

**Rational design of Galactopyranoside-substituted *N*-heterocyclic carbene Palladium(II)
Complexes. Stable and Efficient catalyst for C-C coupling in aqueous medium**

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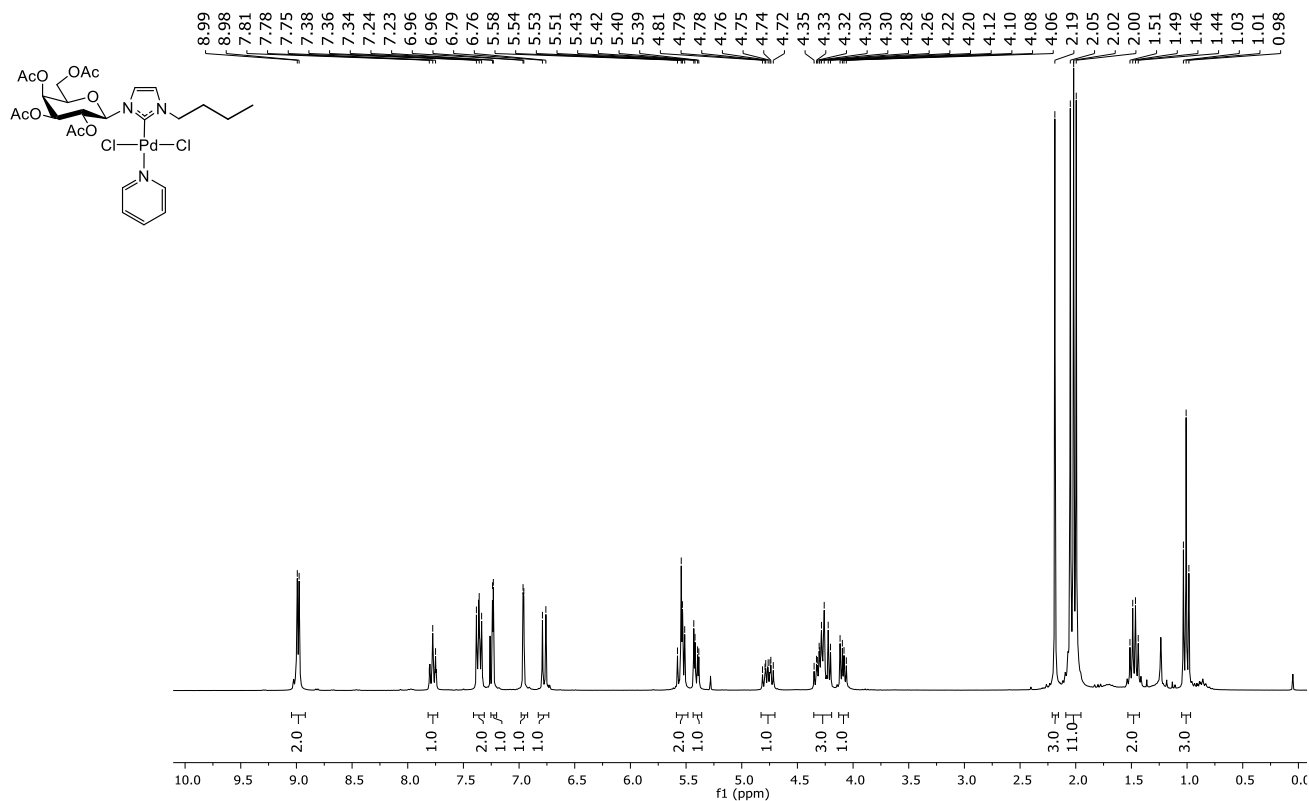
† Member of CONICET

Supplementary Material

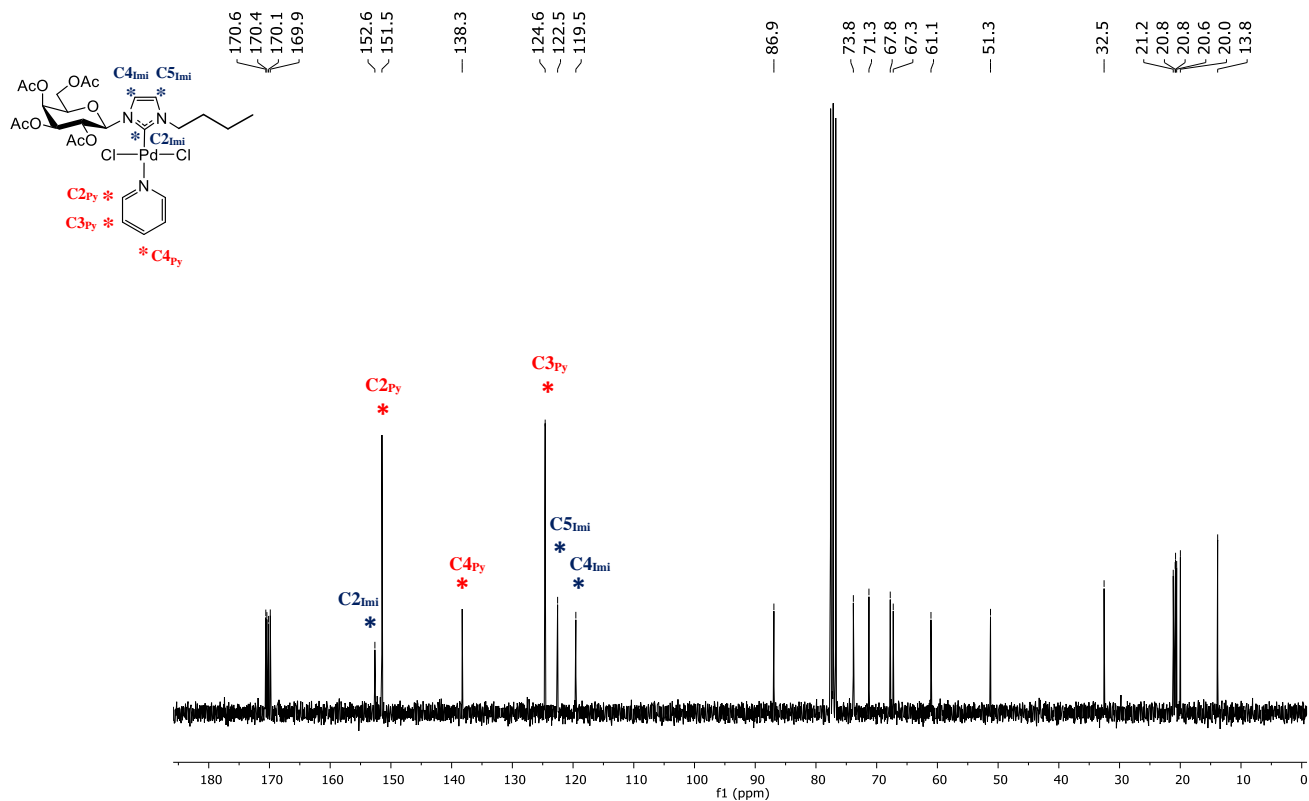
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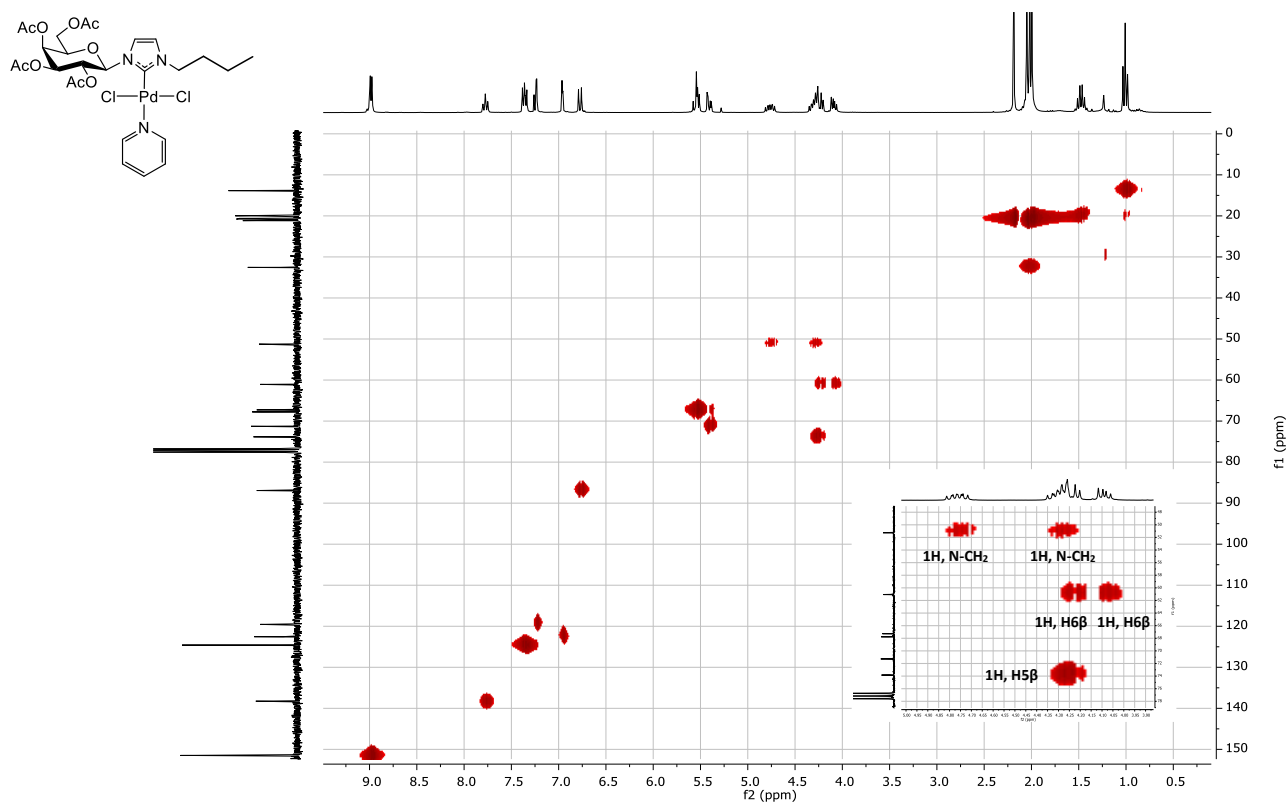
1-Butyl-3-(2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl)imidazol-2-ylidene palladium(II) pyridine dichloro (3a, ^1H NMR, CDCl_3)



