

# **[60]Fullerene Cycloaddition Across Hindered Acenes**

**Irvinder Kaur and Glen P. Miller\***

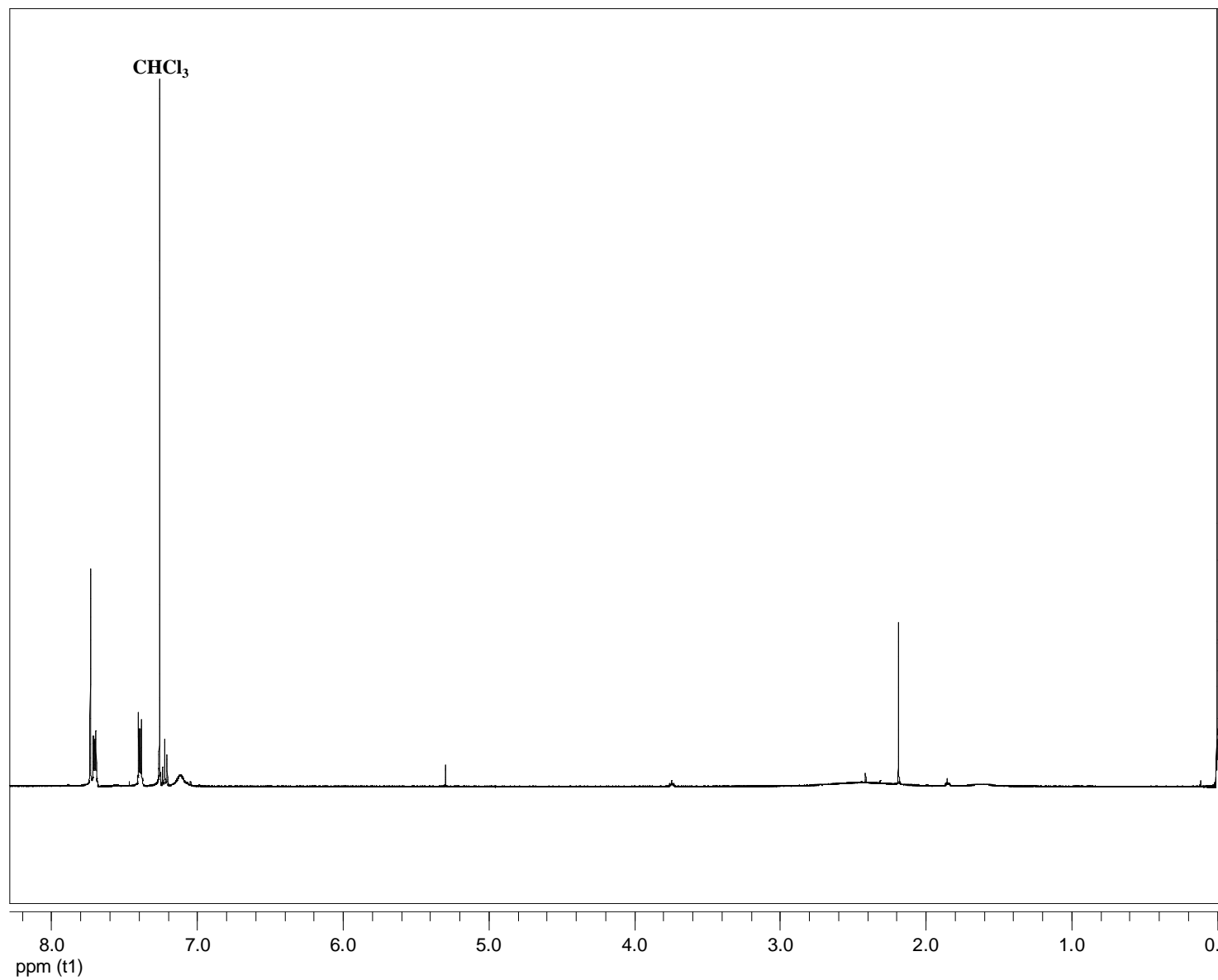
**Department of Chemistry and Materials Science Program**

**University of New Hampshire**

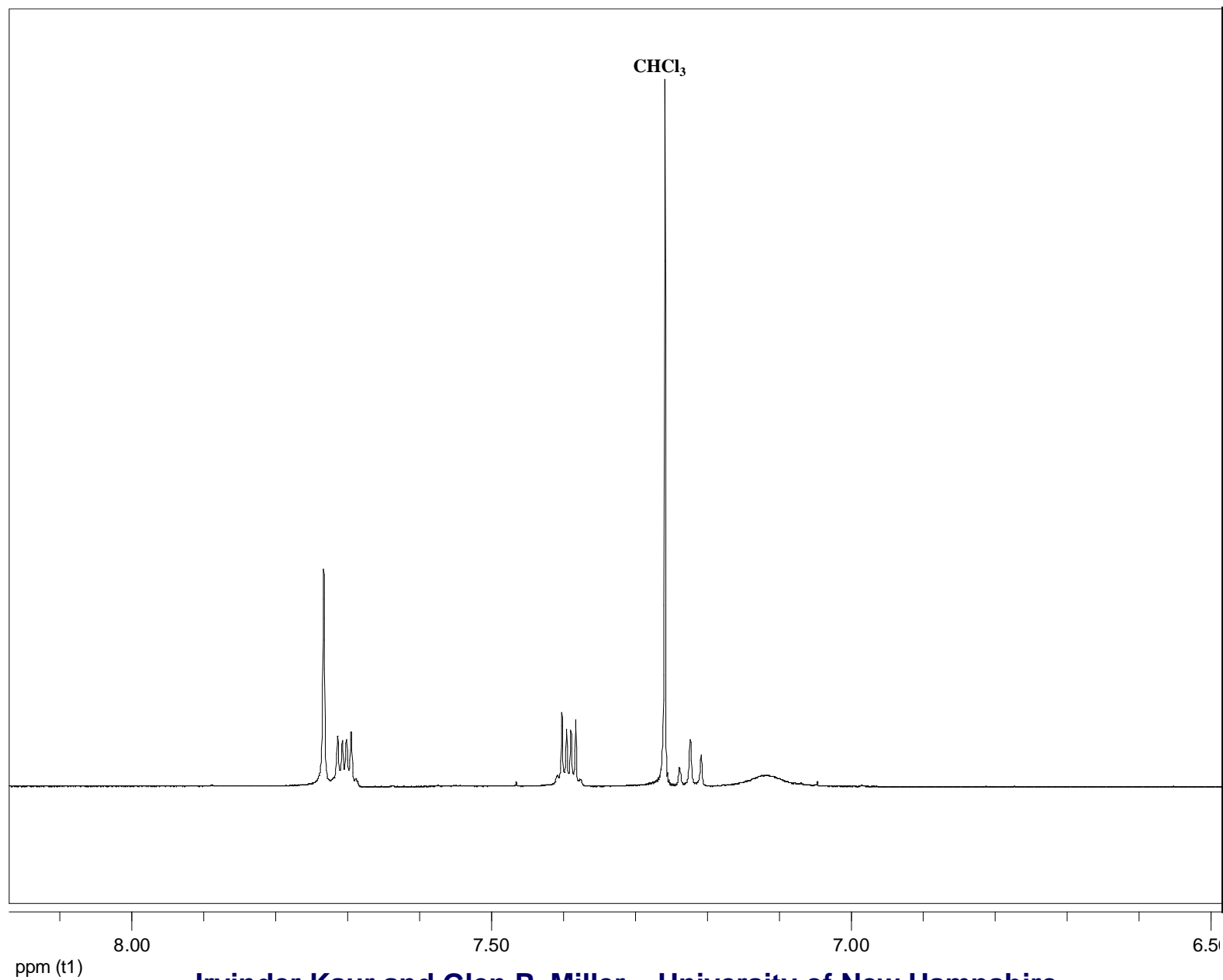
**23 College Rd. Durham, NH 03824**

**[glen.miller@unh.edu](mailto:glen.miller@unh.edu)**

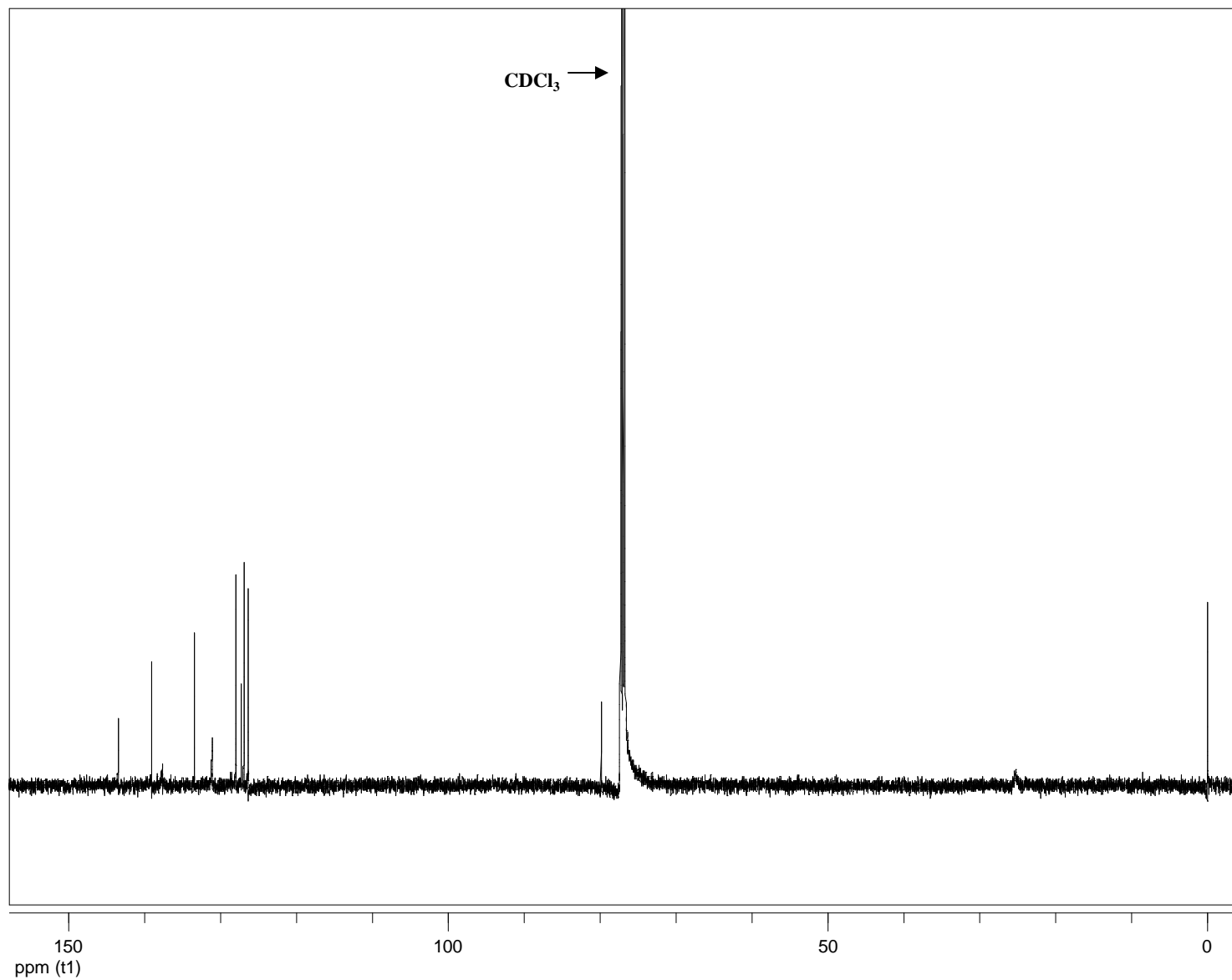
## 6,13-Bis(2',6'-dimethylphenyl)-6,13-dihydropentacene-6,13-diol



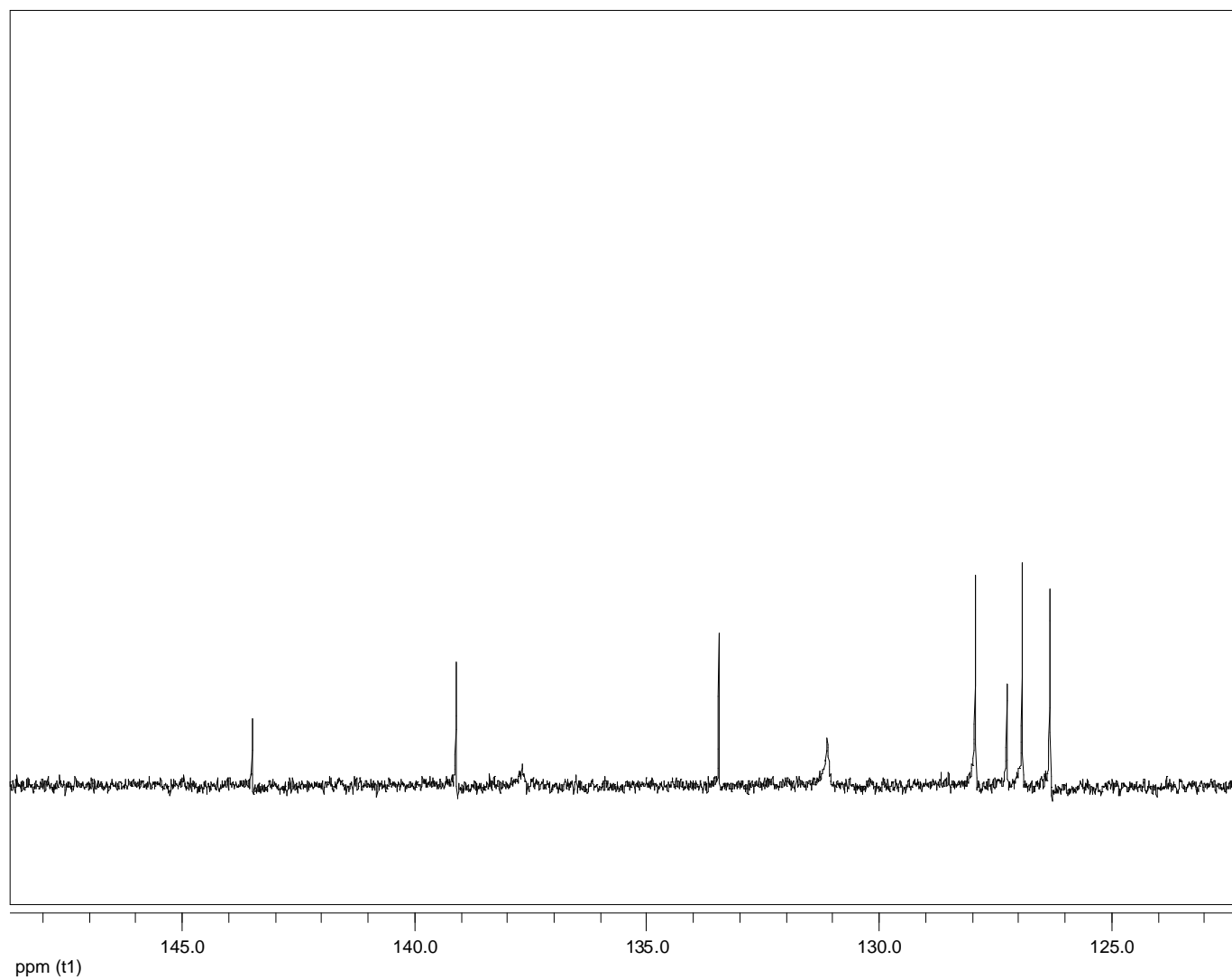
## 6,13-Bis(2',6'-dimethylphenyl)-6,13-dihydropentacene-6,13-diol



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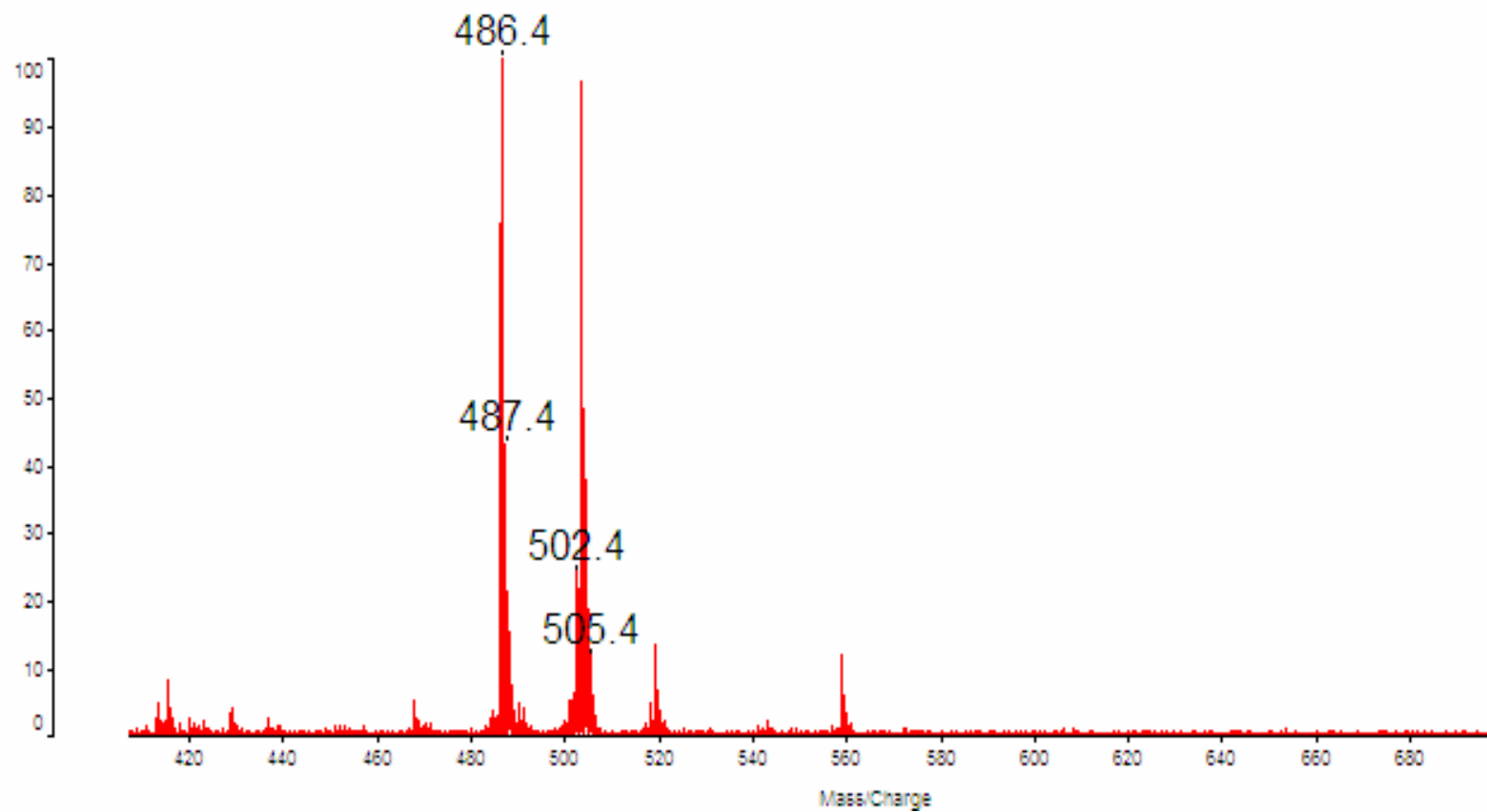


## 6,13-Bis(2',6'-dimethylphenyl)-6,13-dihydropentacene-6,13-diol

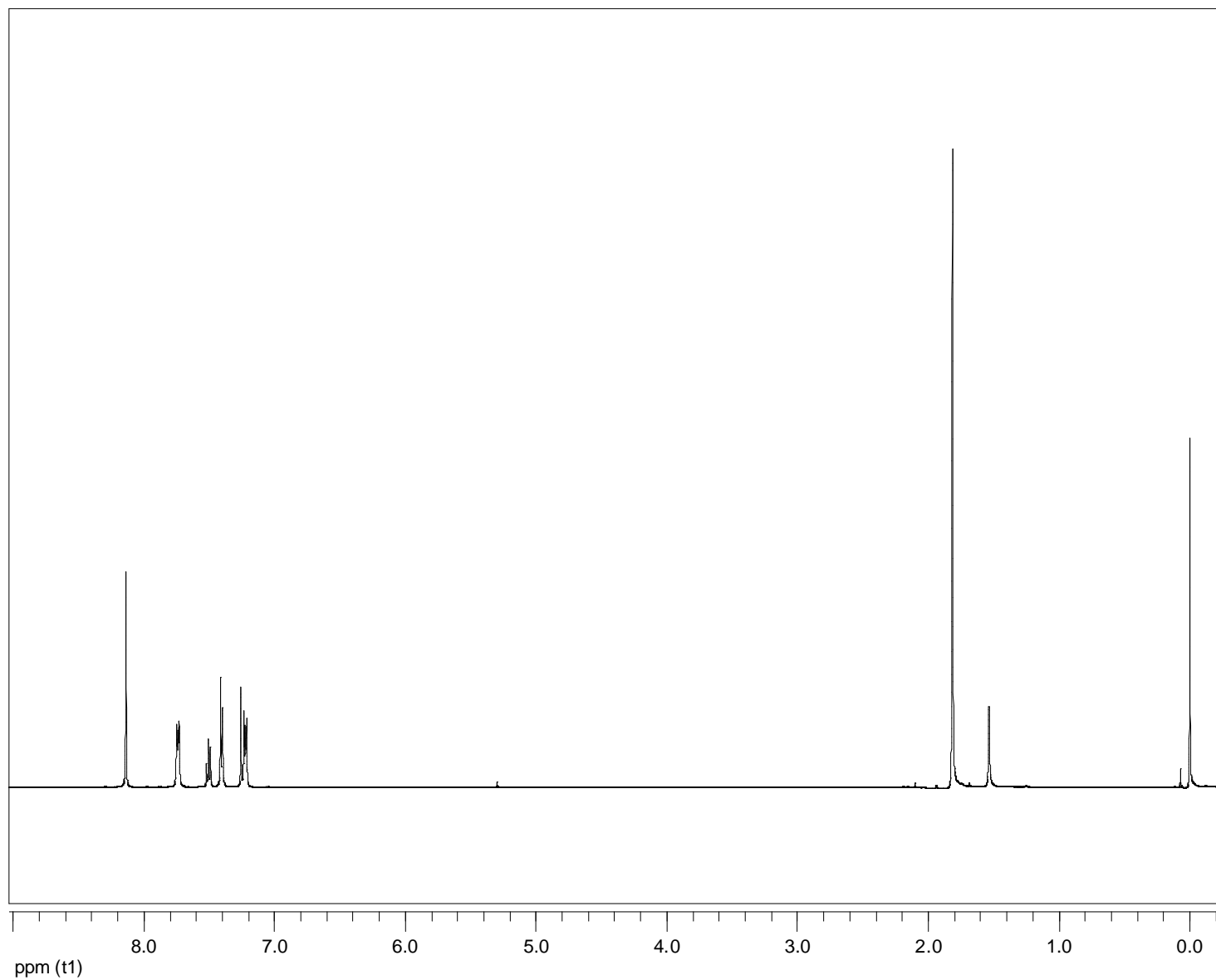


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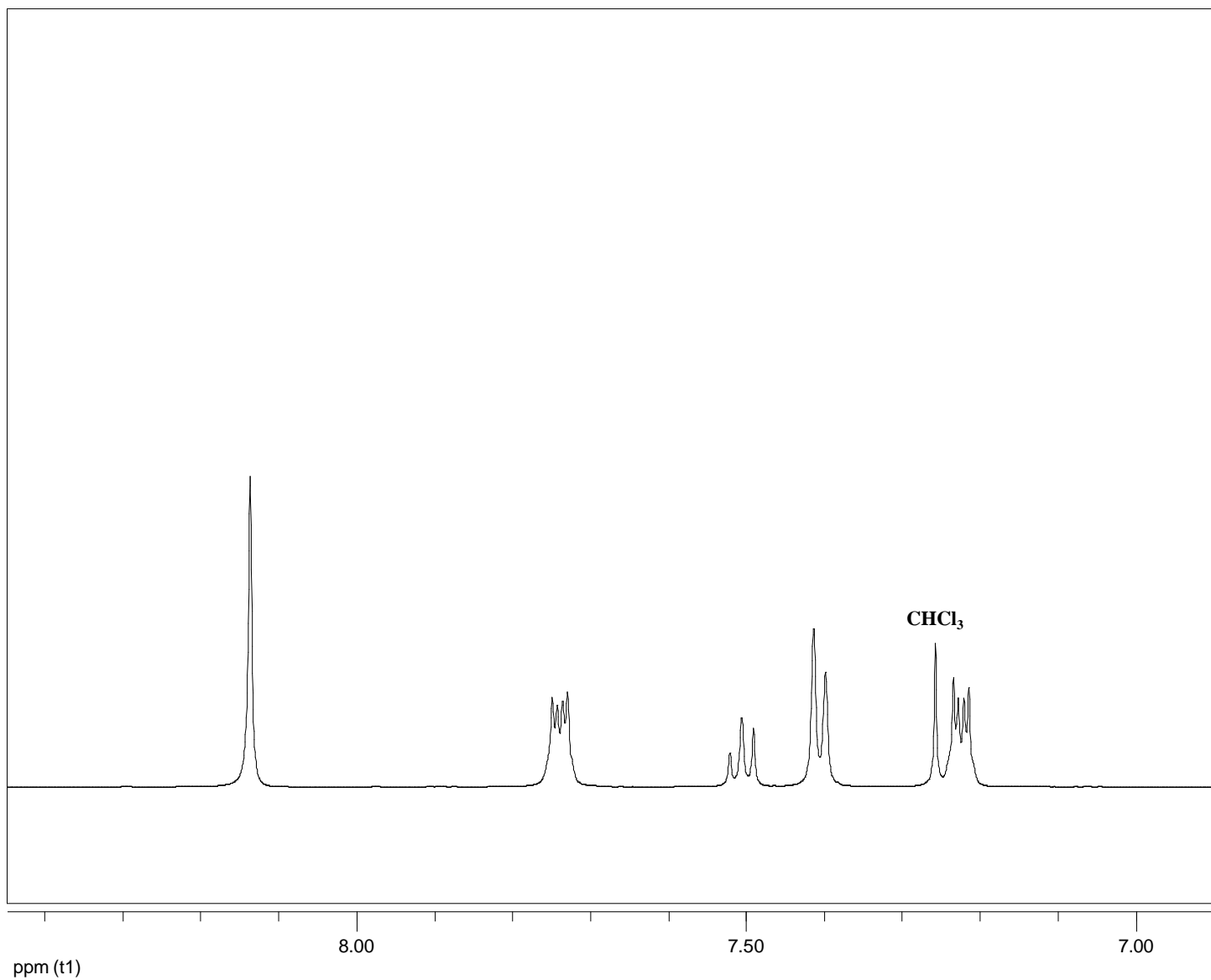
## 6,13-Bis(2',6'-dimethylphenyl)-6,13-dihydropentacene-6,13-diol



