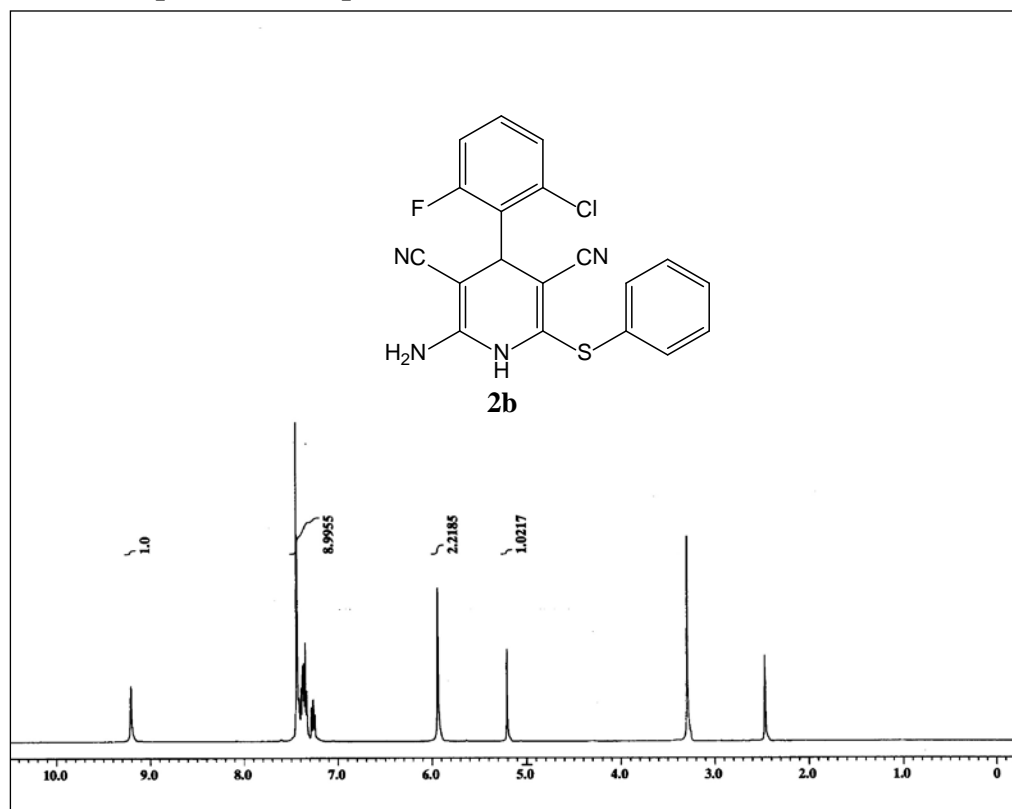
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **1p**



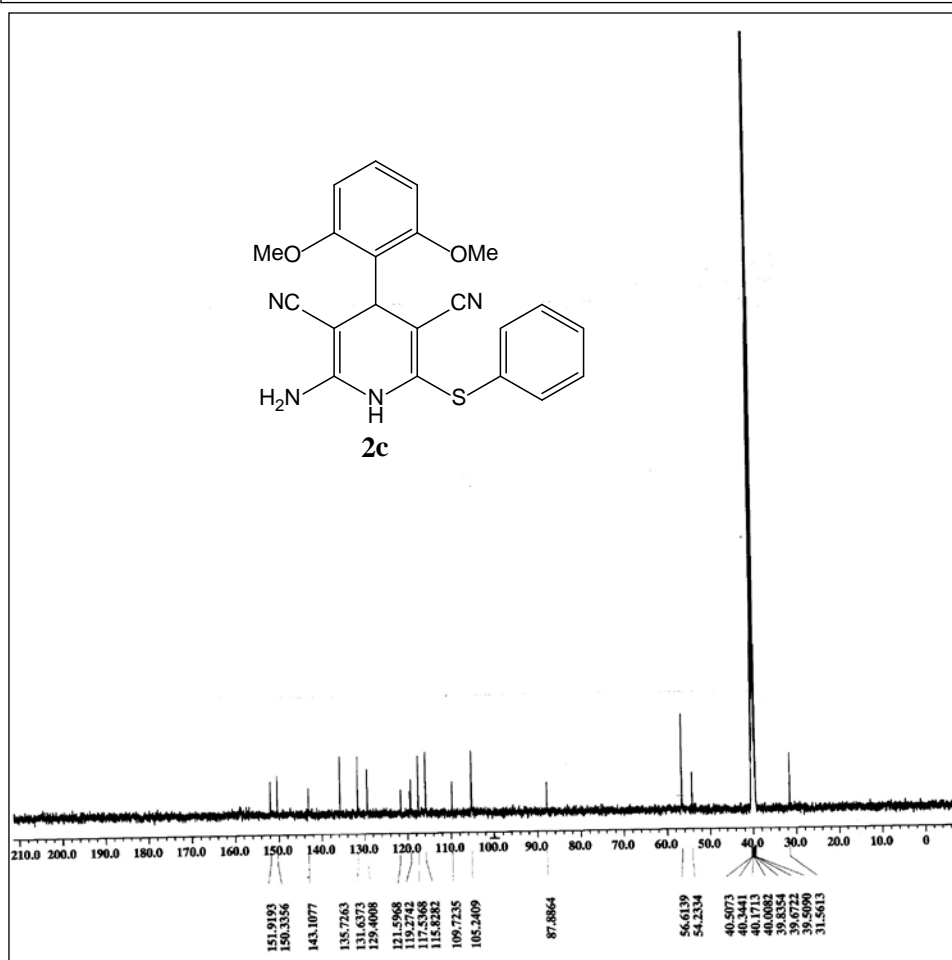