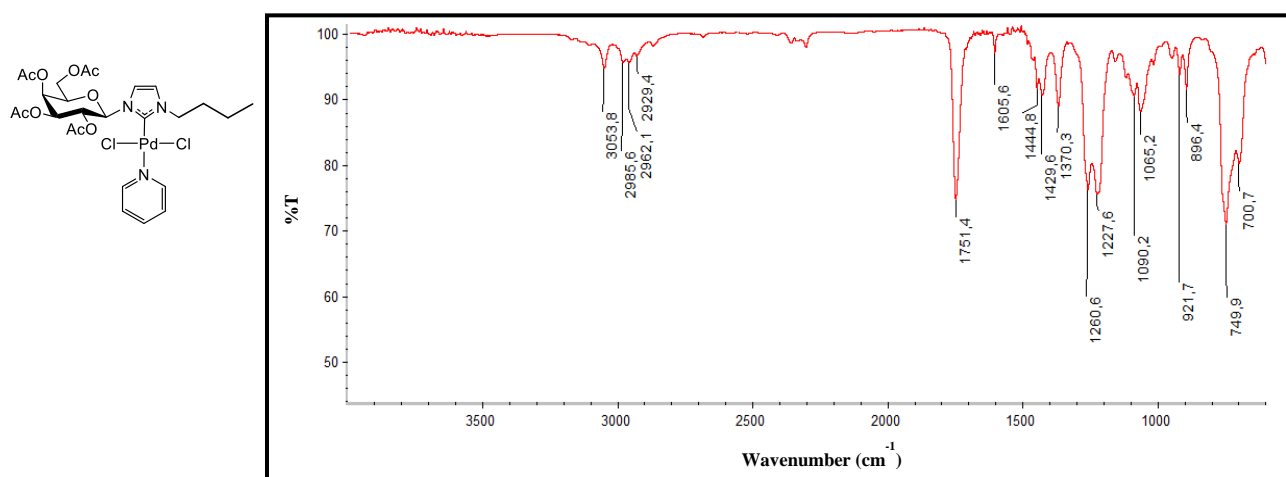
1-Butyl-3-(2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl)imidazol-2-ylidene palladium(II) pyridine dichloro (3a, ^{13}C NMR, CDCl_3)



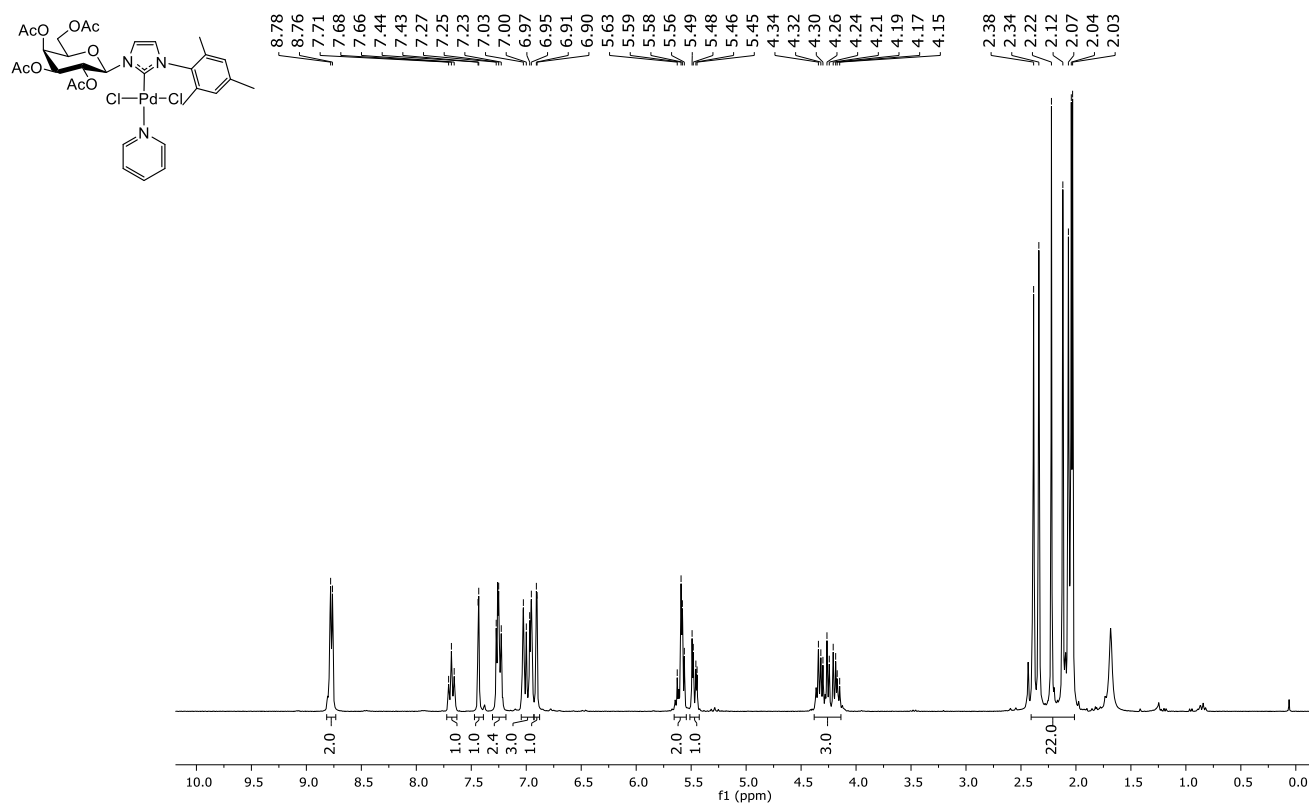
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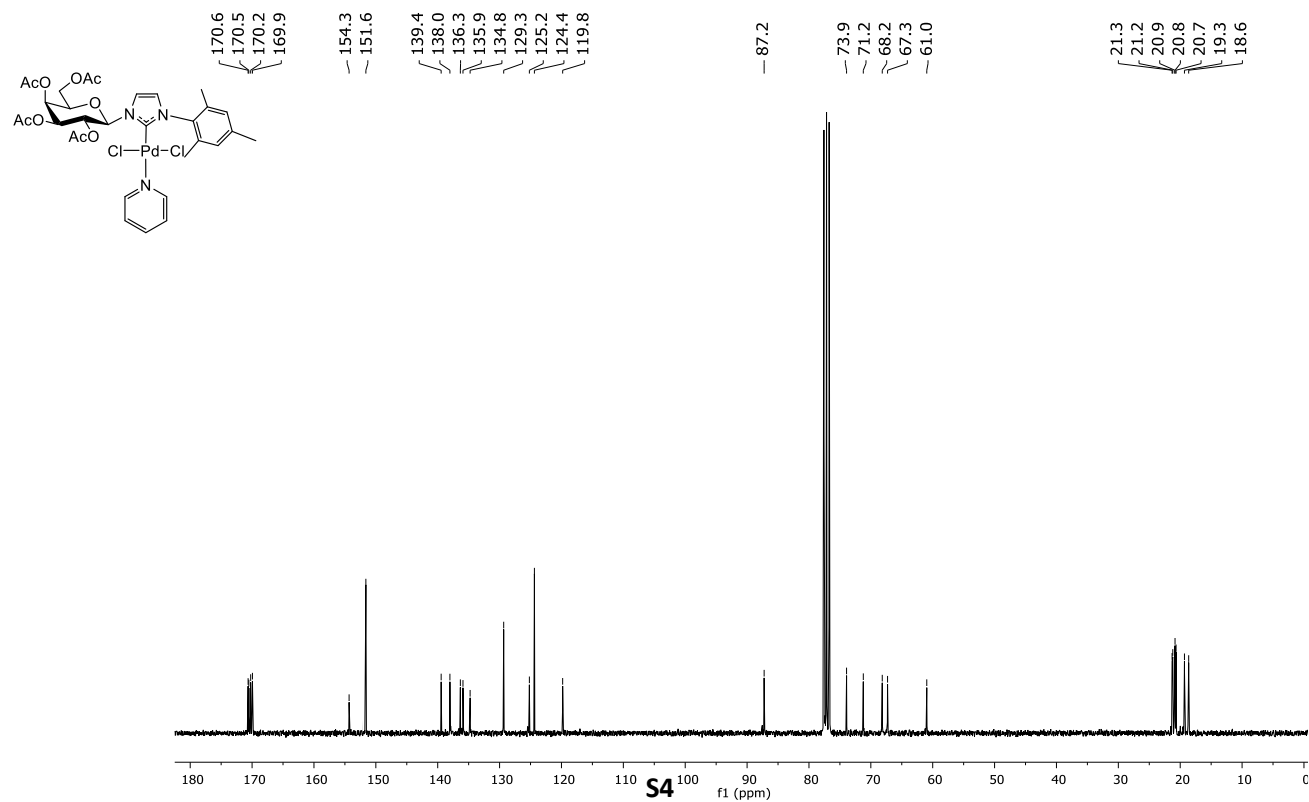
1-Butyl-3-(2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl)imidazol-2-ylidene palladium(II) pyridine dichloro (3a, FTIR-neat)



