

# Supporting Information

## 2-Aminobenzaldehyde, a common precursor to acridines and acridones endowed with bioactivities

Sarah Zeghada,<sup>a,b,c</sup> Ghenia Bentabed-Ababsa,<sup>b,\*</sup> Olivier Mongin,<sup>a</sup> William Erb,<sup>a</sup> Laurent Picot,<sup>d,\*</sup>

Valérie Thiéry,<sup>d</sup> Thierry Roisnel,<sup>a</sup> Vincent Dorcet<sup>a</sup> and Florence Mongin<sup>a,\*</sup>

<sup>a</sup> *Univ Rennes, CNRS, ISCR (Institut des Sciences Chimiques de Rennes) - UMR 6226,  
F-35000 Rennes, France*

<sup>b</sup> *Laboratoire de Synthèse Organique Appliquée, Faculté des Sciences Exactes et Appliquées,  
Université Oran 1 Ahmed Ben Bella, BP 1524 El M'Naouer, 31000 Oran, Algeria*

<sup>c</sup> *Ecole Supérieure en Génie Electrique et Energétique d'Oran (ESGEE), BP CH 2,  
Achaba Hanifi, Technopole USTO, 31000 Oran, Algeria*

<sup>d</sup> *La Rochelle Université, Laboratoire Littoral Environnement et Sociétés, UMRi CNRS 7266,  
Université de La Rochelle, 17042 La Rochelle, France*

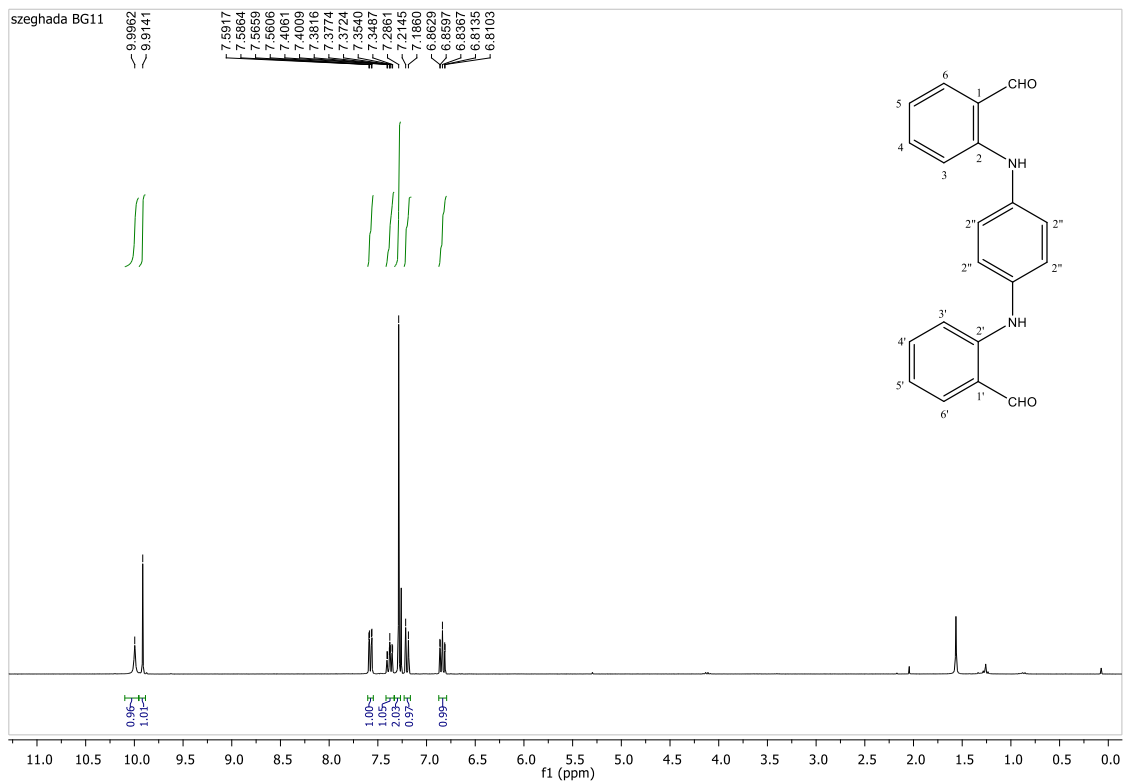
E-mails: bentabedg@gmail.com (G. Bentabed-Ababsa),  
laurent.picot@univ-lr.fr (L. Picot), florence.mongin@univ-rennes1.fr (F. Mongin)

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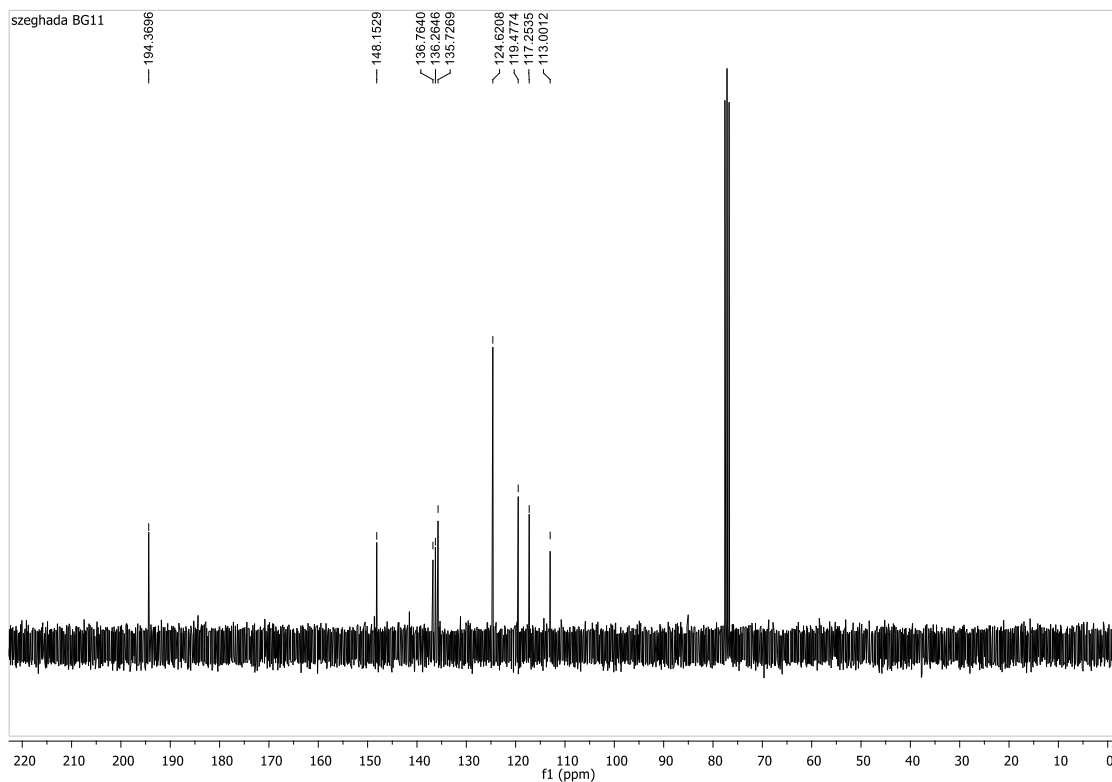
NMR spectra of compounds <b>2f2</b> , <b>4a</b> , <b>4e</b> , <b>5a1</b> , <b>5a2</b> , <b>5a5</b> , <b>5a3</b> , <b>5a4</b> , <b>5a7</b> , <b>5a8</b> , <b>5a9</b> , <b>6b</b> , <b>6c</b> , <b>6d</b> , <b>7b</b> , <b>7c</b> , <b>7d</b> and <b>6ab</b>	p. S2
Absorption and emission of acridines <b>5a2</b> and <b>5a7</b> in toluene	p. S22

***N,N'*-(1,4-phenylene)-2,2'-bis(2-aminobenzaldehyde) (2f2).**

<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>)

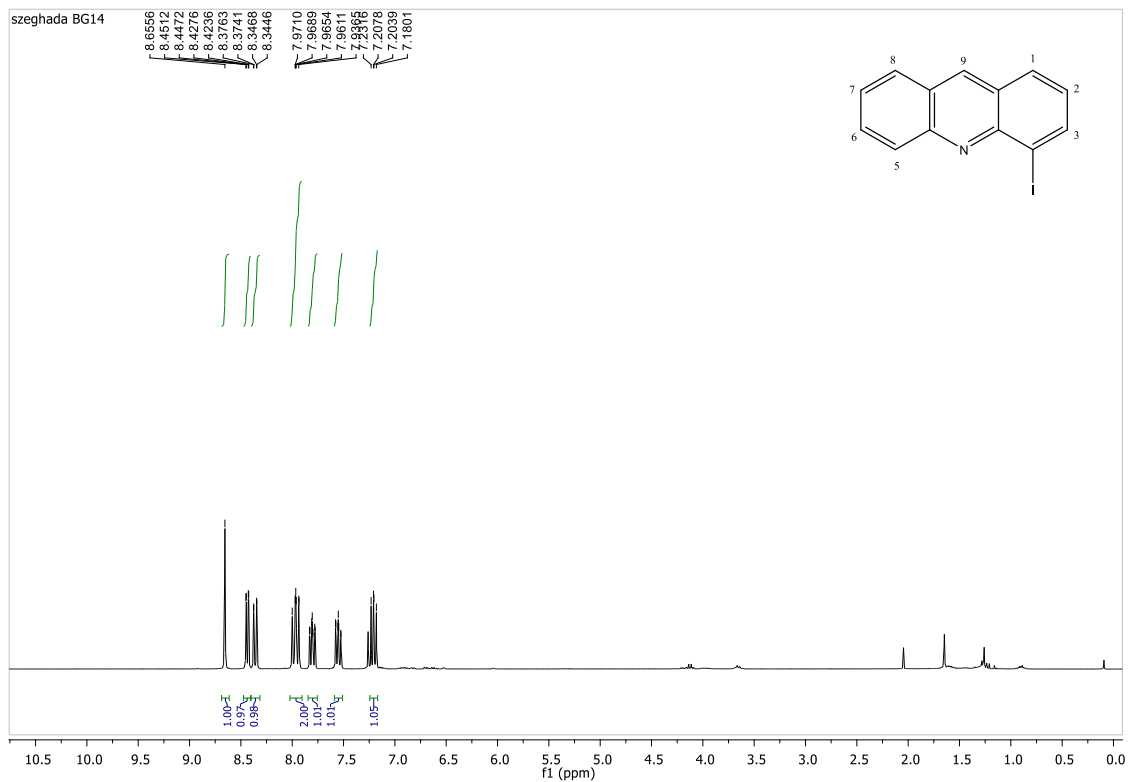


<sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>)

