

Supplementary Material

Synthesis and Structural Characterization of Novel Dimers of Dipyridothiazine as Promising Antiproliferative Agents

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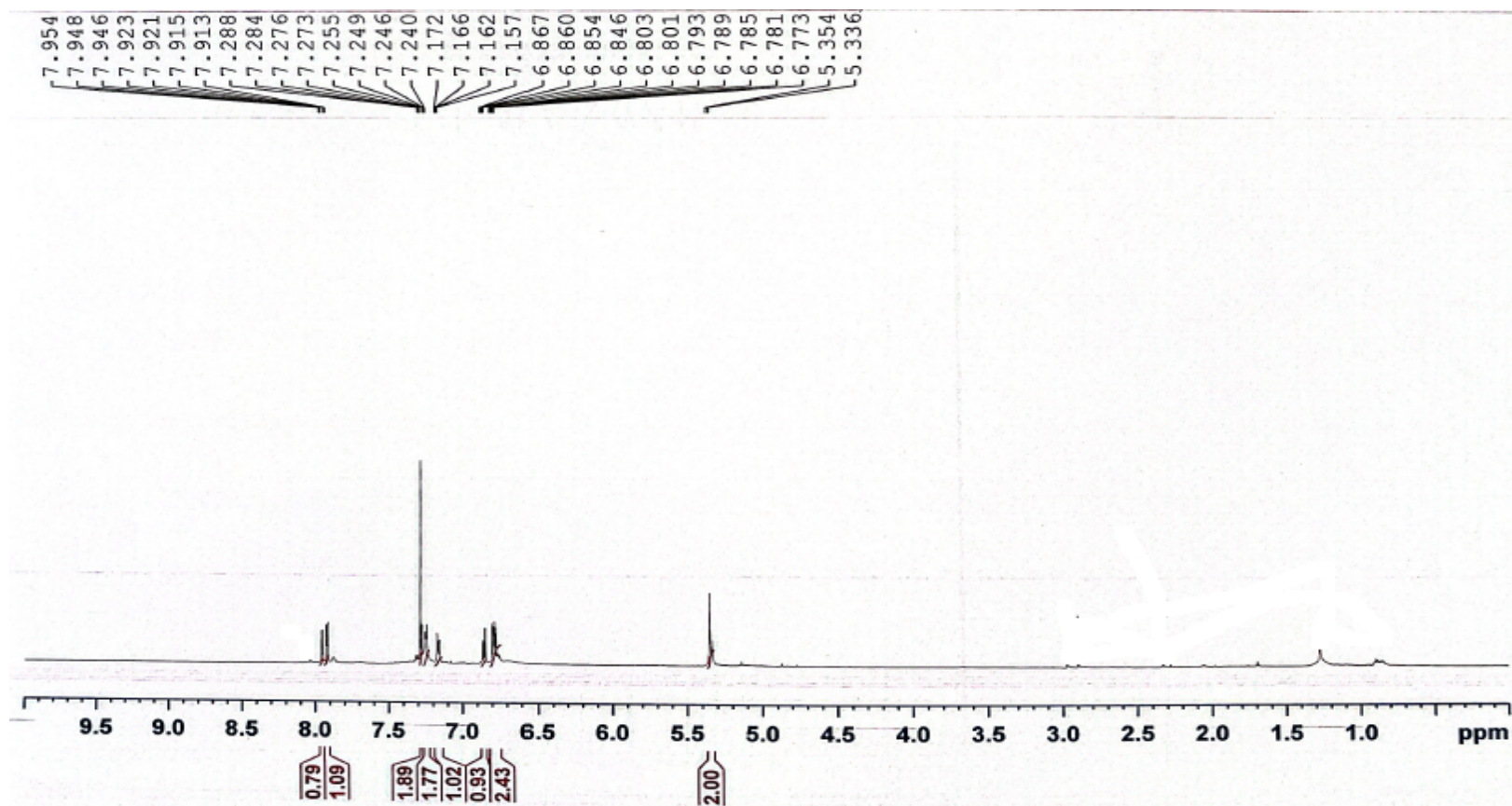
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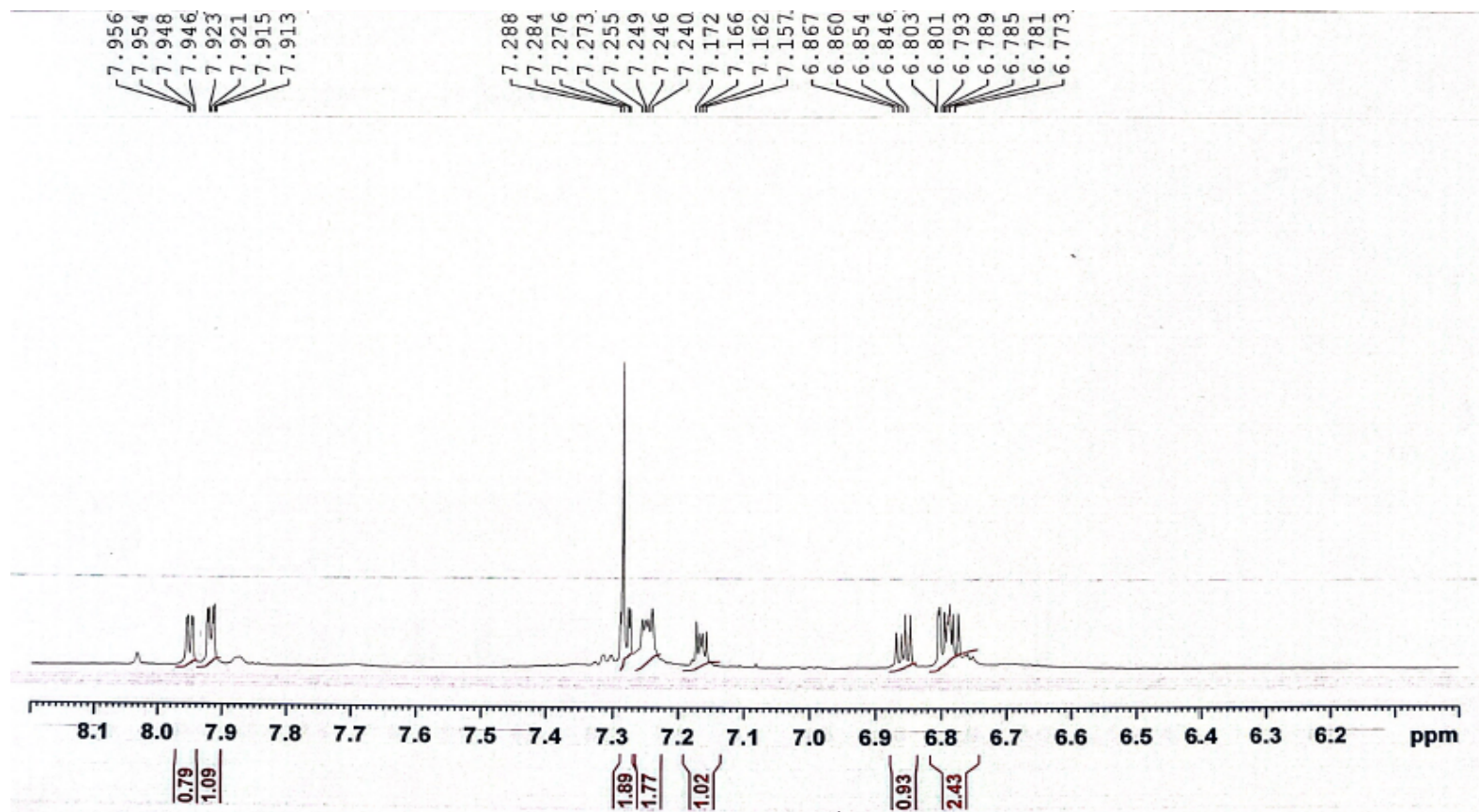
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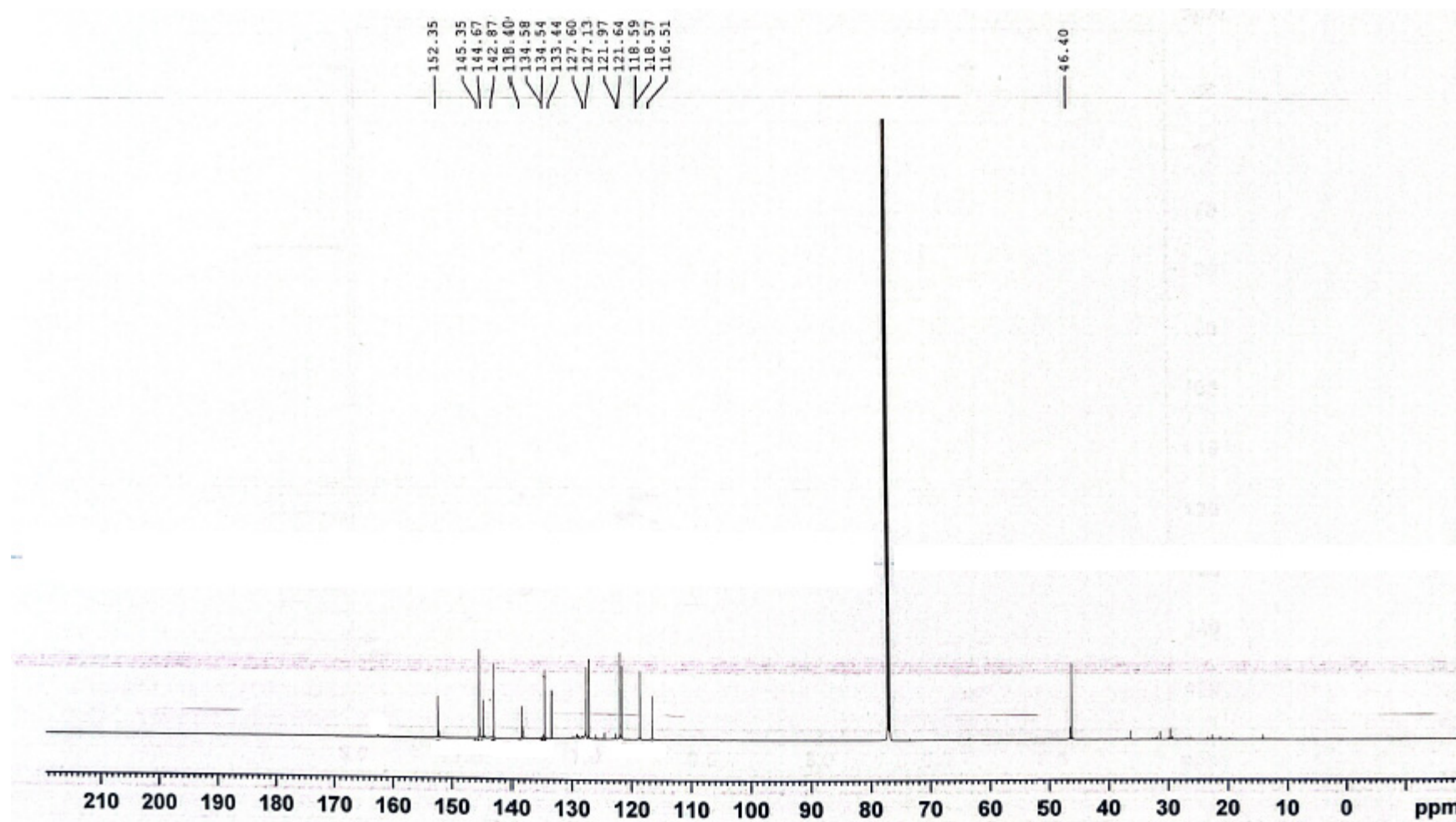
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NMR spectra and HR MS of 1,2-bis((dipyrido[2,3-b:2',3'-e][1,4]thiazin-10-yl)methyl)benzene (**1a**)

