

**Sc(OTf)₃-Catalyzed Efficient Synthesis of β , β -Bisindolyl Ketones by the Double
Indolylation of Acetic Acid 2-Methylene-3-oxobutyl Ester**

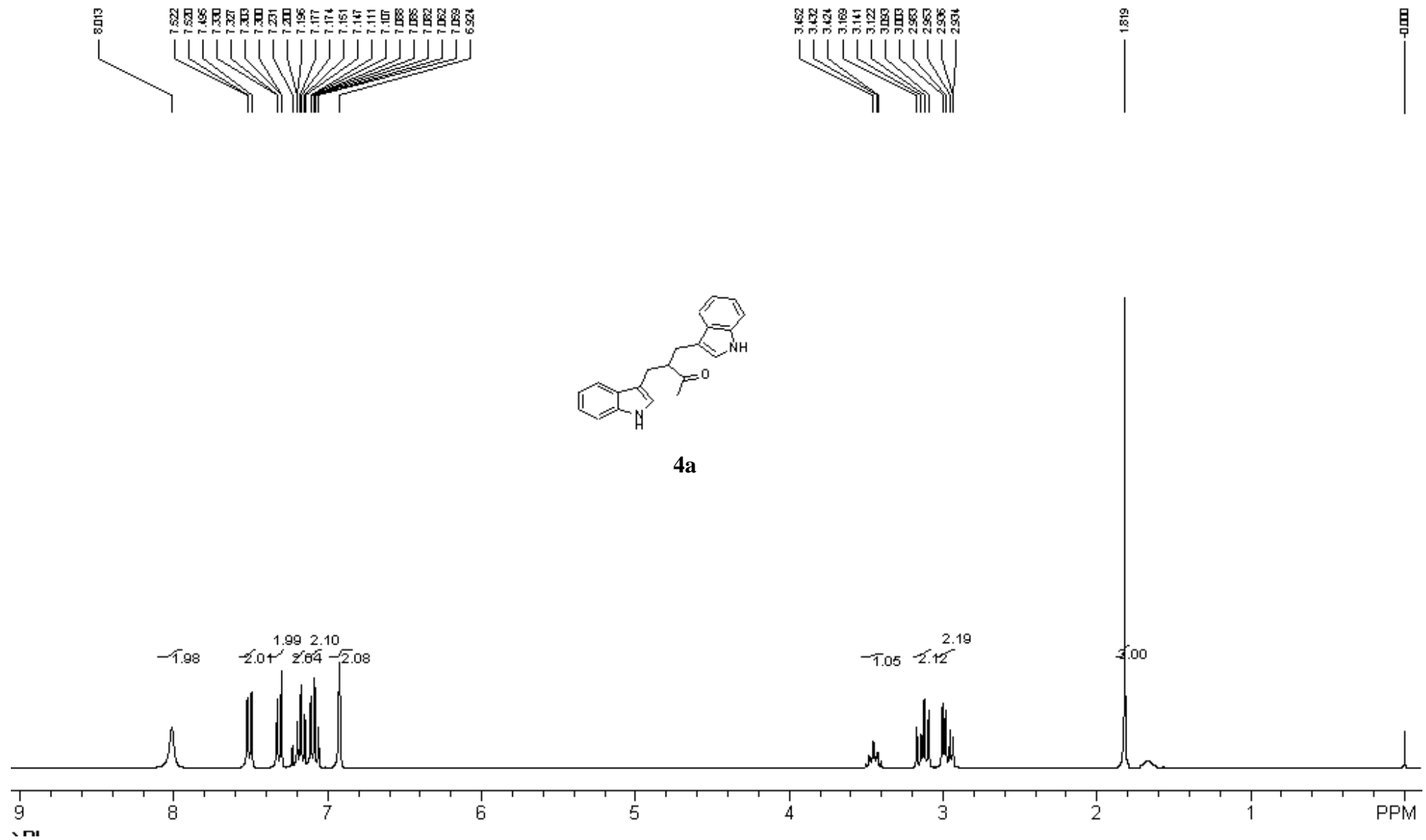
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Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, P. R.*

China

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Supporting Information



214.213

136.120

127.087

122.284

121.833

119.184

118.827

113.127

111.156

77.415

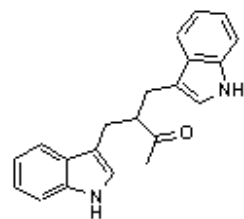
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76.588

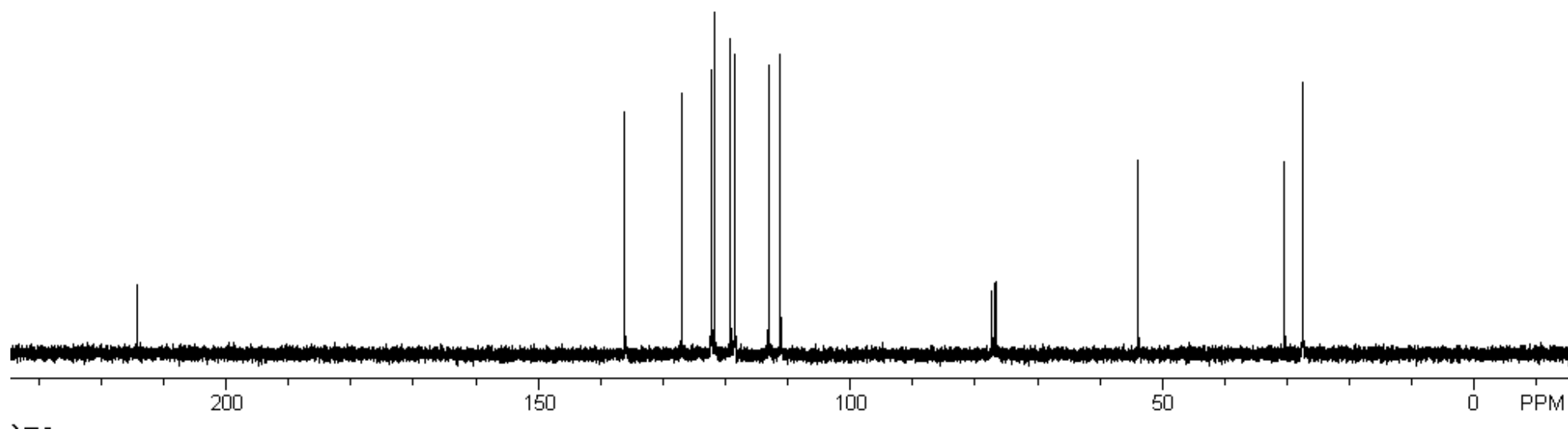
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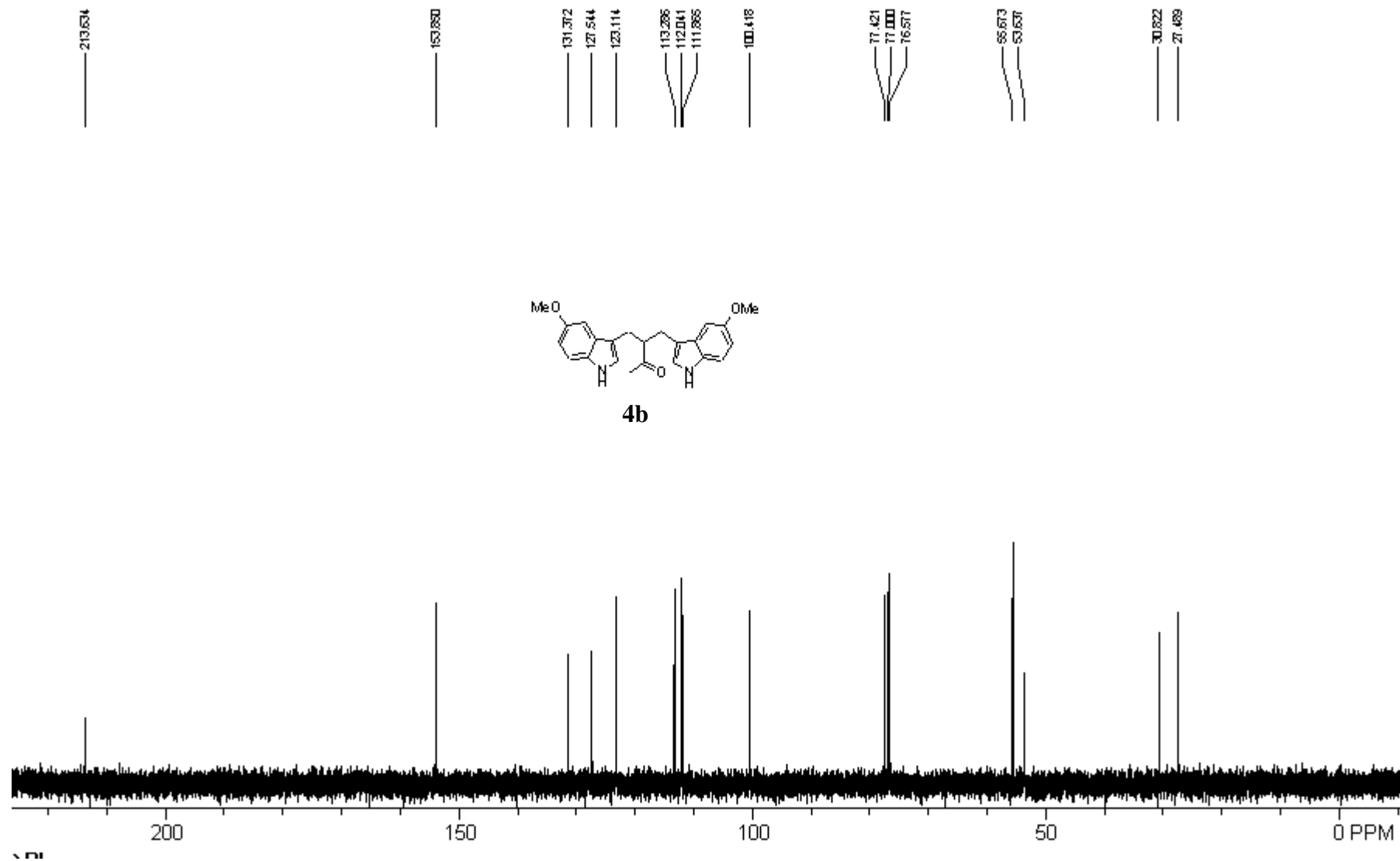
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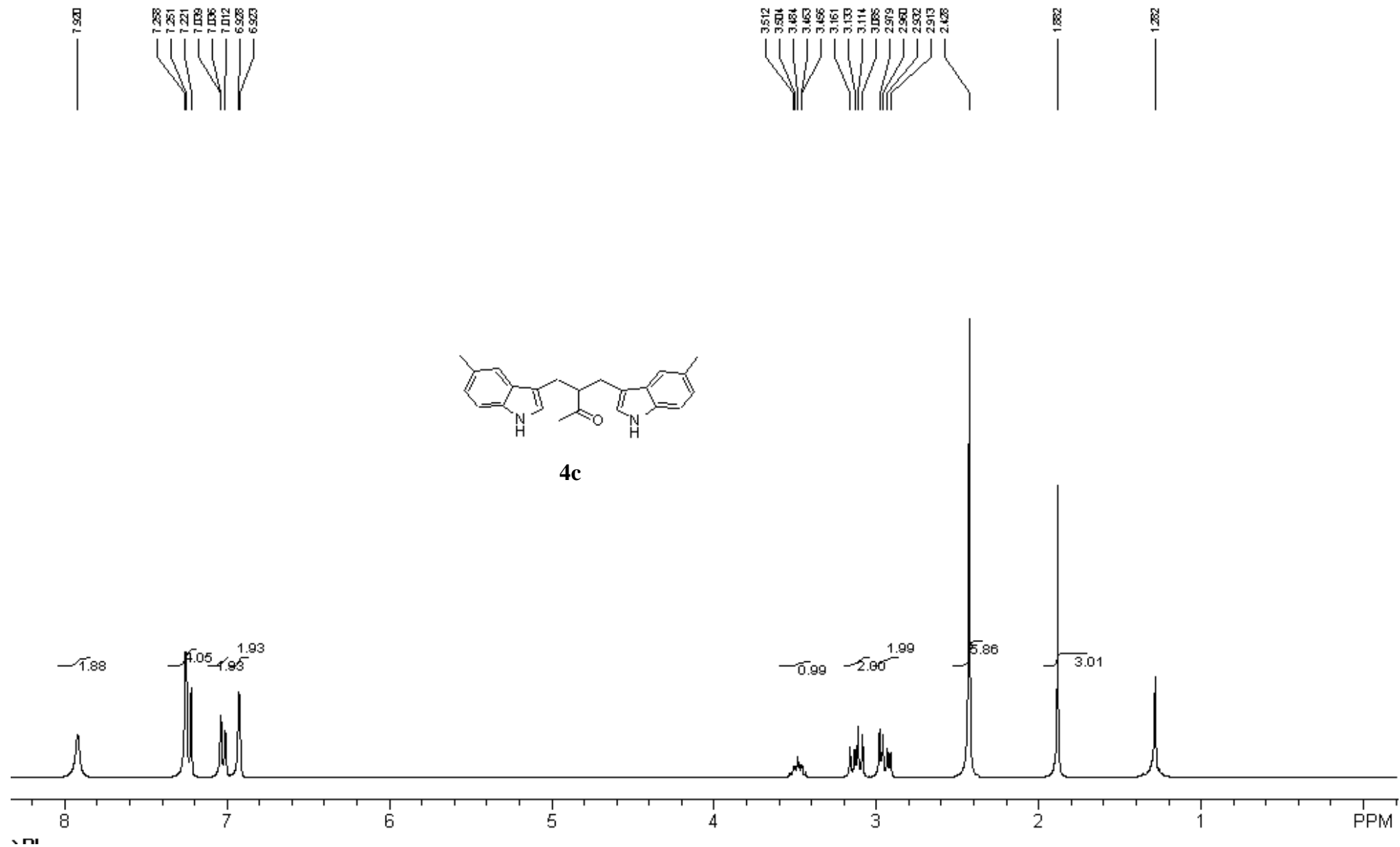
27.641