## 6,13-Bis(2',6'-dimethylphenyl)pentacene (1)

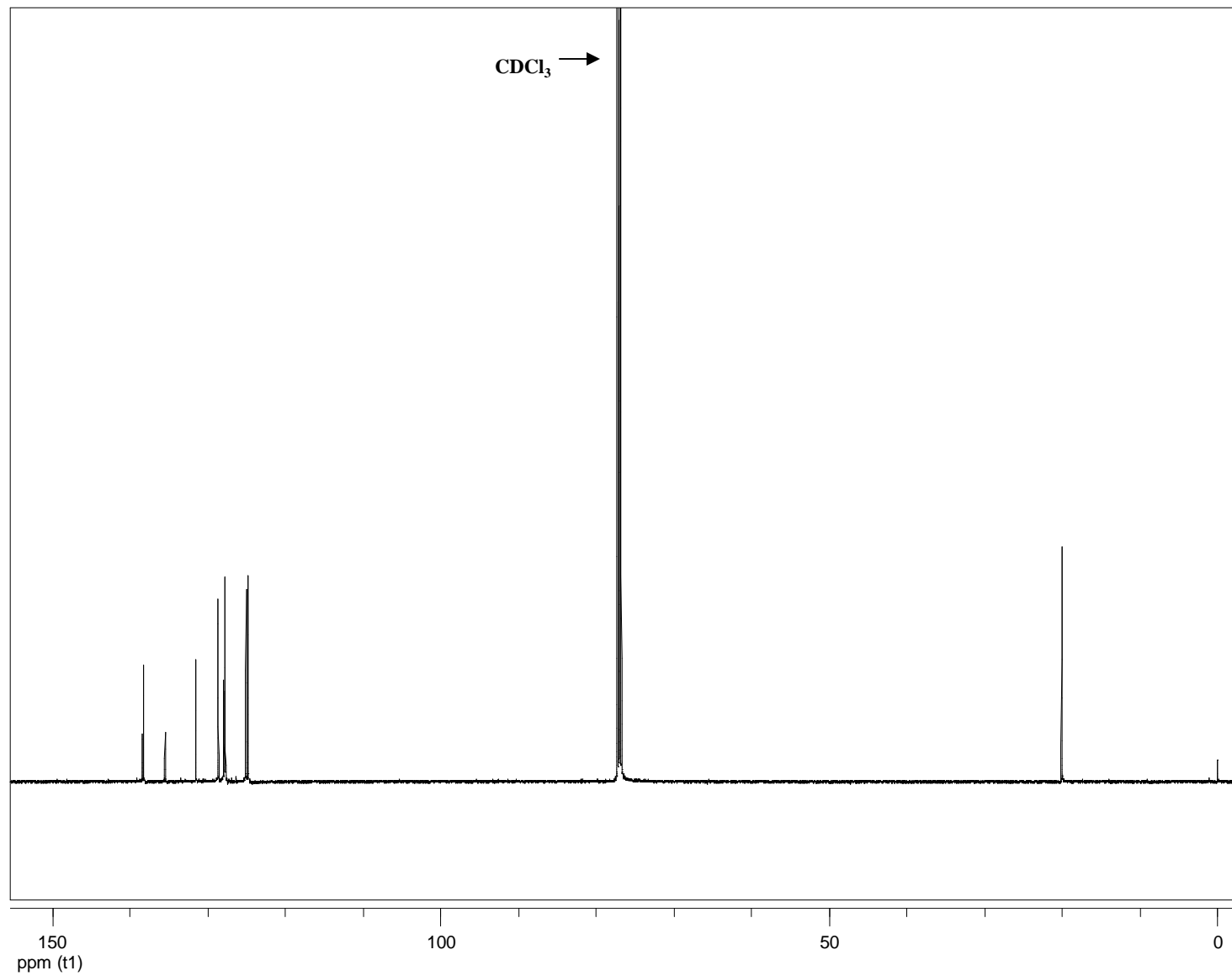


## 6,13-Bis(2',6'-dimethylphenyl)pentacene (1)

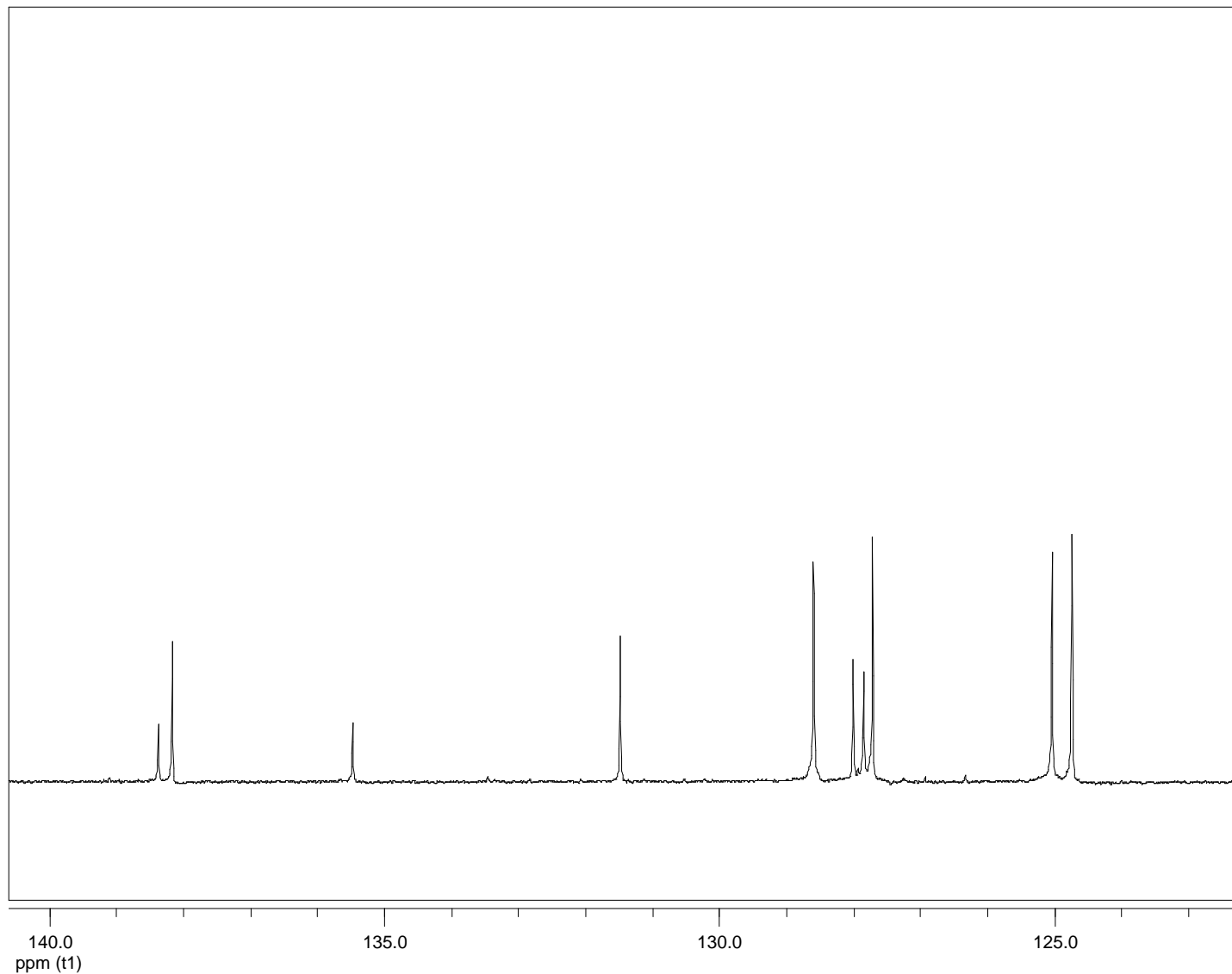




## 6,13-Bis(2',6'-dimethylphenyl)pentacene (1)

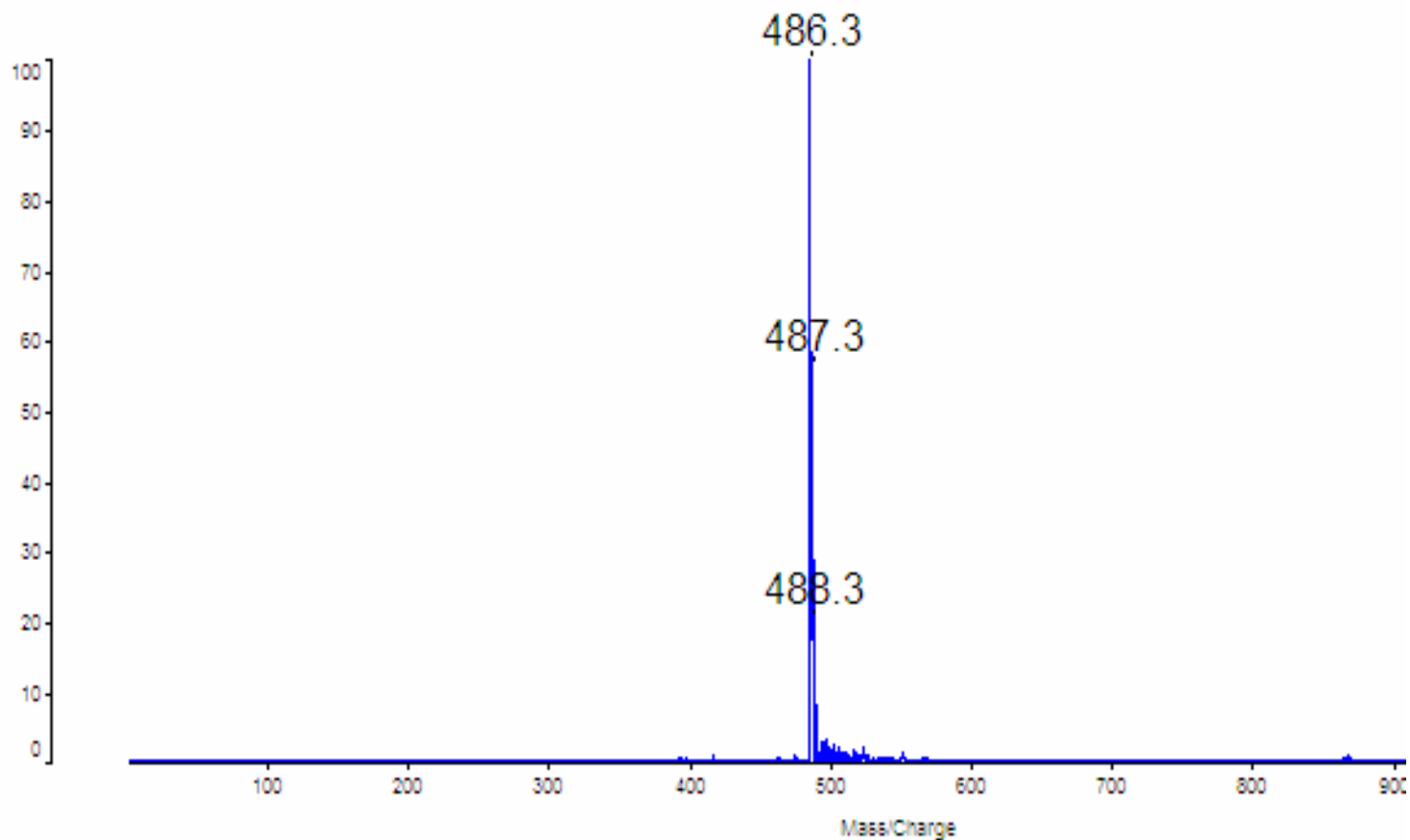


## 6,13-Bis(2',6'-dimethylphenyl)pentacene (1)

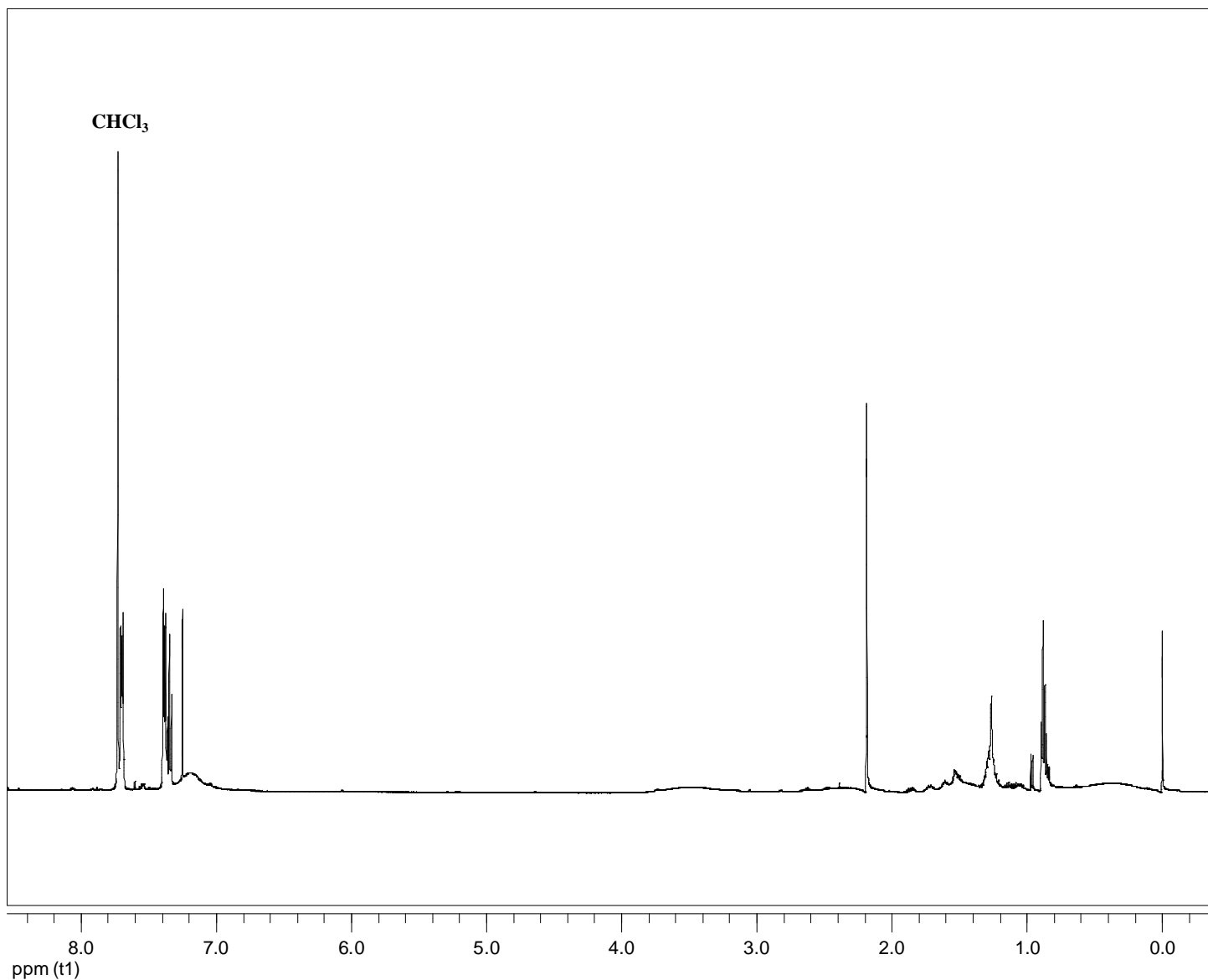


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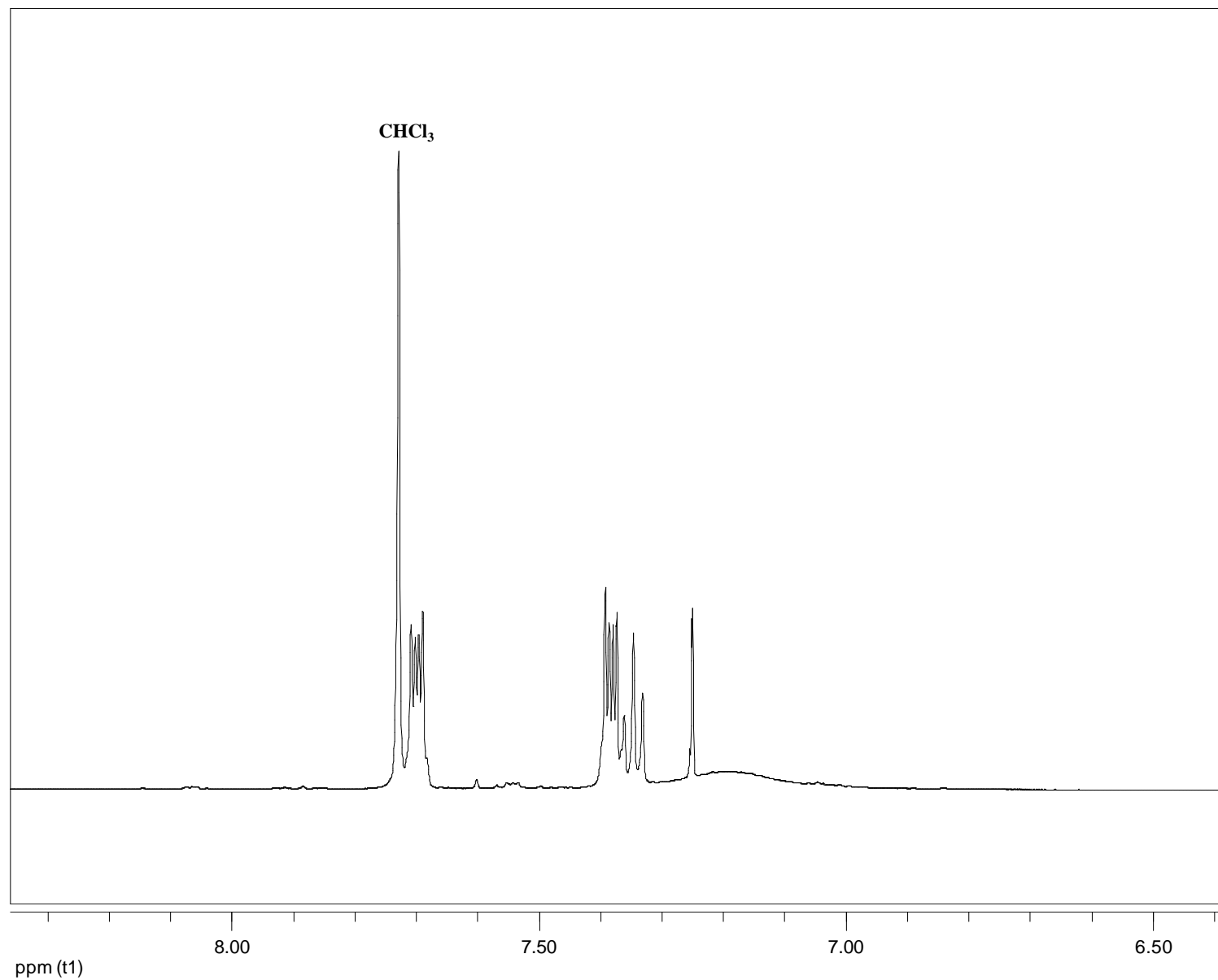
## 6,13-Bis(2',6'-dimethylphenyl)pentacene (1)



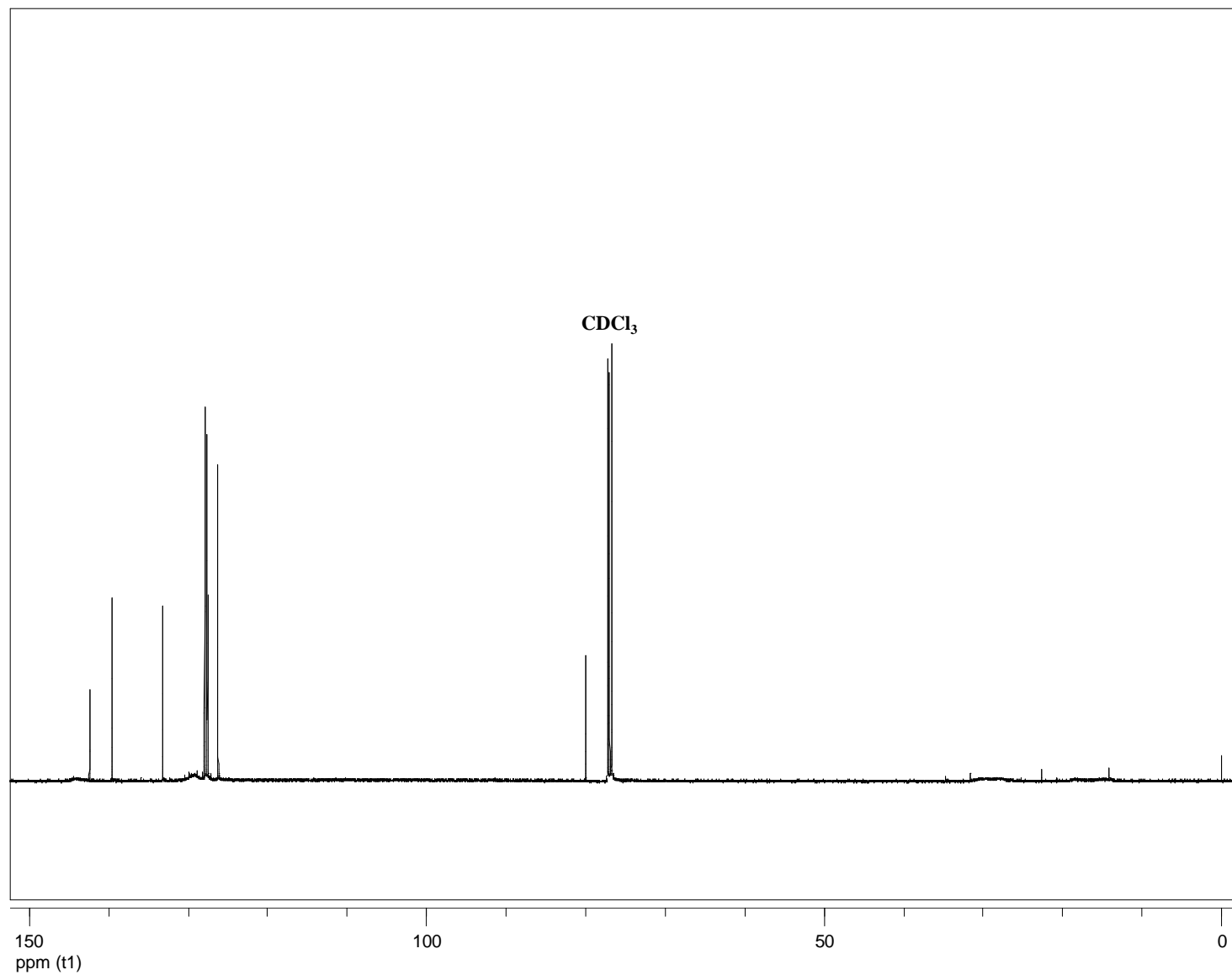
## 6,13-Bis(2',6'-diethylphenyl)-6,13-dihydropentacene-6,13-diol