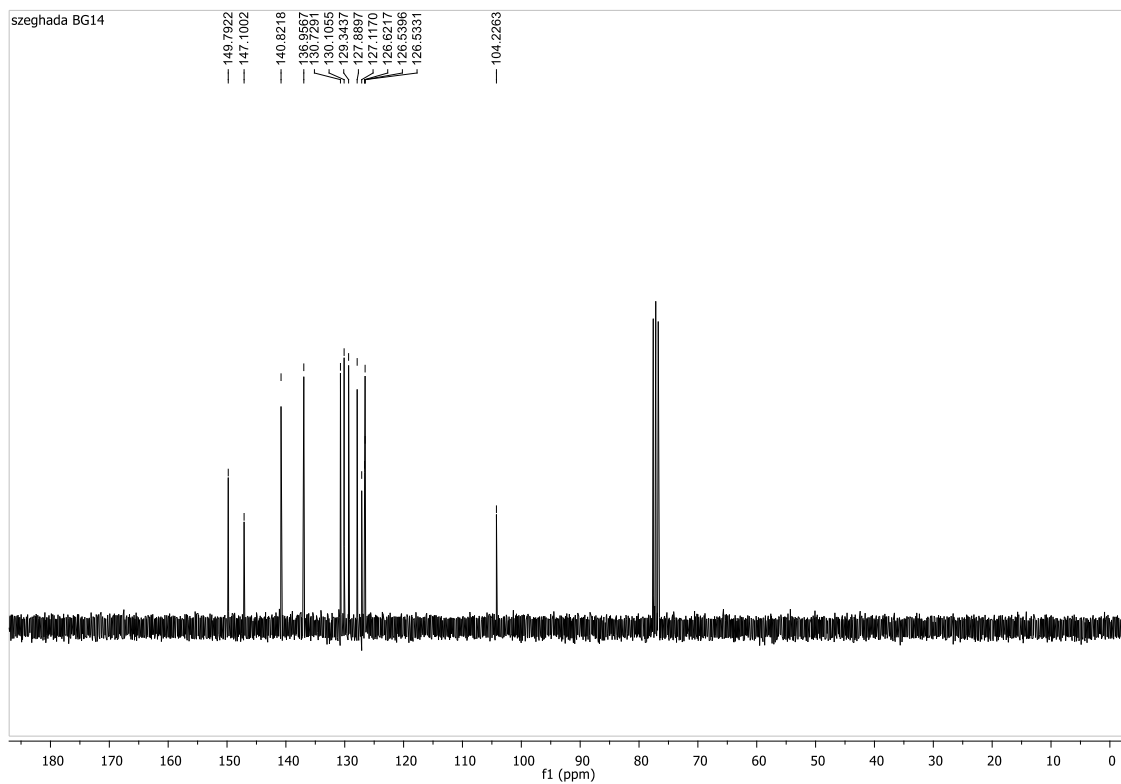


# 4-Iodoacridine (4a).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

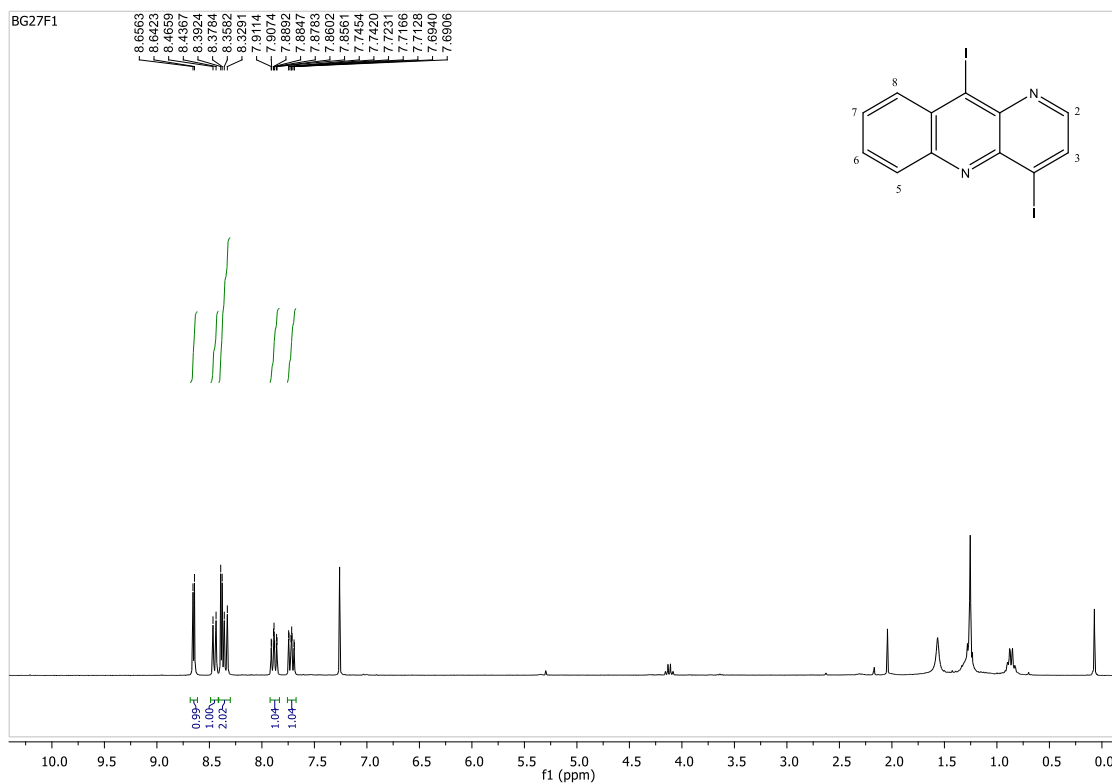


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

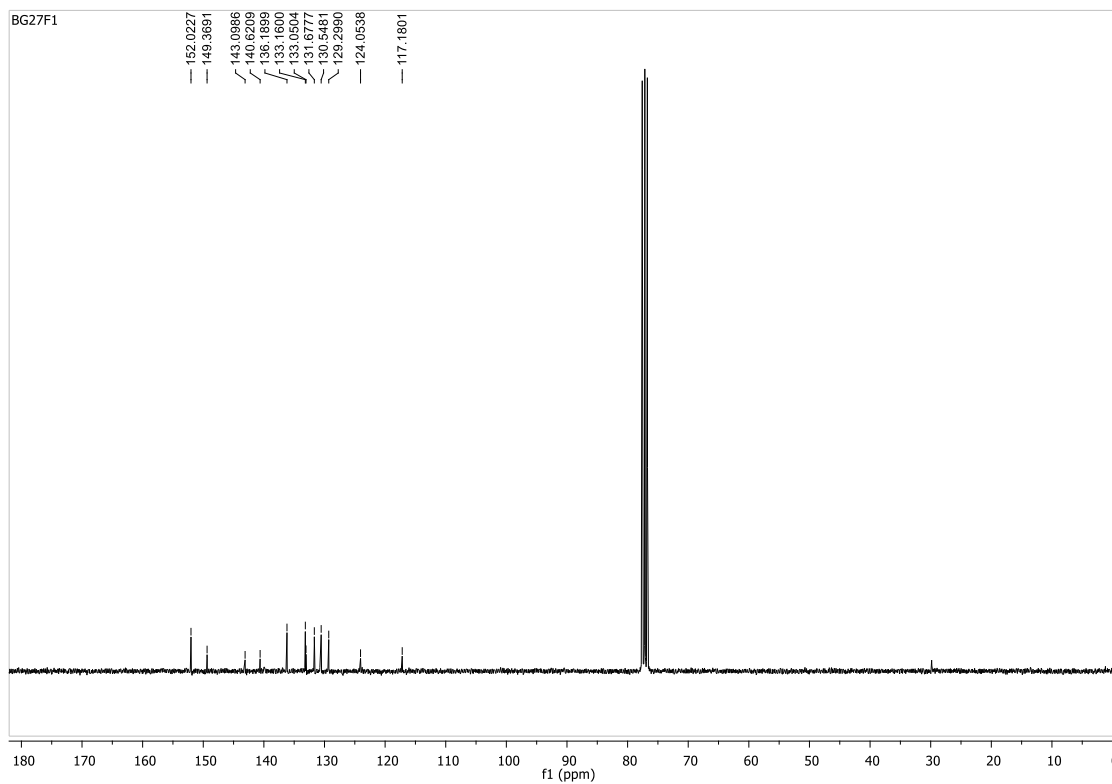


# 4,9-Diiodobenzo[*b*][1,5]naphthyridine (4e).

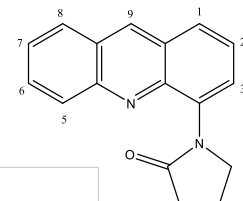
$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )



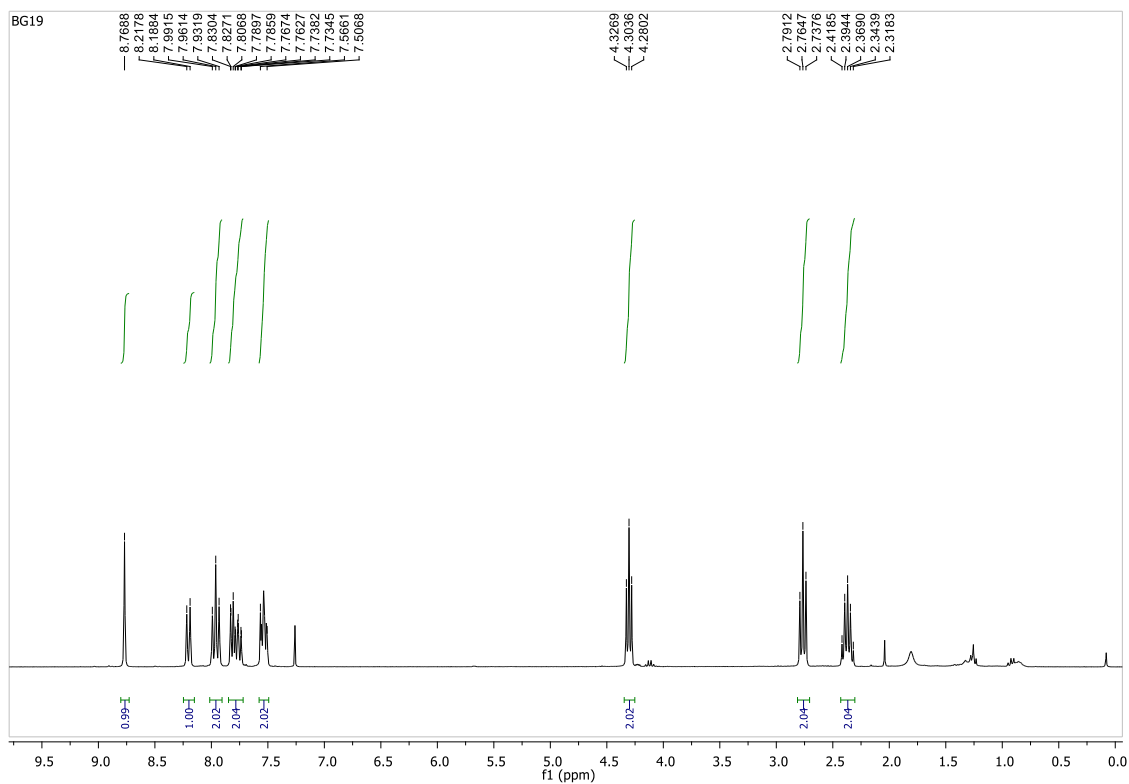
$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )



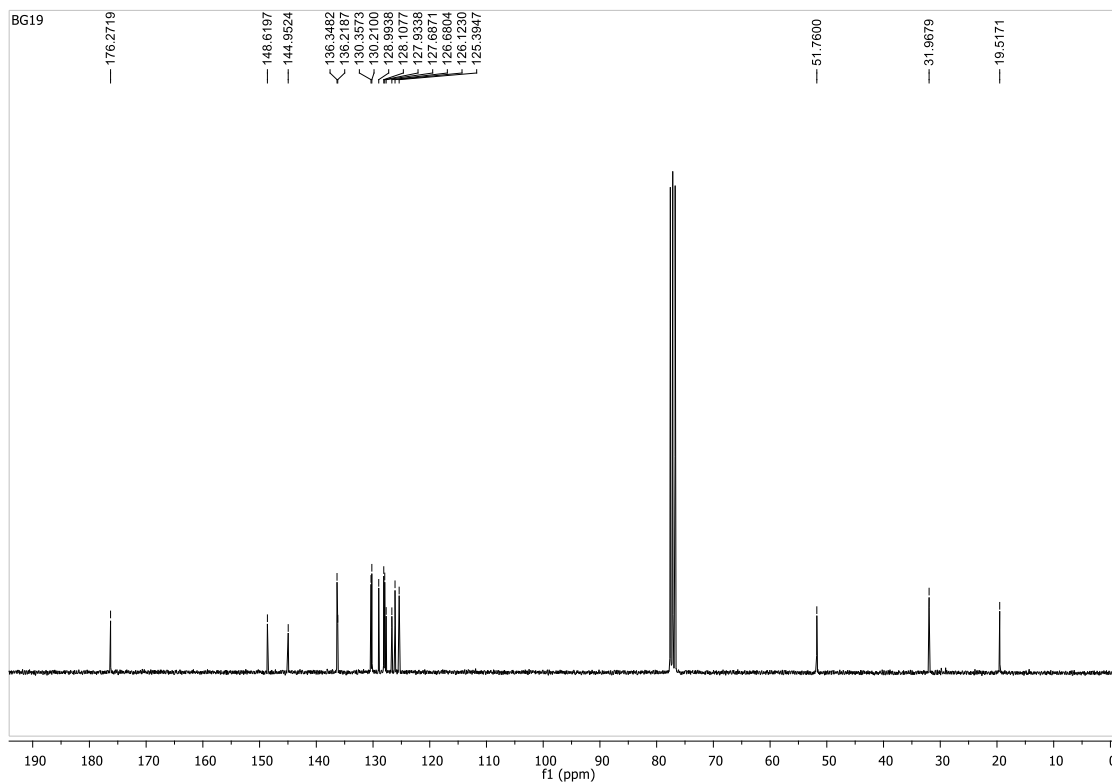
# *N*-(4-acridyl)-2-pyrrolidinone (**5a1**).