4a







213.810

134.576

128.479

127.369

123.576

122.403

118.368

113.088

110.796

77.421

77.000

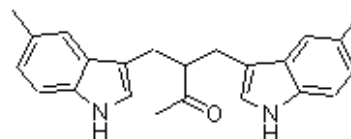
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53.722

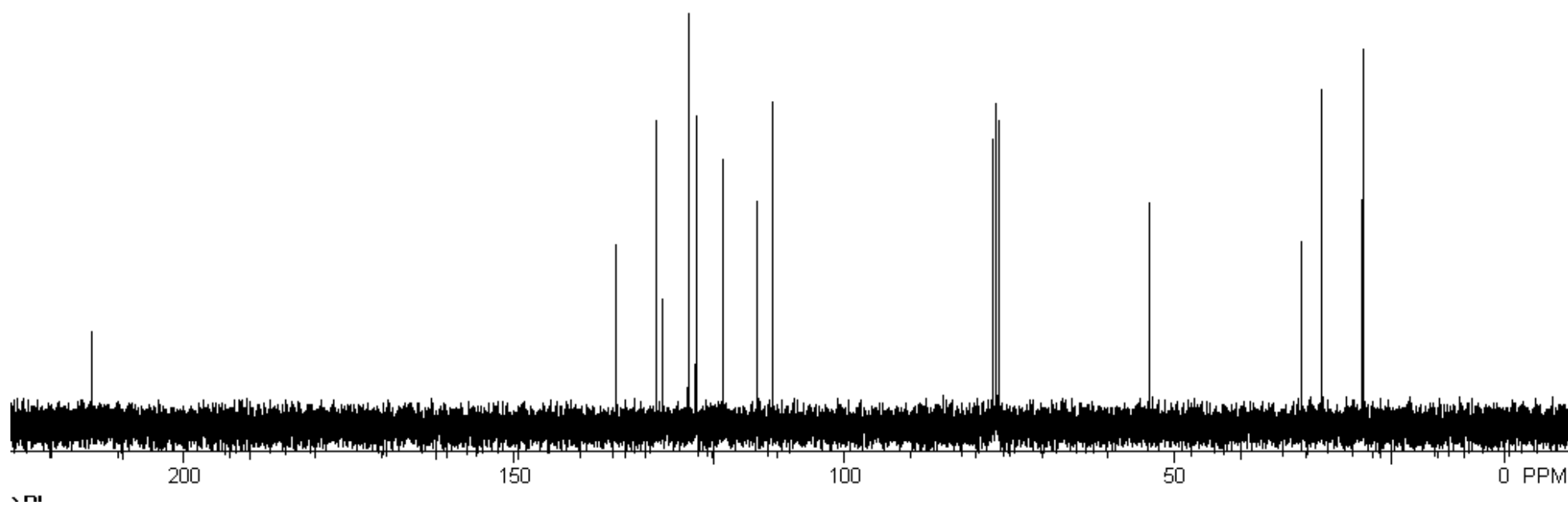
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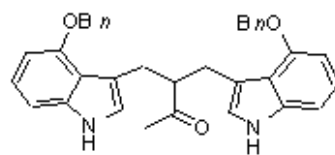
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21.457

