

Supporting Information

for

Synthesis of 1,3-*cis*-disubstituted sterically encumbered imidazolidinone organocatalysts

Jan Wallbaum and Daniel B. Werz*

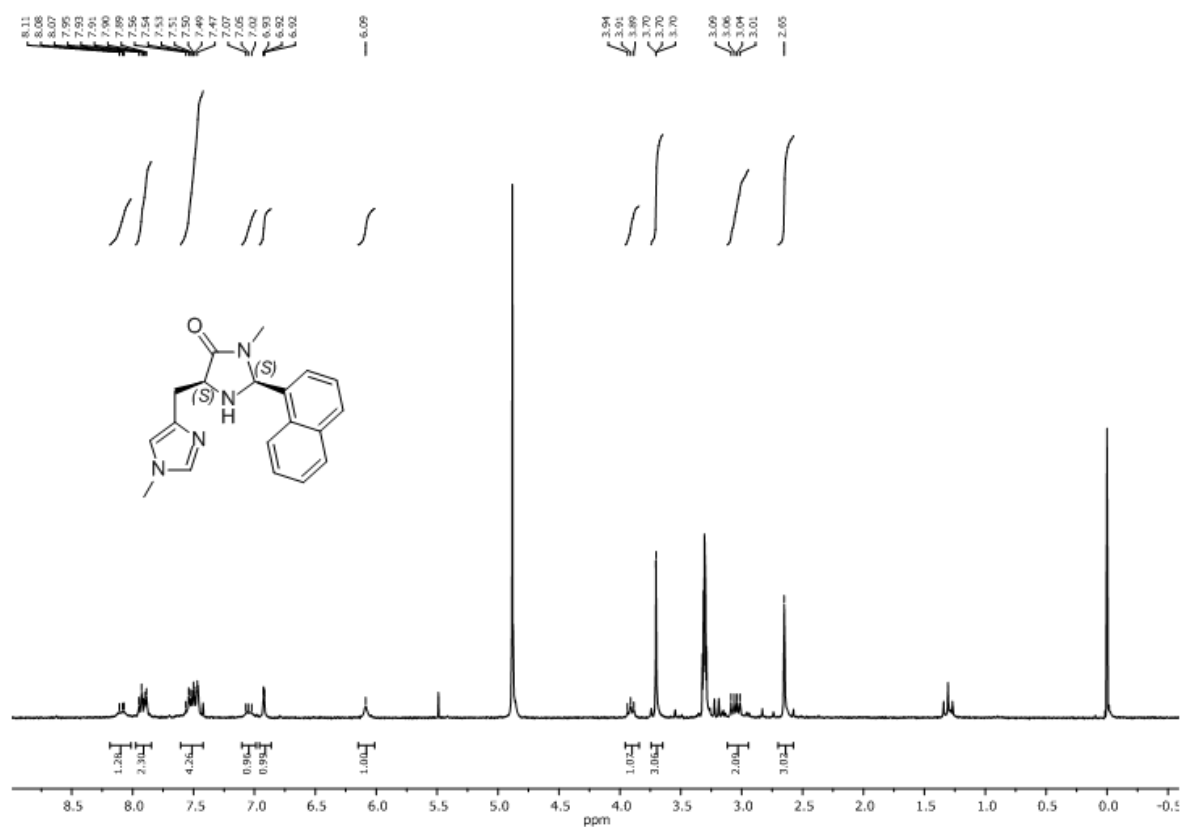
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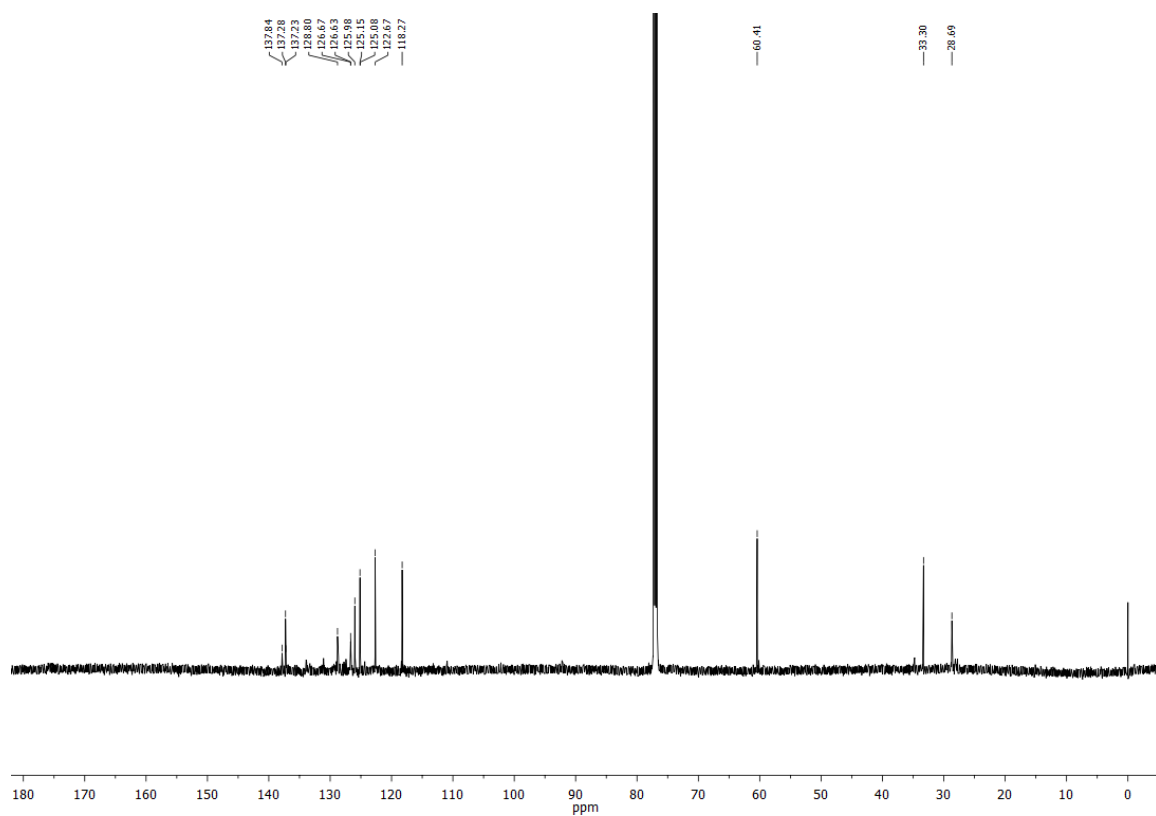
* Corresponding author