$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

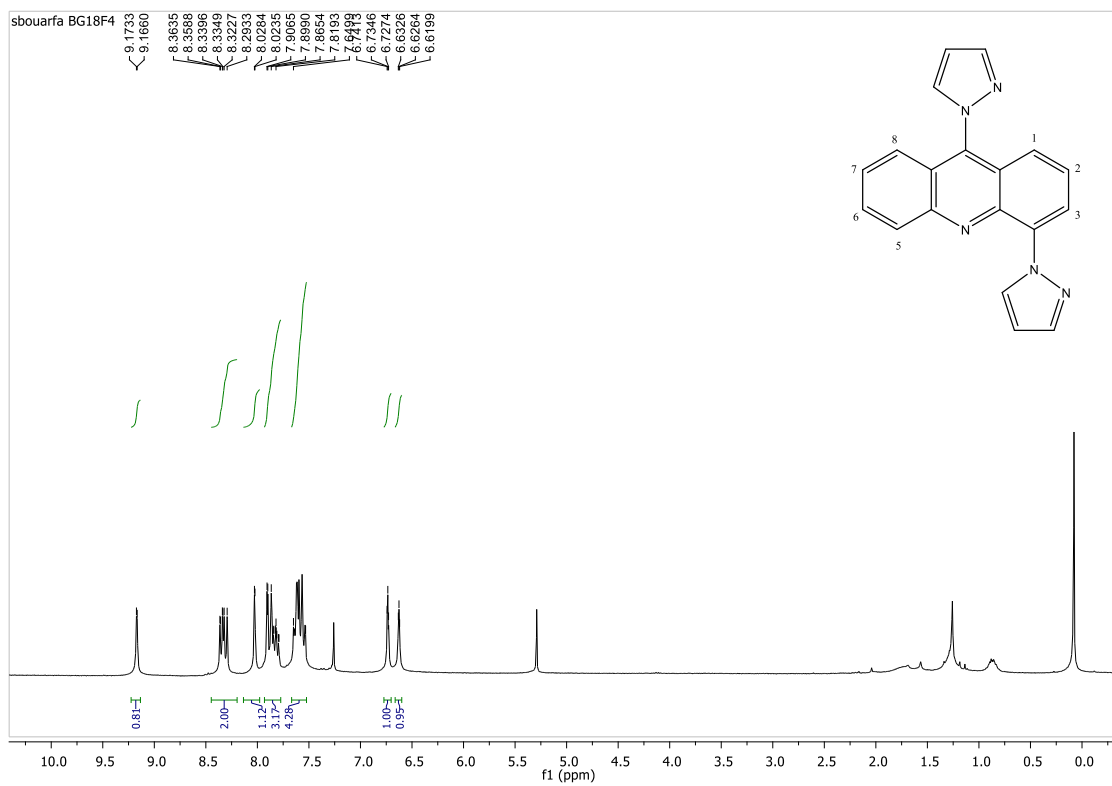


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

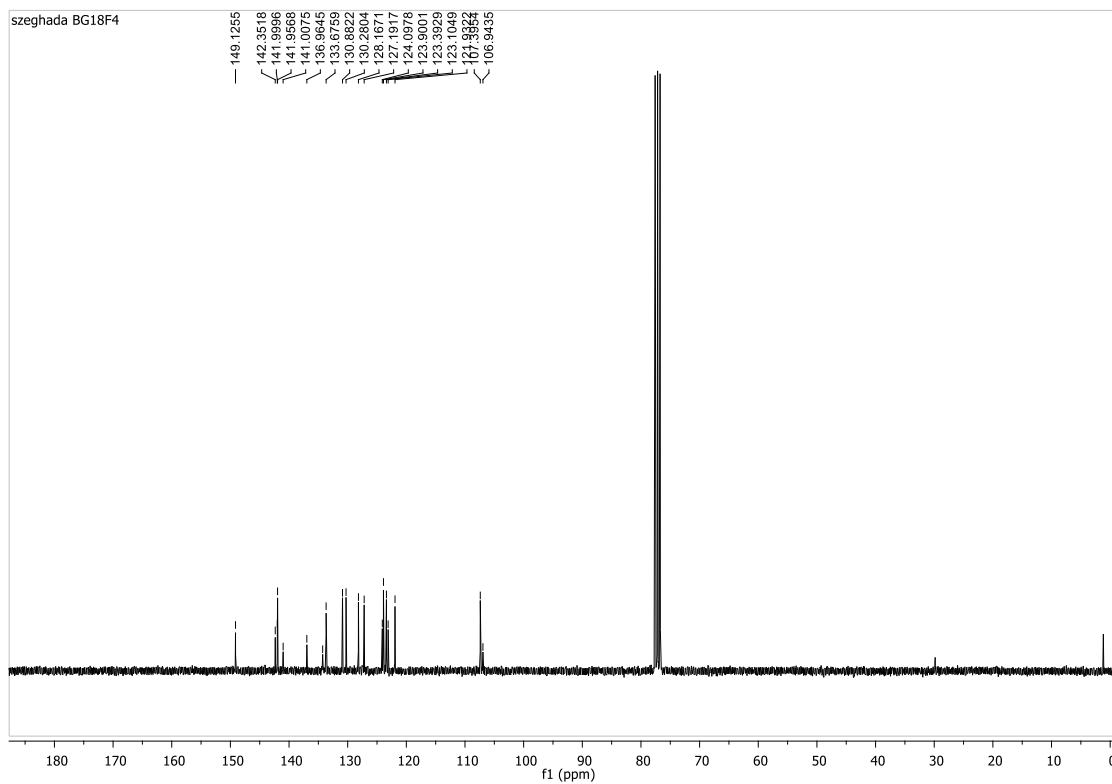


## 4,9-Di(*N*-pyrazolyl)acridine (**5a2**).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

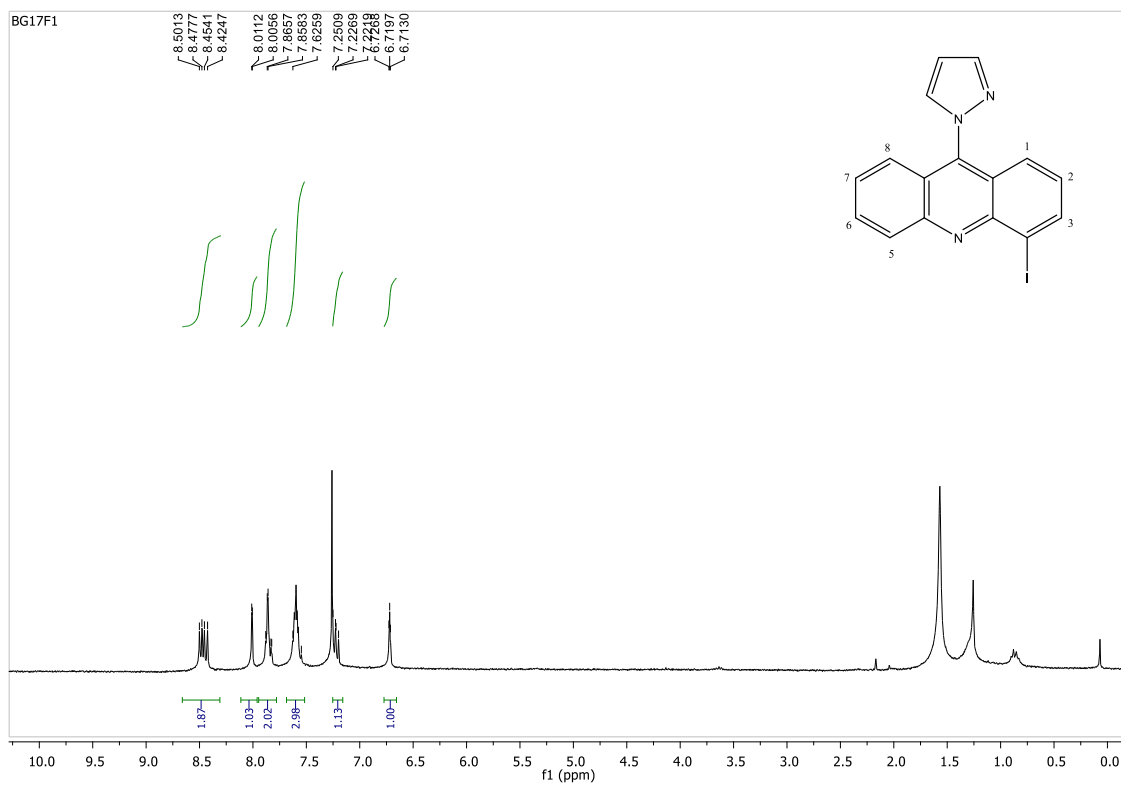


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )



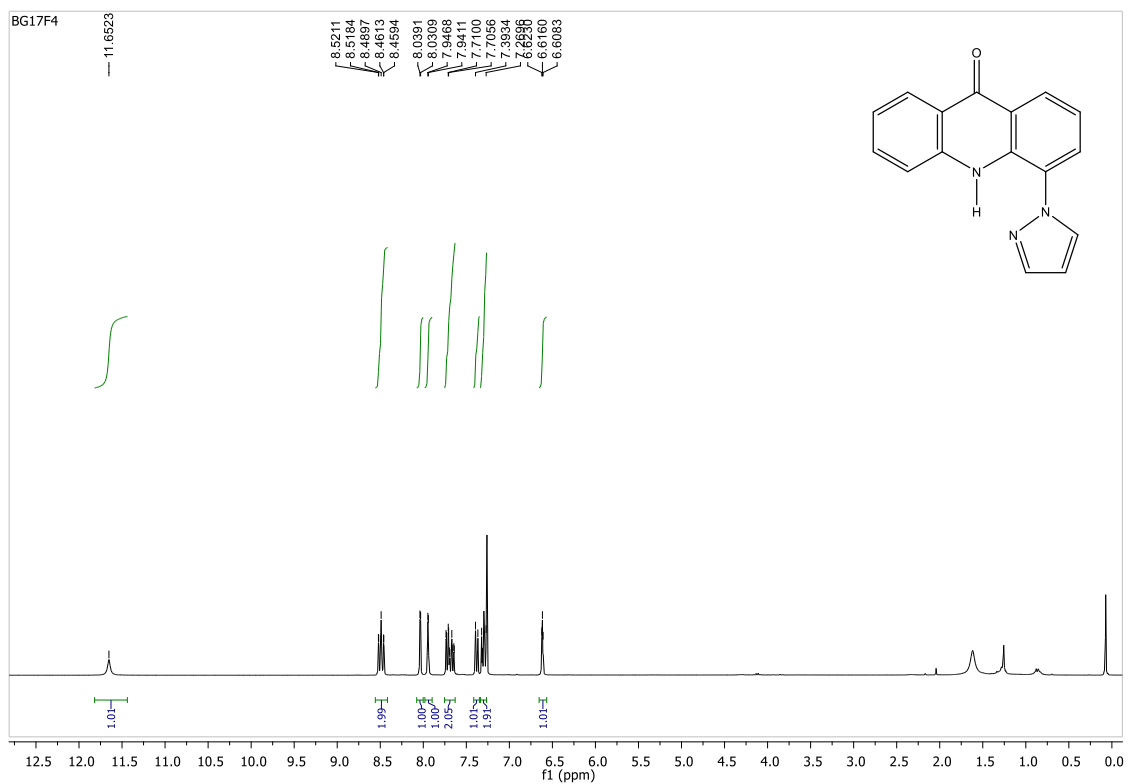
# 4-Iodo-9-(*N*-pyrazolyl)acridine (5a5).

<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>)

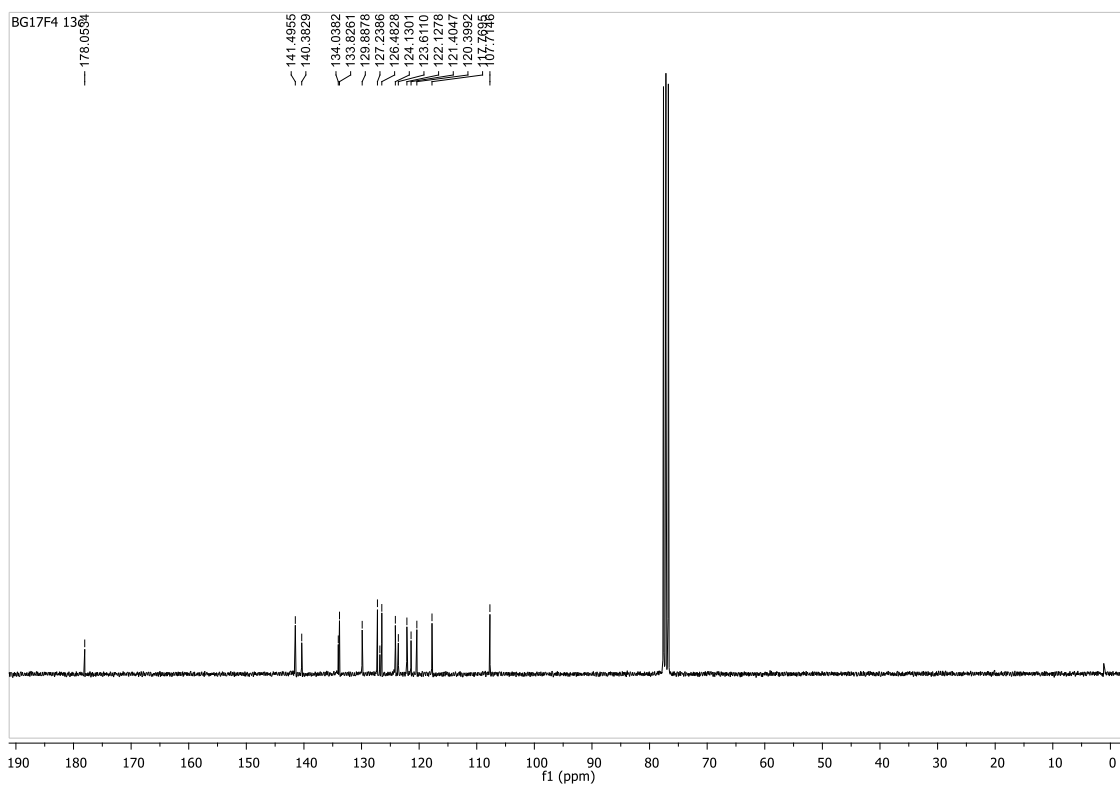


### 4-(*N*-pyrazolyl)-9-acridone (5a3).

<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>)



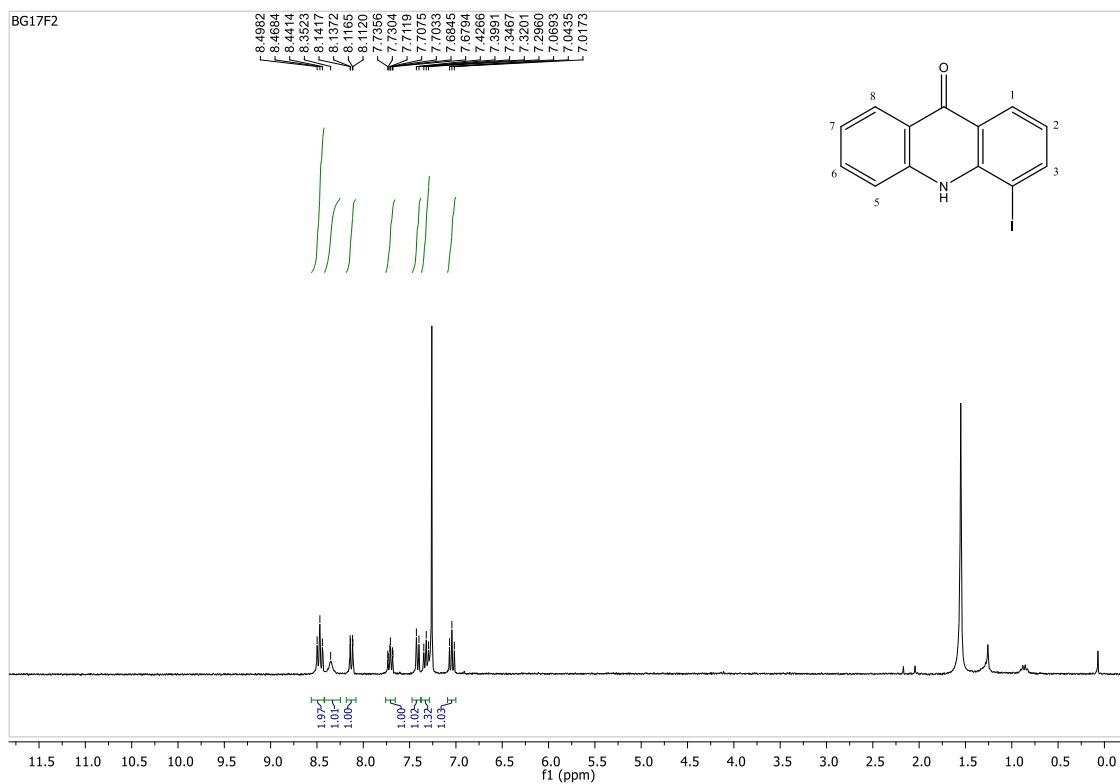
<sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>)



