

Supporting Information for “Synthesis and steroid sulfatase inhibitory activities of *N*-alkanoyl tyramine phosphates and thiophosphates “

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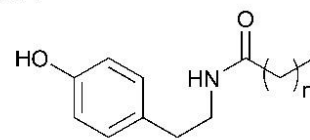
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^b Department of Molecular Biology, Faculty of Biotechnology and Environment Sciences, The John Paul II Catholic University of Lublin, Konstantynów 1i, 20-708 Lublin, Poland

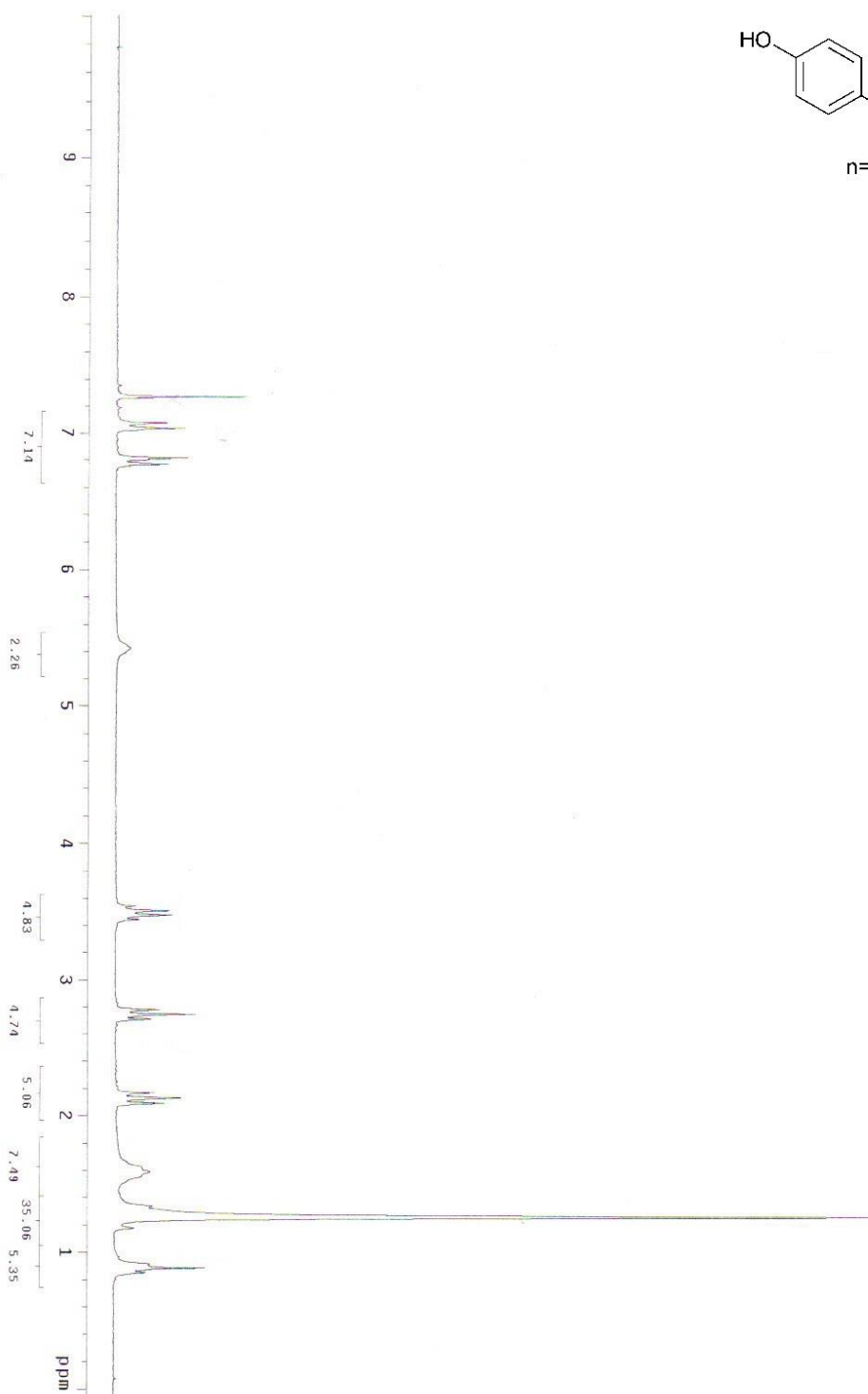
^c Department of Pharmaceutical Technology and Biochemistry, Chemical Faculty, Gdansk University of Technology, Narutowicza 11/12, 80-233 Gdansk, Poland

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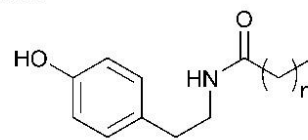
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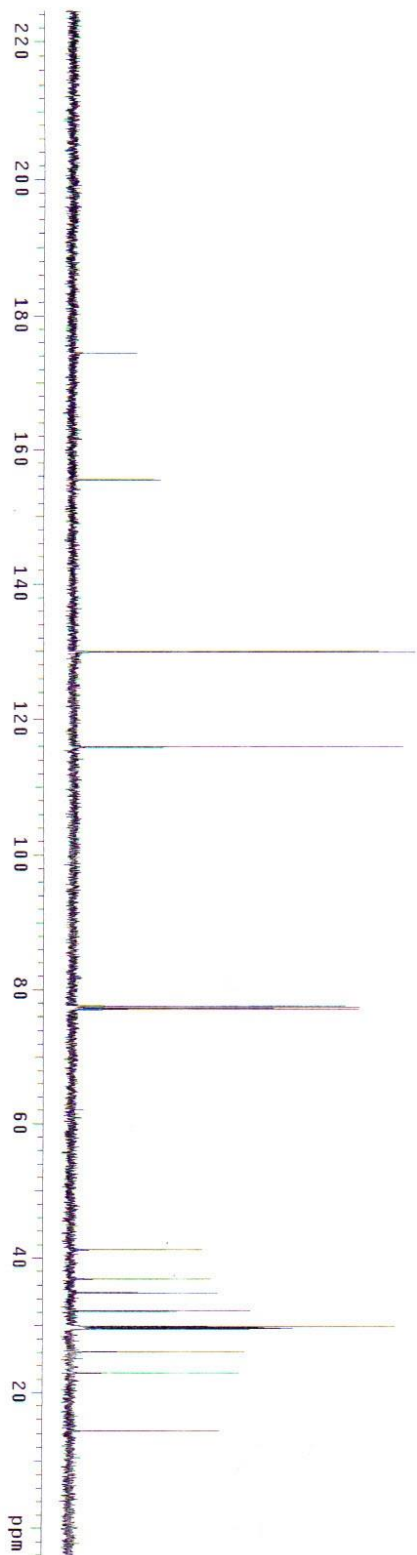
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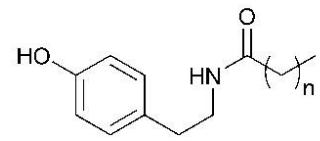
^{13}C NMR



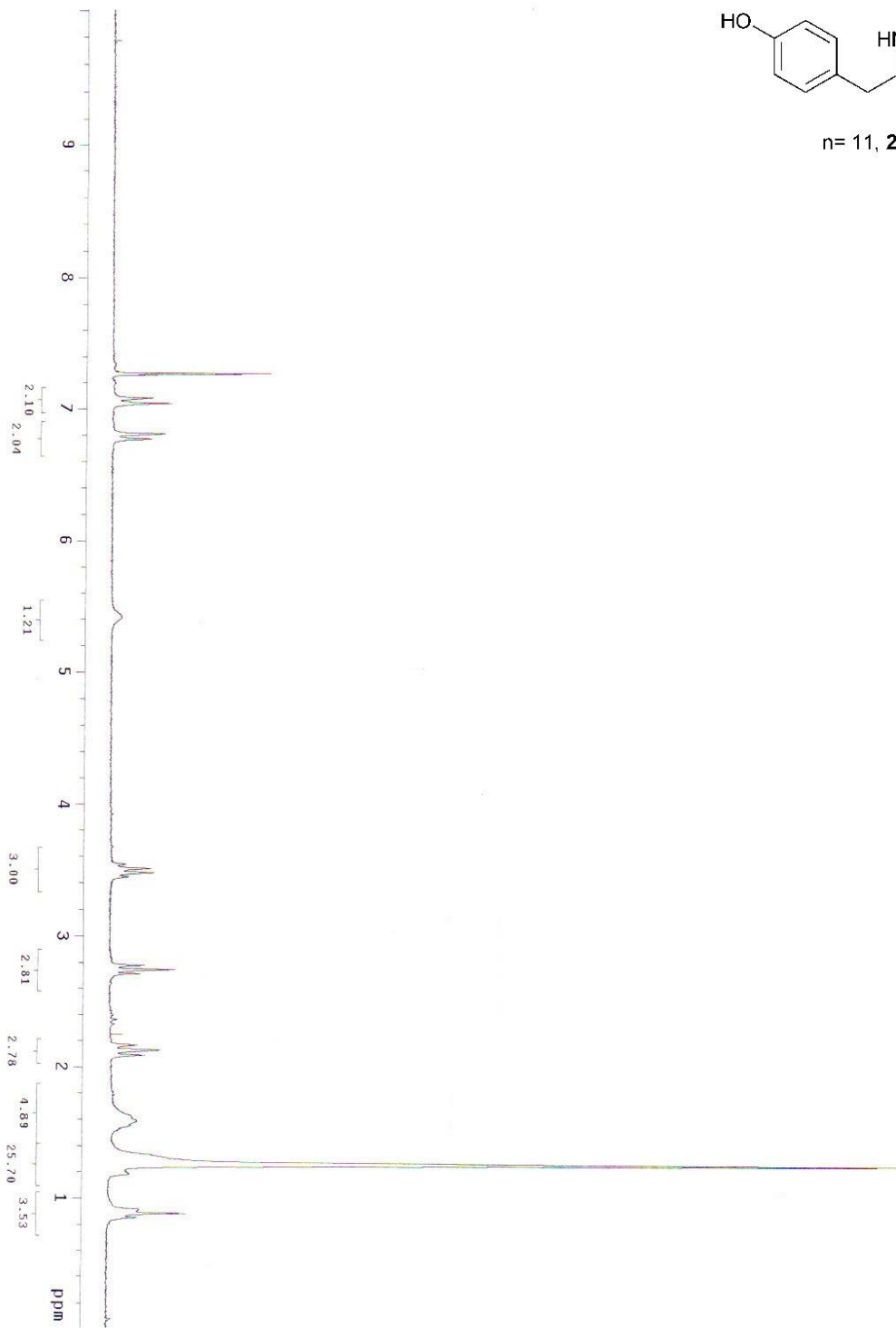
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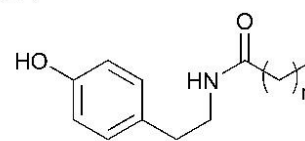
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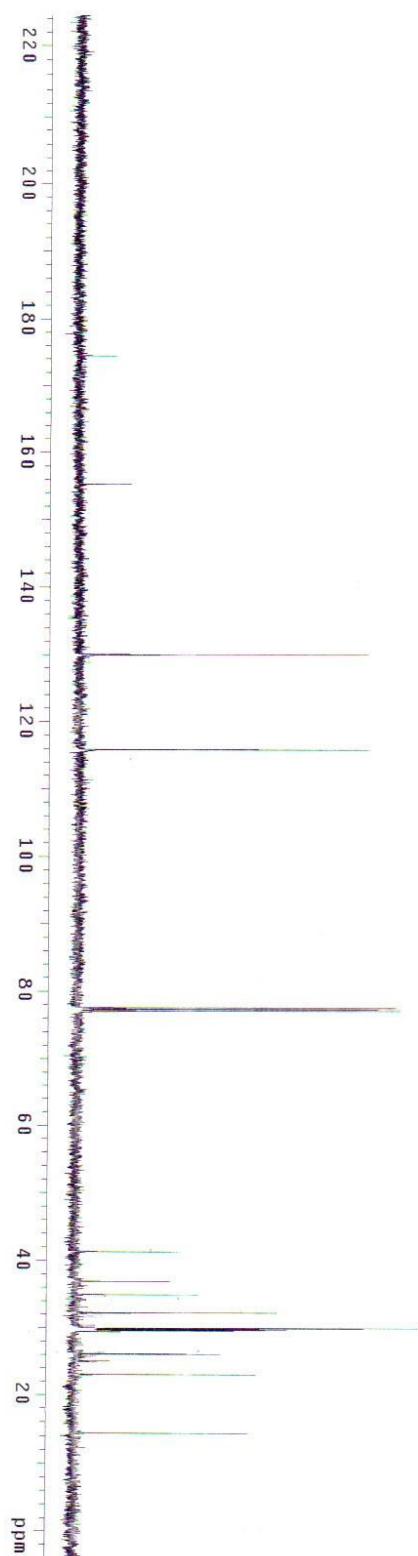
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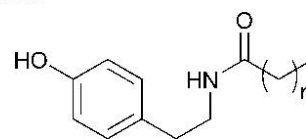
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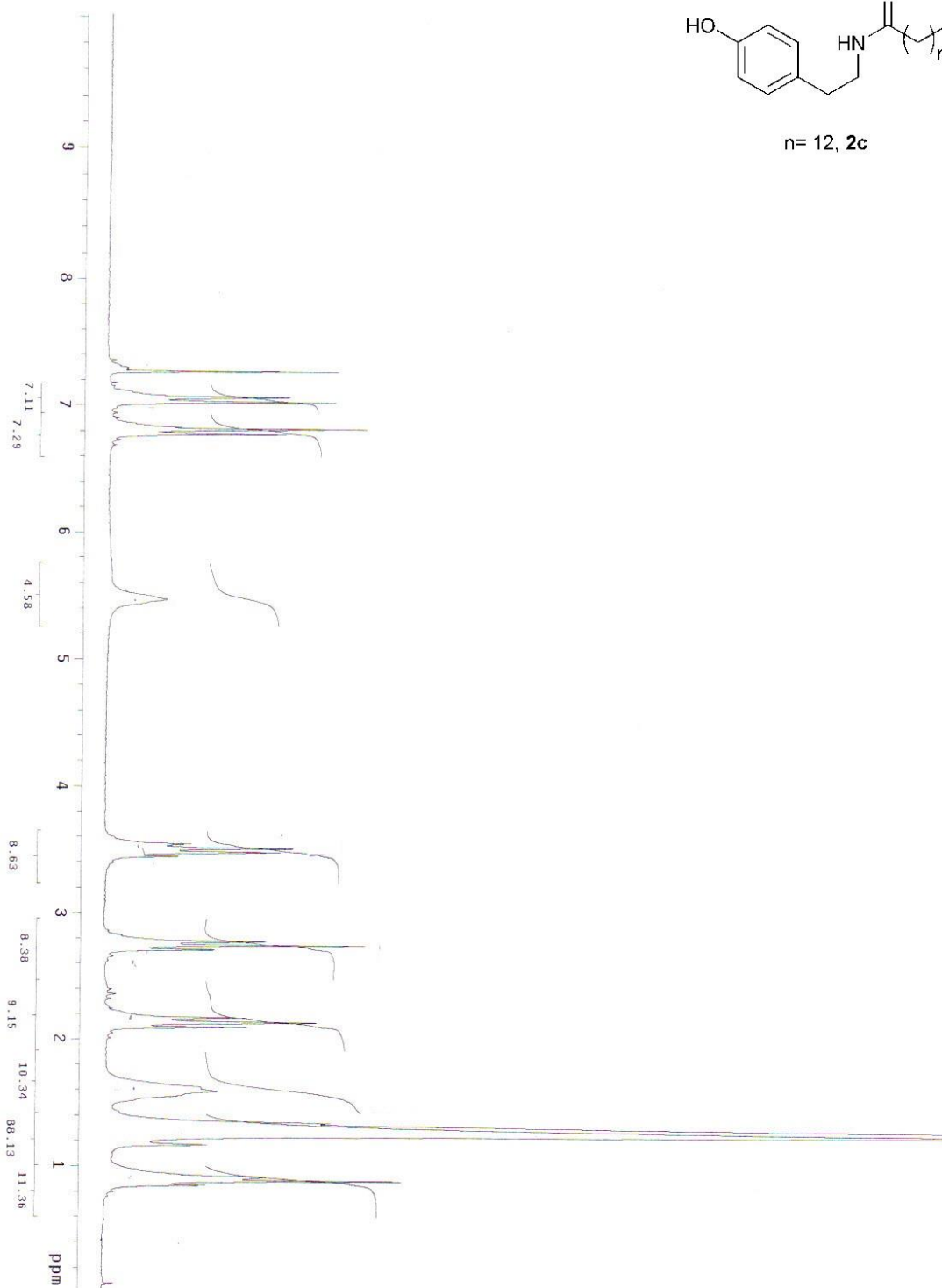
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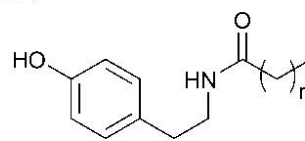
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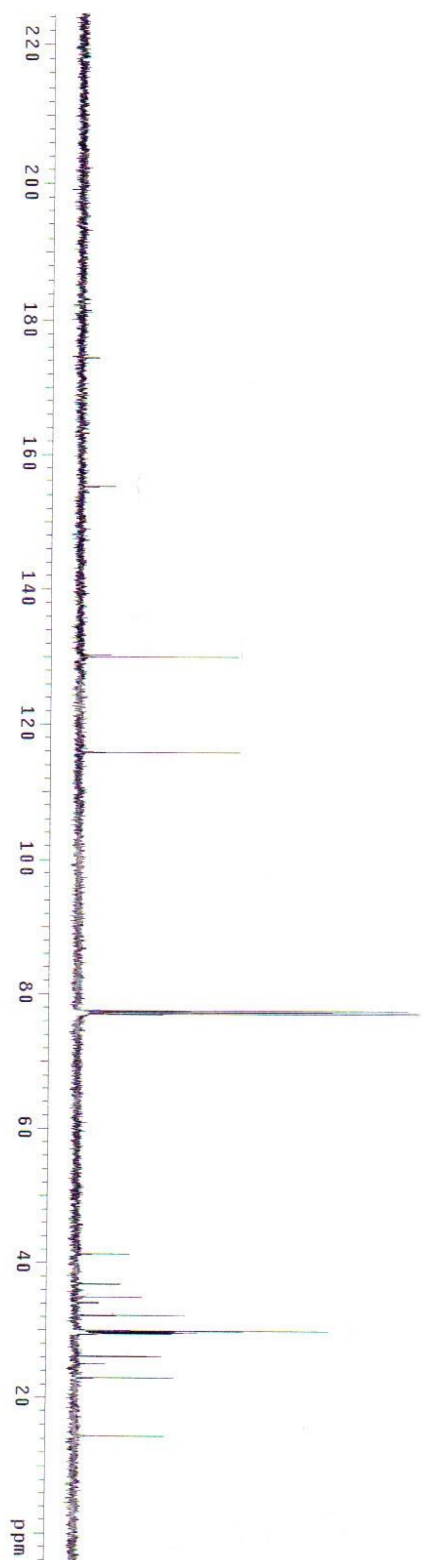
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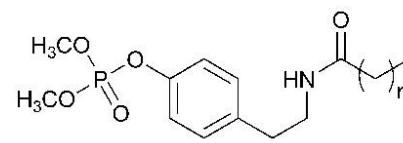
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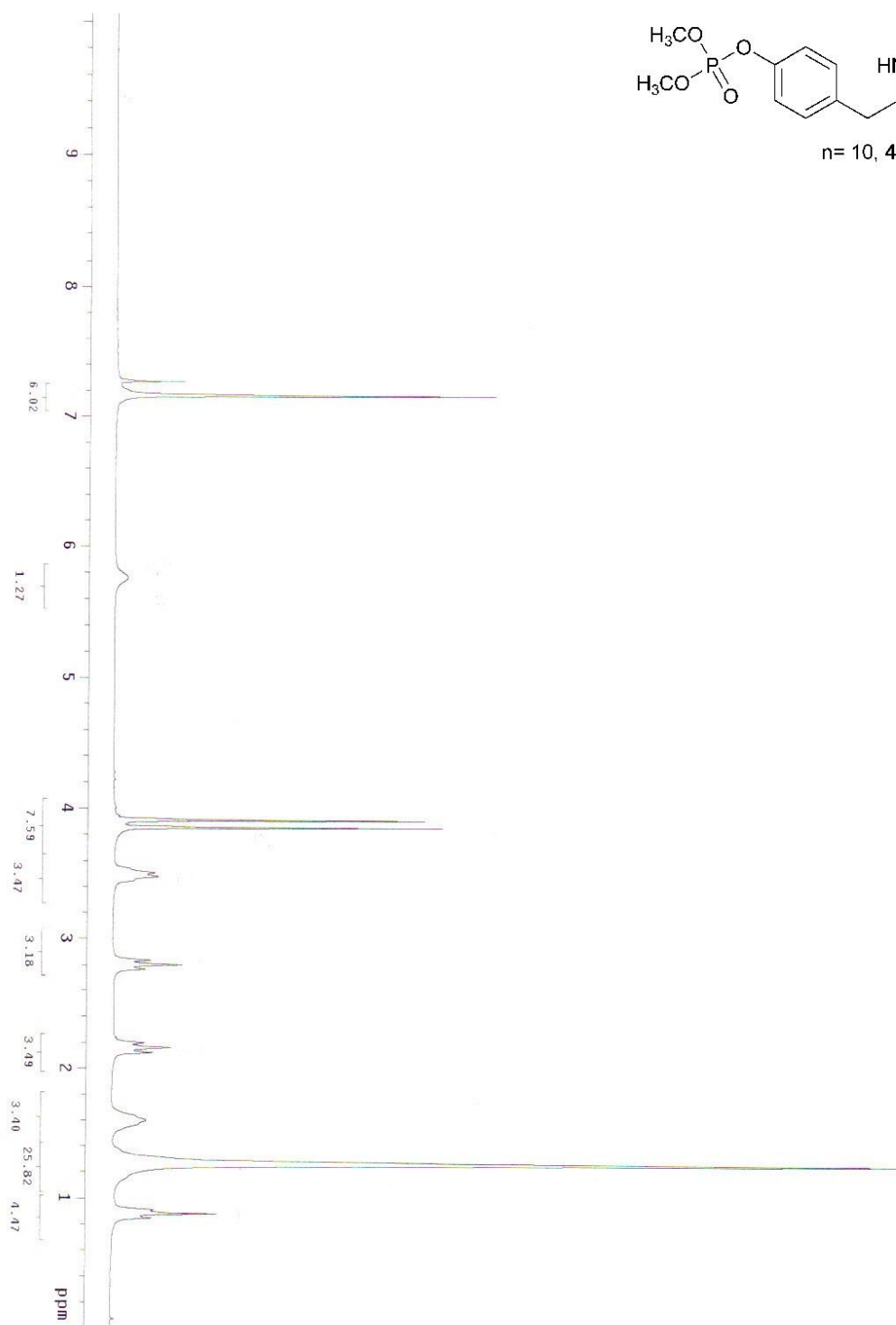
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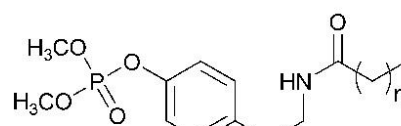
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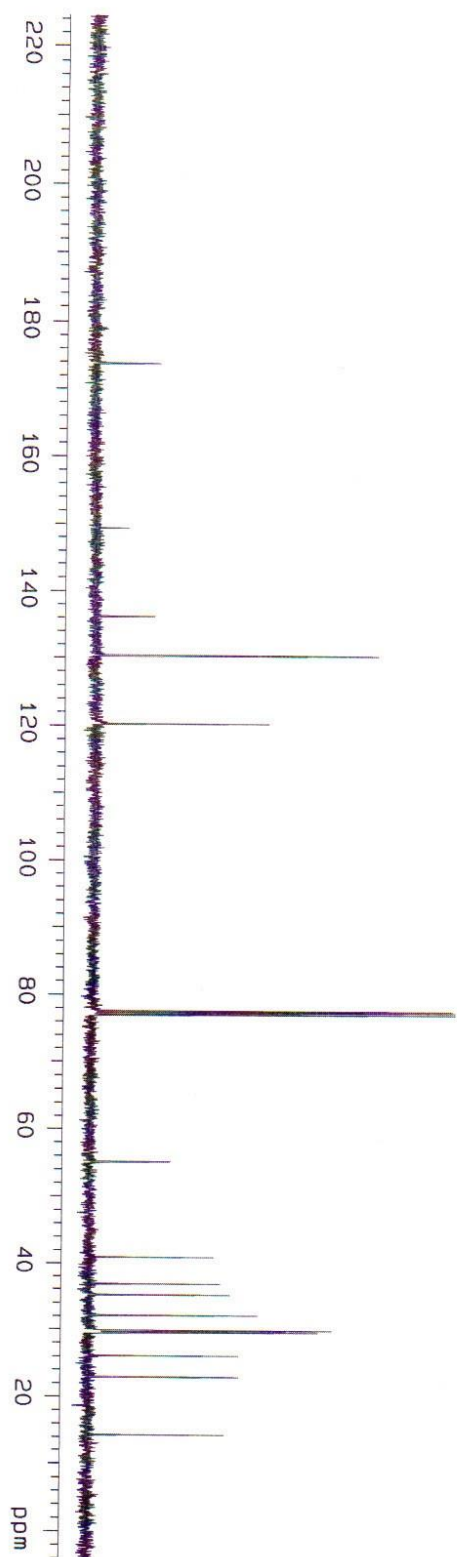
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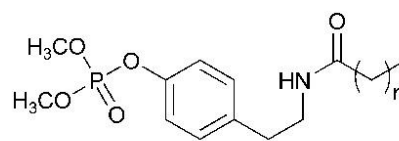
¹³C NMR