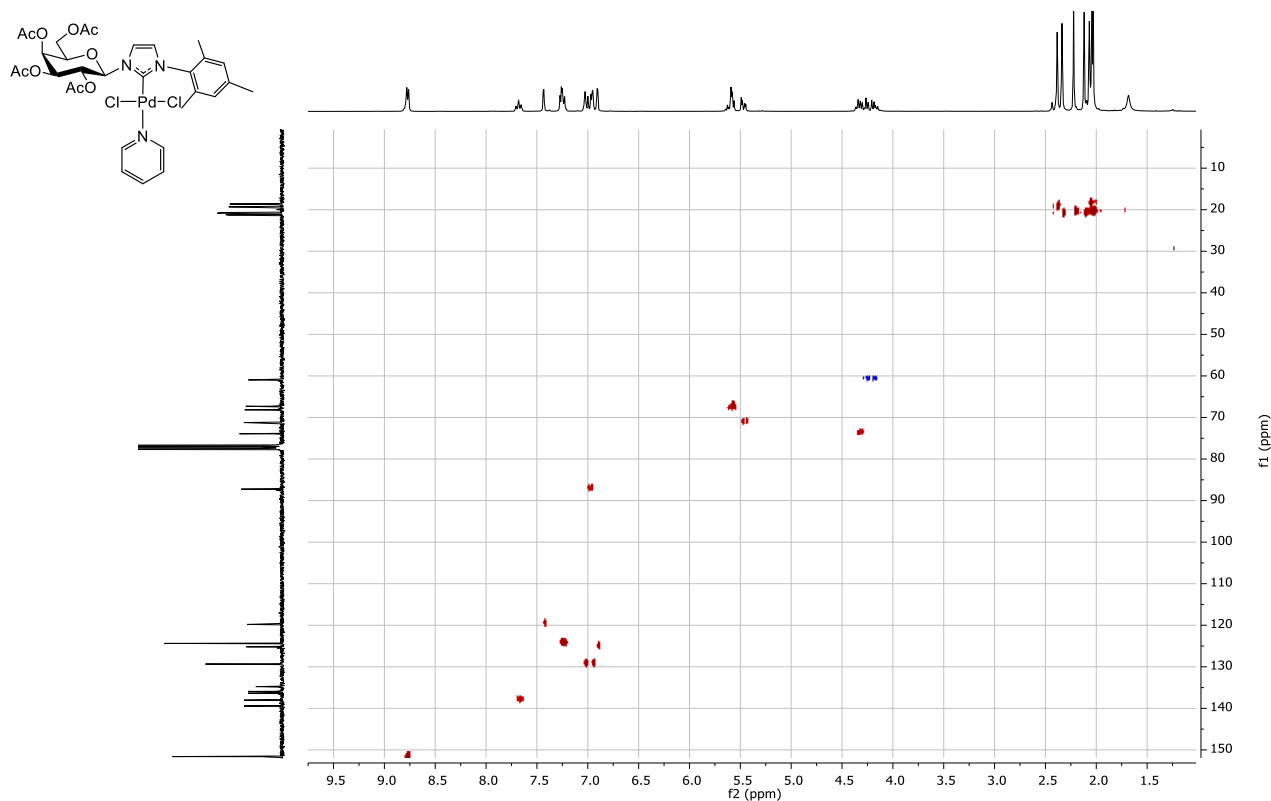
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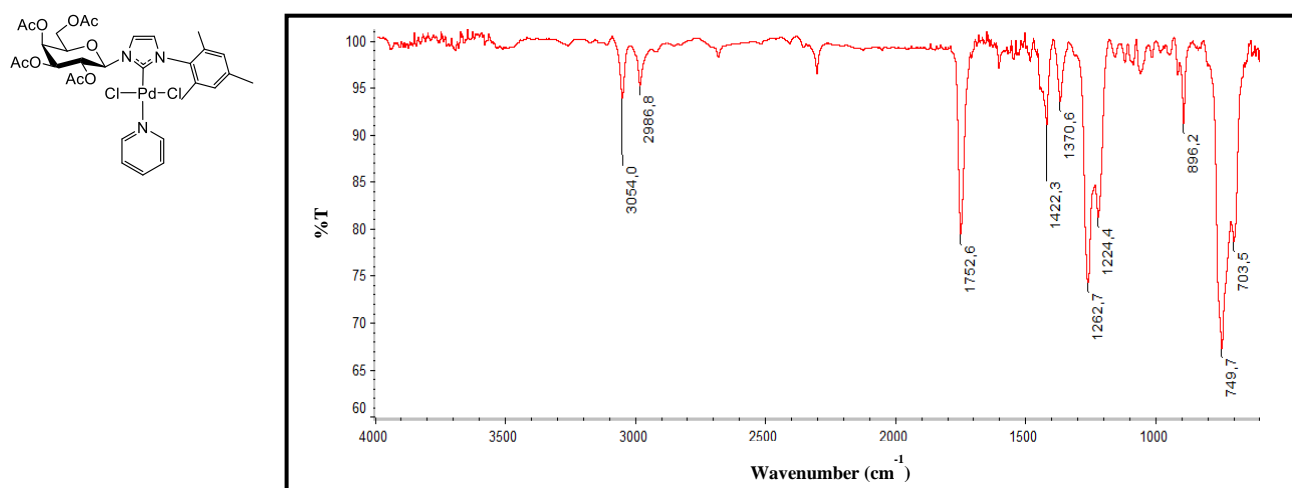
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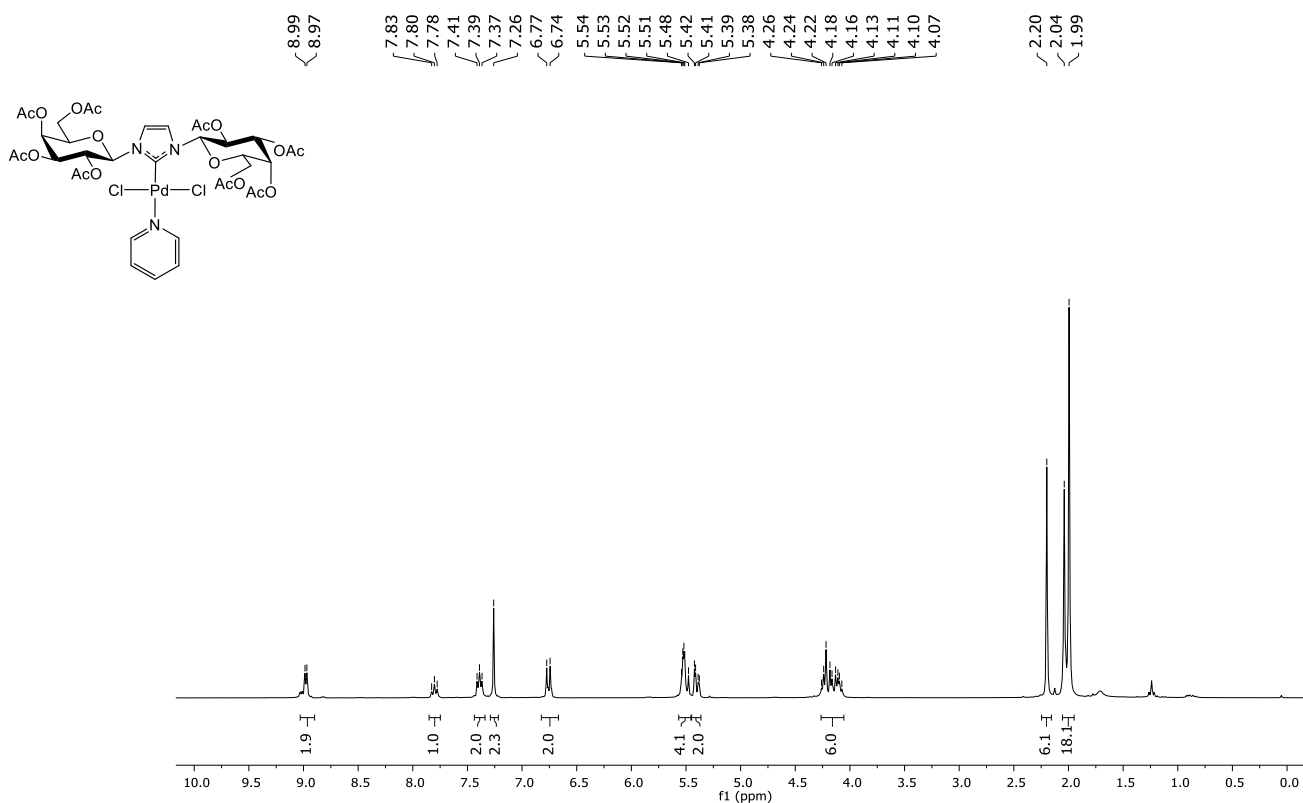
1-Mesityl-3-(2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl)imidazol-2-ylidene palladium(II) pyridine dichloro (3b, HSQC, CDCl₃)