Copies of ^1H and ^{13}C NMR spectra

(2*S*,5*S*)-(+)-5-((*N*-methylimidazol-4-yl)methyl)-3-methyl-2-(naphthalen-1-yl)imidazolidin-4-one (7b)

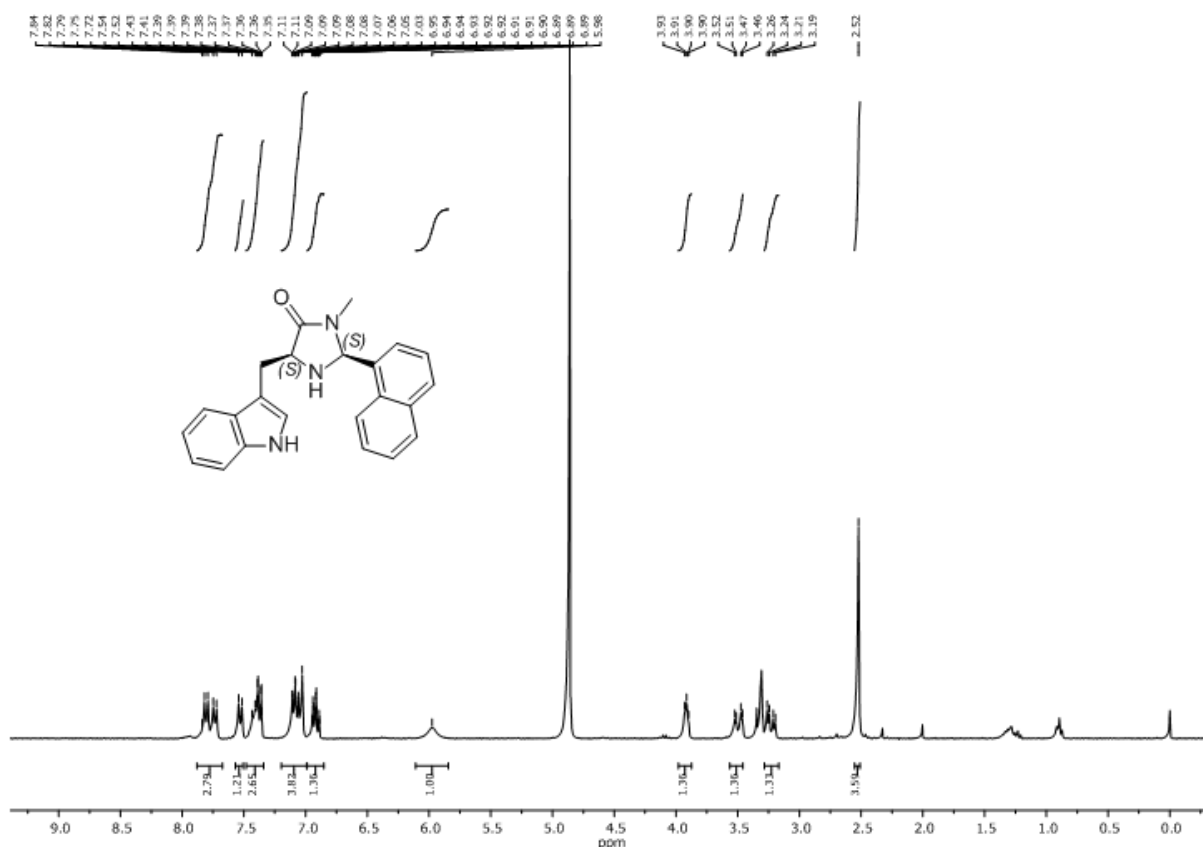


(¹H NMR, 200 MHz, MeOD)

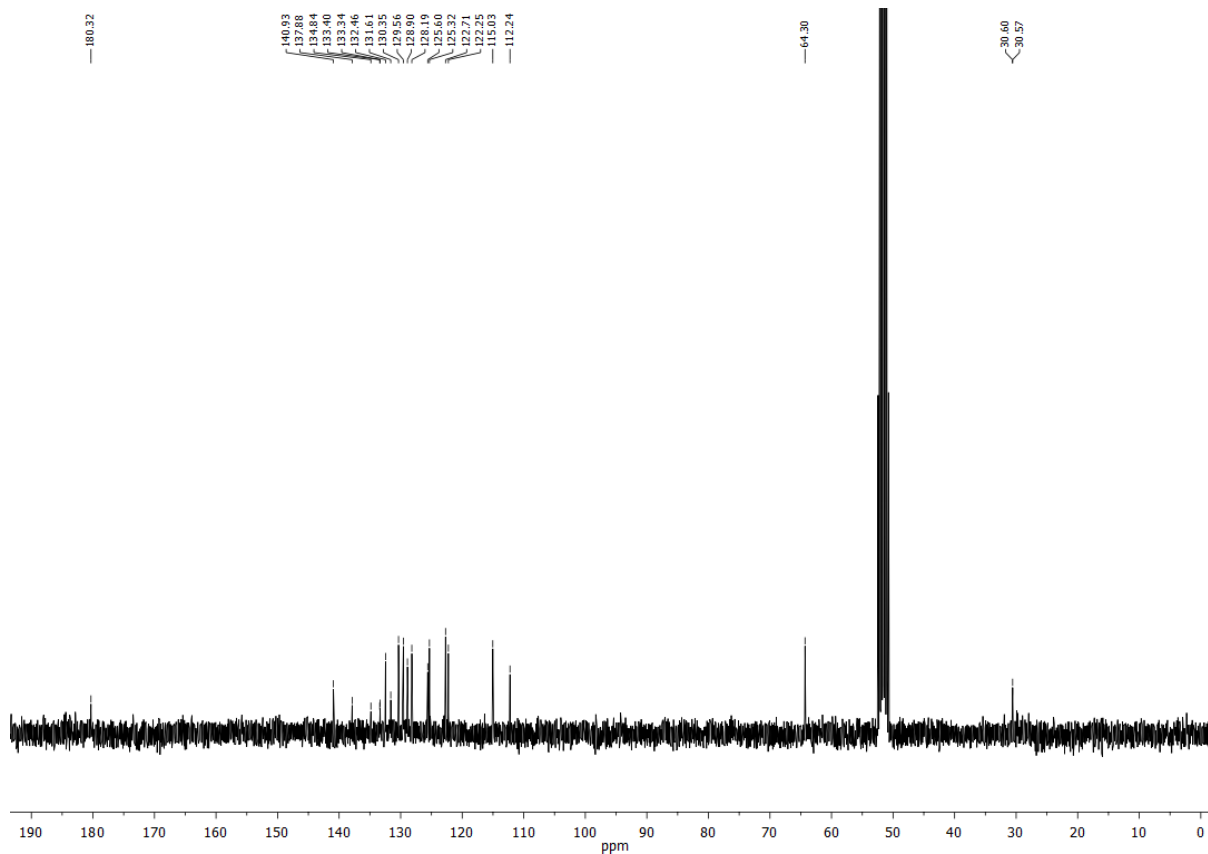


(¹³C NMR, 150 MHz, CDCl₃)