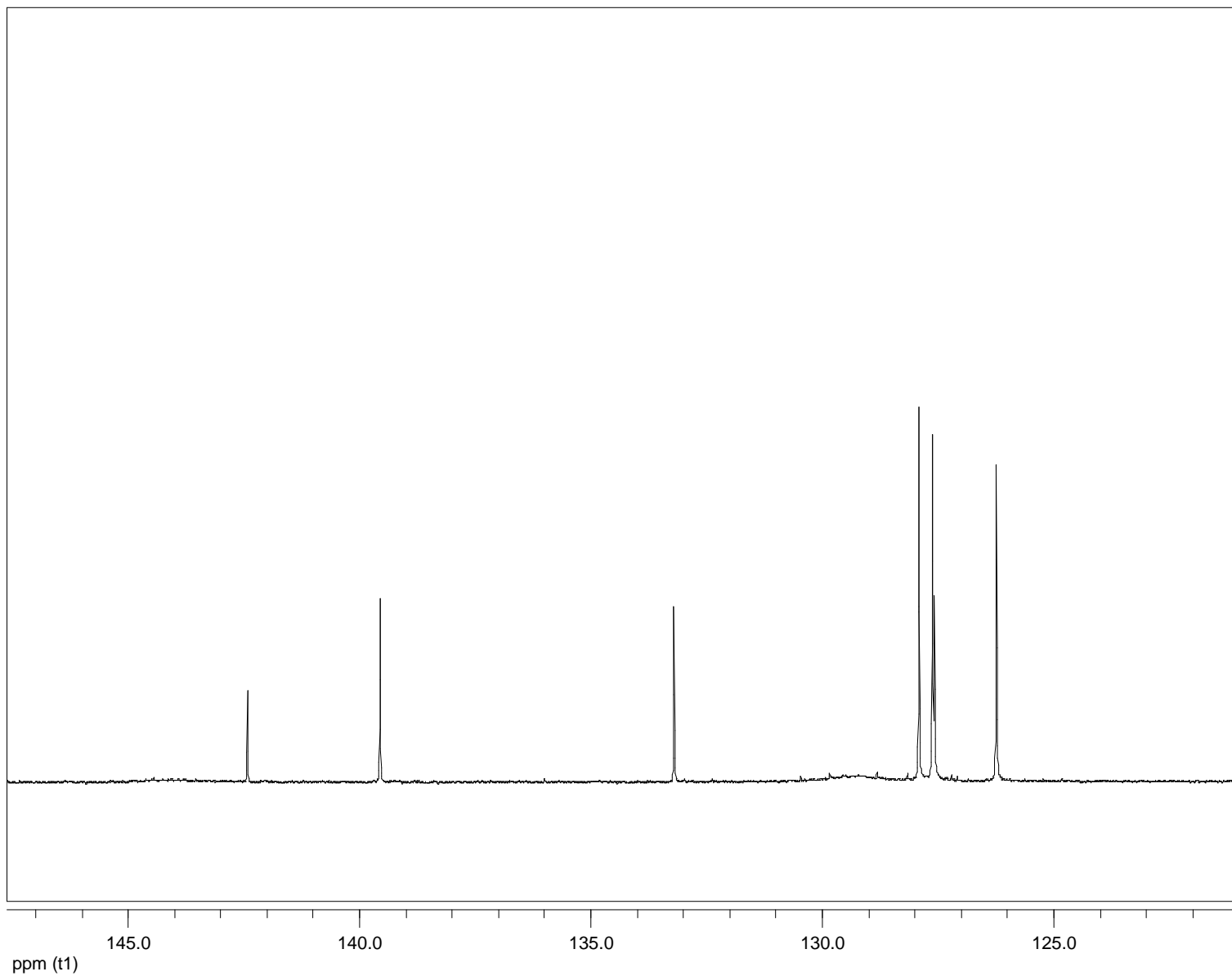
## 6,13-Bis(2',6'-diethylphenyl)-6,13-dihydropentacene-6,13-diol



## 6,13-Bis(2',6'-diethylphenyl)-6,13-dihydropentacene-6,13-diol

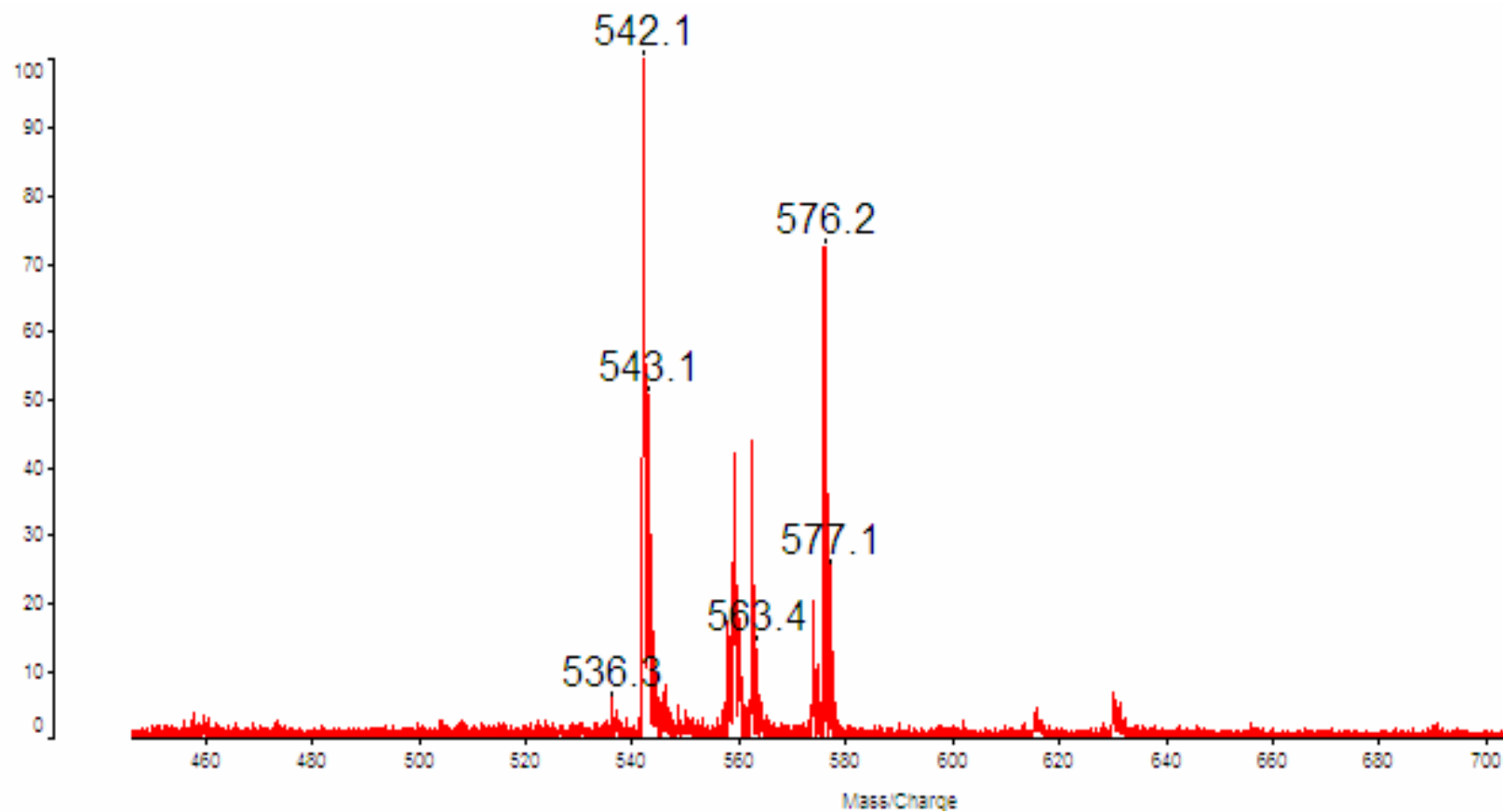


## 6,13-Bis(2',6'-diethylphenyl)-6,13-dihydropentacene-6,13-diol



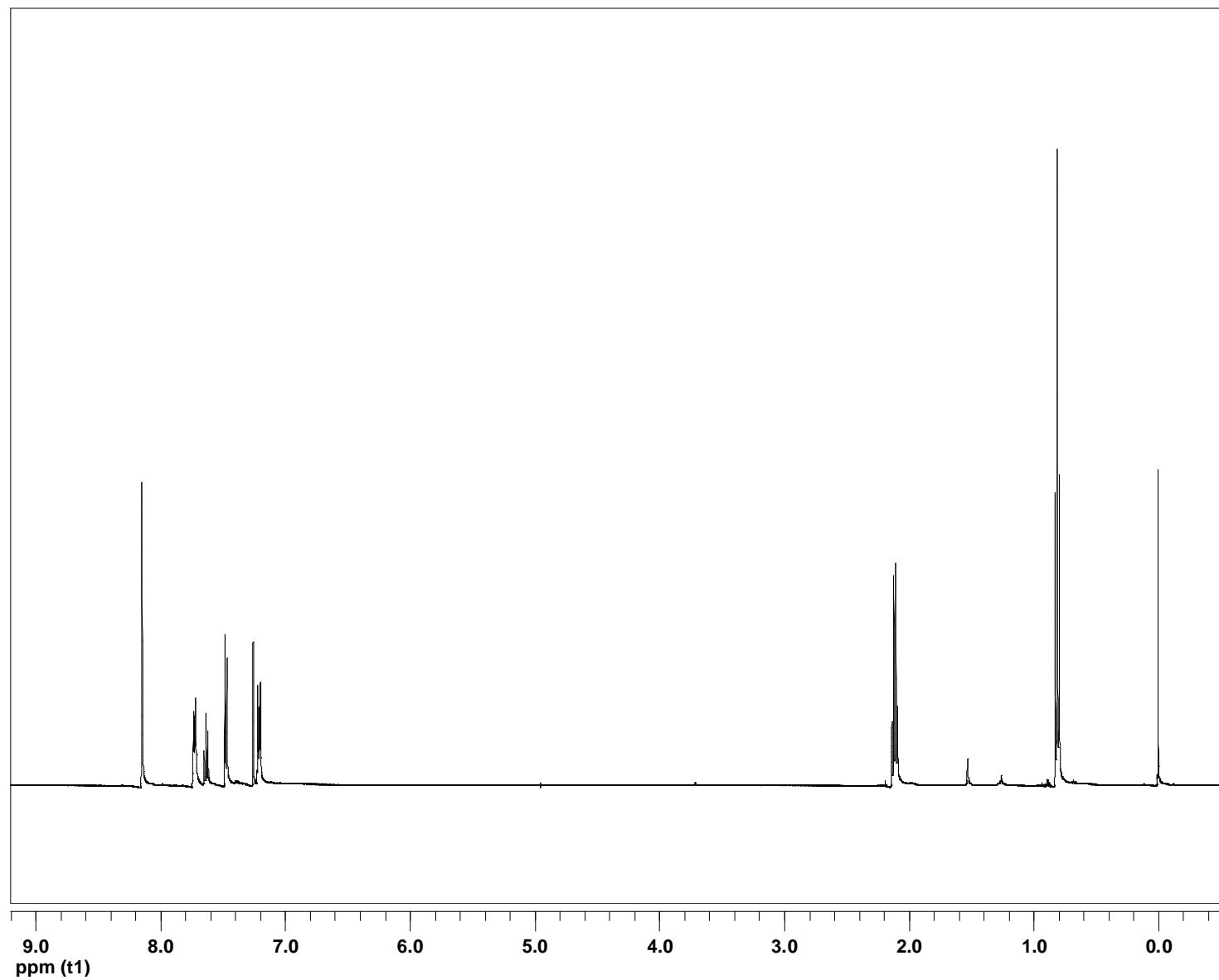
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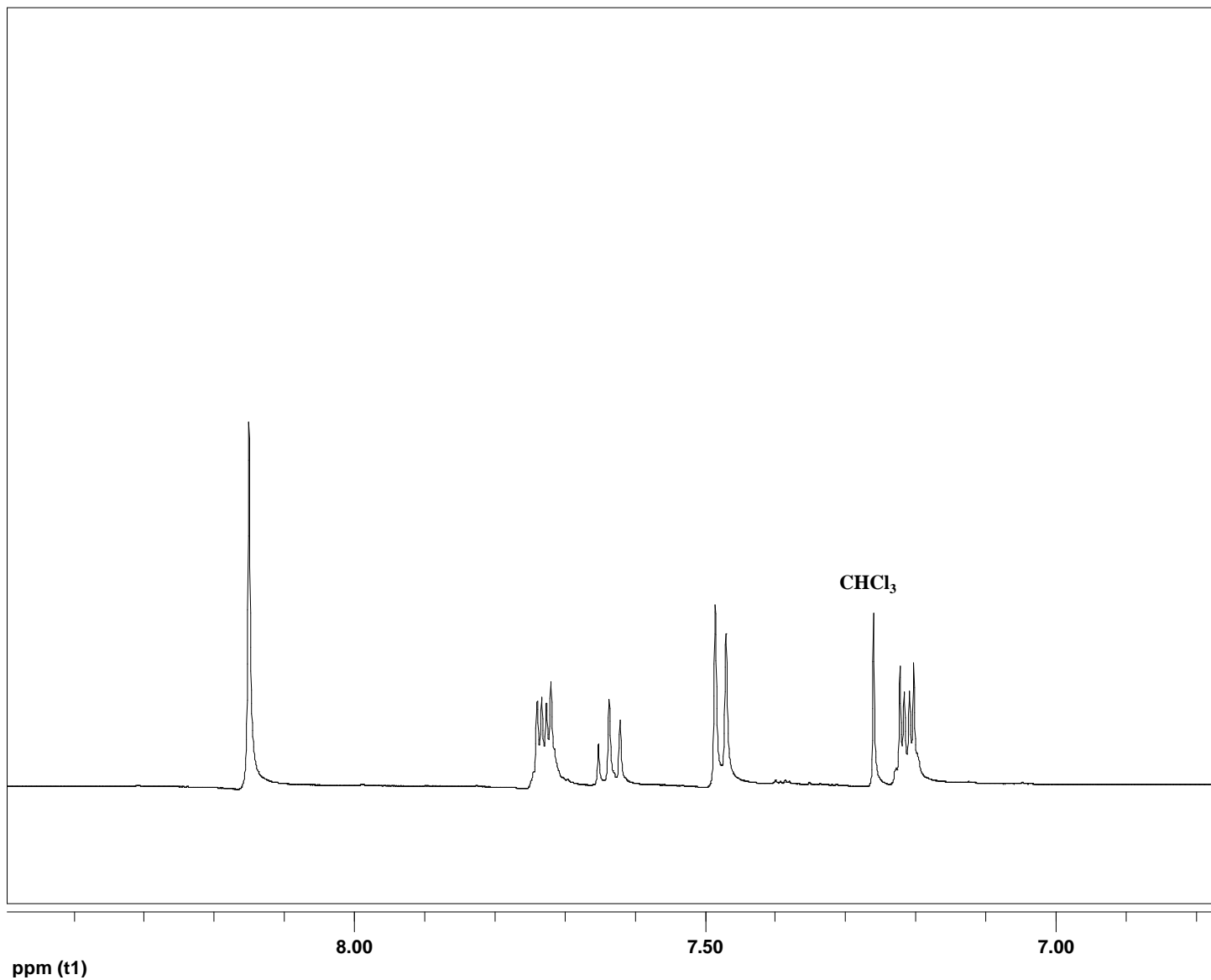


## 6,13-Bis(2',6'-diethylphenyl)pentacene (2)

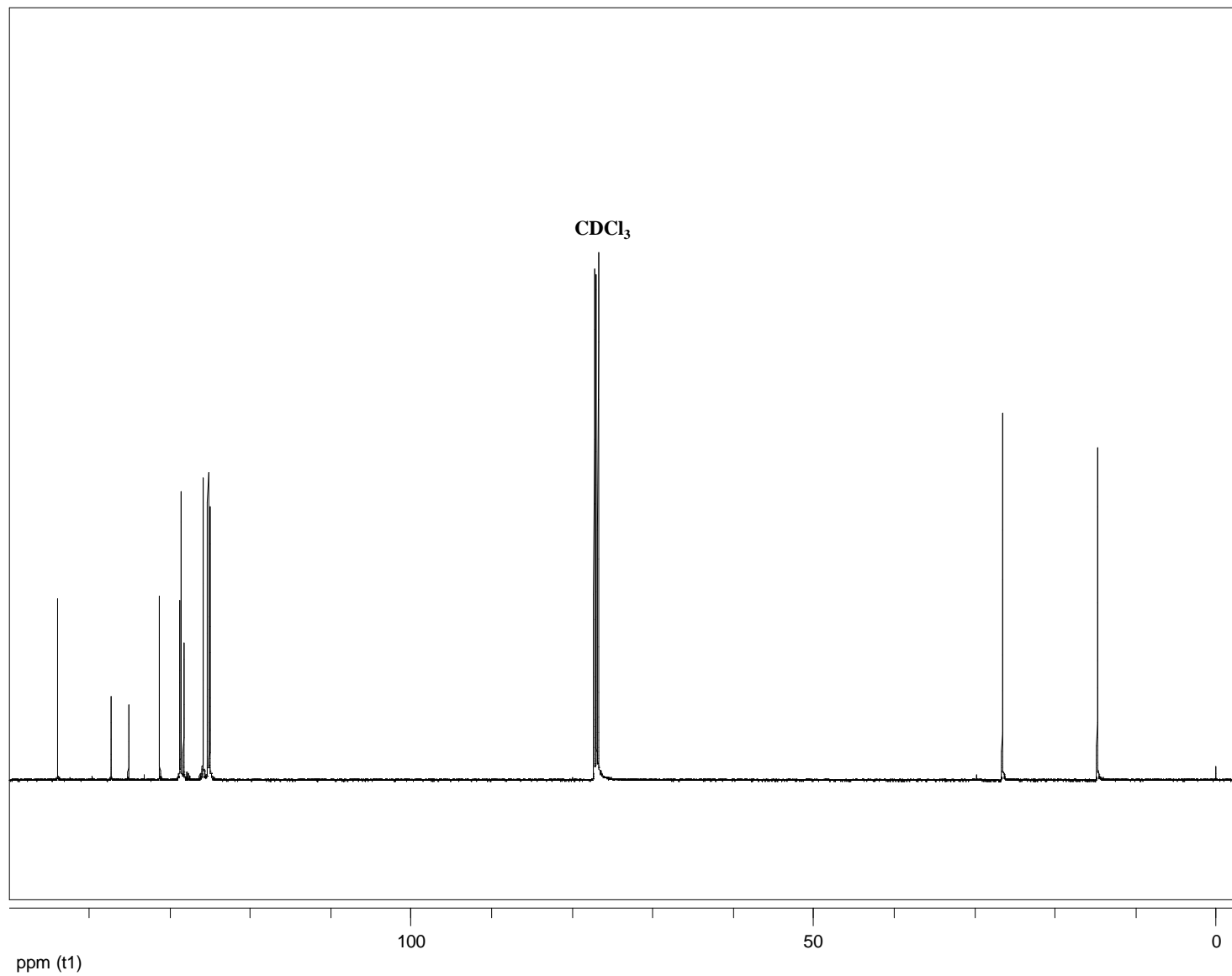


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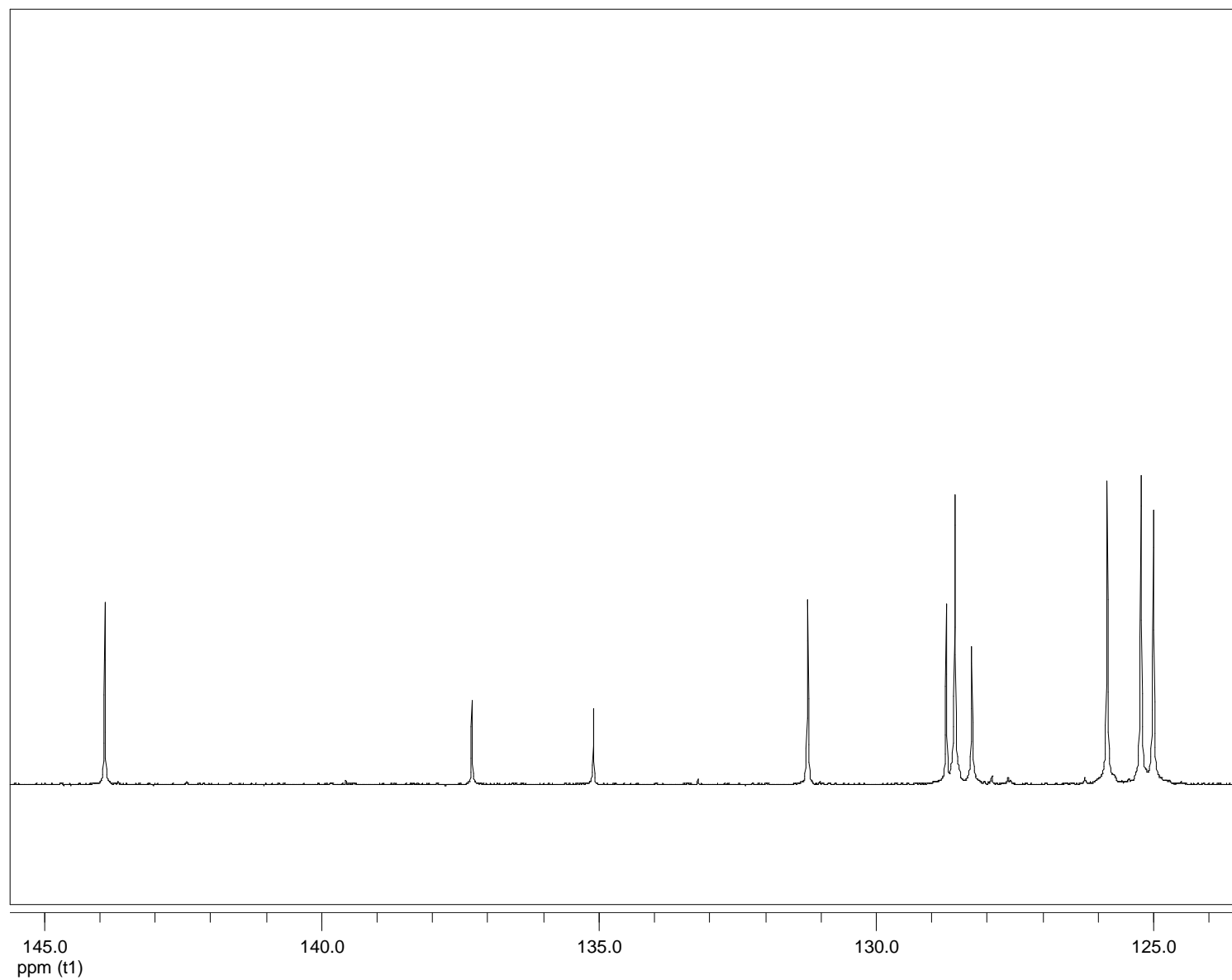
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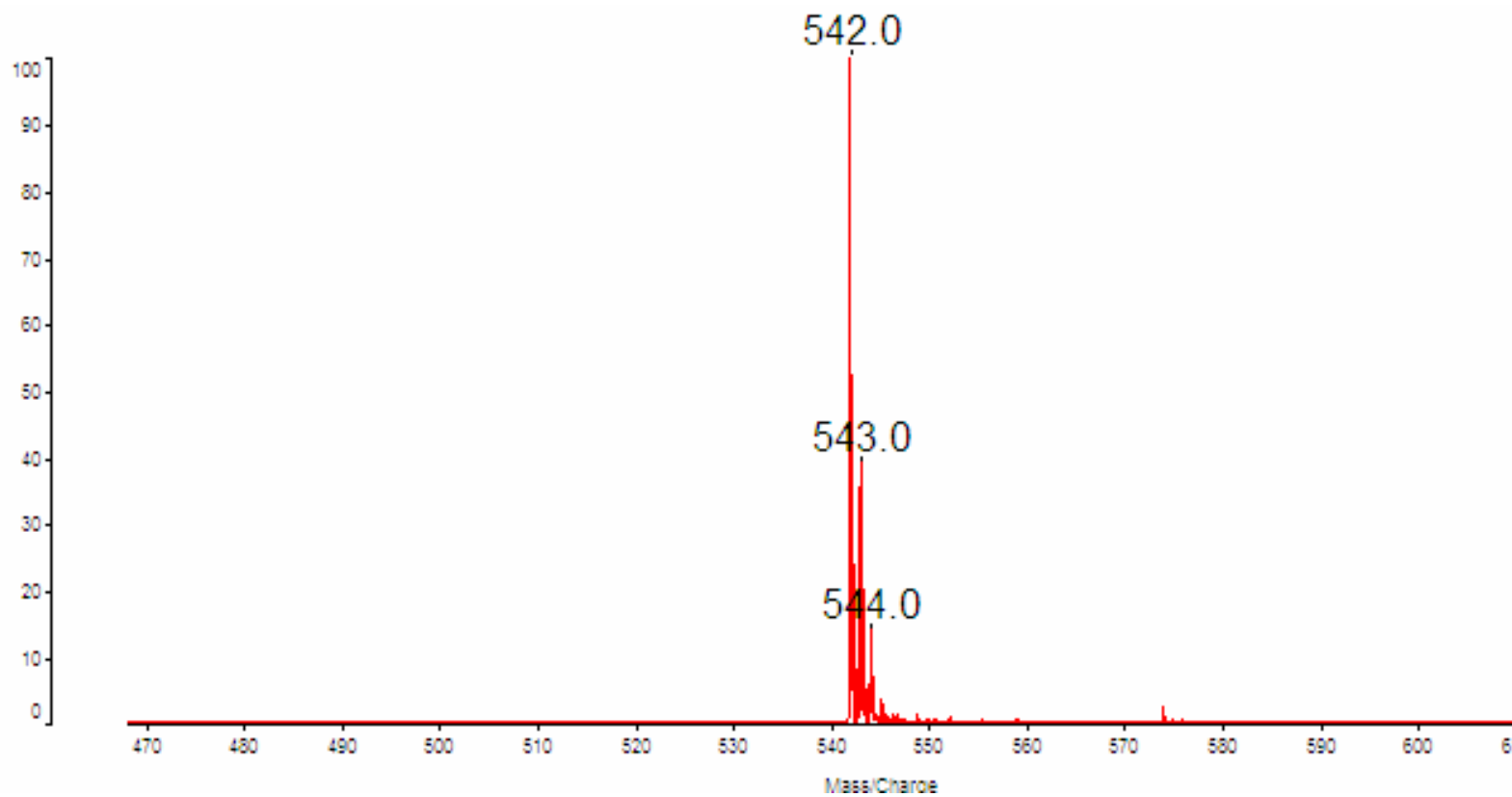