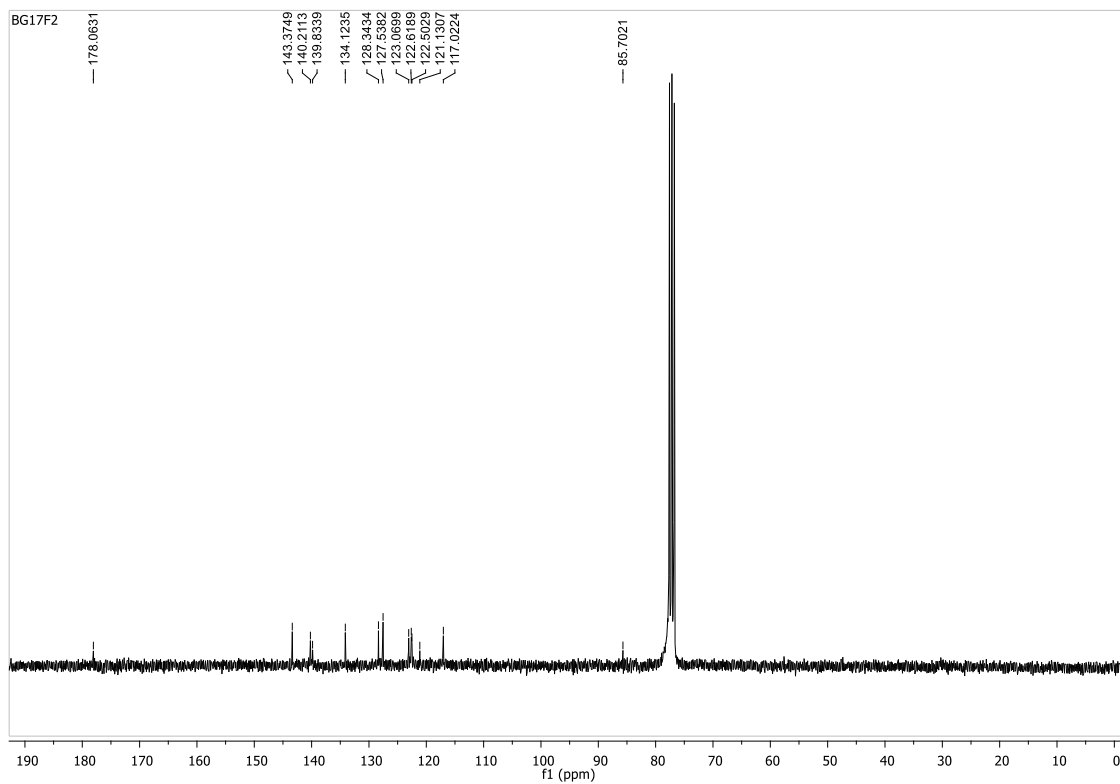


### 4-Iodo-9-acridone (5a4).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

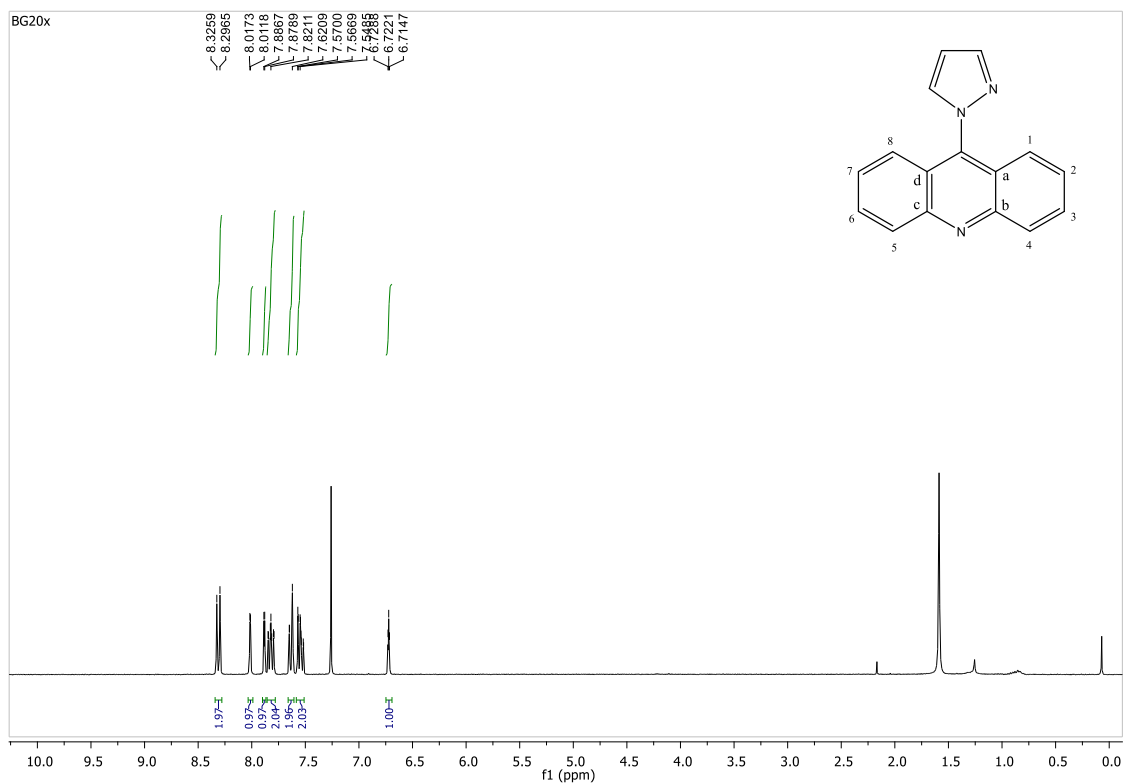


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

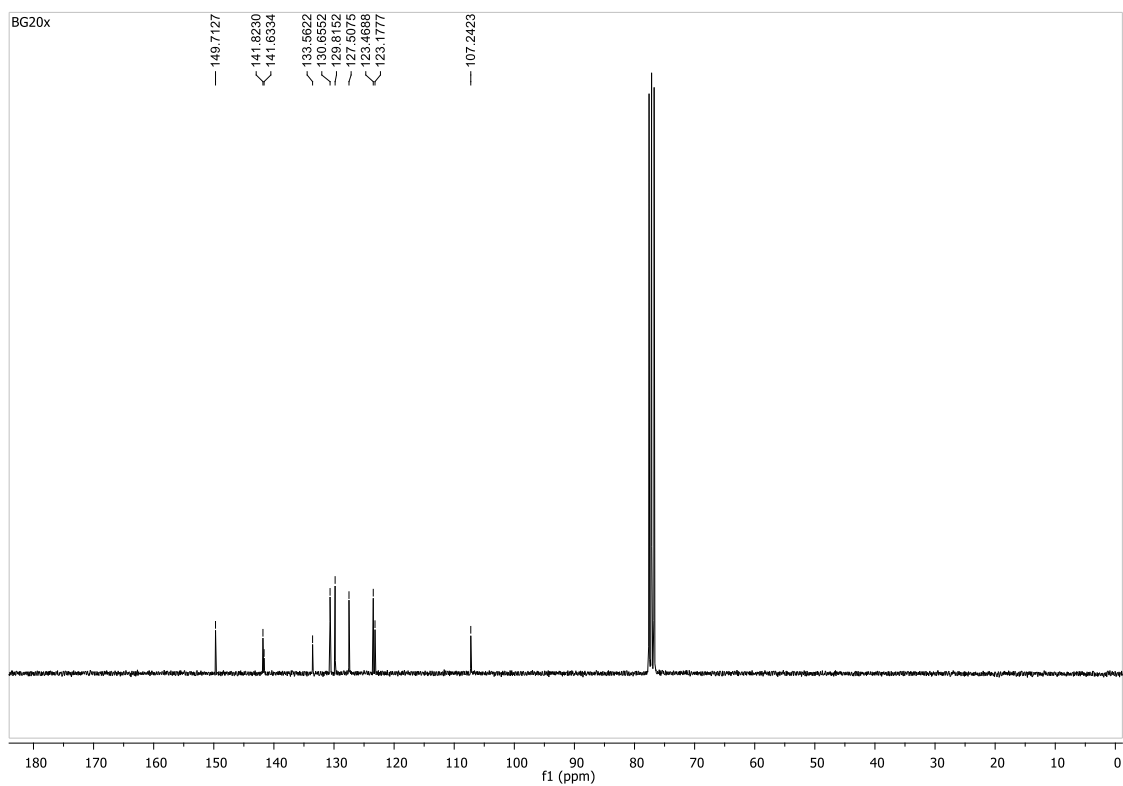


# 9-(*N*-pyrazolyl)acridine (5a7).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

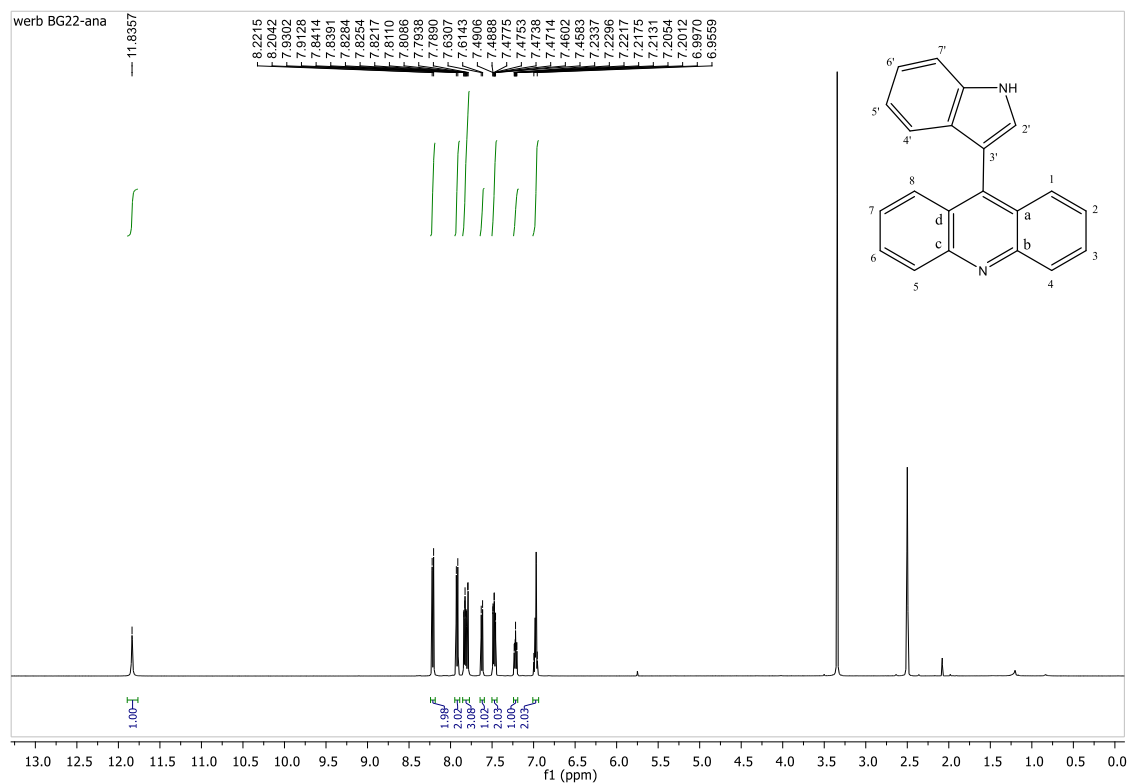


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

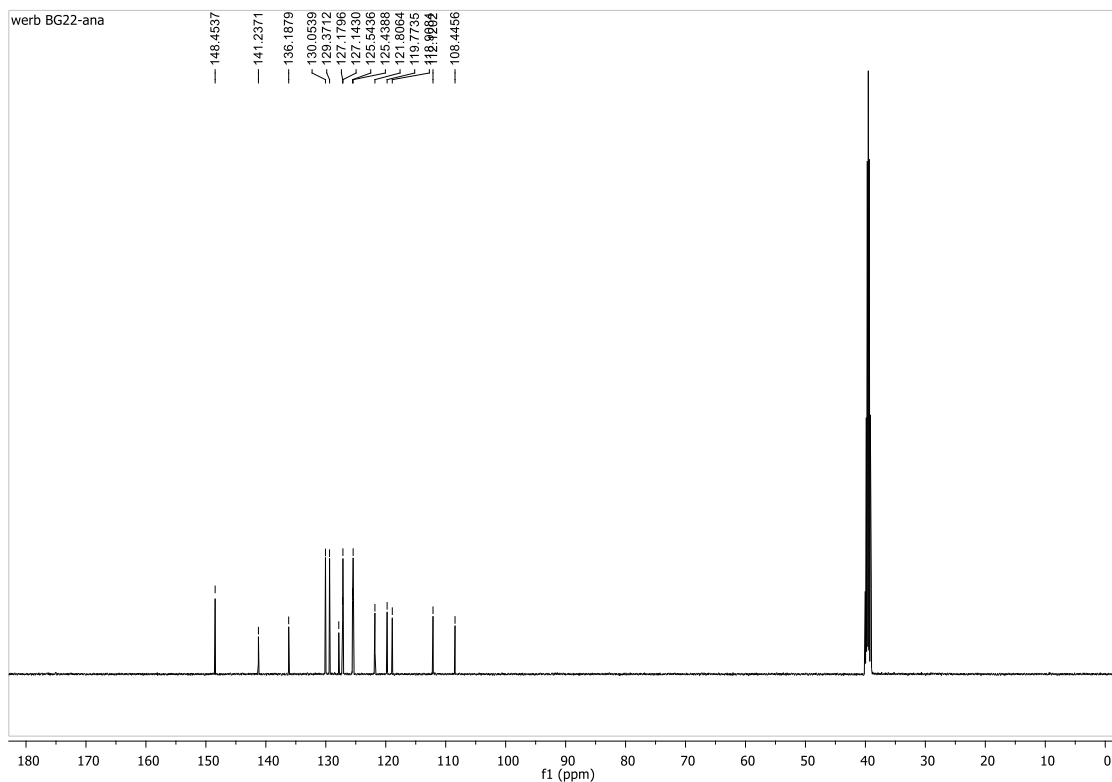