(2*S*,5*S*)-(-)-5-((Indol-3-yl)methyl)-3-methyl-2-(naphthalen-1-yl)imidazolidin-4-one (7c)

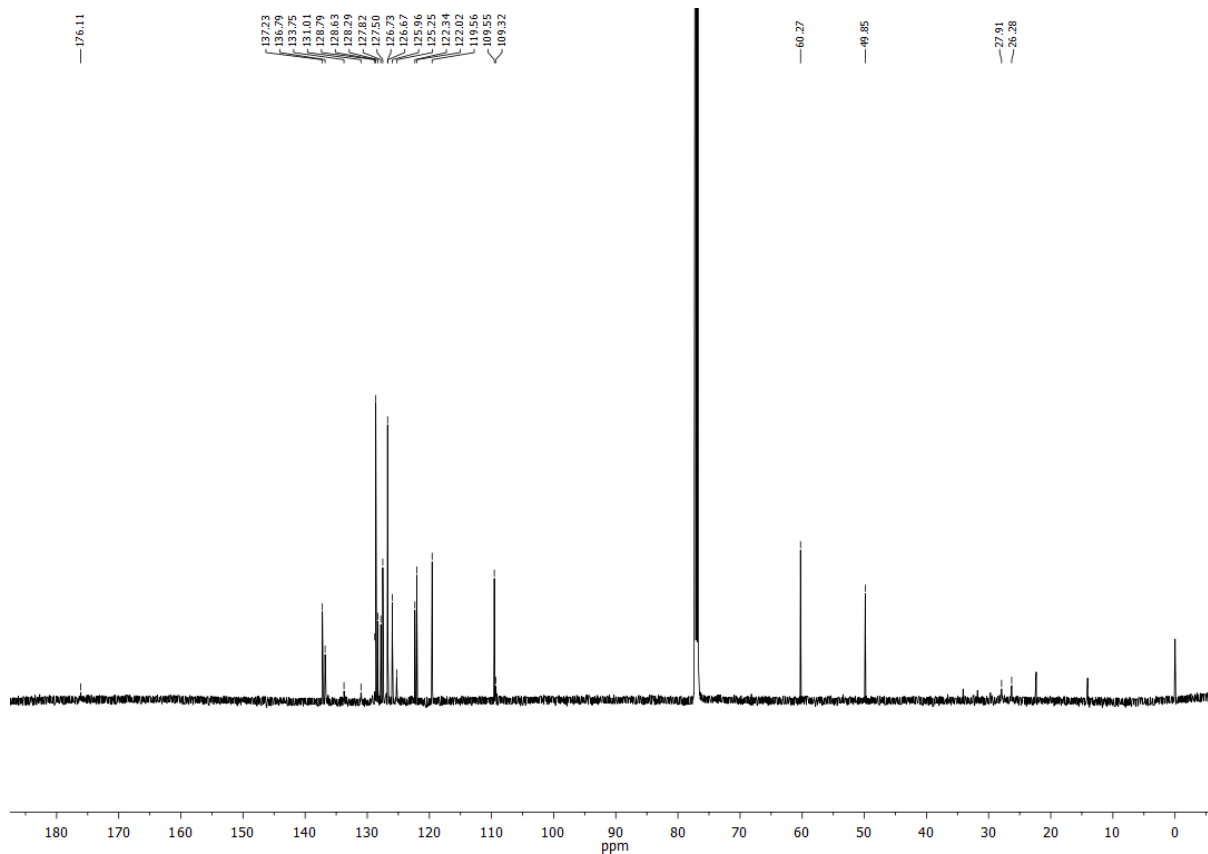
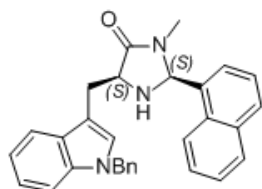
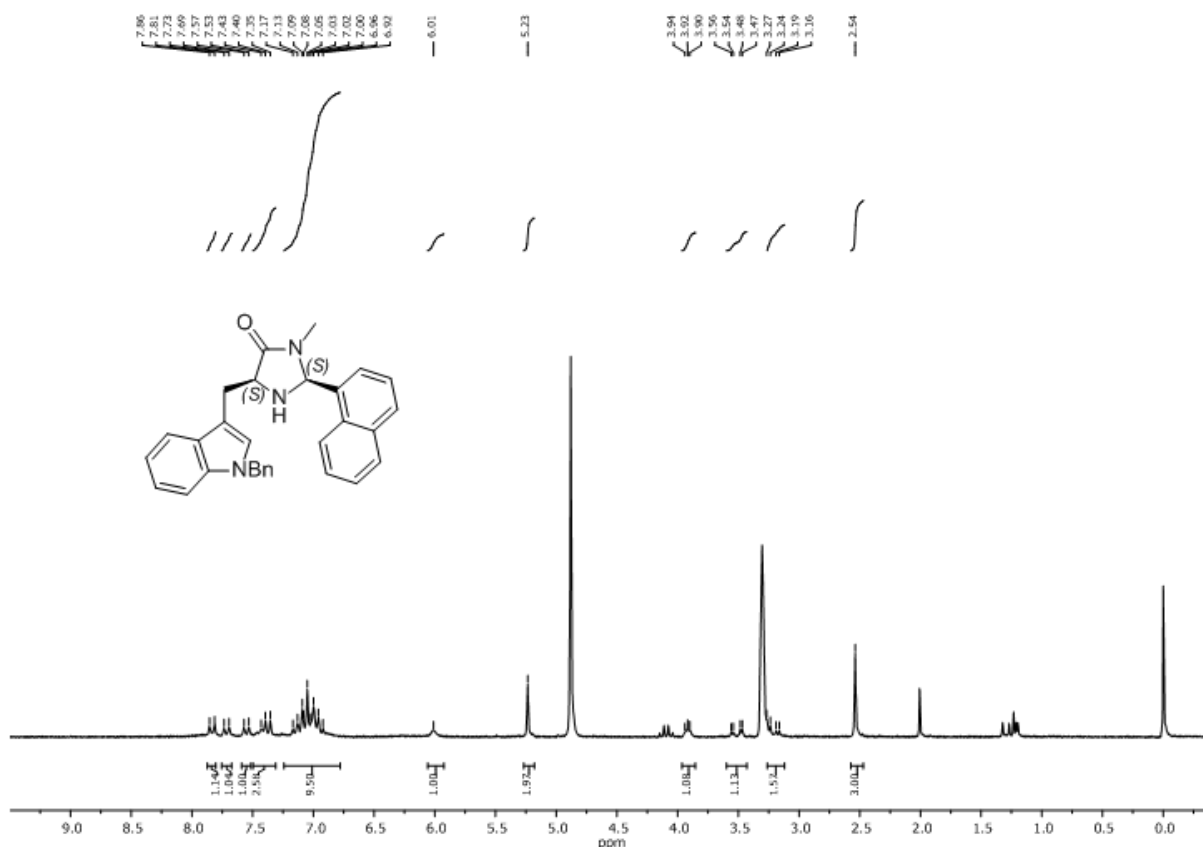


