



Organic Chemistry: CHEM2322

Structural Problems

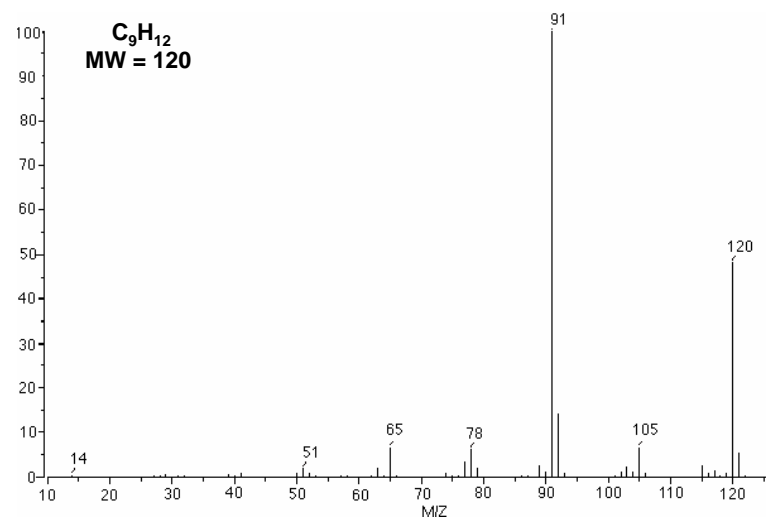
Dr. Christopher J. O'Brien
203 CRB, cobrien@uta.edu