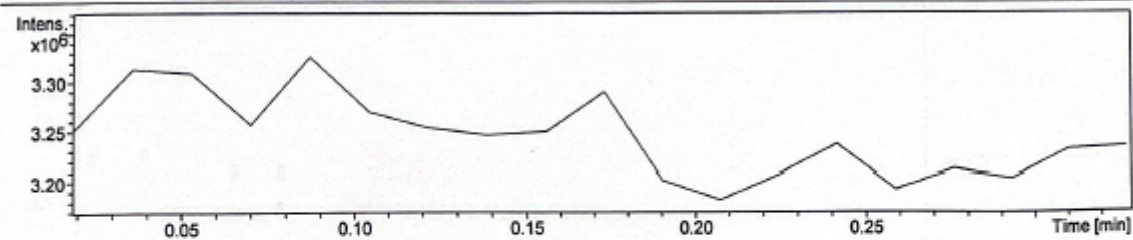




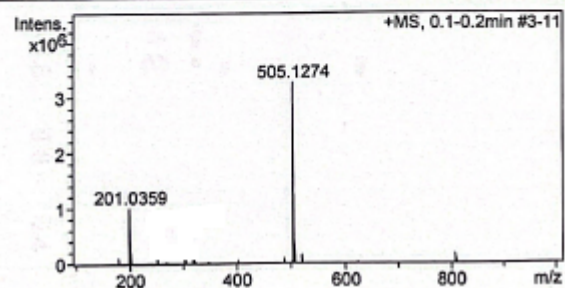


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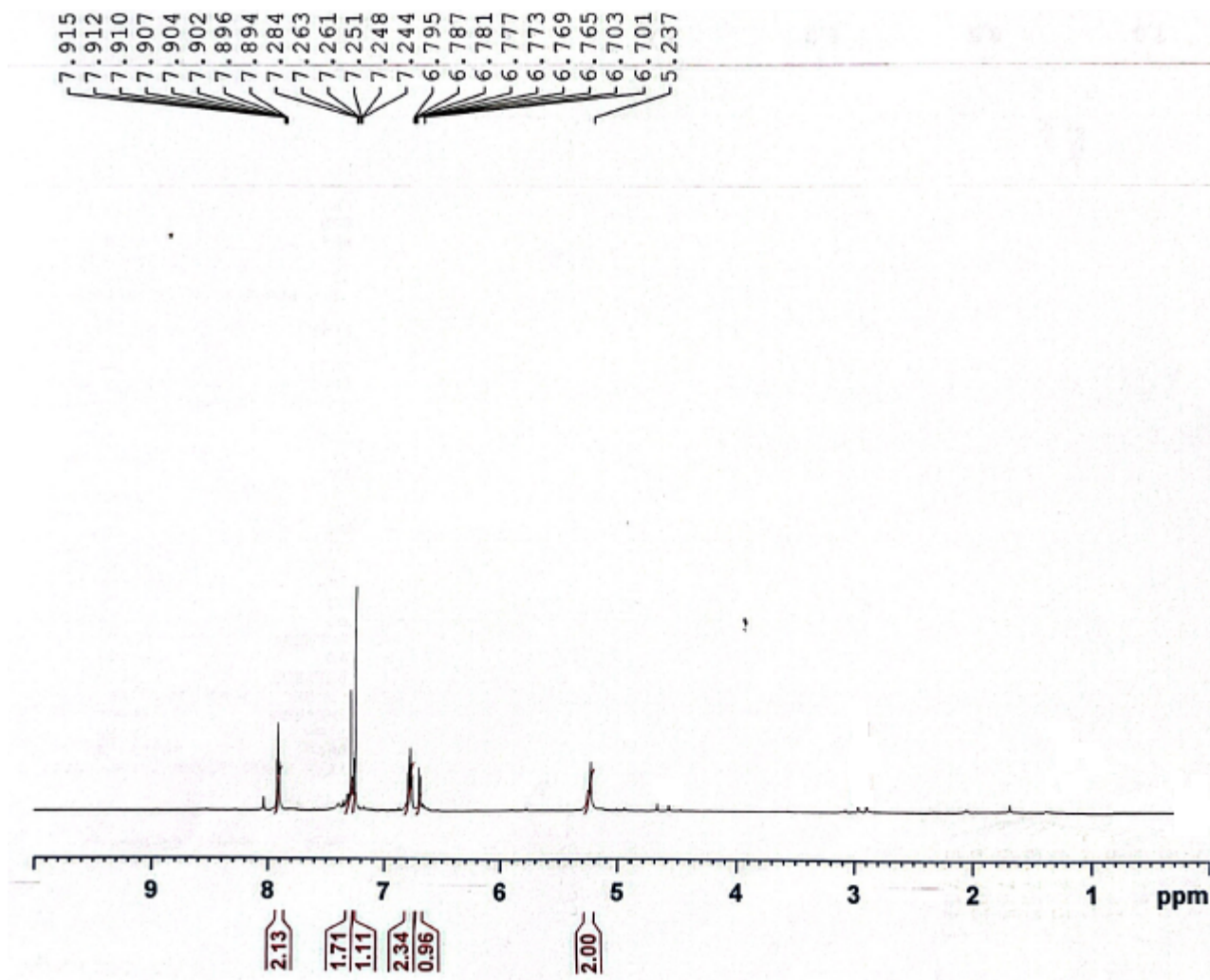
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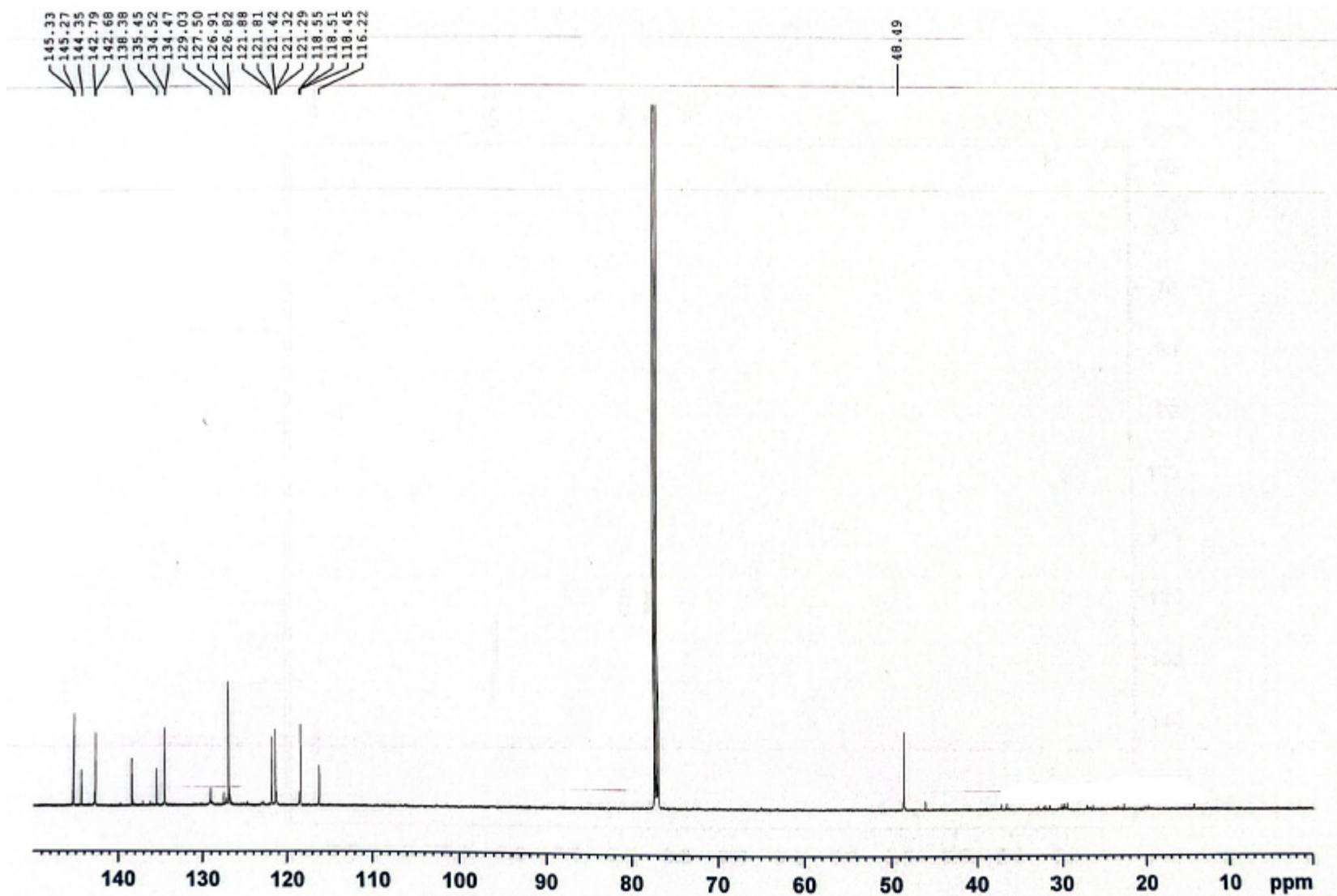


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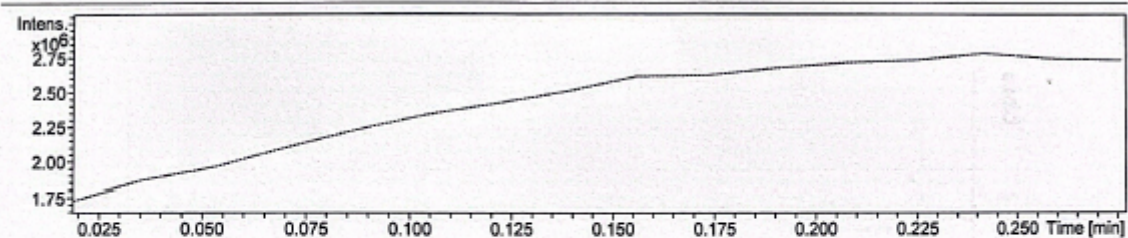
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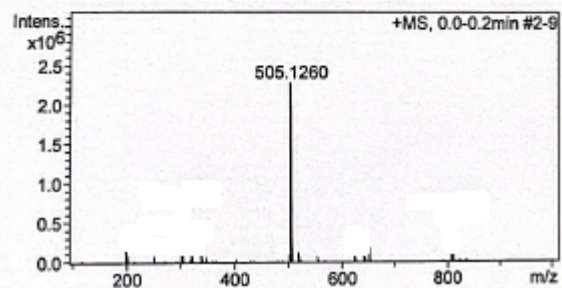


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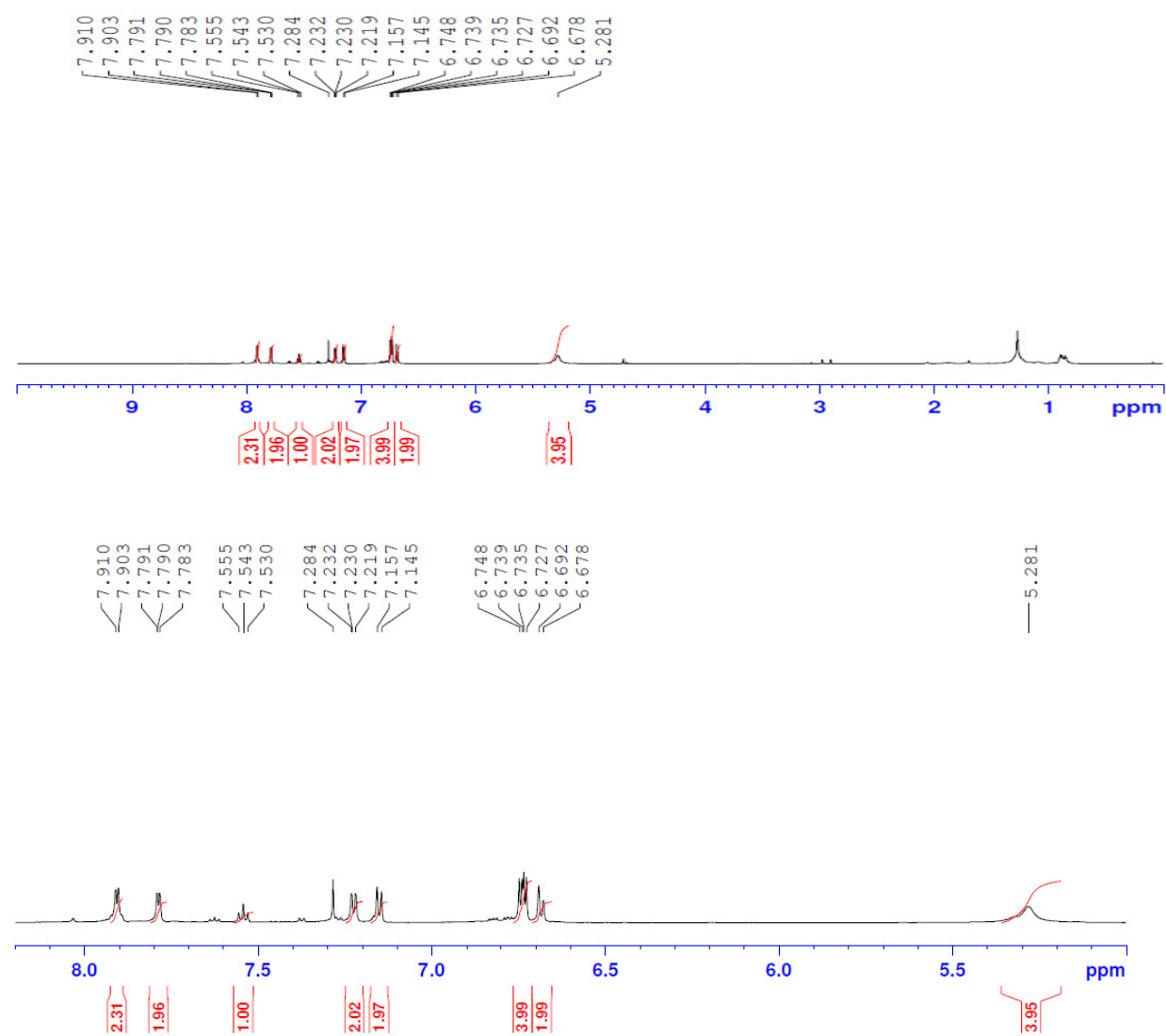
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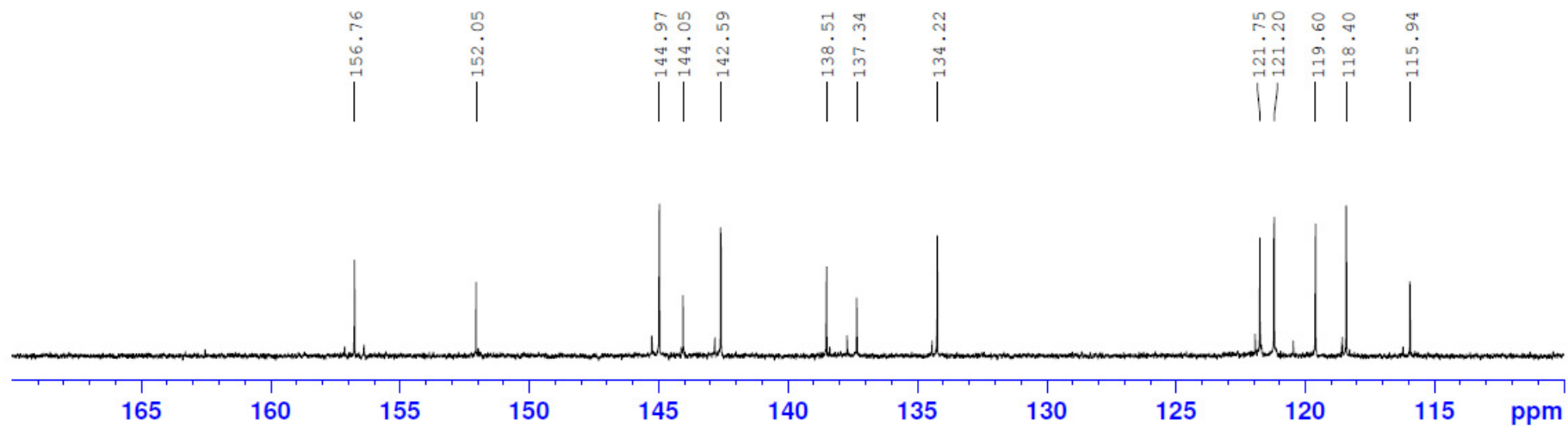
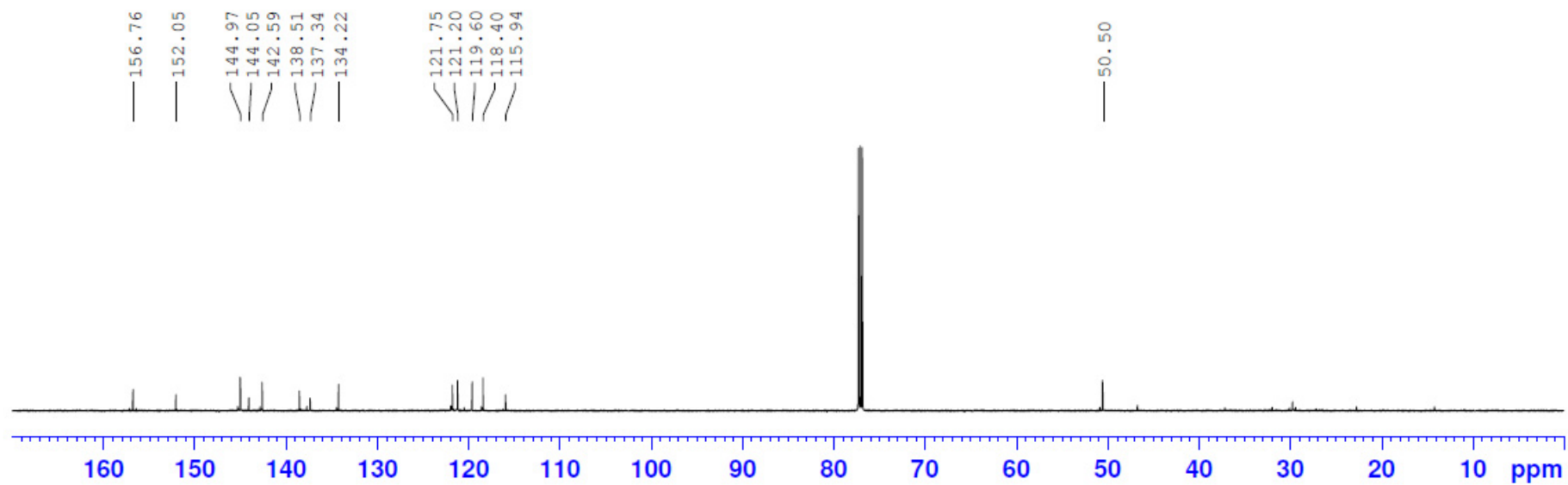


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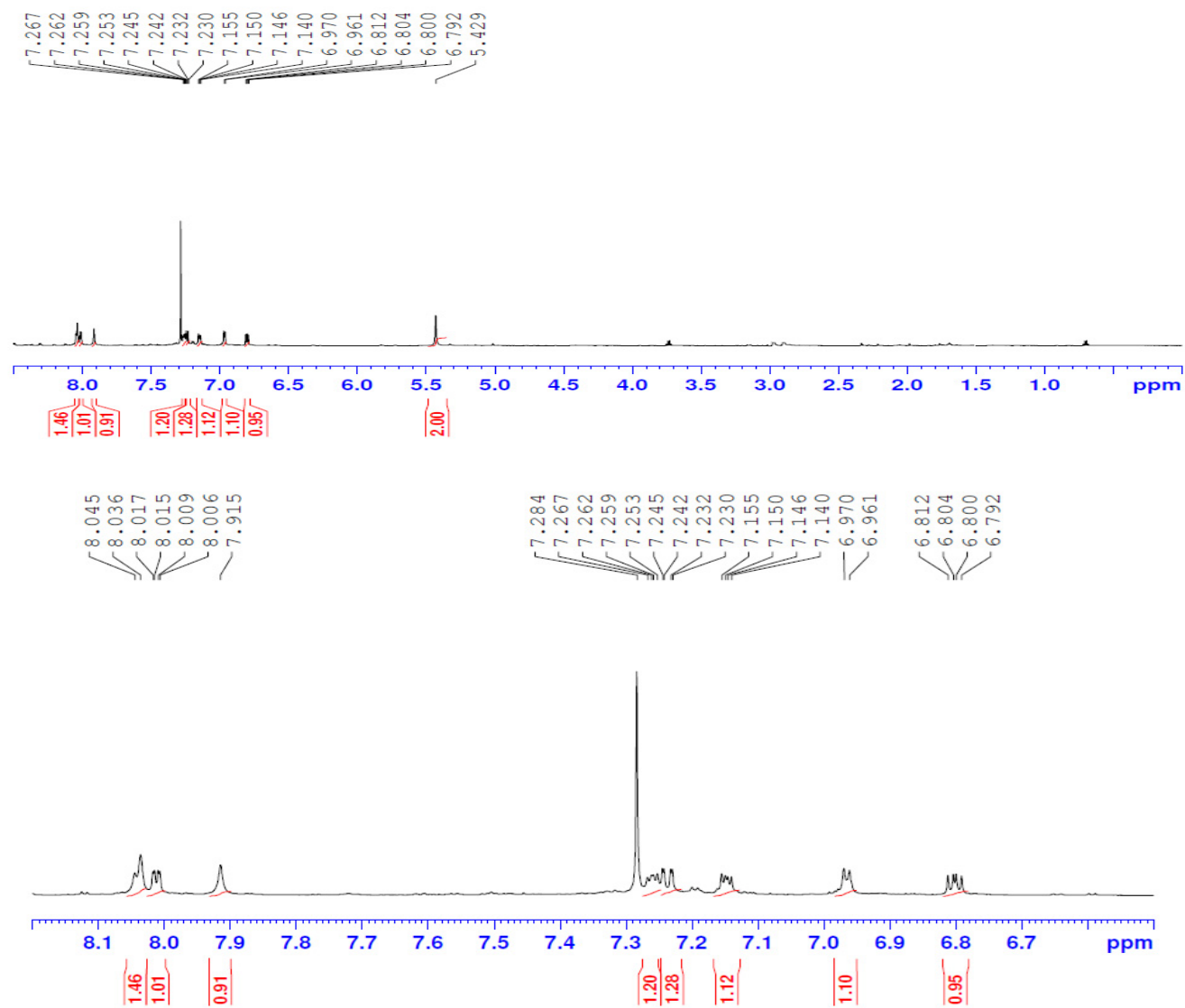