(¹H NMR, 300 MHz, MeOD)

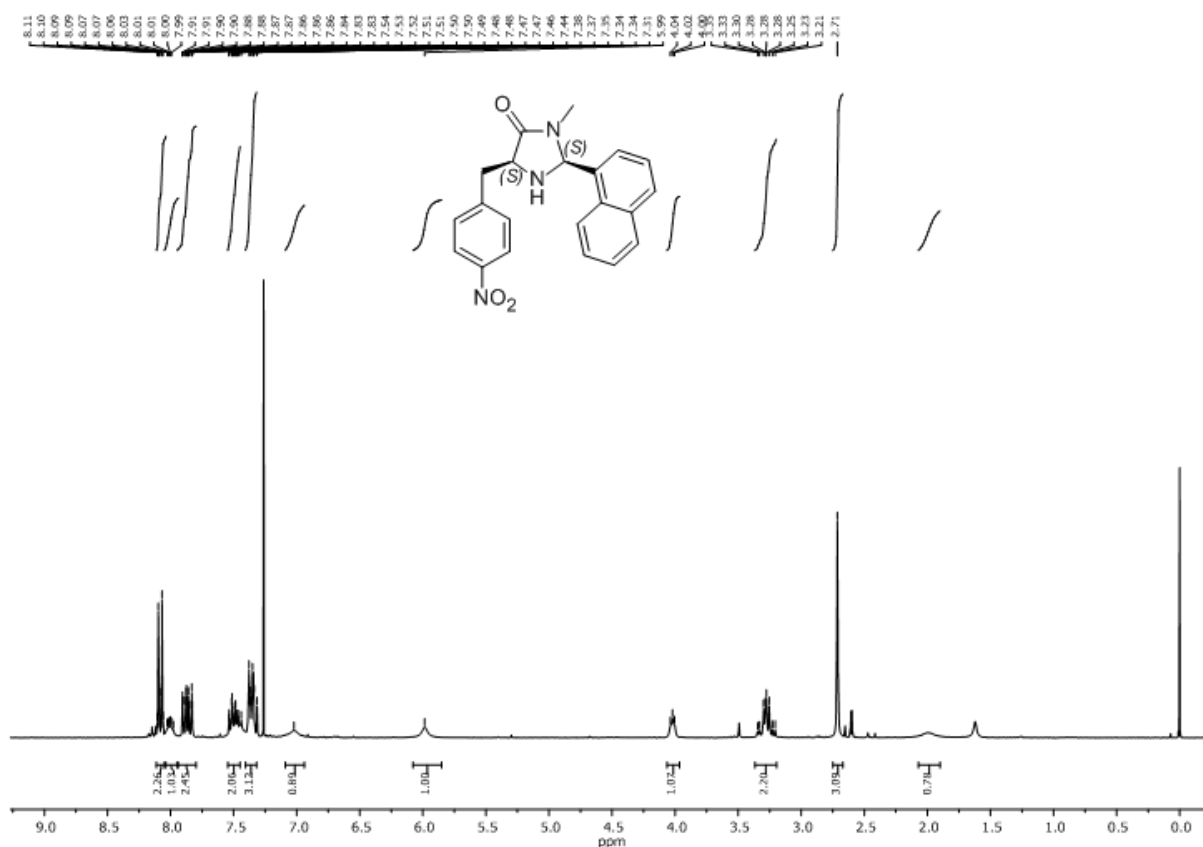


(¹³C NMR, 75 MHz, MeOD)