n = 10, 4a



³¹P NMR

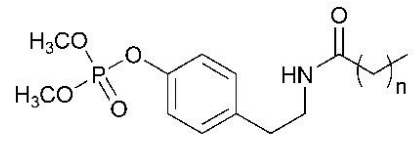


n = 10, **4a**

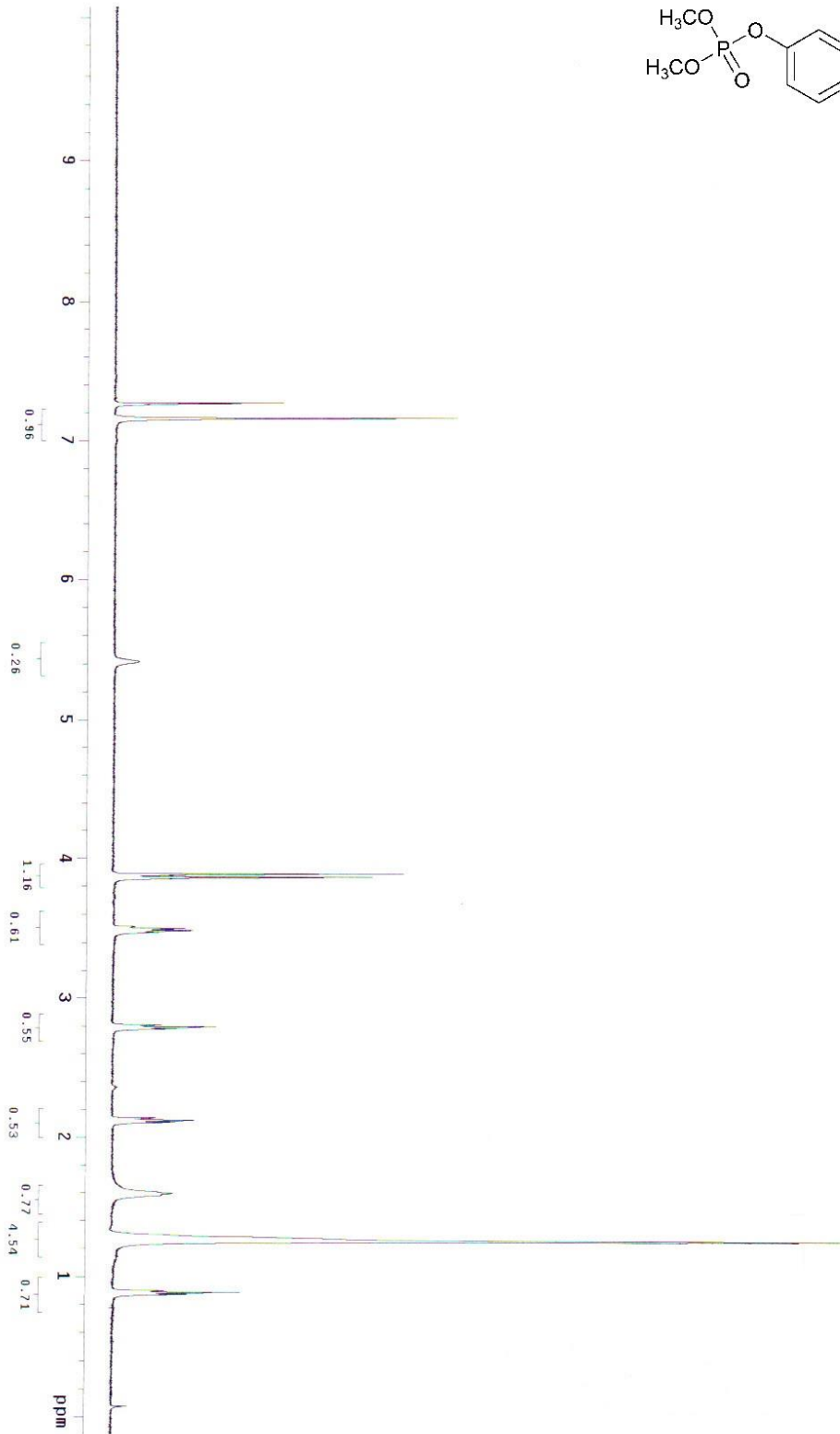


INDEX	FREQUENCY	PPM	HEIGHT
1	-584.996	-2.891	14.4

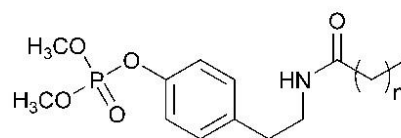
¹H NMR



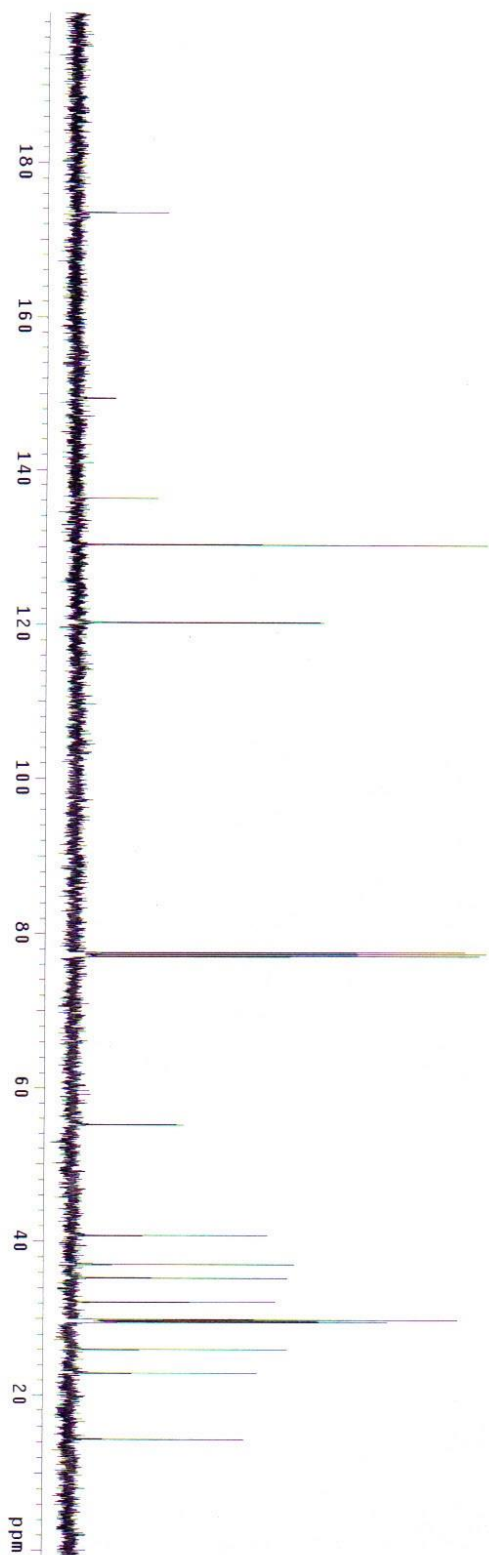
n = 11, **4b**



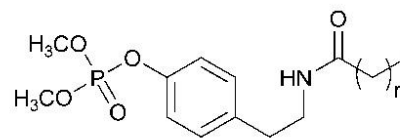
¹³C NMR



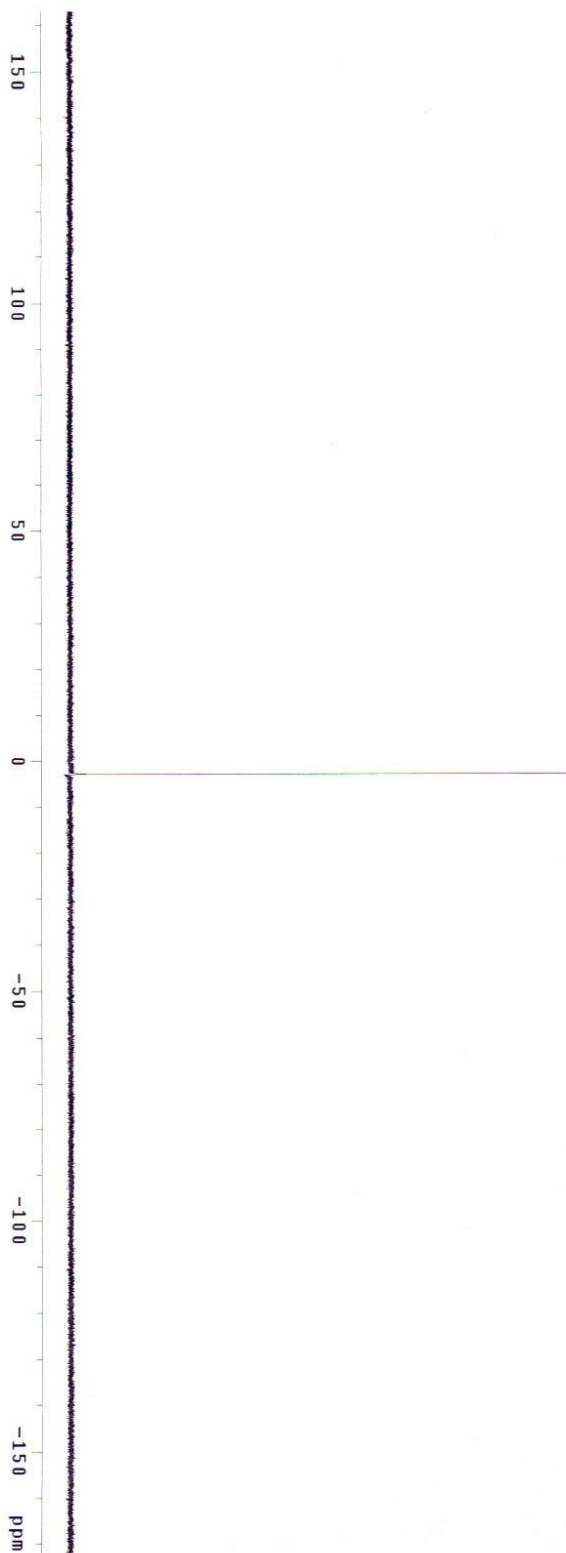
n= 11, **4b**



³¹P NMR

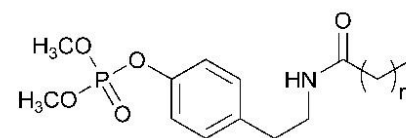


n = 11, 4b

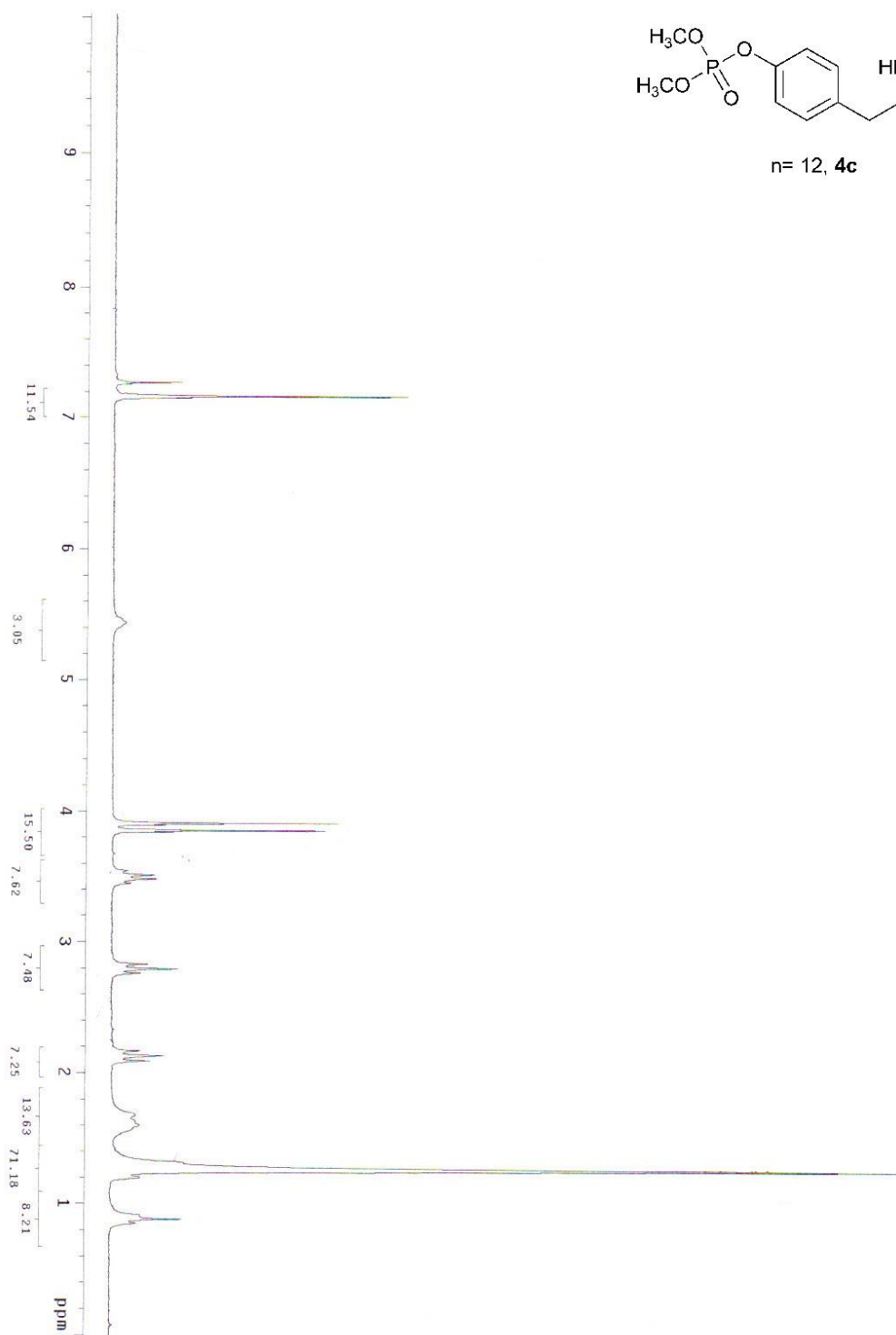


INDEX	FREQUENCY	PPM	HEIGHT
1	-579.806	-2.866	31.9

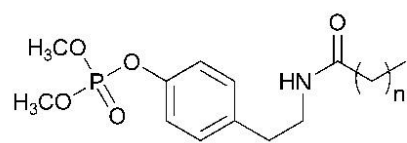
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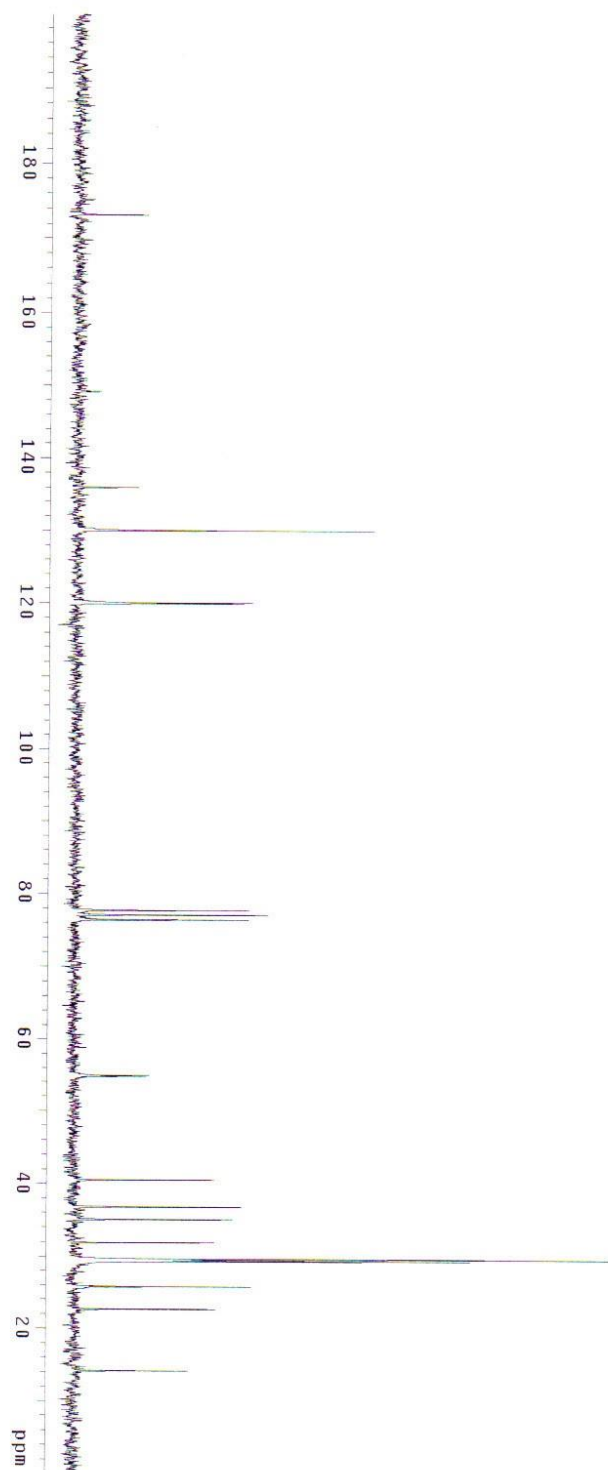
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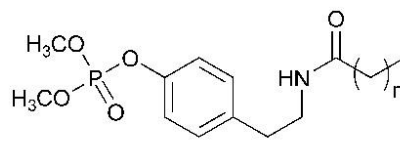
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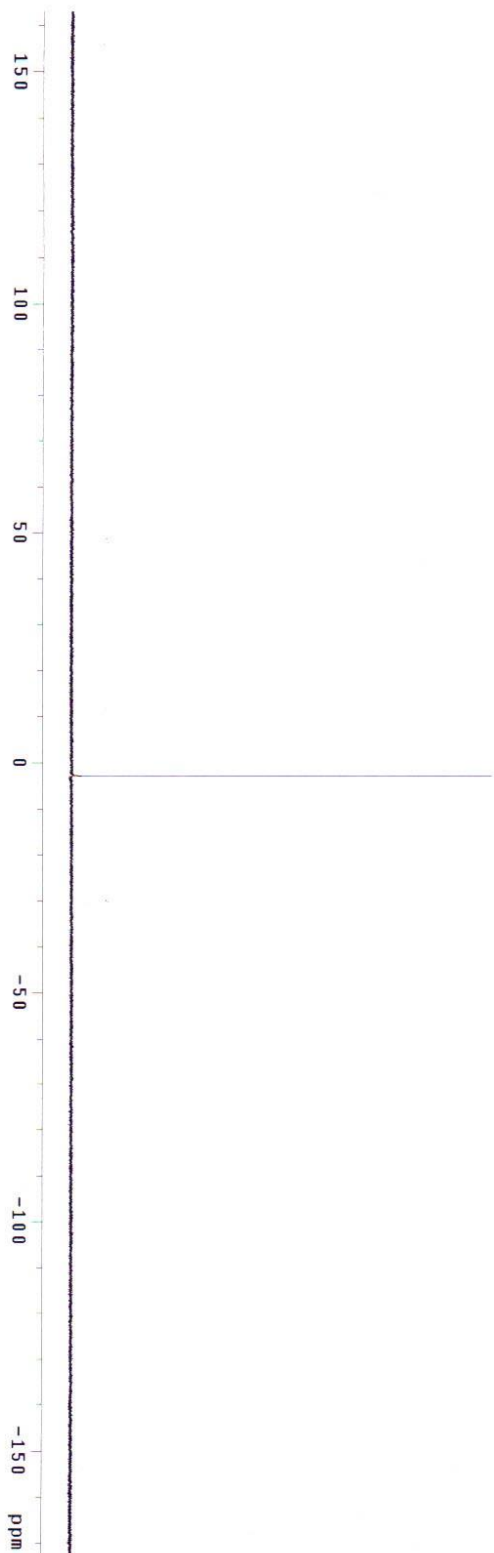