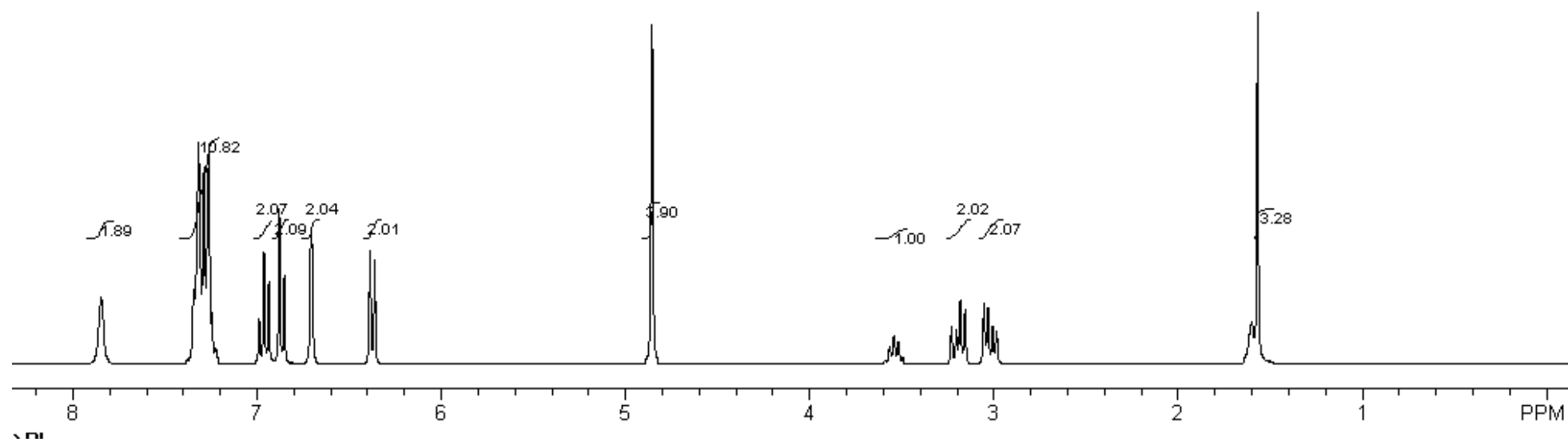


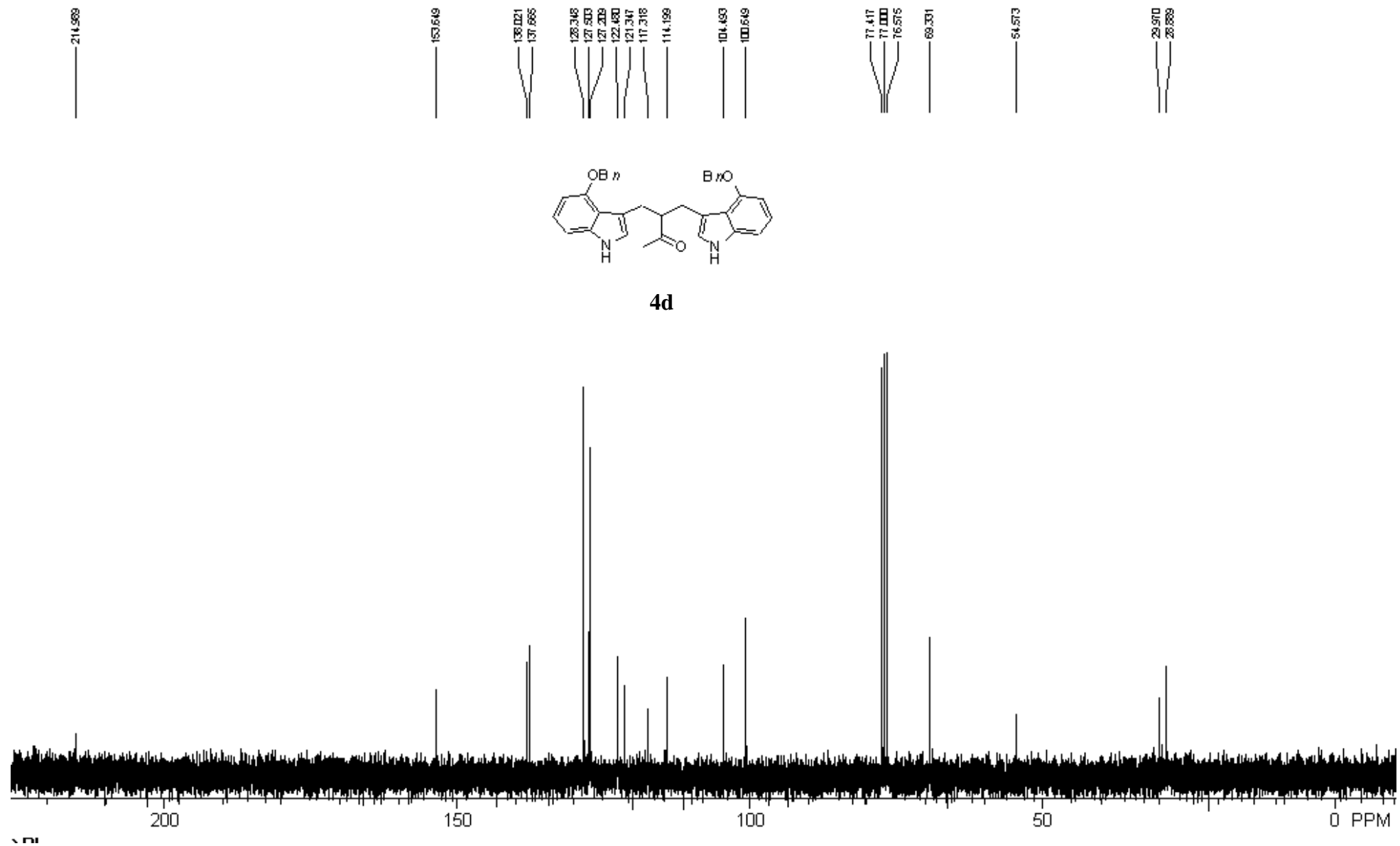
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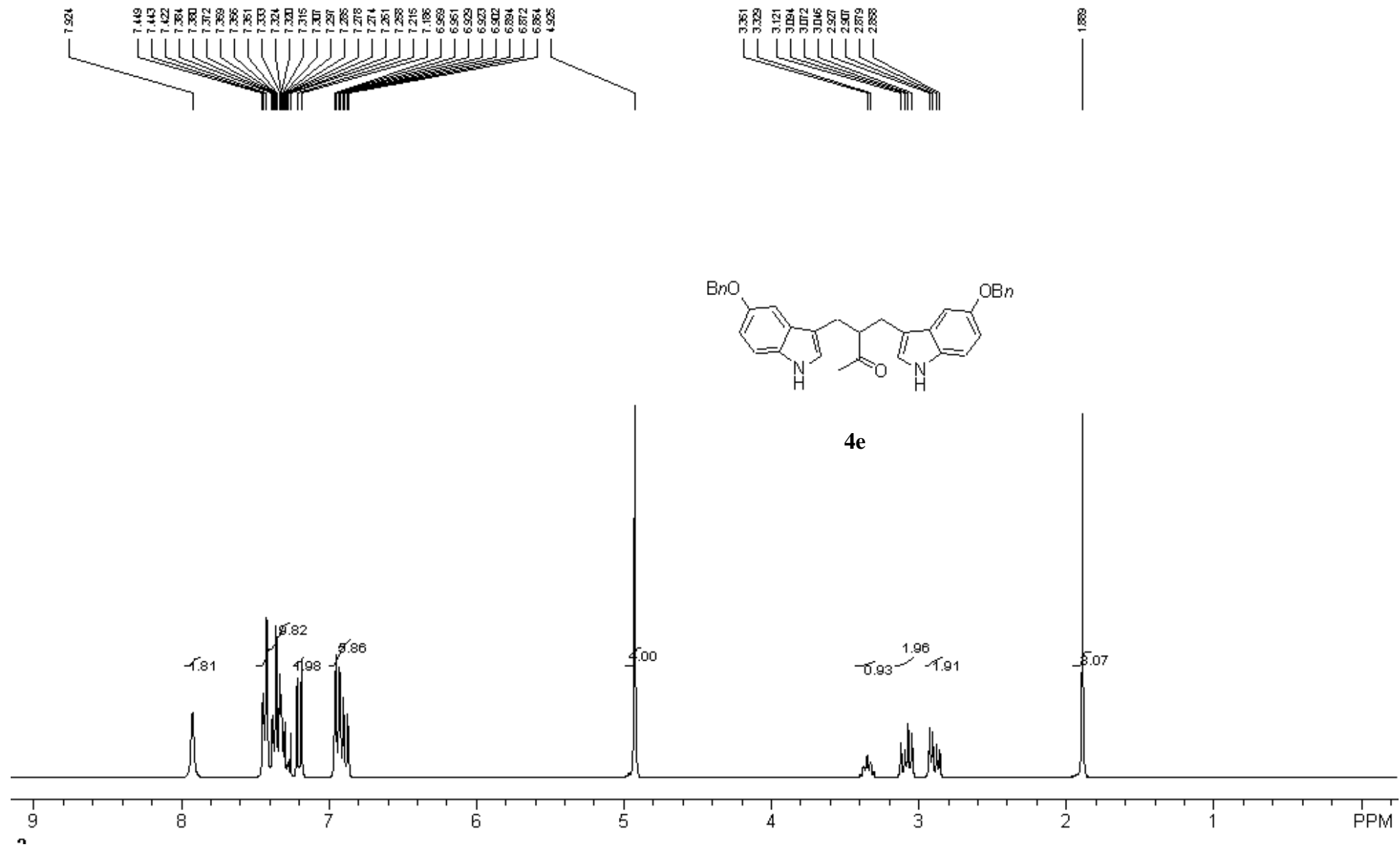


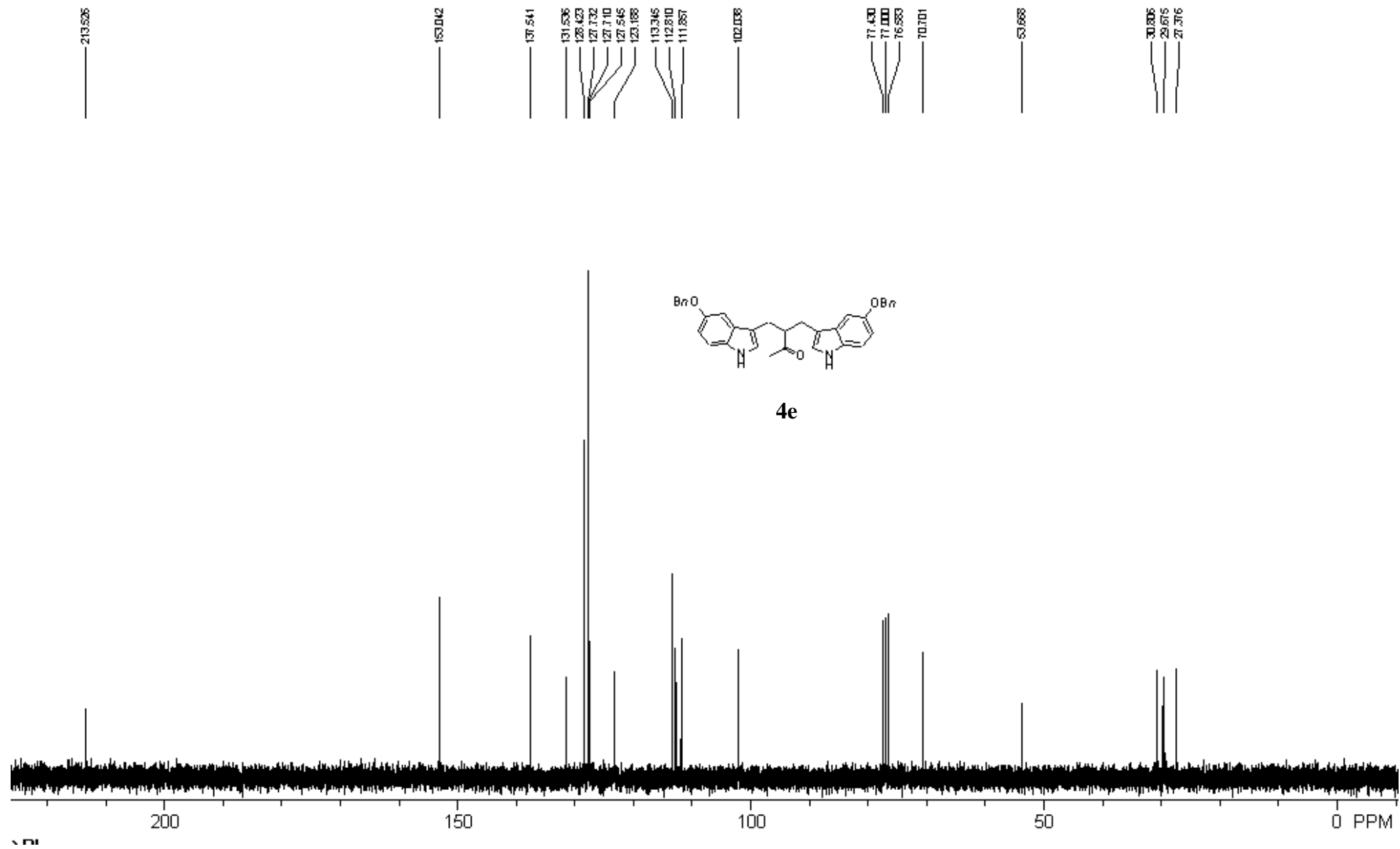


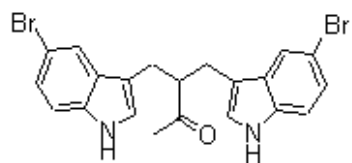
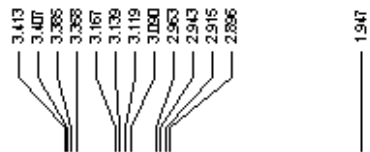
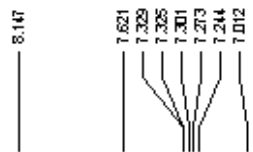
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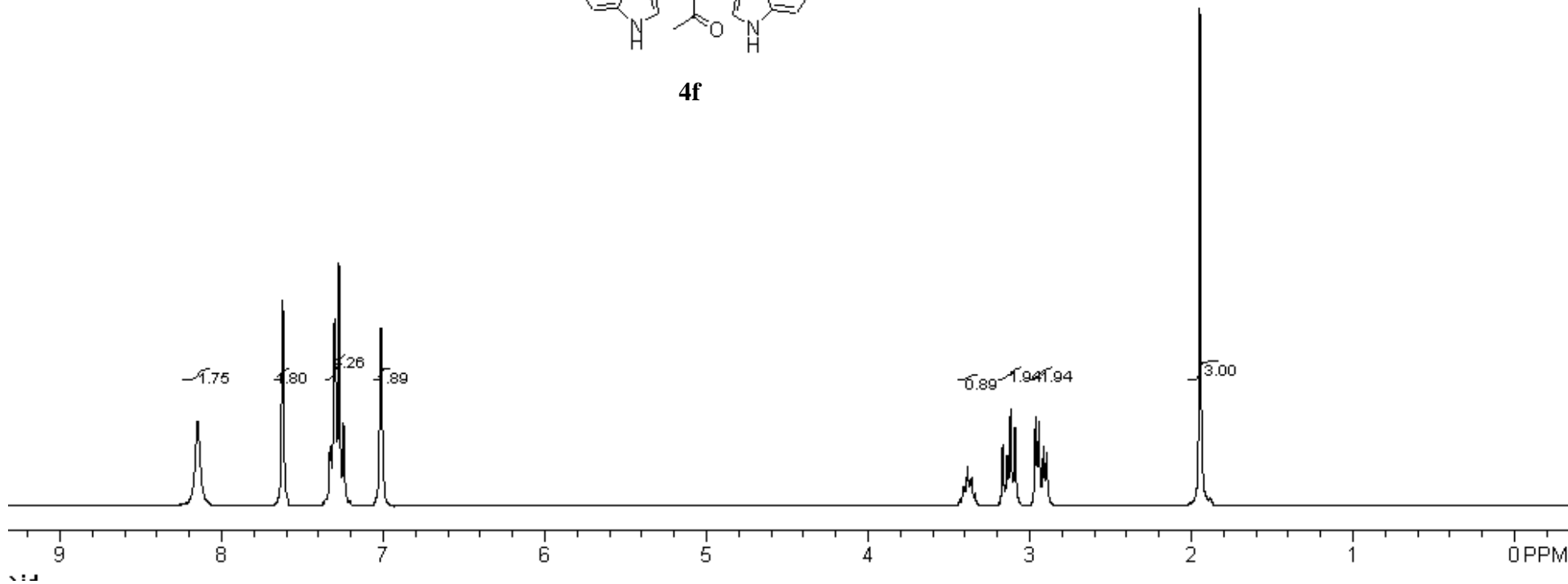