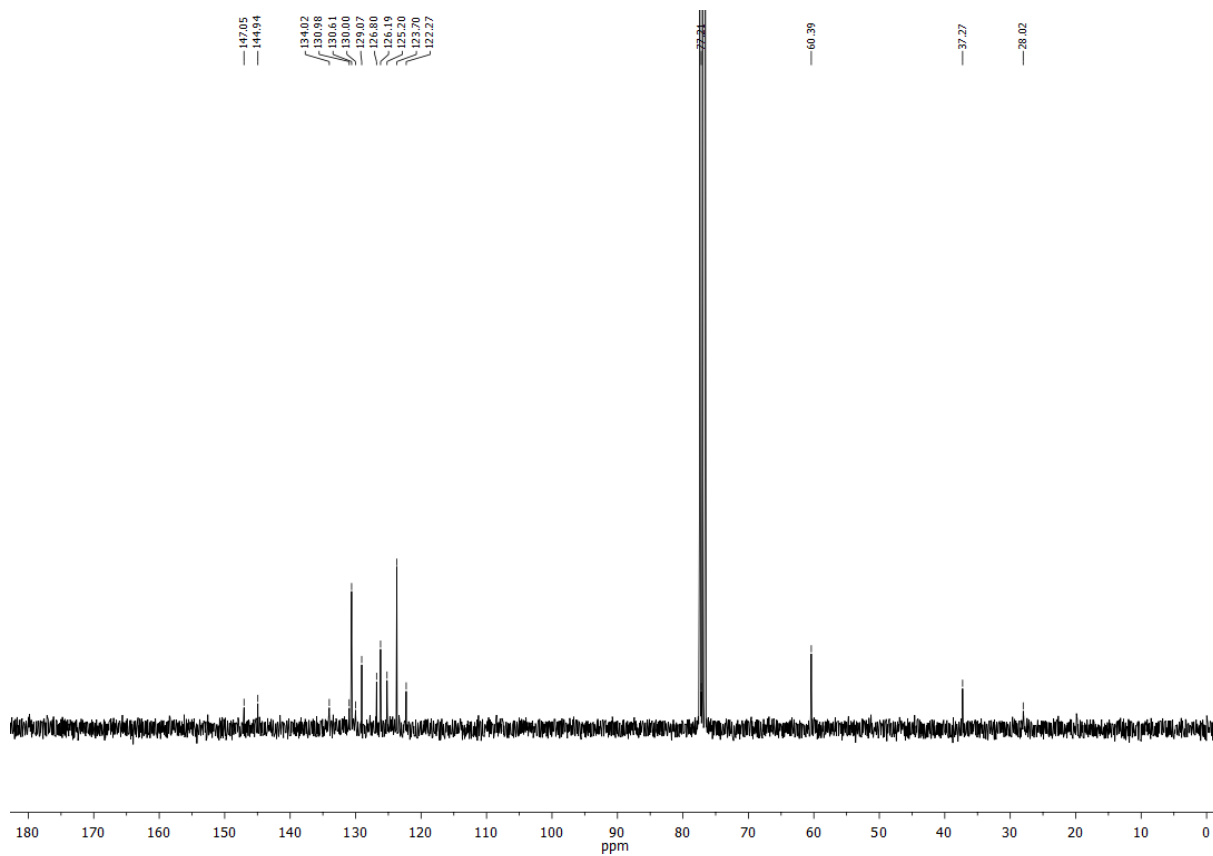
(2*S*,5*S*)-(-)-5-((*N*-benzylindol-3-yl)methyl)-3-methyl-2-(naphthalen-1-yl)imidazolidin-4-one (7d)



(2*S*,5*S*)-(-)-5-(*p*-Nitrobenzyl)-3-methyl-2-(naphthalen-1-yl)imidazolidin-4-one (7e)

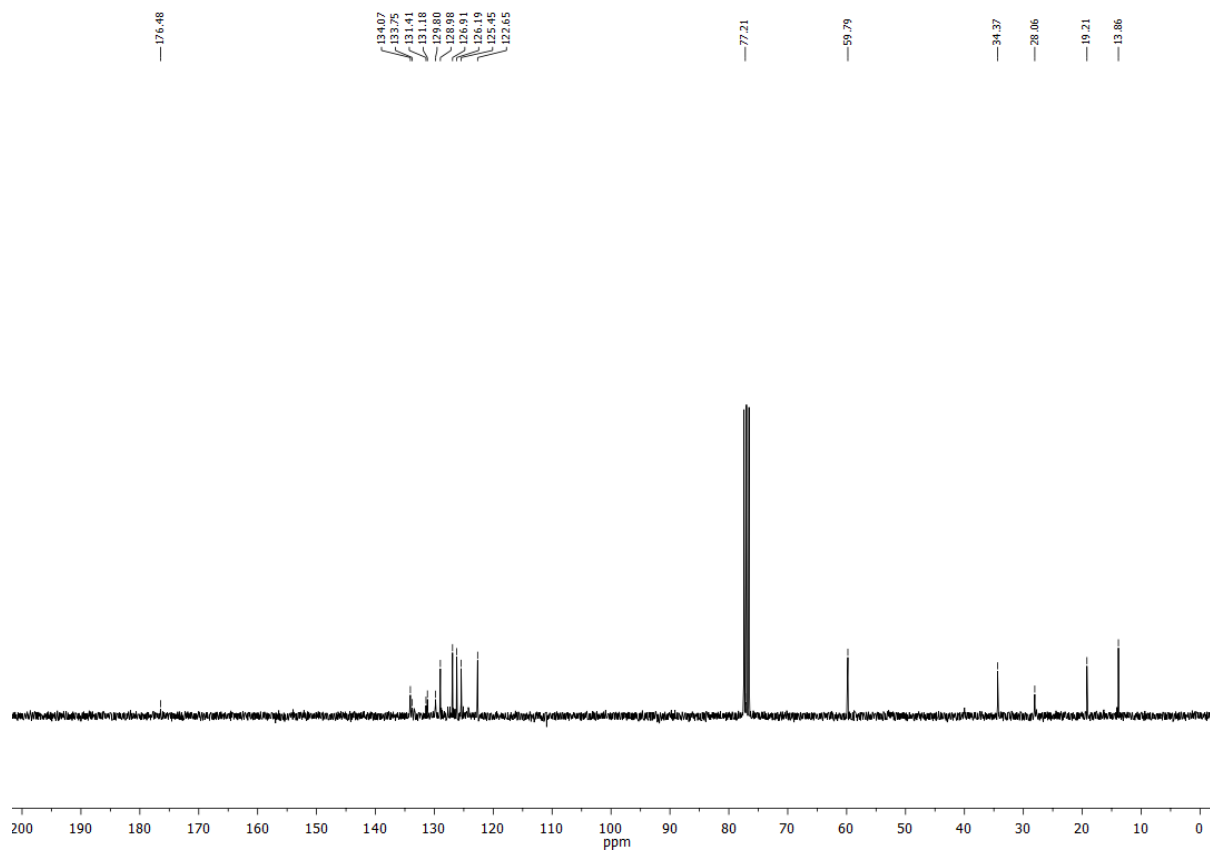
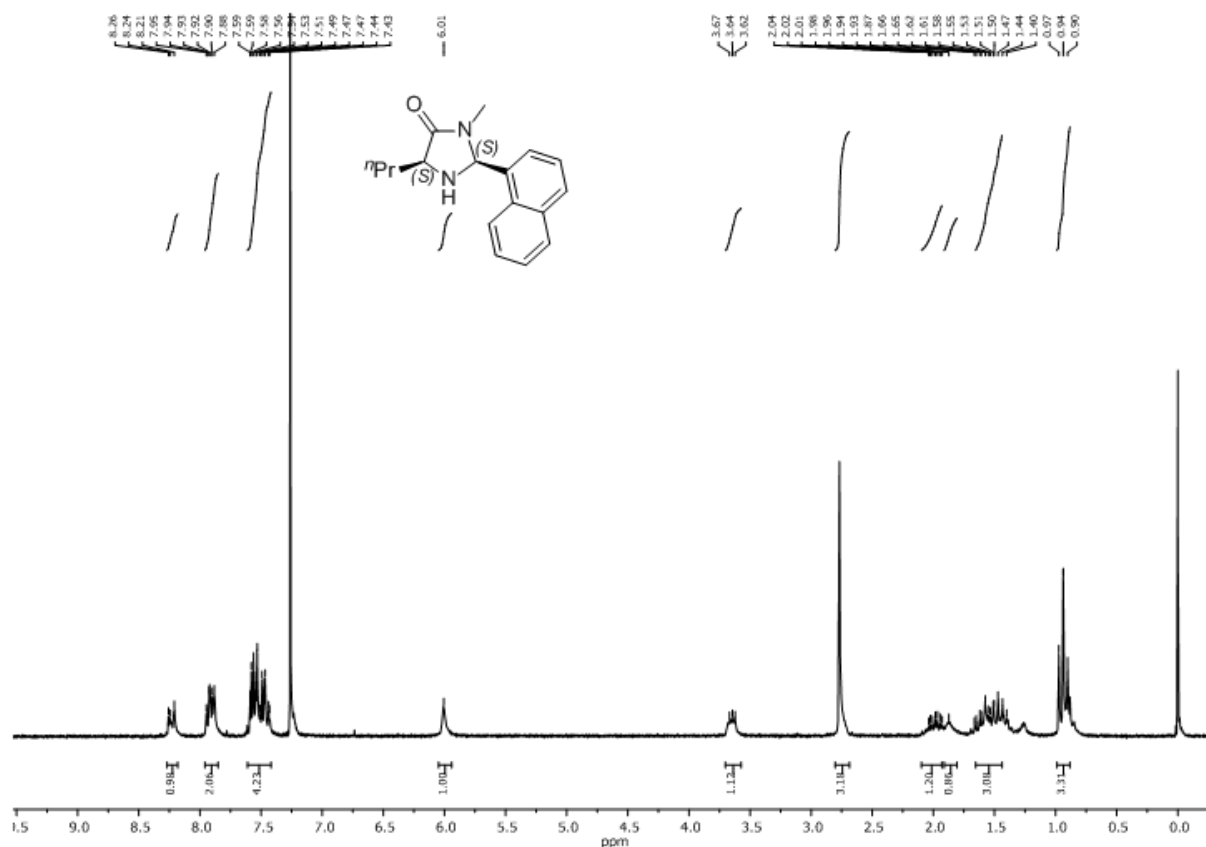