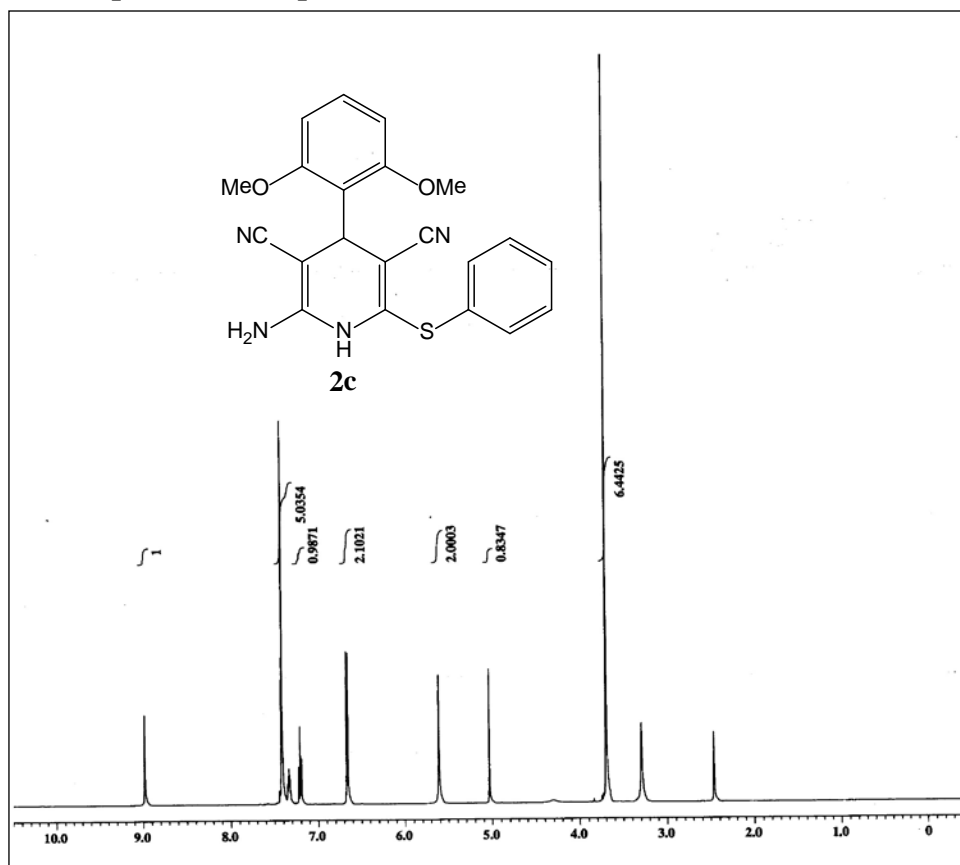
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **2a**



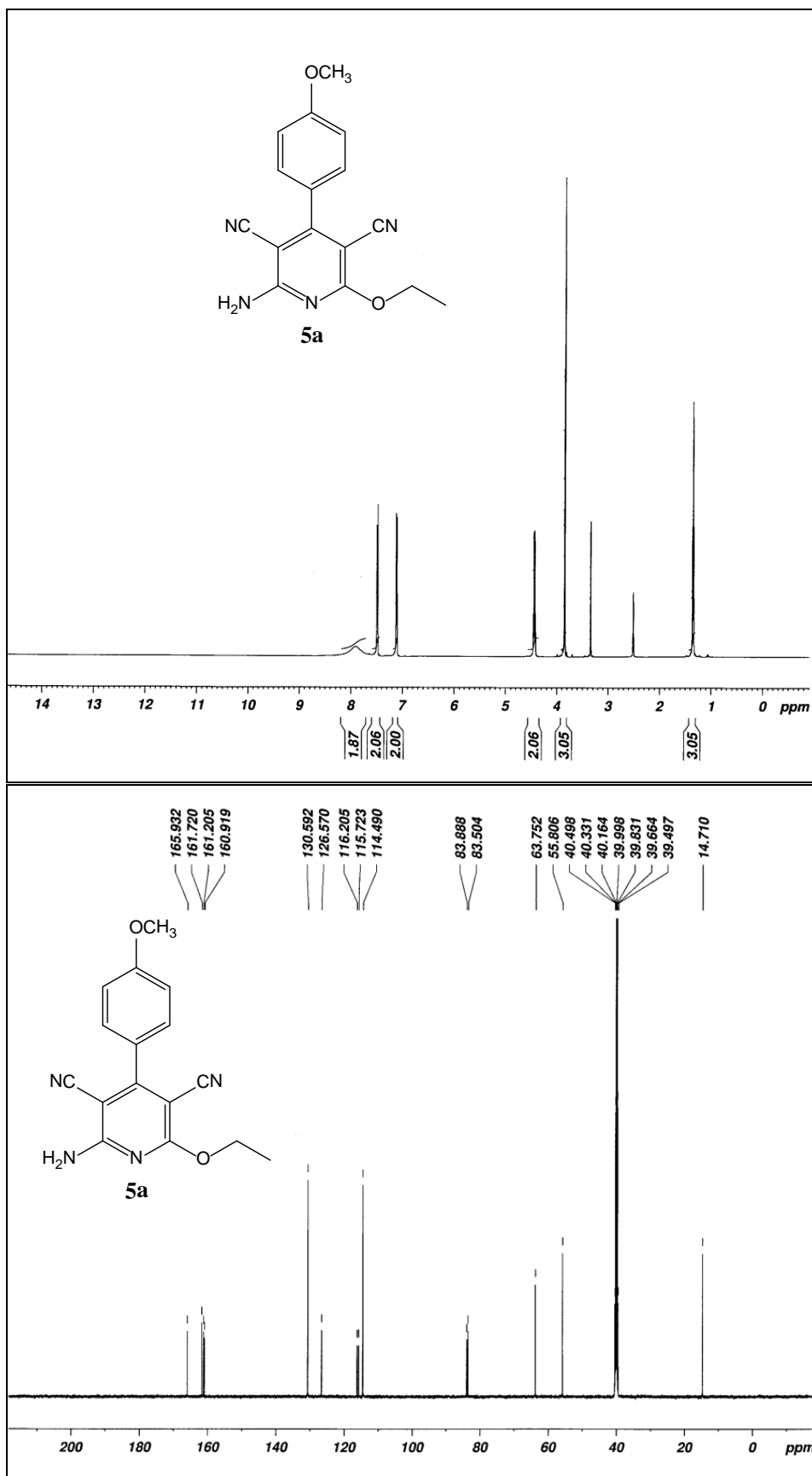