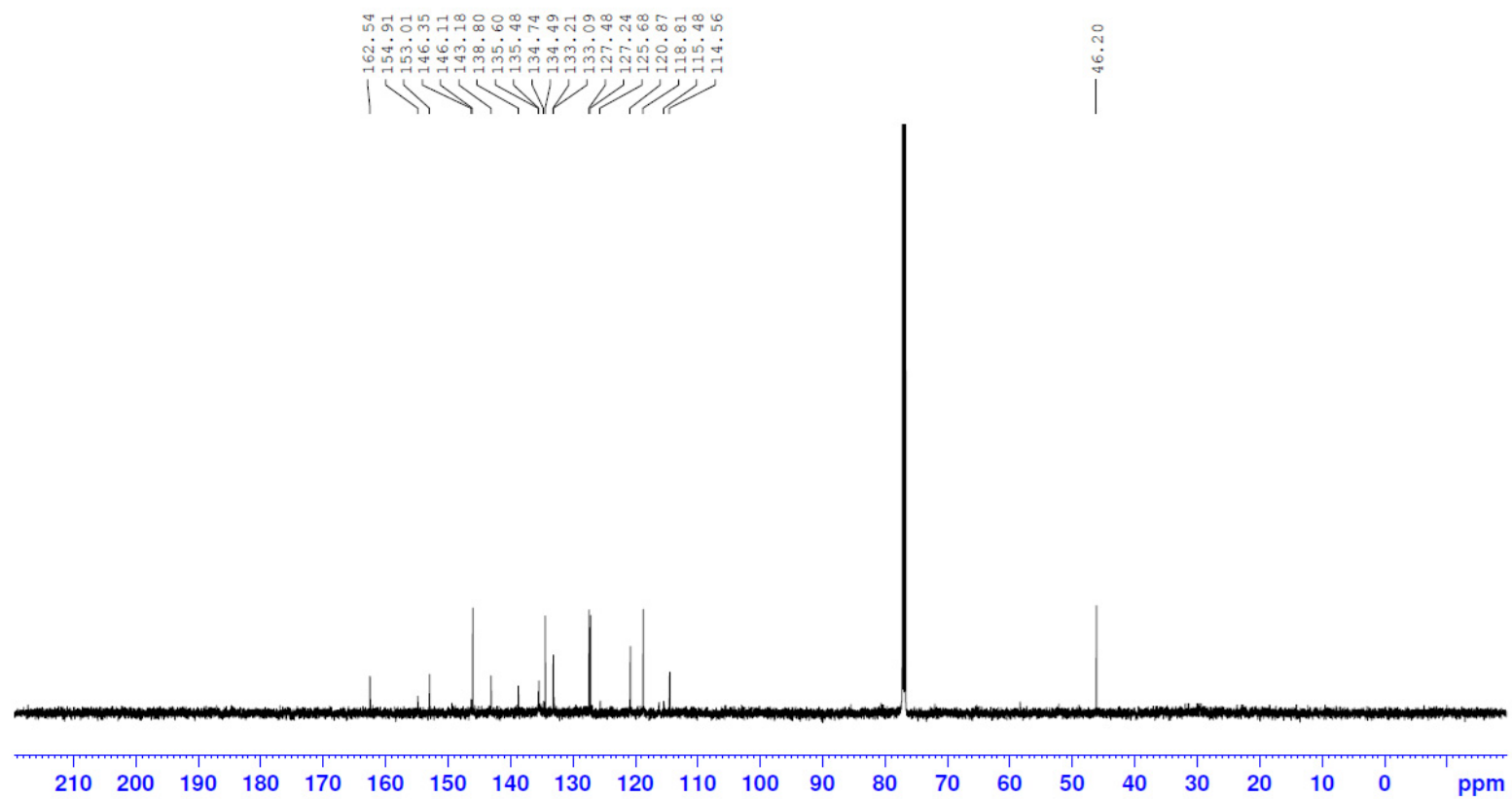
NMR spectra and HR MS of 2,6-bis((dipyrido[2,3-b:2',3'-e][1,4]thiazin-10-yl)methyl)pyridine (**1c**)





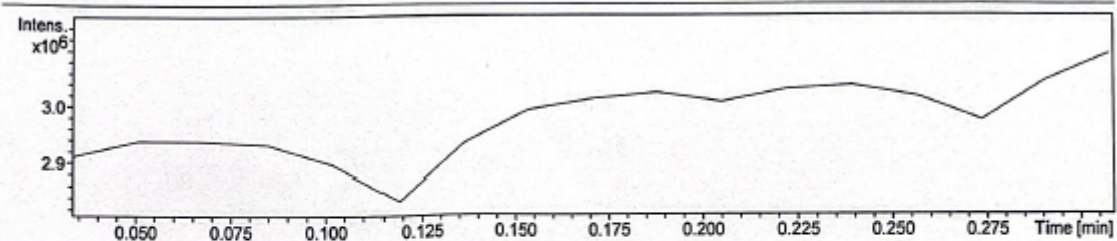
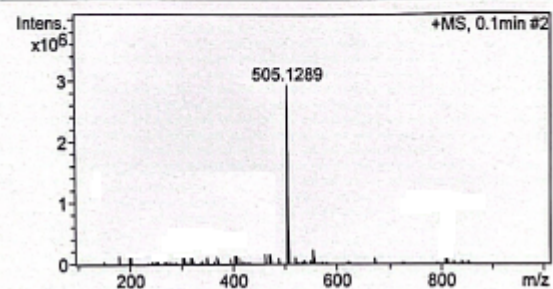
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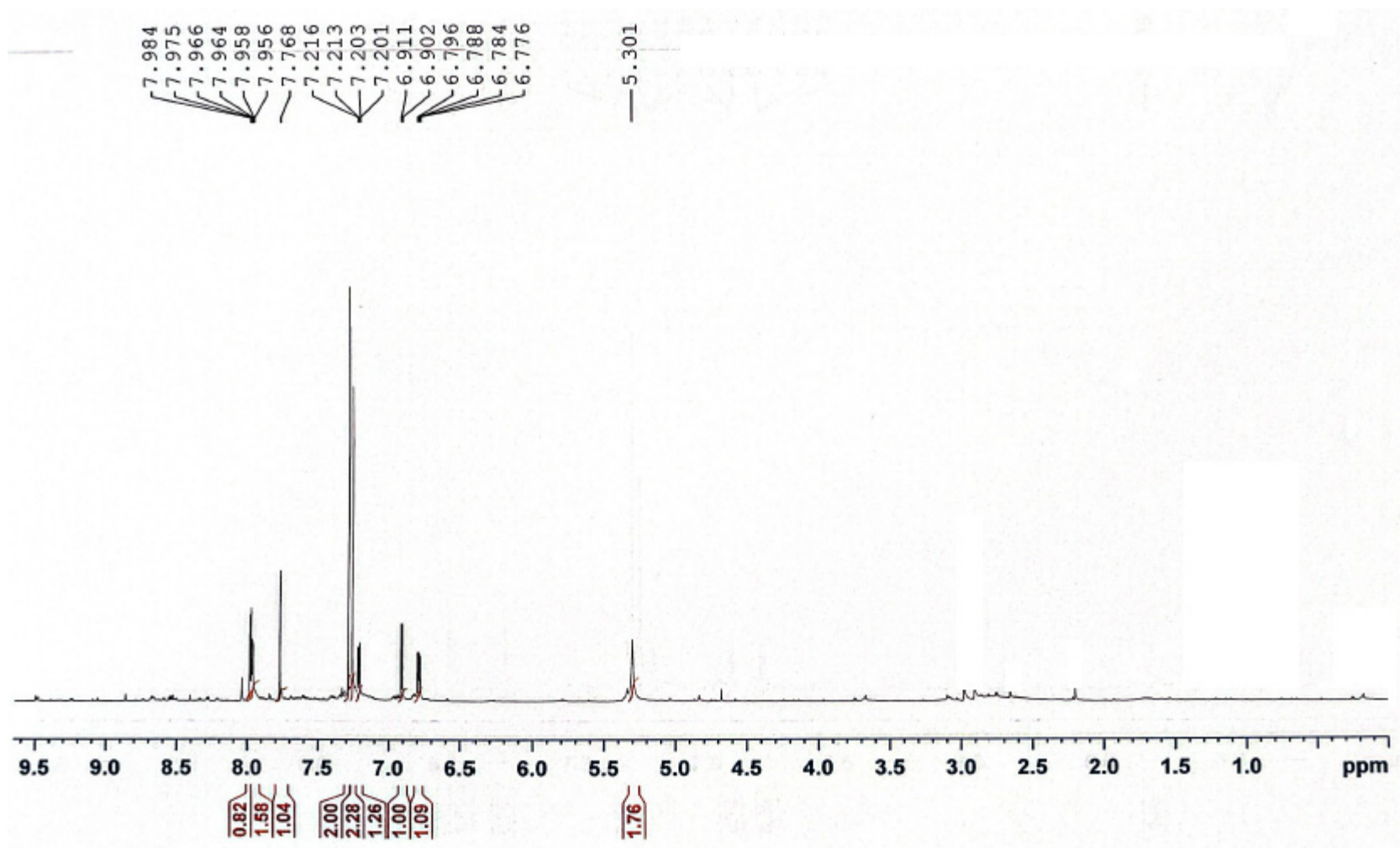


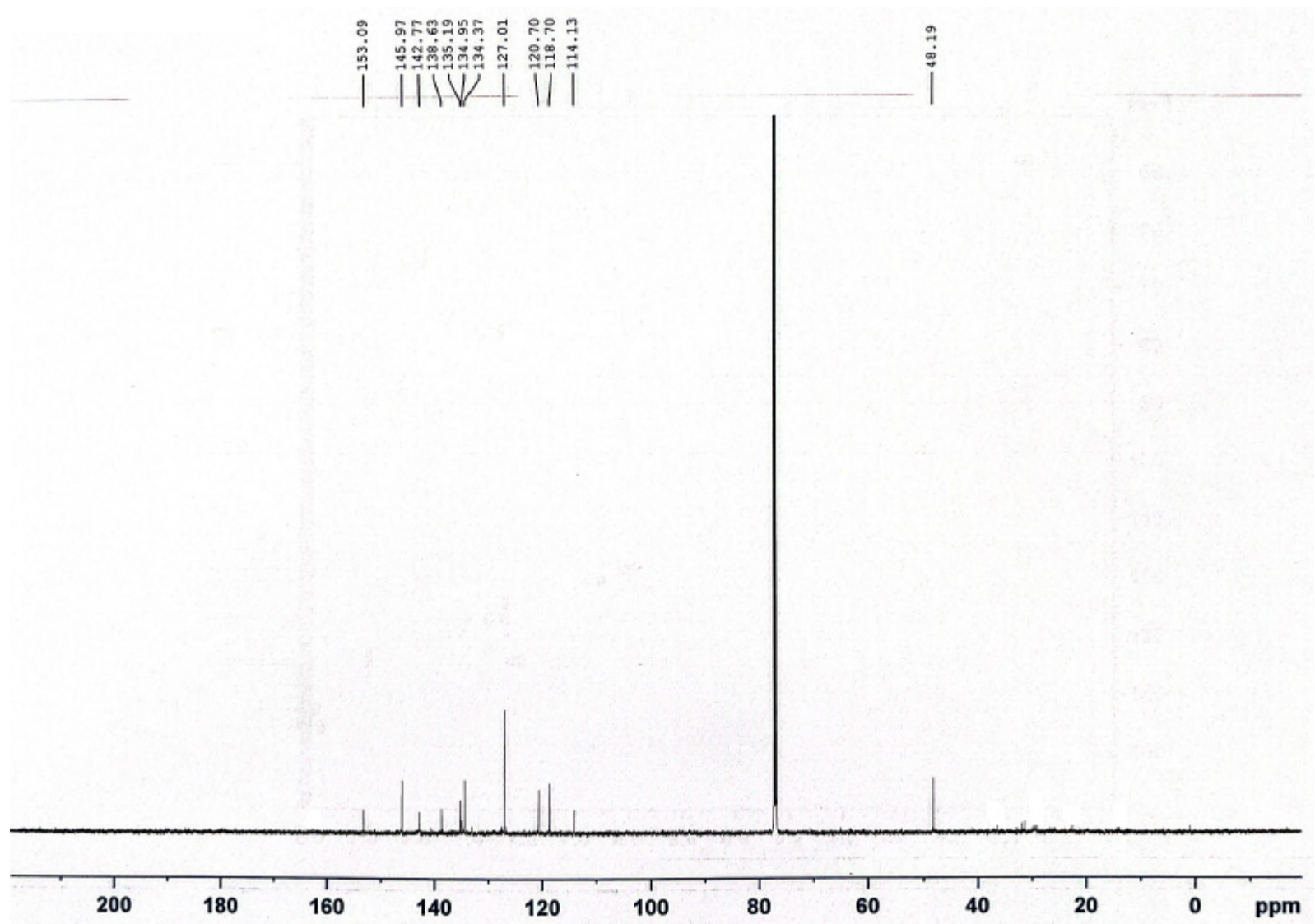
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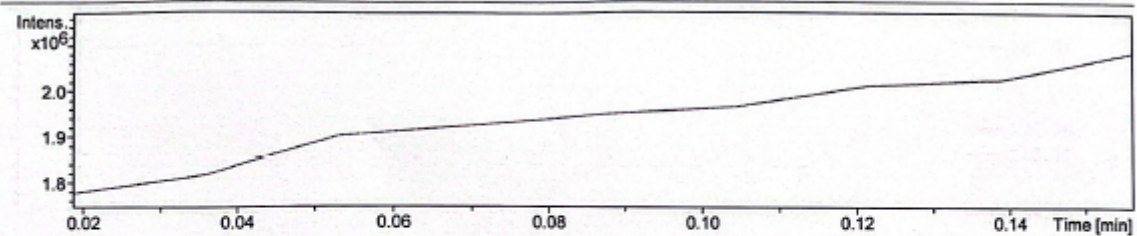
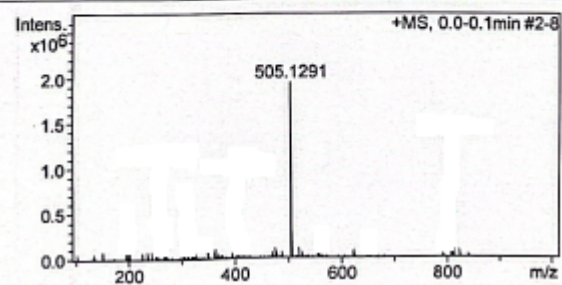
NMR spectra and HR MS of 1,4-bis((dipyrido[2,3-b:2',3'-e][1,4]thiazin-10-yl)methyl)benzene (**2b**)