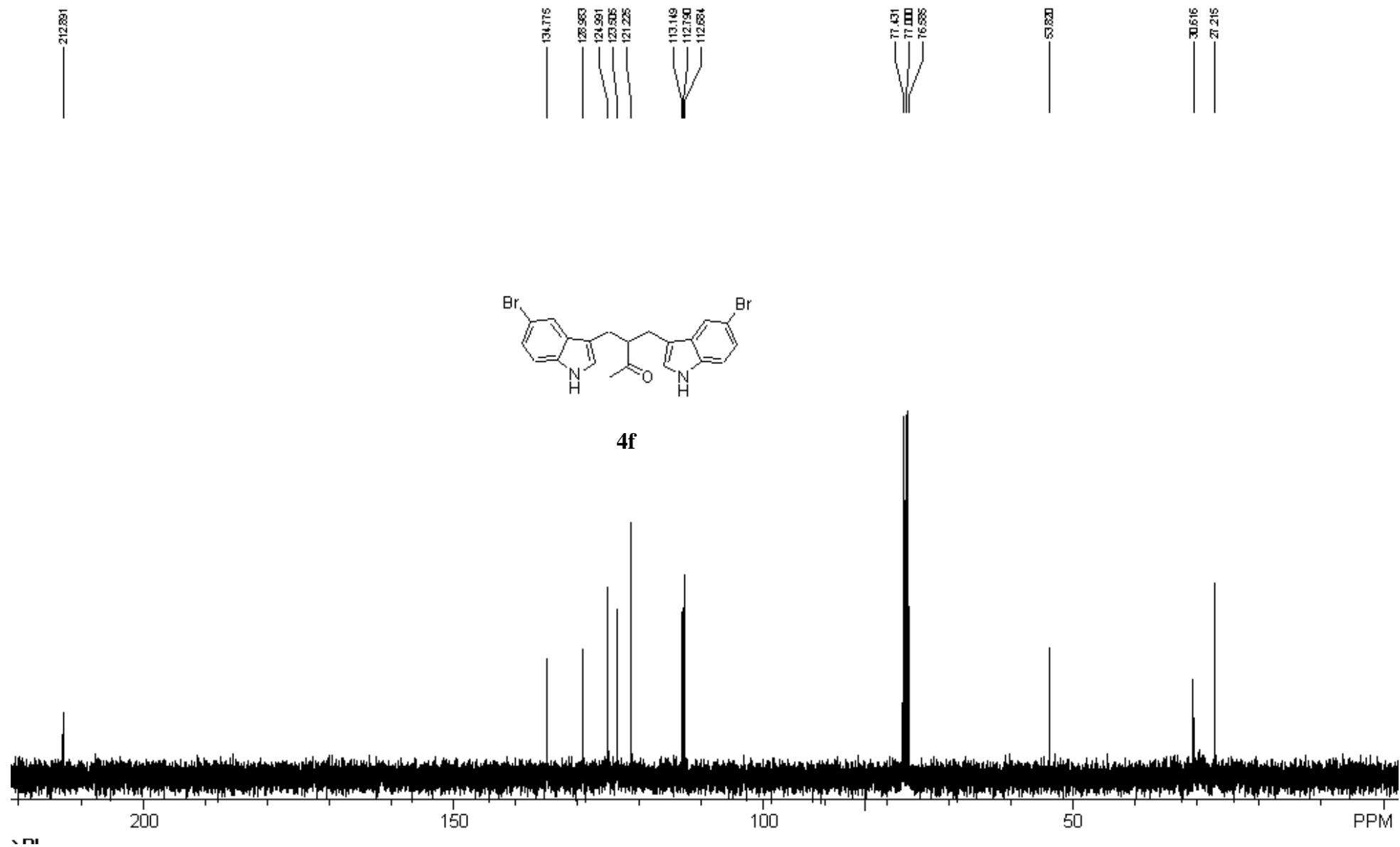


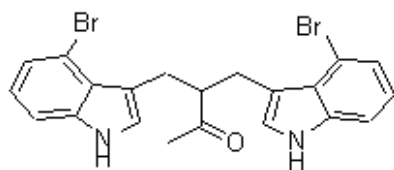




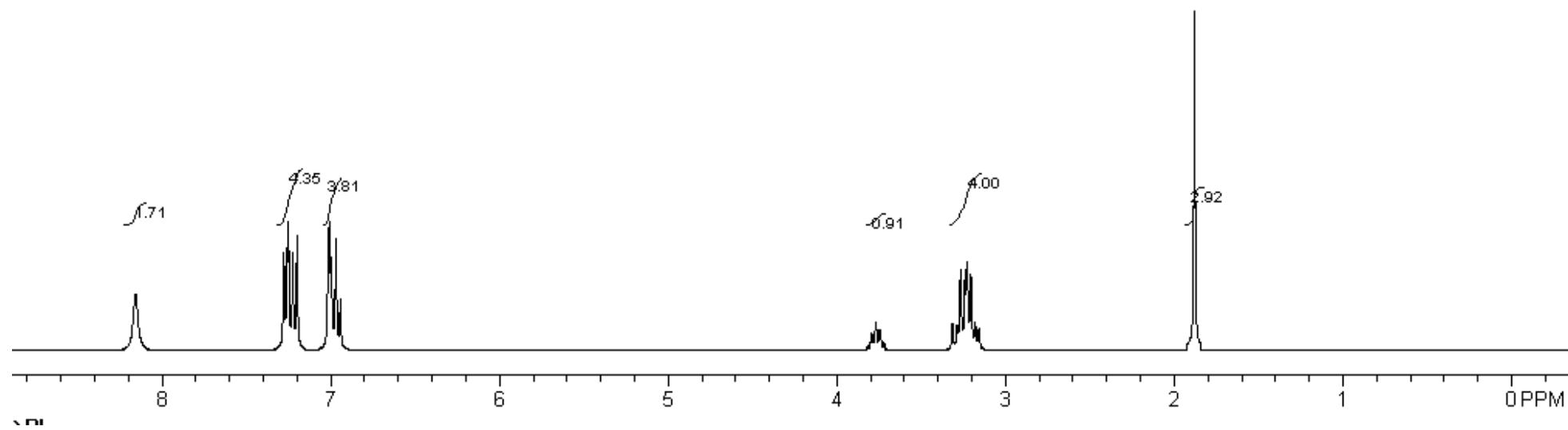
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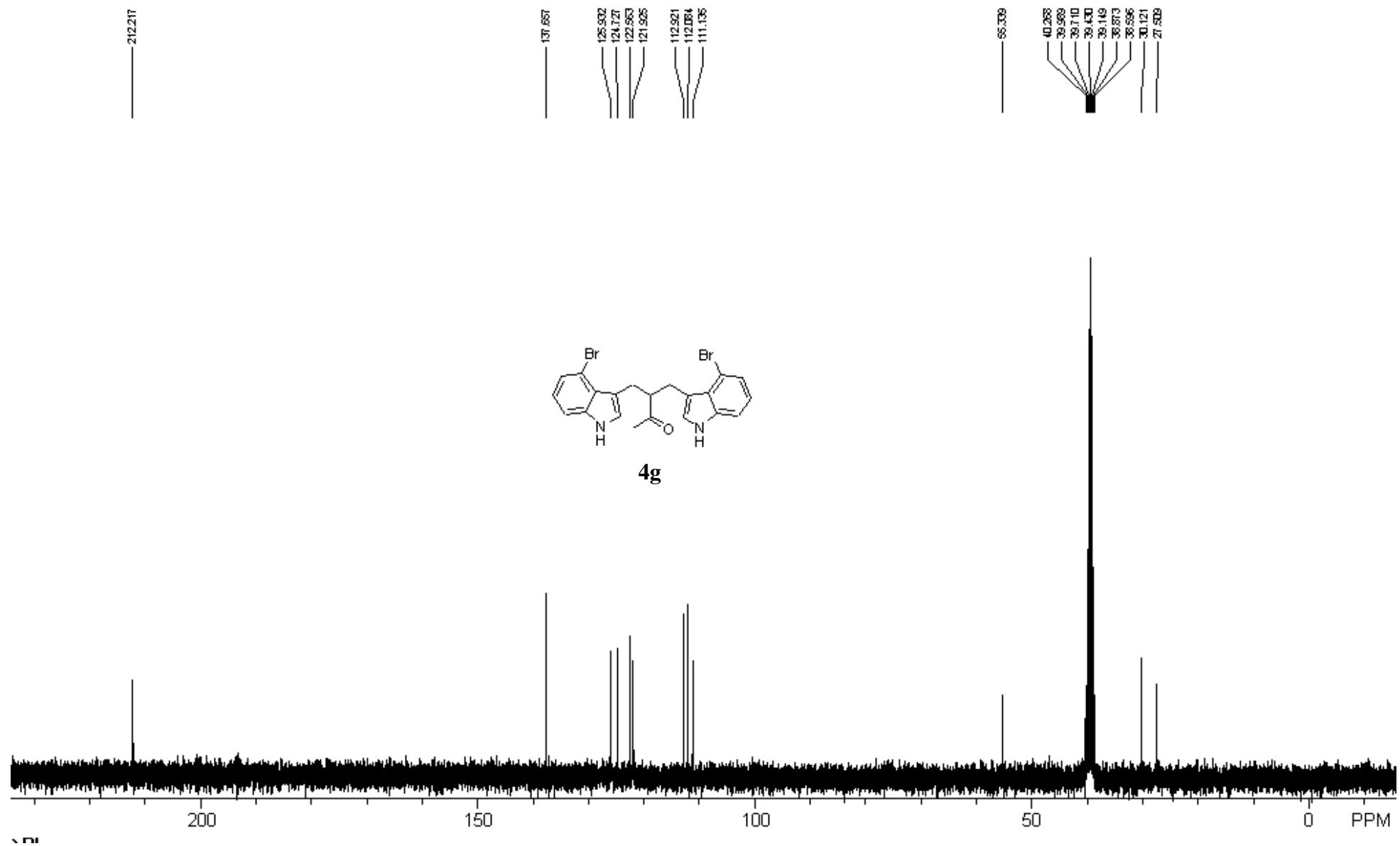