(¹H NMR, 300 MHz, CDCl₃)

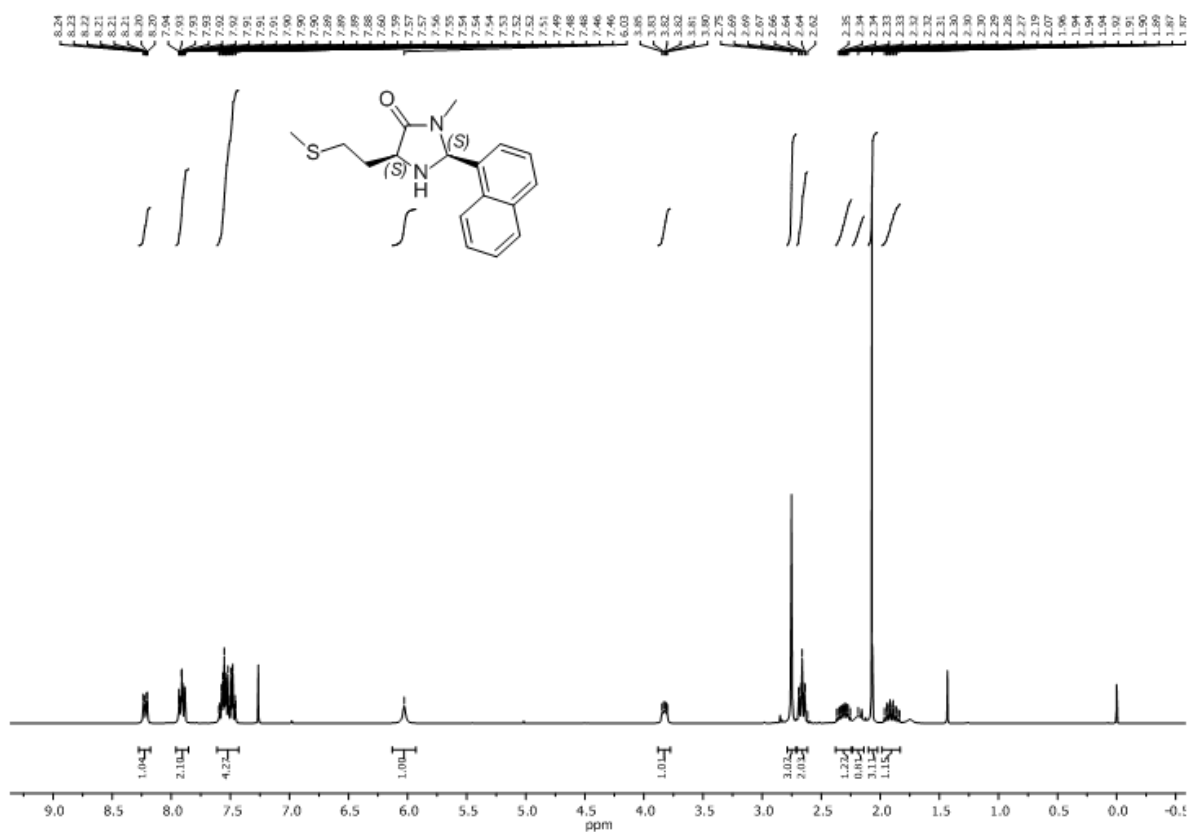


(¹³C NMR, 75 MHz, CDCl₃)