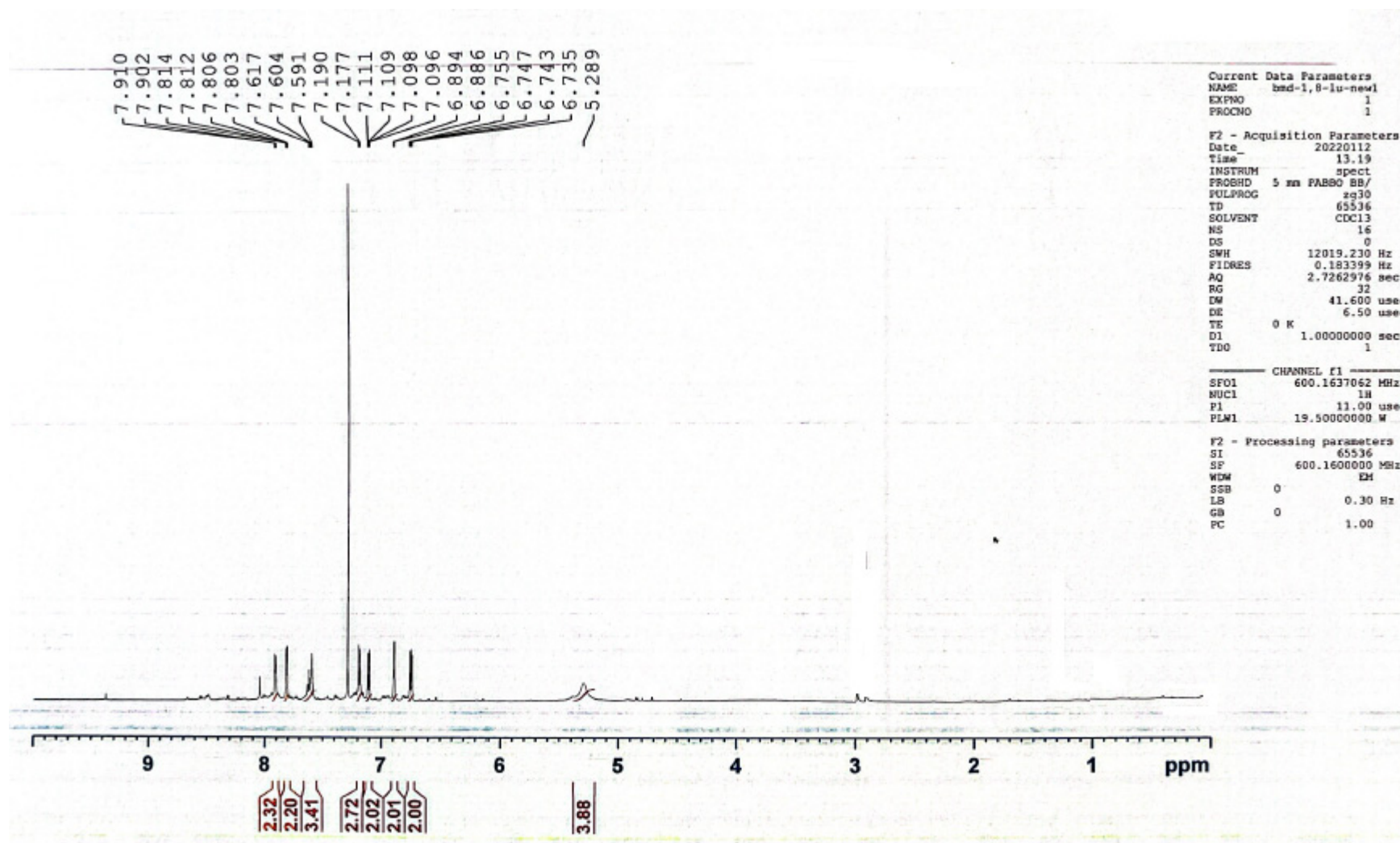


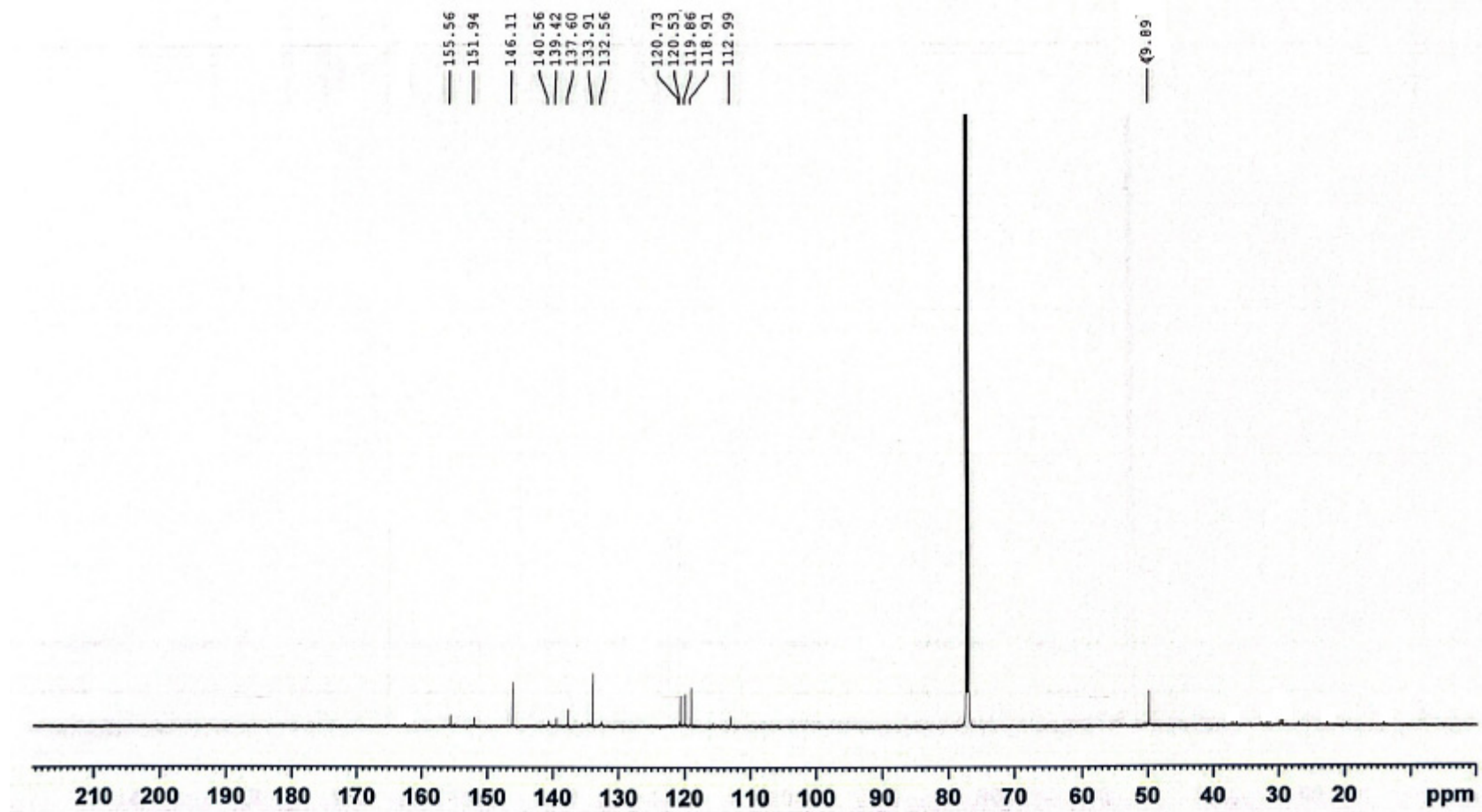
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**+MS, 0.0-0.1min #2-8**

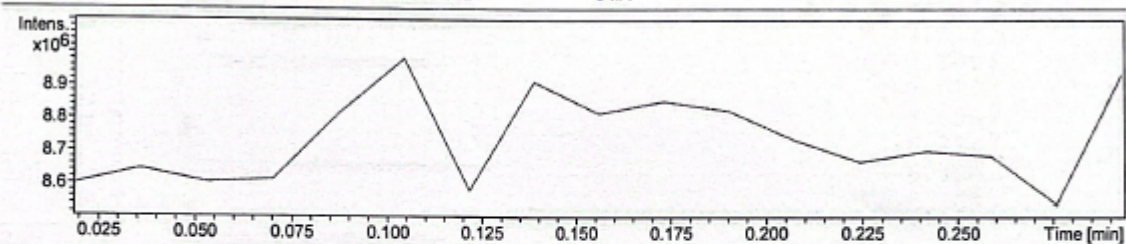
NMR spectra and HR MS of 2,6-bis((dipyrido[3,2-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**2c**)



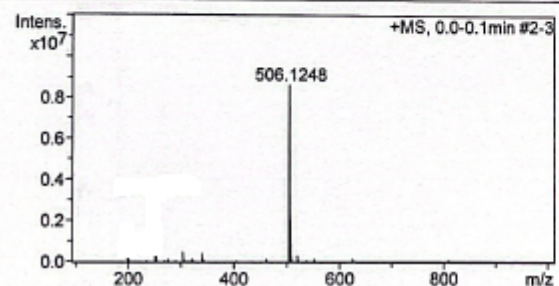


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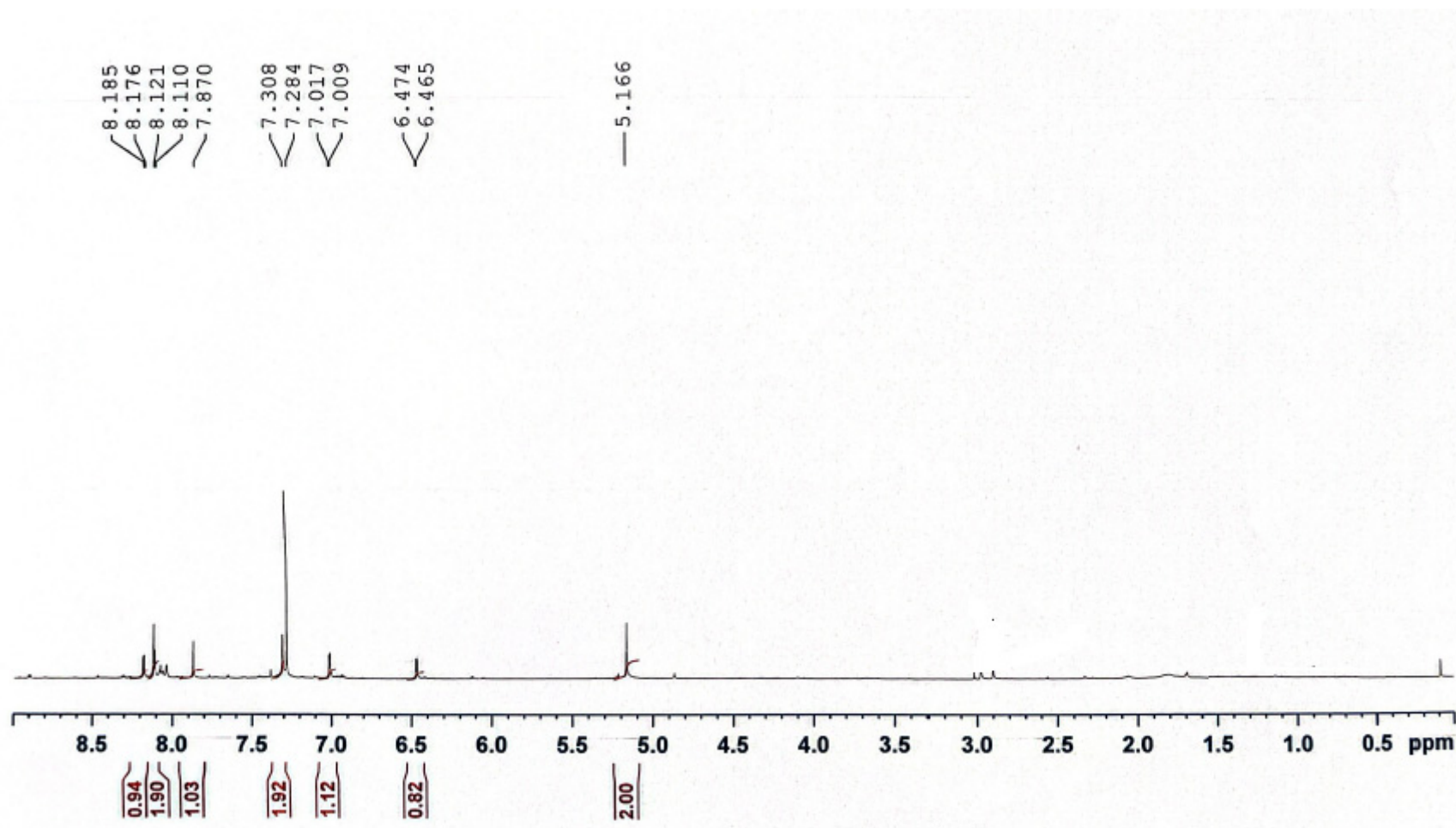
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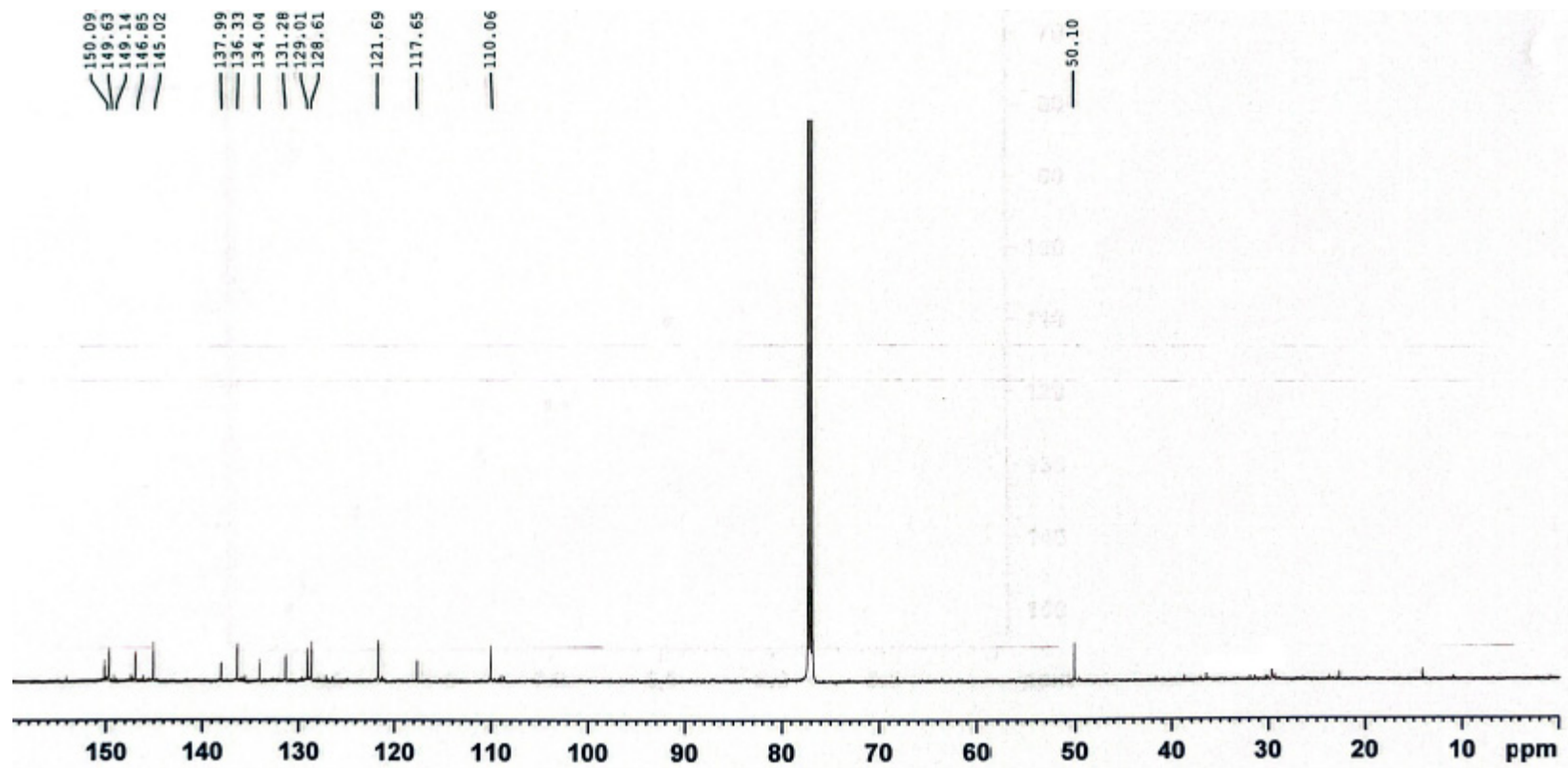