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **2b**



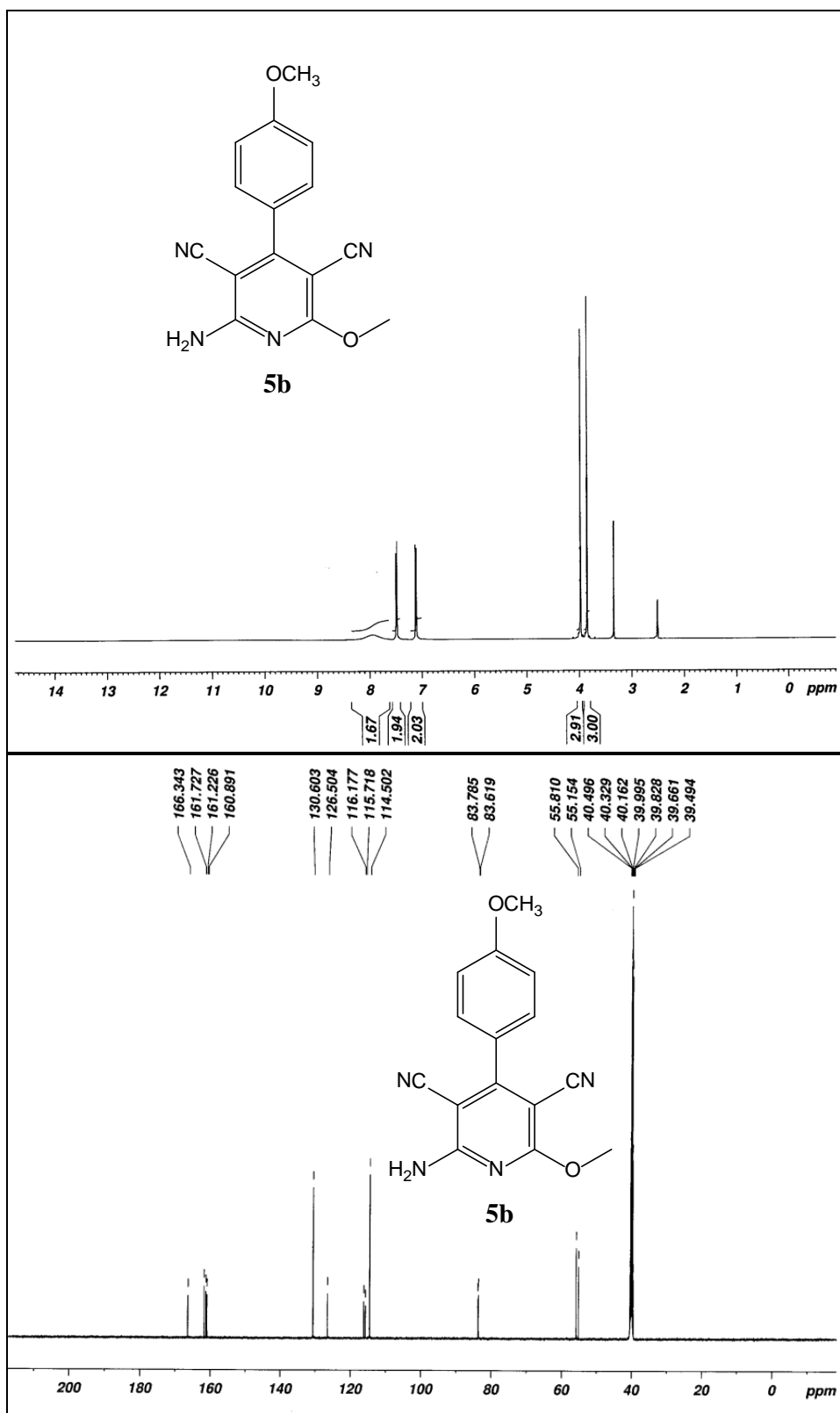
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **2c**