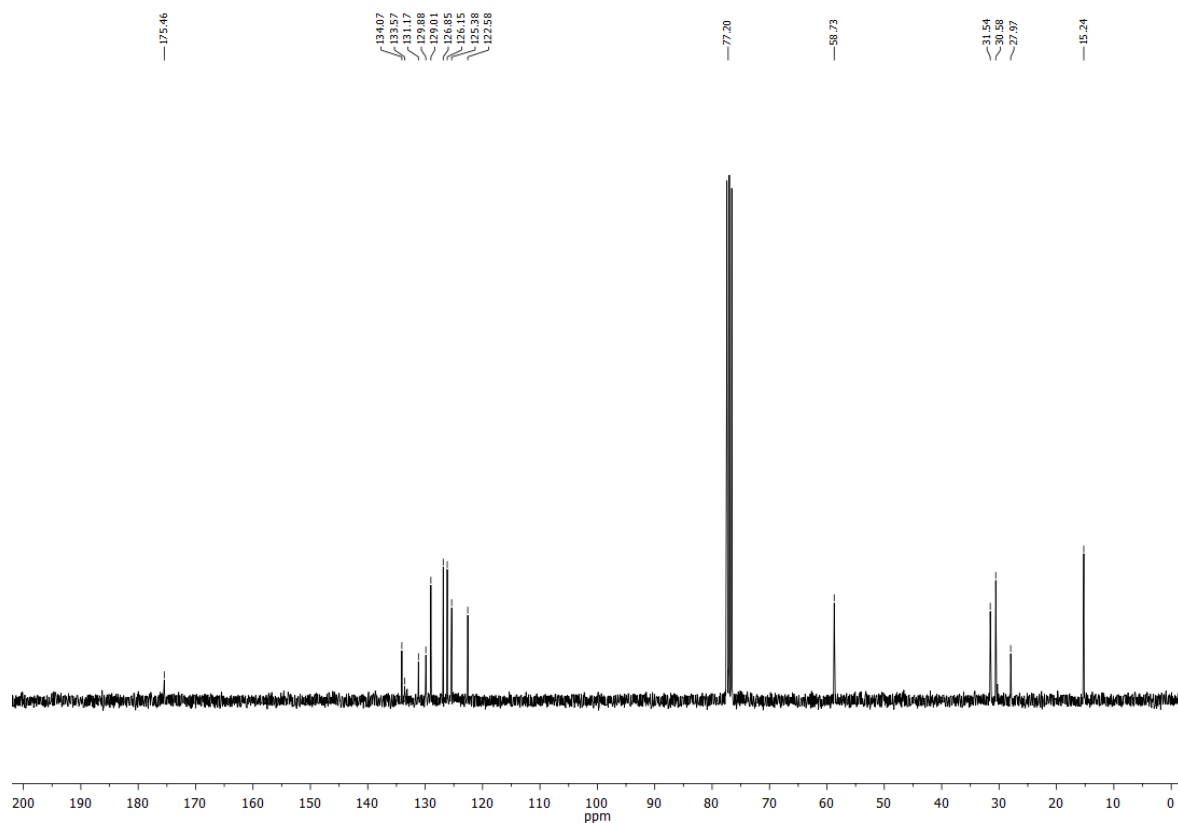
(2*S*,5*S*)-3-Methyl-2-(naphthalen-1-yl)-5-propylimidazolidin-4-one (7f)



(2S,5S)-3-Methyl-5-(2-(methylthio)ethyl)-2-(naphthalen-1-yl)imidazolidin-4-one (7g)

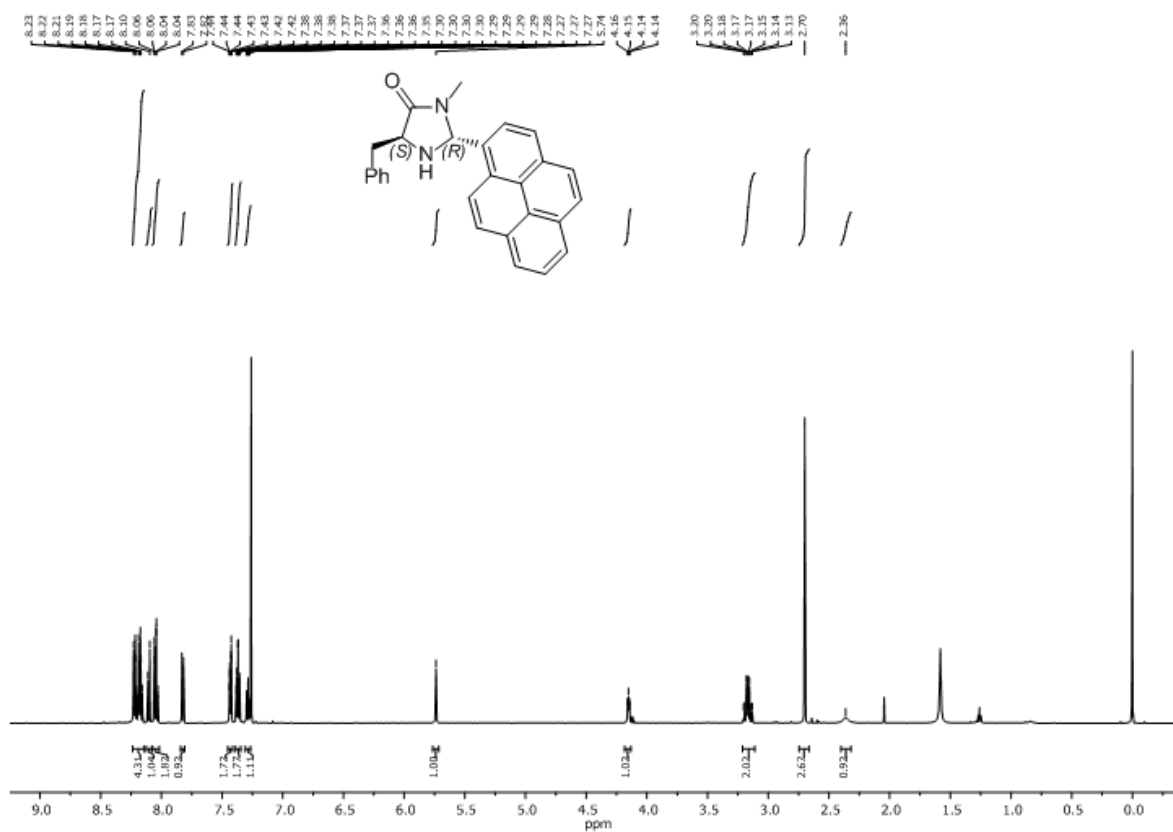


(¹H NMR, 300 MHz, CDCl₃)