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Slide 1

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Problem 1: Mass Spec

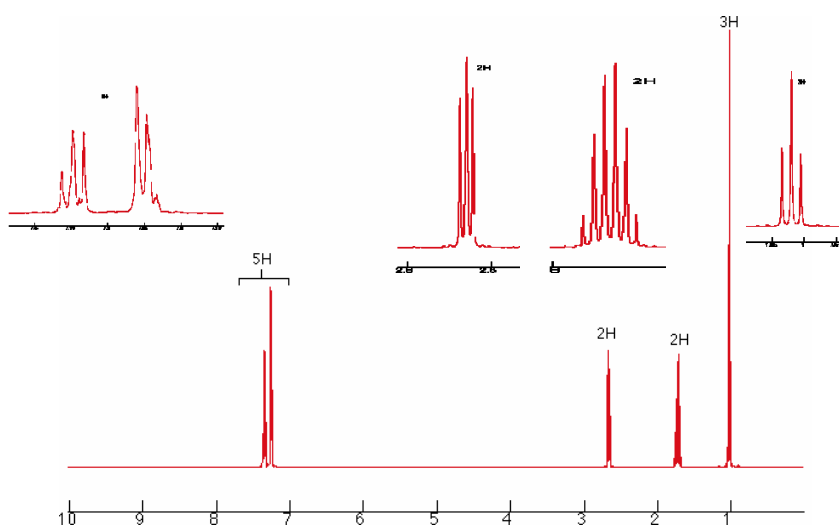


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Problem 1: 1H -NMR

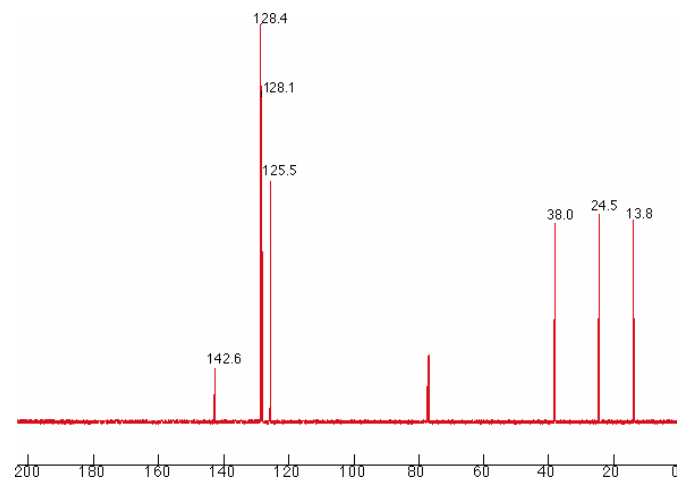


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Problem 1 ^{13}C -NMR

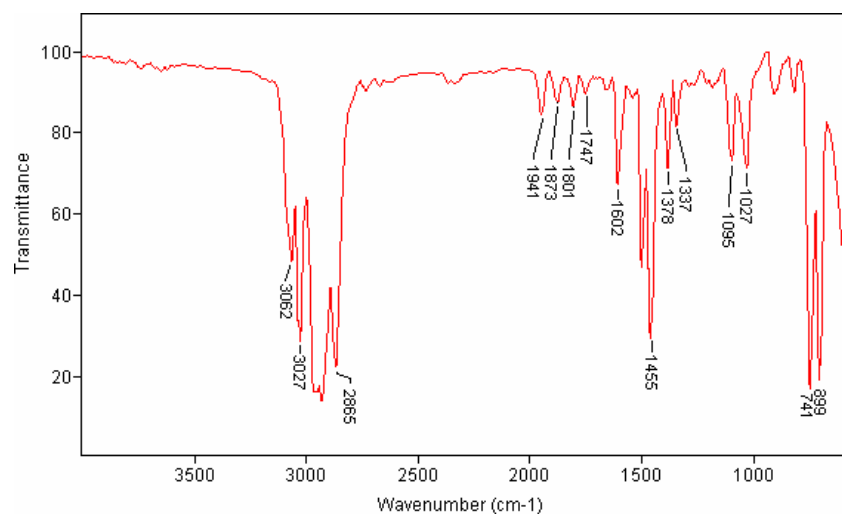


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Problem 1: IR



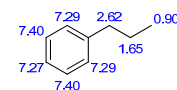
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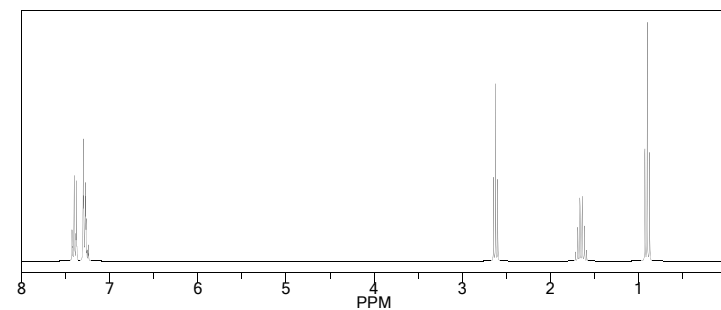
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Problem 1: Answer