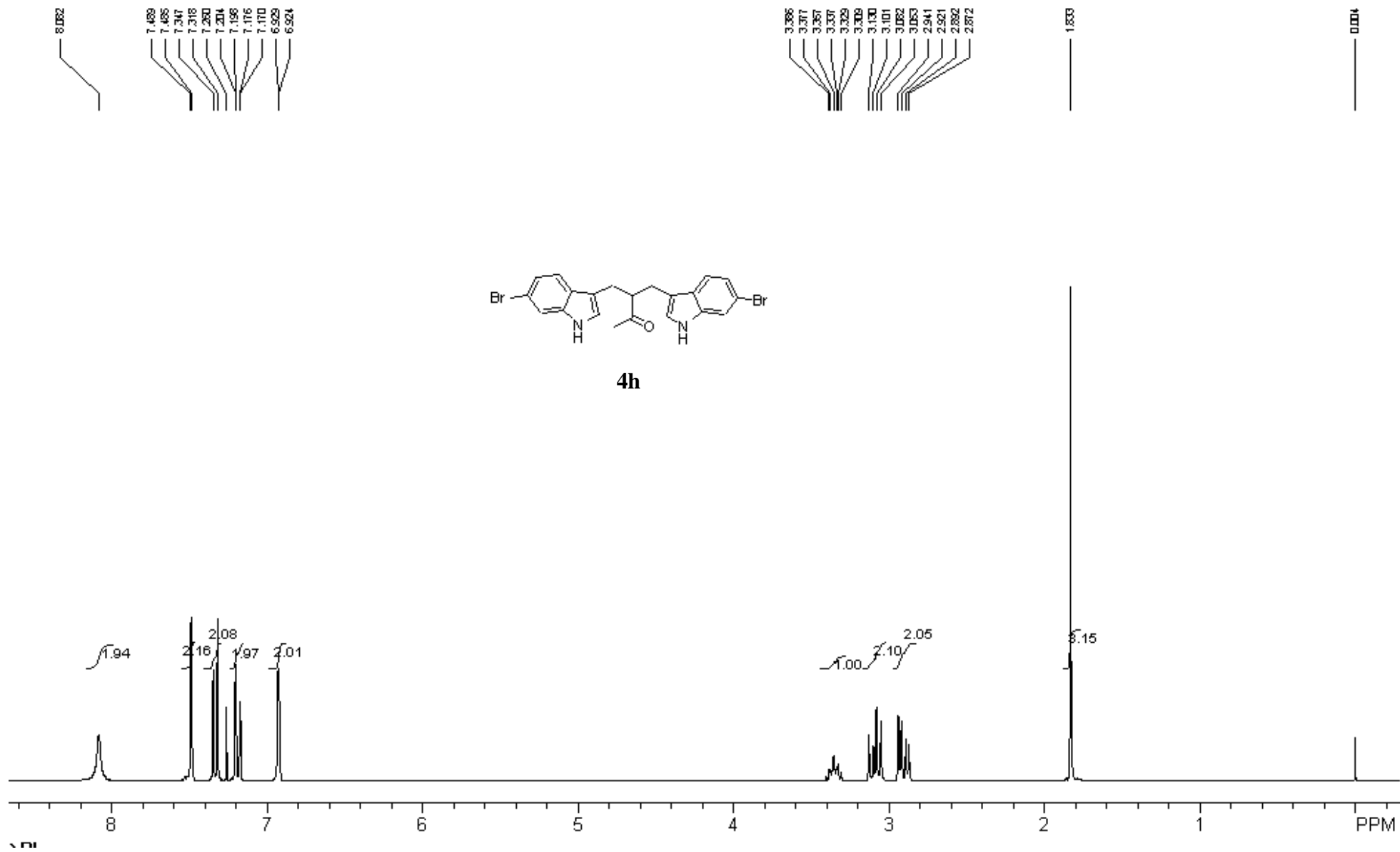


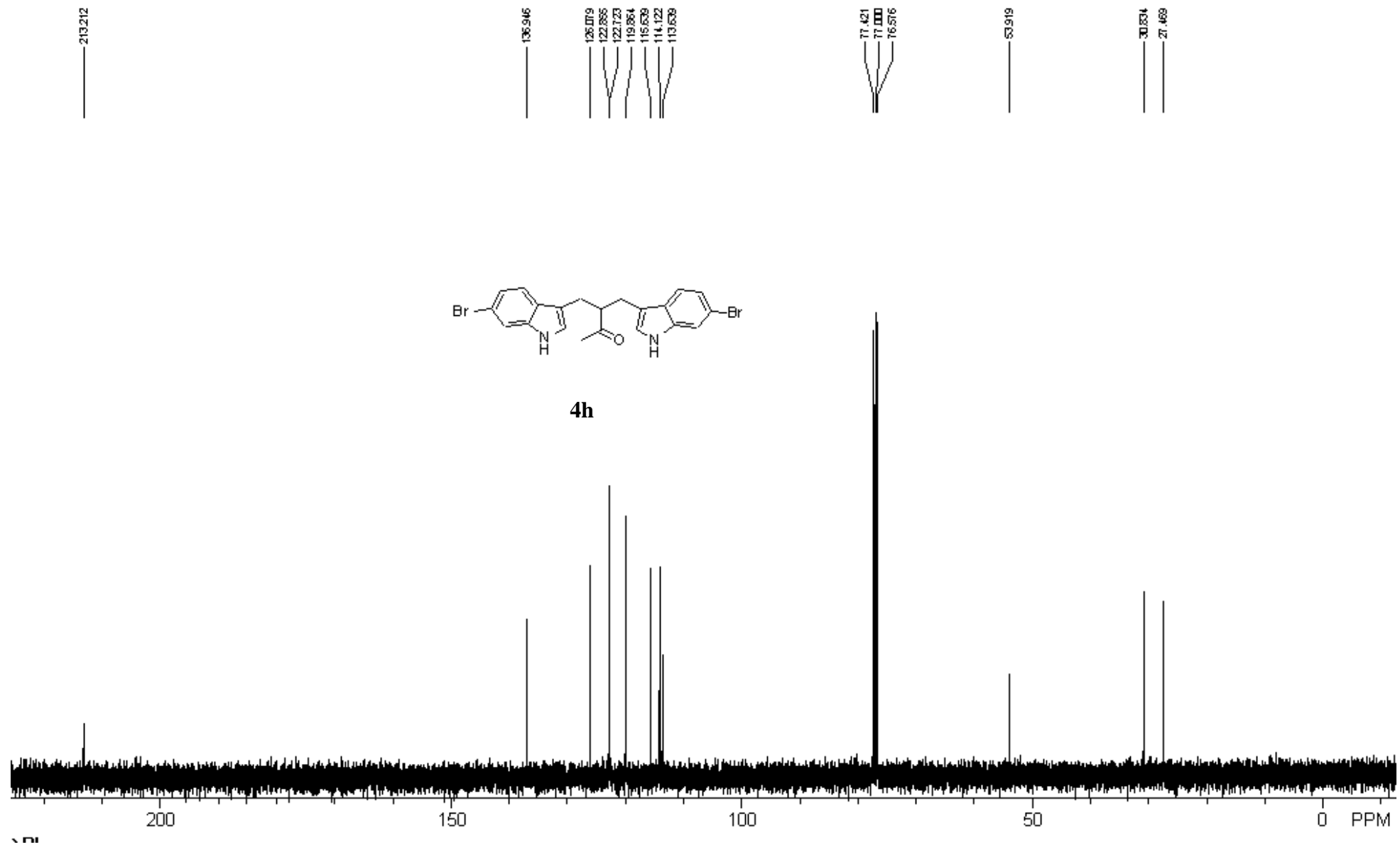


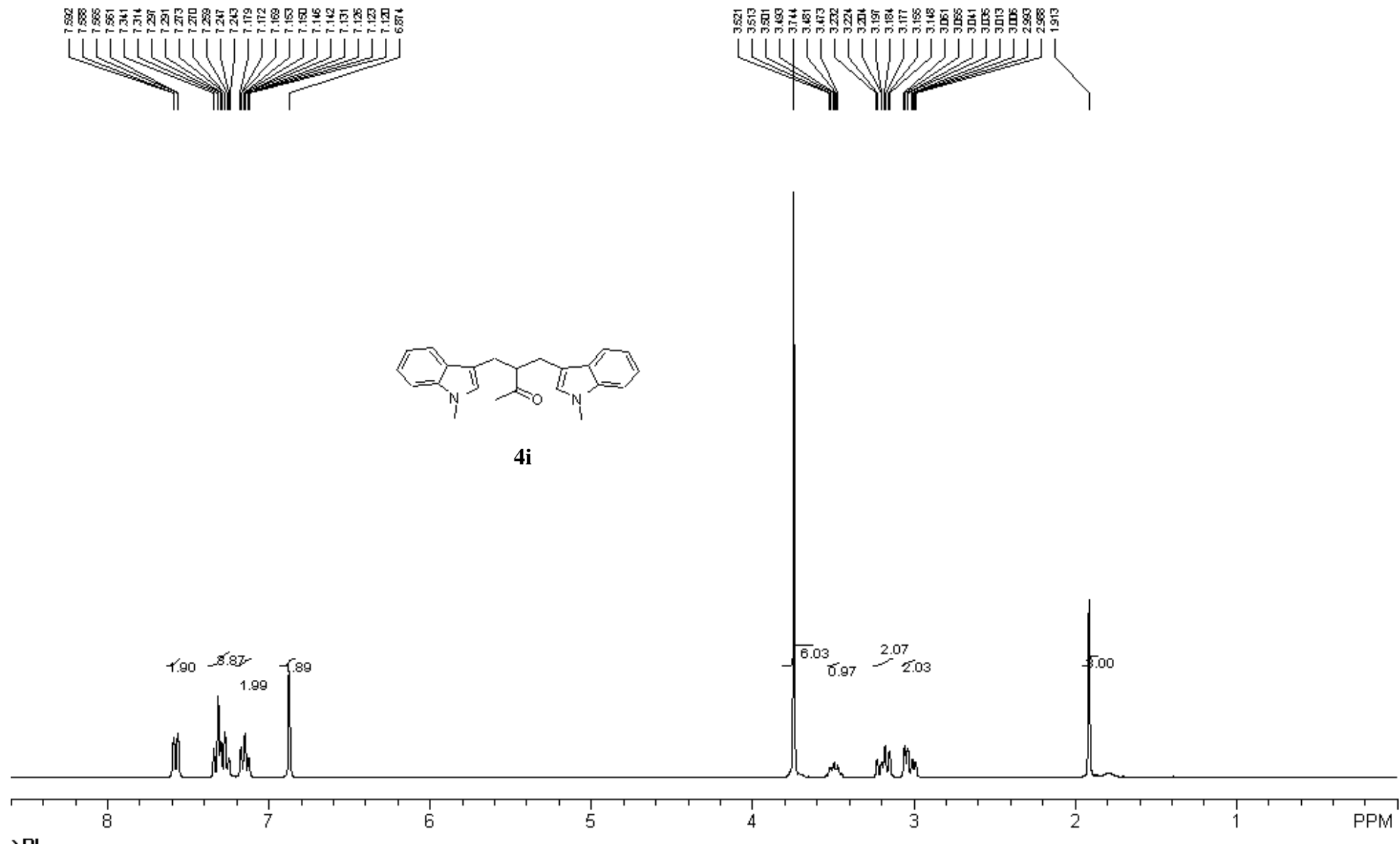
4g

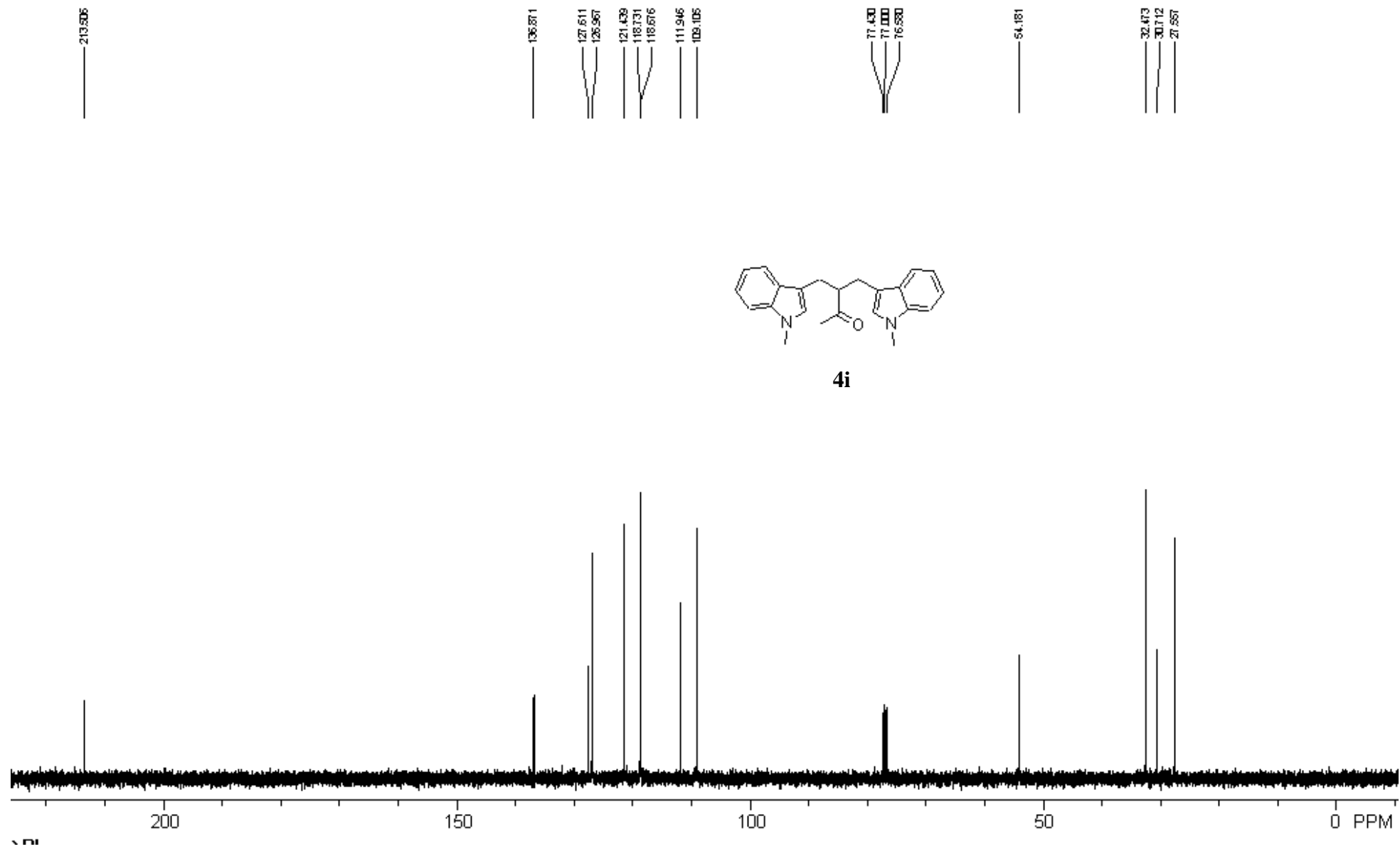












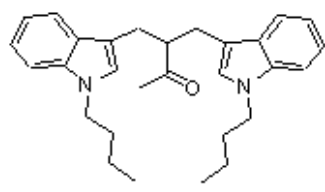
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7.465
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7.276
7.209
7.205
7.185
7.182
7.155
7.155
7.089