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³¹P NMR

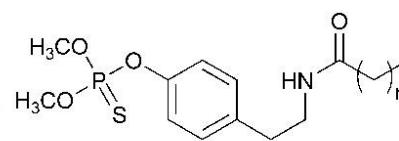


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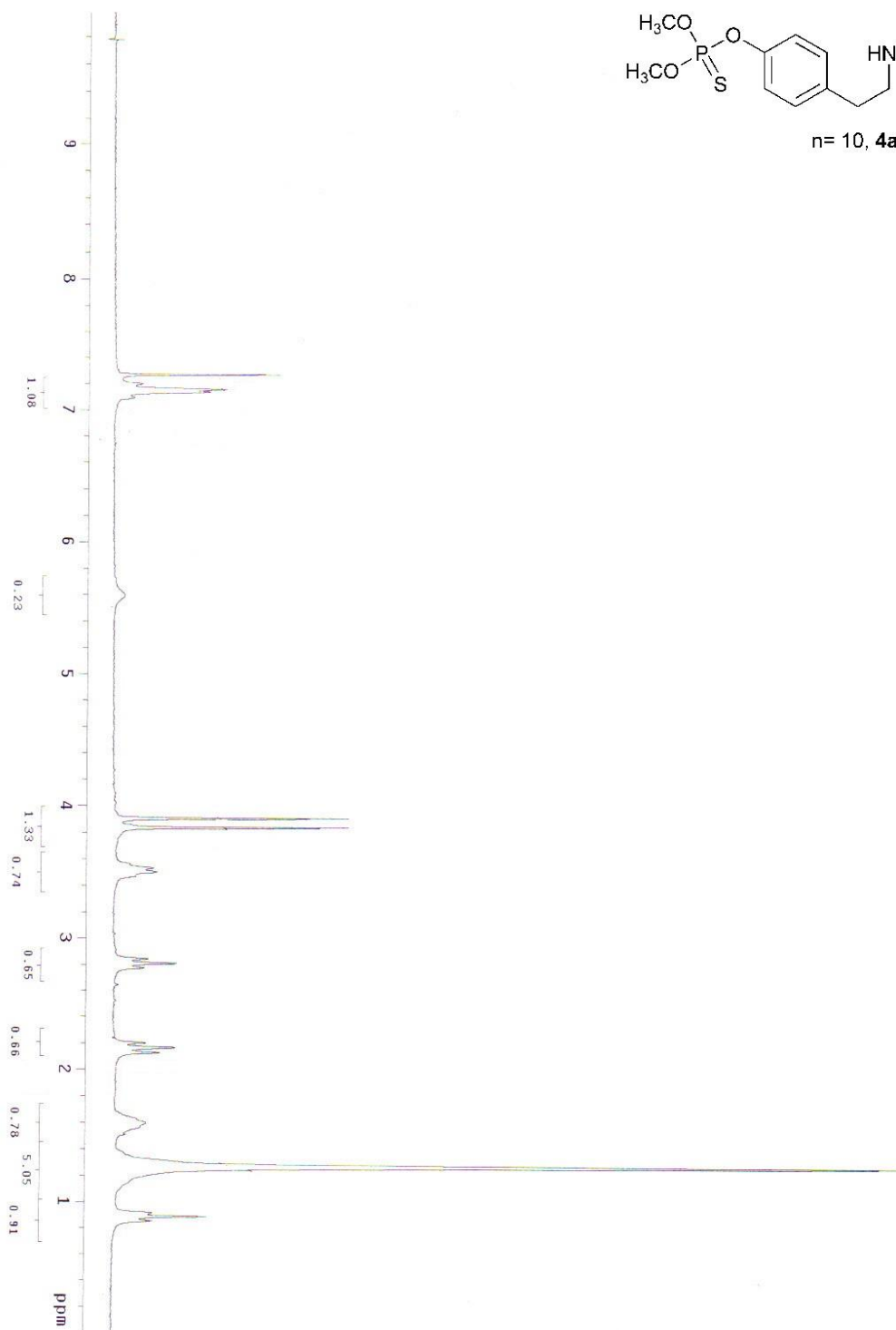


INDEX	FREQUENCY	PPM	HEIGHT
1	-580.844	-2.871	42.0

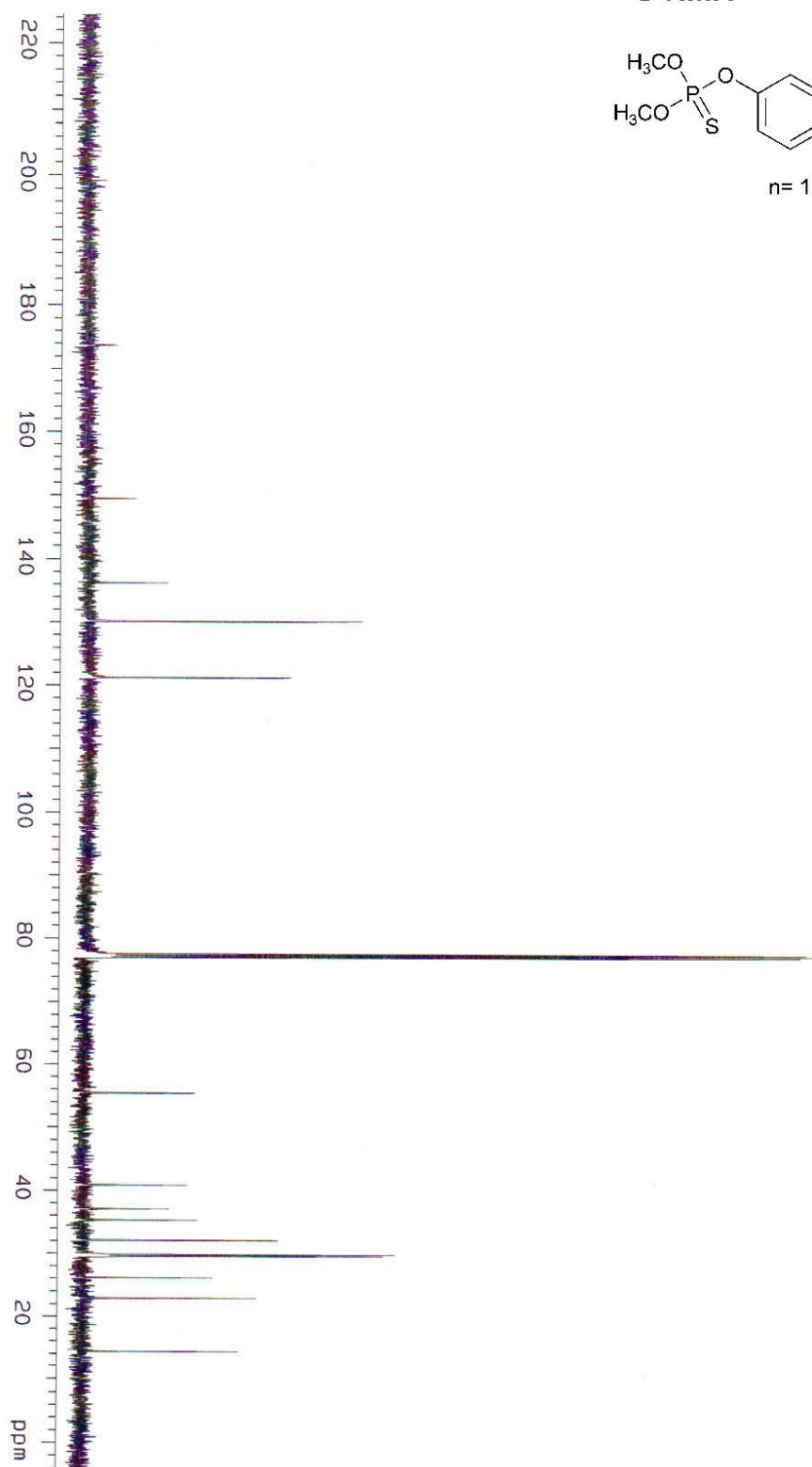
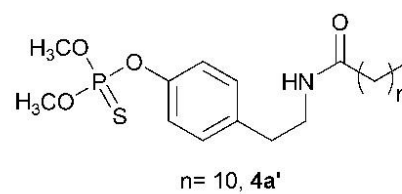
¹H NMR



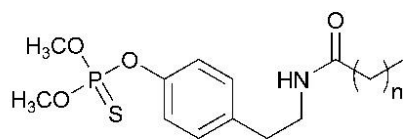
n = 10, 4a'



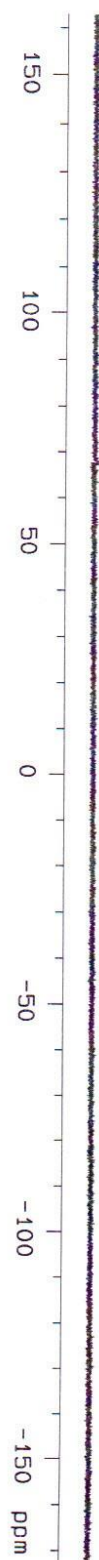
¹³C NMR



³¹P NMR

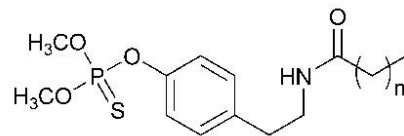


n = 10, **4a'**

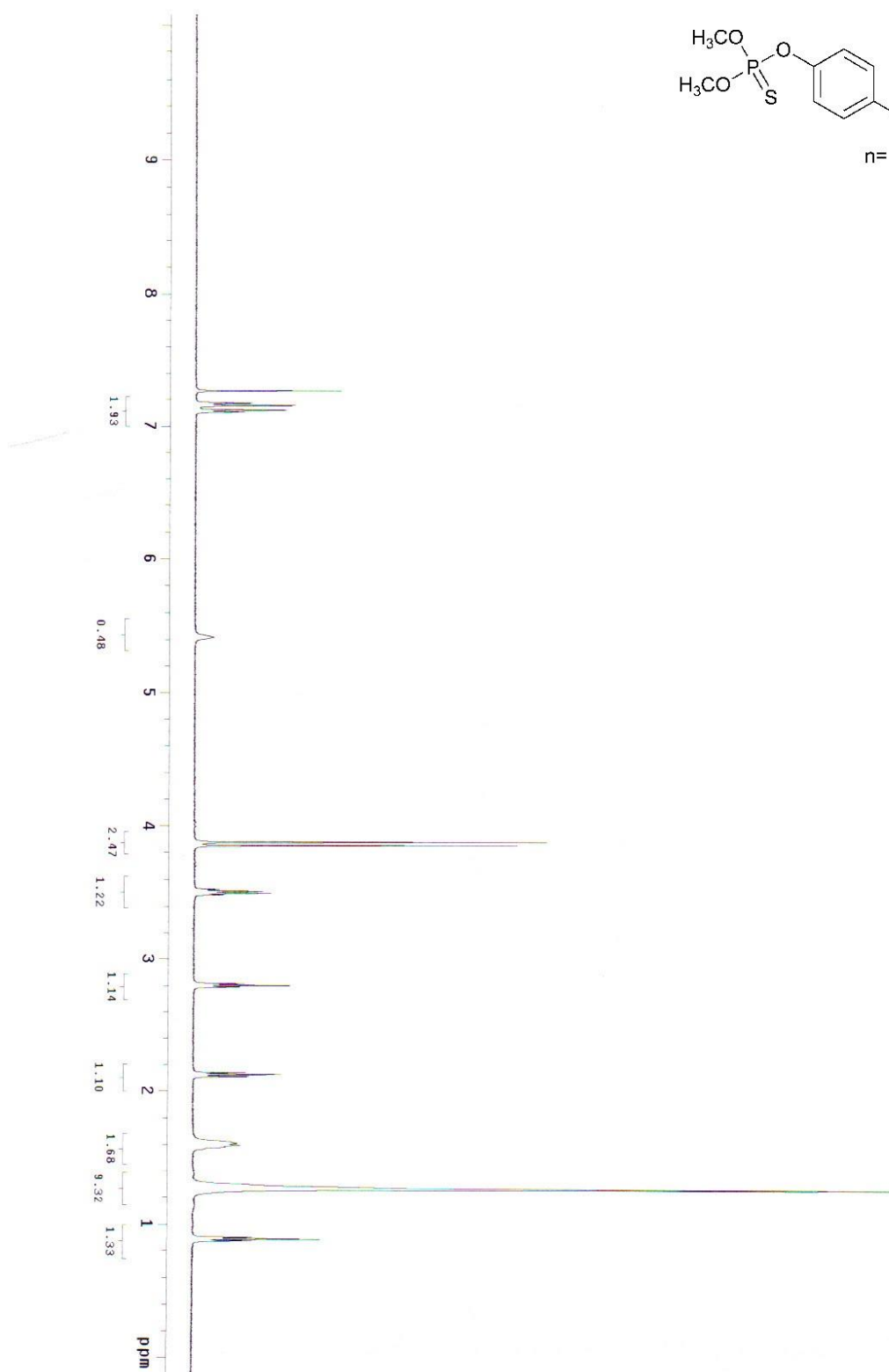


INDEX	FREQUENCY	PPM	HEIGHT
1	13700.355	57.714	10.4

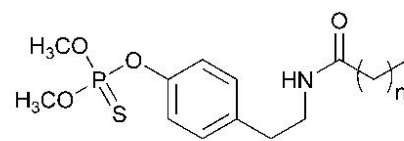
¹H NMR



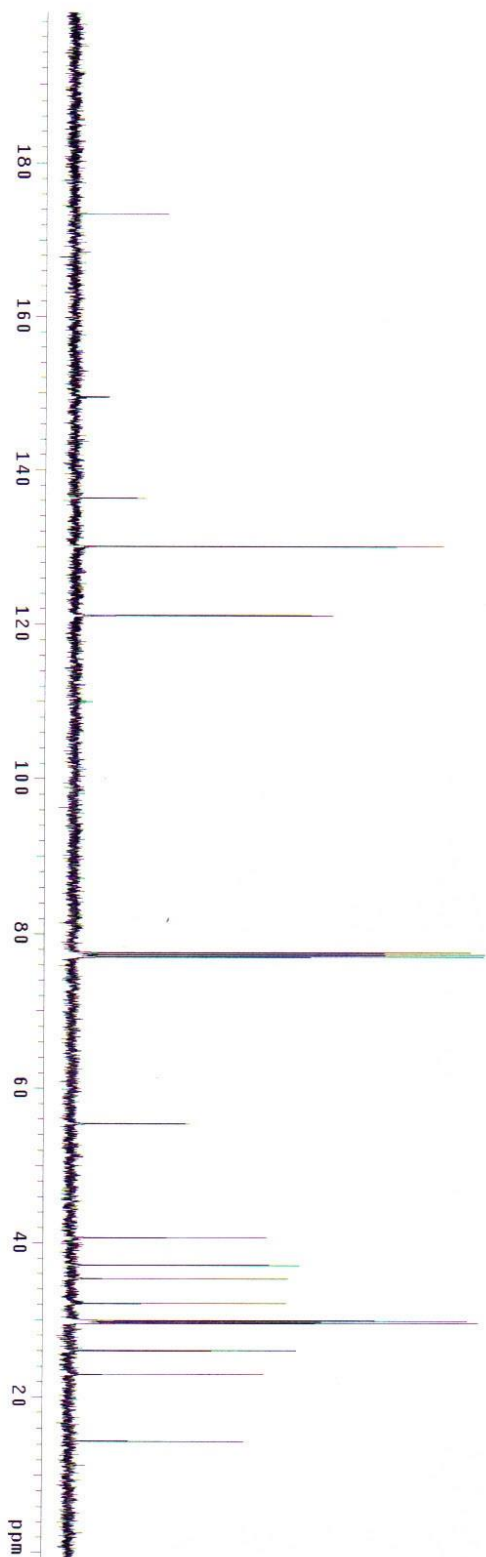
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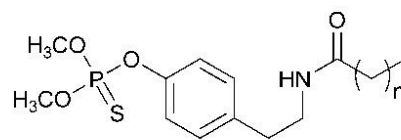
^{13}C NMR



n = 11, 4b'