ChemNMR ¹H Estimation



Estimation quality is indicated by color: good, medium, rough

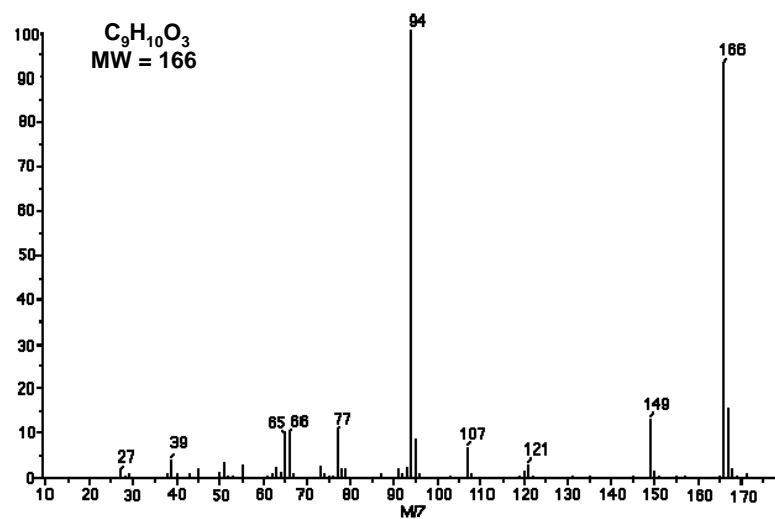


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Problem 2: Mass Spec

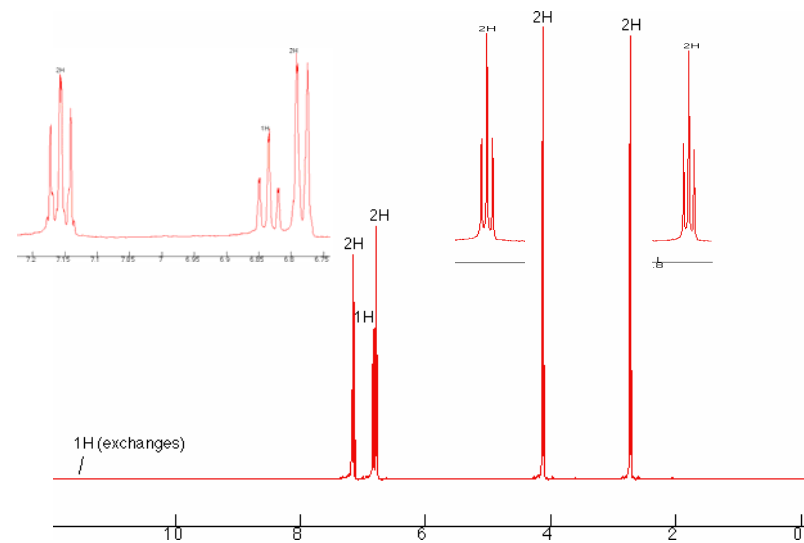


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Problem 2: ¹H-NMR

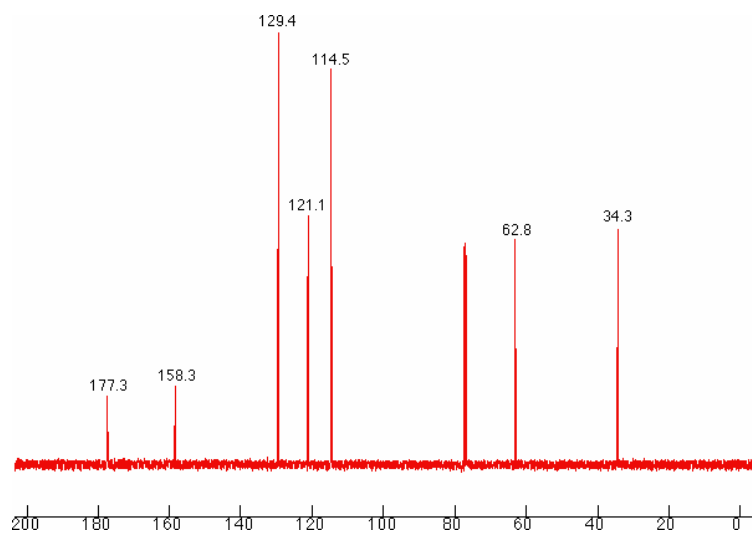


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Problem 2: ^{13}C -NMR

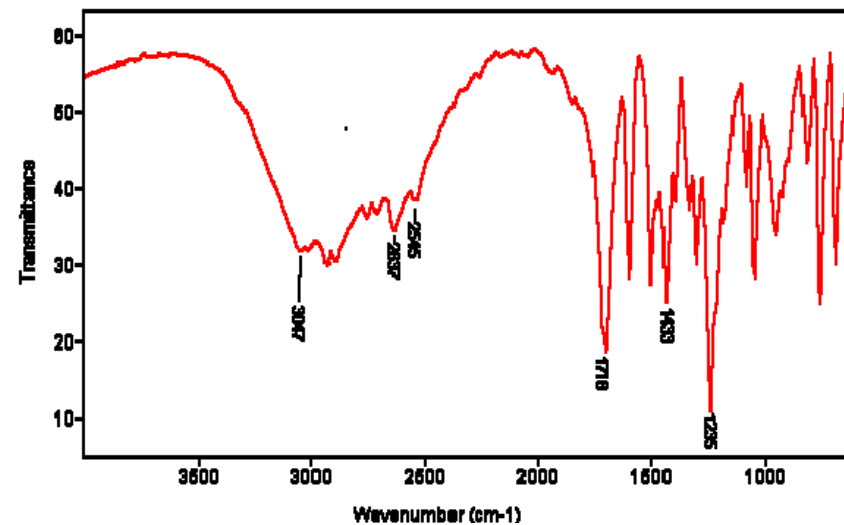


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Problem 2: IR



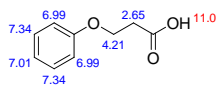
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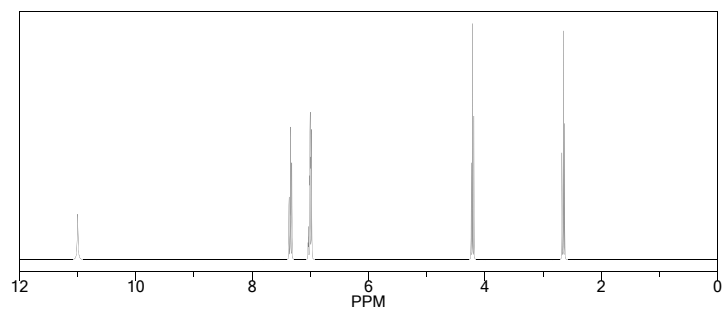
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Problem 2: Answer