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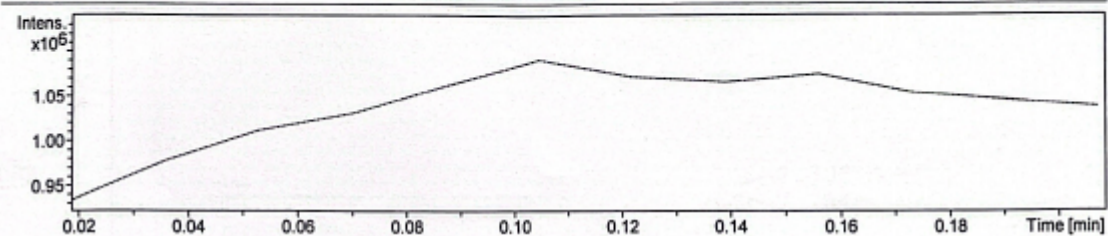
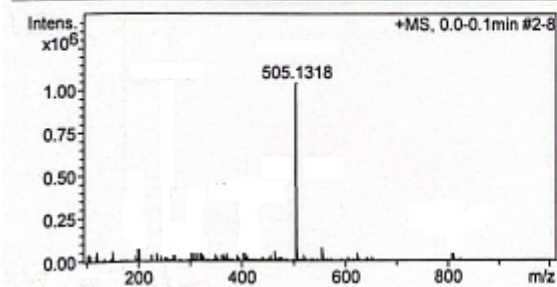
NMR spectra and HR MS of 1,2-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)benzene (**3a**)



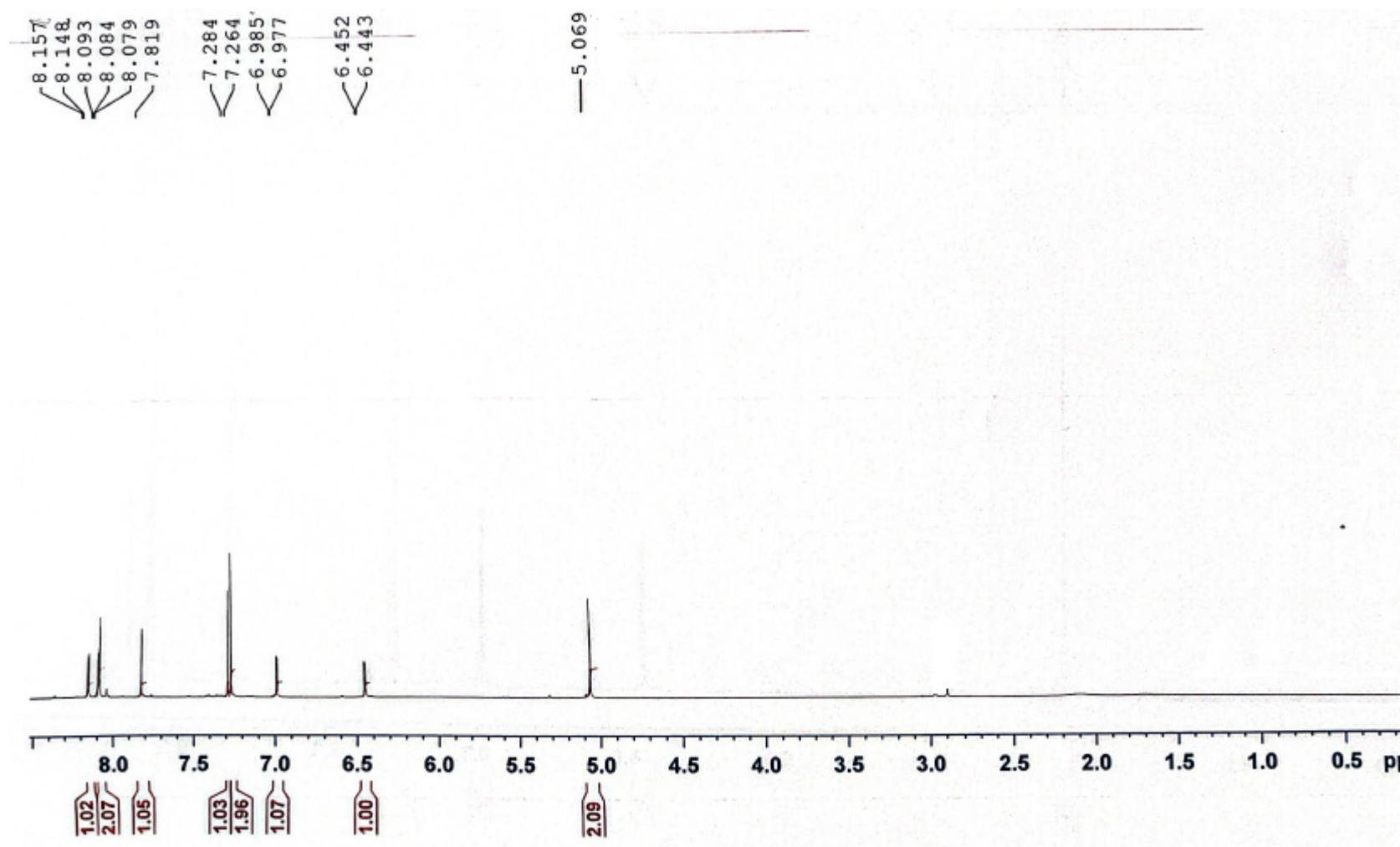


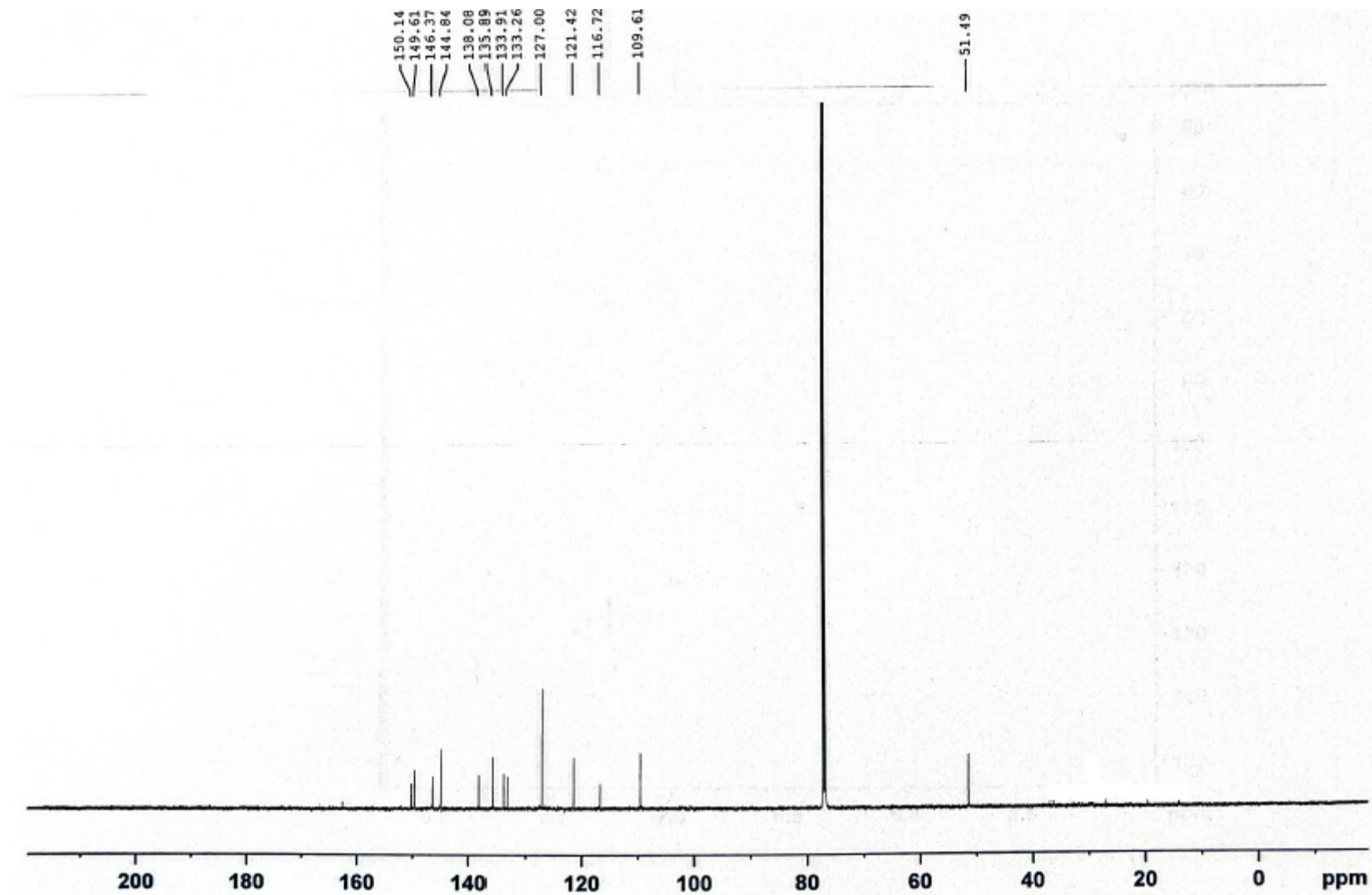
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**+MS, 0.0-0.1min #2-8**

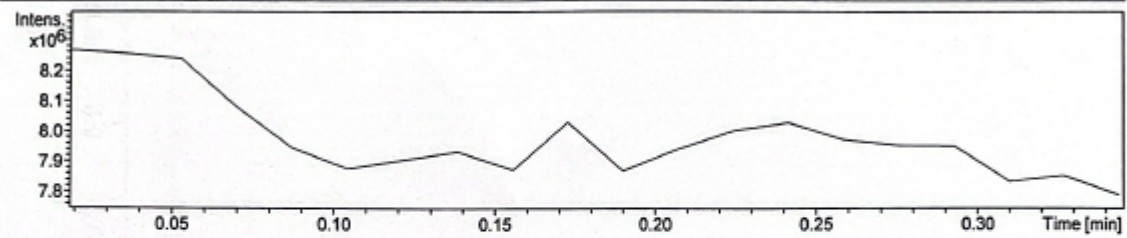
NMR spectra and HR MS of 1,4-bis((dipyrido[2,3-b:2',3'-e][1,4]thiazin-10-yl)methyl)benzene (**3b**)



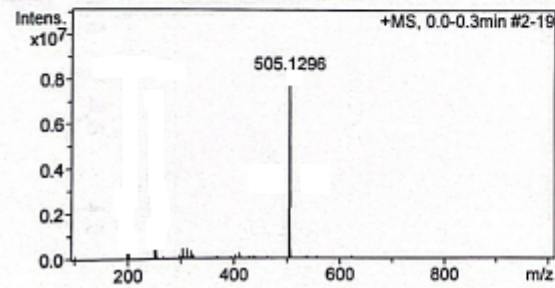


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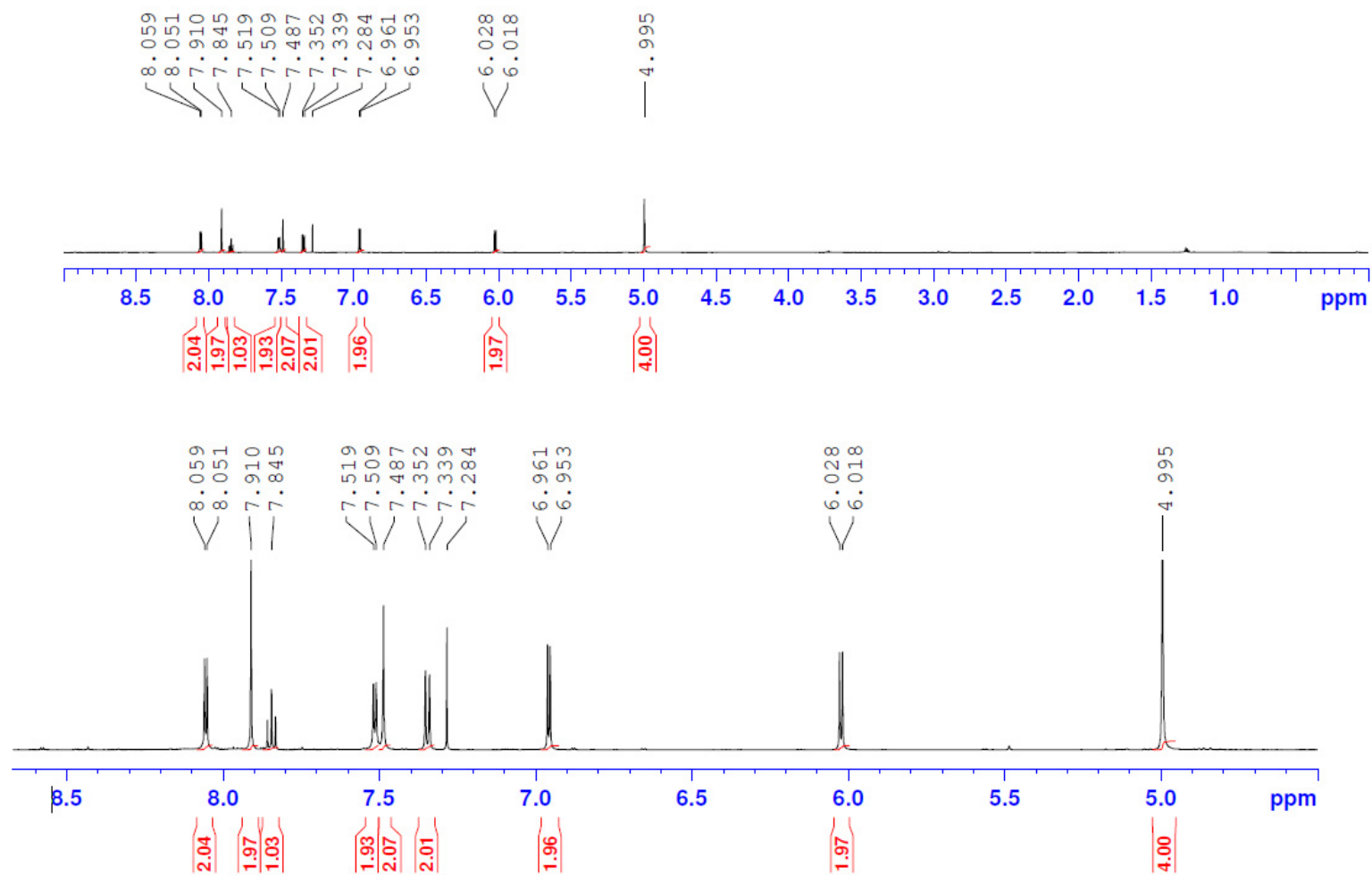