7.085
7.062
7.039
7.035
6.884

4.052
4.030
4.005

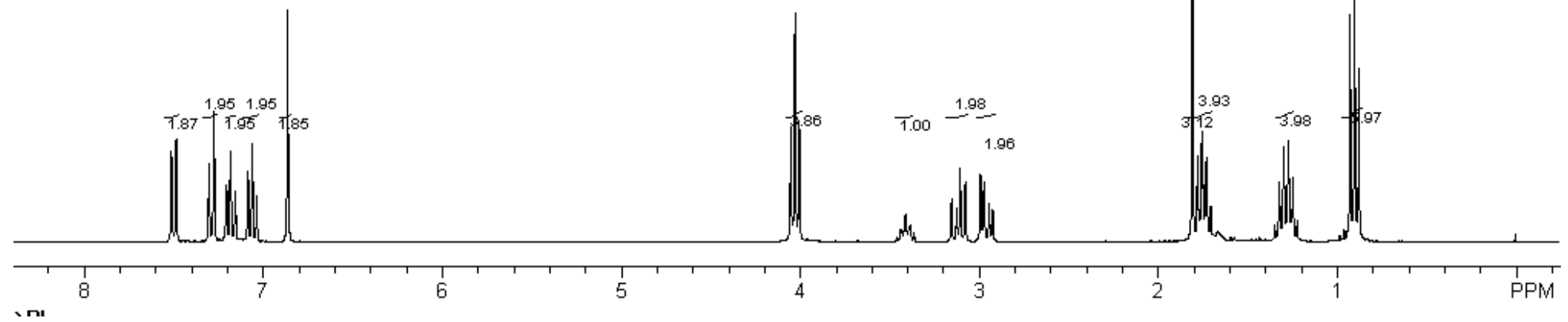
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3.365
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2.913
2.945
2.925

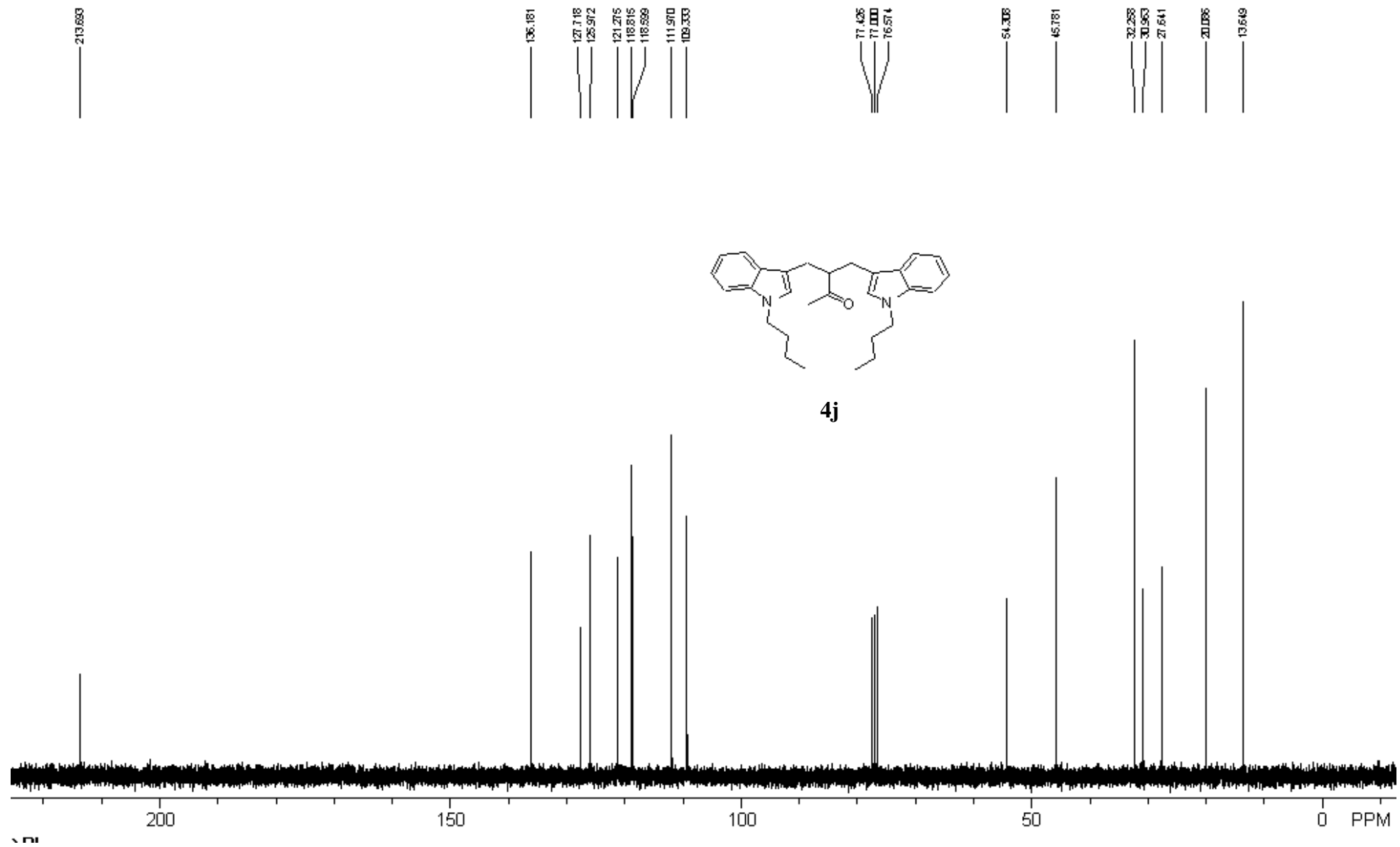
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1.225
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0.904
0.879