ChemNMR ^1H Estimation



Estimation quality is indicated by color: good, medium, rough



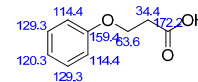
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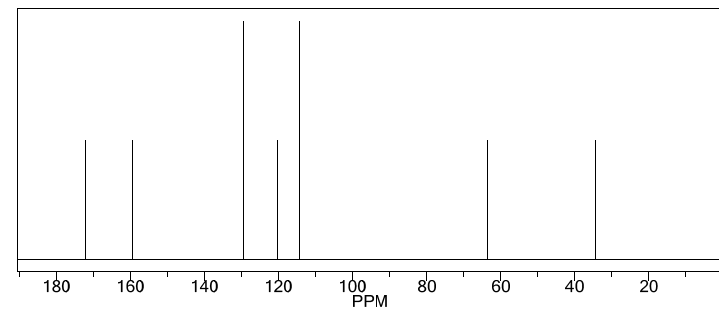
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Problem 2: Answer

ChemNMR ^{13}C Estimation



Estimation quality is indicated by color: good, medium, rough

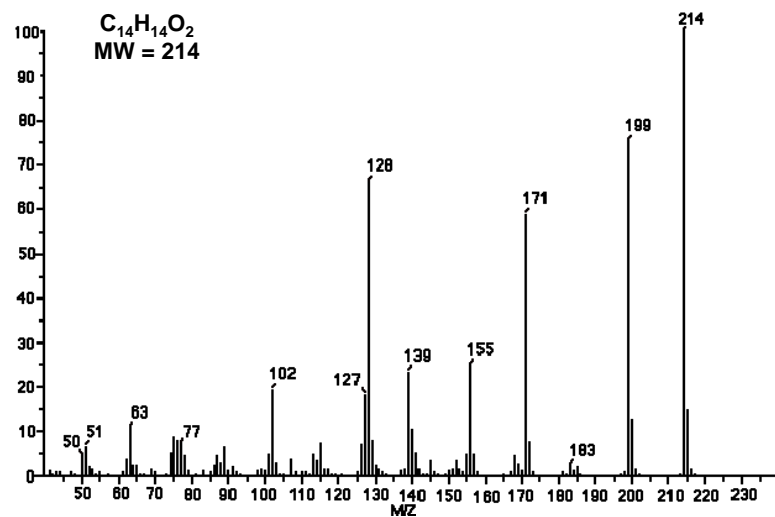


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Problem 3: Mass Spec

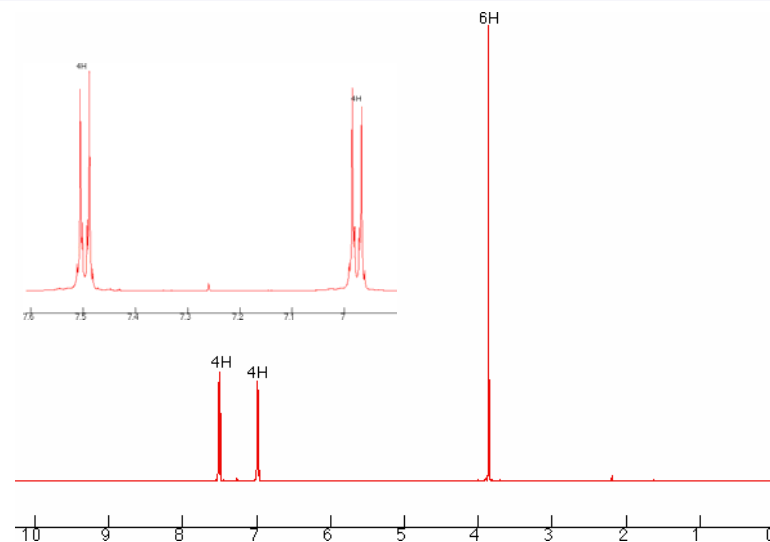


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Problem 3: 1H -NMR

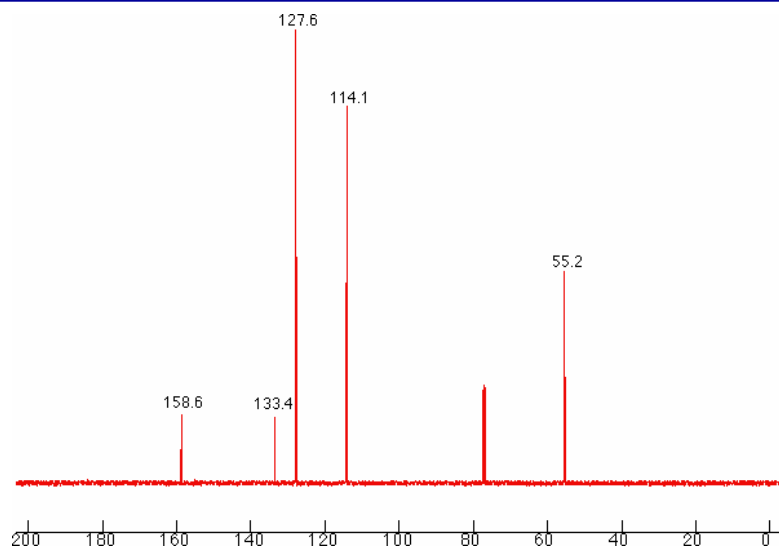