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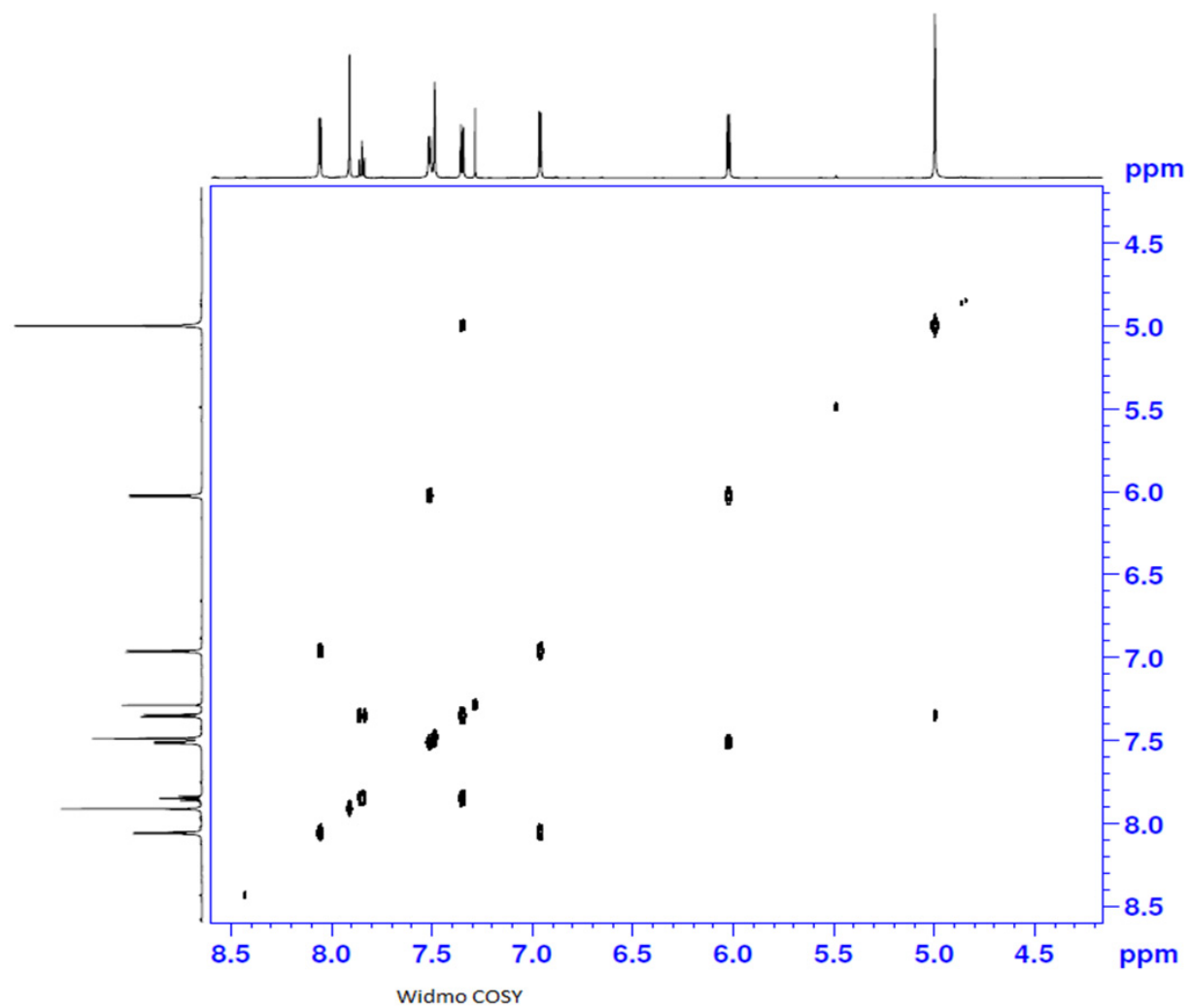


NMR spectra and HR MS of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)

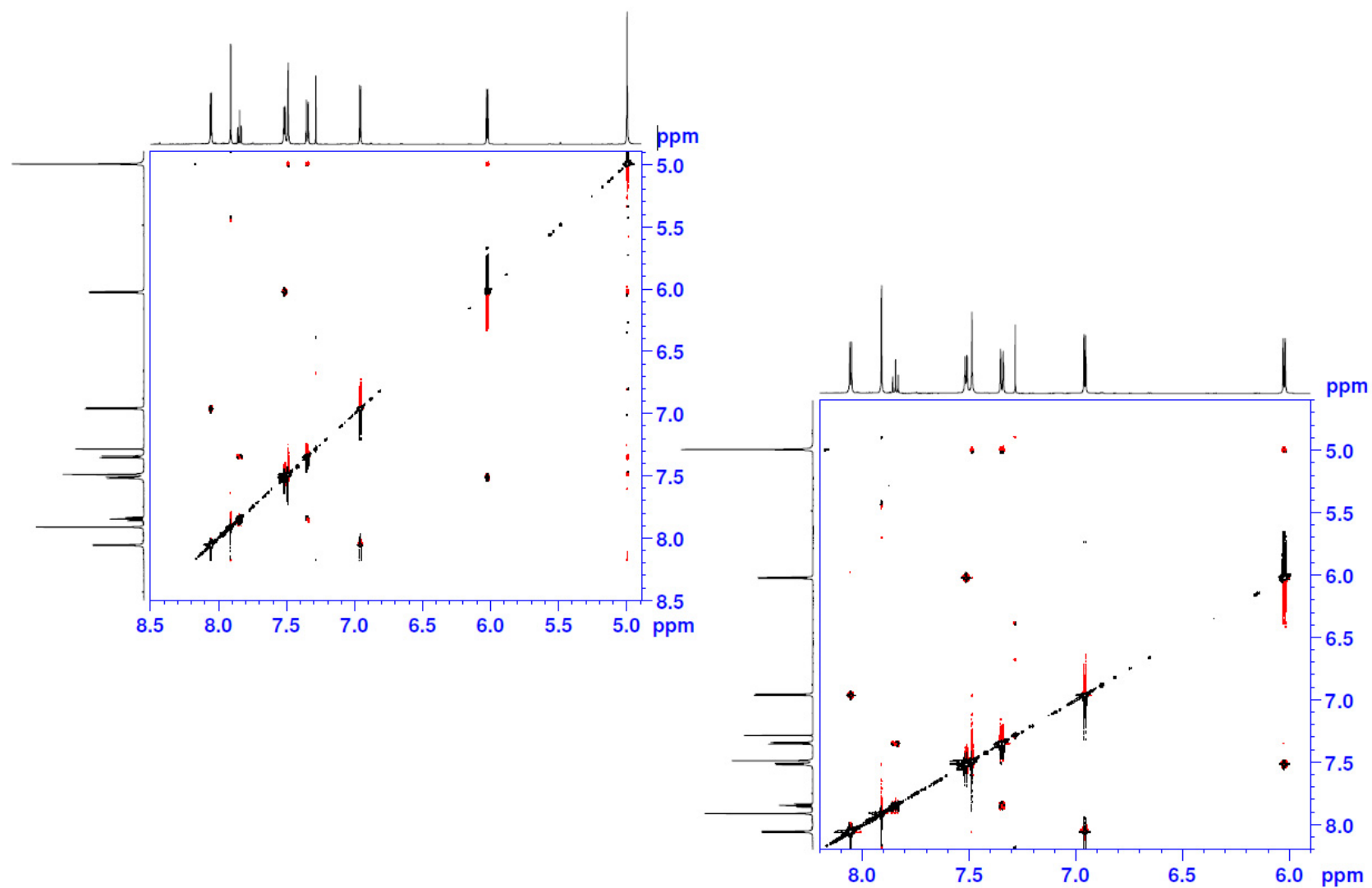
. ^1H NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)



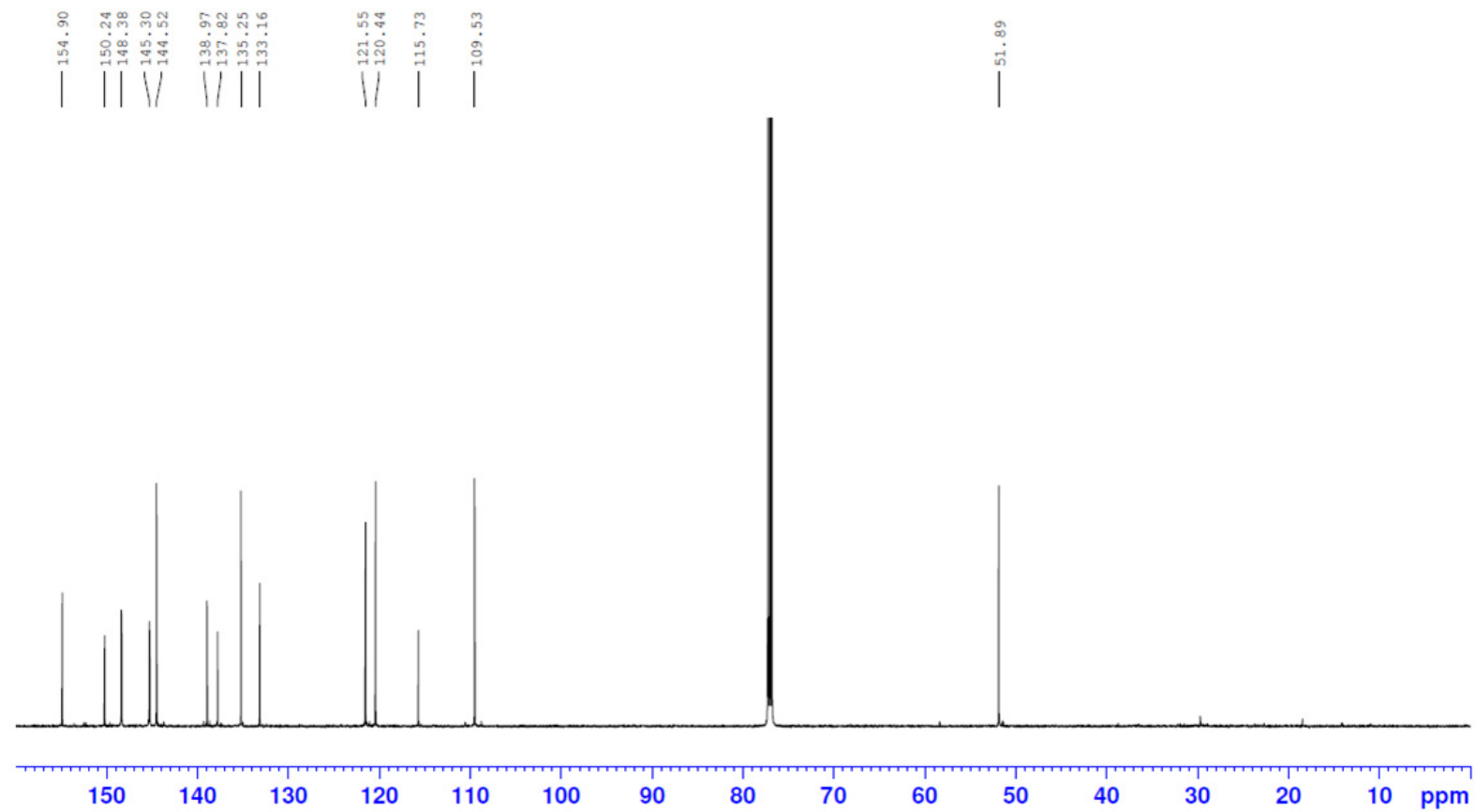
COSY NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)



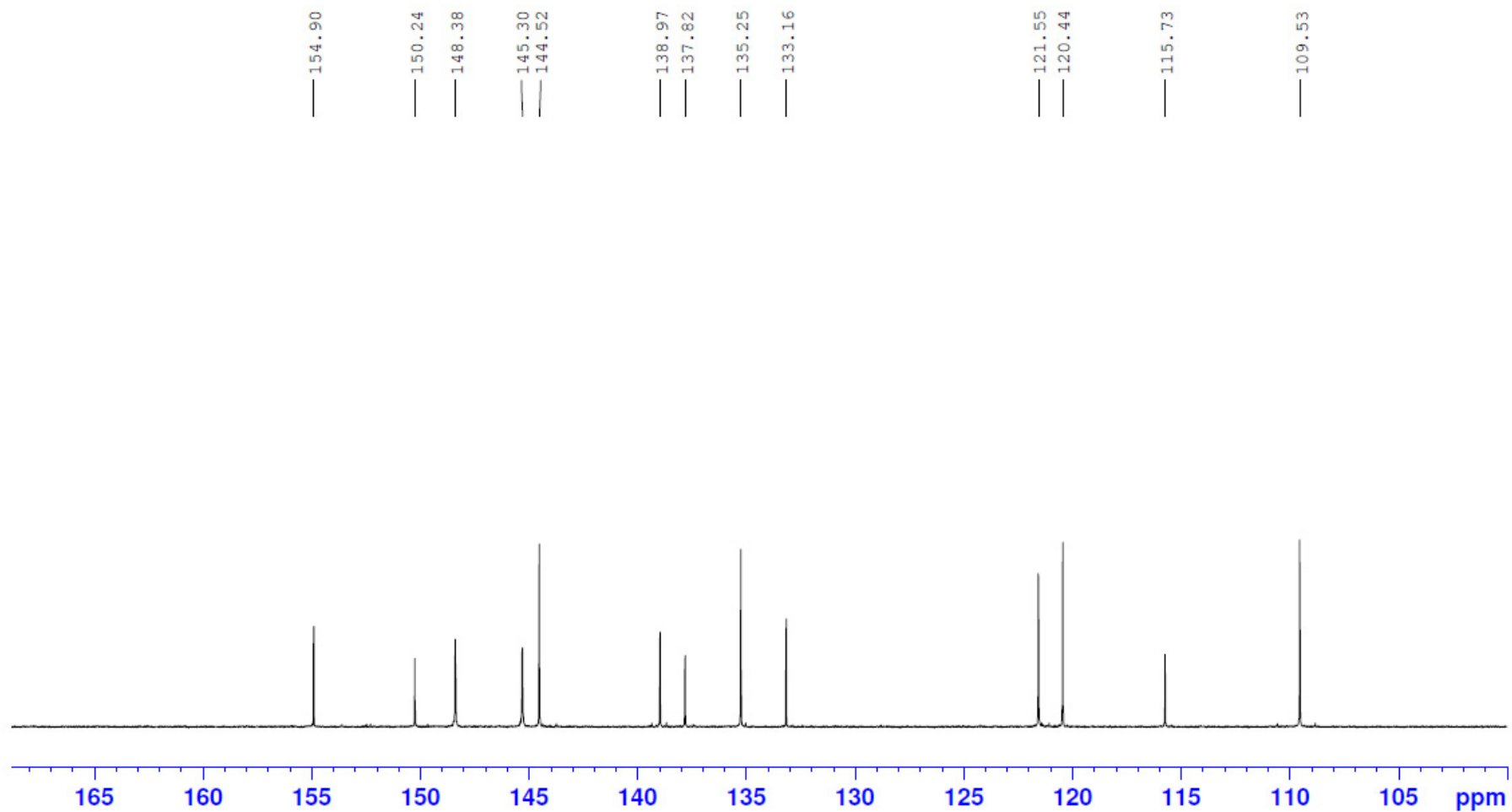
NOESY NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)



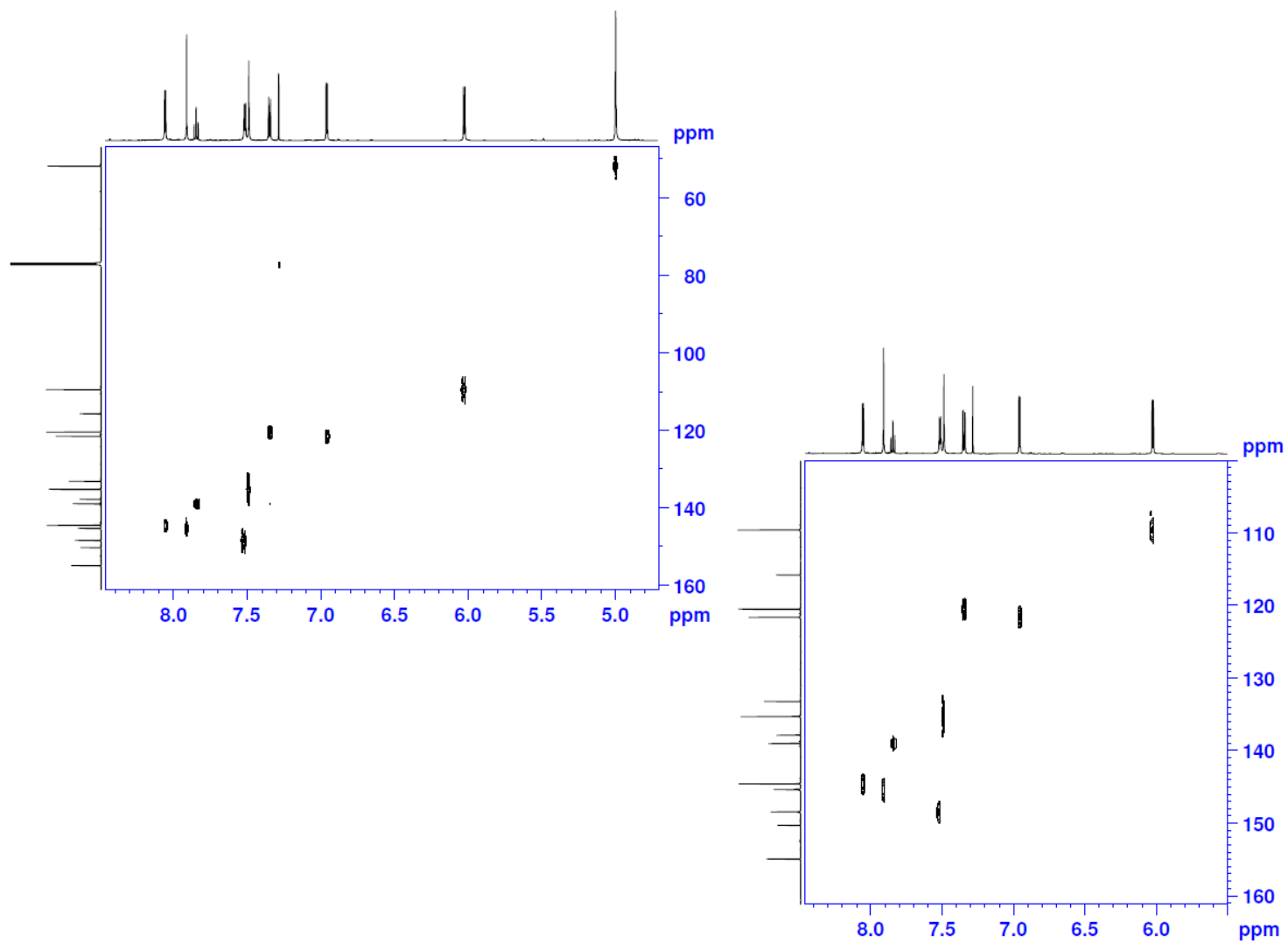
¹³C NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)