## 6,13-Bis(2',6'-diethylphenyl)pentacene (2)

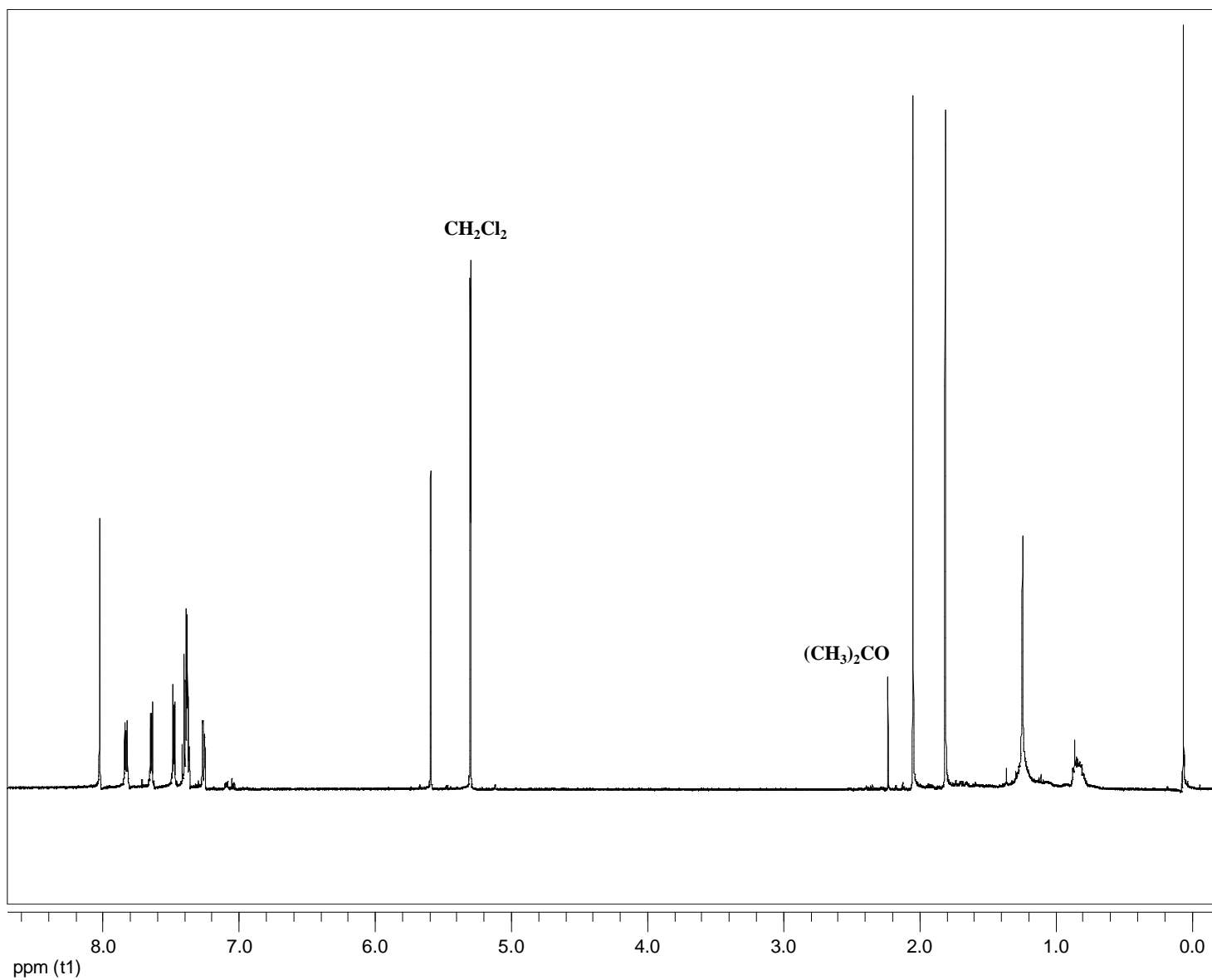


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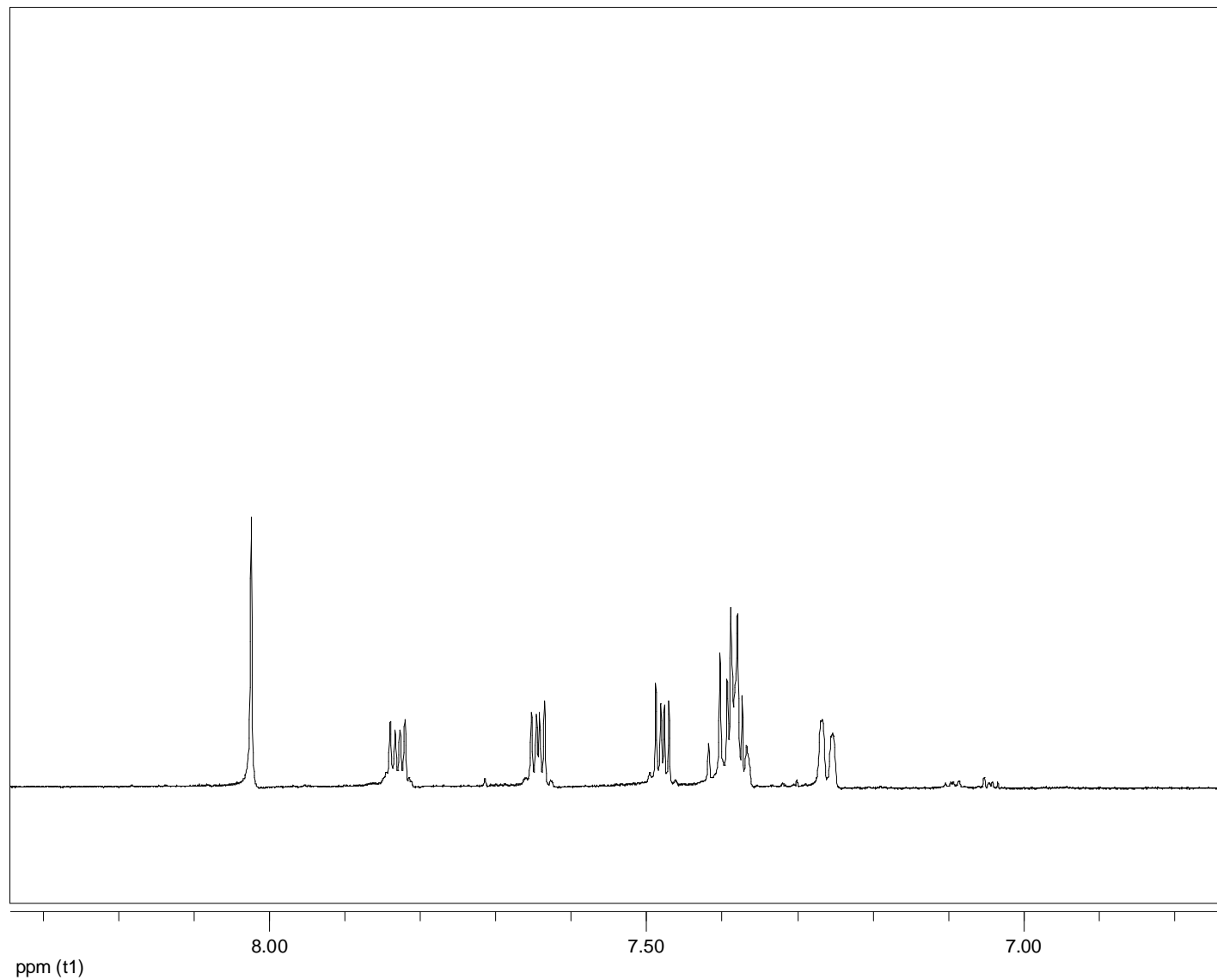
## 6,13-Bis(2',6'-diethylphenyl)pentacene (2)



## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene monoadduct (3)

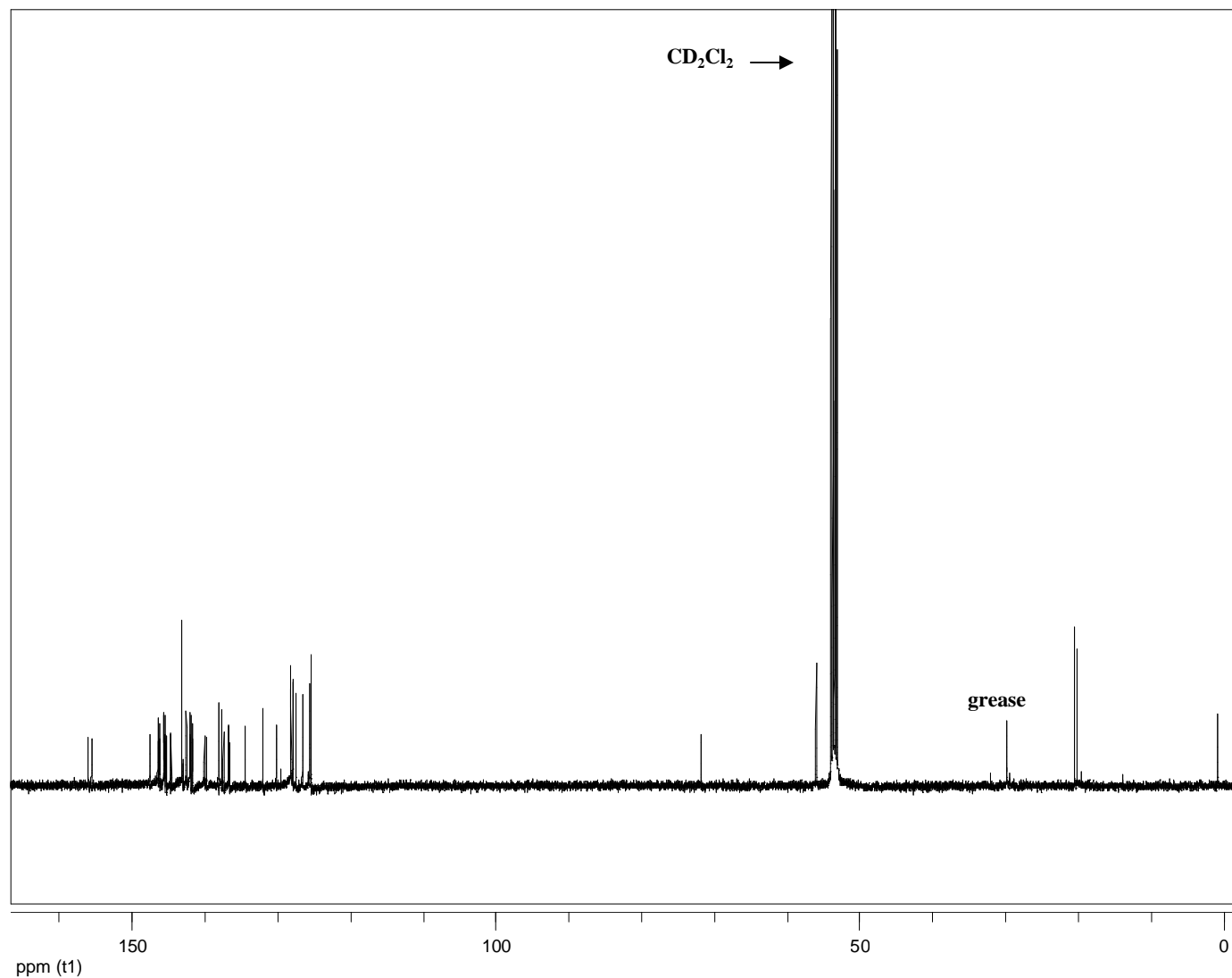


## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene monoadduct (3)



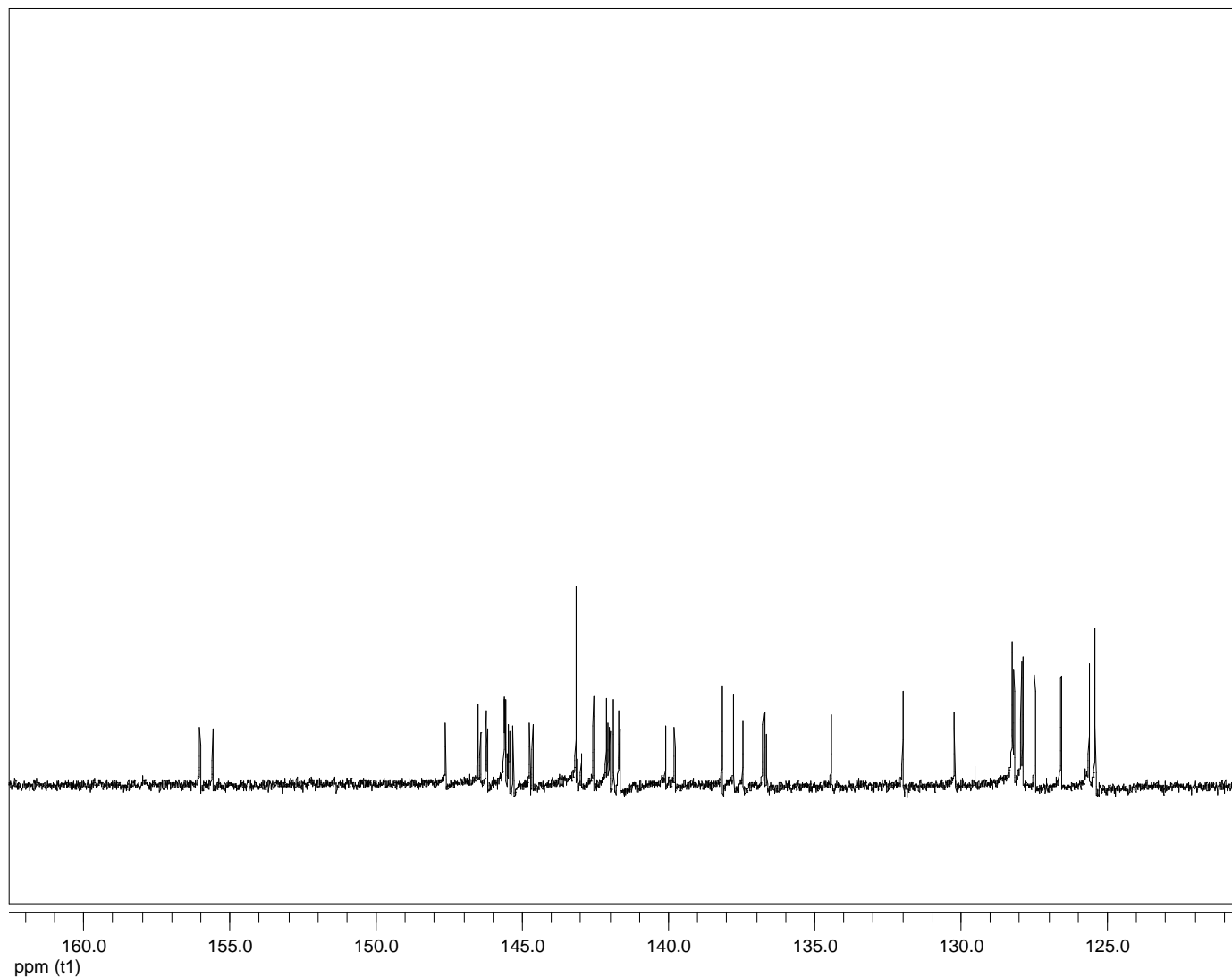
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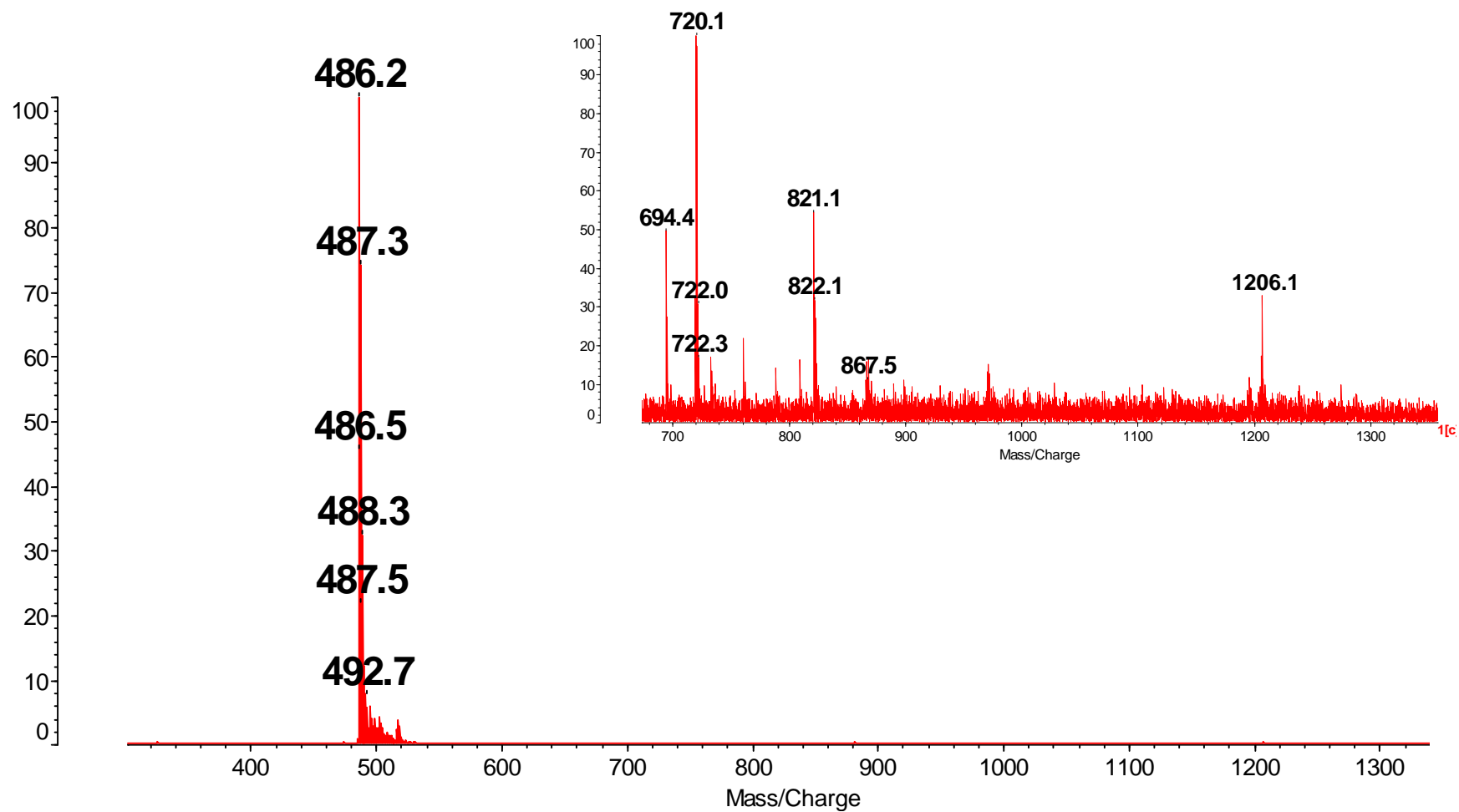


## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene monoadduct (3)

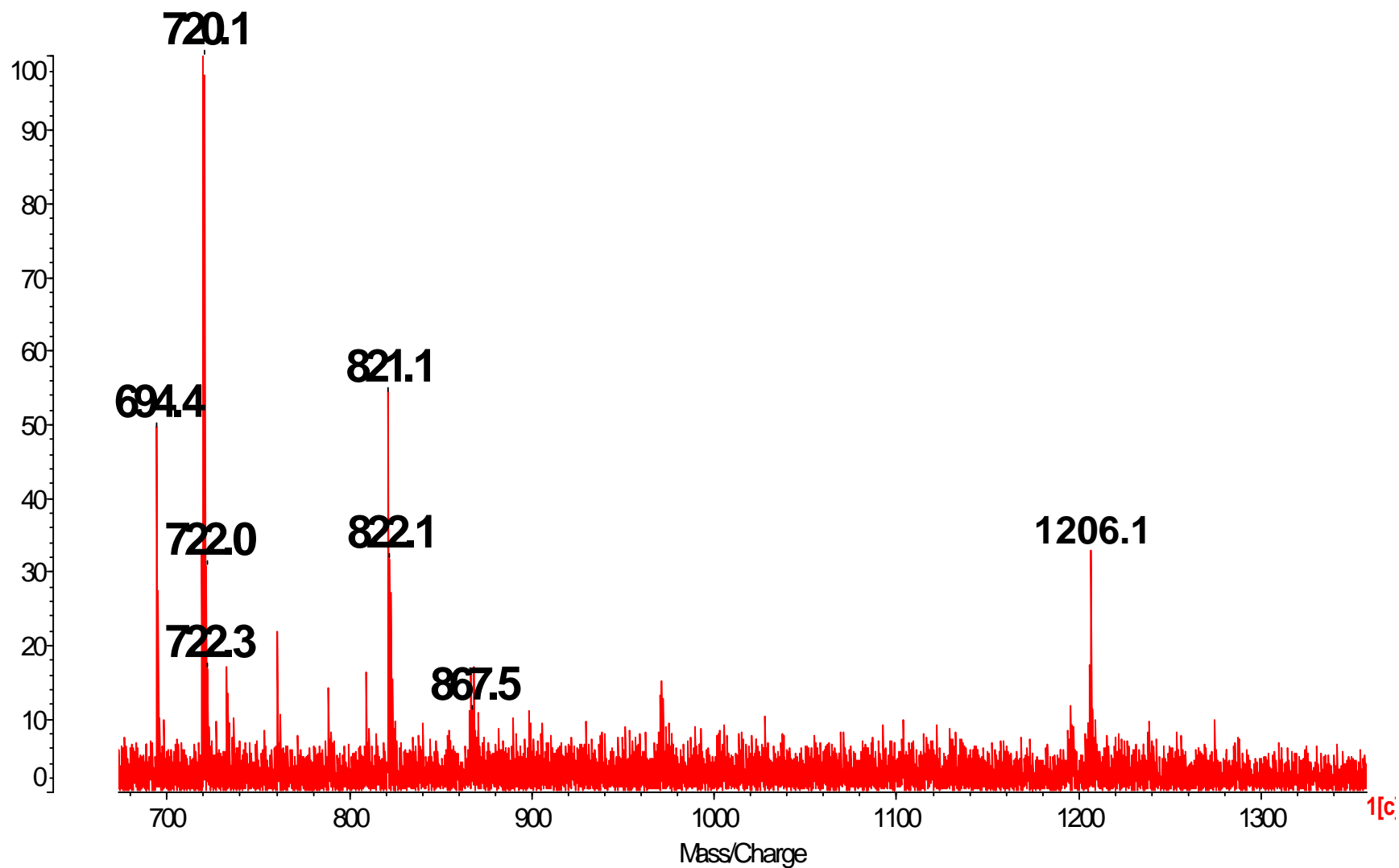


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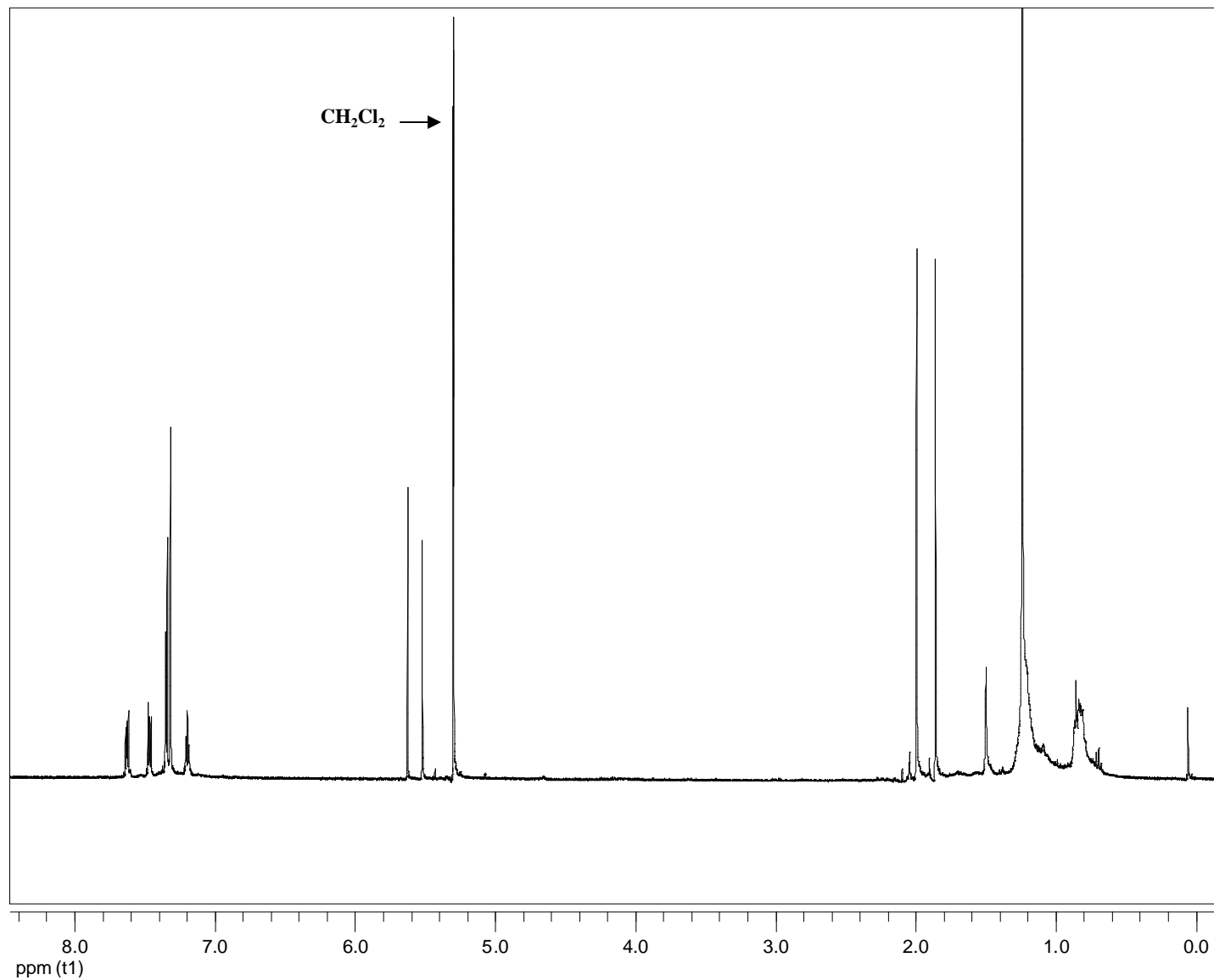
## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene monoadduct (3)