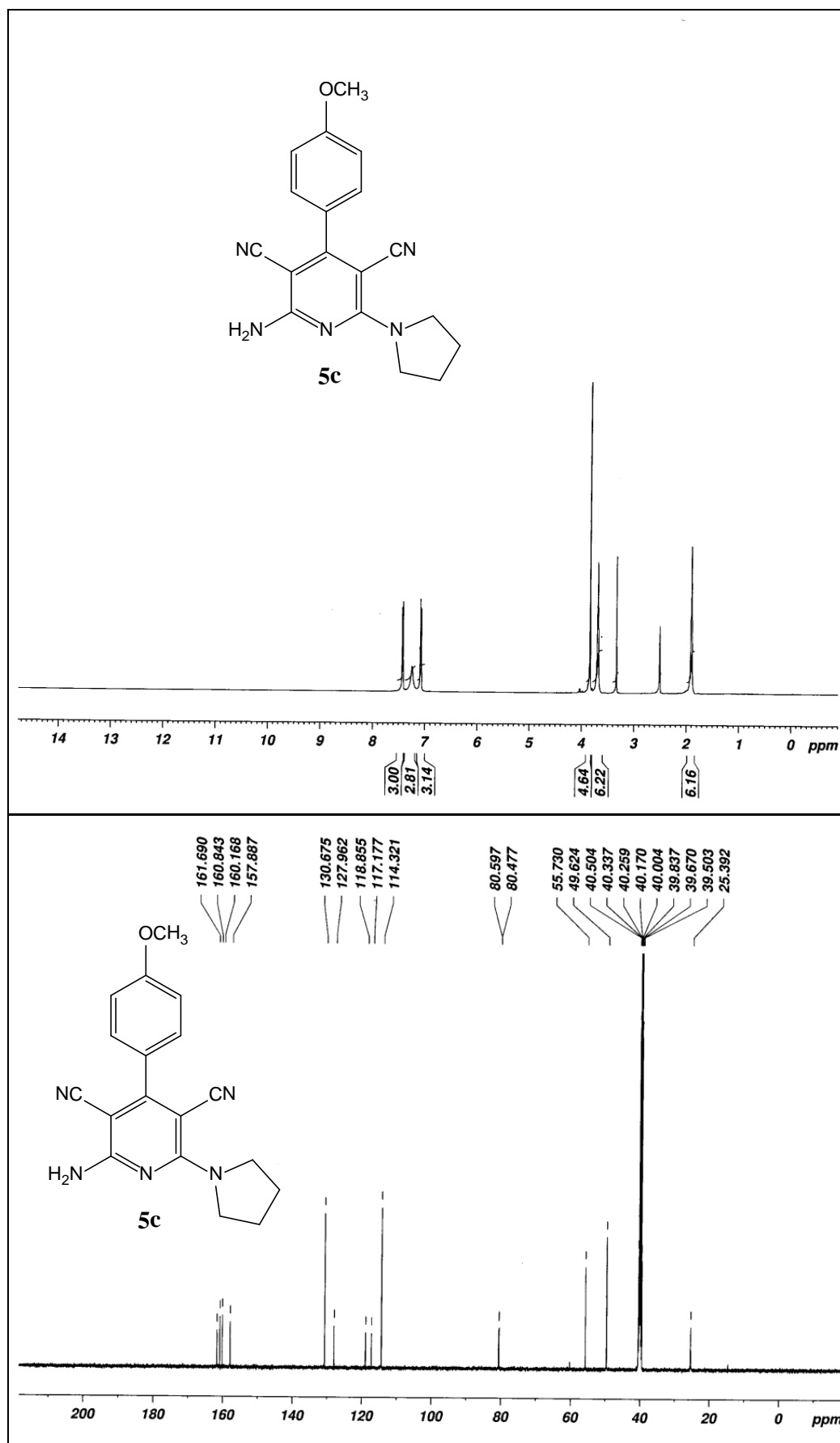
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 5a



### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 5b

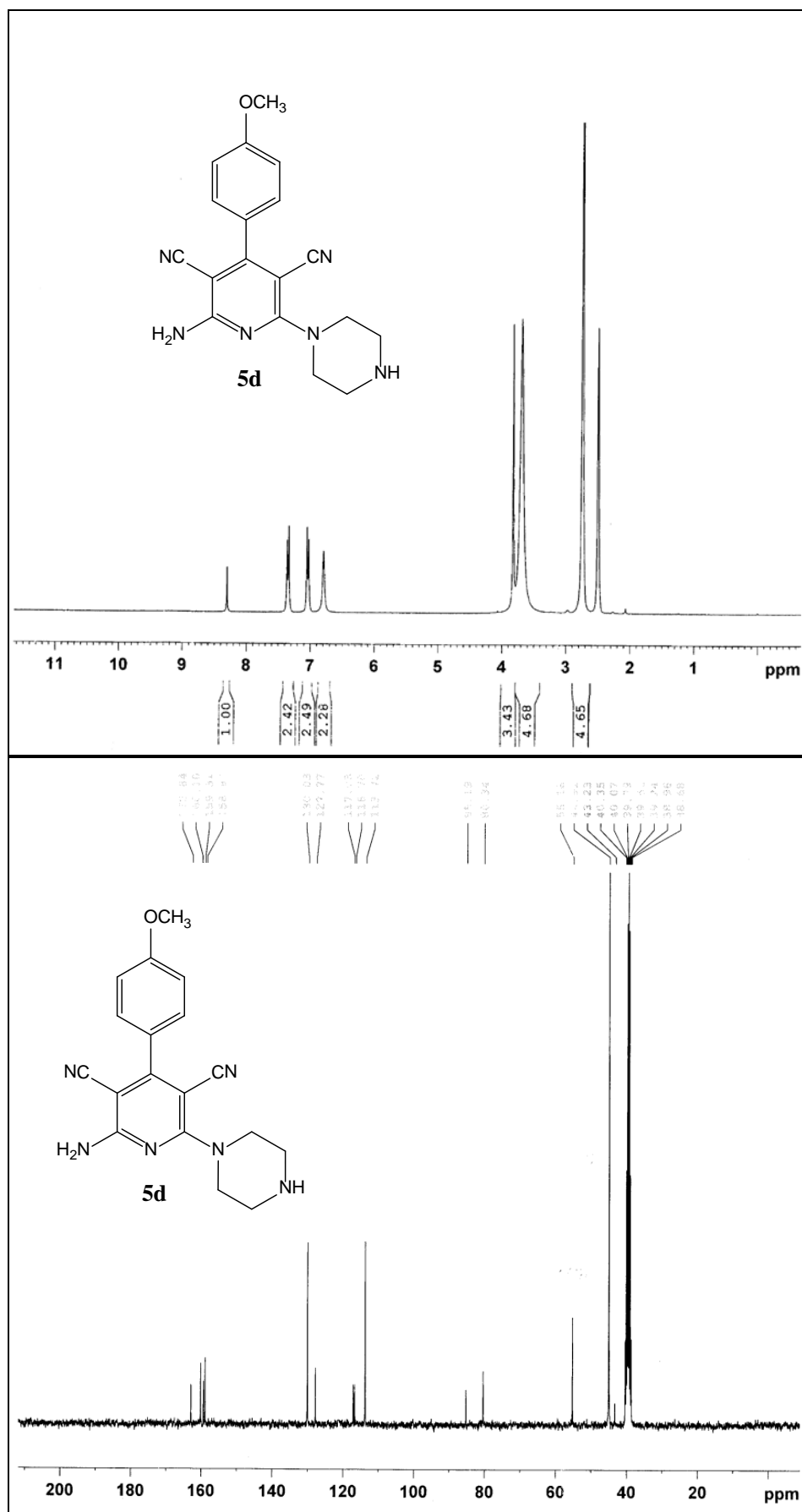


### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 5c