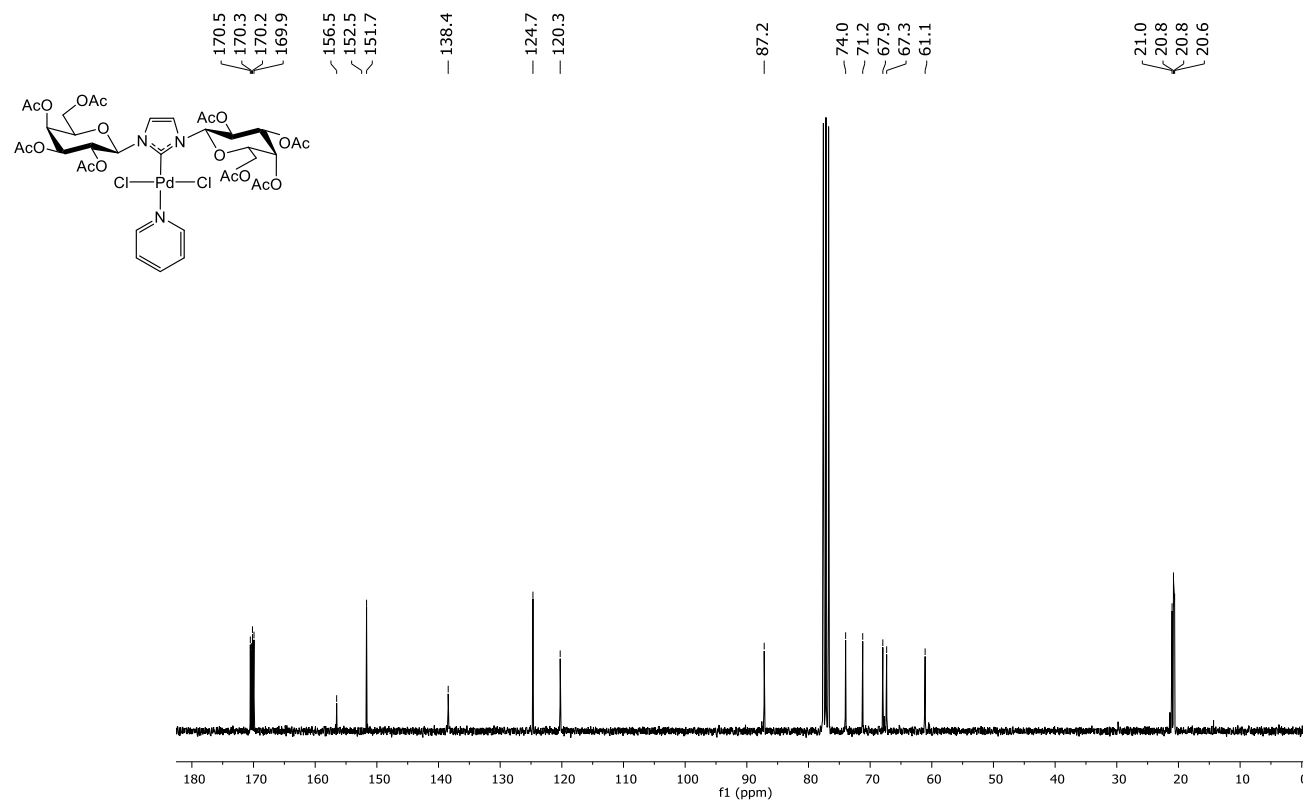
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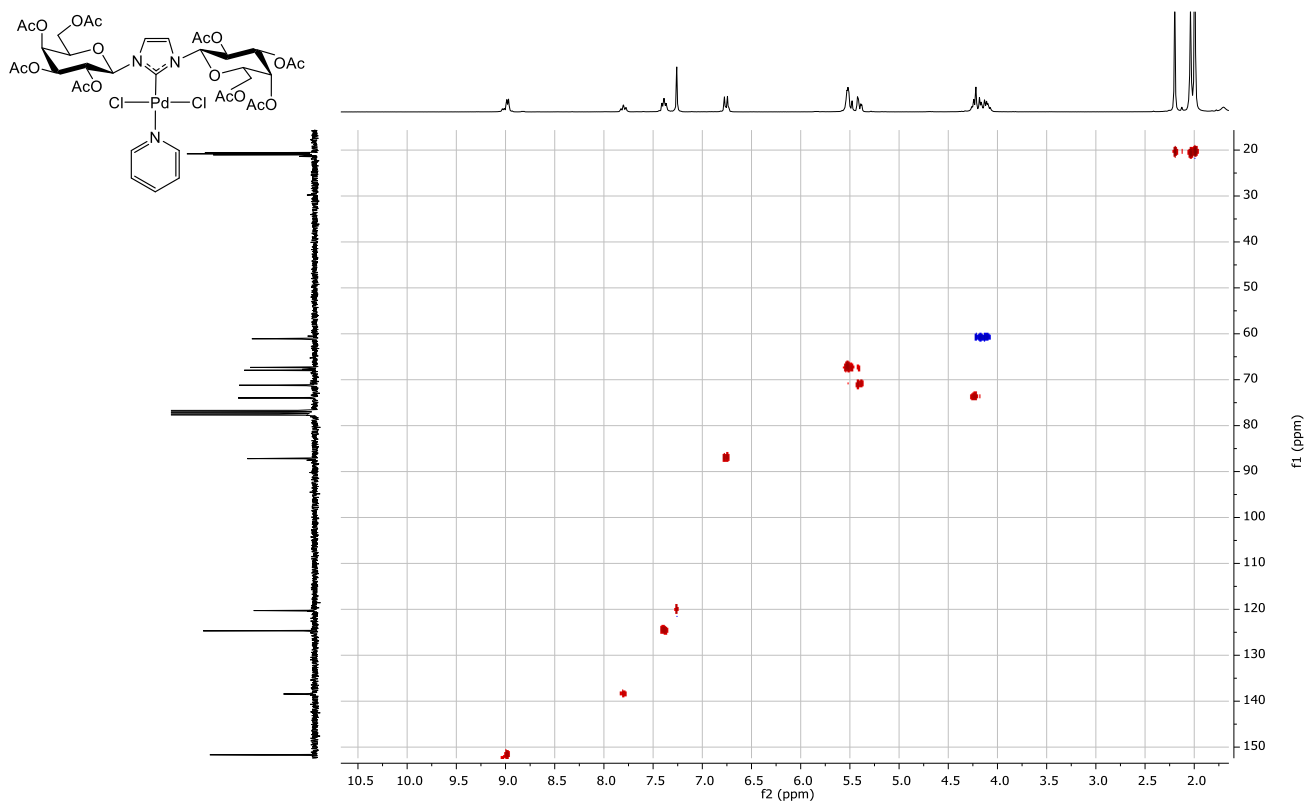
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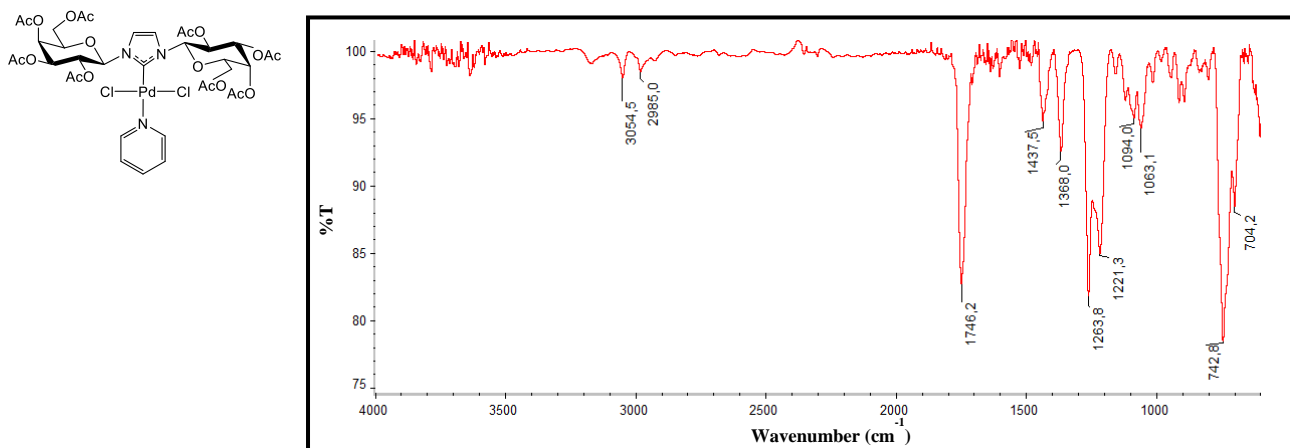
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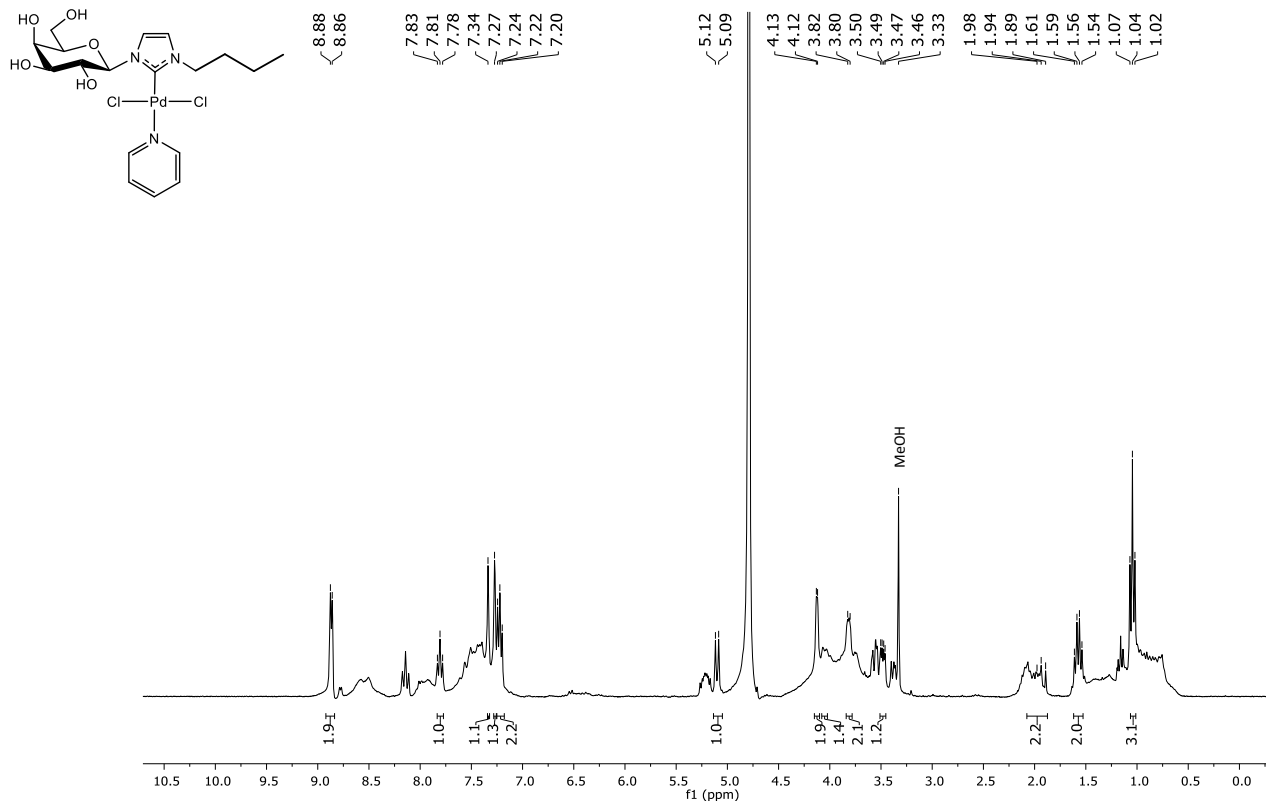
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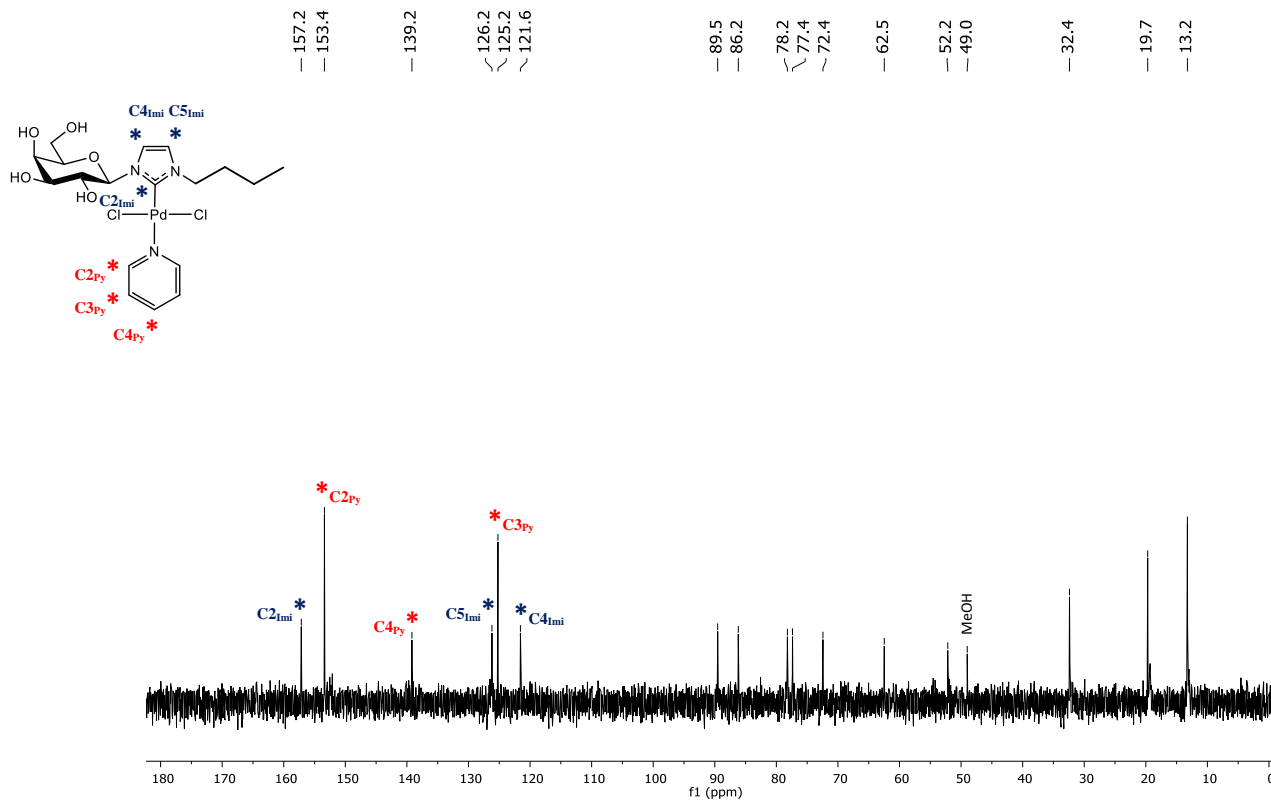
1-(2,3,4,6-Tetra-*O*-acetyl- β -D-galactopyranosyl)-3-(2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl) imidazol-2-ylidene palladium(II) pyridine dichloro (3c, FTIR-neat)