^{31}P NMR

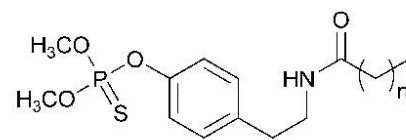


n = 11, 4b'

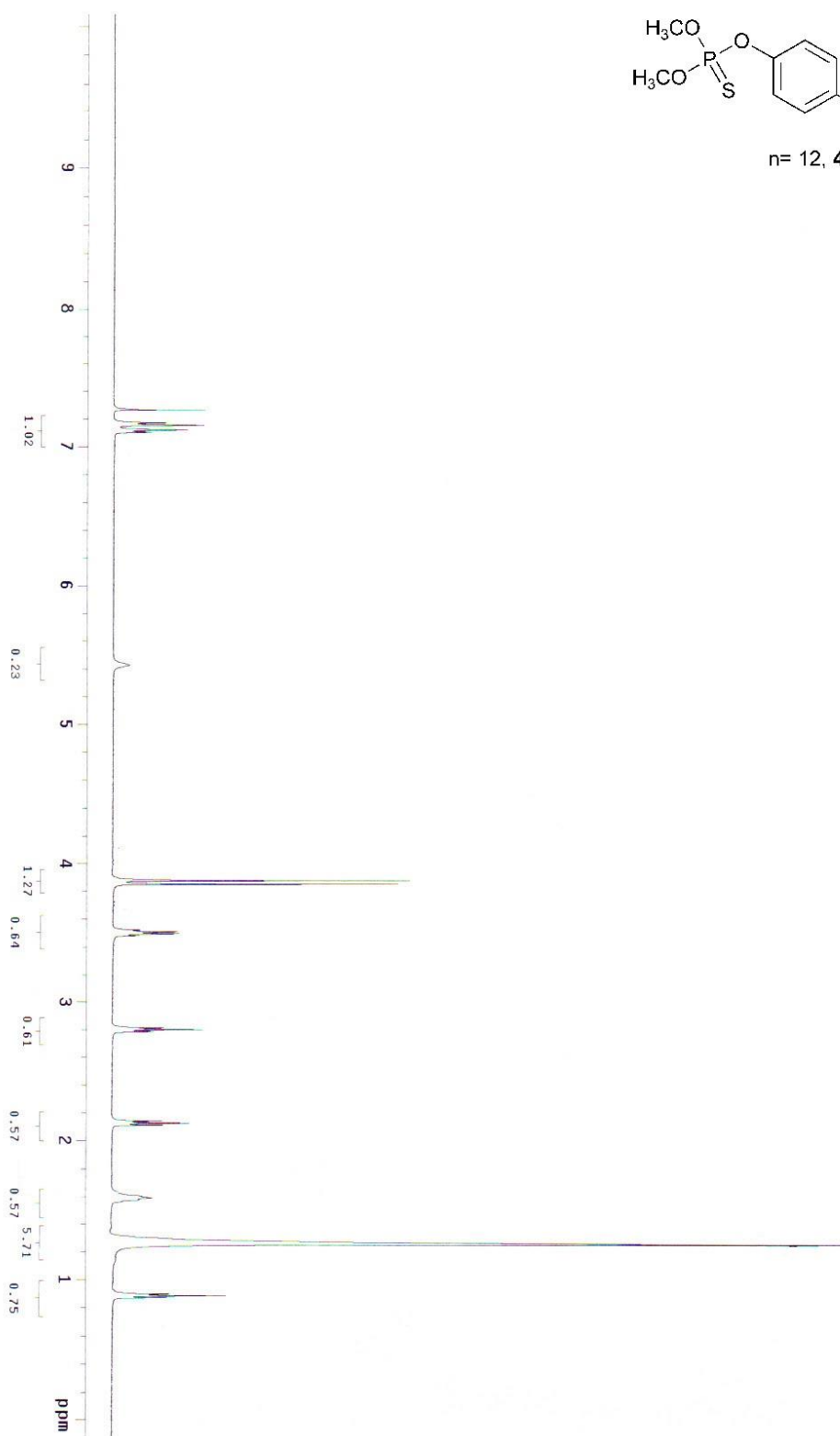


INDEX	FREQUENCY	PPM	HEIGHT
1	13700.355	67.714	34.8

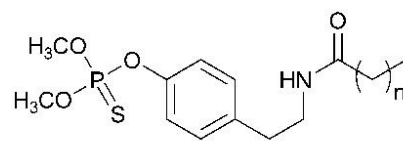
¹H NMR



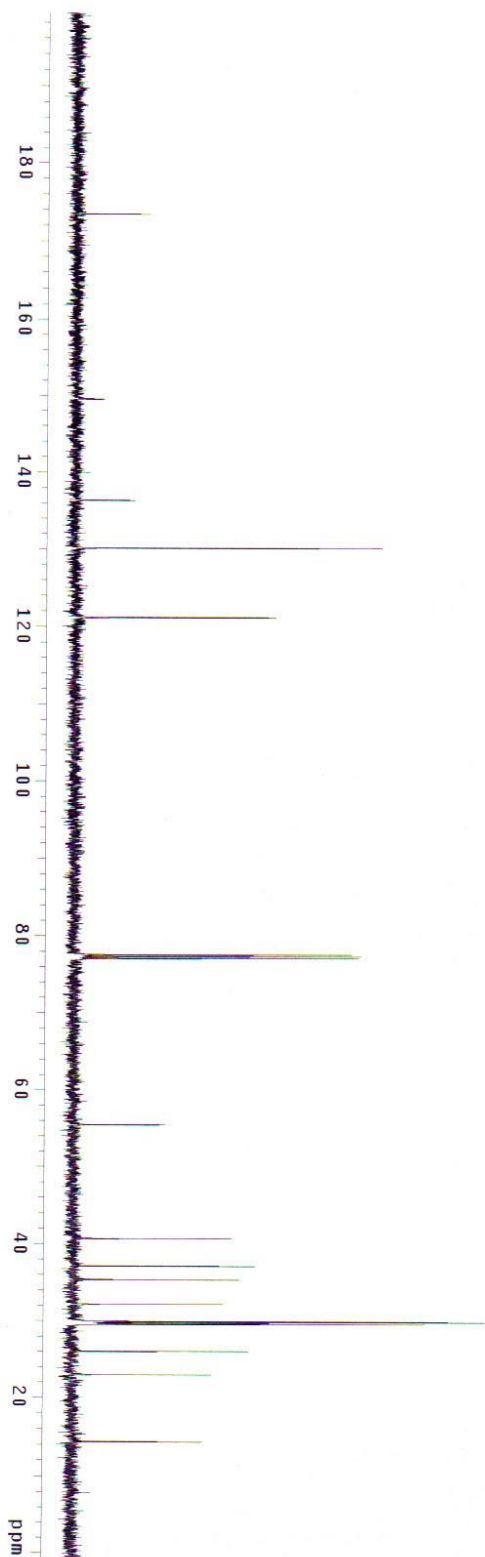
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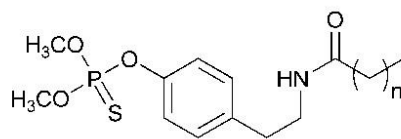
¹³C NMR



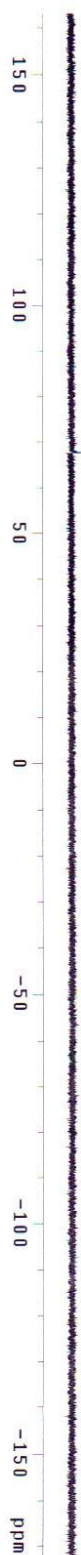
n = 12, 4c'



³¹P NMR

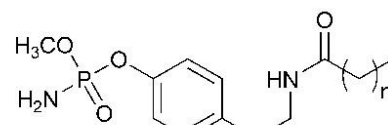


n = 12, 4c'

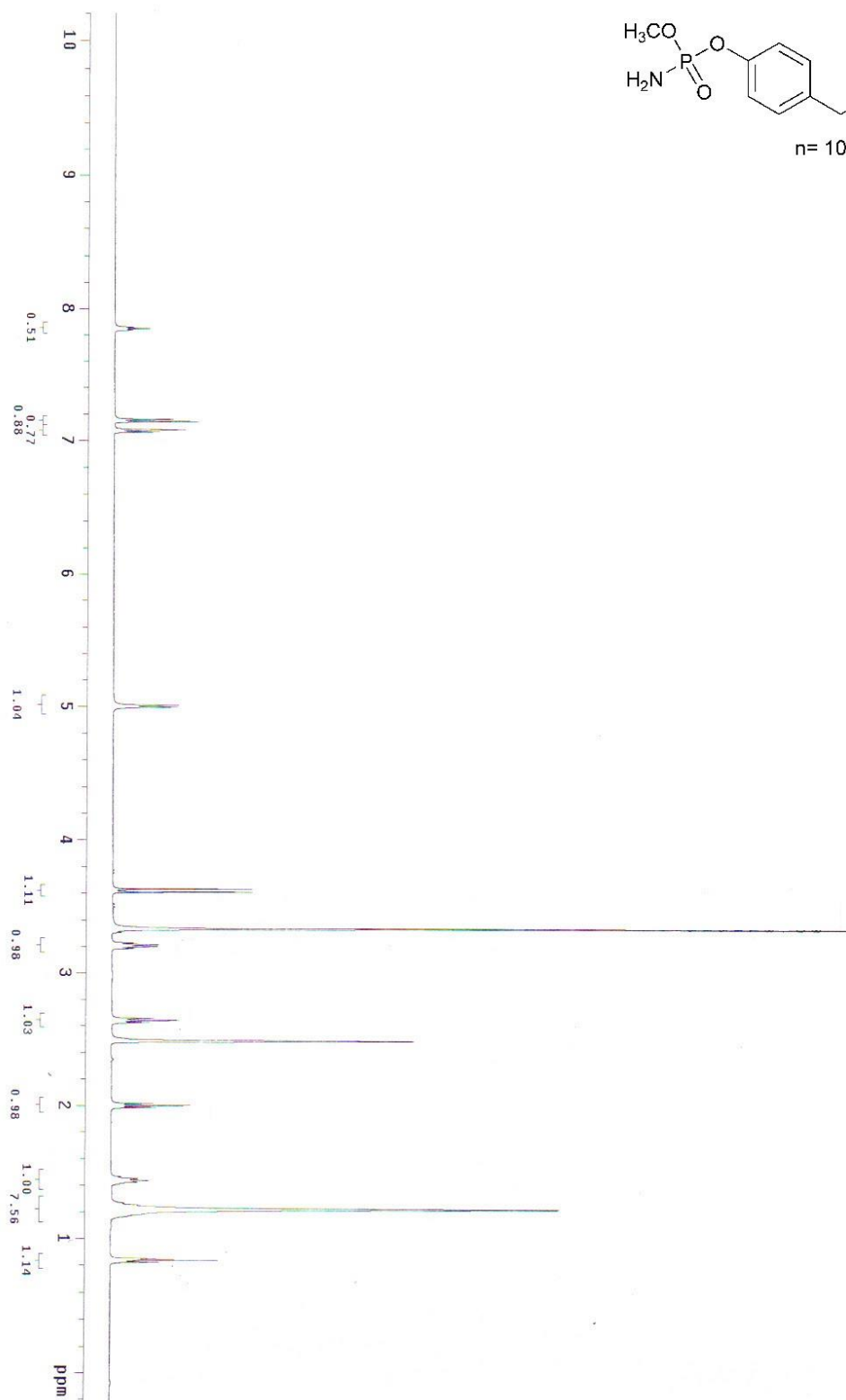


INDEX	FREQUENCY	PPM	HEIGHT
1	13700.355	67.714	25.8

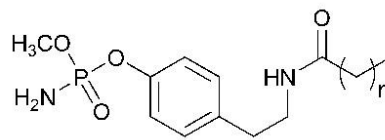
¹H NMR



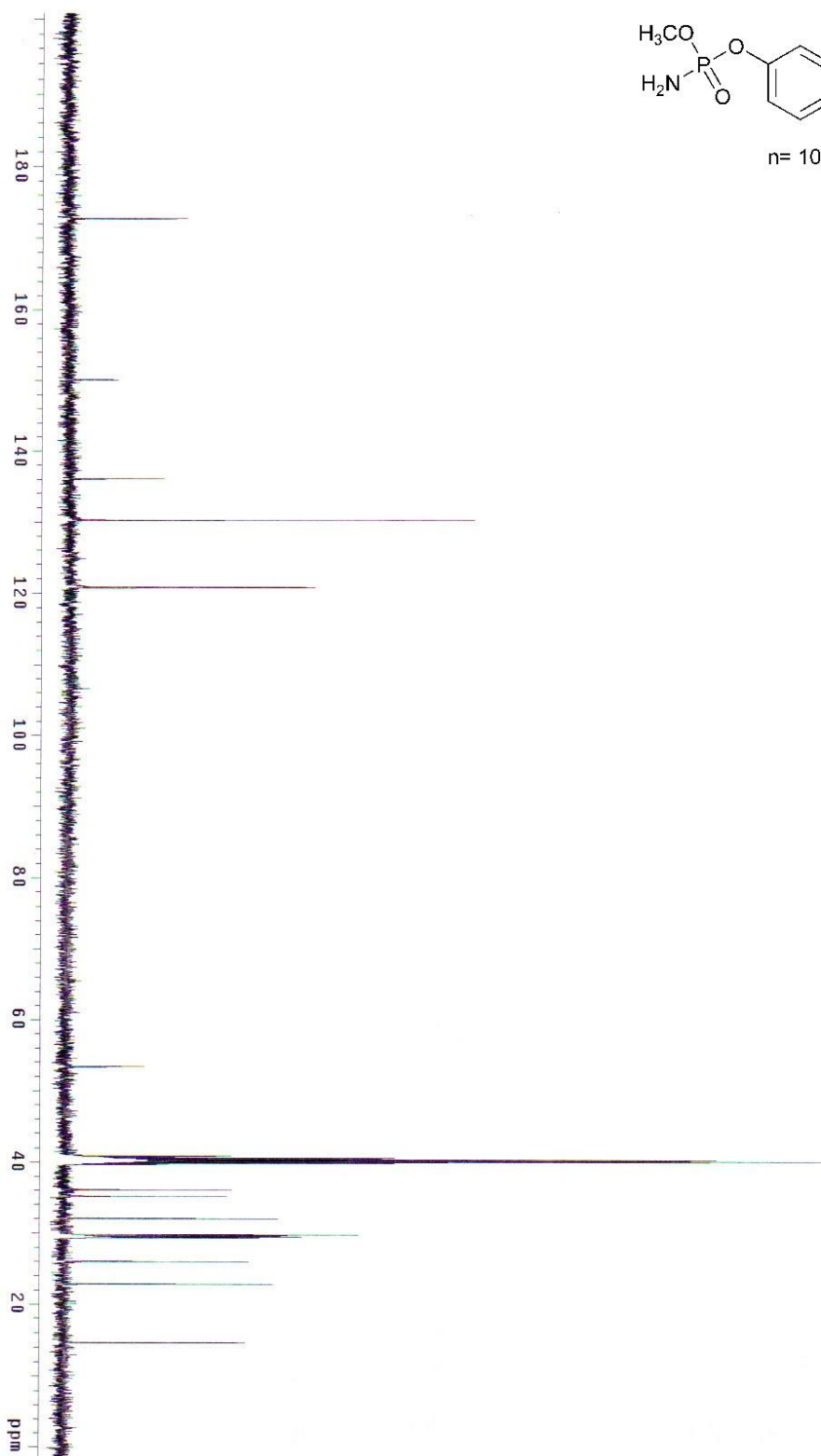
n = 10, 4d



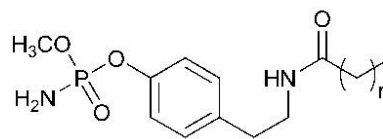
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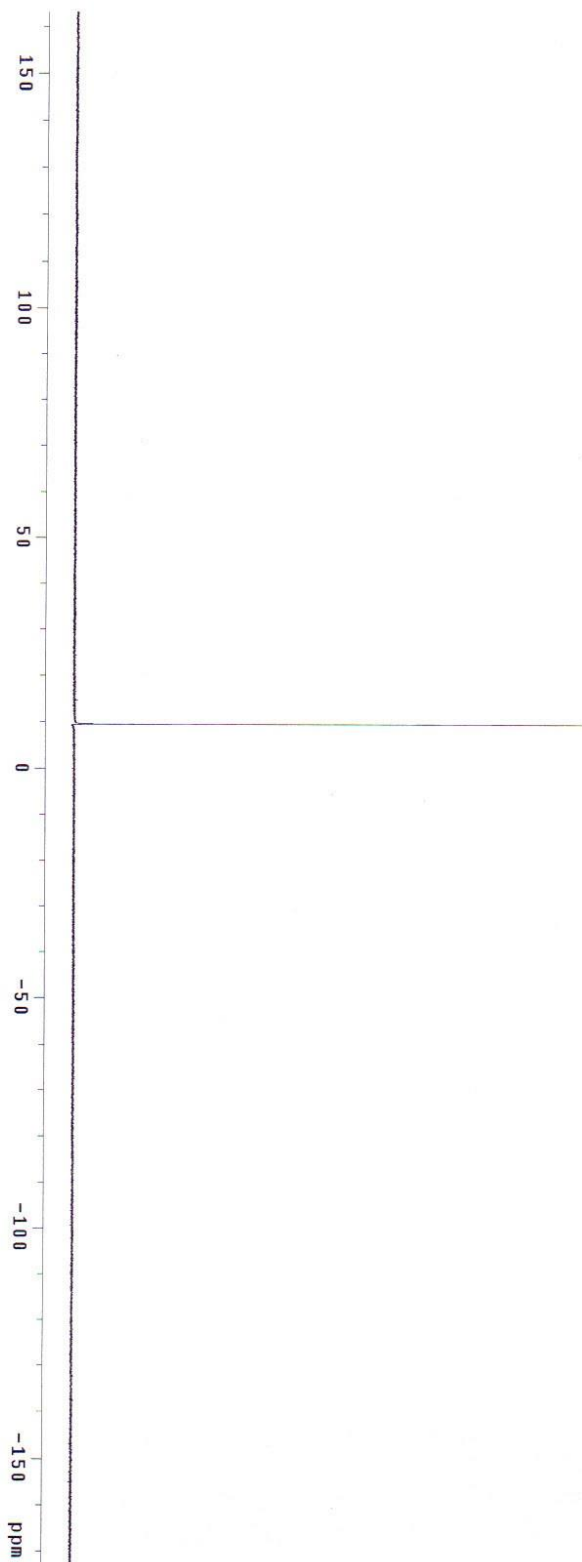
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³¹P NMR