# 9-(3-Indolyl)acridine (5a8).

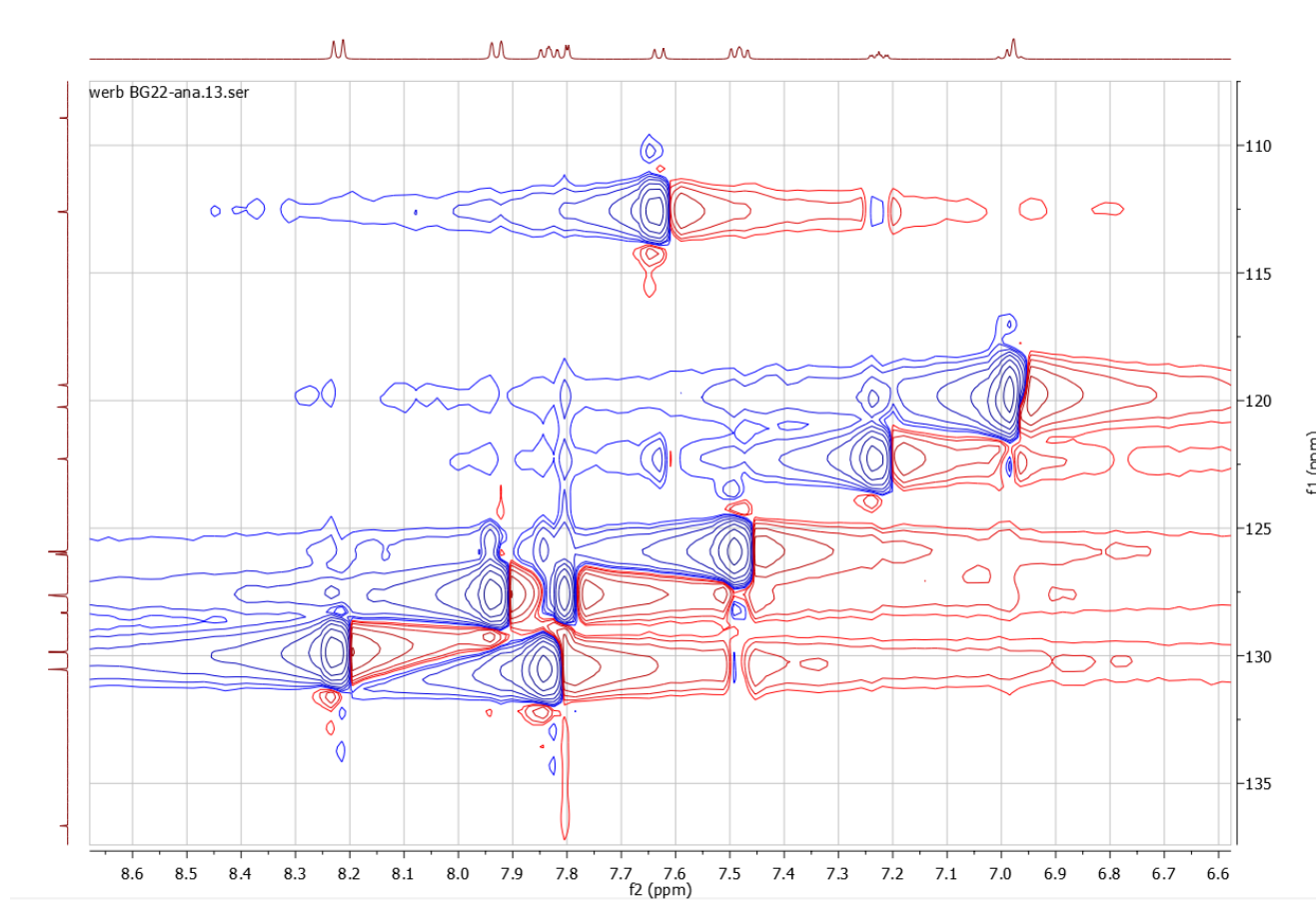
$^1\text{H}$  NMR (500 MHz,  $(\text{CD}_3)_2\text{SO}$ )



$^{13}\text{C}$  NMR (126 MHz,  $(\text{CD}_3)_2\text{SO}$ )

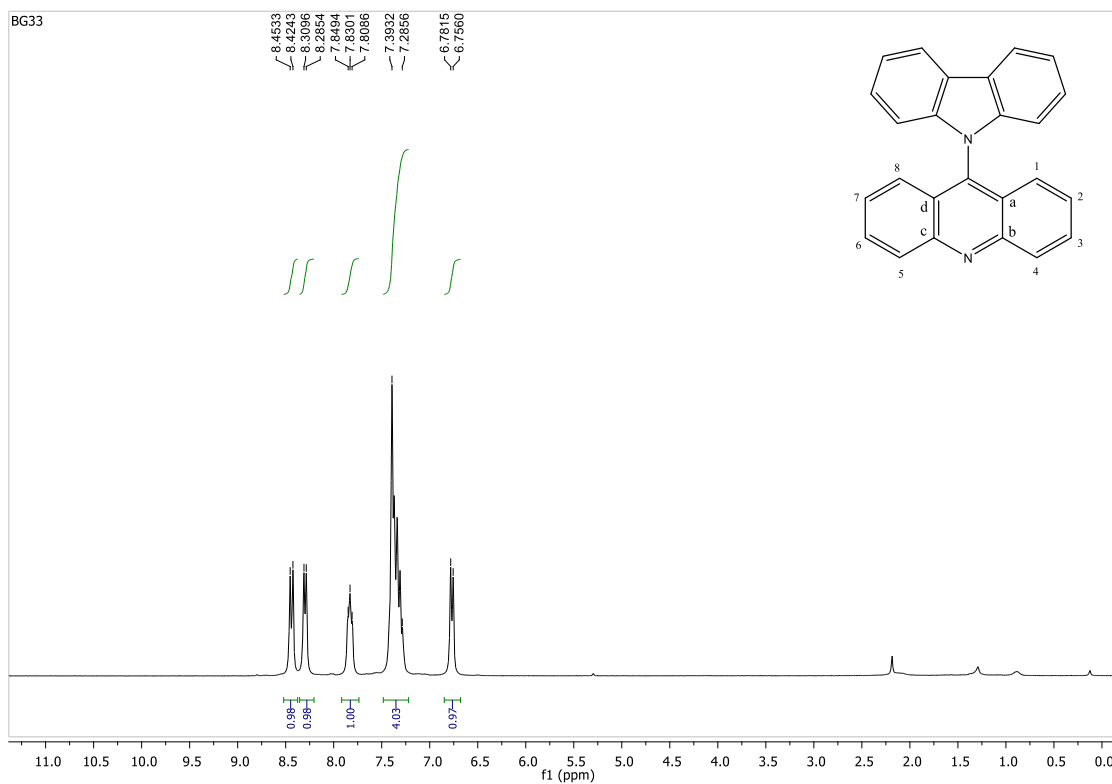


HSQC (126 MHz, (CD<sub>3</sub>)<sub>2</sub>SO)

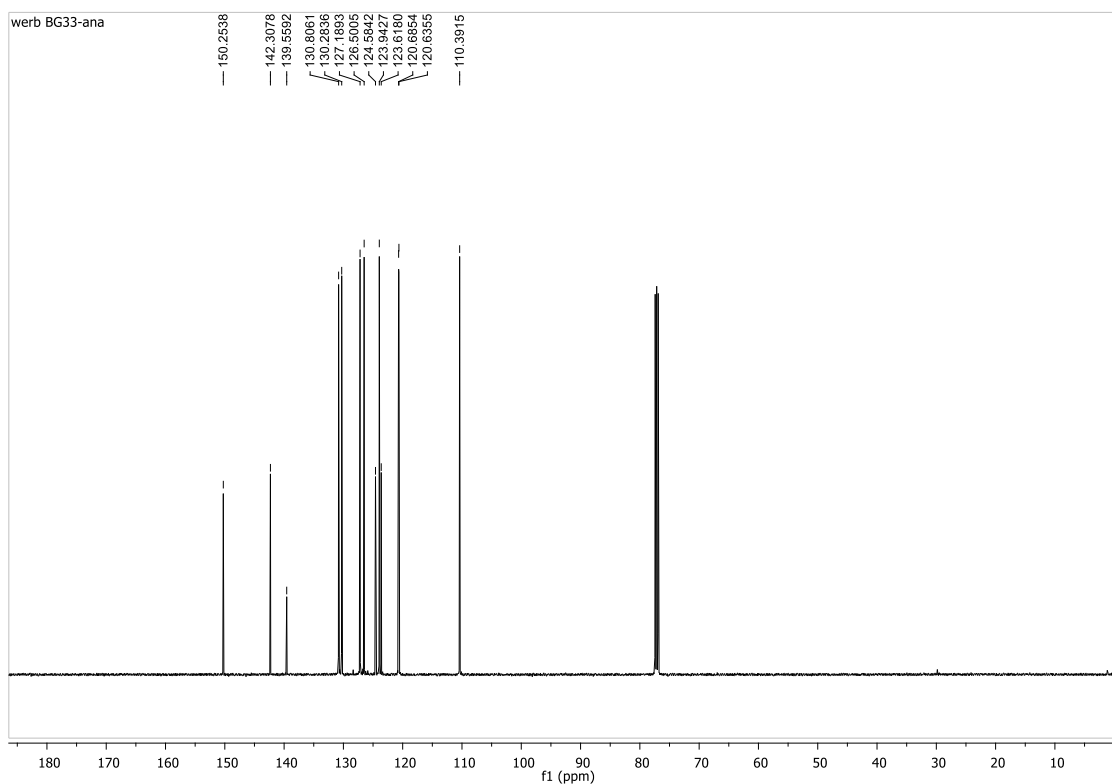


# 9-(*N*-carbazolyl)acridine (5a9).

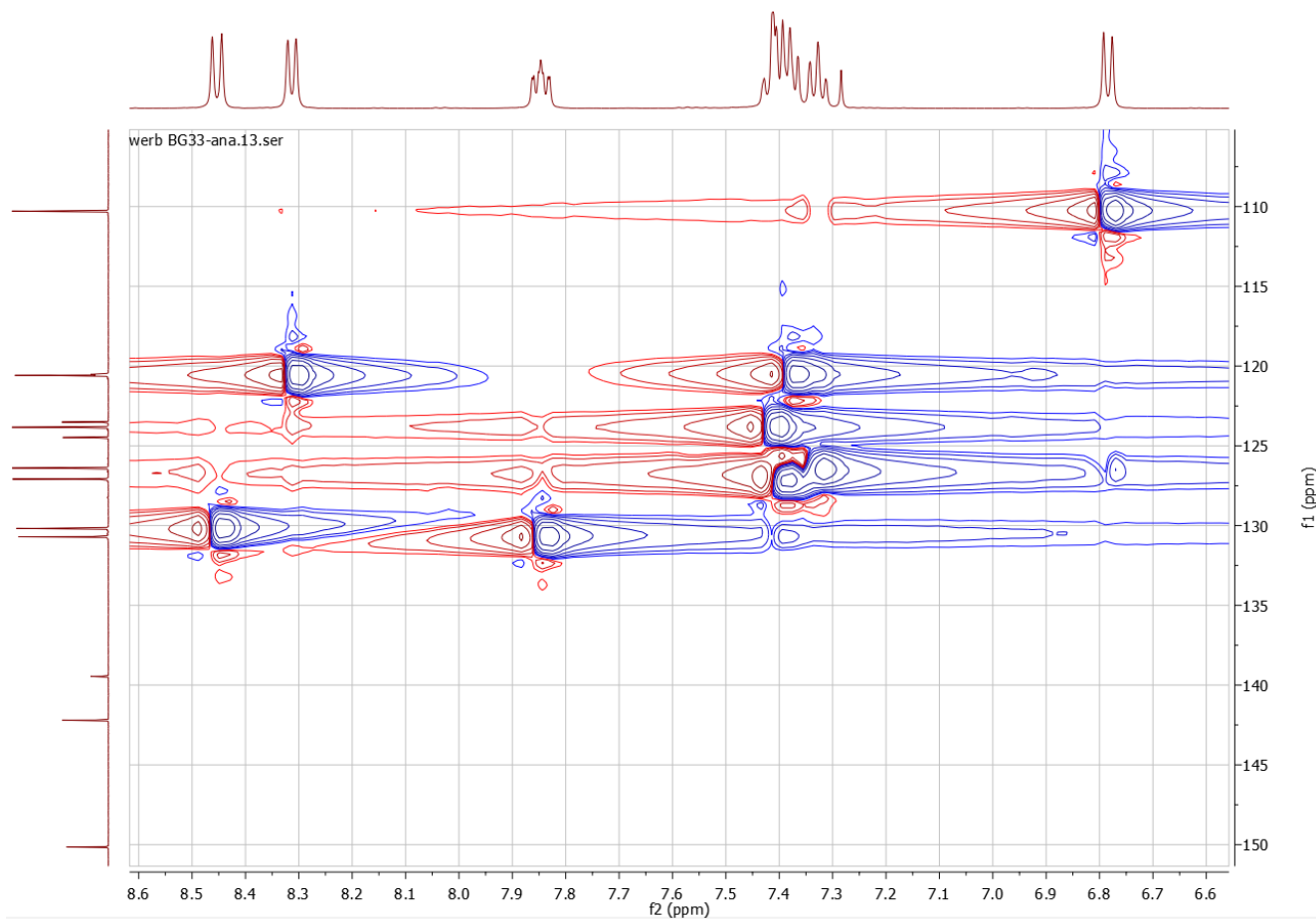
$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )



$^{13}\text{C}$  NMR (126 MHz,  $\text{CDCl}_3$ )