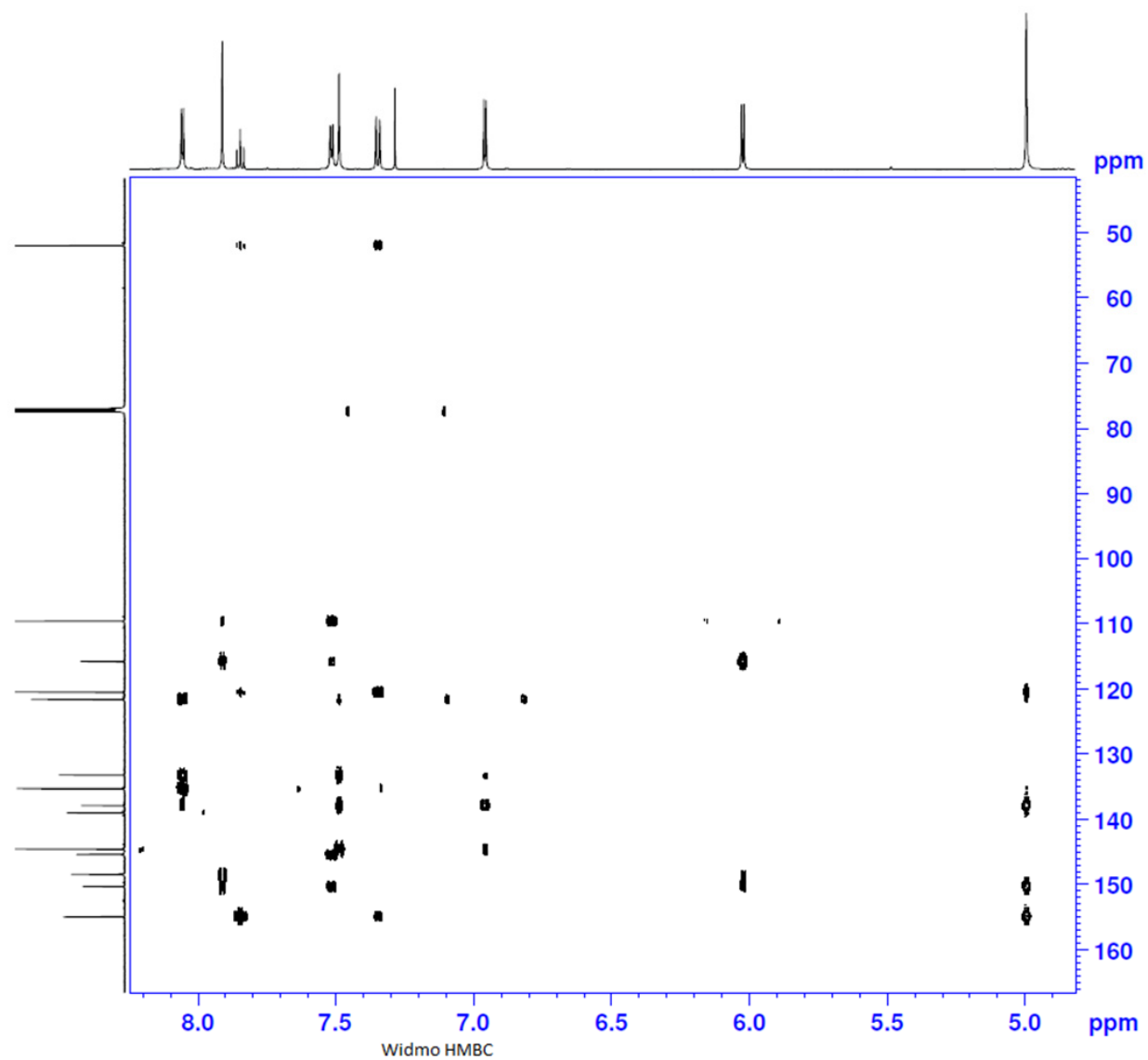
^{13}C NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**) – aromatic part



HSQC NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)



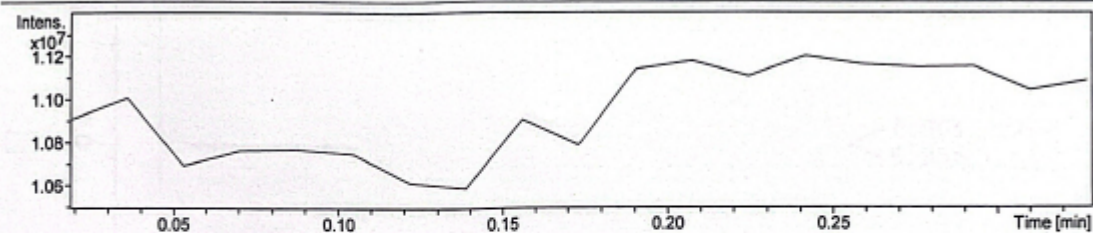
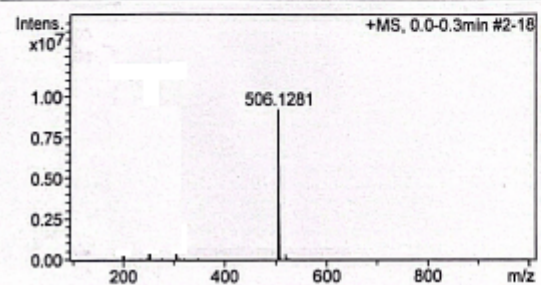
HMBC NMR of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)



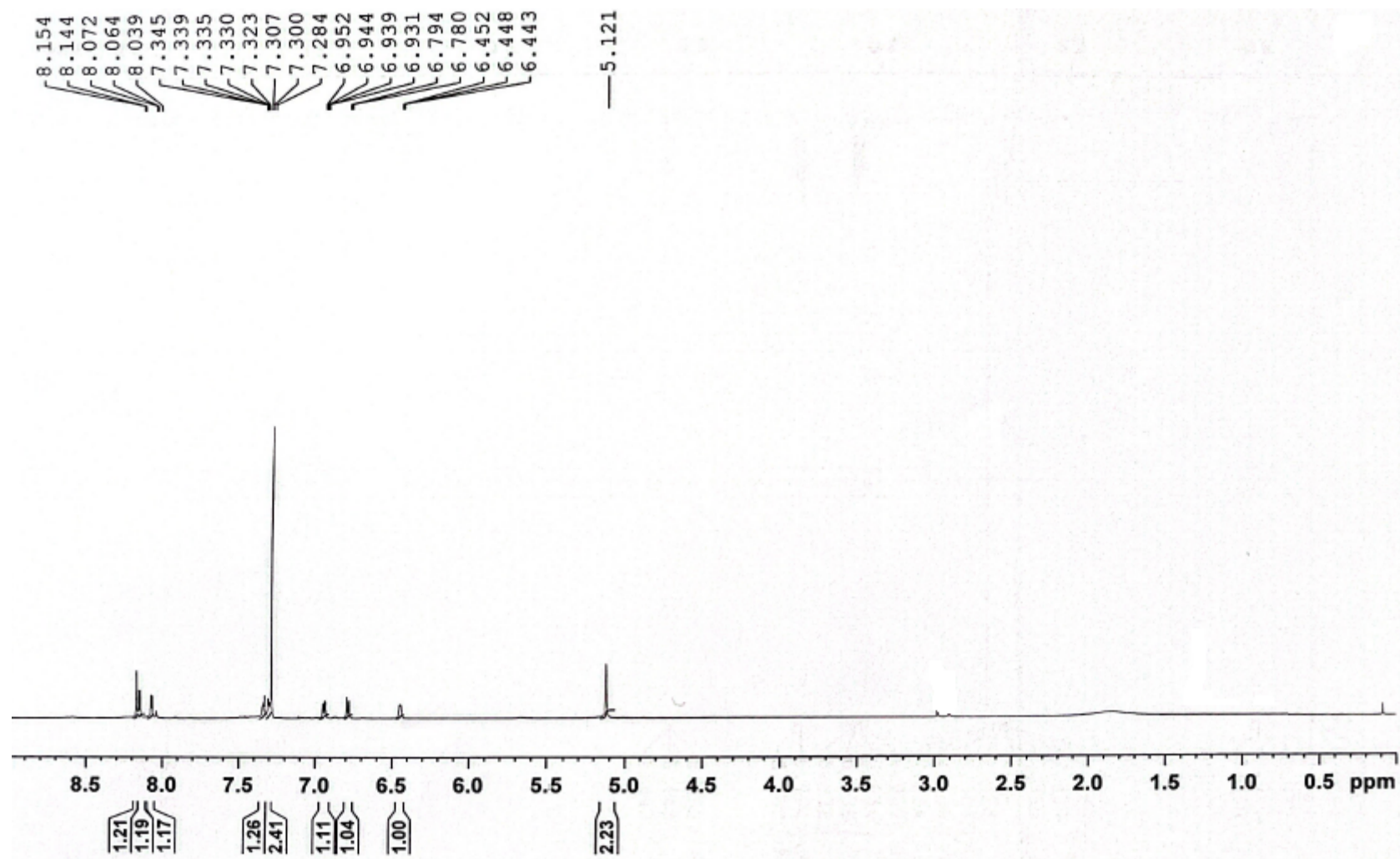
HR MS of 2,6-bis((dipyrido[3,4-b:3',4'-e][1,4]thiazin-10-yl)methyl)pyridine (**3c**)

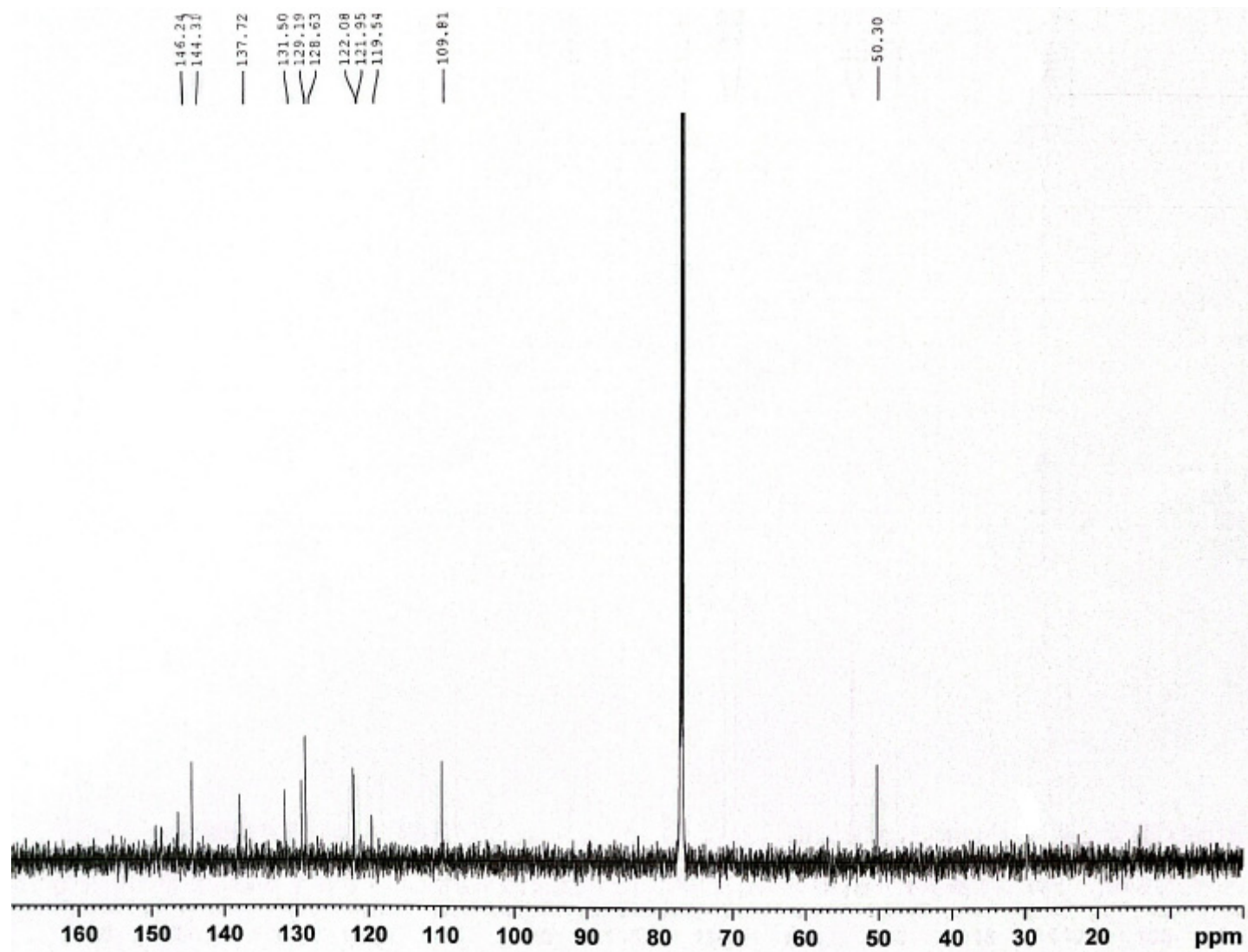
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**+MS, 0.0-0.3min #2-18**

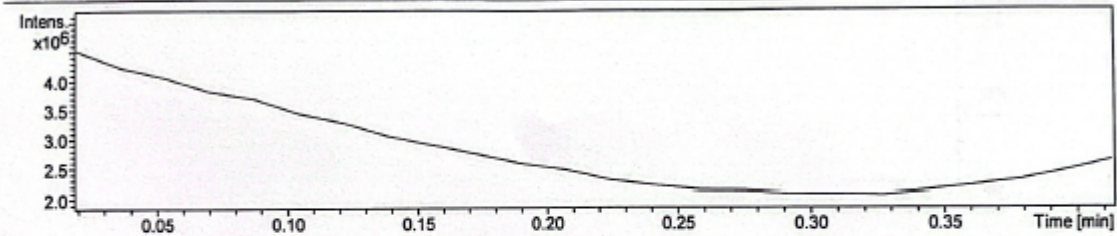
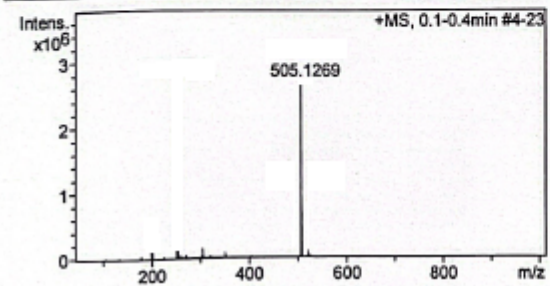
NMR spectra and HR MS of 1,2-bis((dipyrido[2,3-b:4',3'-e][1,4]thiazin-5-yl)methyl)benzene (**4a**)