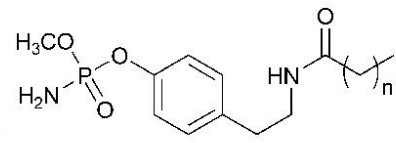


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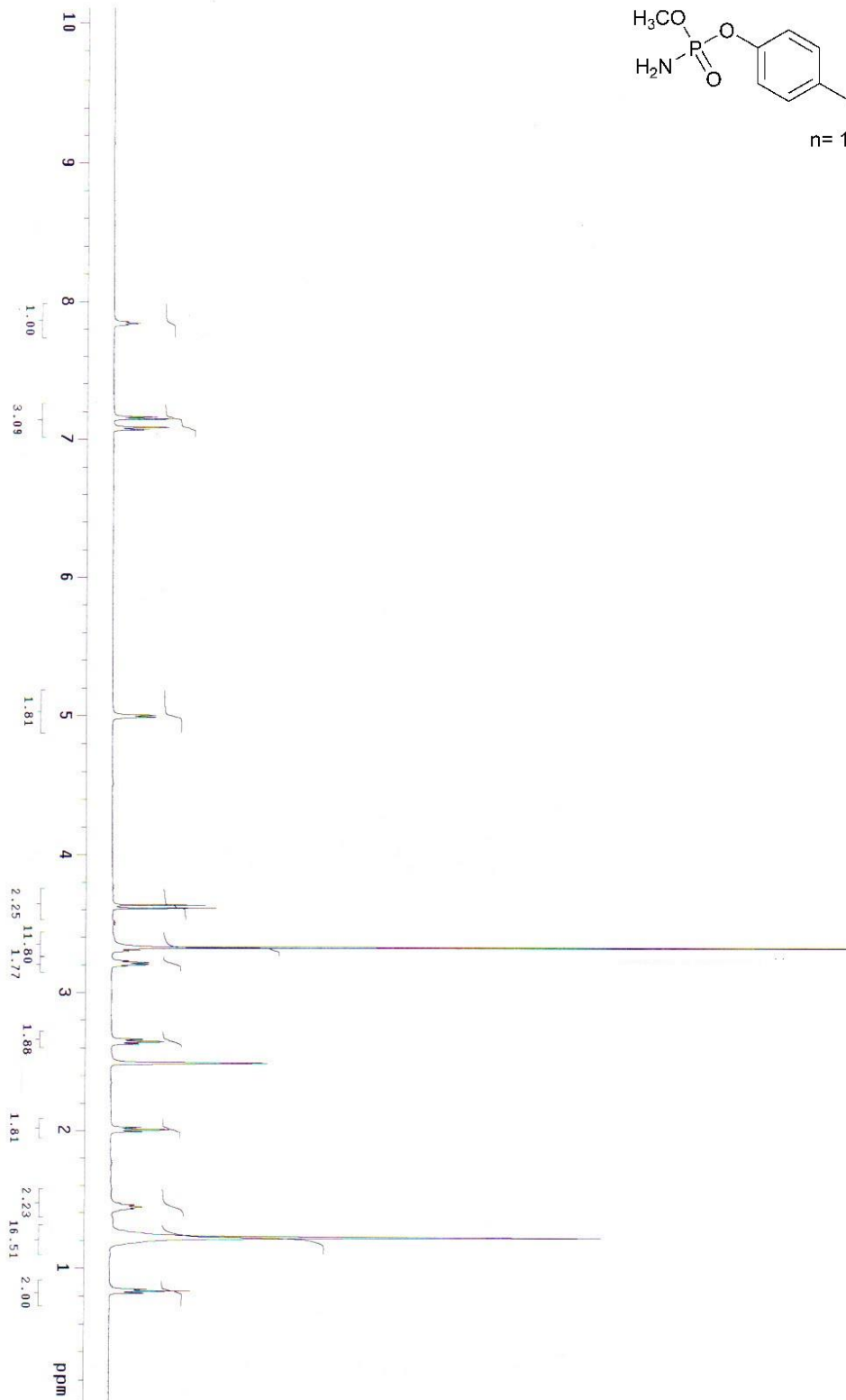


INDEX	FREQUENCY	PPM	HEIGHT
1	1903.110	9.406	30.5

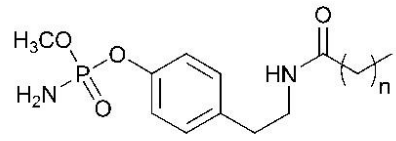
¹H NMR



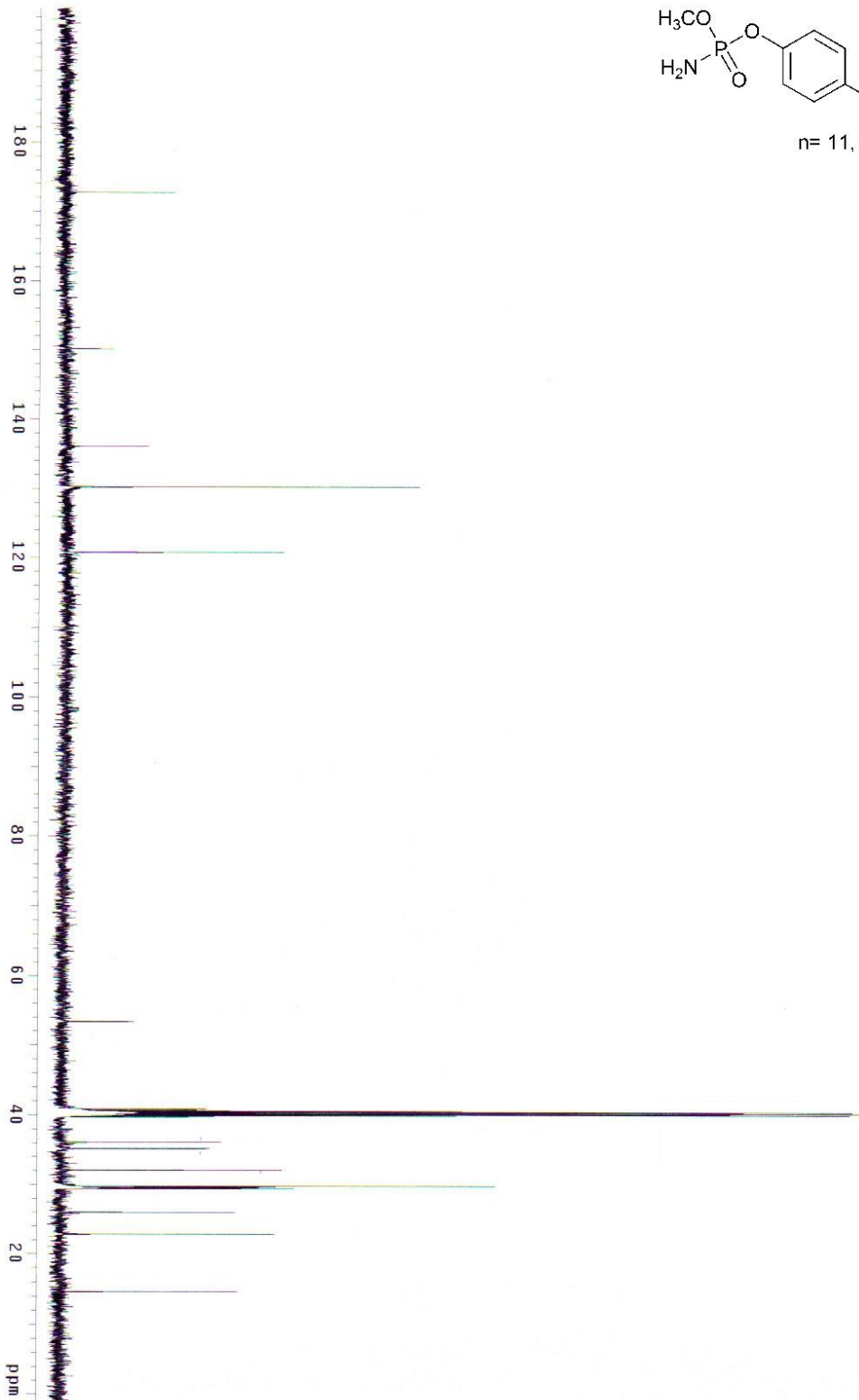
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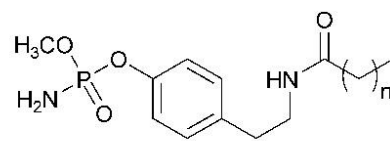
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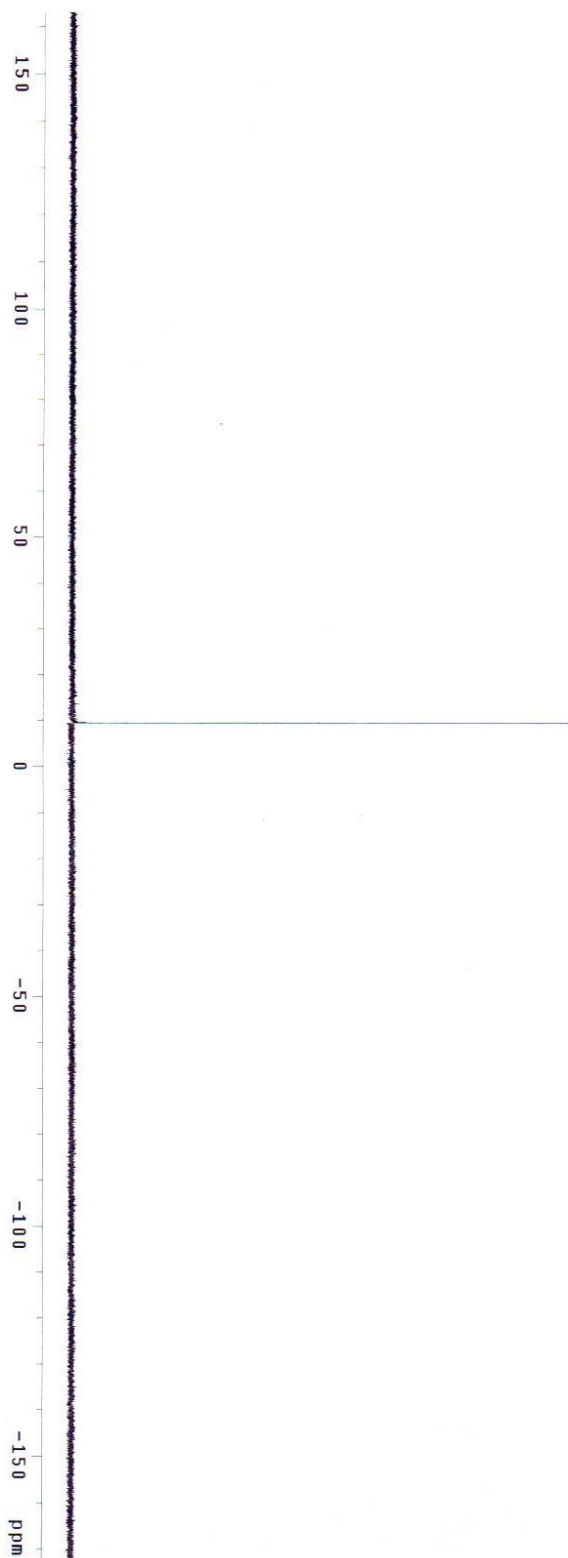
n = 11, **4e**