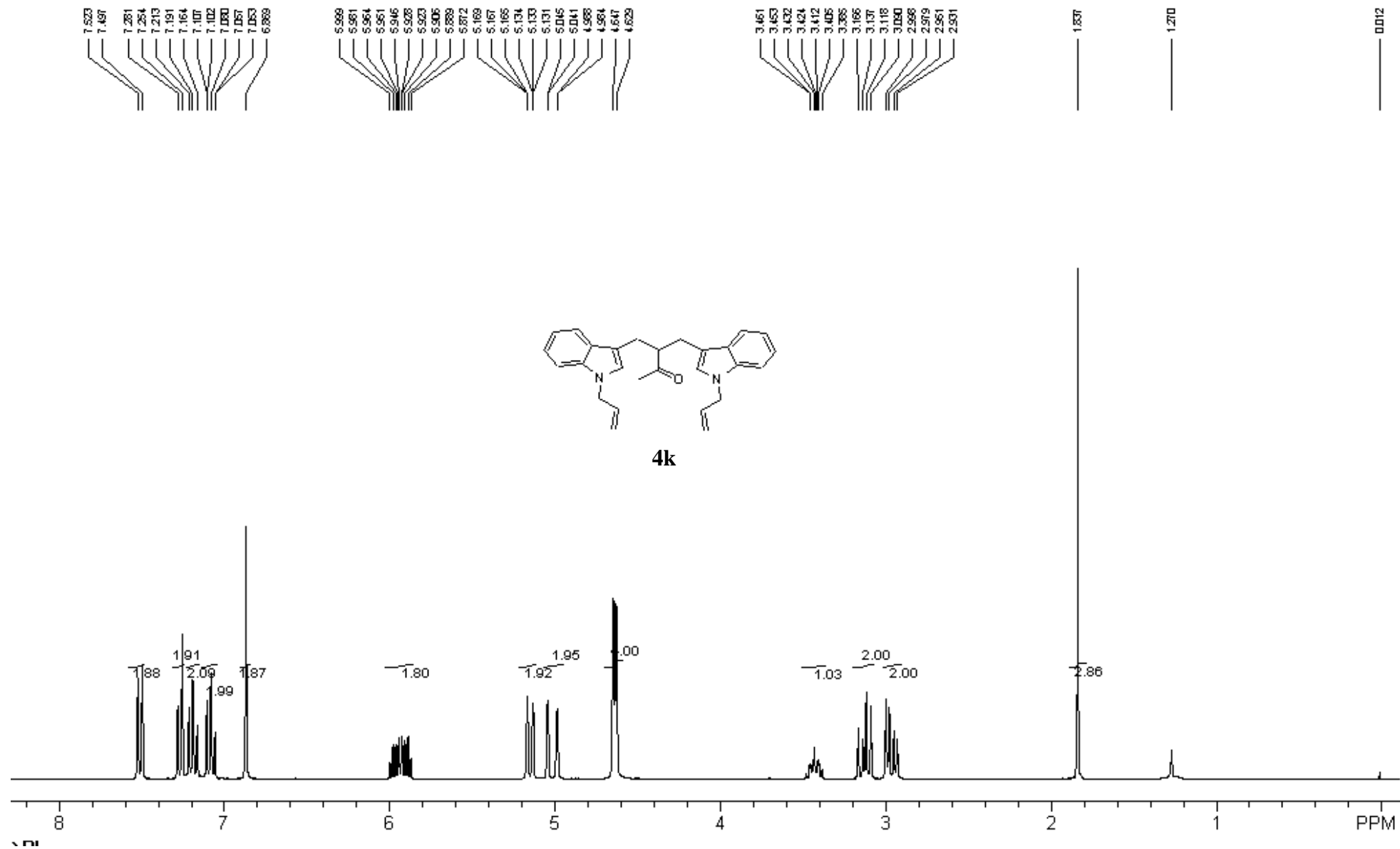
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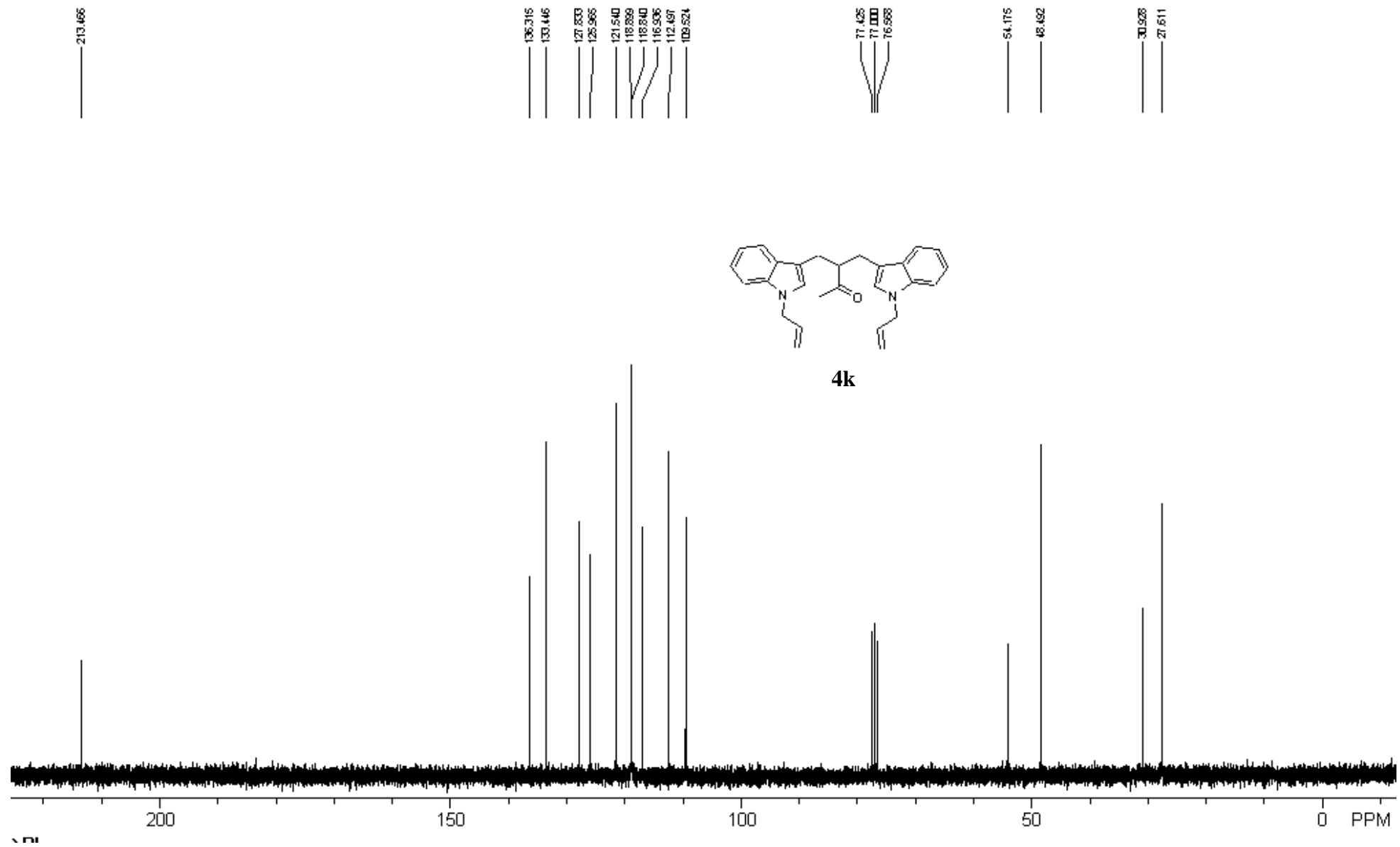


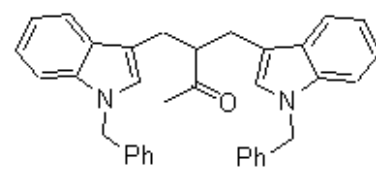
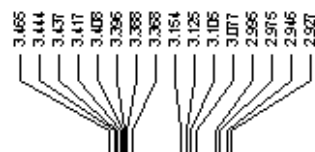
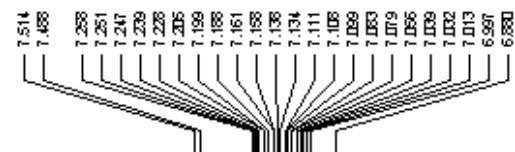
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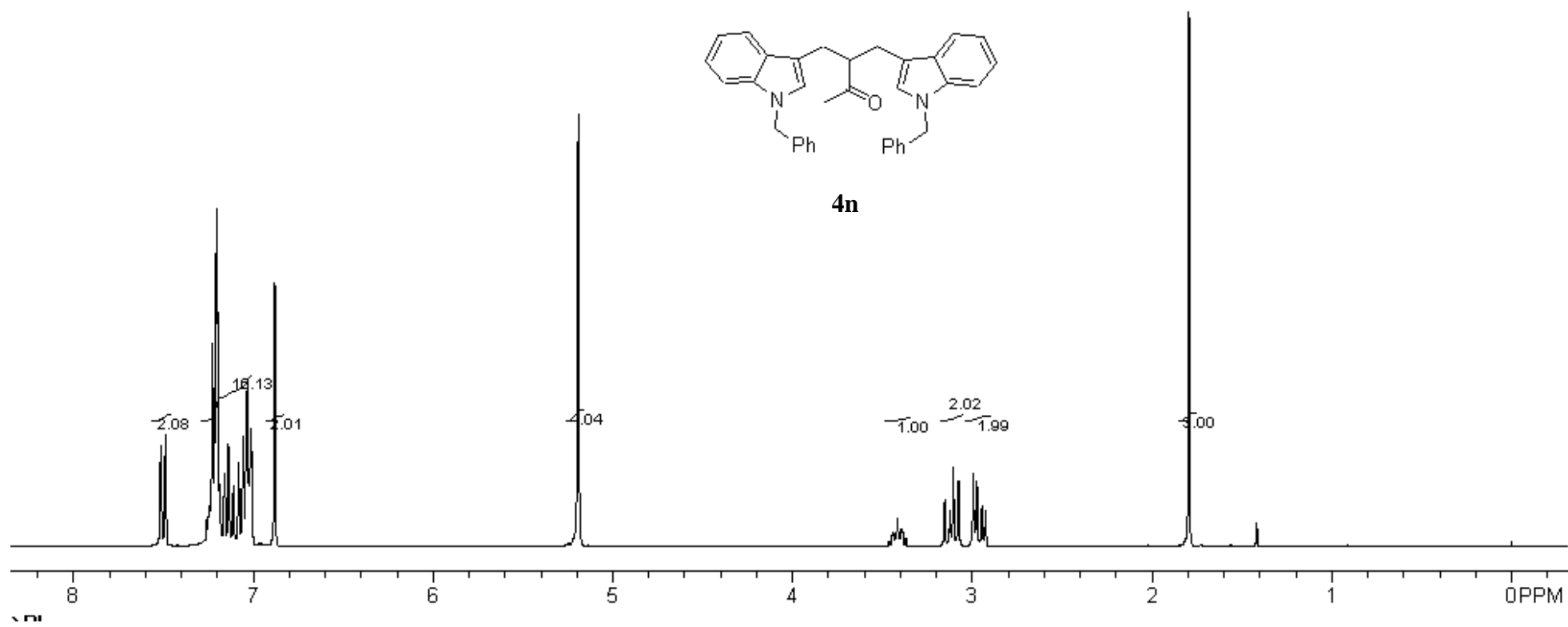