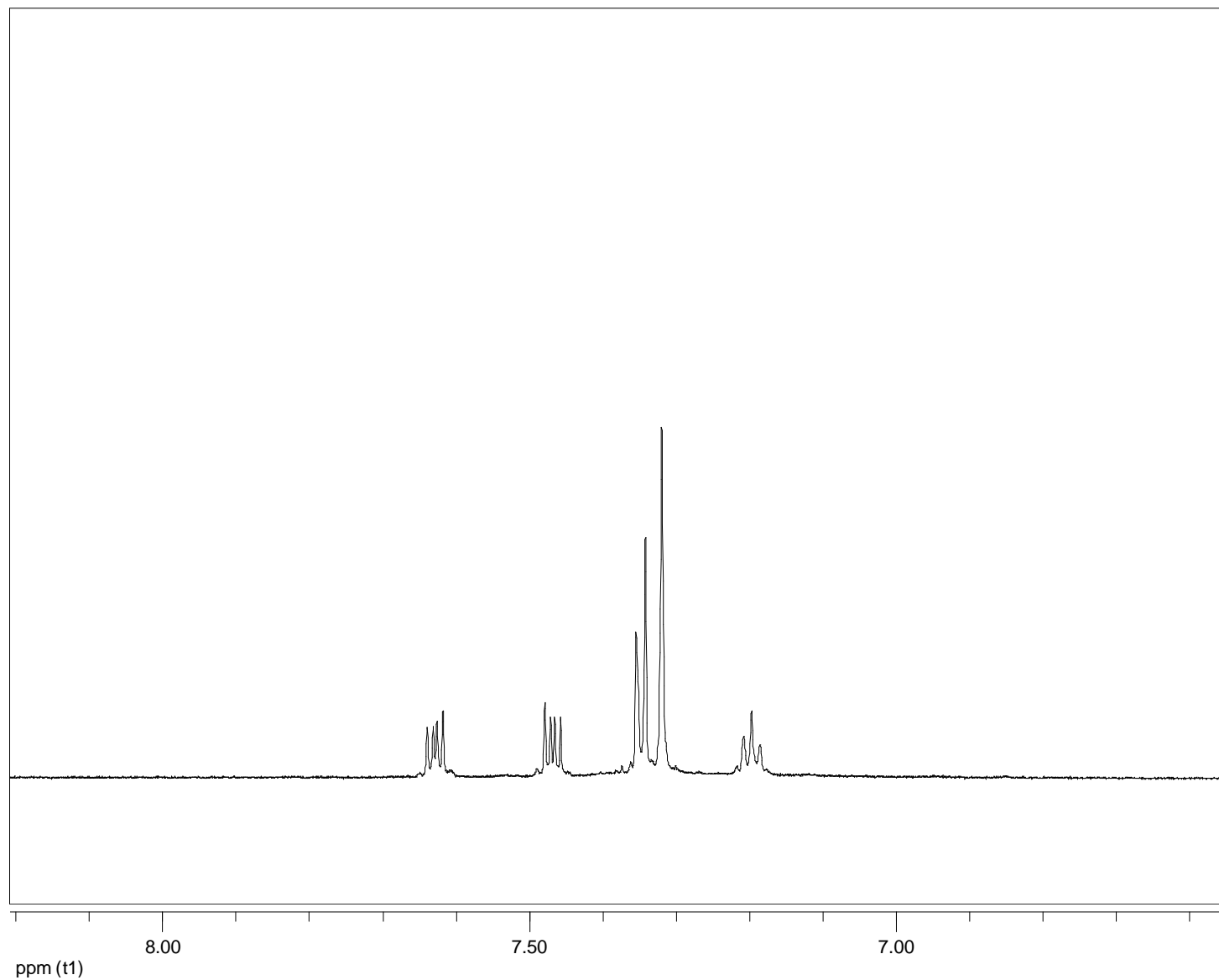
### [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene monoadduct (3)



# [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*syn*-8)

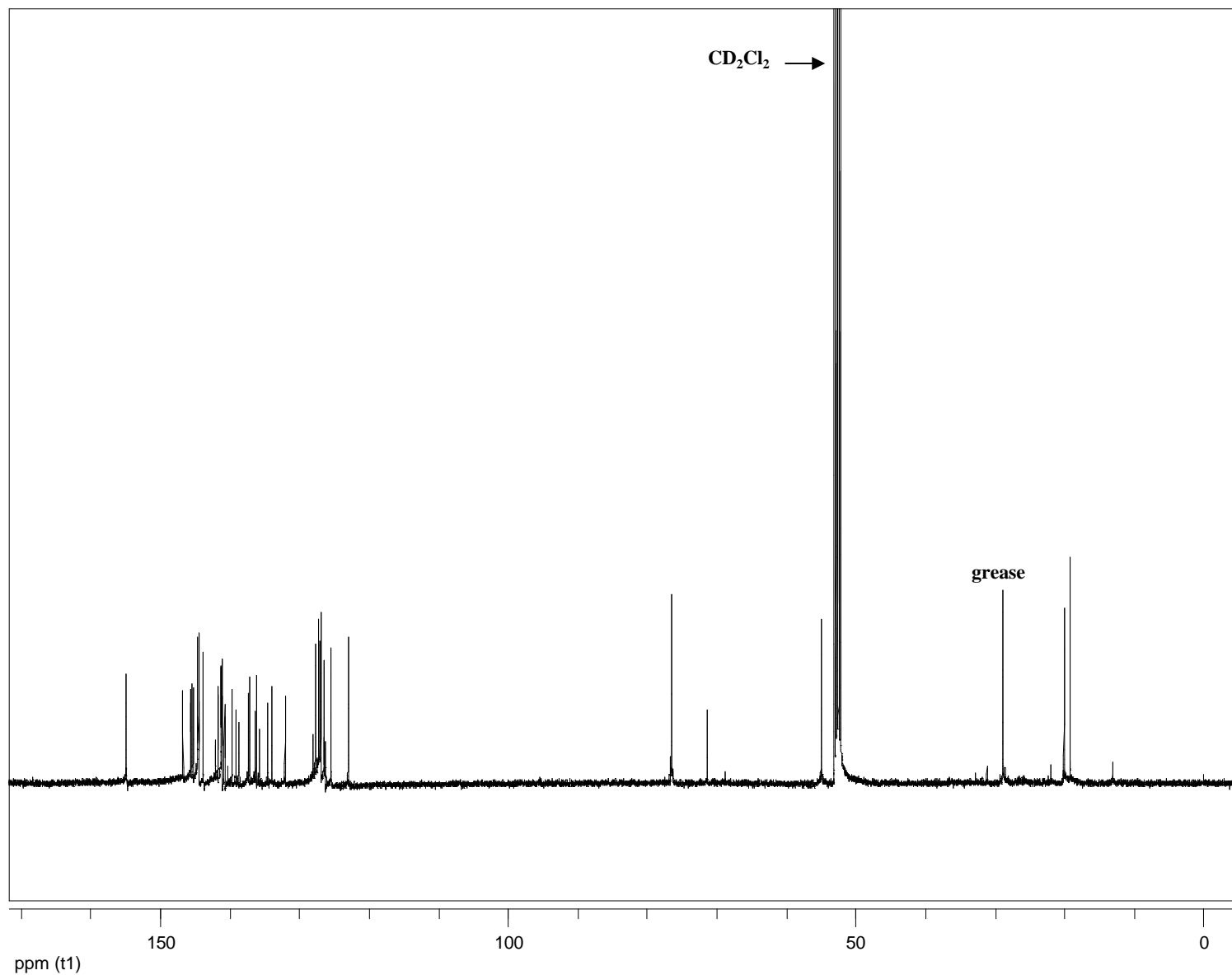


## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*syn*-8)

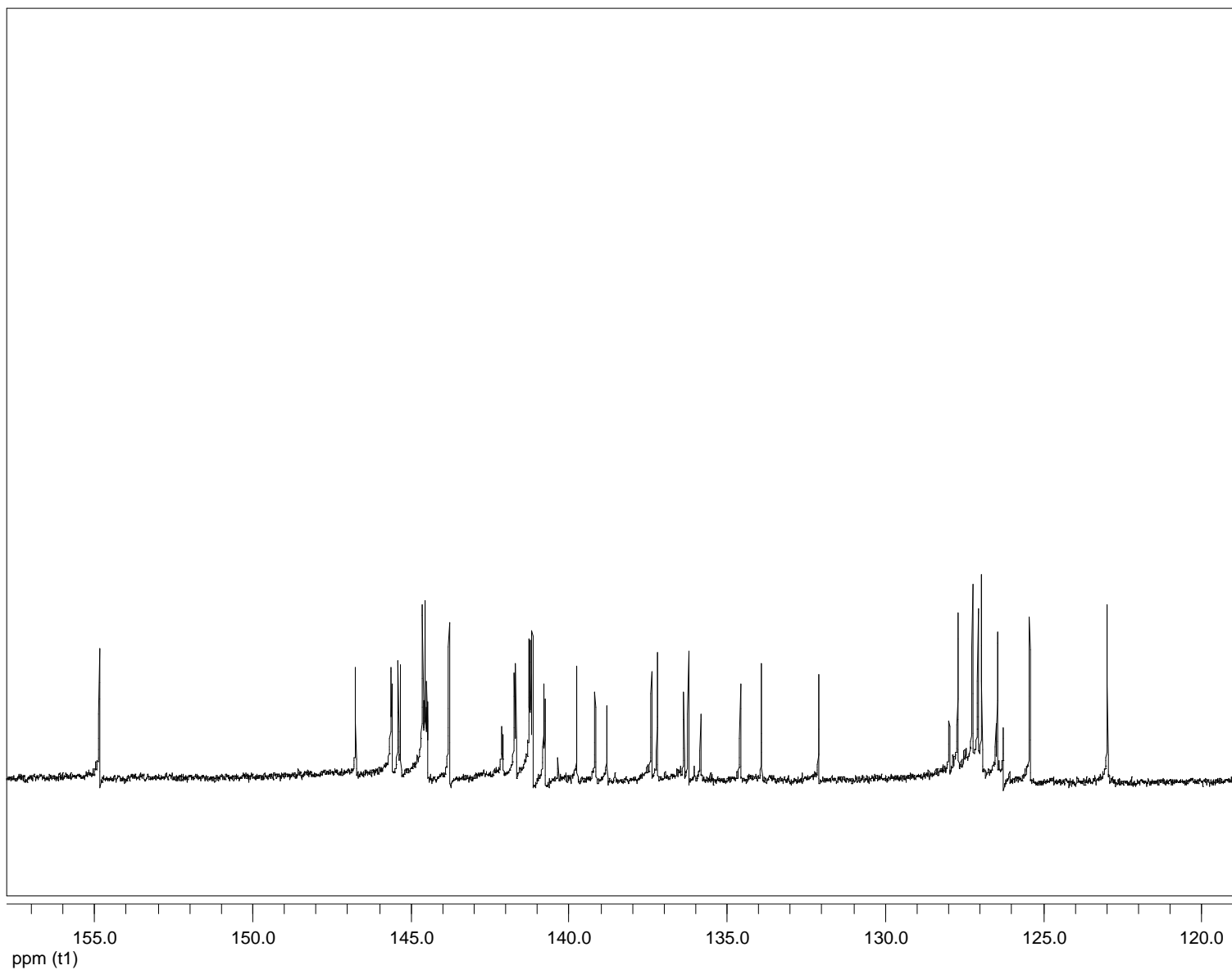


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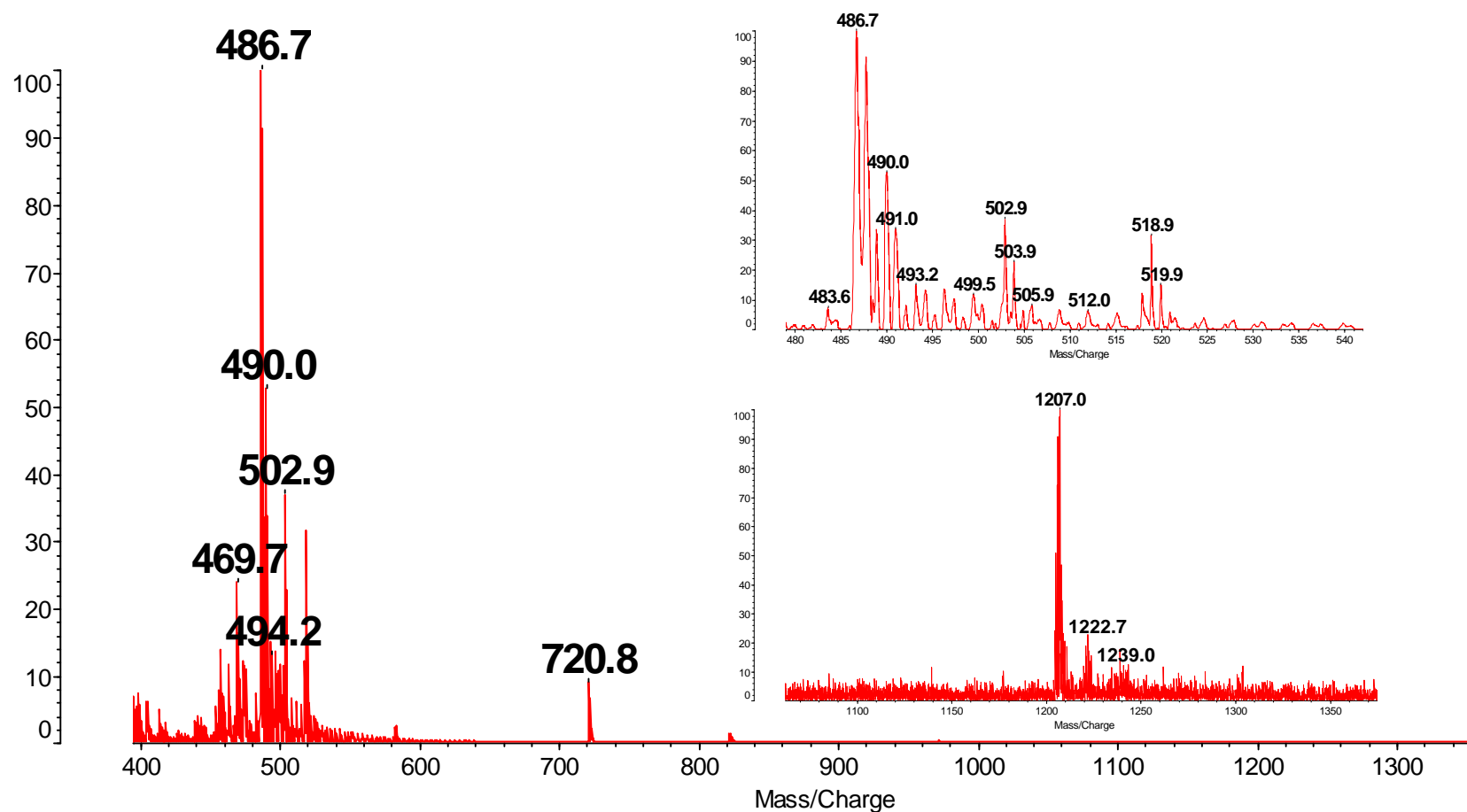


## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*syn*-8)

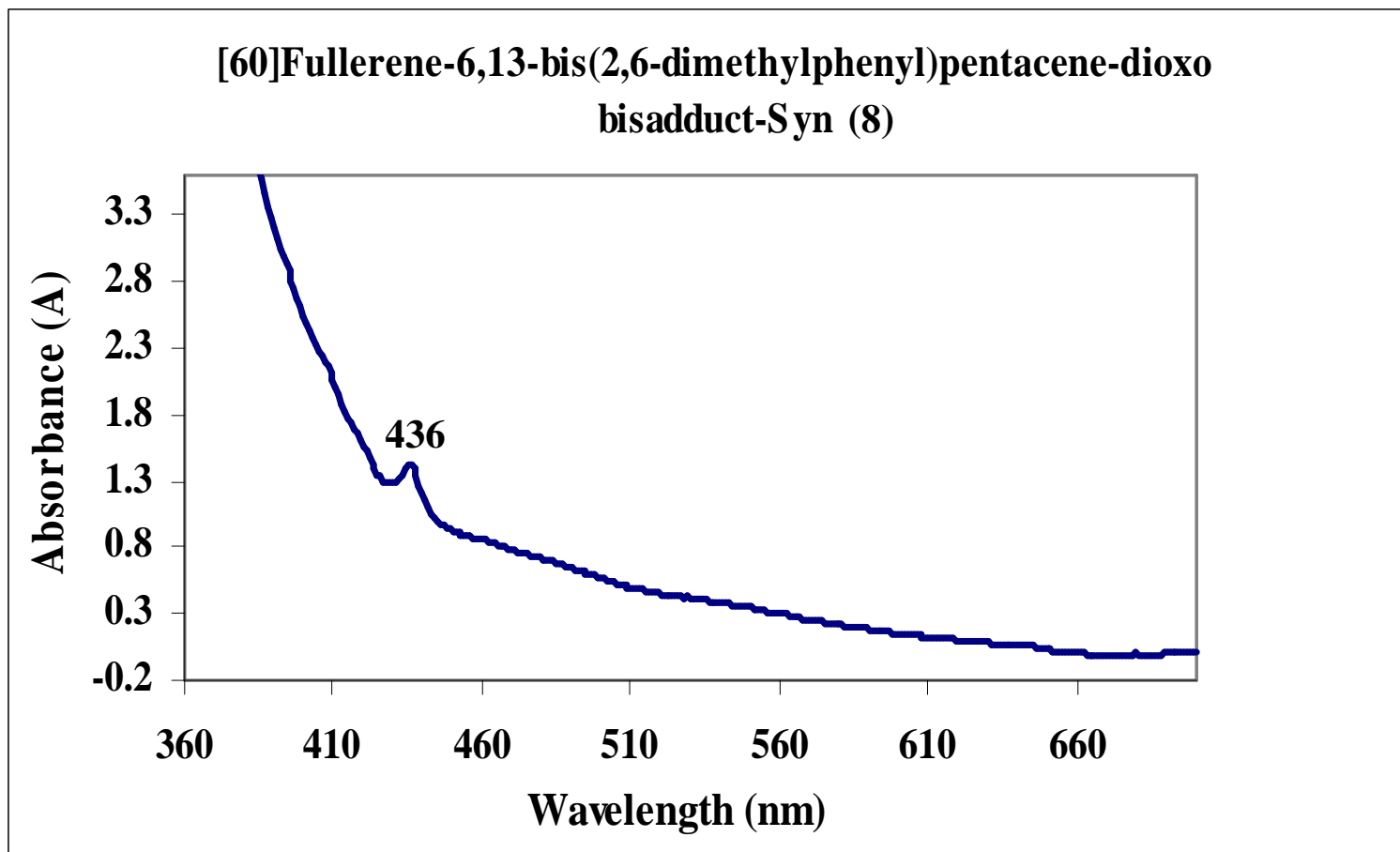


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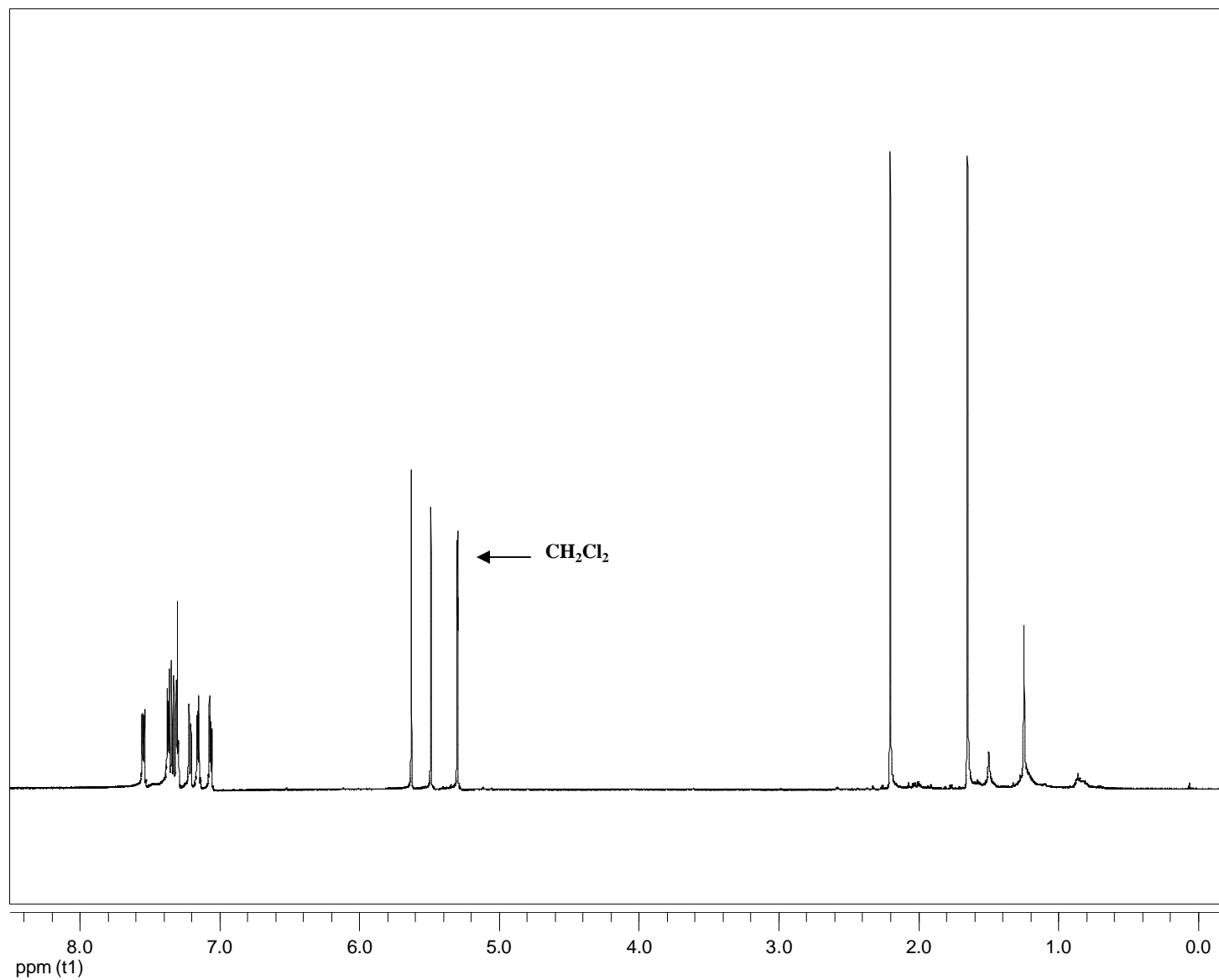
## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*syn*-8)