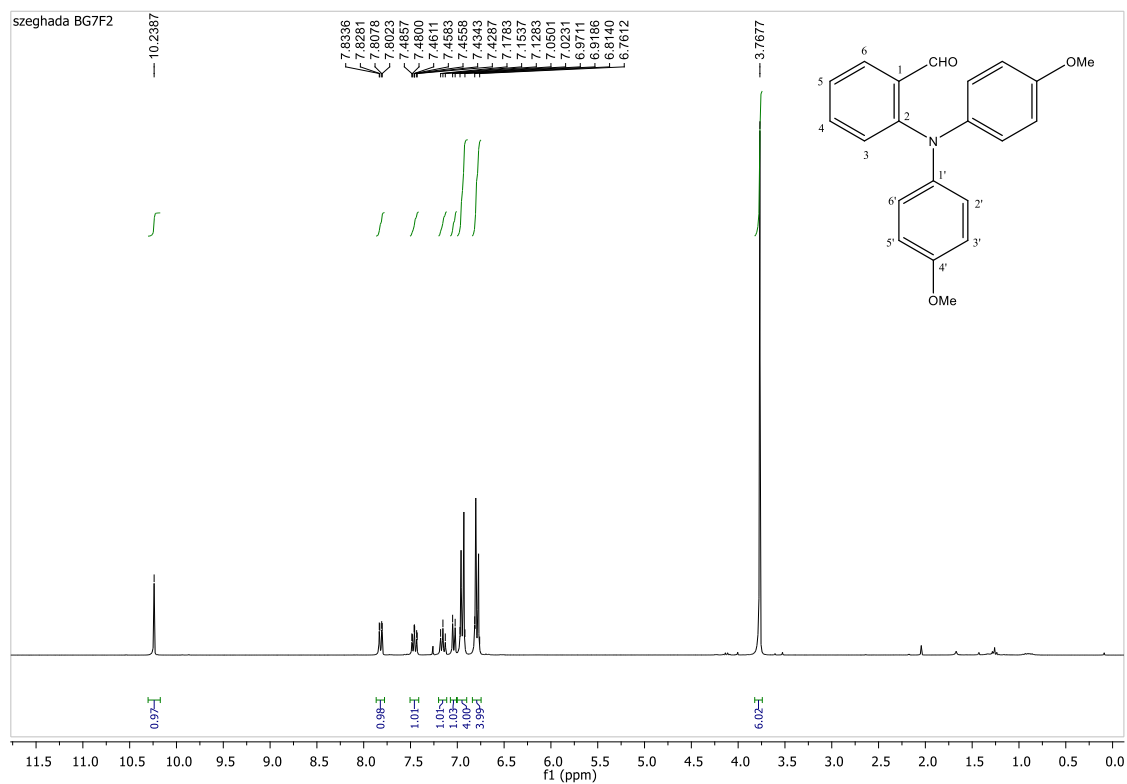


HSQC (CDCl<sub>3</sub>)

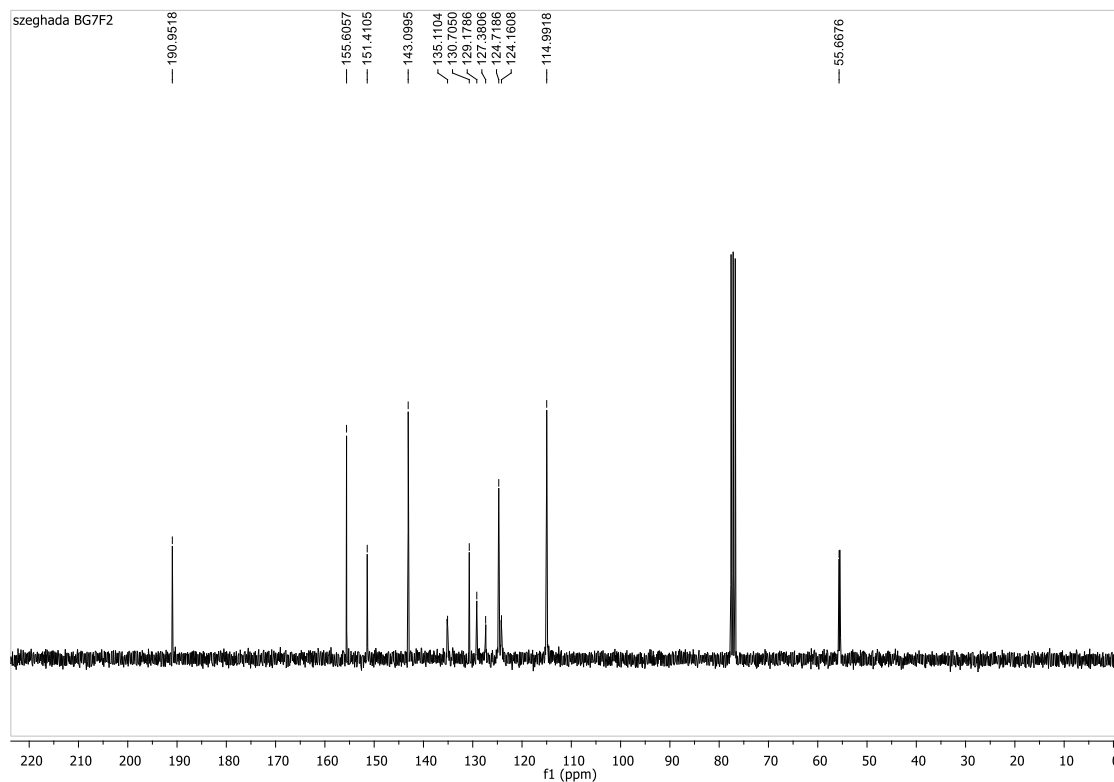


## 2-[*N,N*-di(4-methoxyphenyl)]aminobenzaldehyde (6b).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

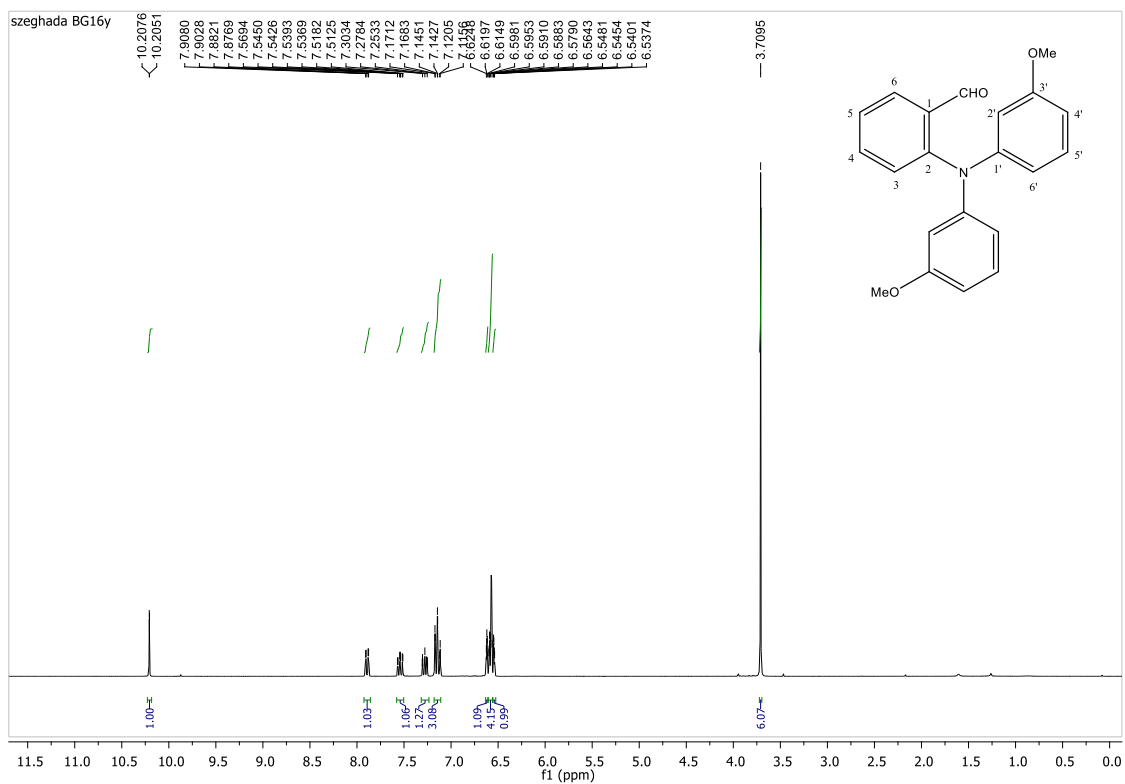


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

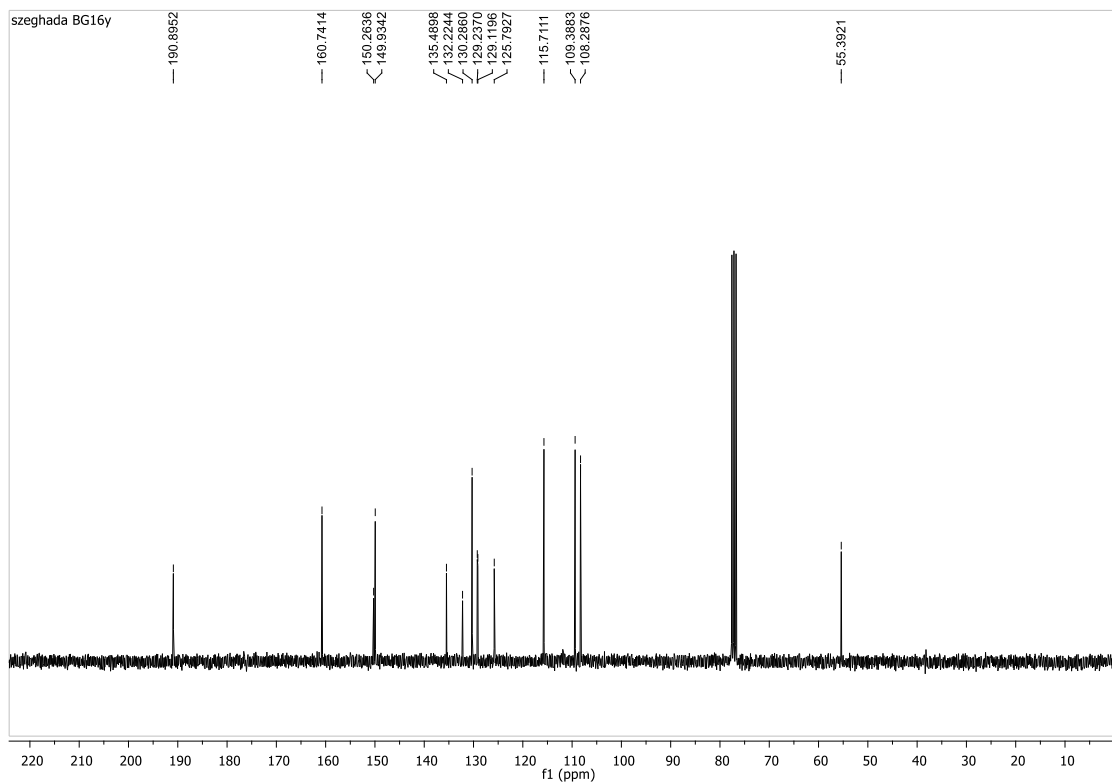


## 2-[*N,N*-di(3-methoxyphenyl)]aminobenzaldehyde (6c).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )



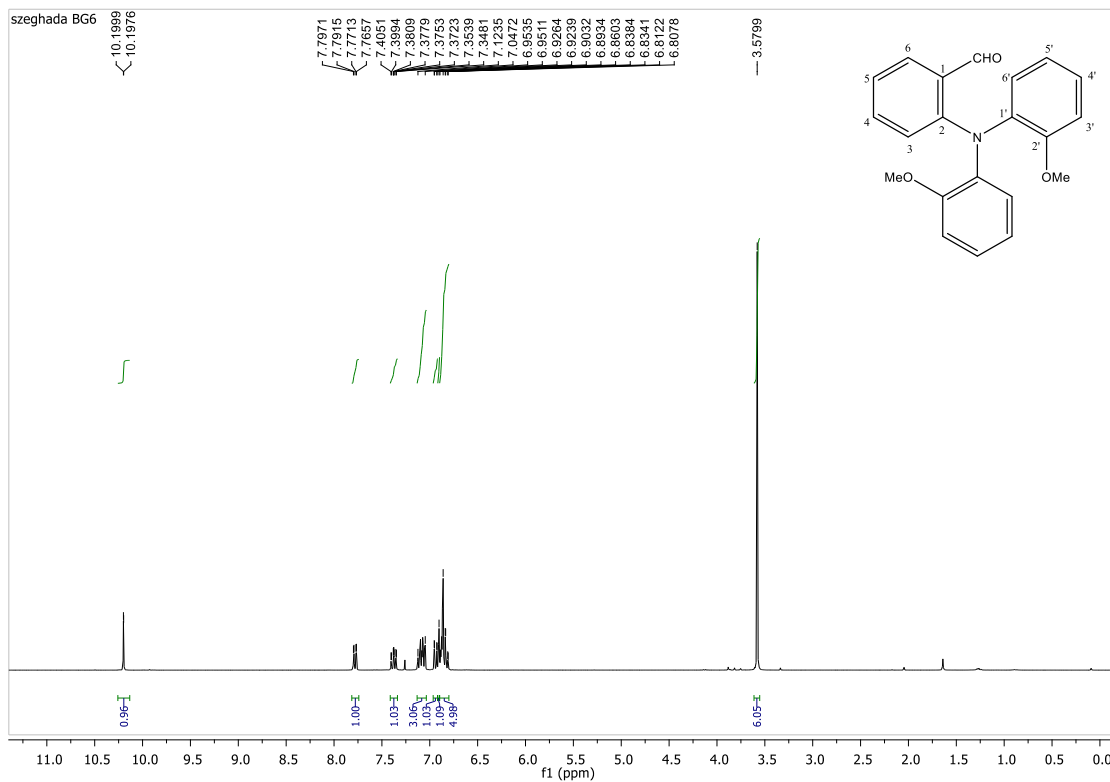
$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )