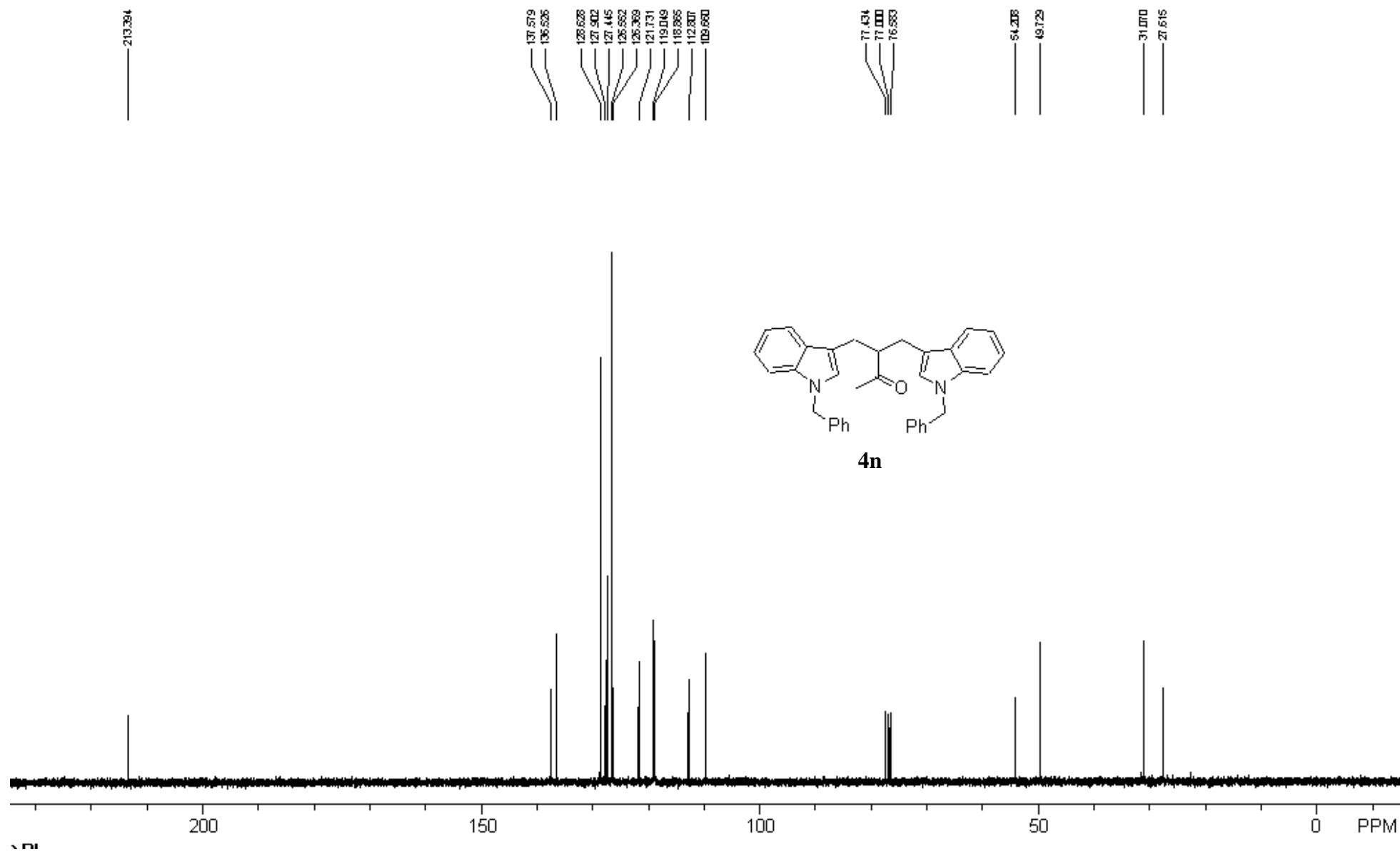






4n





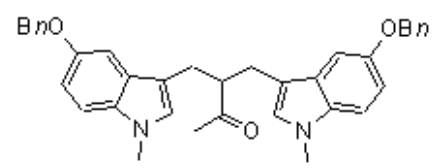
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7.216
7.185
7.051
6.969
6.969
6.882

4.966

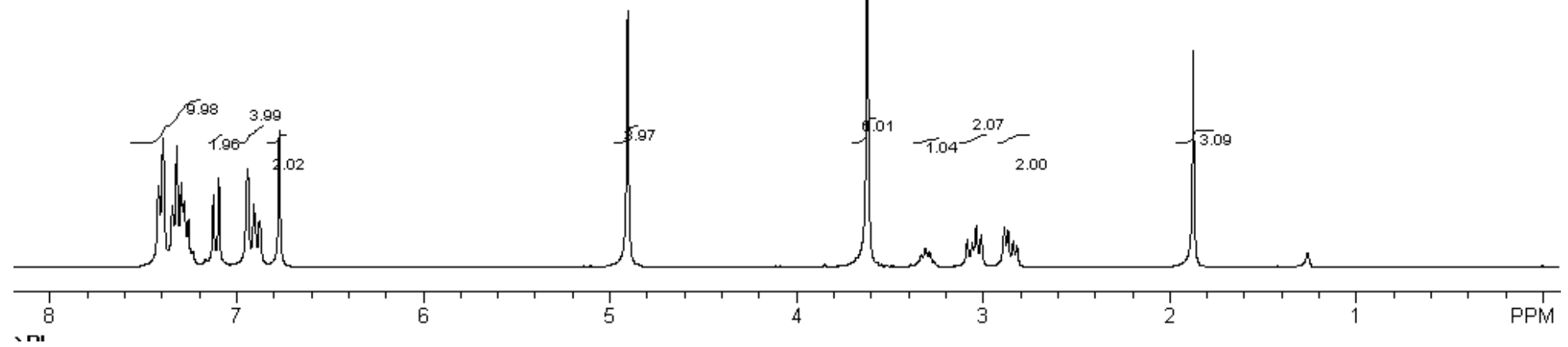
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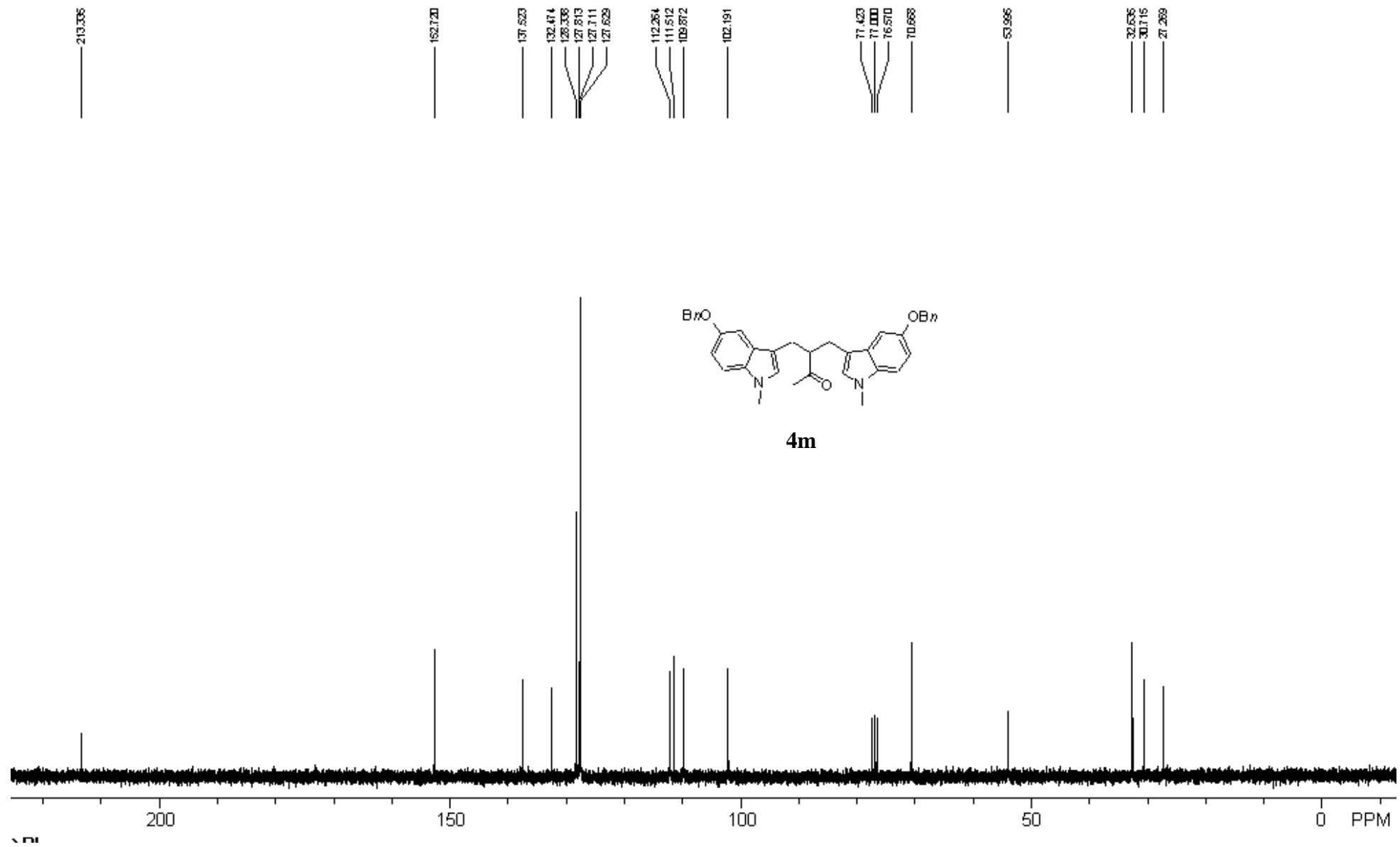
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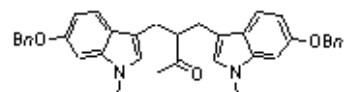
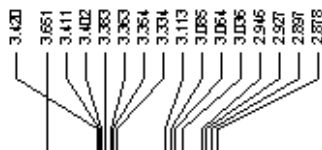
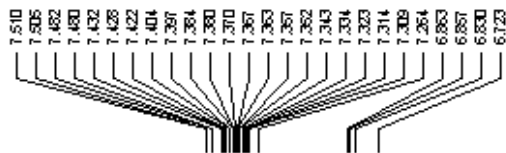
1.351



4m







4n