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Problem 3: ^{13}C -NMR

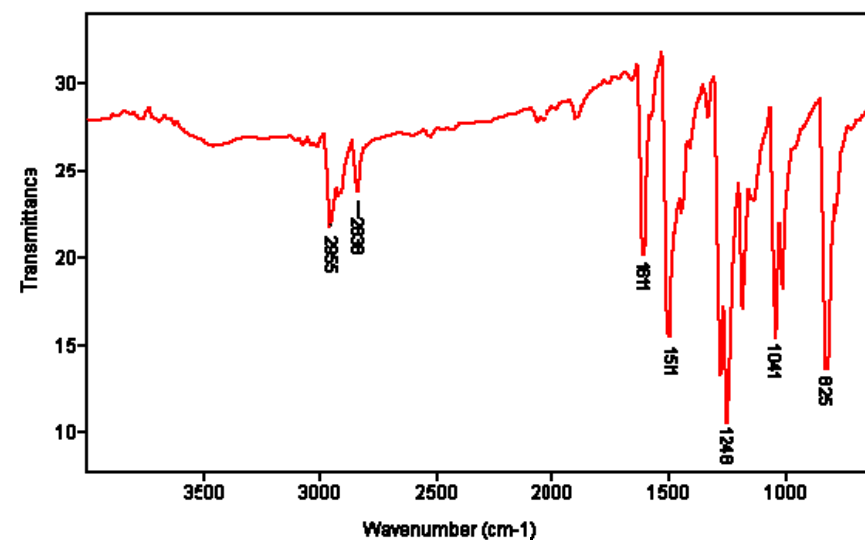


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Problem 3: IR



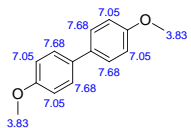
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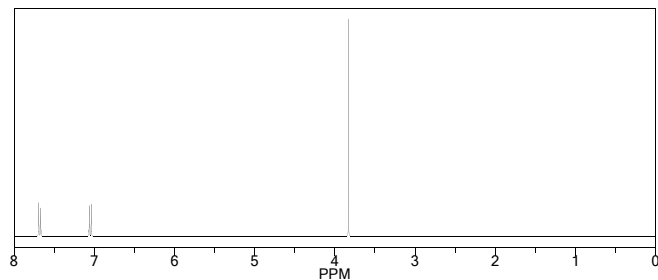
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Problem 3: Answer

ChemNMR ^1H Estimation



Estimation quality is indicated by color: good, medium, rough



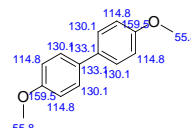
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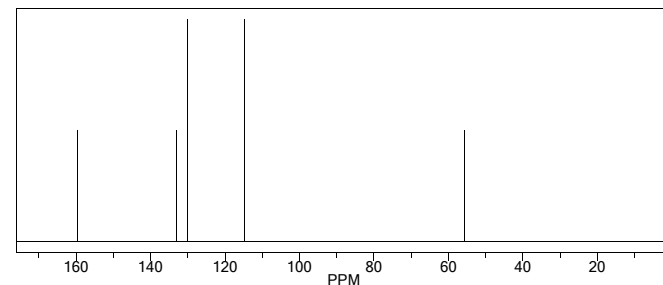
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Problem 3: Answer