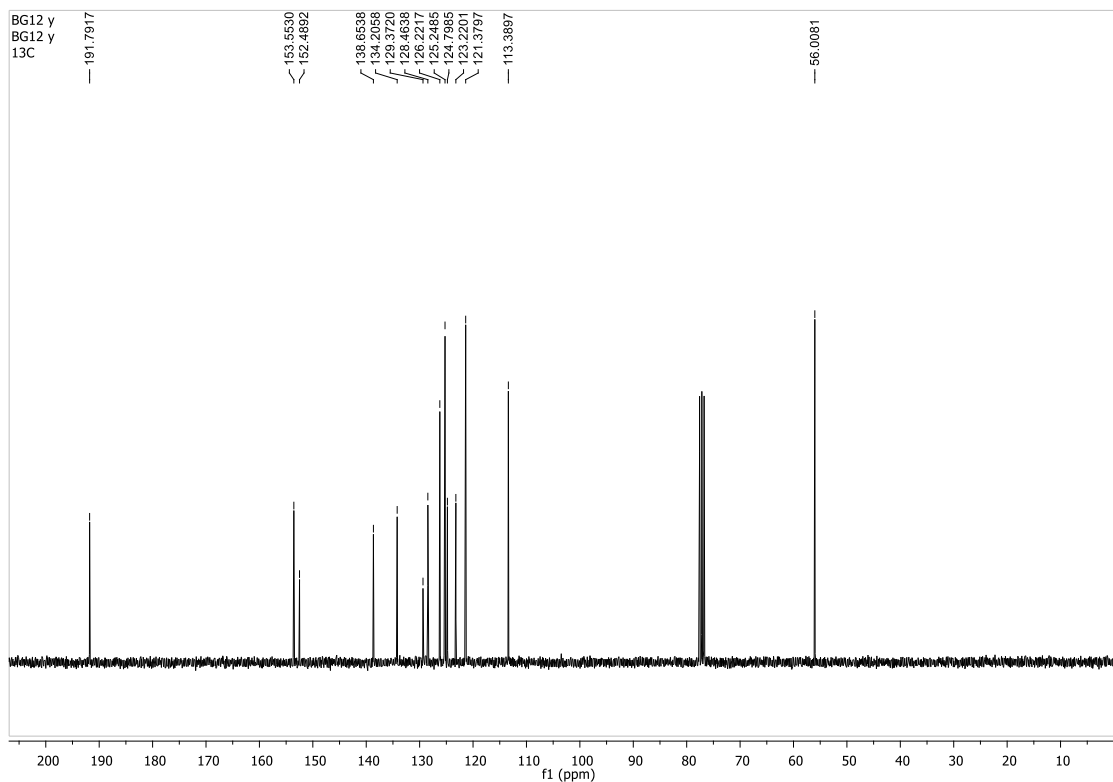


## 2-[*N,N*-di(2-methoxyphenyl)]aminobenzaldehyde (6d).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

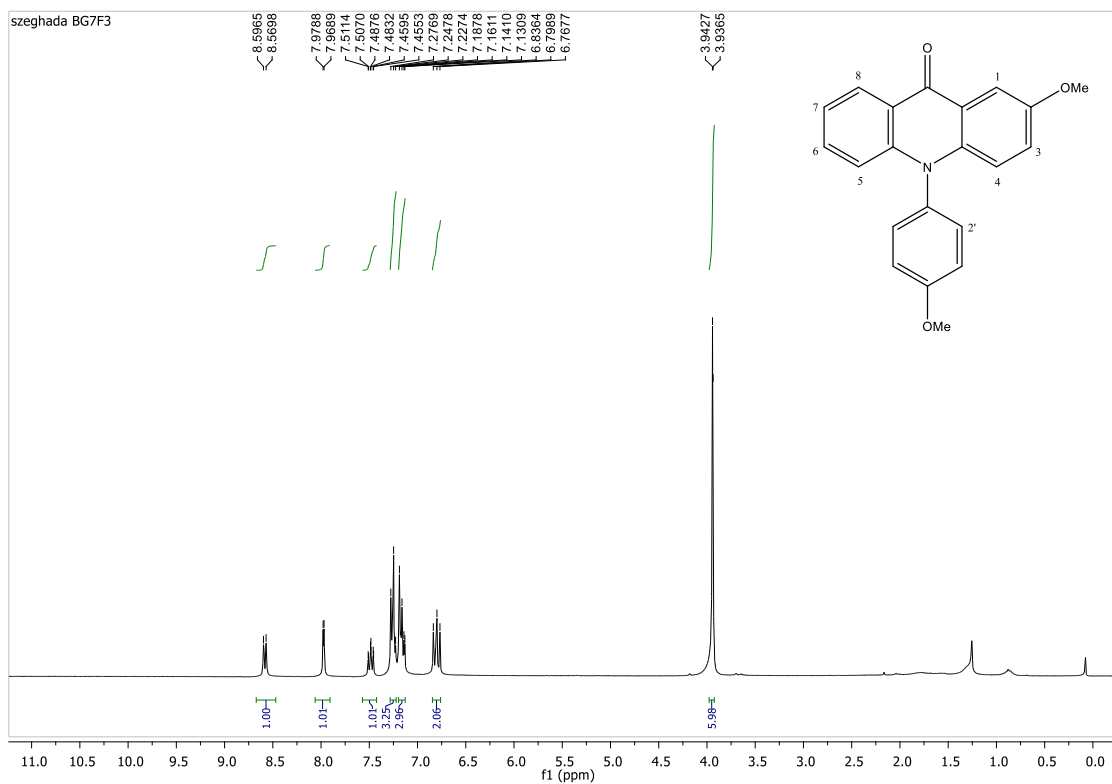


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

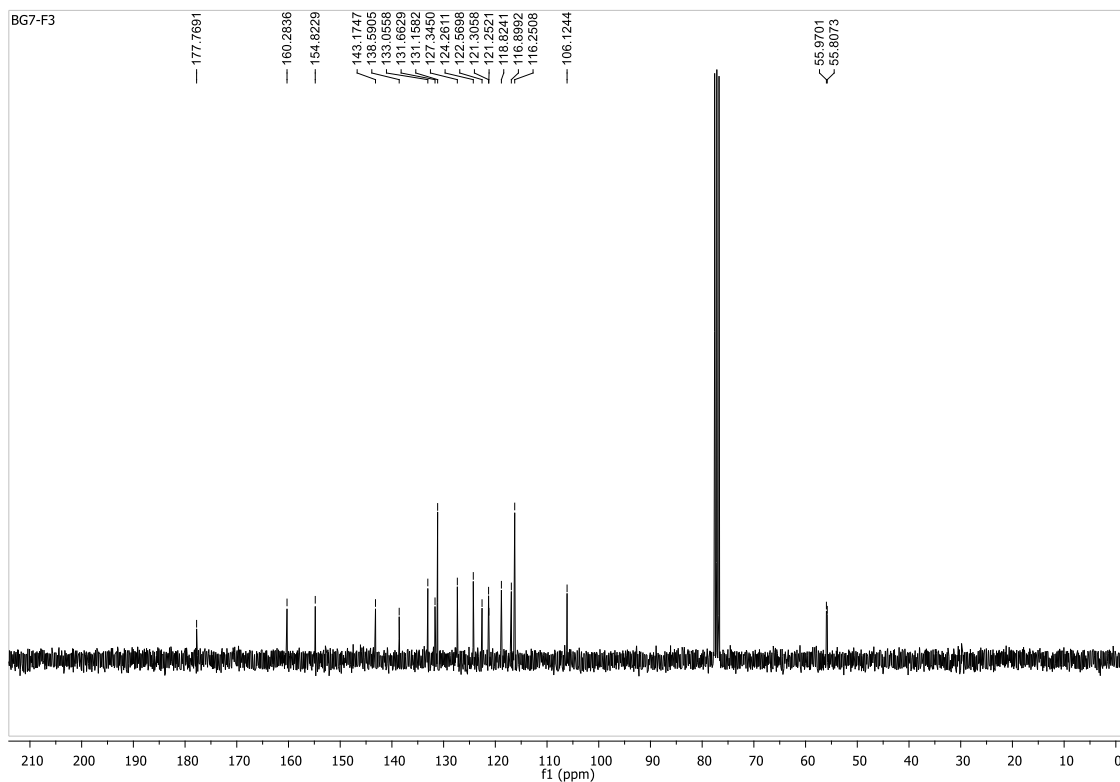


## 2-Methoxy-N-(4-methoxyphenyl)-9-acridone (7b).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

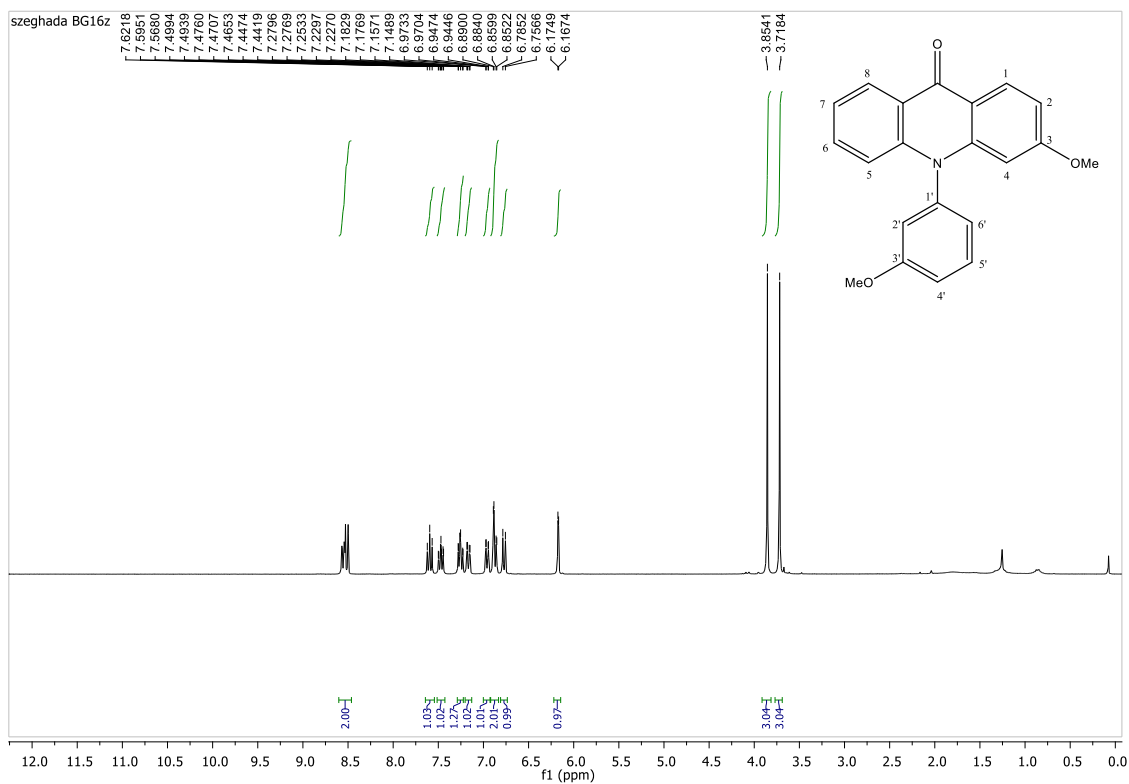


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

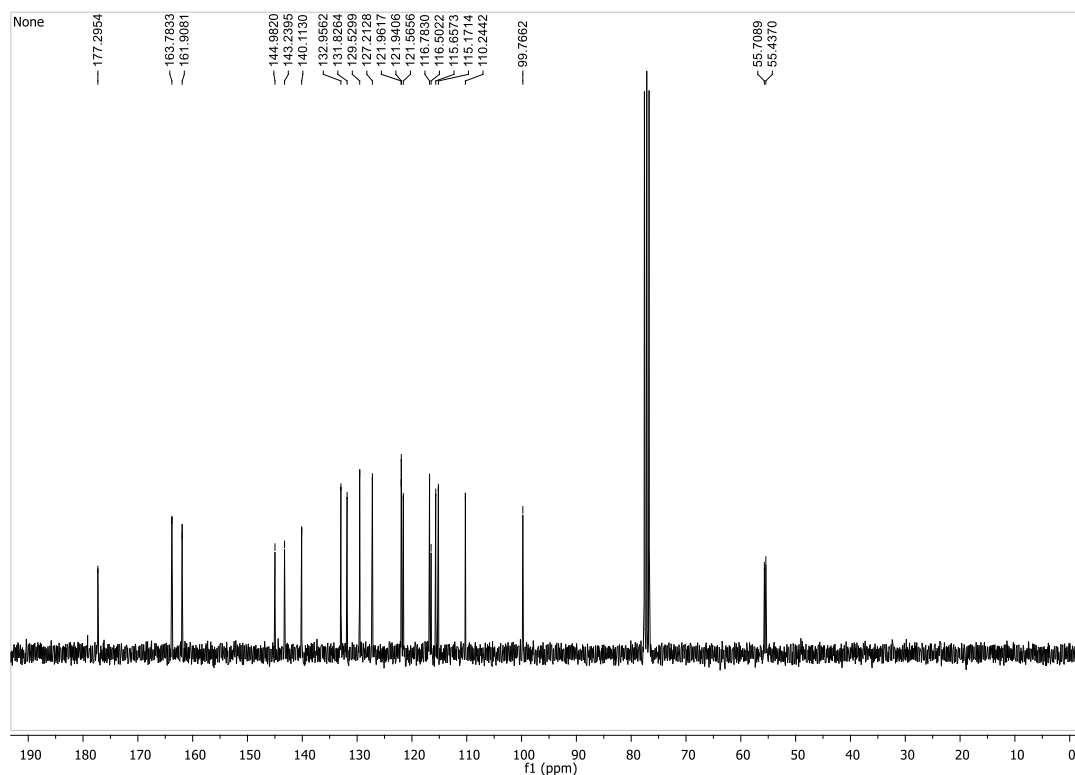


### 3-Methoxy-N-(3-methoxyphenyl)-9-acridone (7c).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

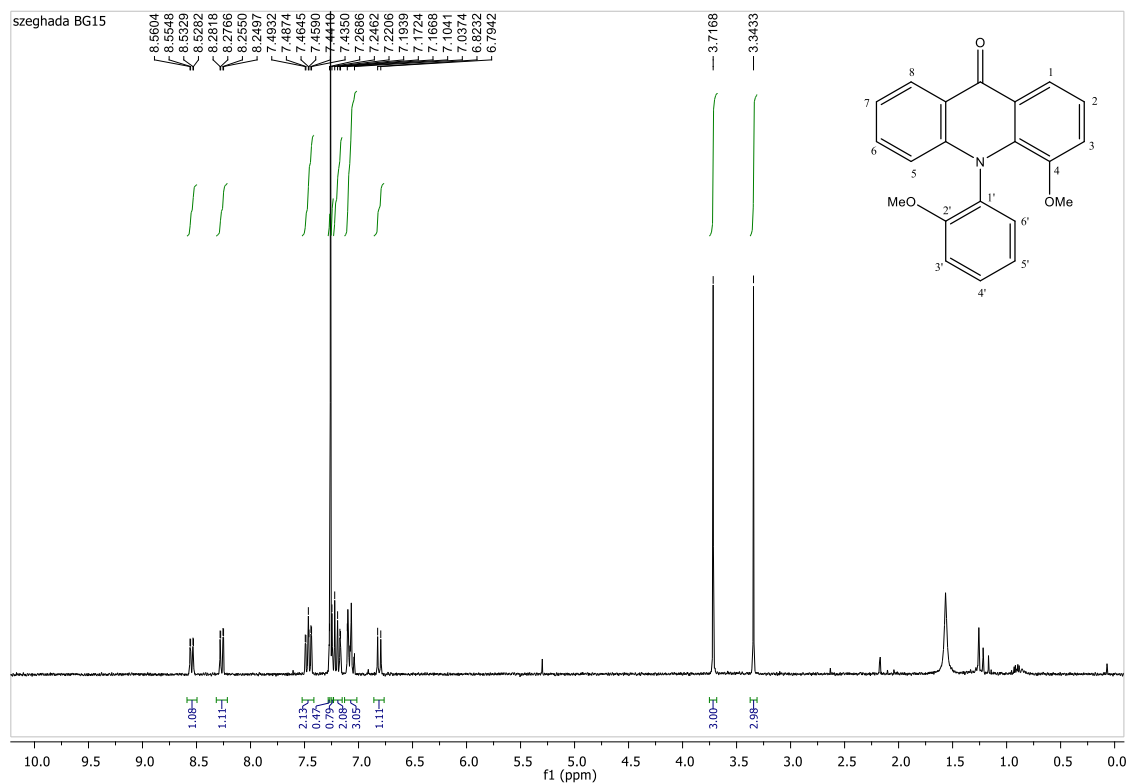


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