³¹P NMR

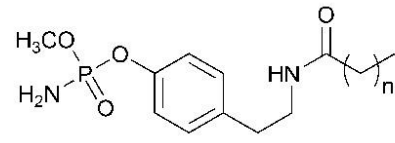


n = 11, **4e**

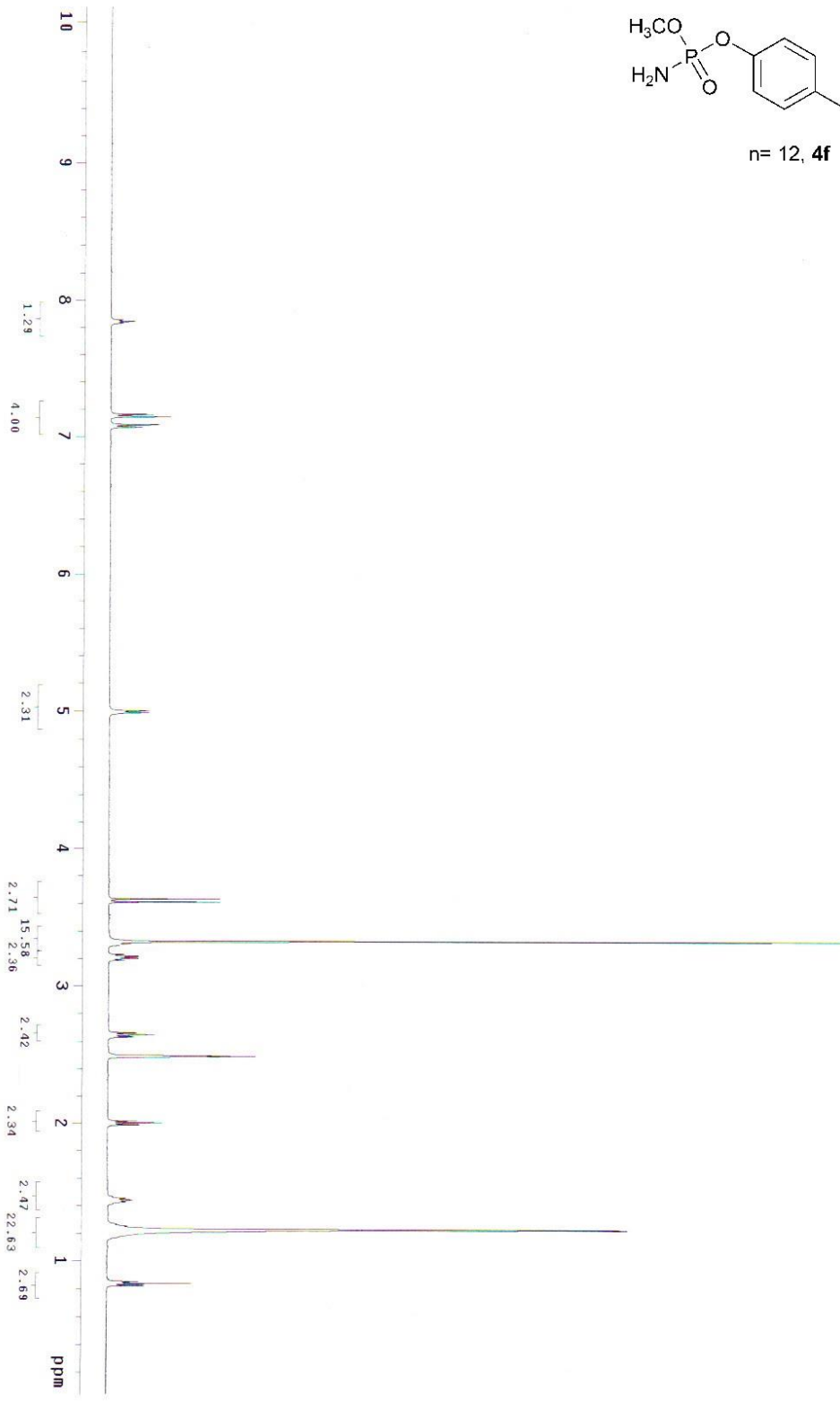


INDEX	FREQUENCY	PPM	HEIGHT
1	1302.072	9.401	28.9

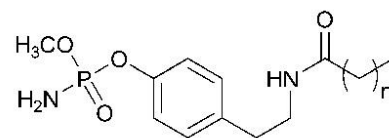
¹H NMR



n = 12, 4f



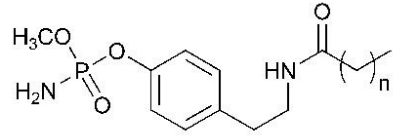
¹³C NMR



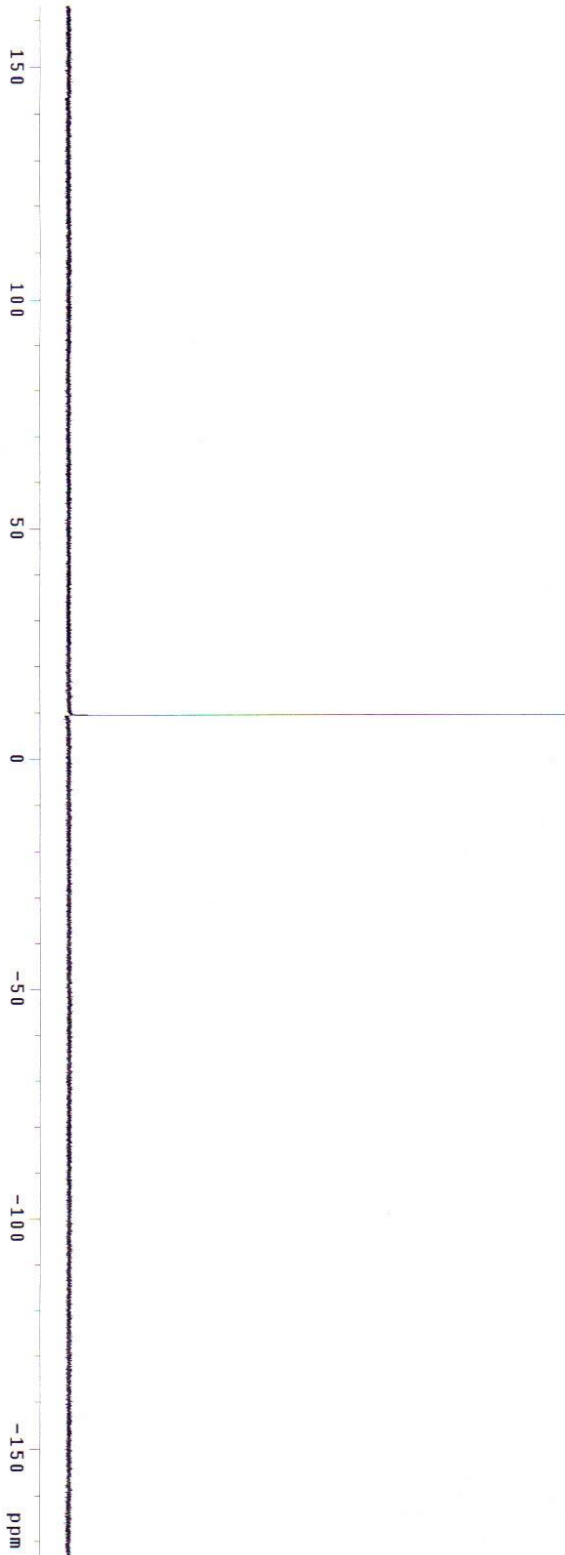
n = 12, 4f



³¹P NMR

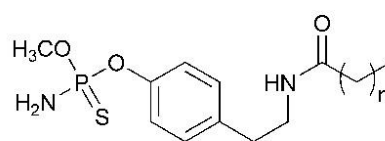


n = 12, 4f

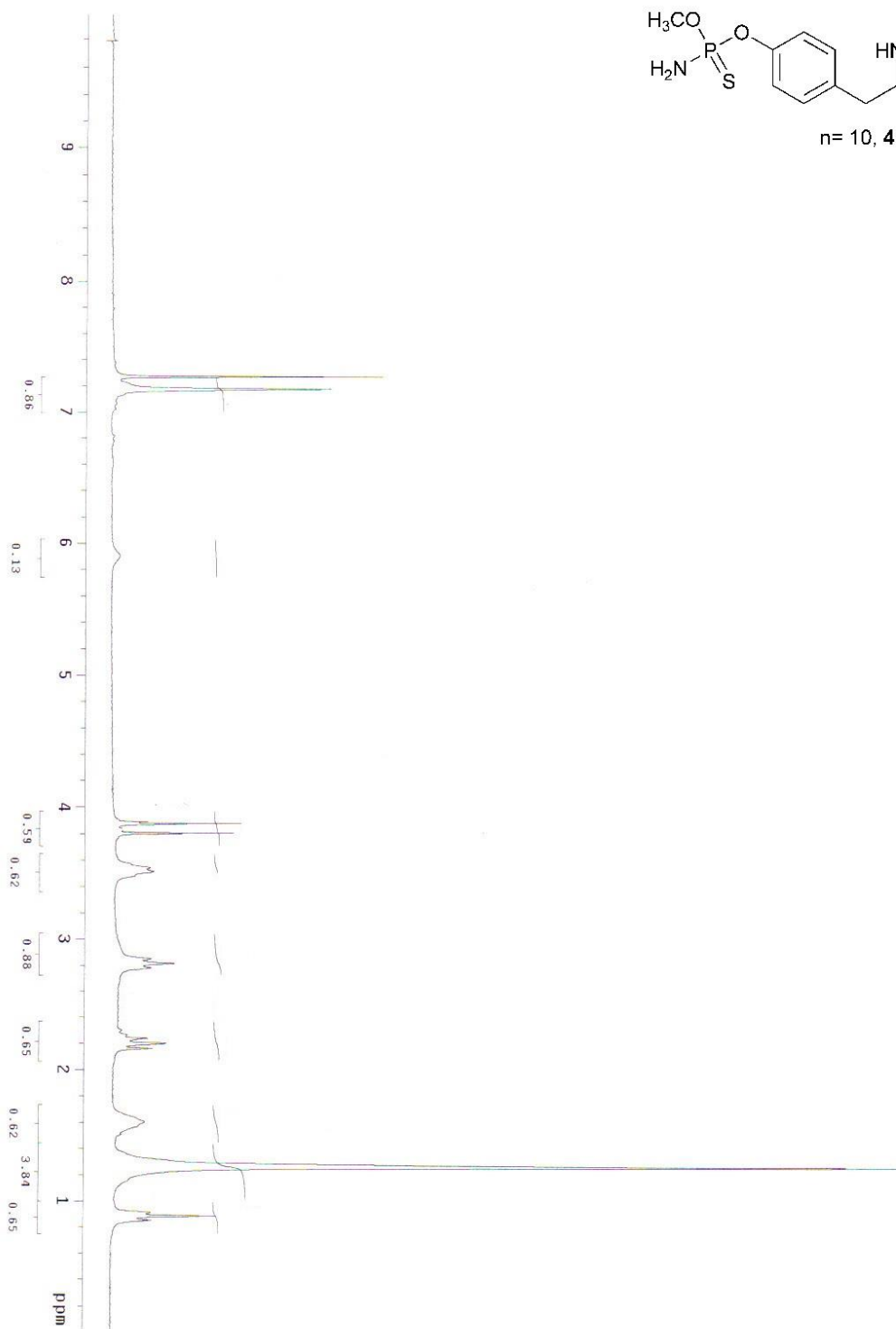


INDEX	FREQUENCY	PPM	HEIGHT
1	1902.072	9.401	38.7

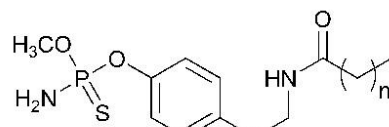
¹H NMR



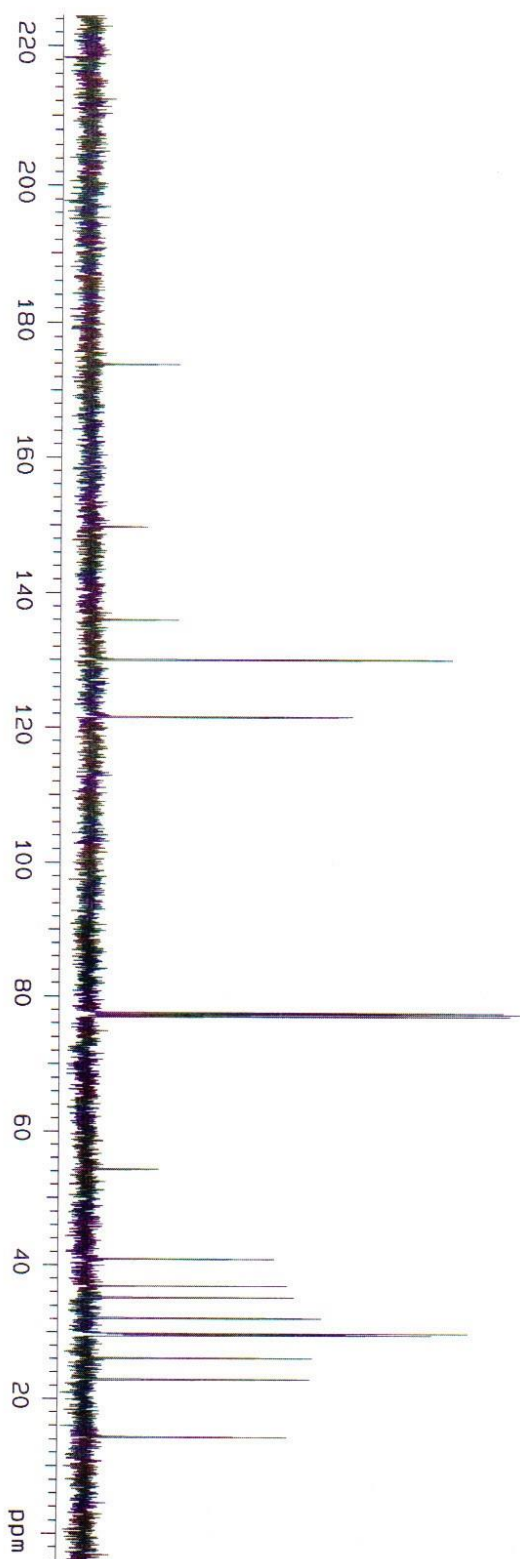
n = 10, 4d'



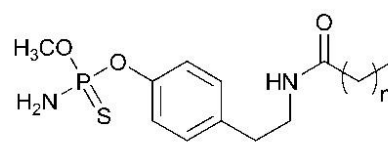
¹³C NMR



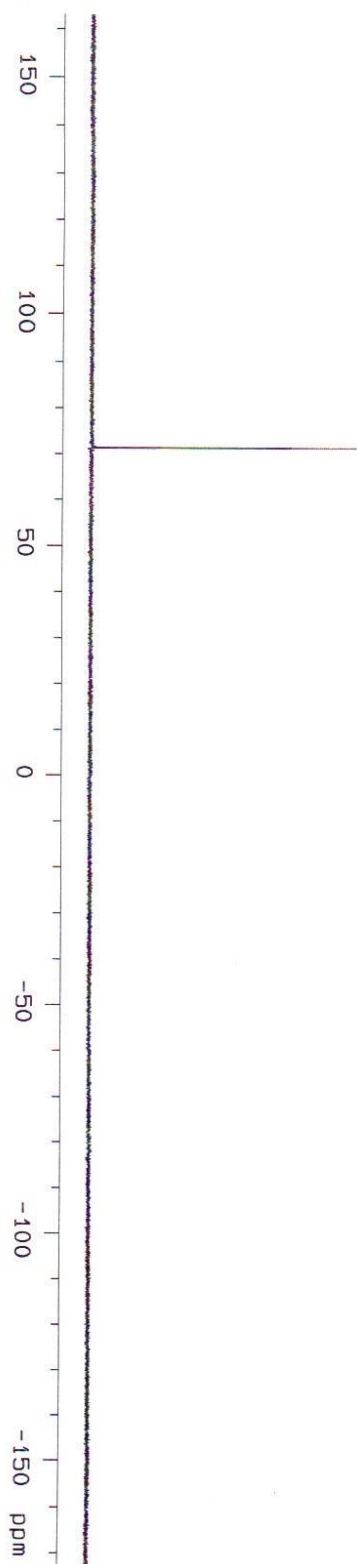
n = 10, 4d'



³¹P NMR

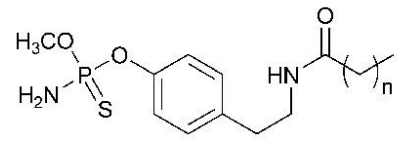


n = 10, **4d'**

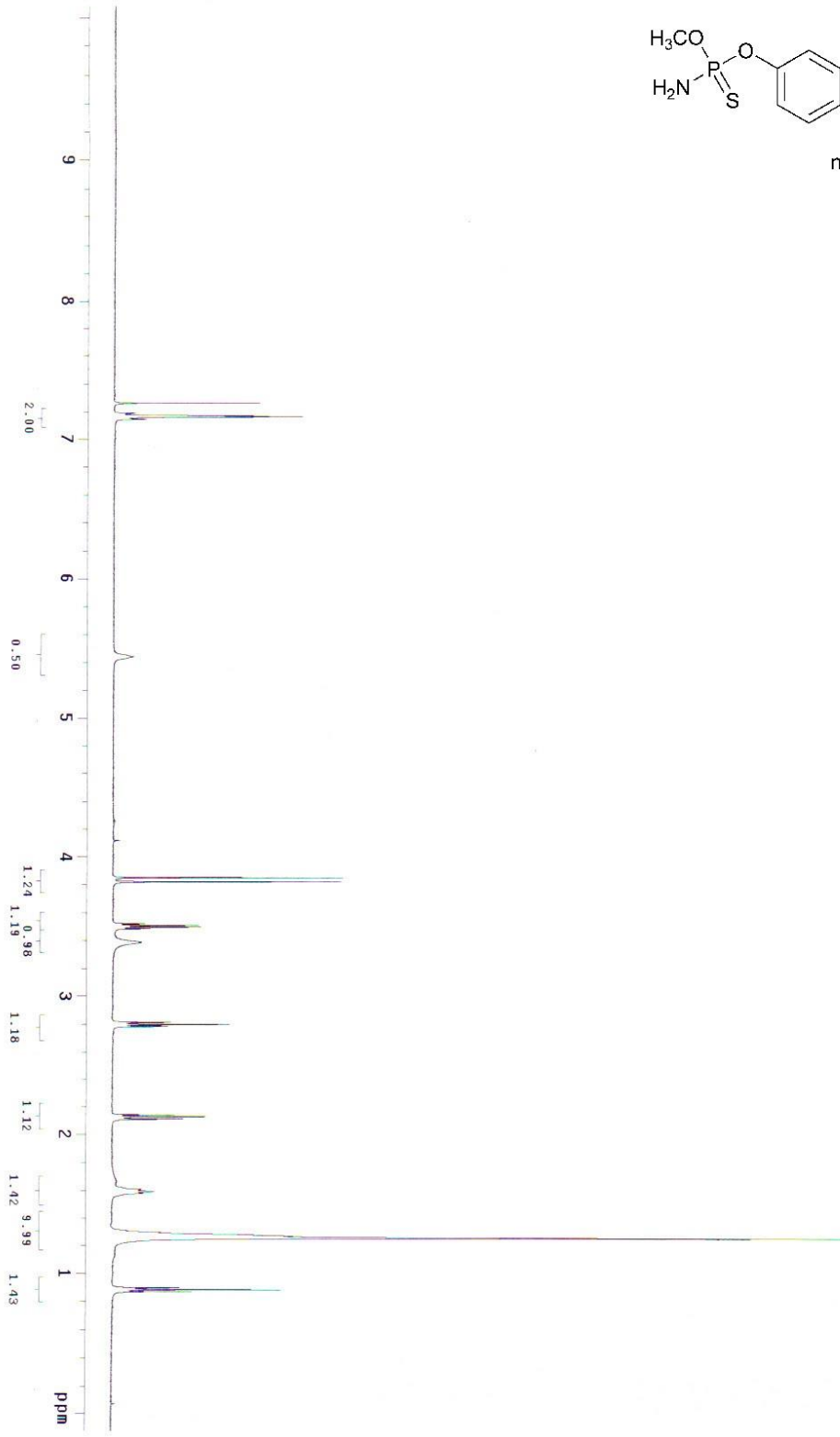


INDEX	FREQUENCY	PPM	HEIGHT
1	14421.785	71.280	14.4

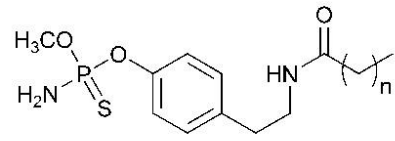
¹H NMR



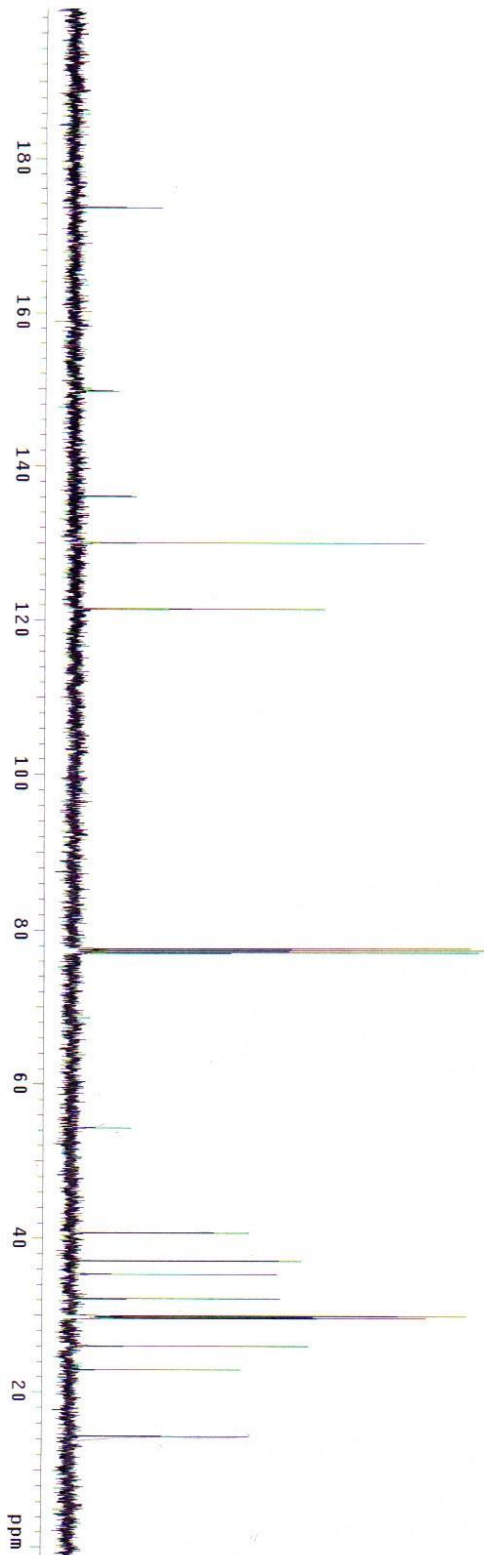
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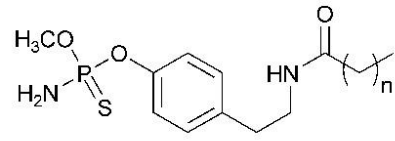
¹³C NMR



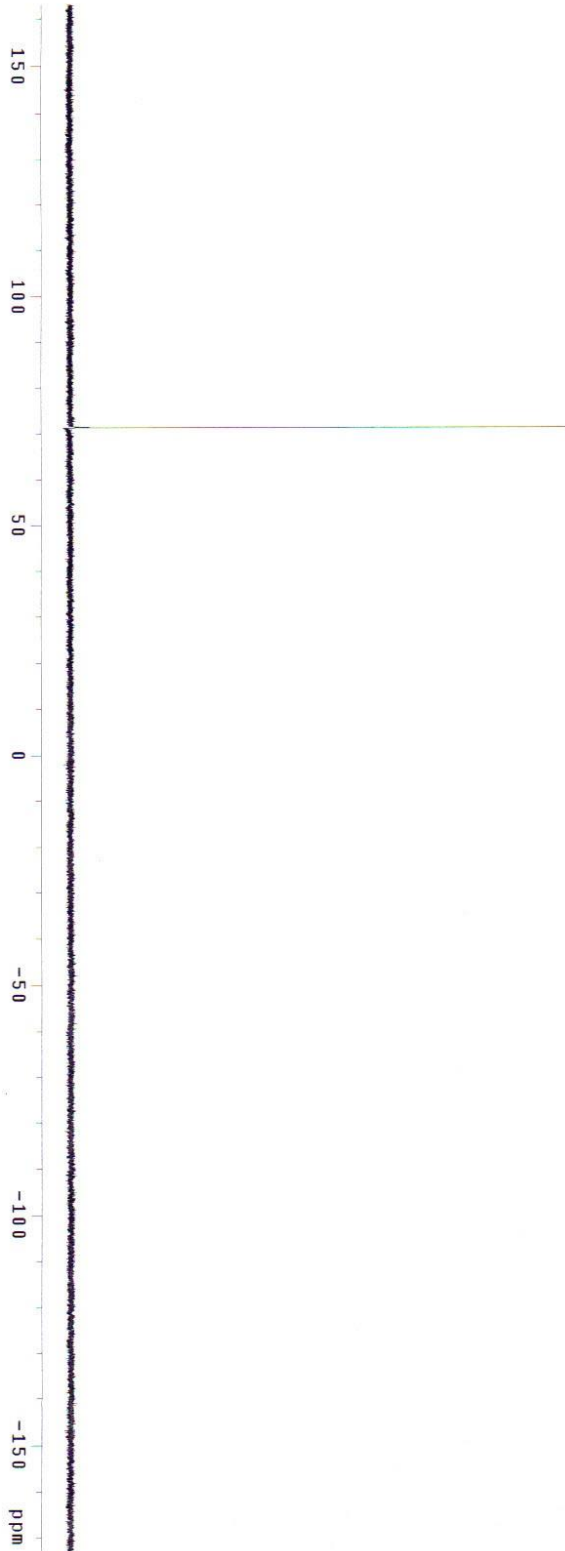
n = 11, 4e'