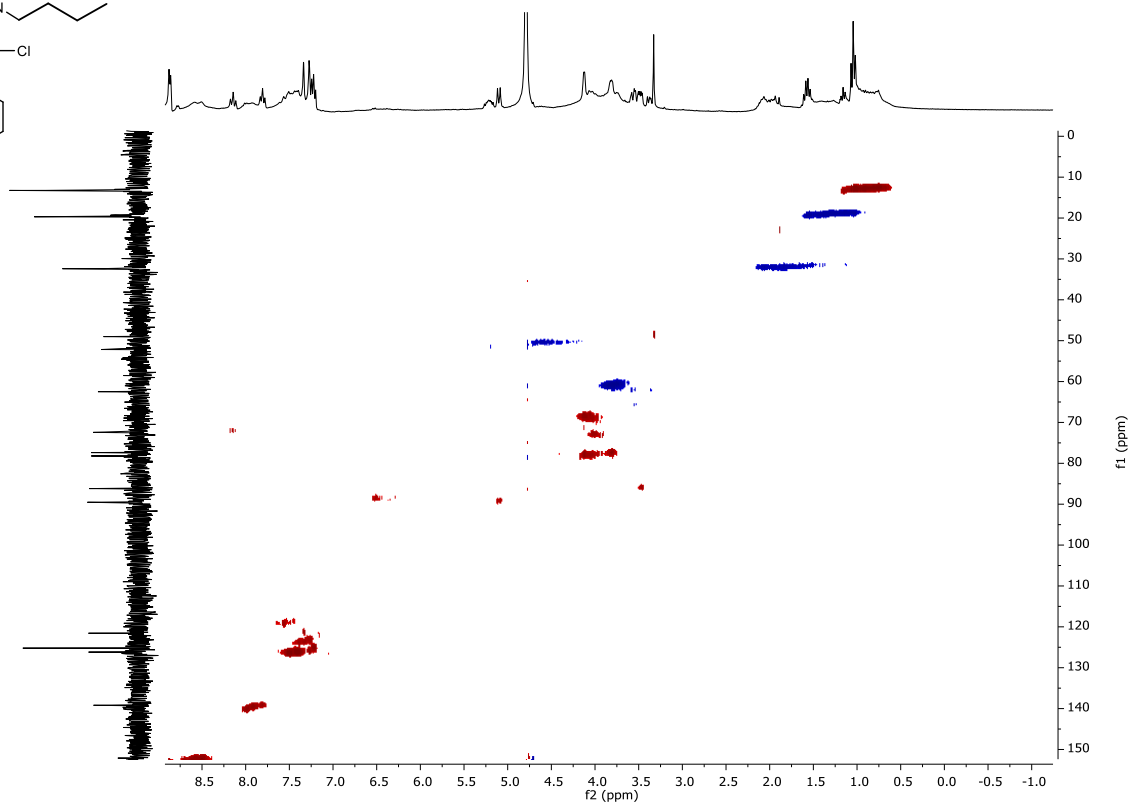
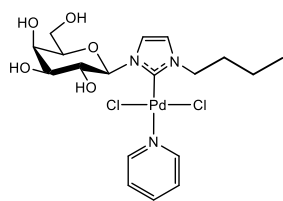
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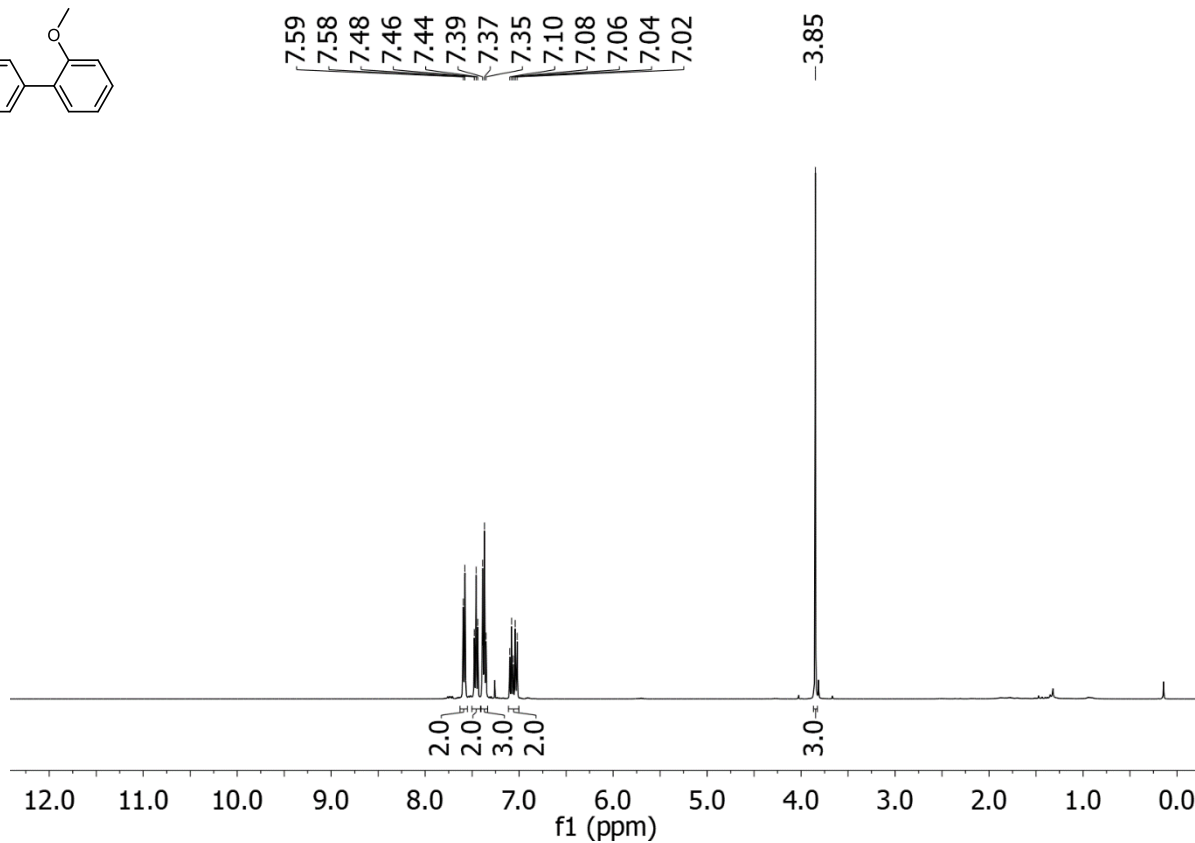
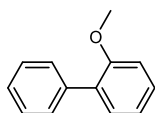
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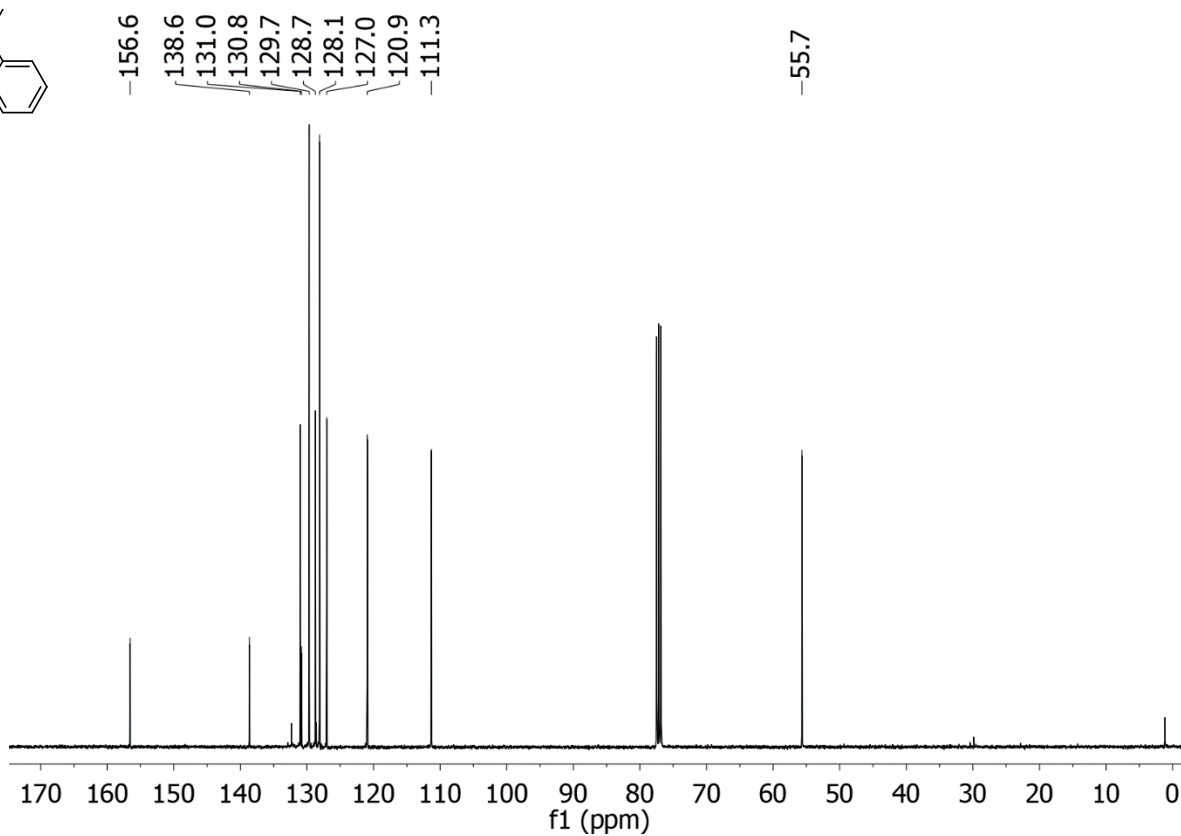
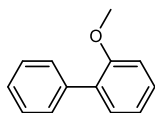
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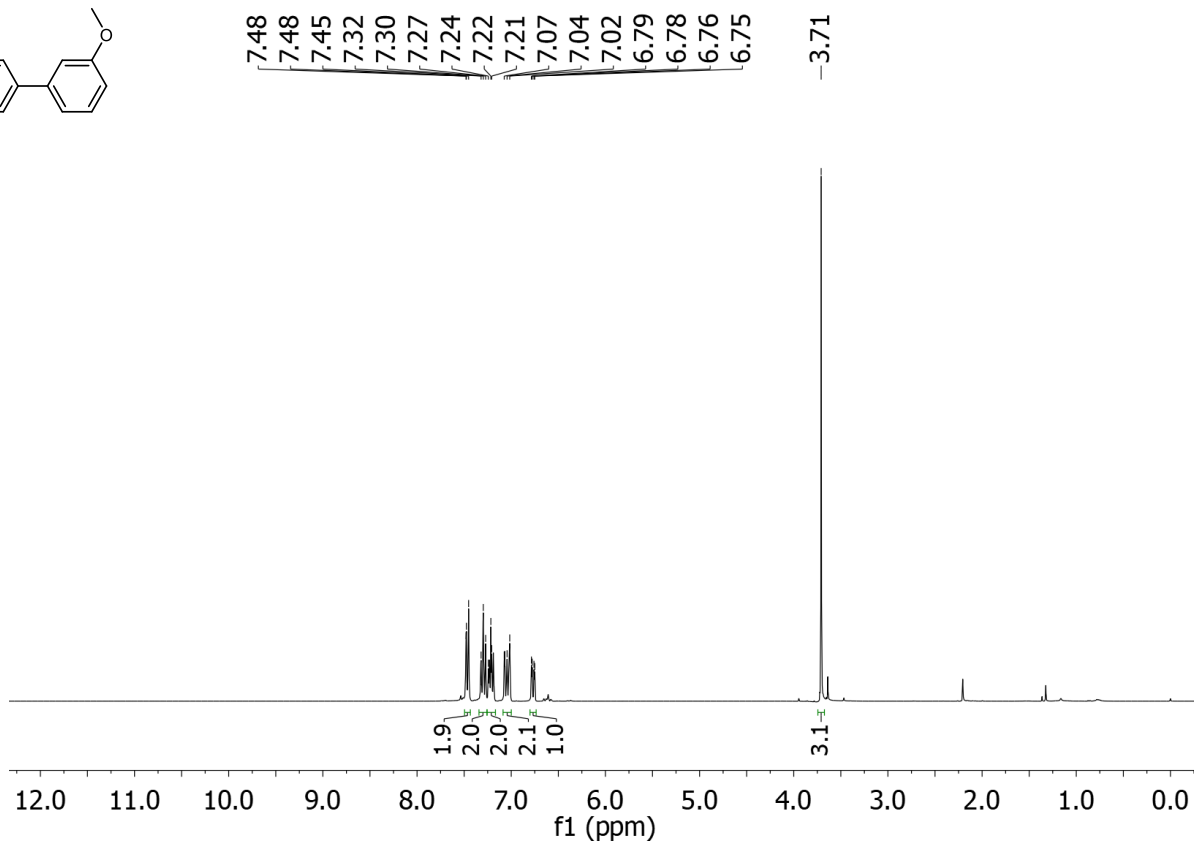
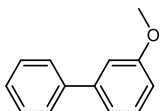
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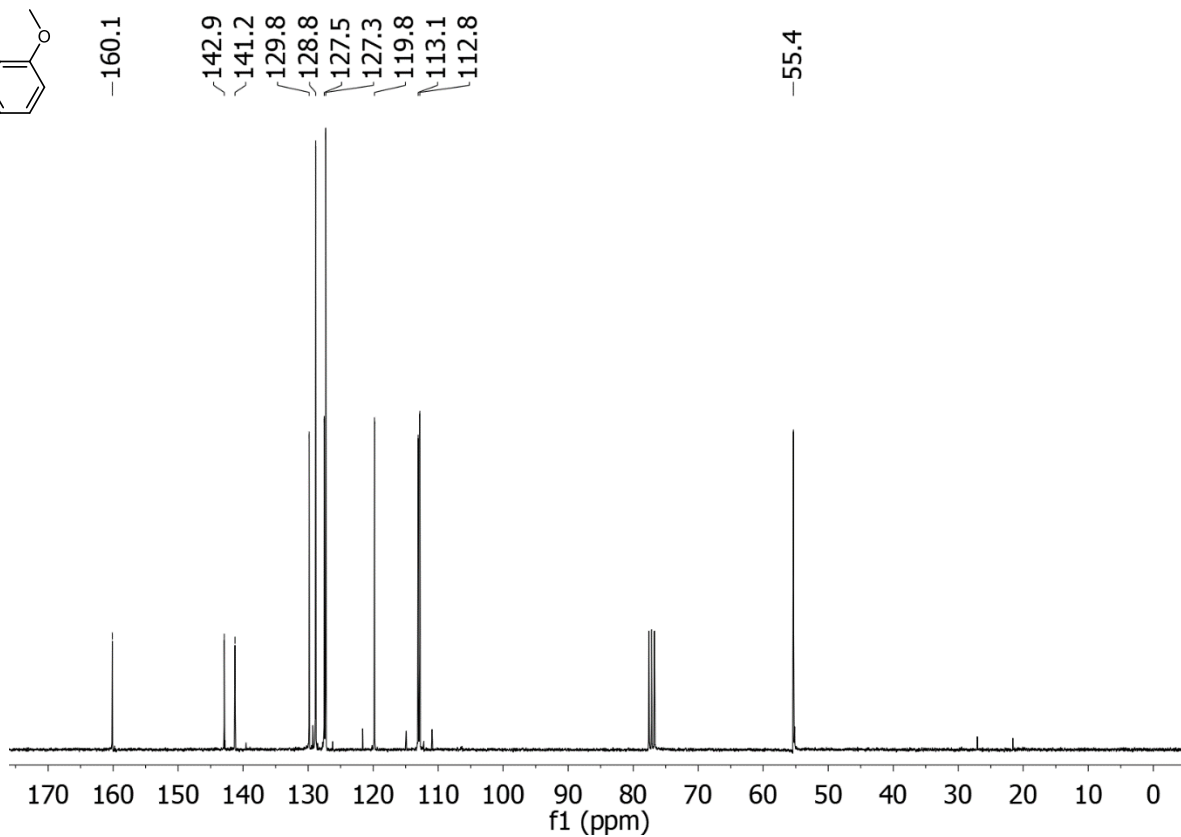
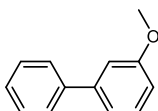
***o*-methoxybiphenyl** (^{13}C NMR, CDCl_3)