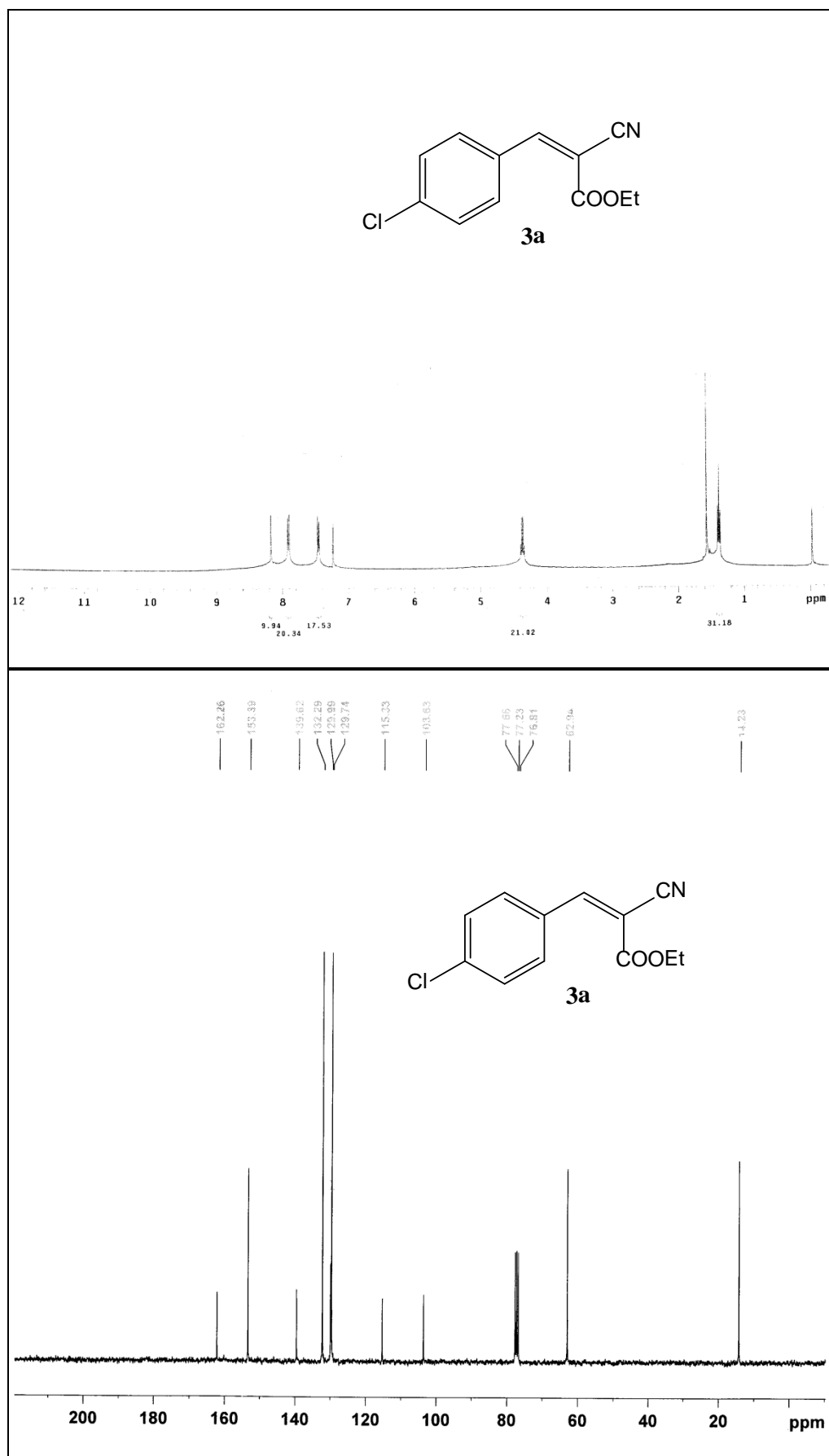




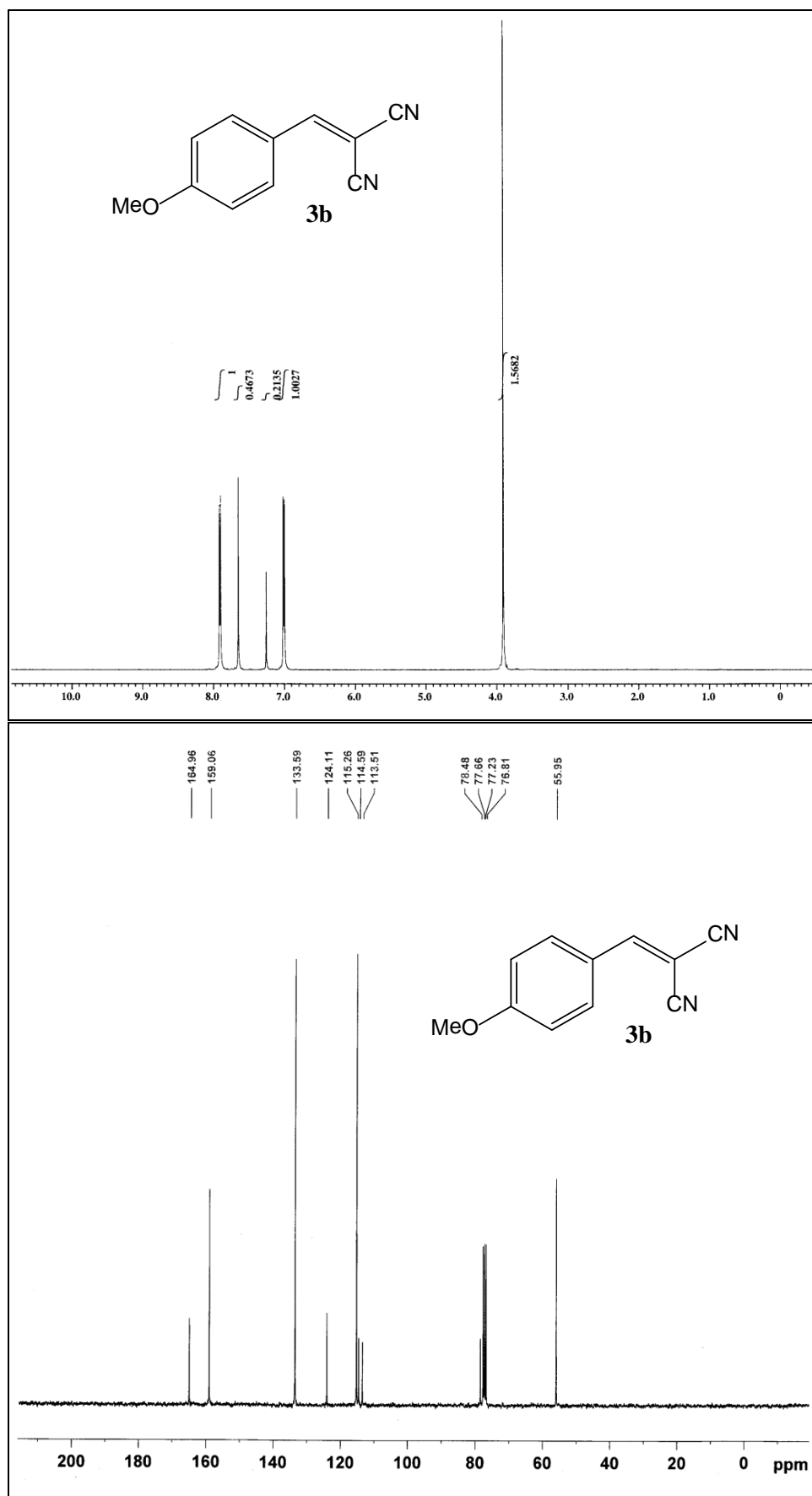
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 5d