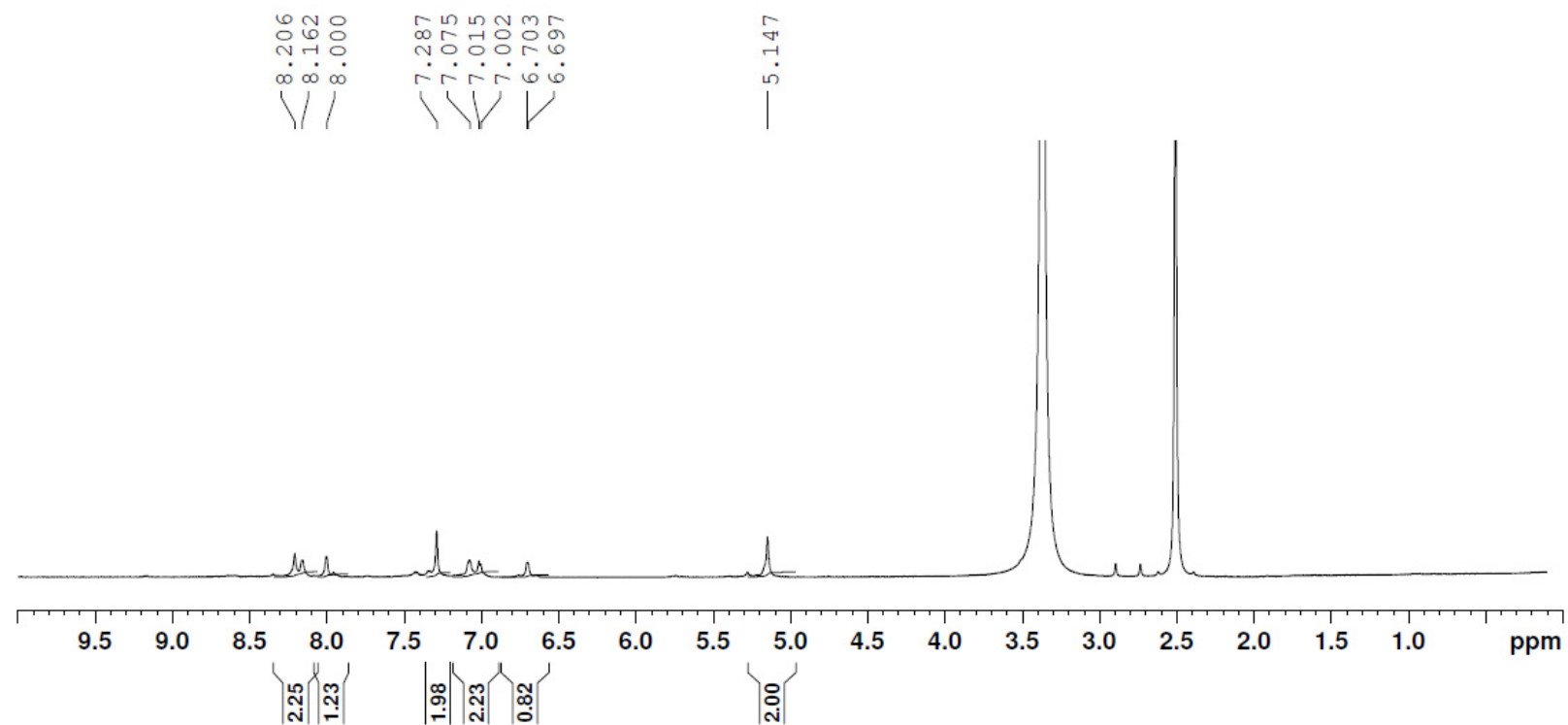


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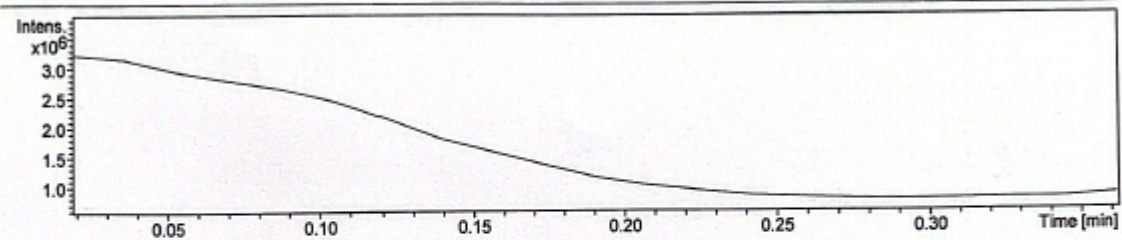
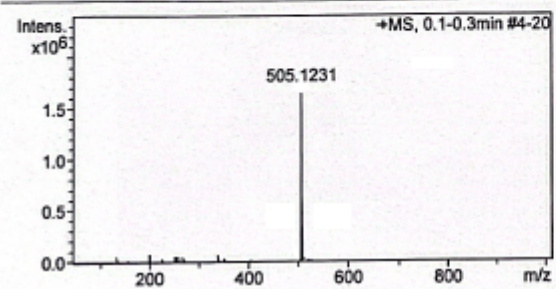
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NMR spectra and HR MS of 1,4-bis((dipyrido[2,3-b:2',3'-e][1,4]thiazin-10-yl)methyl)benzene (**4b**)

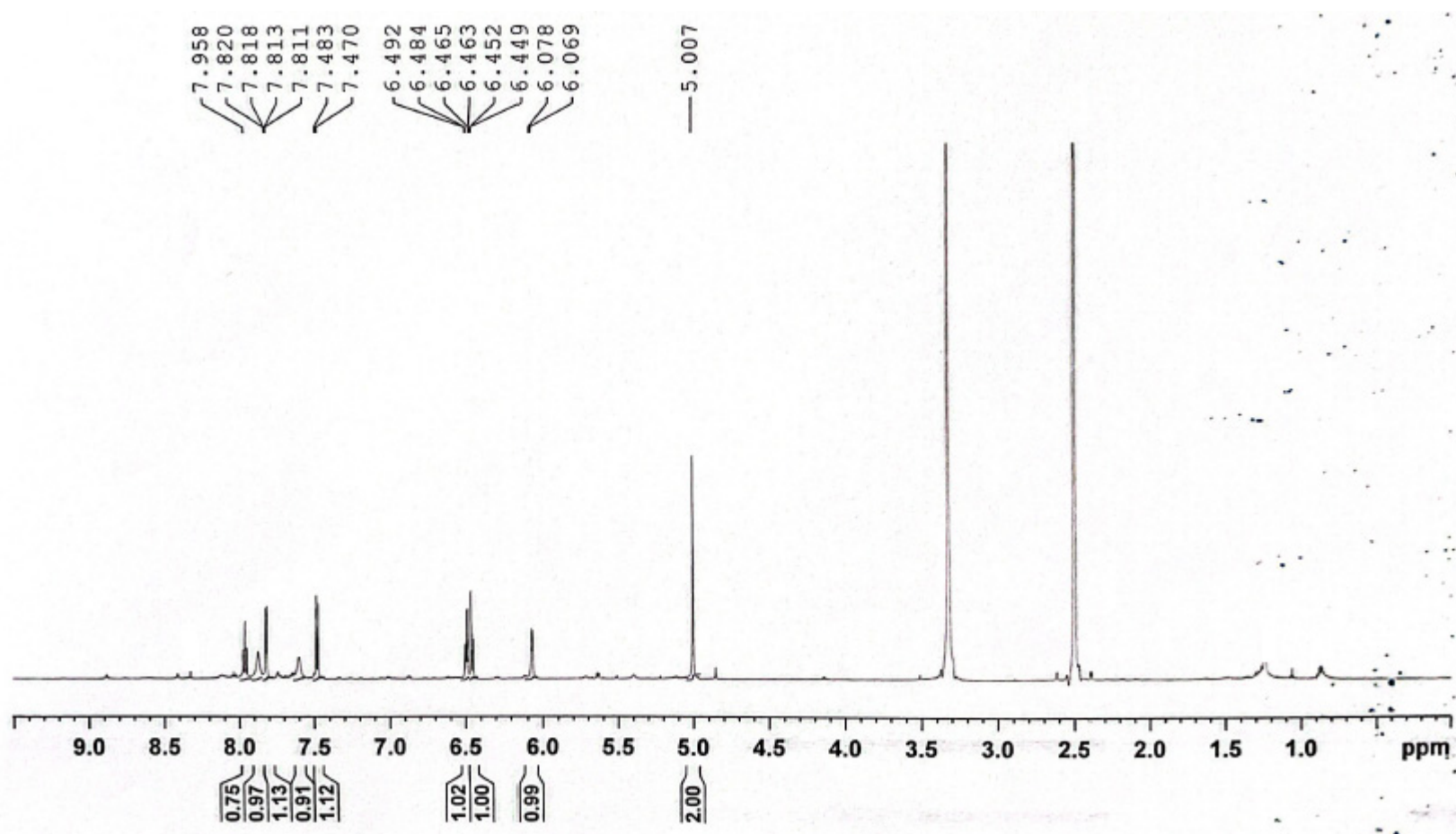


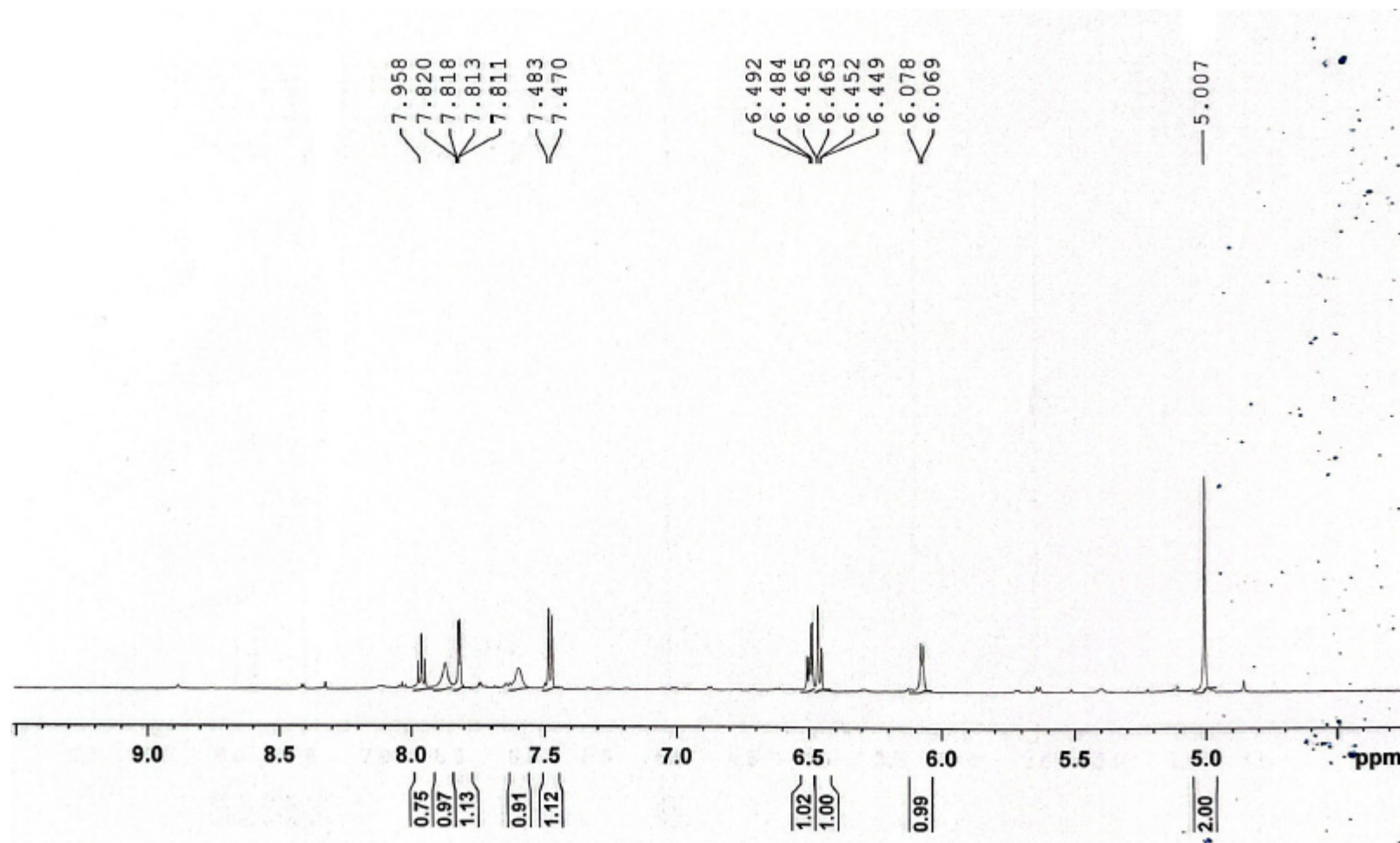
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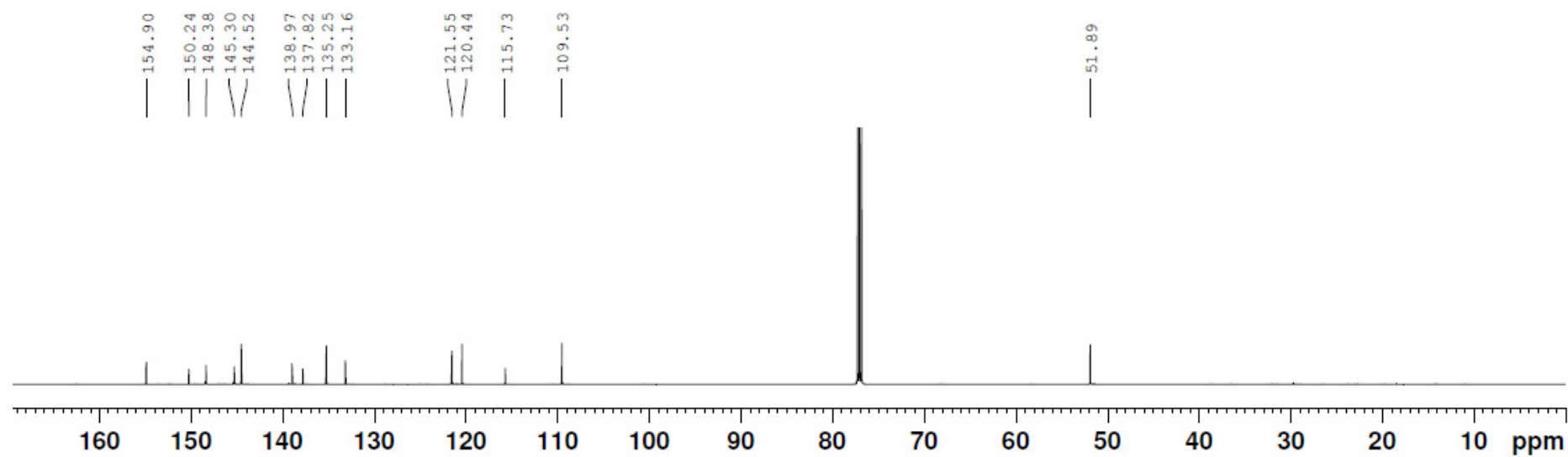
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**+MS, 0.1-0.3min #4-20**

NMR spectra and HR MS of 2,6-bis((dipyrido[2,3-b:4',3'-e][1,4]thiazin-10-yl)methyl)pyridine (**4c**)

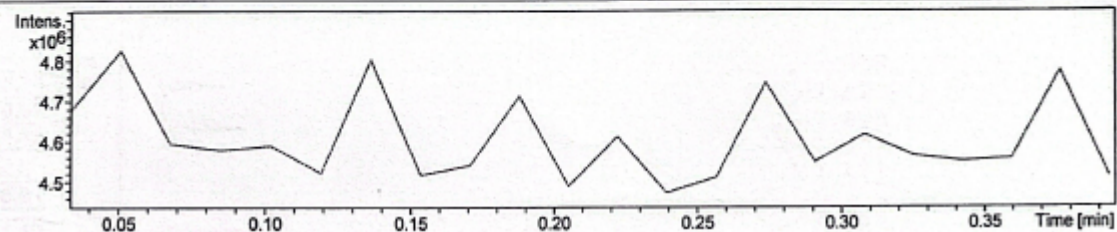






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+MS, 0.3-0.4min #16-21