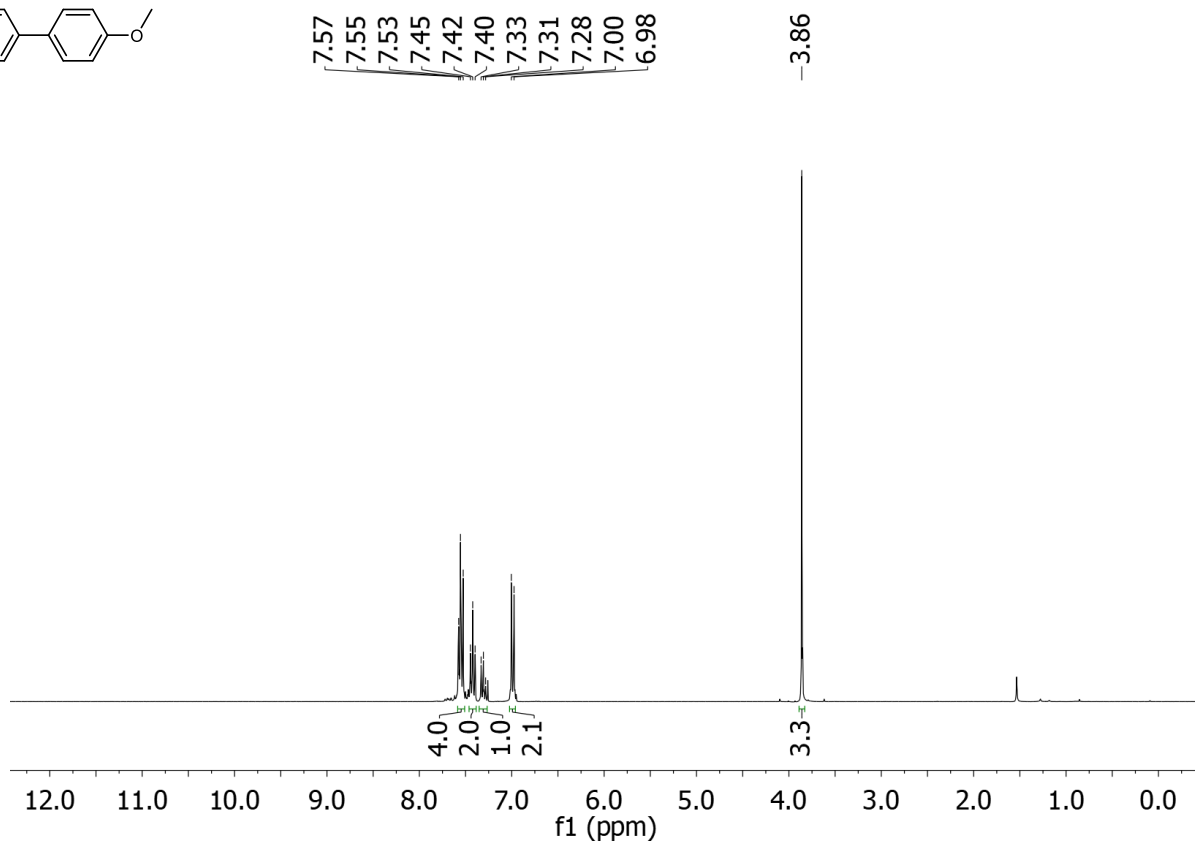
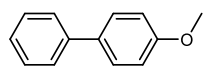
***m*-methoxybiphenyl (¹H NMR, CDCl₃)**



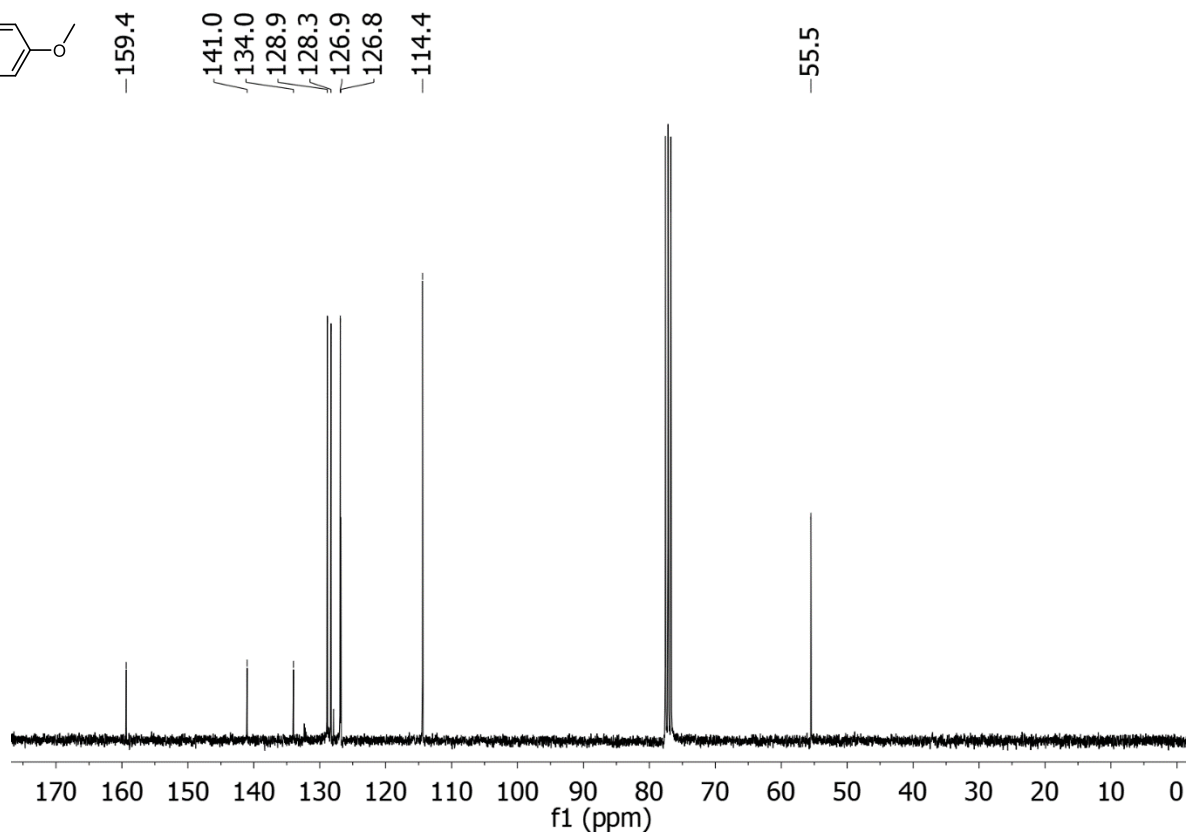
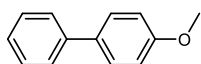
***m*-methoxybiphenyl (¹³C NMR, CDCl₃)**