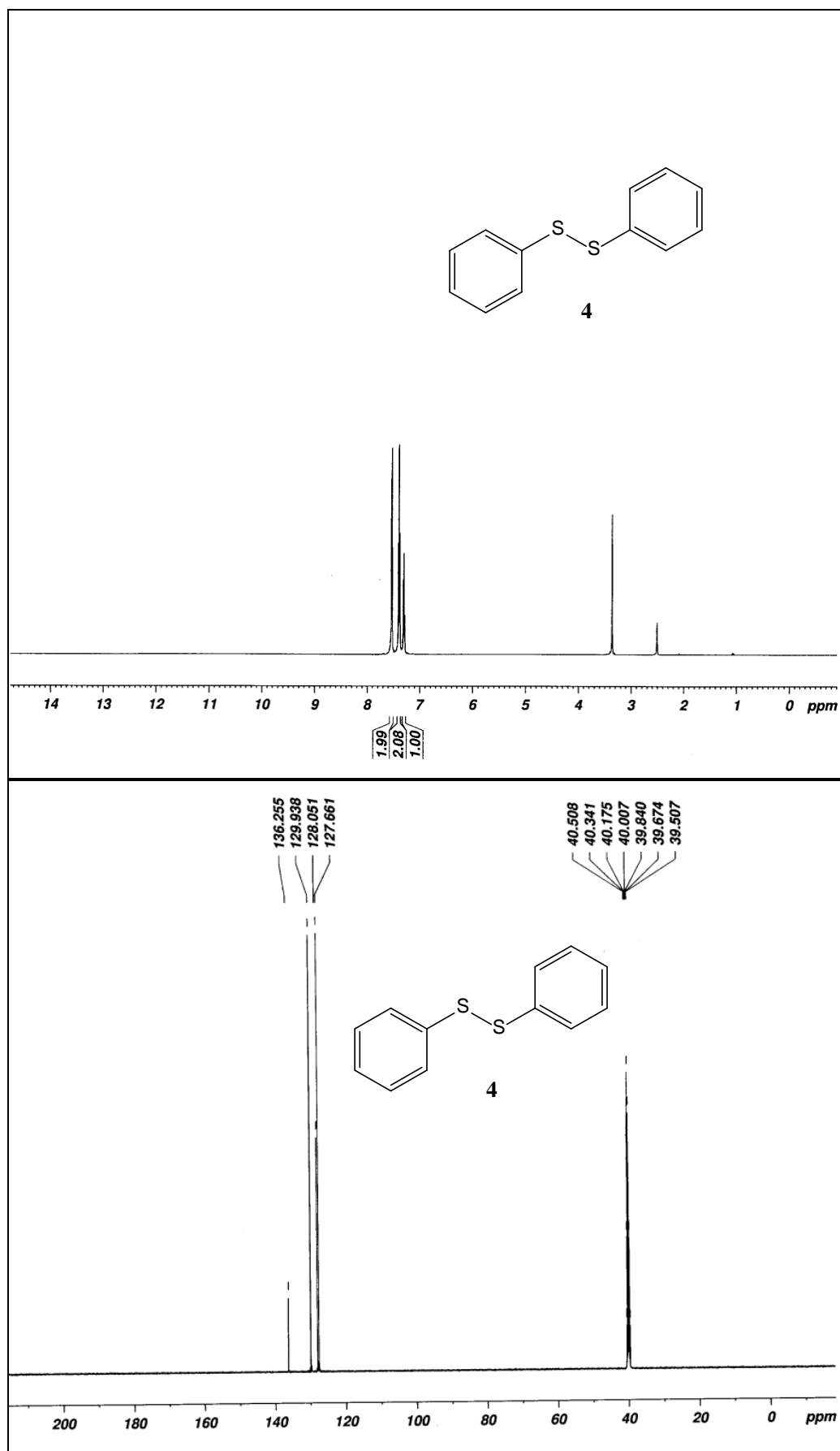
### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 3a



### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 3b



### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound 4



### $^1\text{H}$ and $^{13}\text{C}$ spectra of compound **6**