ChemNMR ^{13}C Estimation



Estimation quality is indicated by color: good, medium, rough

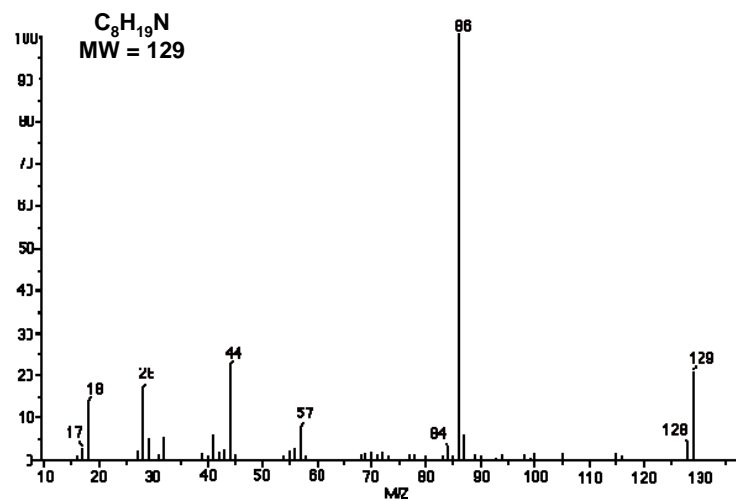


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Problem 4: Mass Spec

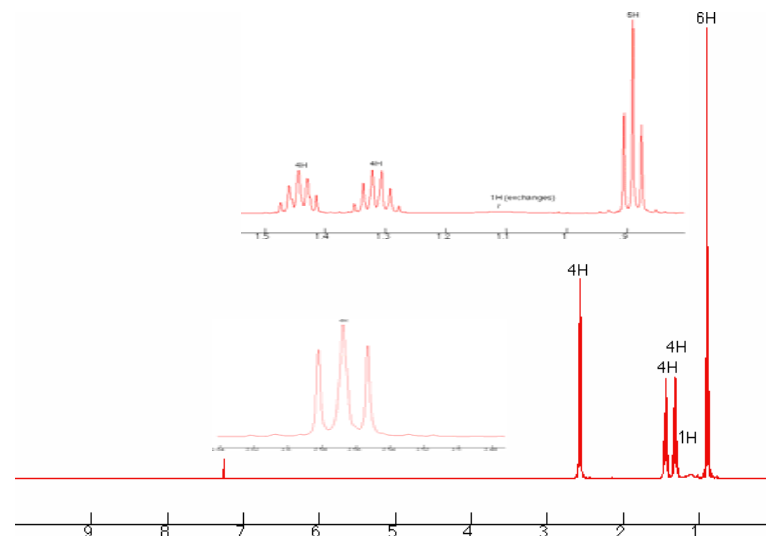


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Problem 4: ^1H -NMR

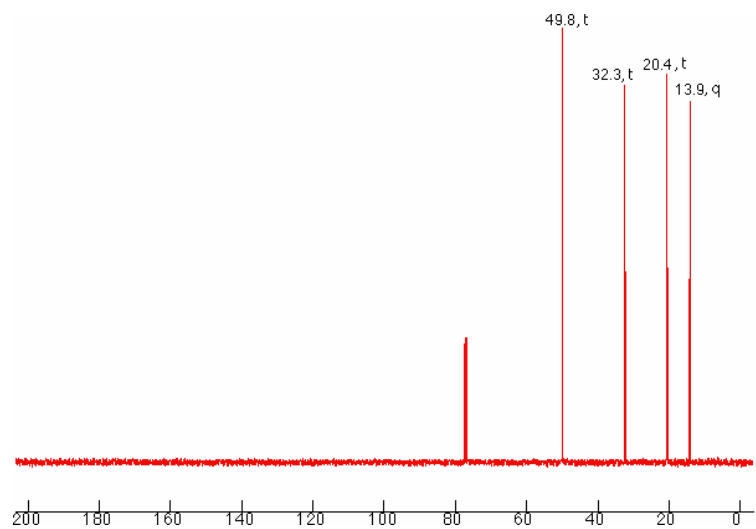


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Problem 4: ^{13}C -NMR

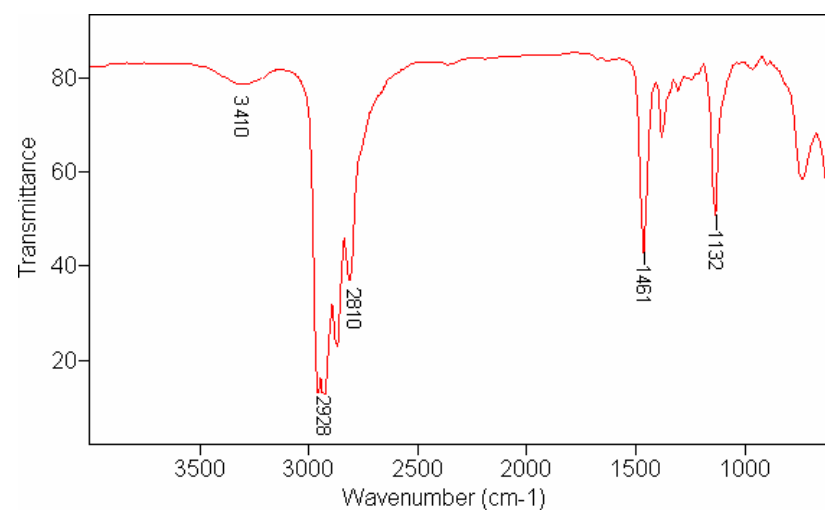


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Problem 4: IR



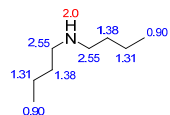
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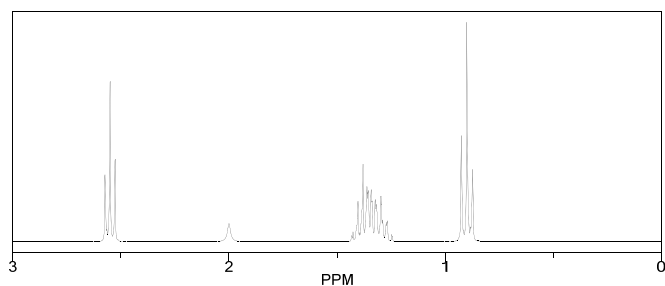
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Problem 4: Answer

ChemNMR ^1H Estimation



Estimation quality is indicated by color: good, medium, rough



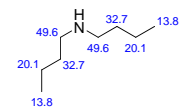
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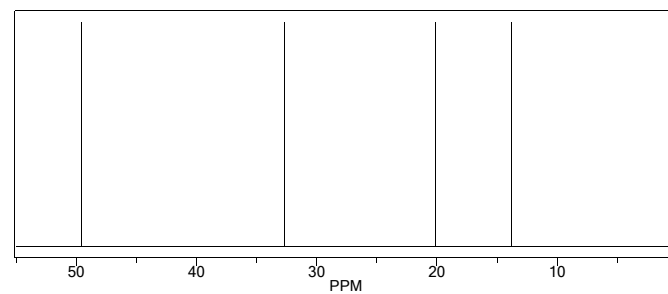
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Problem 4: Answer