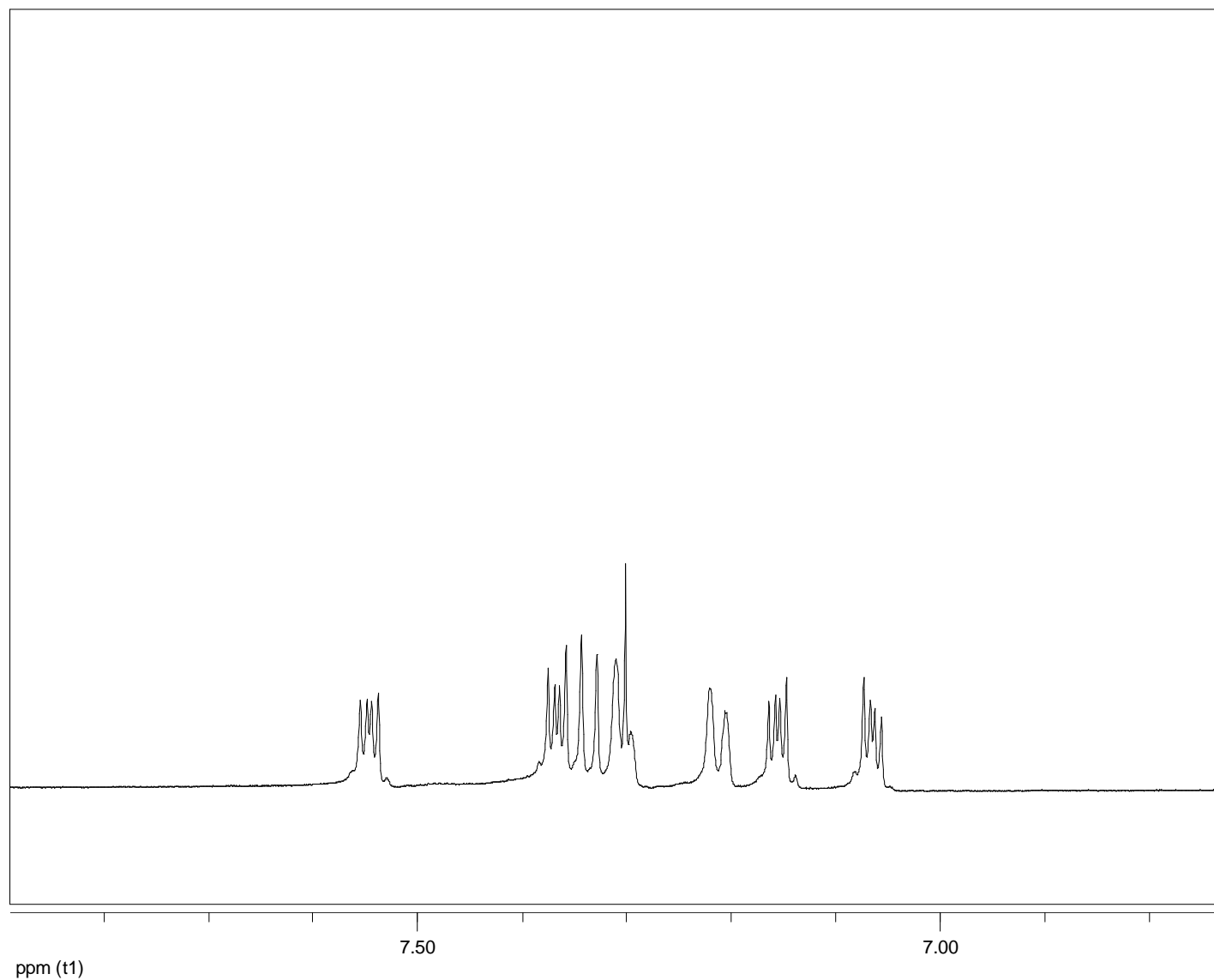




# [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*anti*-9)

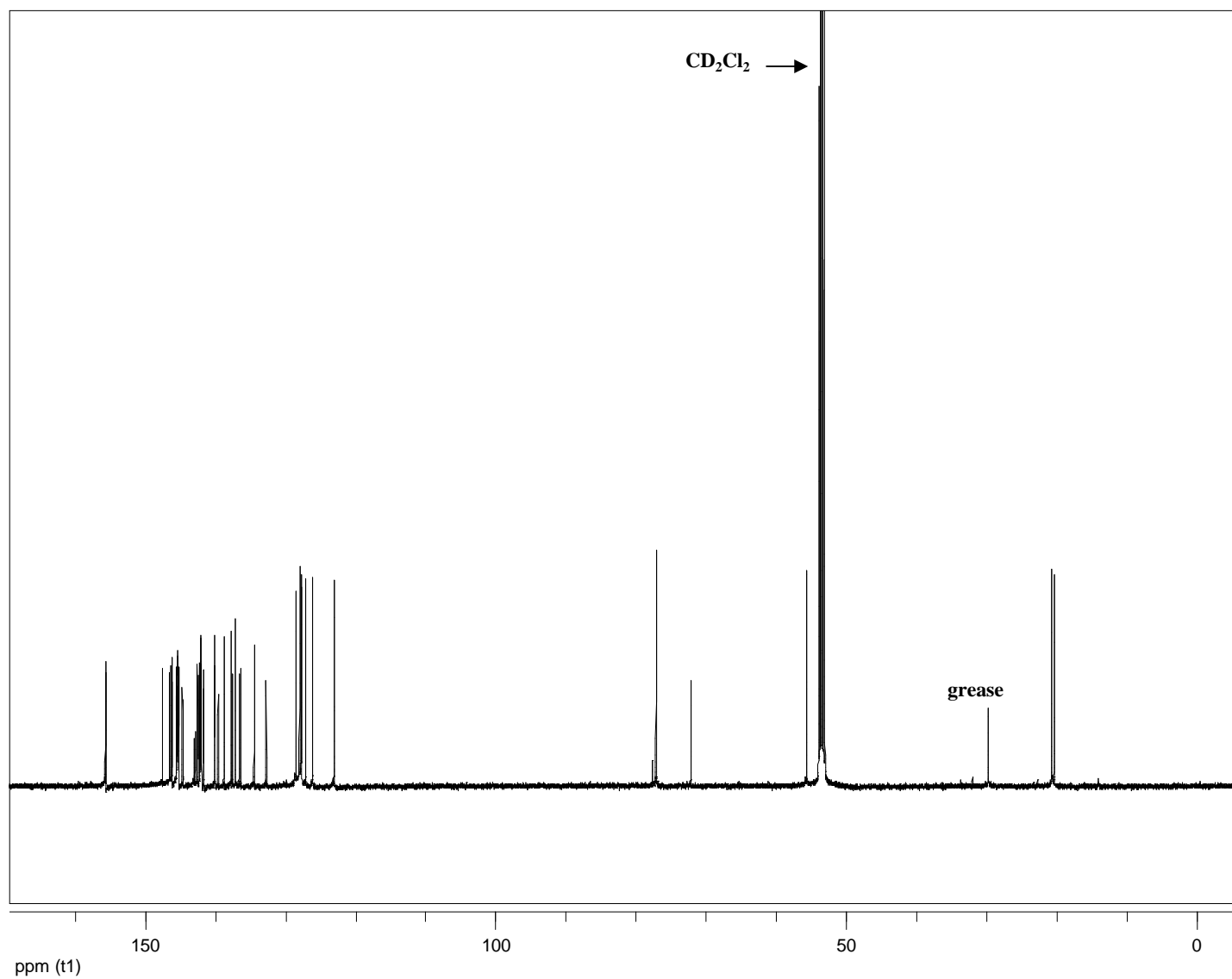


## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*anti*-9)

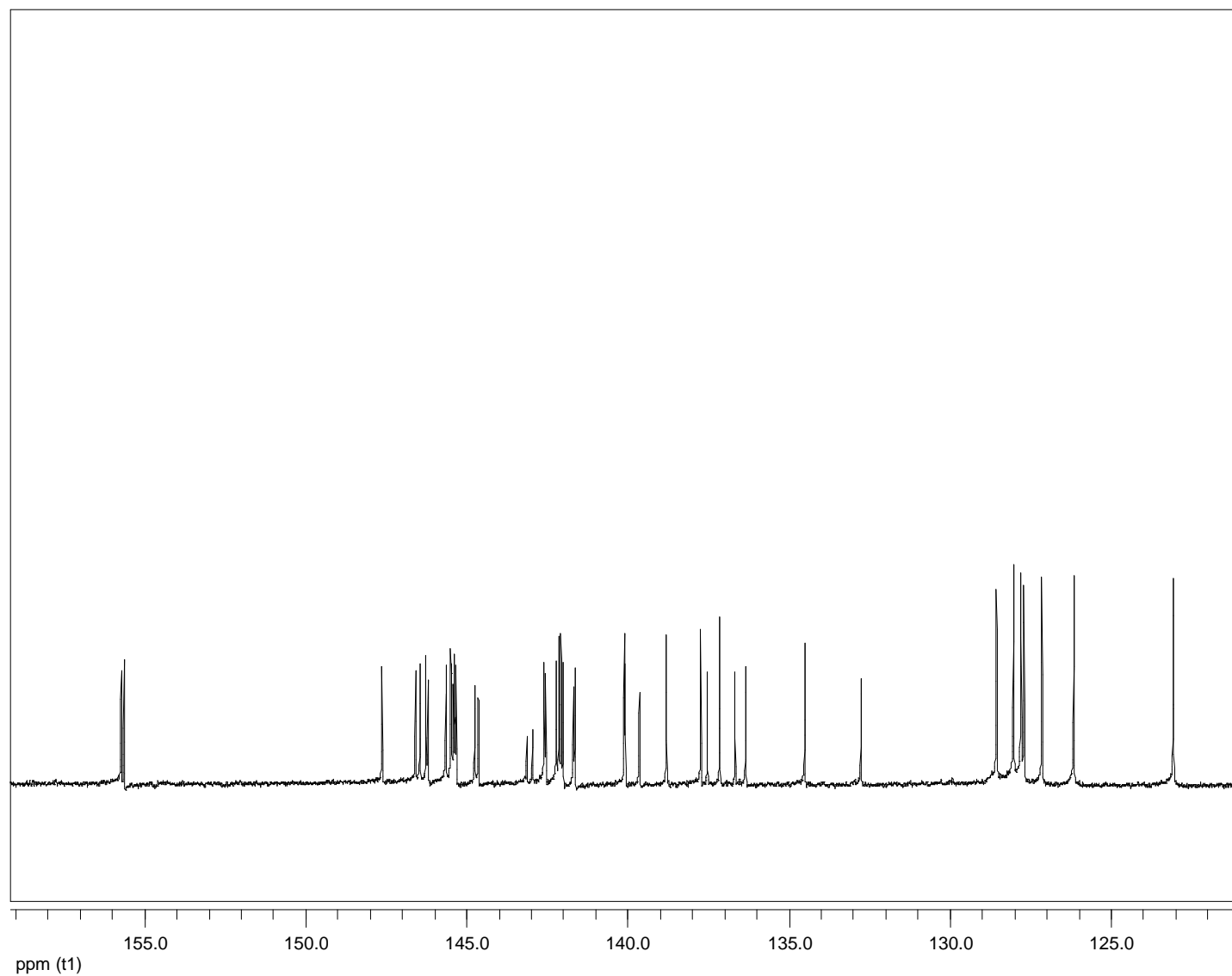


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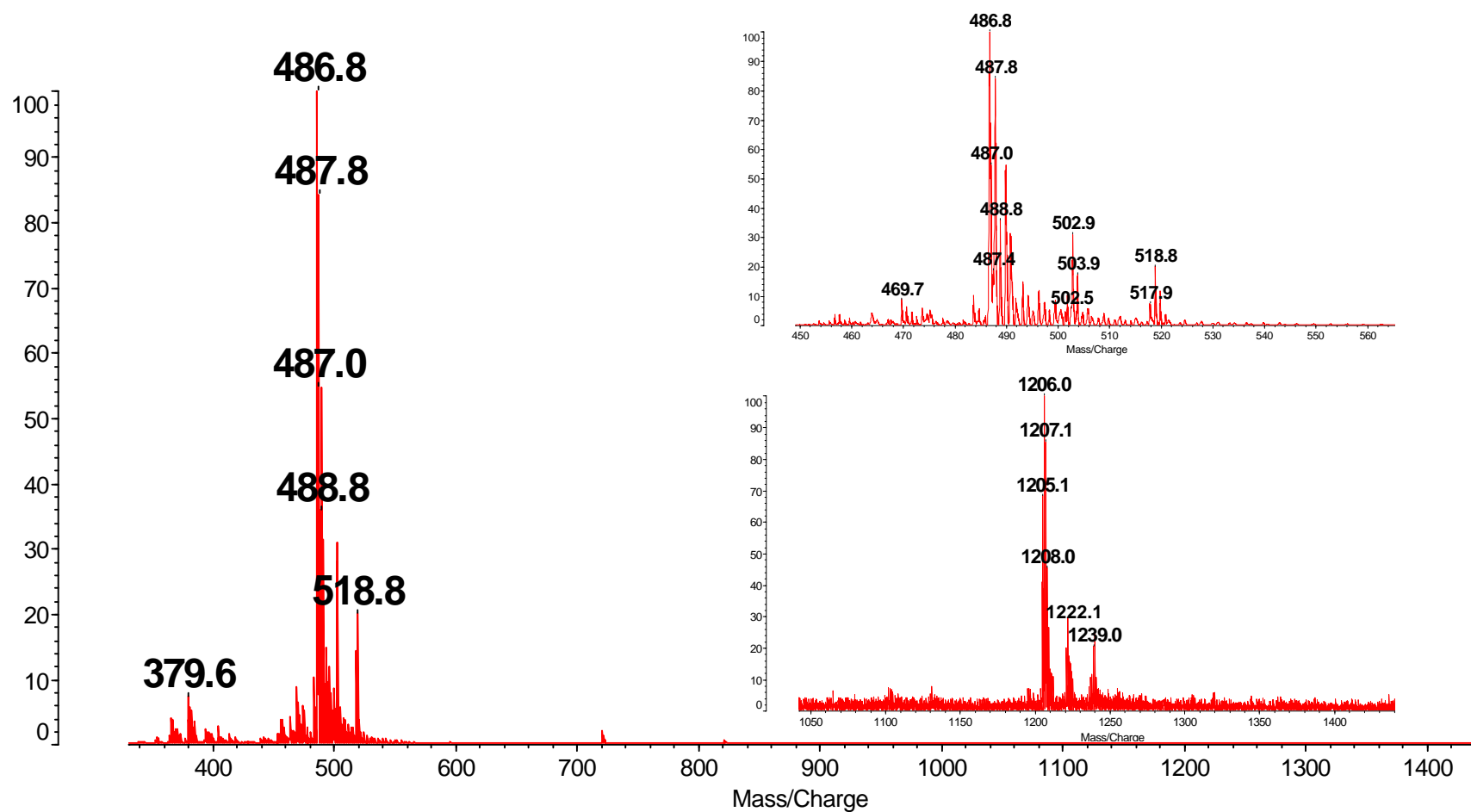


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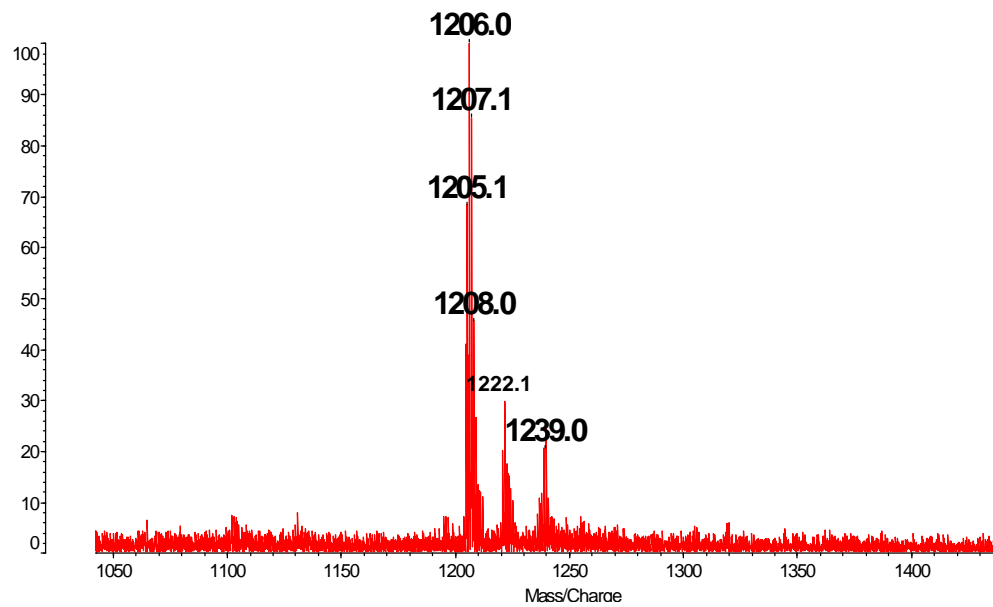
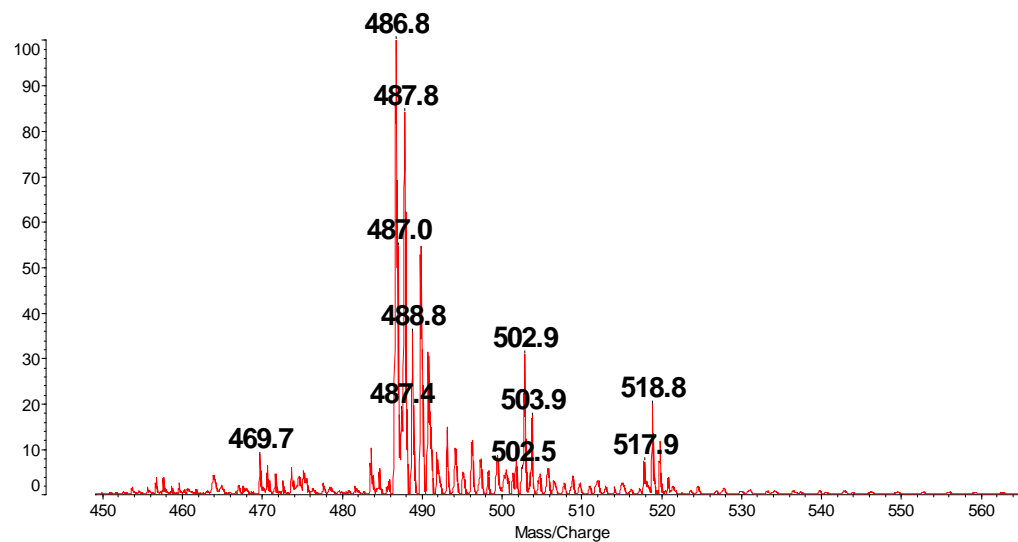


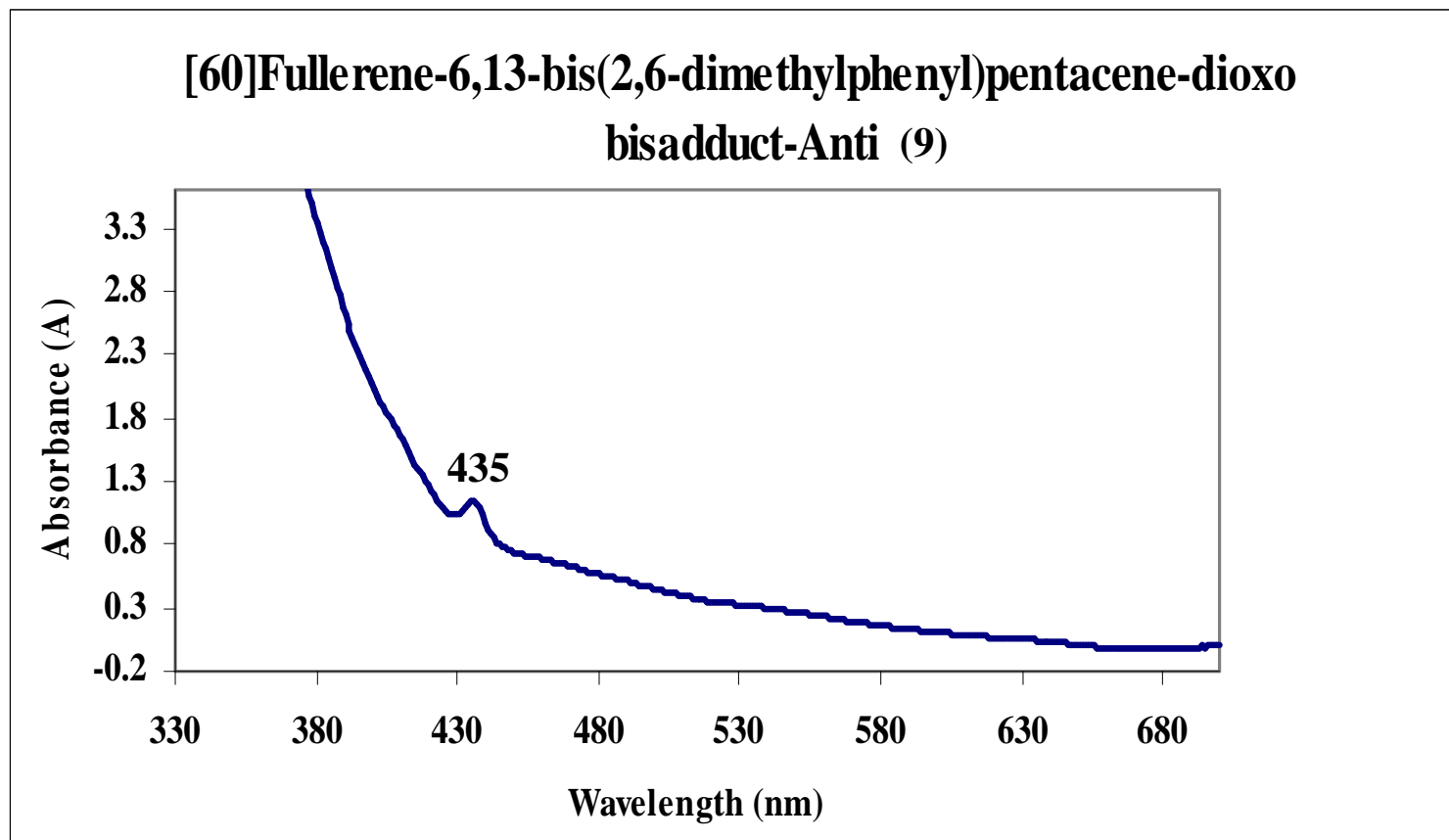
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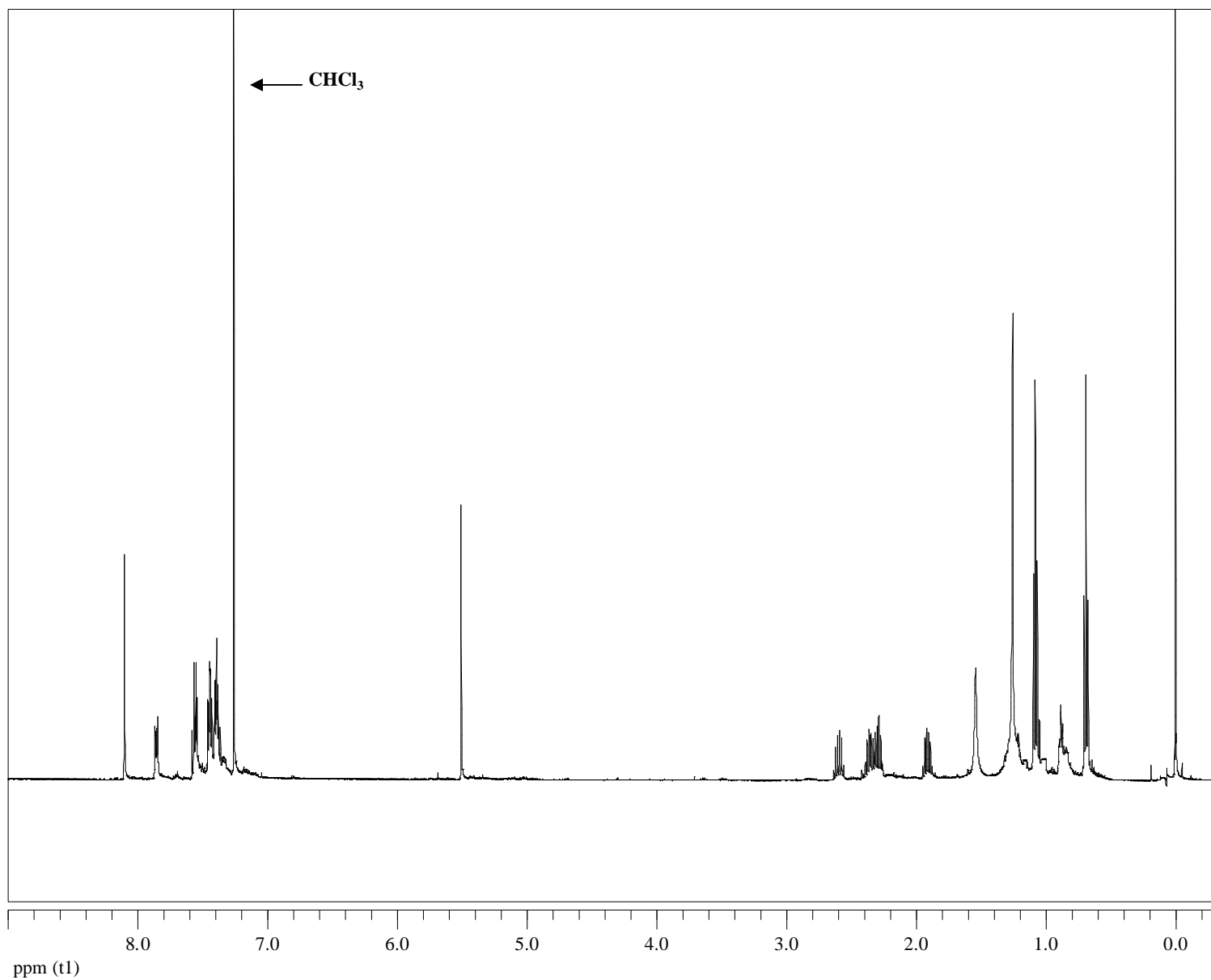
## [60]Fullerene-6,13-bis(2',6'-dimethylphenyl)pentacene-dioxo bisadduct (*anti*-9)