³¹P NMR

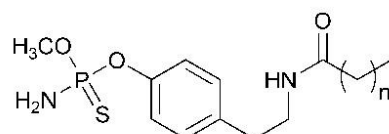


n = 11, **4e'**

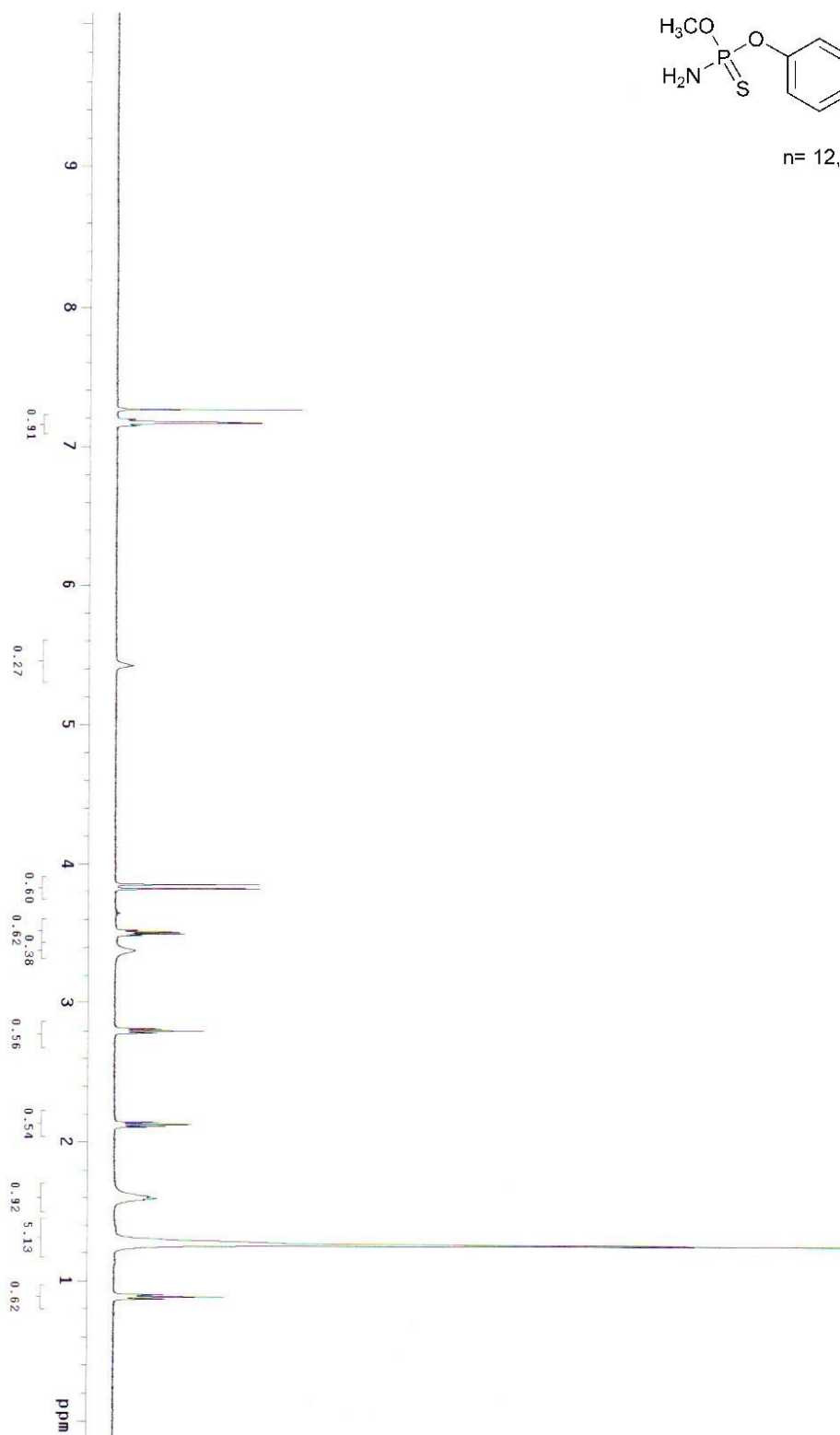


INDEX	FREQUENCY	PPM	HEIGHT
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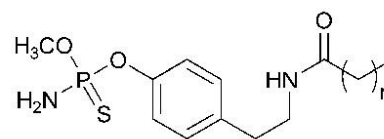
¹H NMR



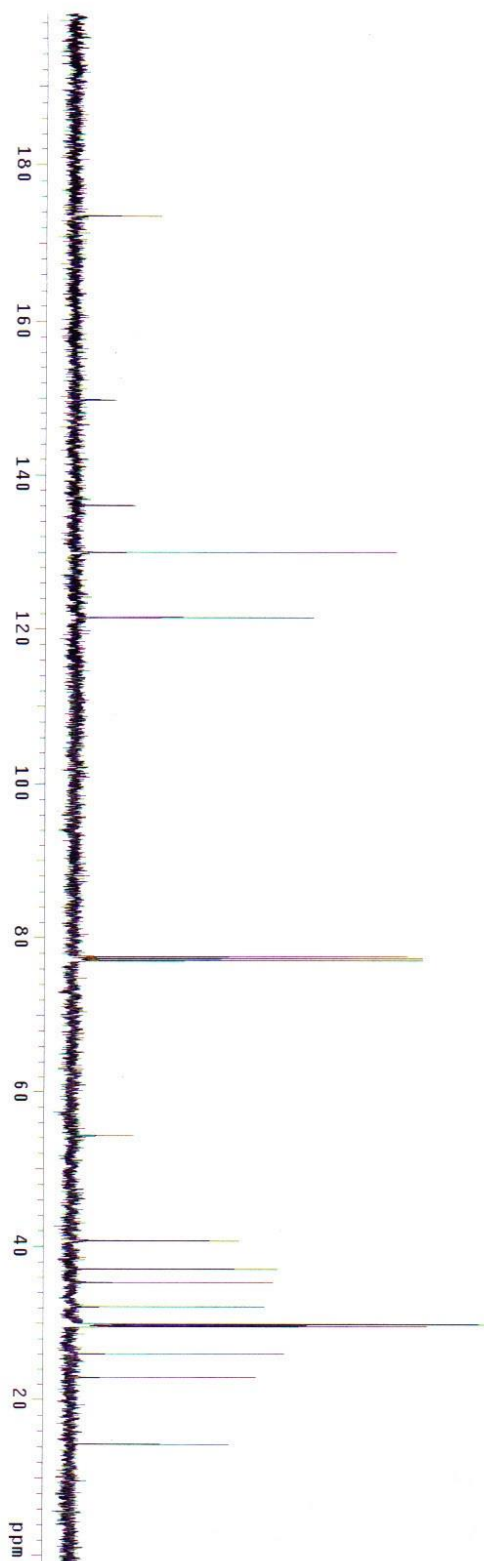
n = 12, **4f**



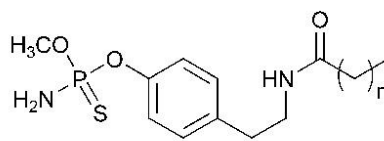
¹³C NMR



n = 12, 4f'



³¹P NMR

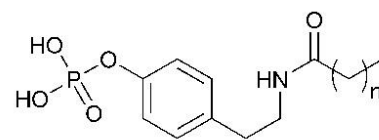


n = 12, 4f'