ChemNMR ^{13}C Estimation



Estimation quality is indicated by color: good, medium, rough

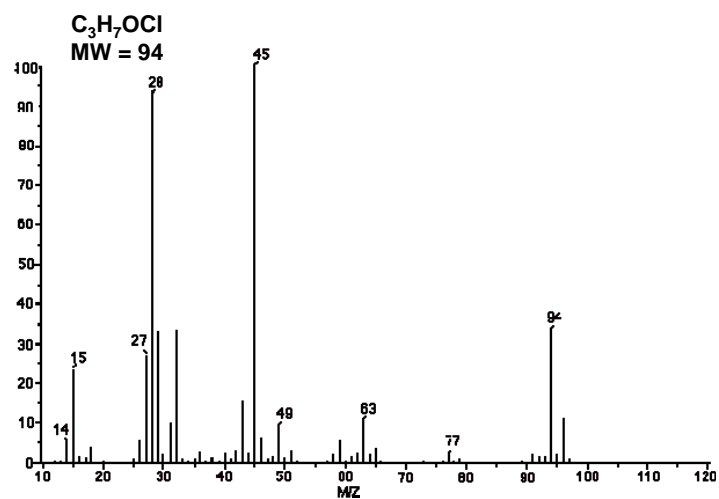


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Problem 5: Mass Spec

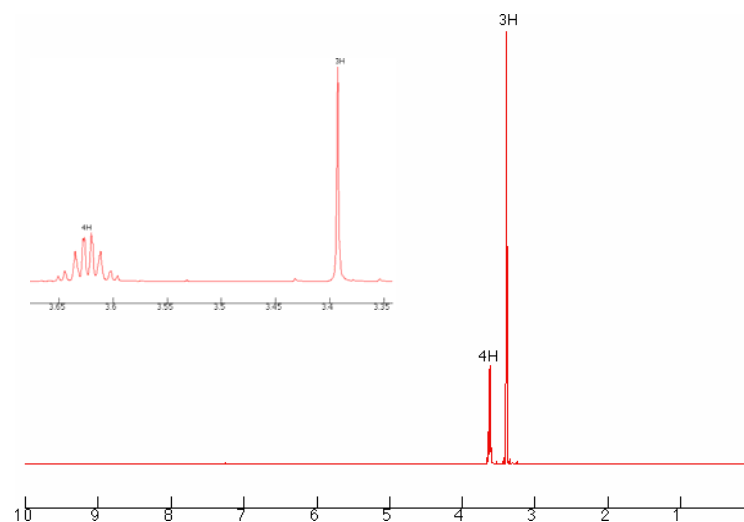


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Problem 5: 1H -NMR

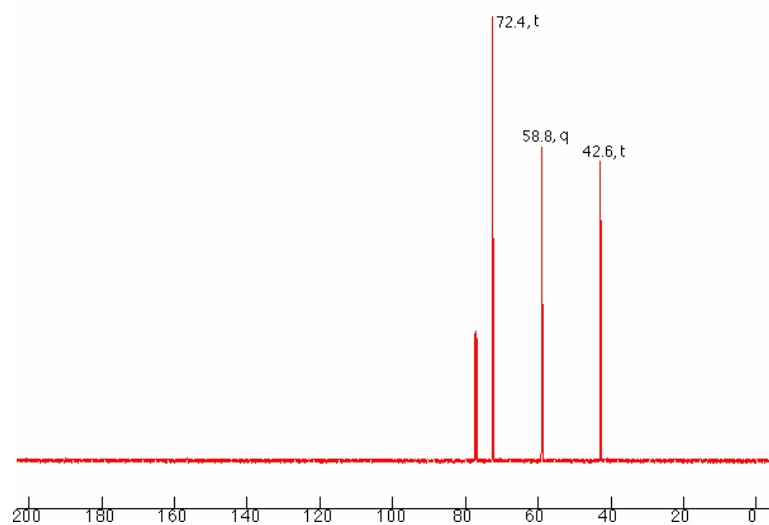


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Problem 5: ^{13}C -NMR

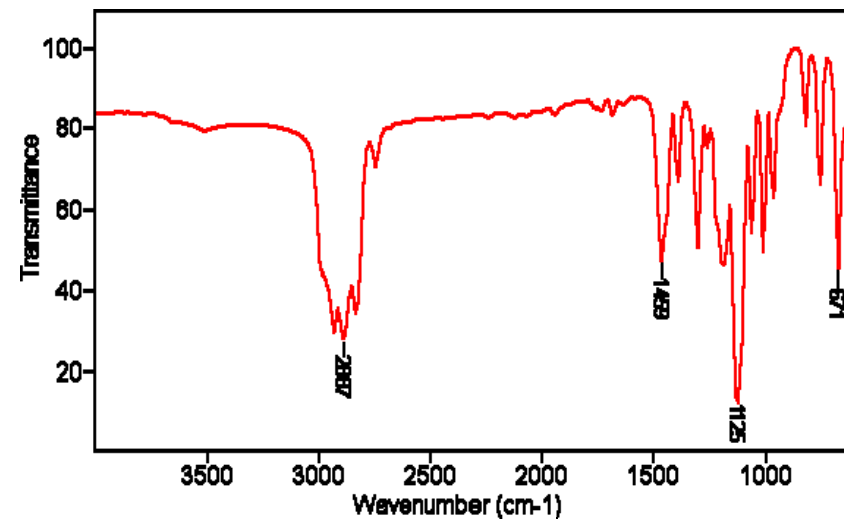


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Problem 5: IR



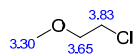