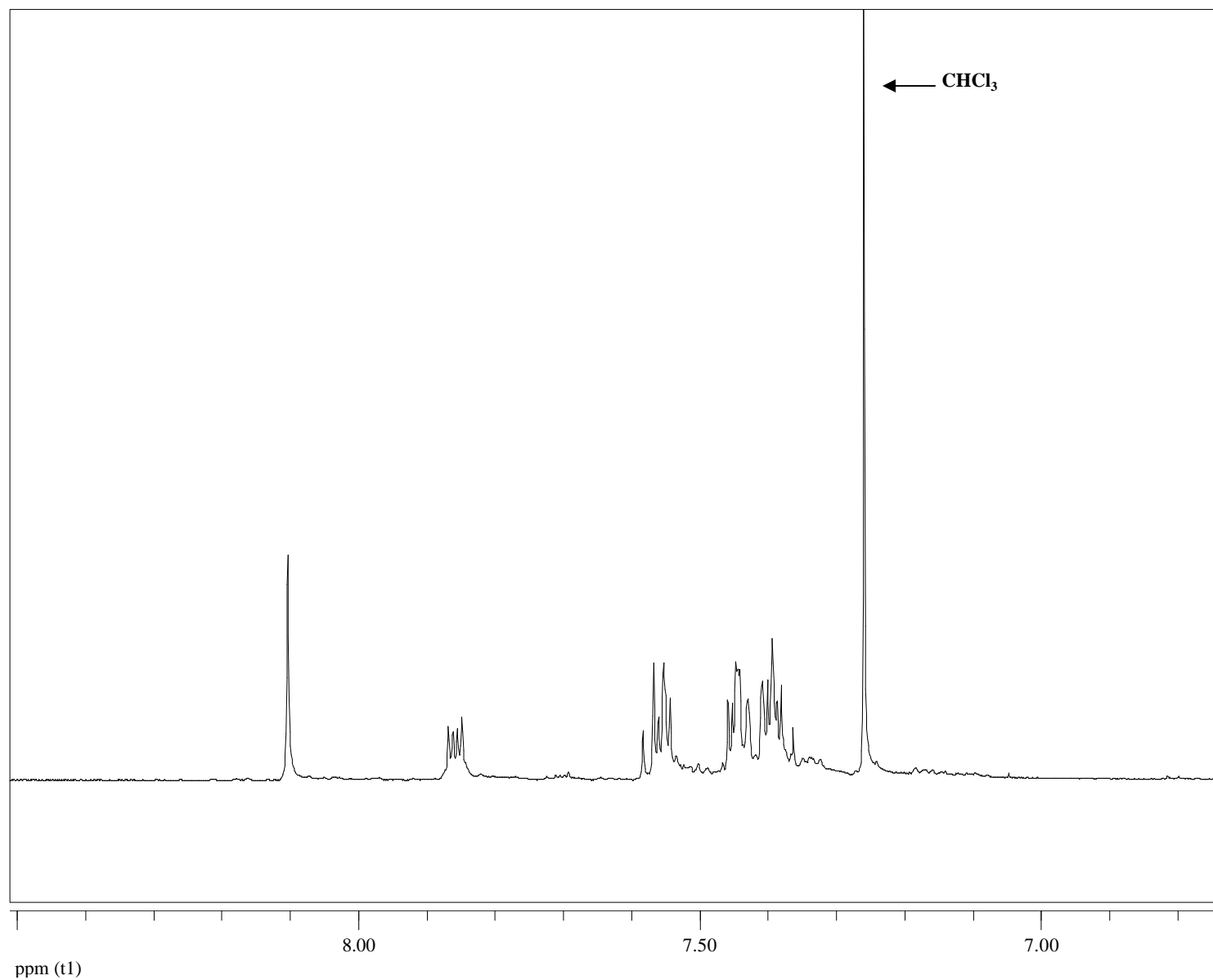




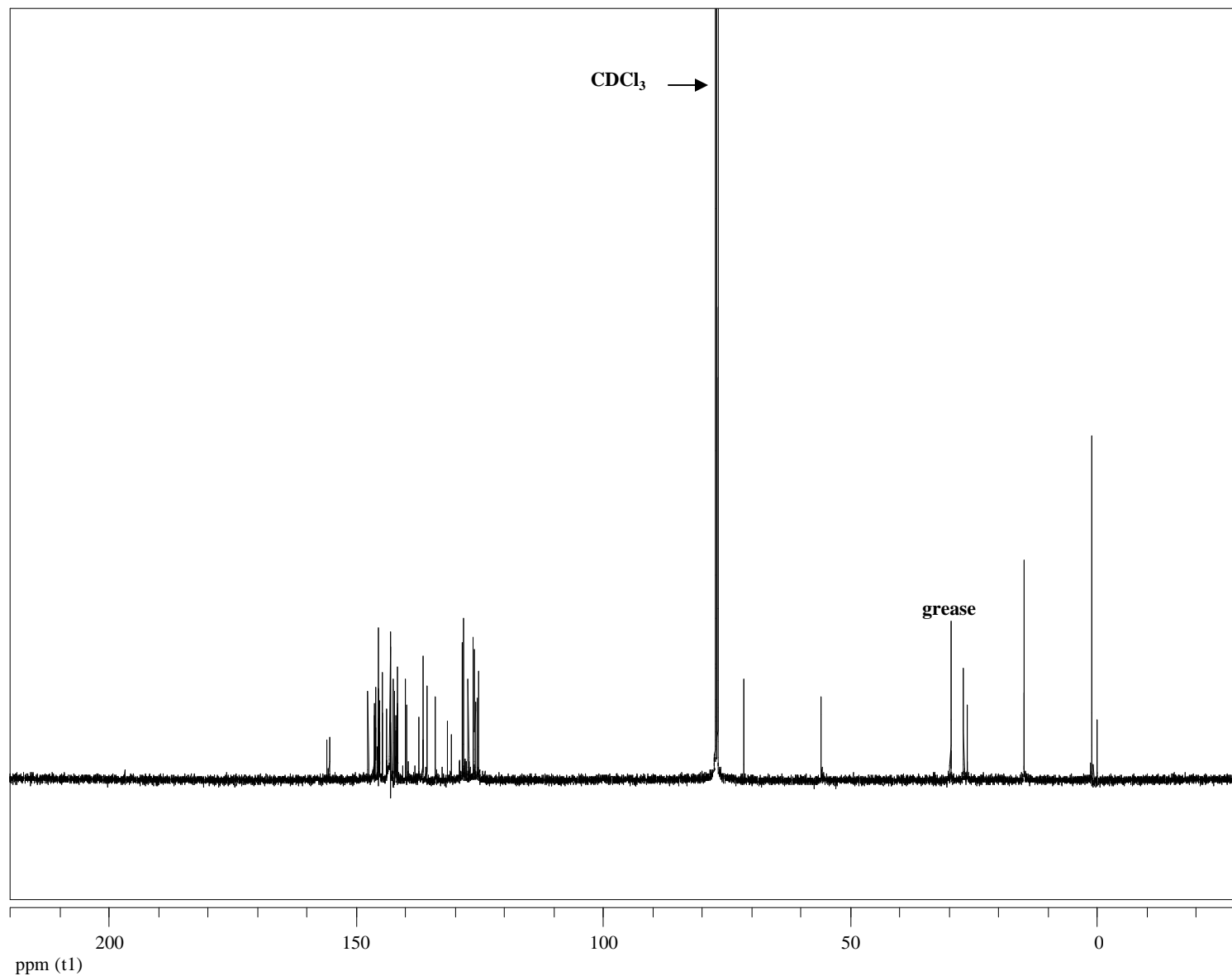
## [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene monoadduct (4)



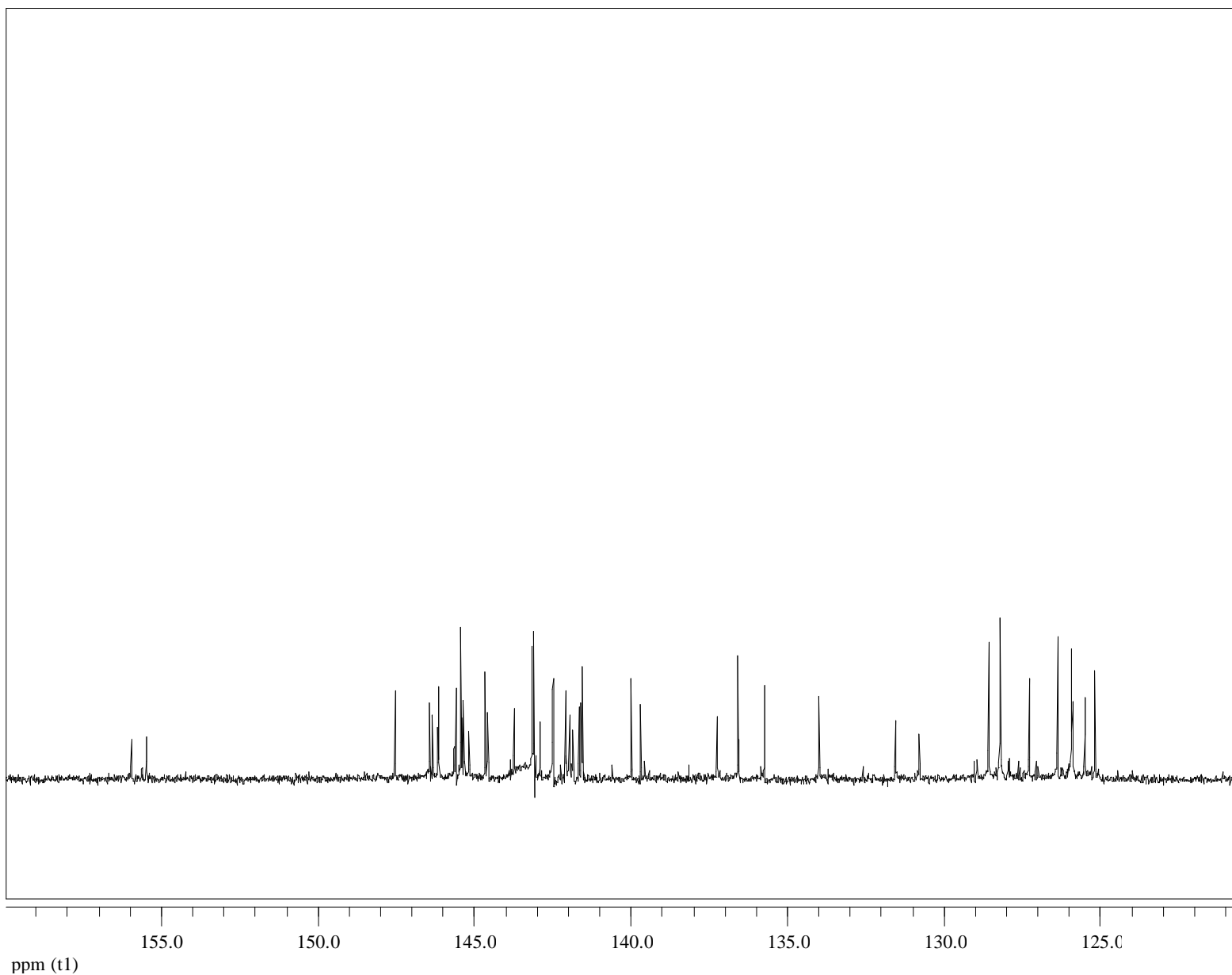
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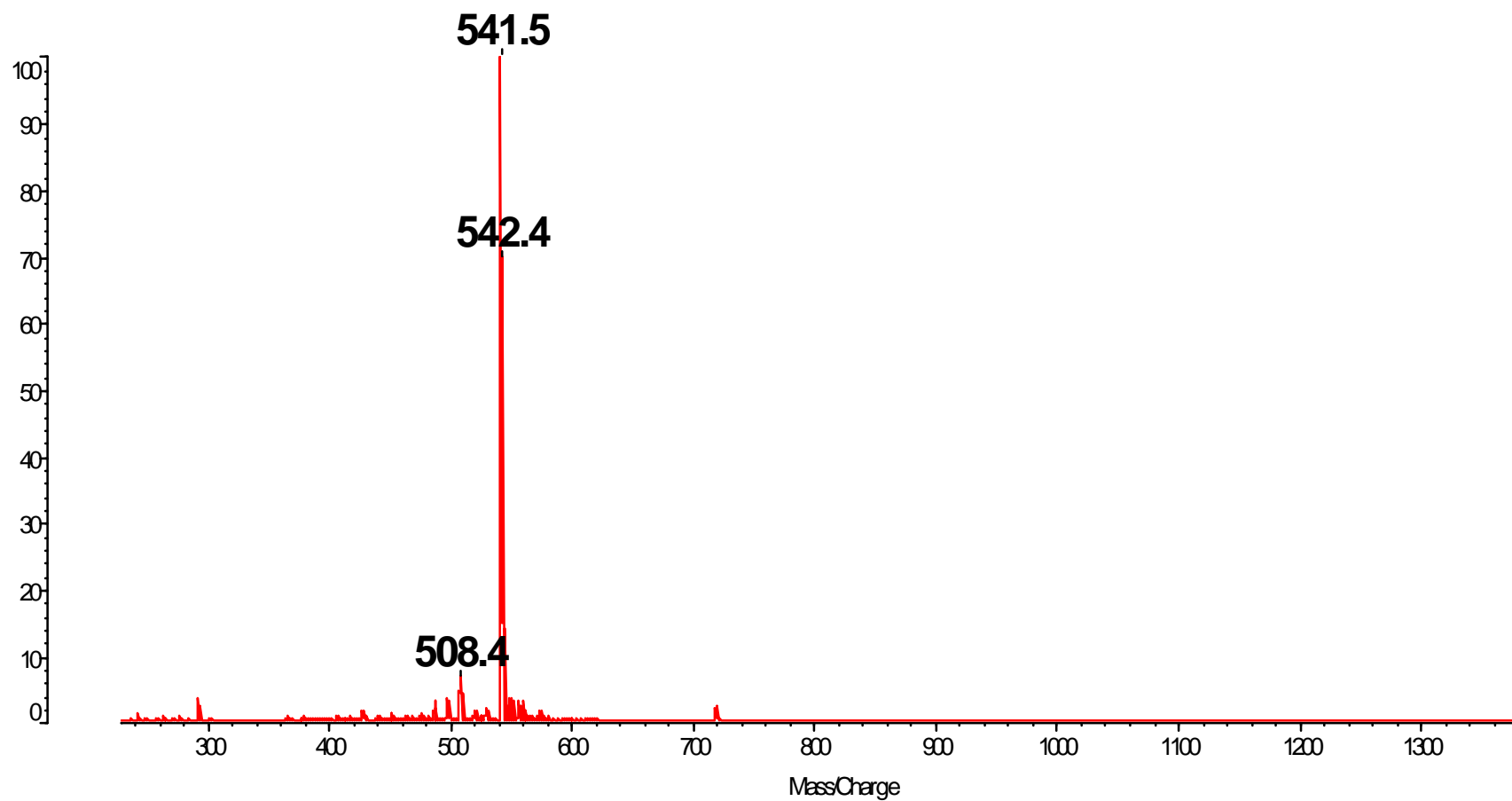


## [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene monoadduct (4)

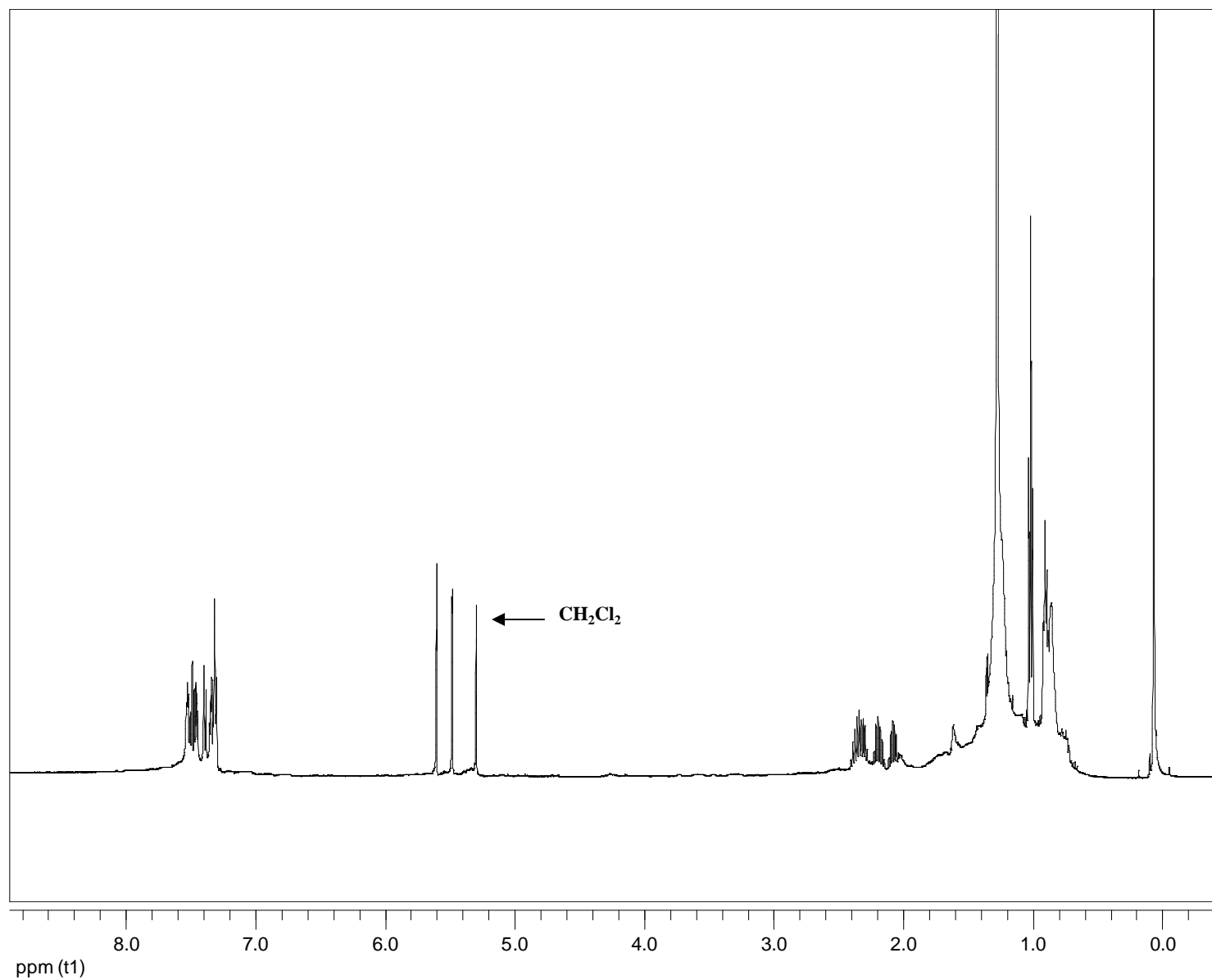


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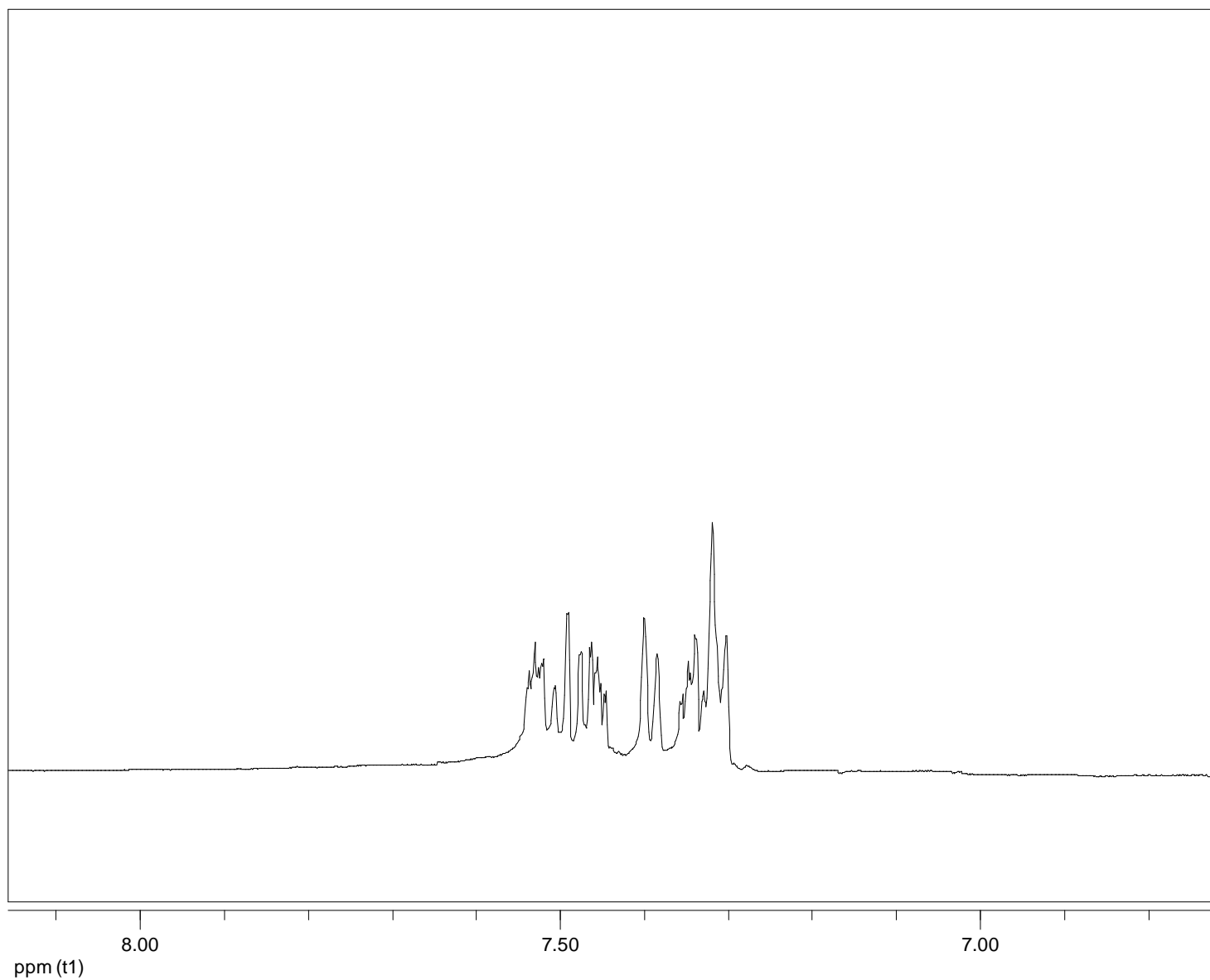
## [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene monoadduct (4)



# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*syn*-10)

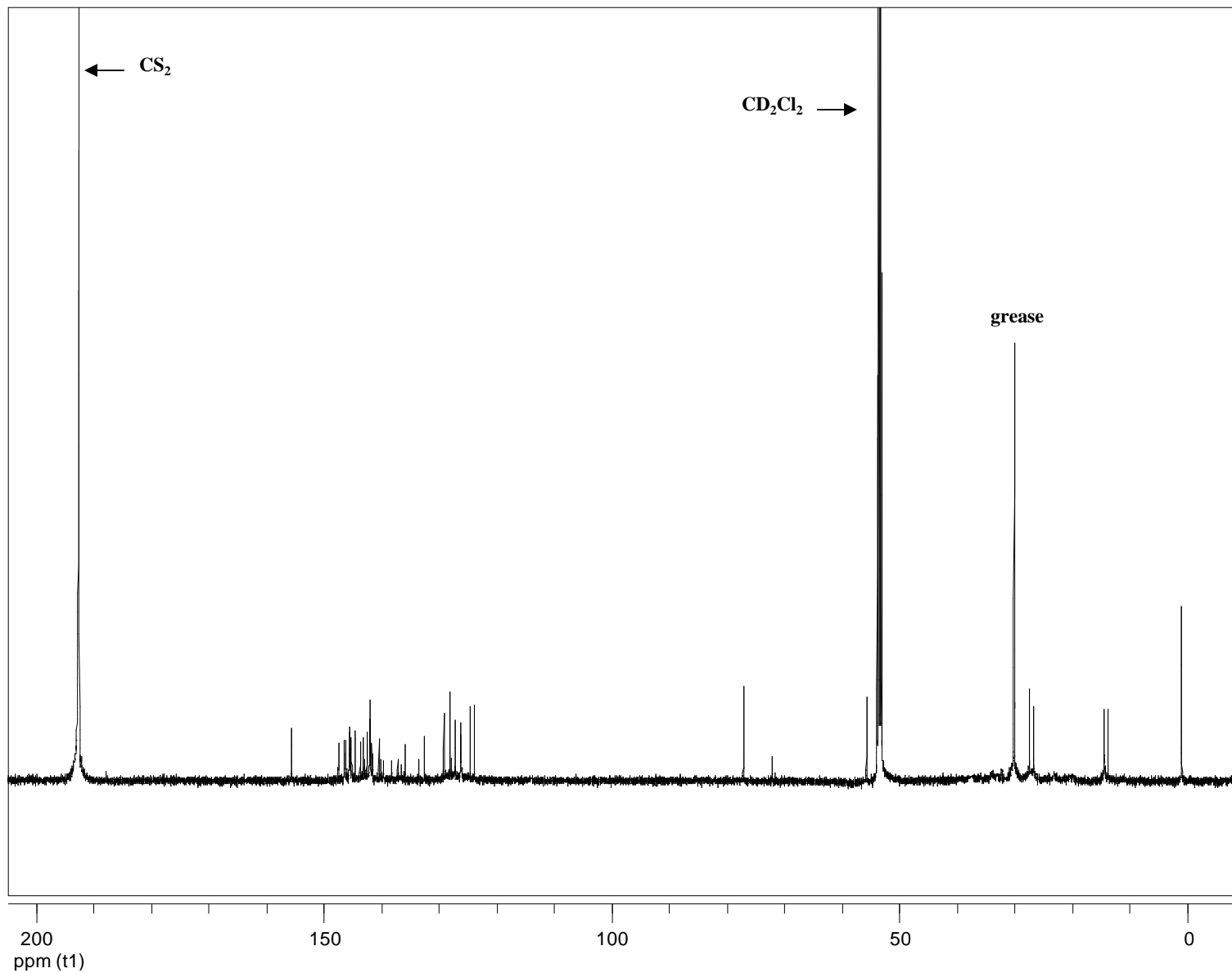


# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*syn*-10)