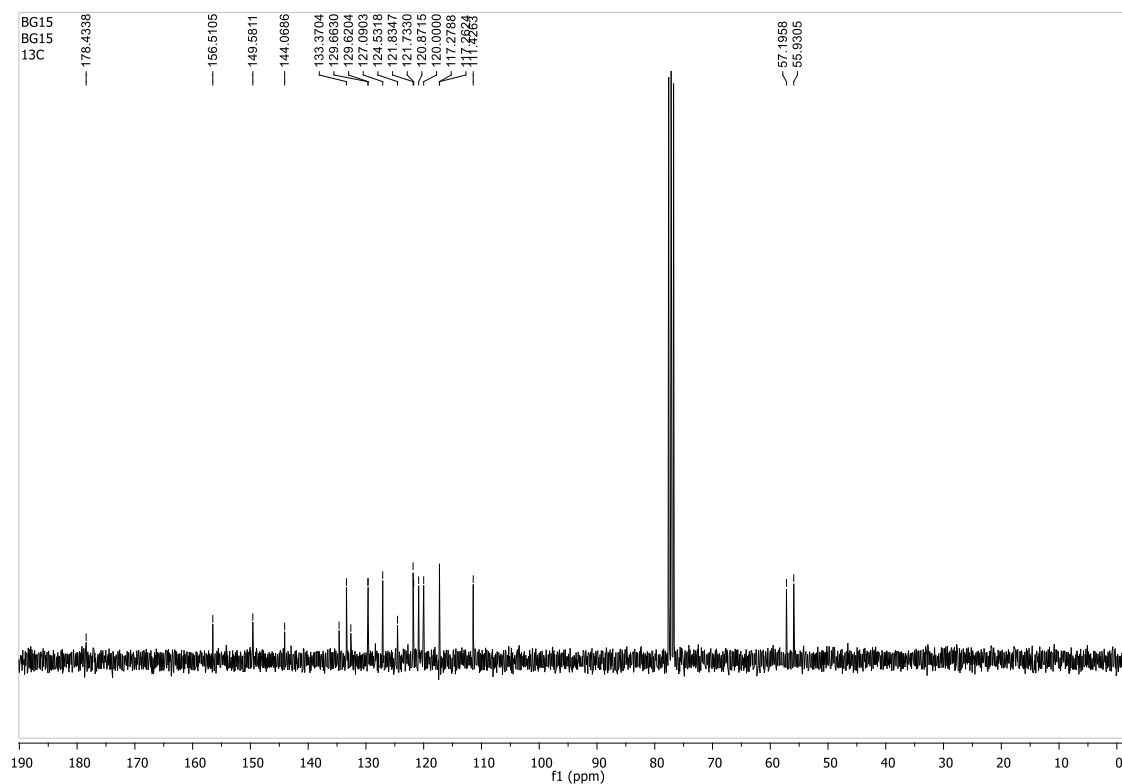


# 4-Methoxy-N-(2-methoxyphenyl)-9-acridone (7d).

$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )

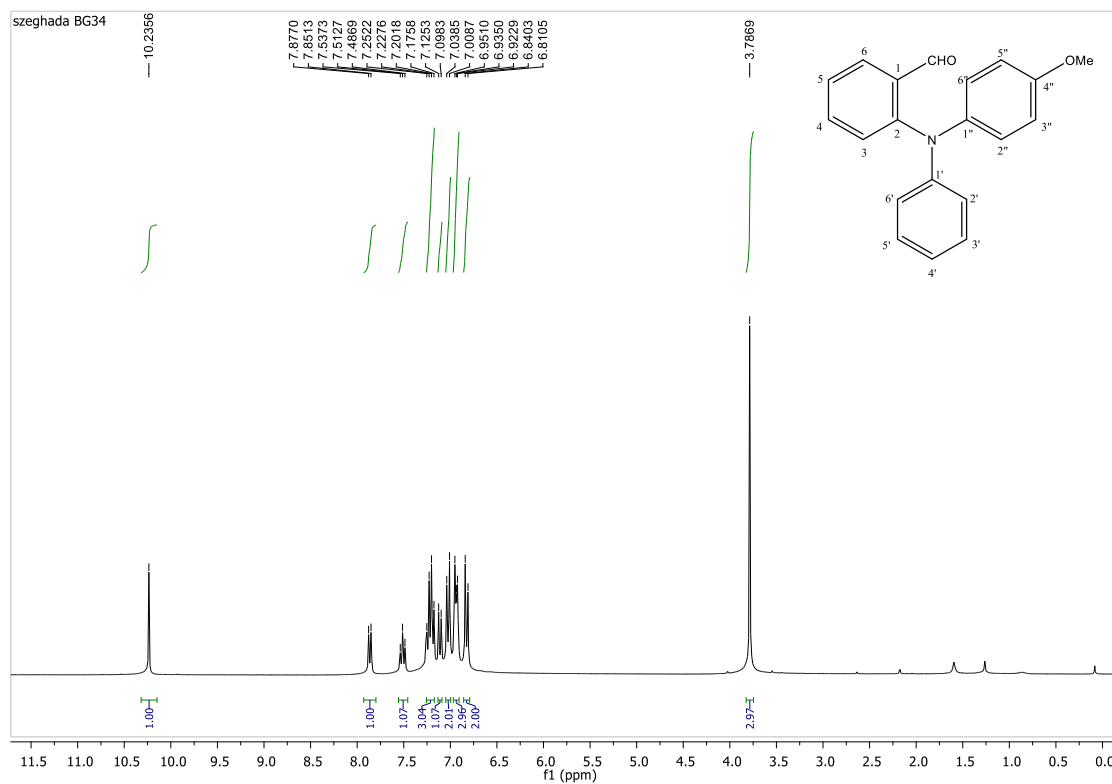


$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )

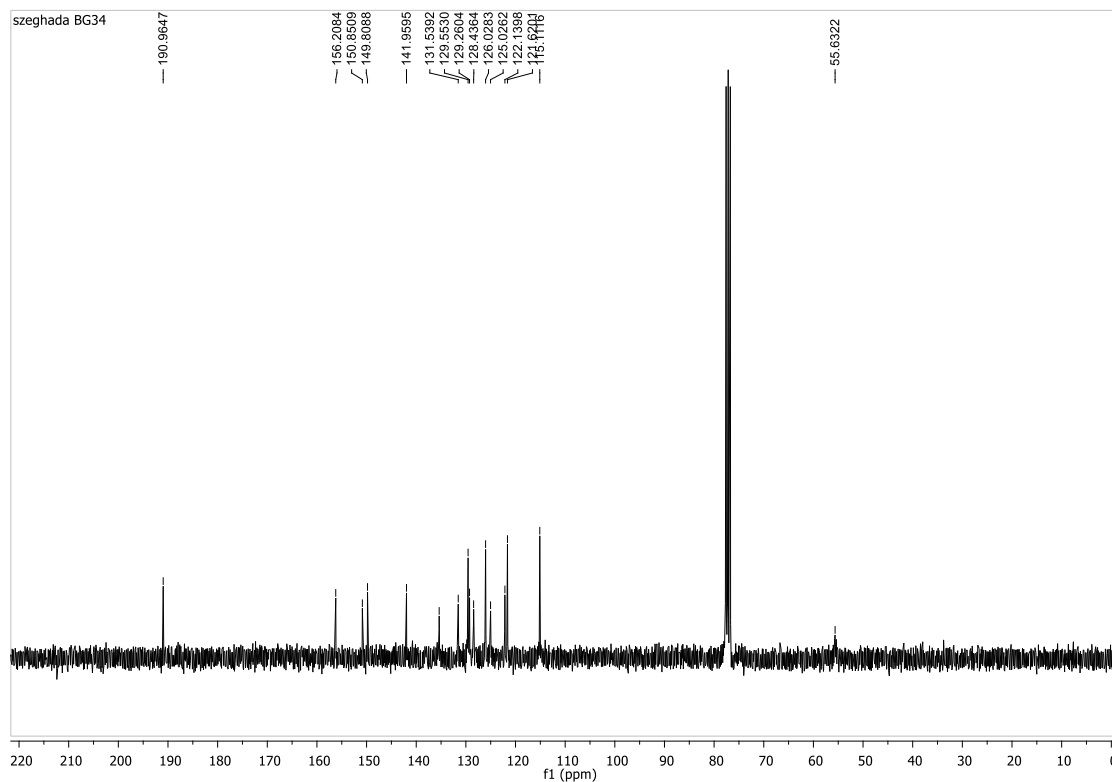


## 2-[(*N*-4-methoxyphenyl)-*N*-phenyl]amino]benzaldehyde (6ab).

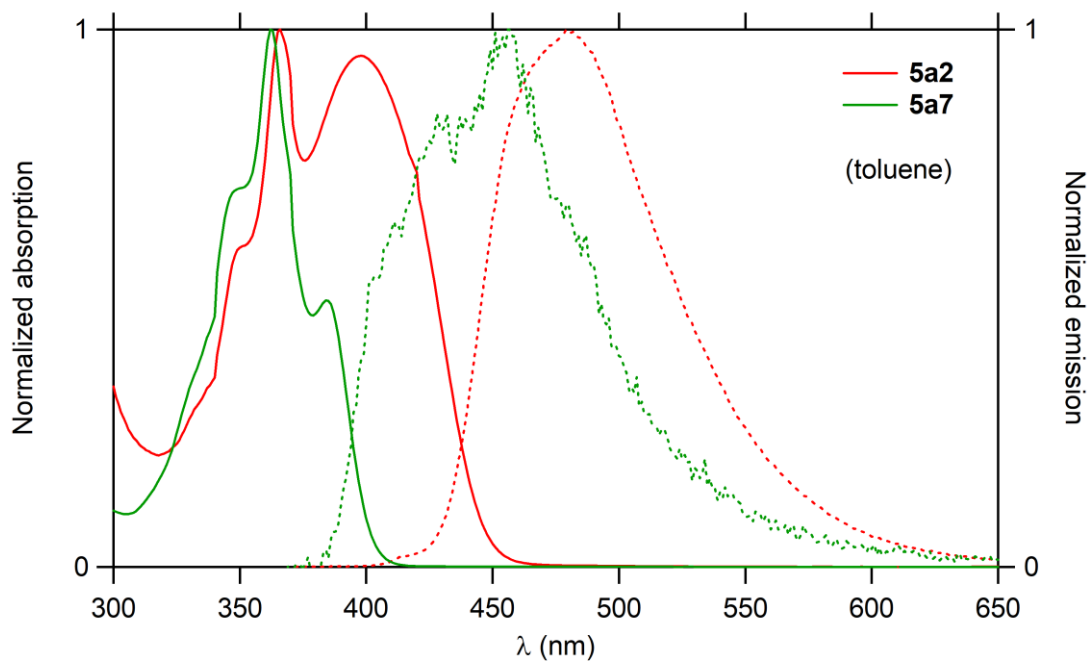
$^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )



$^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )



## Absorption and emission of acridines **5a2** and **5a7**



**Figure S1.** Absorption (solid line) and emission (dotted line) of acridines **5a2** and **5a7** in toluene.