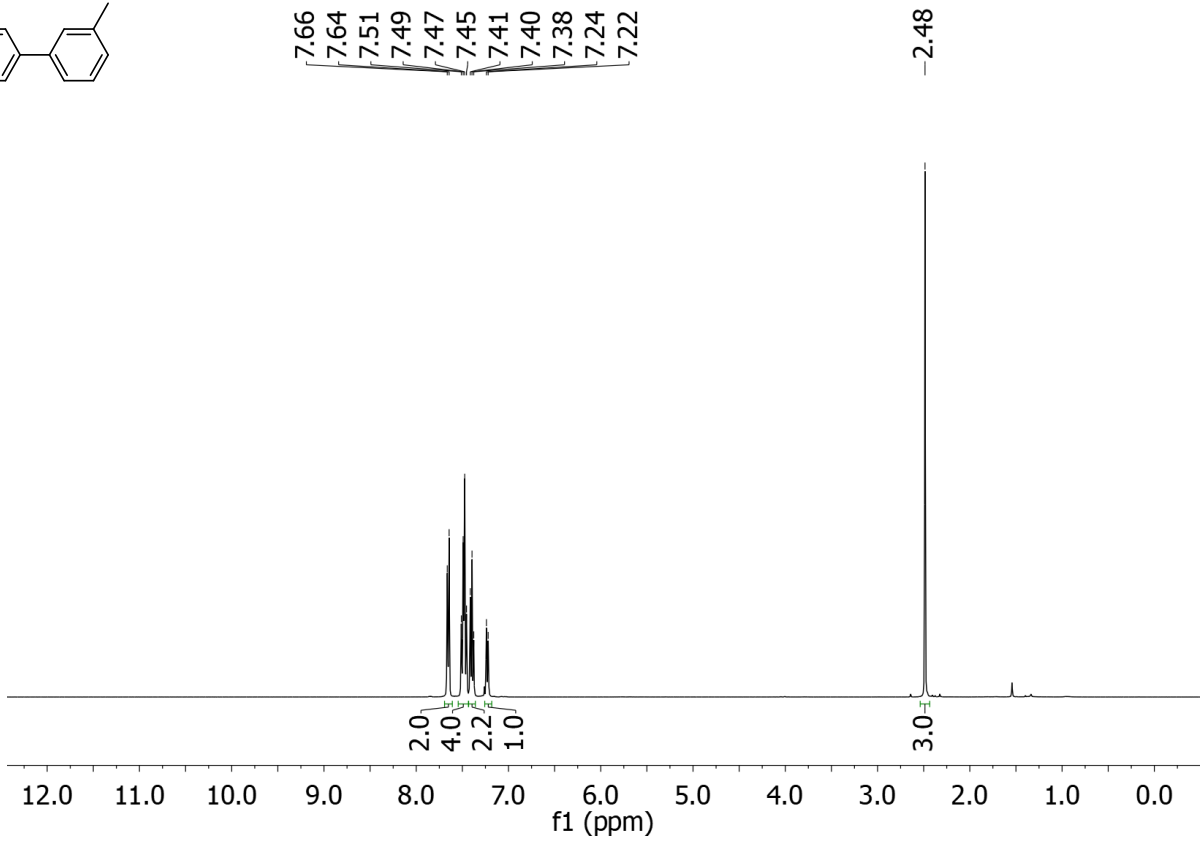
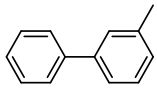
***p*-methoxybiphenyl (¹H NMR, CDCl₃)**



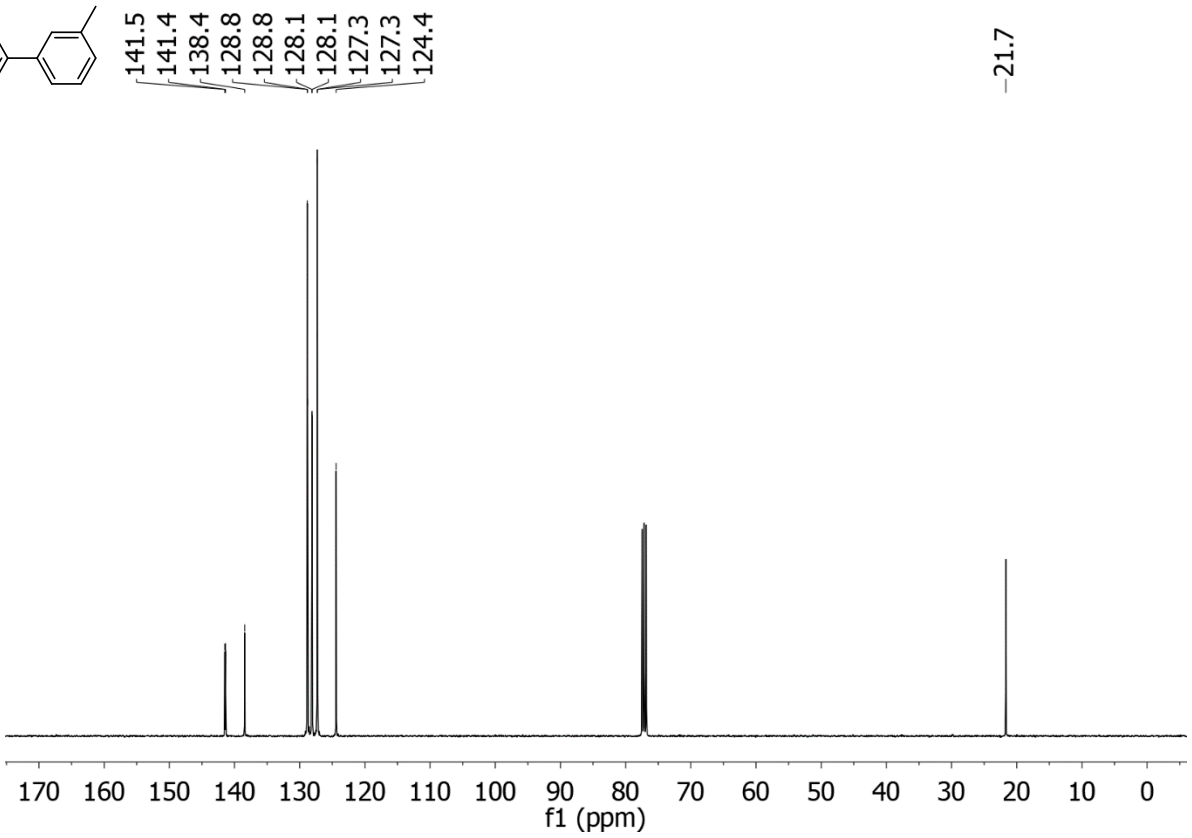
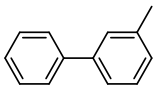
***p*-methoxybiphenyl (¹³C NMR, CDCl₃)**