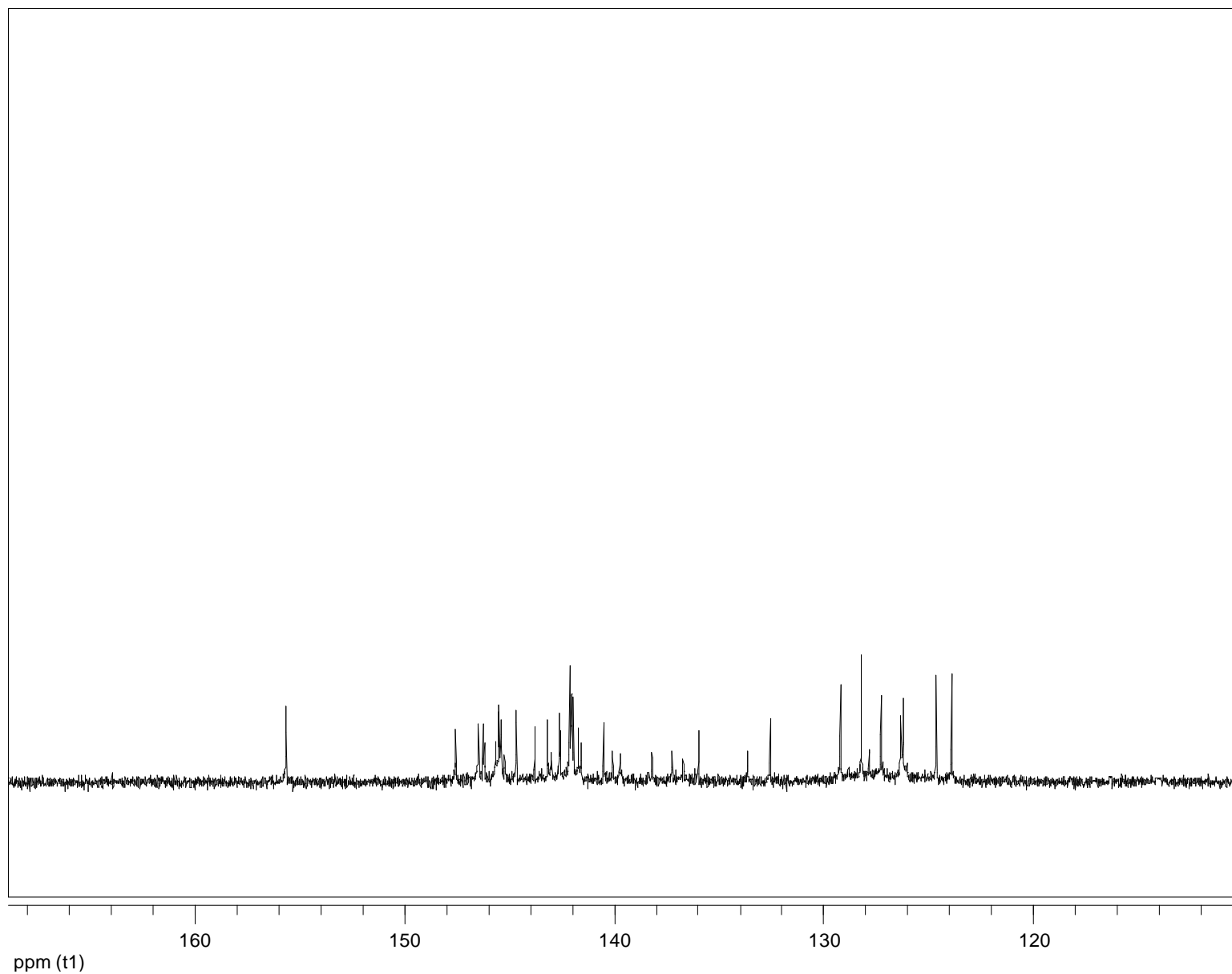
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# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*syn*-10)



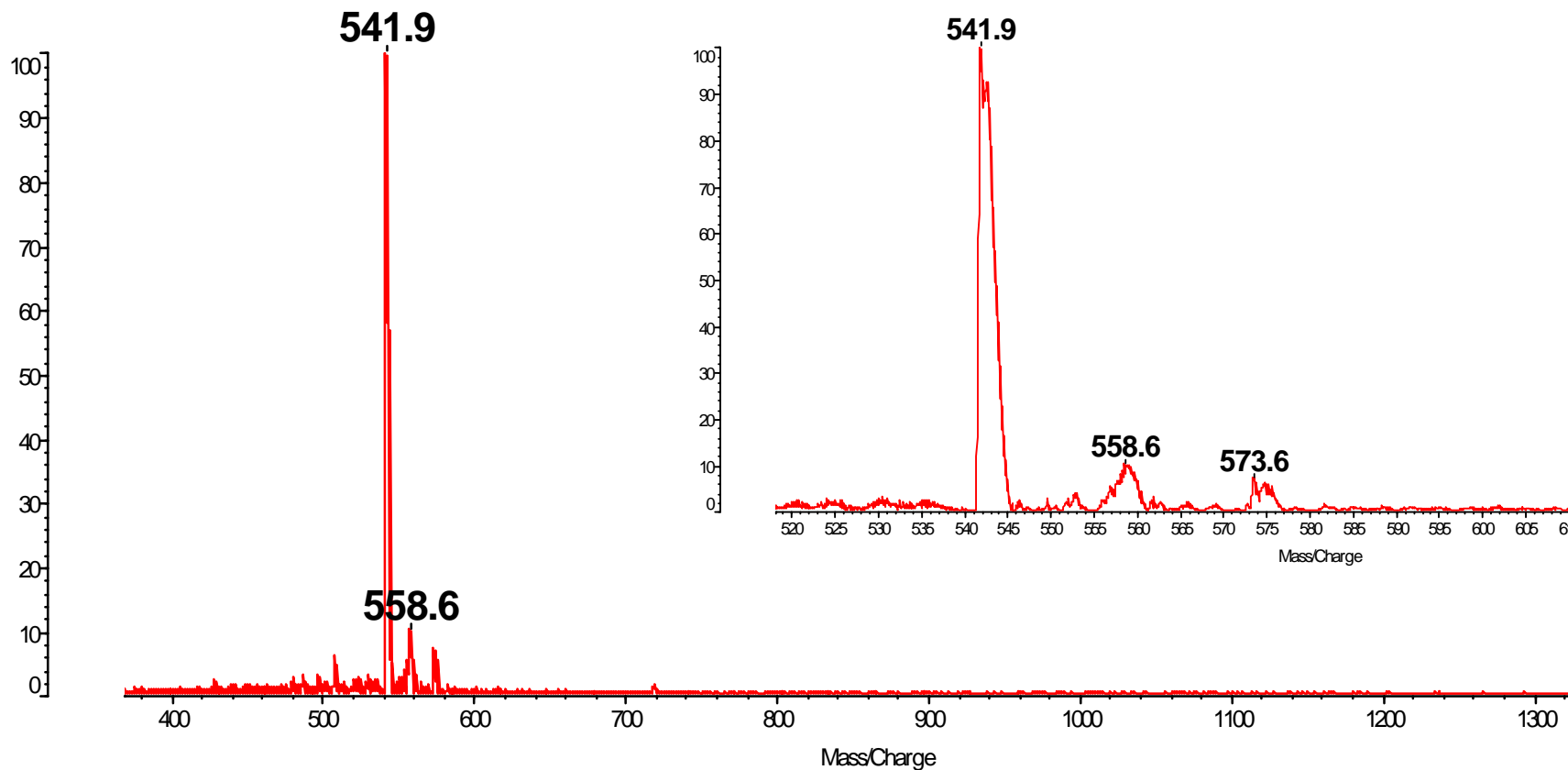


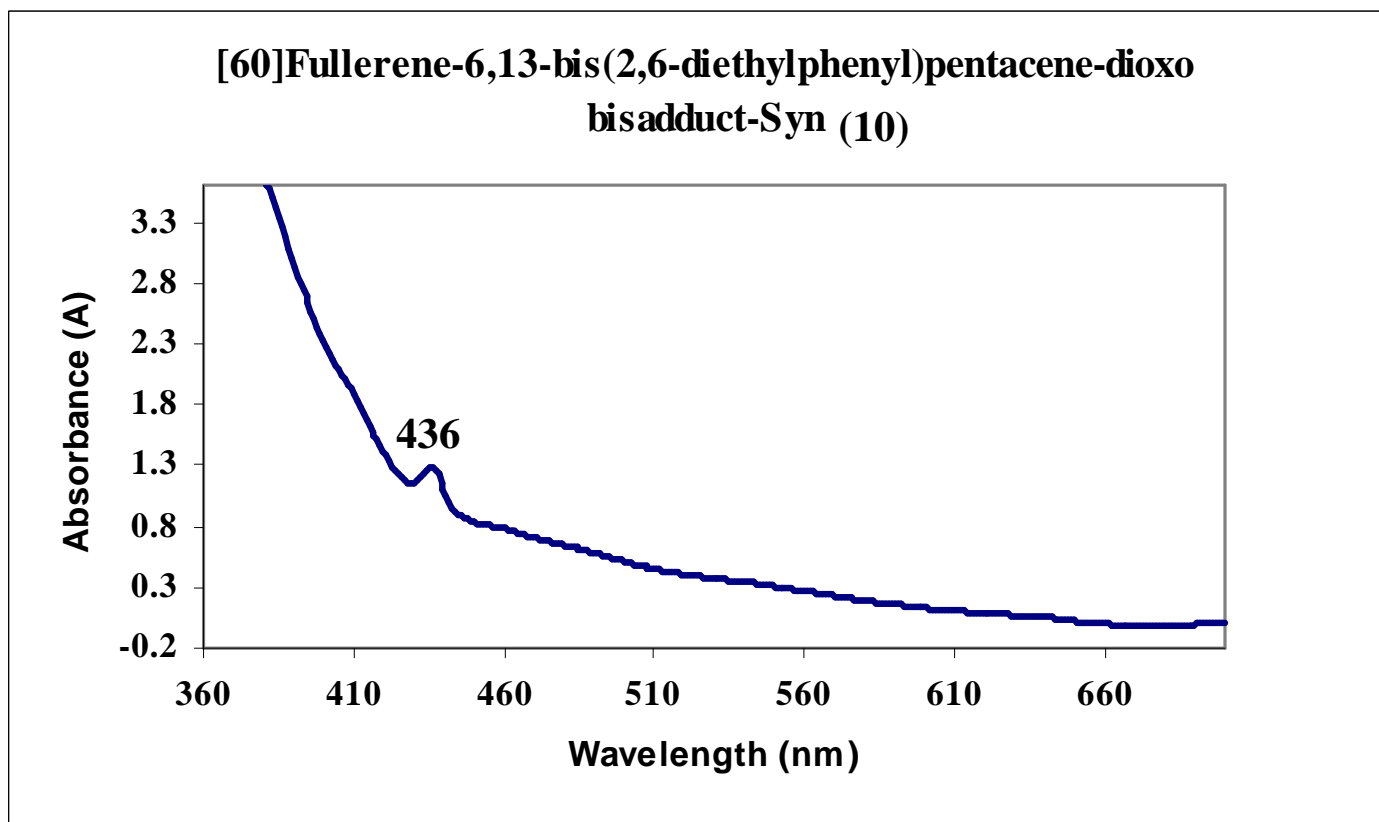
## [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*syn*-10)



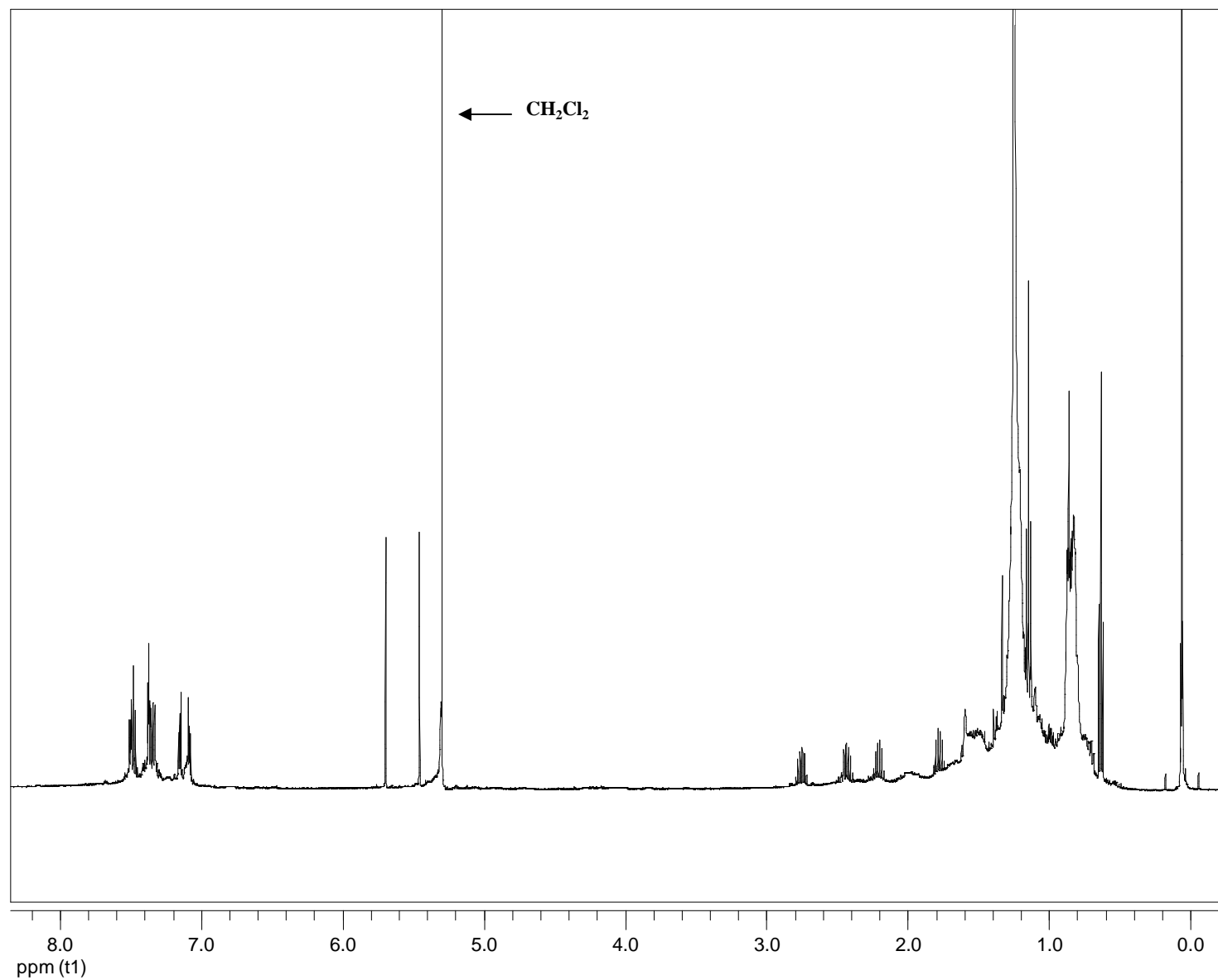
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## [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*syn*-10)

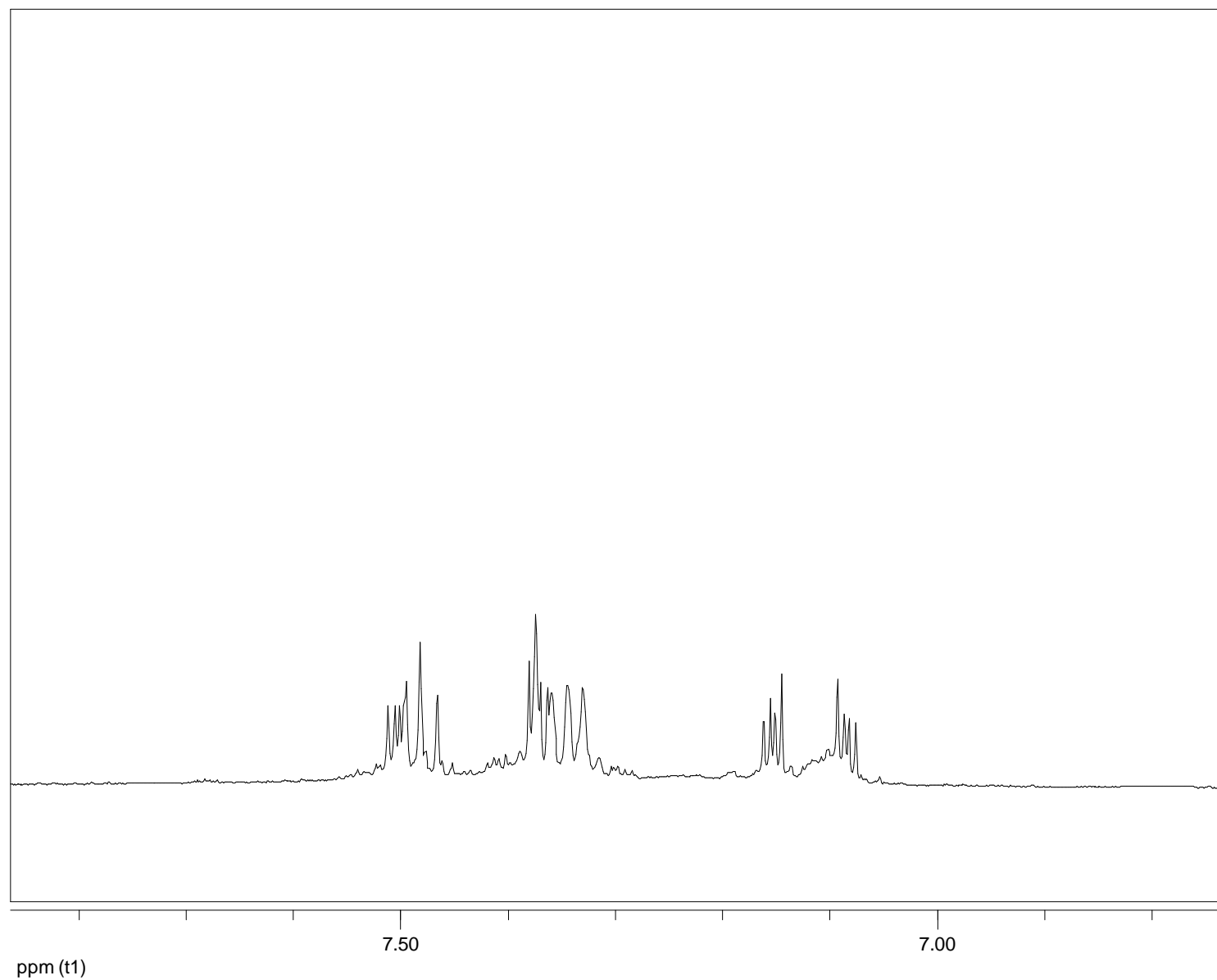




# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*anti*-11)

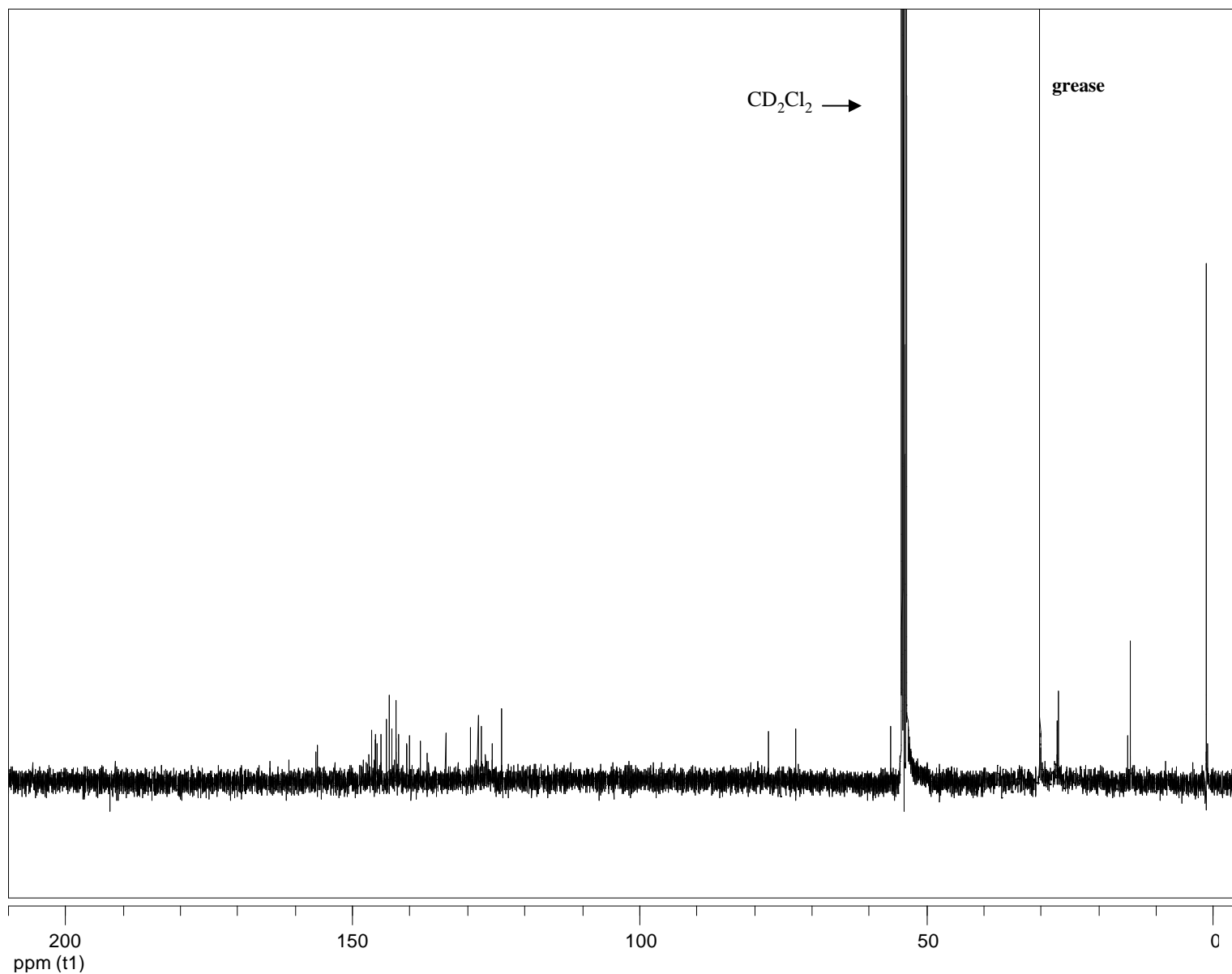


# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*anti*-11)

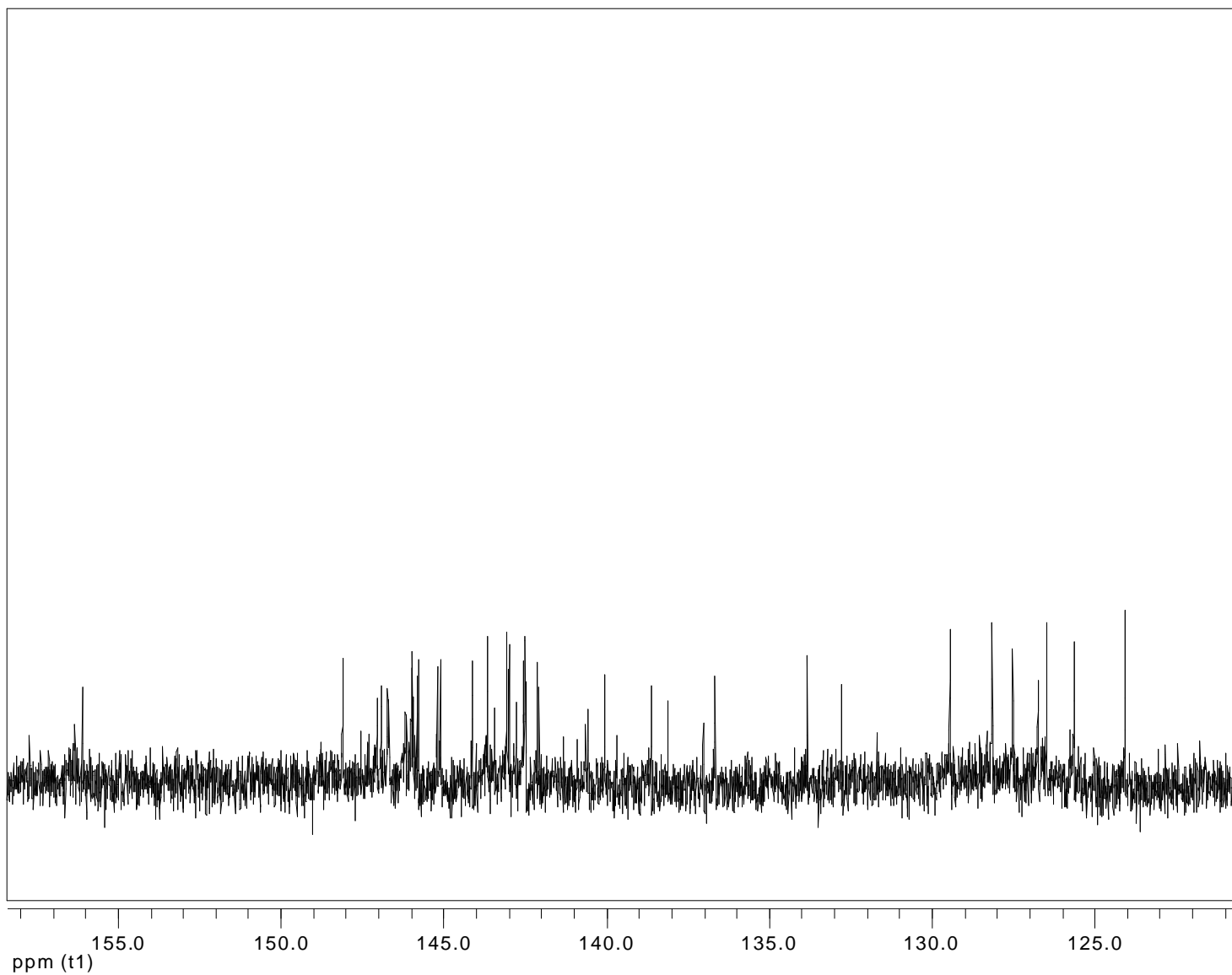


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# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*anti*-11)



# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*anti*-11)



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# [60]Fullerene-6,13-bis(2',6'-diethylphenyl)pentacene-dioxo bisadduct (*anti*-11)