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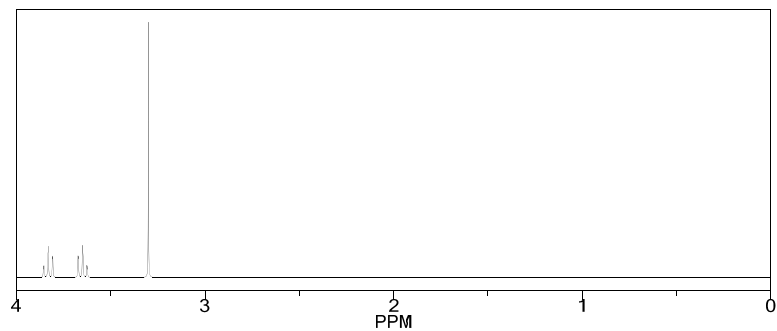
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Problem 5: Answer

ChemNMR ^1H Estimation



Estimation quality is indicated by color: good, medium, rough



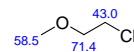
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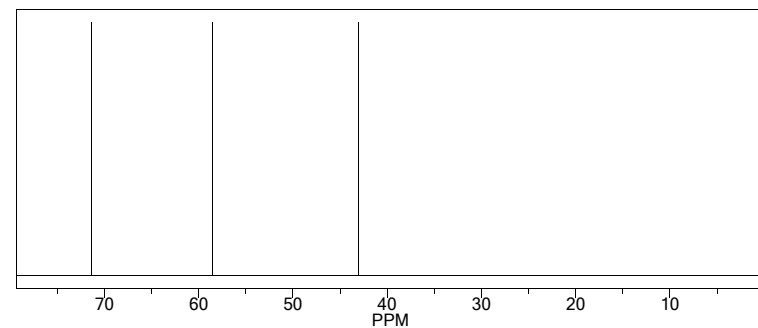
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Problem 5: Answer

ChemNMR ^{13}C Estimation



Estimation quality is indicated by color: good, medium, rough



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