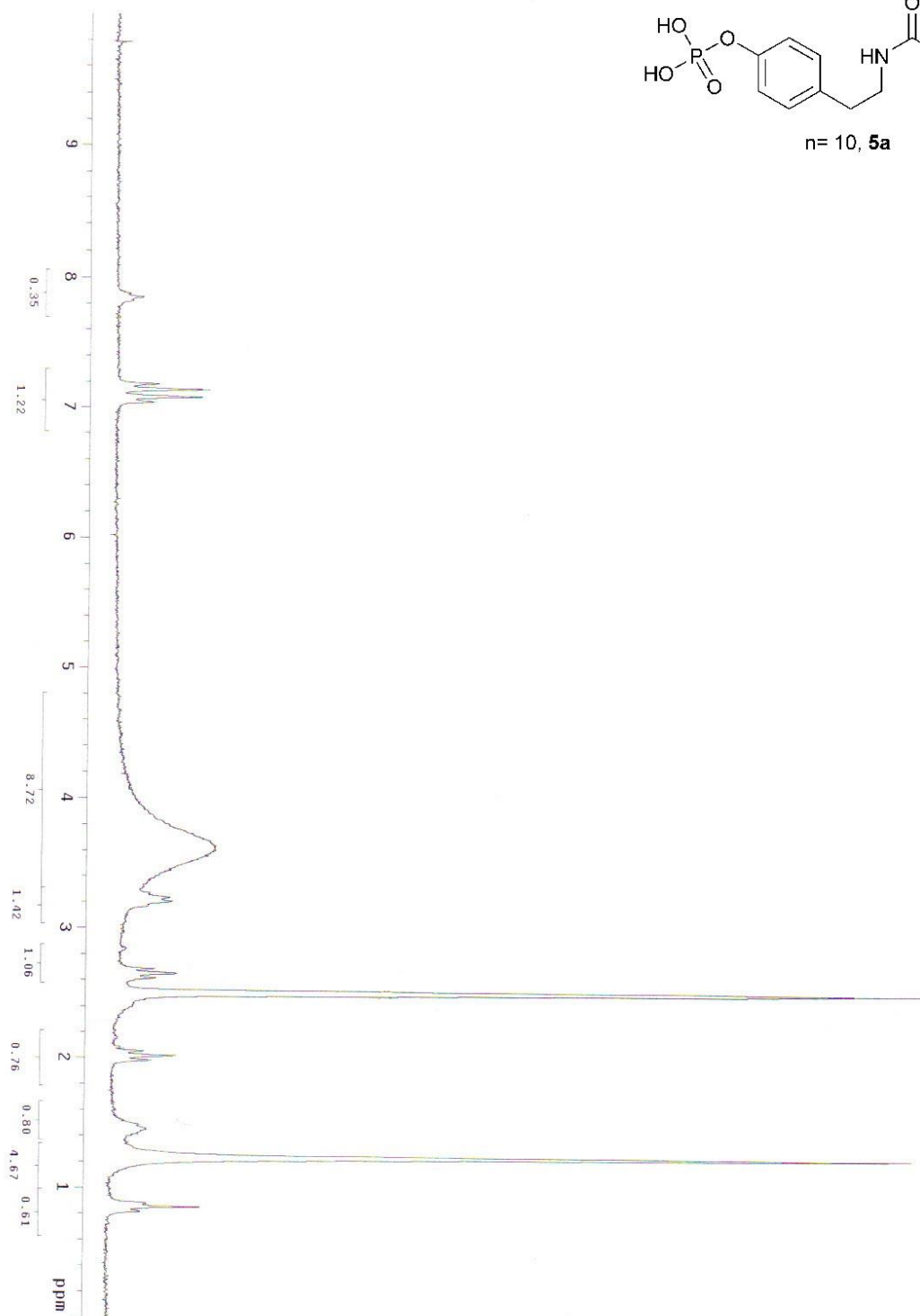


INDEX	FREQUENCY	PPM	HEIGHT
1	14416.595	71.254	29.2

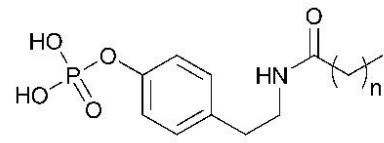
¹H NMR



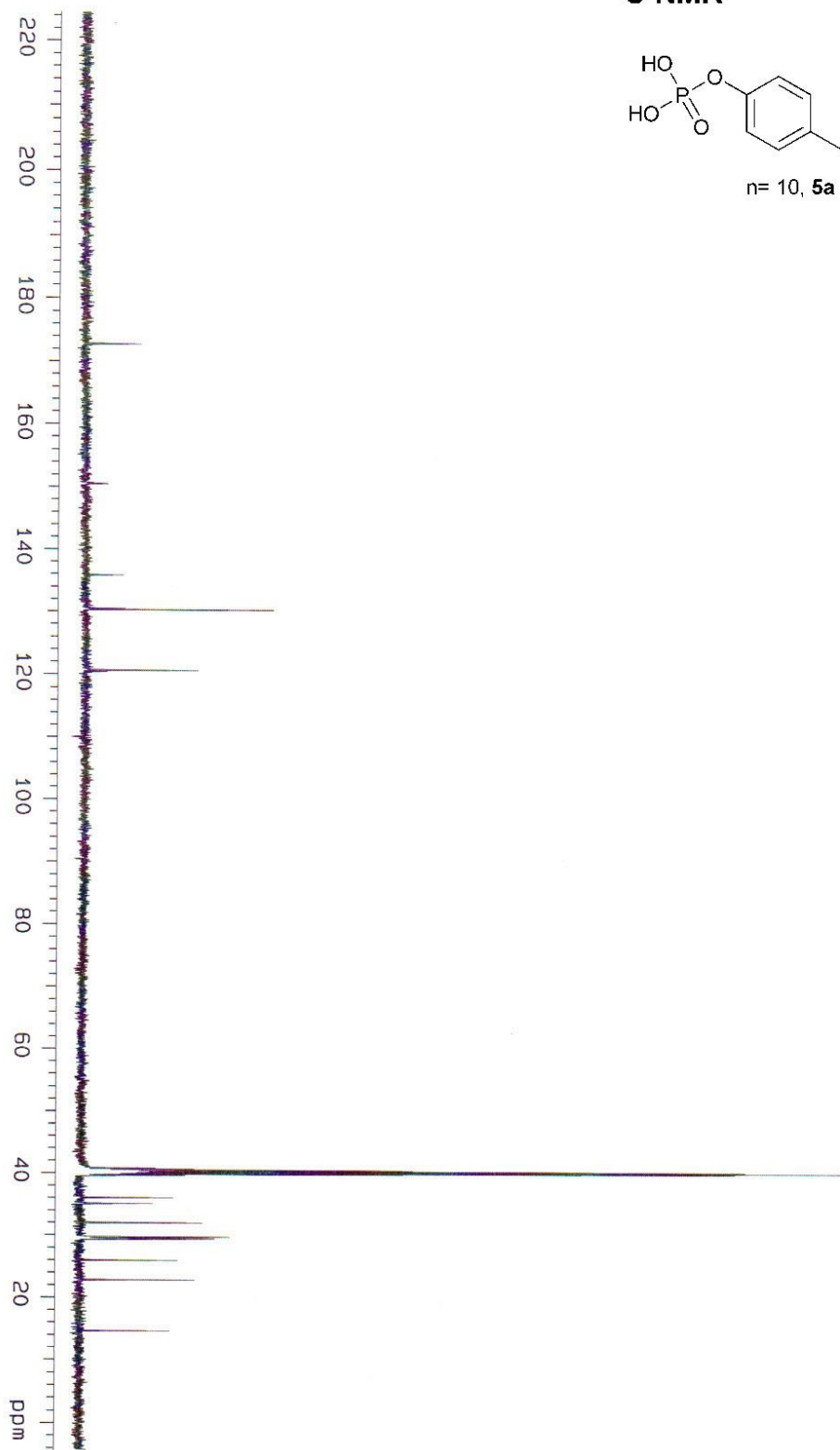
n = 10, 5a



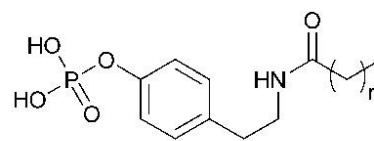
¹³C NMR



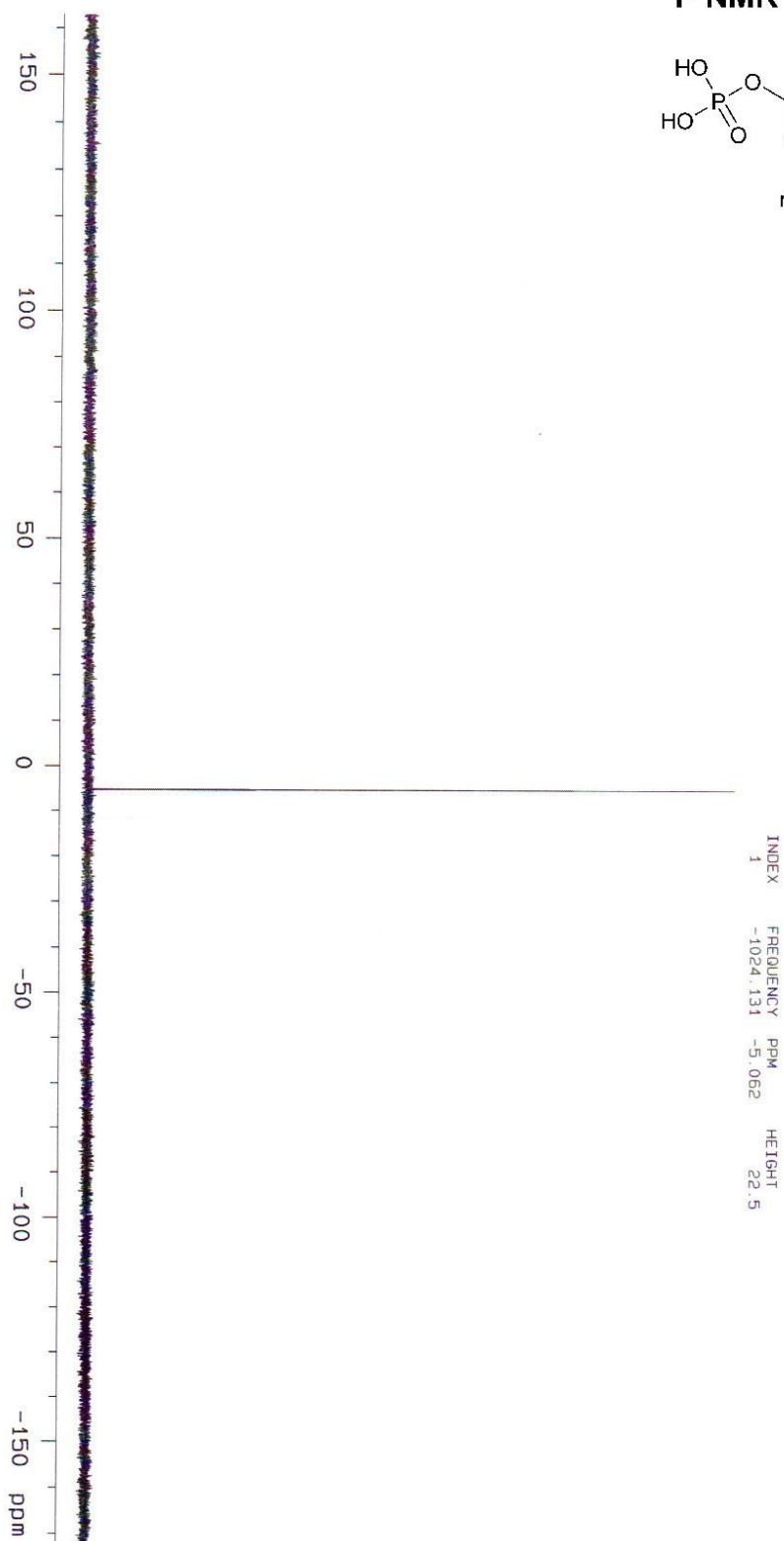
n = 10, **5a**



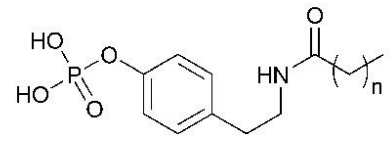
³¹P NMR



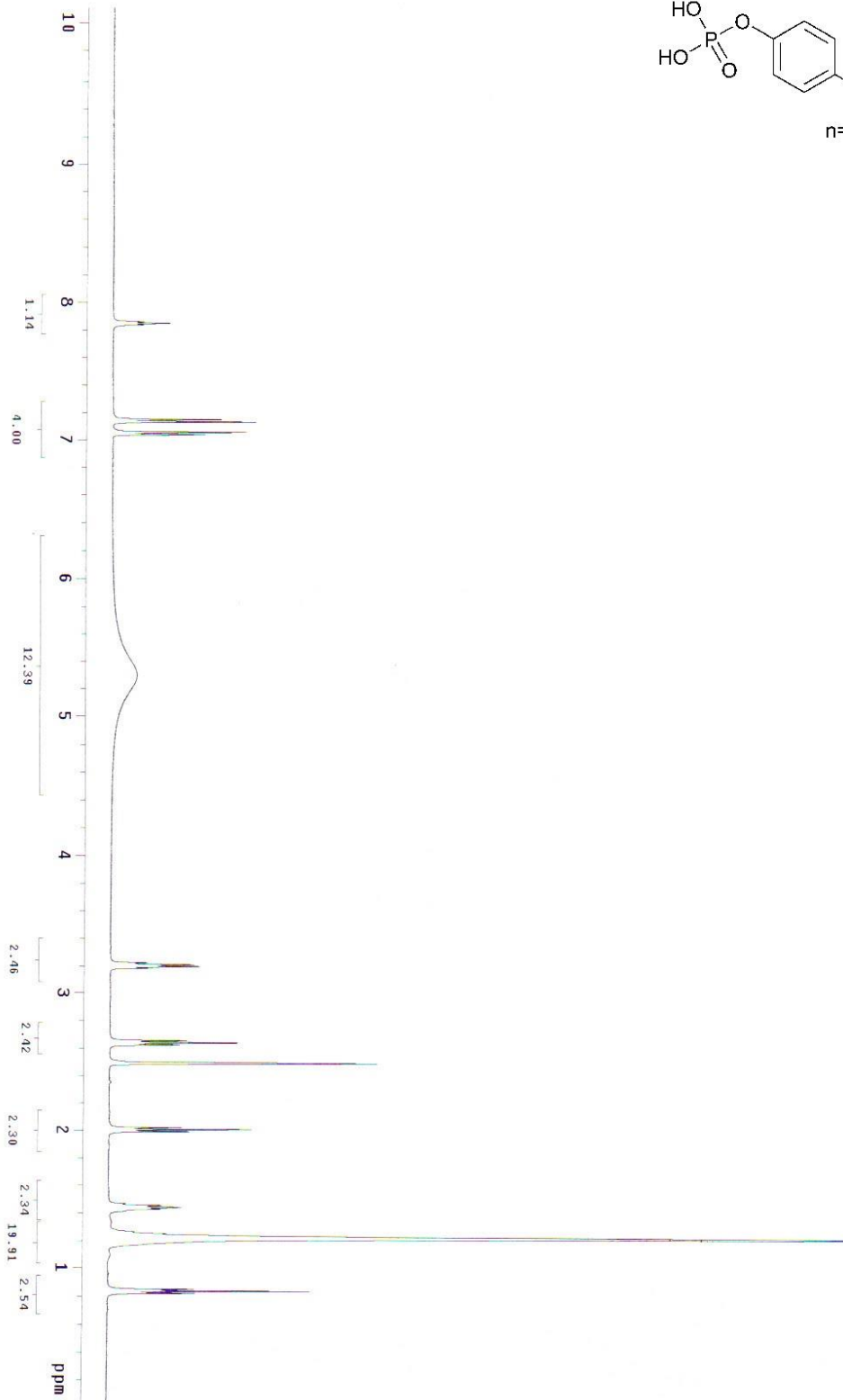
n = 10, 5a



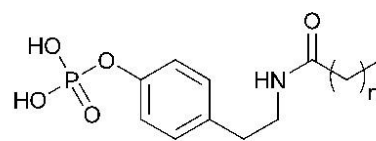
¹H NMR



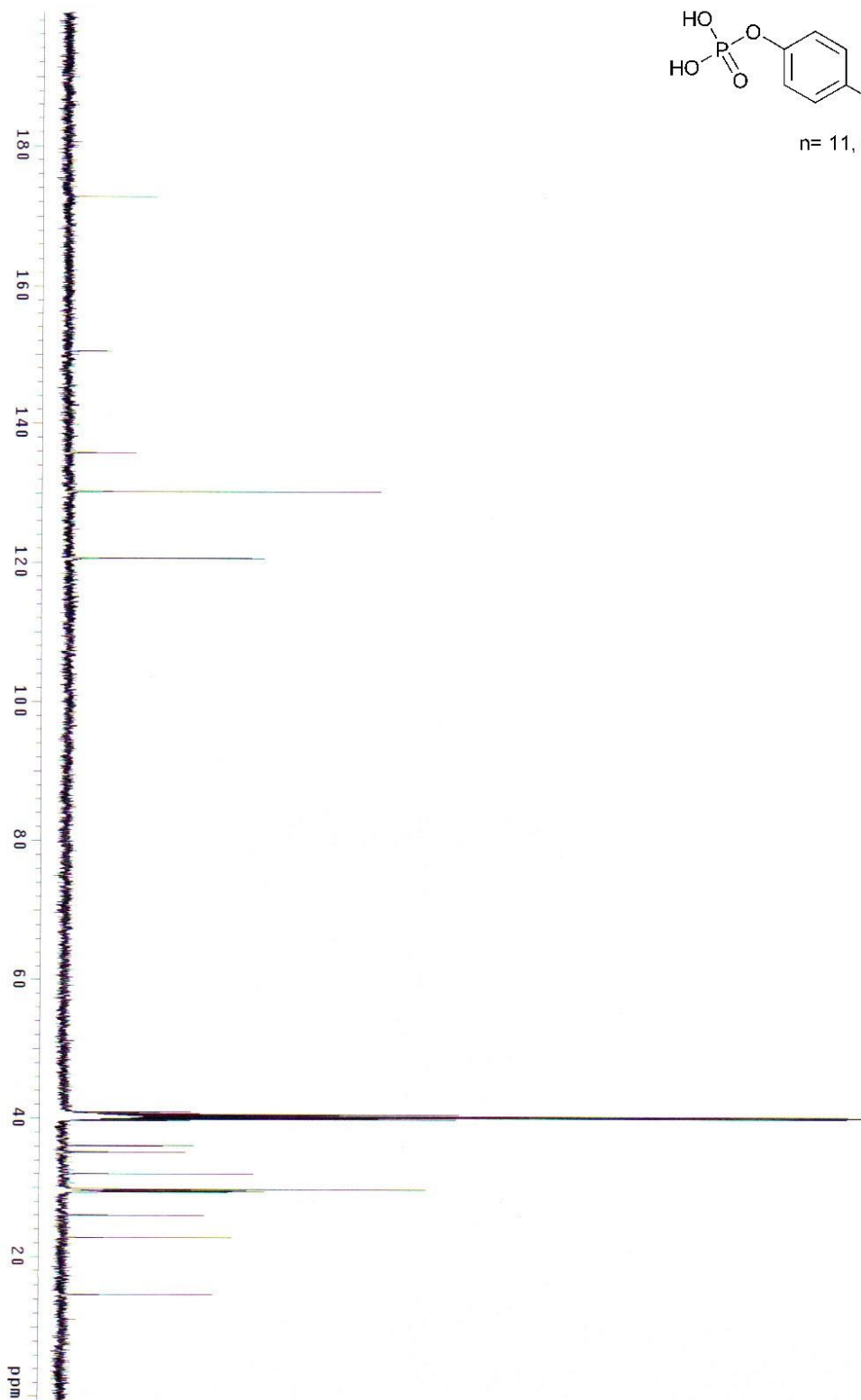
n = 11, **5b**



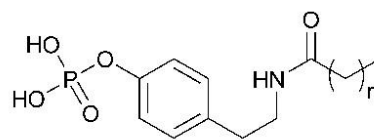
¹³C NMR



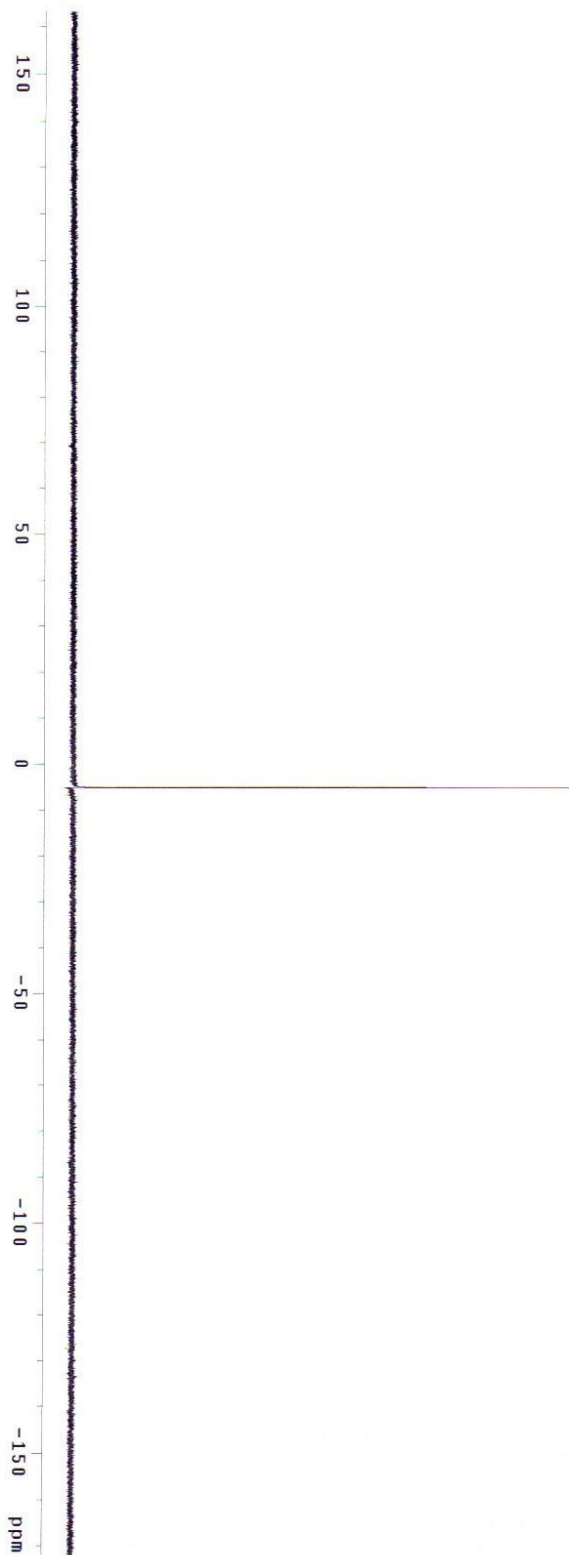
n= 11, **5b**



³¹P NMR

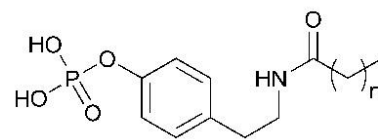


n = 11, **5b**

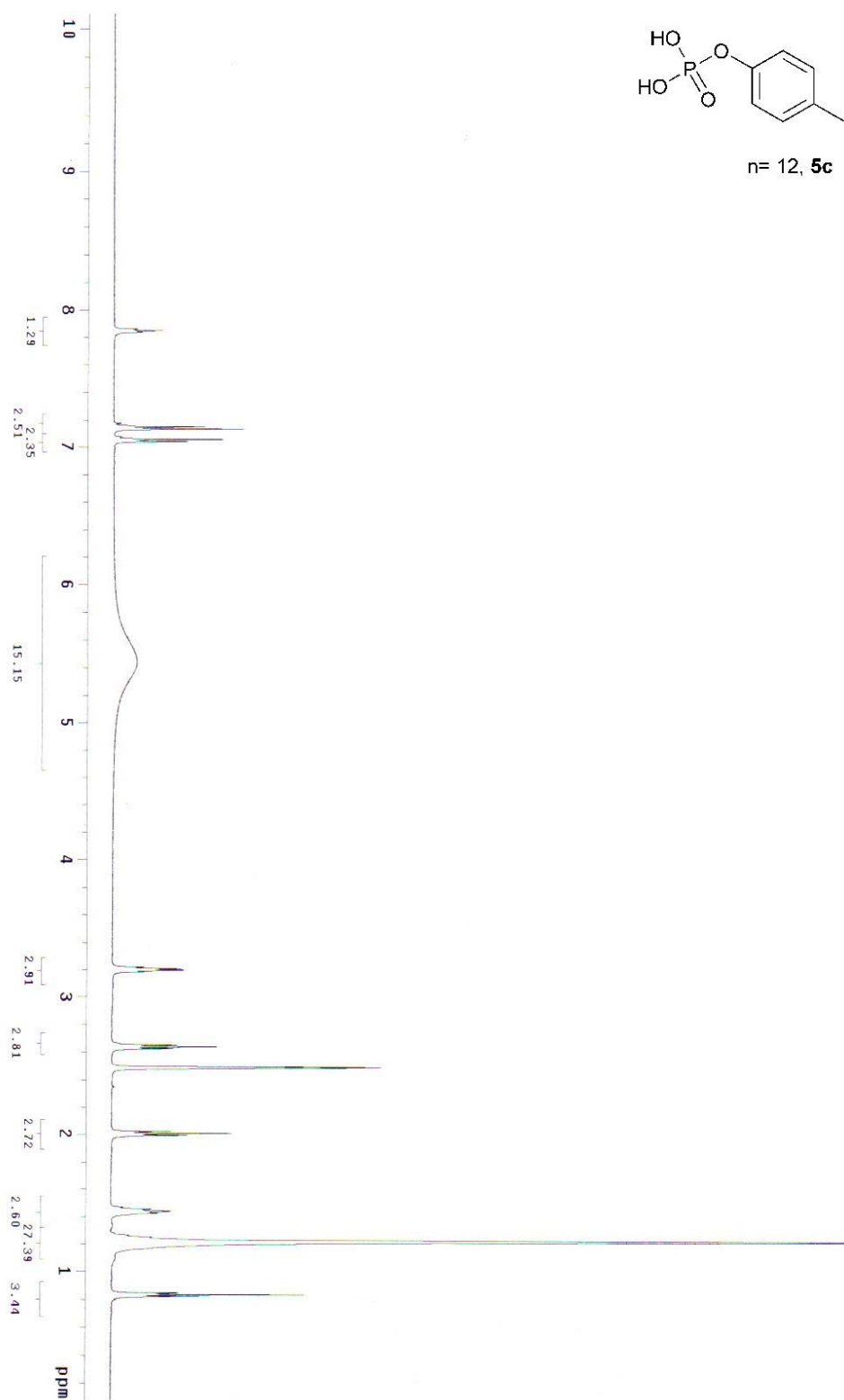


INDEX	FREQUENCY	PPM	HEIGHT
1	-1023.093	-5.057	30.0

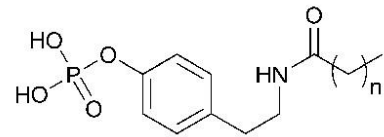
¹H NMR



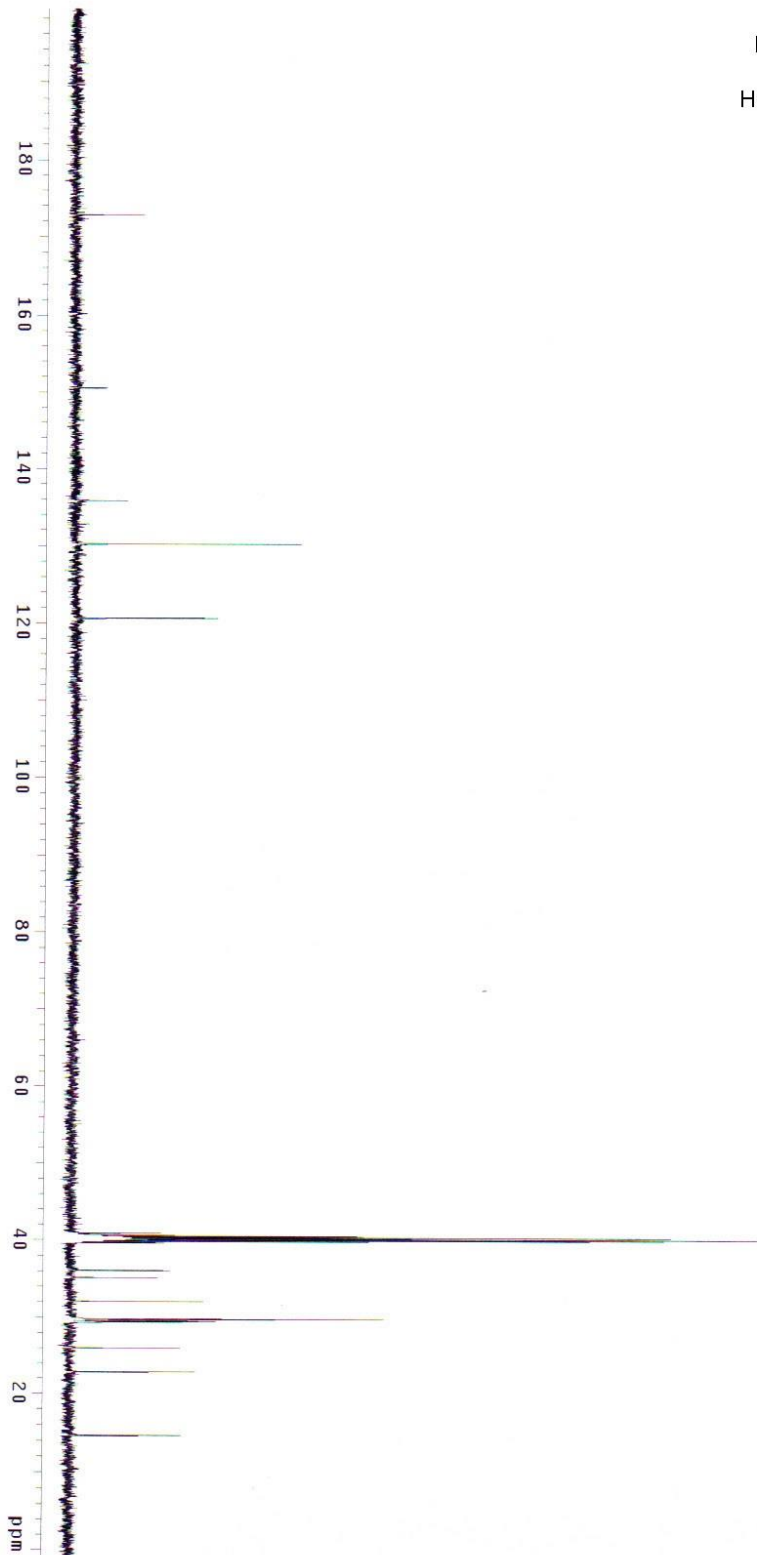
n = 12, **5c**



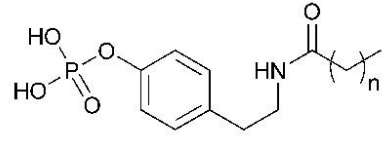
¹³C NMR



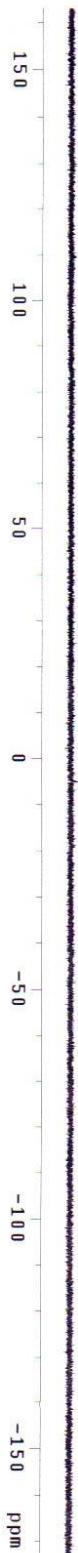
n = 12, 5c



³¹P NMR



n = 12, 5c



INDEX	FREQUENCY	PPM	HEIGHT
1	-1025.168	-5.067	29.5