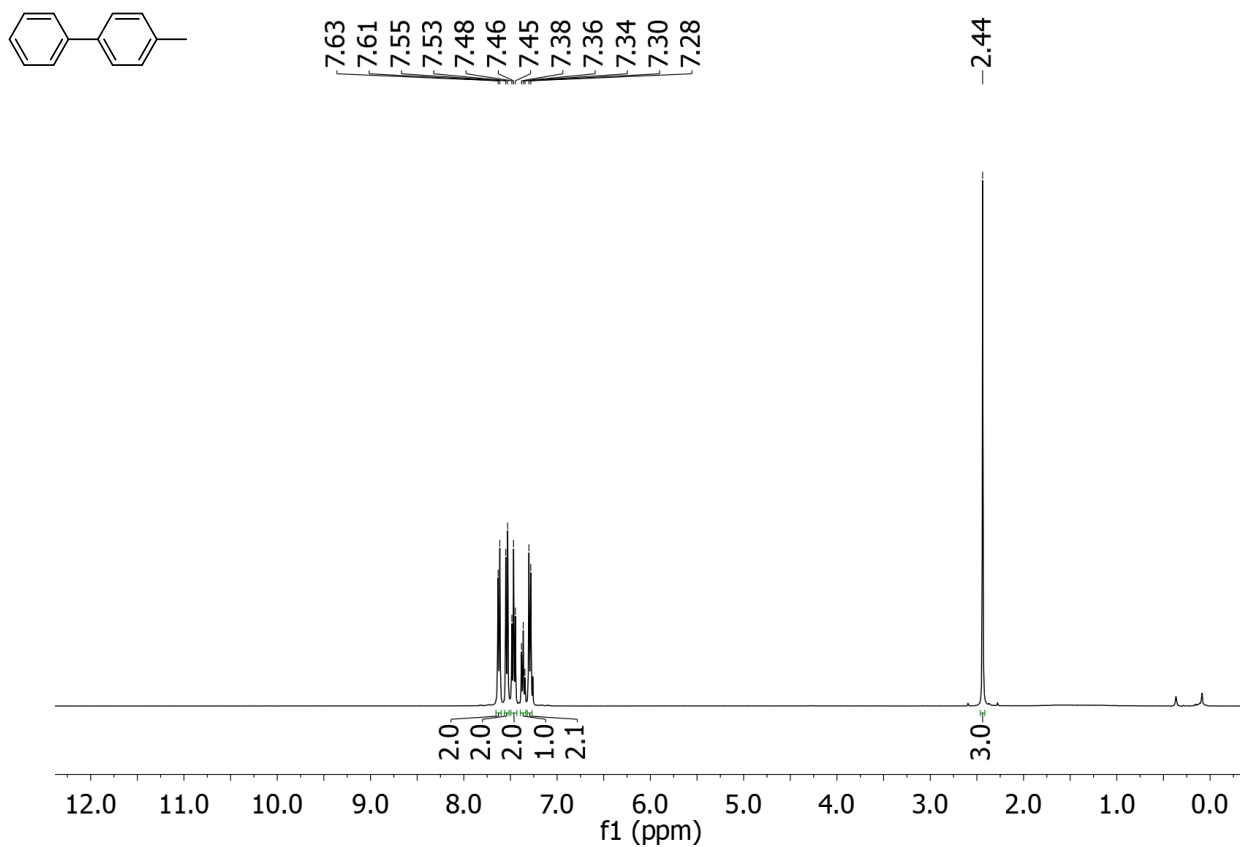
***m*-methylbiphenyl (¹H NMR, CDCl₃)**



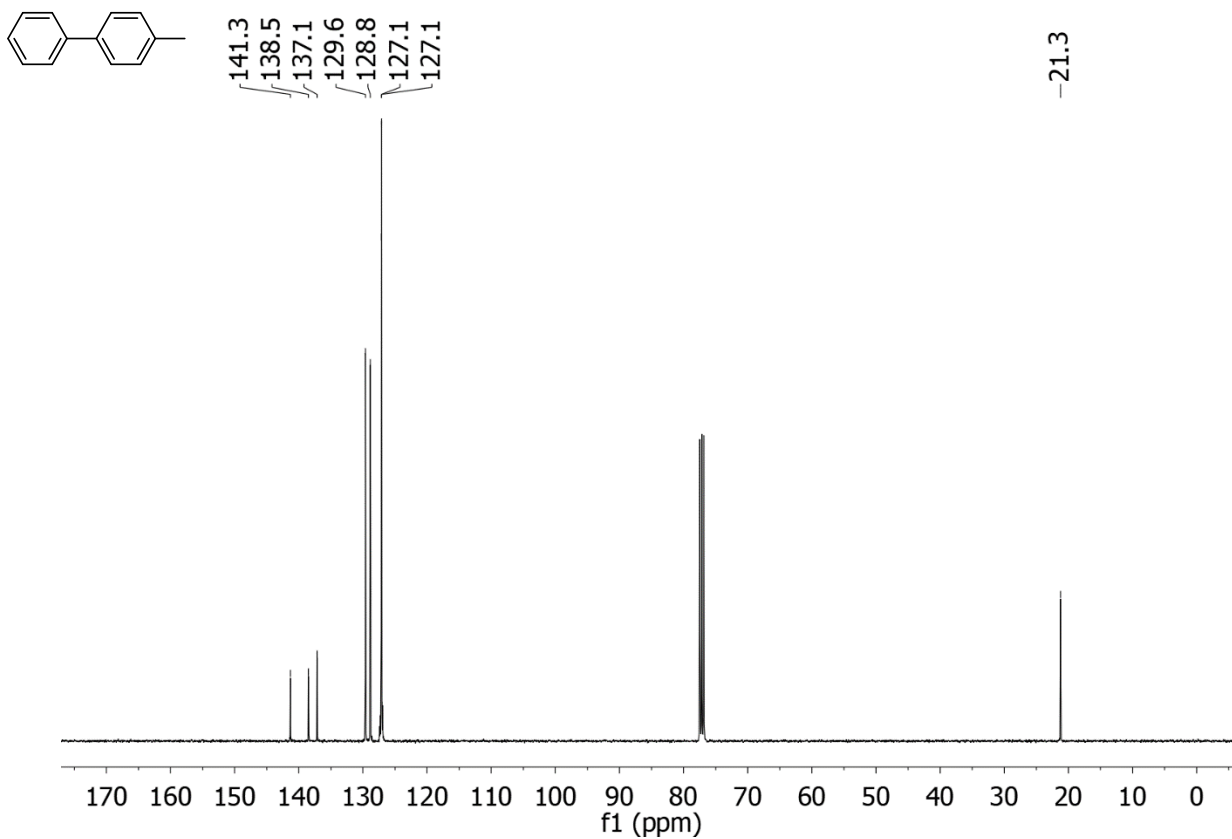
***m*-methylbiphenyl (¹³C NMR, CDCl₃)**



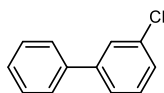
***p*-methylbiphenyl** (^1H NMR, CDCl_3)



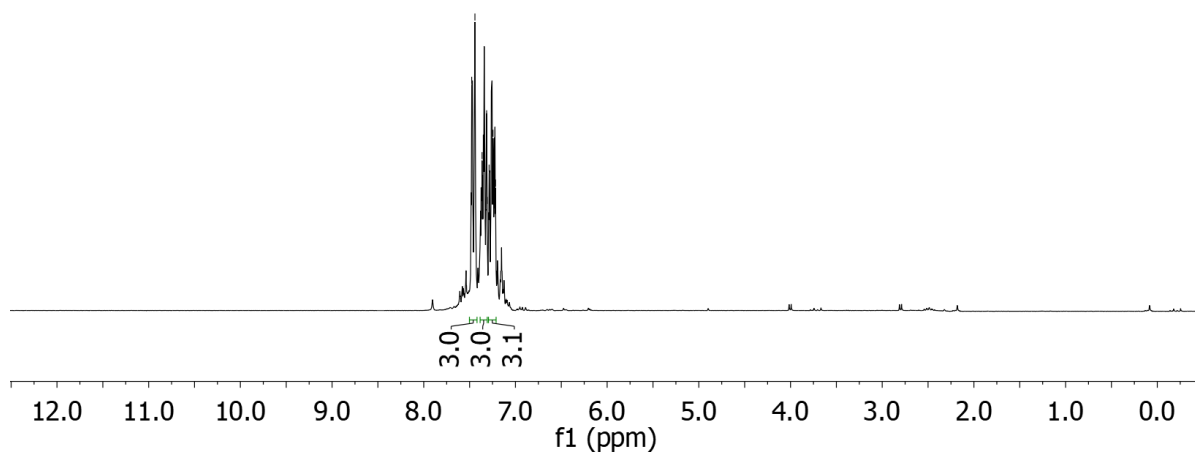
***p*-methylbiphenyl** (^{13}C NMR, CDCl_3)



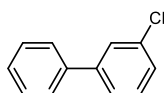
***m*-chlorobiphenyl (¹H NMR, CDCl₃)**



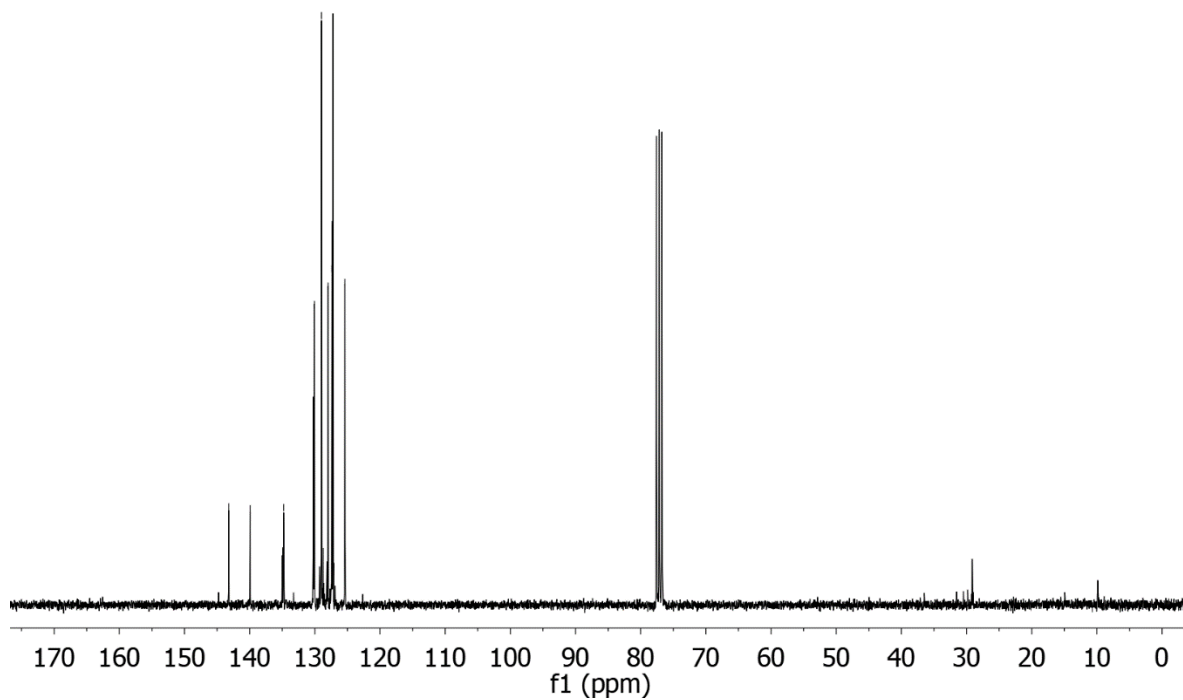
7.48
7.44
7.36
7.31
7.31
7.29
7.24
7.22



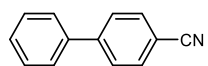
***m*-chlorobiphenyl (¹³C NMR, CDCl₃)**



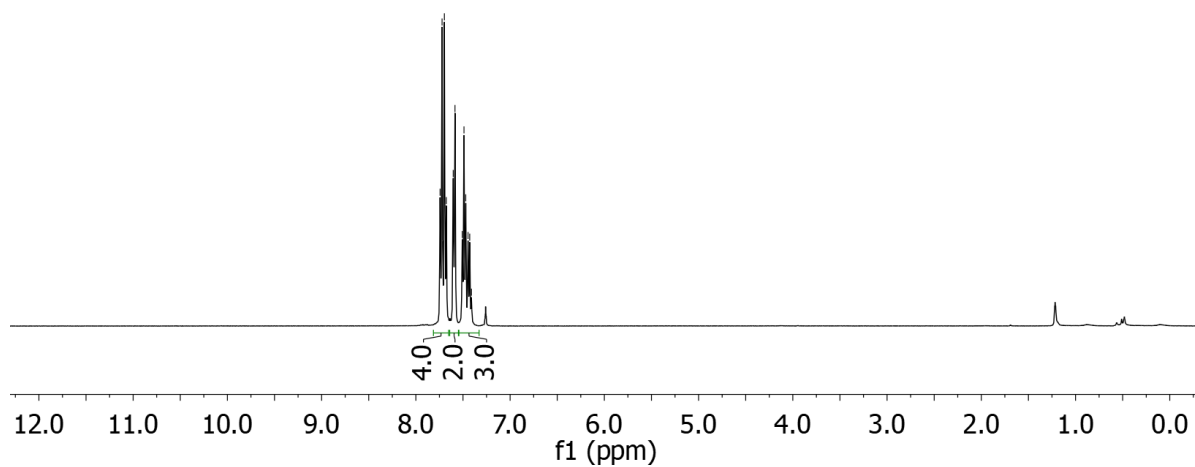
143.2
139.9
134.8
130.1
129.0
128.0
127.4
127.3
127.2
125.4



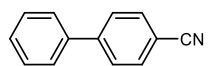
***p*-cyanobiphenyl** (^1H NMR, CDCl_3)



7.74
7.72
7.71
7.68
7.61
7.58
7.53
7.49
7.47
7.45
7.43
7.41



***p*-cyanobiphenyl** (^{13}C NMR, CDCl_3)



145.9
139.3
132.7
129.2
128.8
127.9
127.4
119.2
111.0