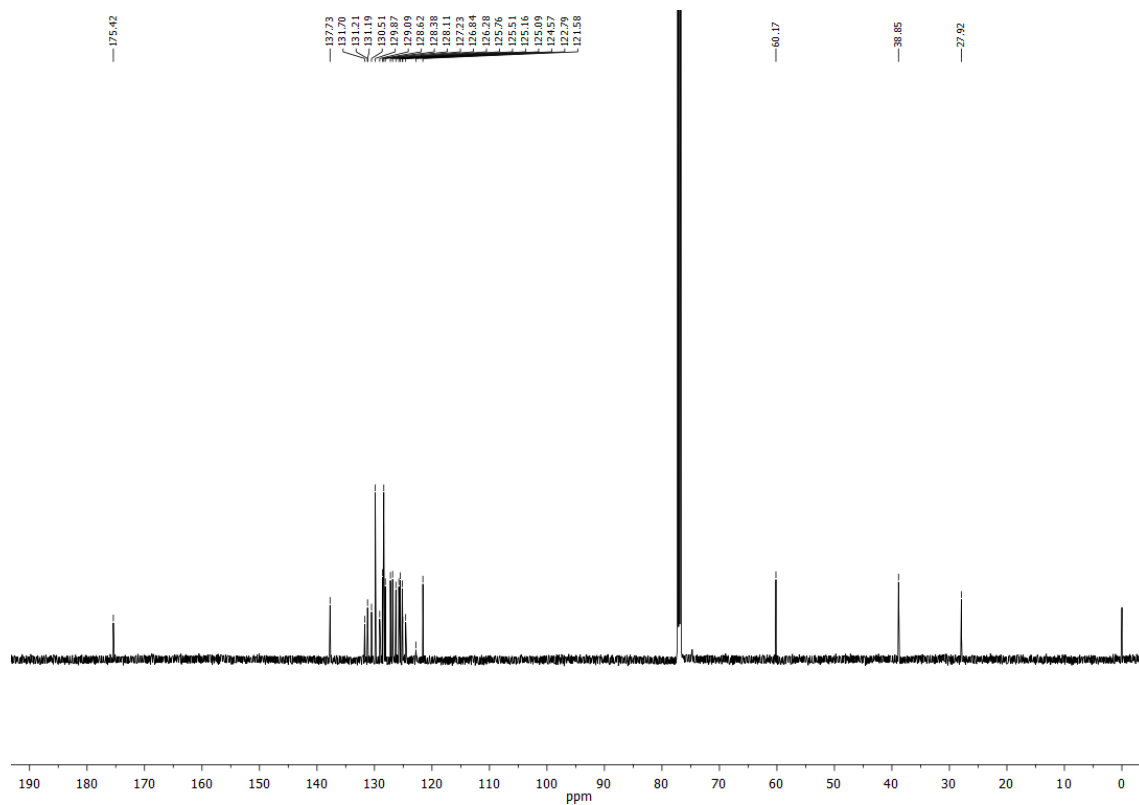


(¹³C NMR, 75 MHz, CDCl₃)

(2*R*,5*S*)-(-)-5-Benzyl-3-methyl-2-(pyren-1-yl)imidazolidin-4-one ((*R*,5)-3b)

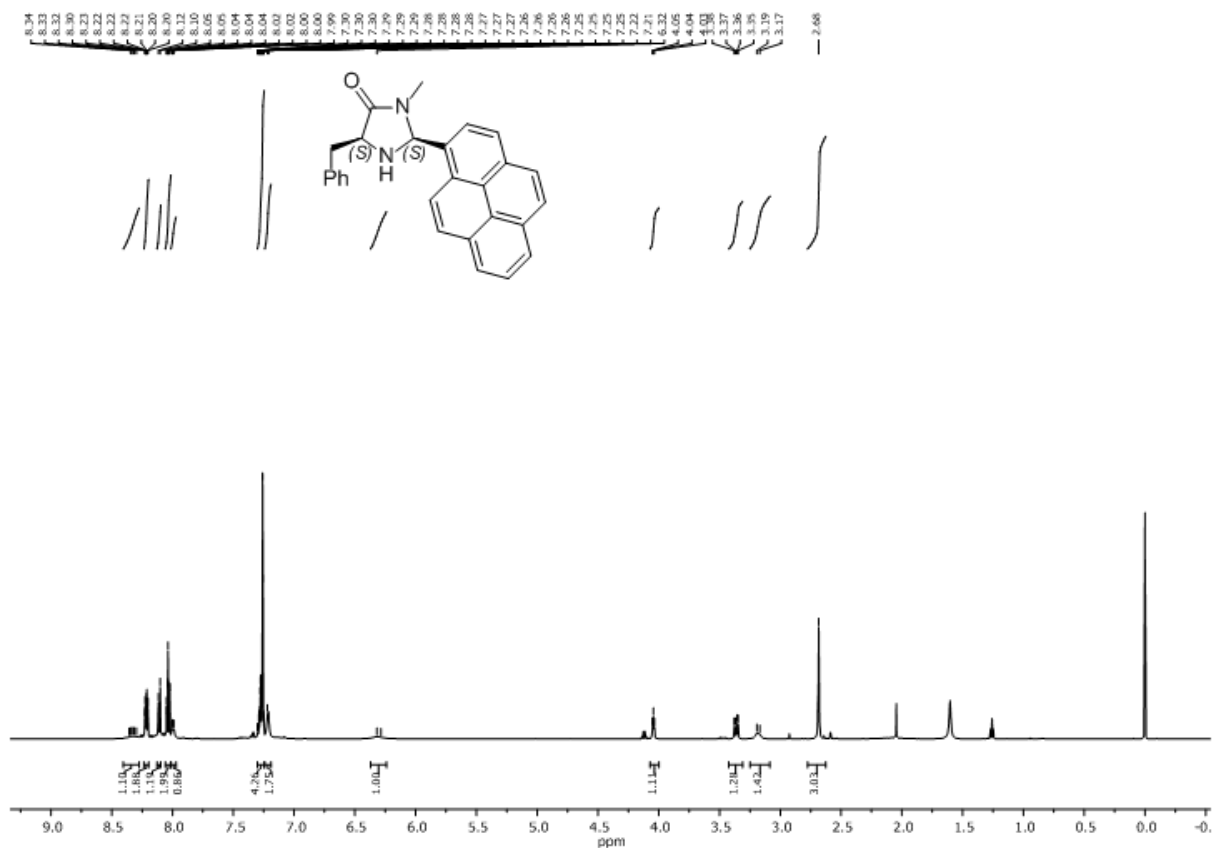


(¹H NMR, 600 MHz, CDCl₃)

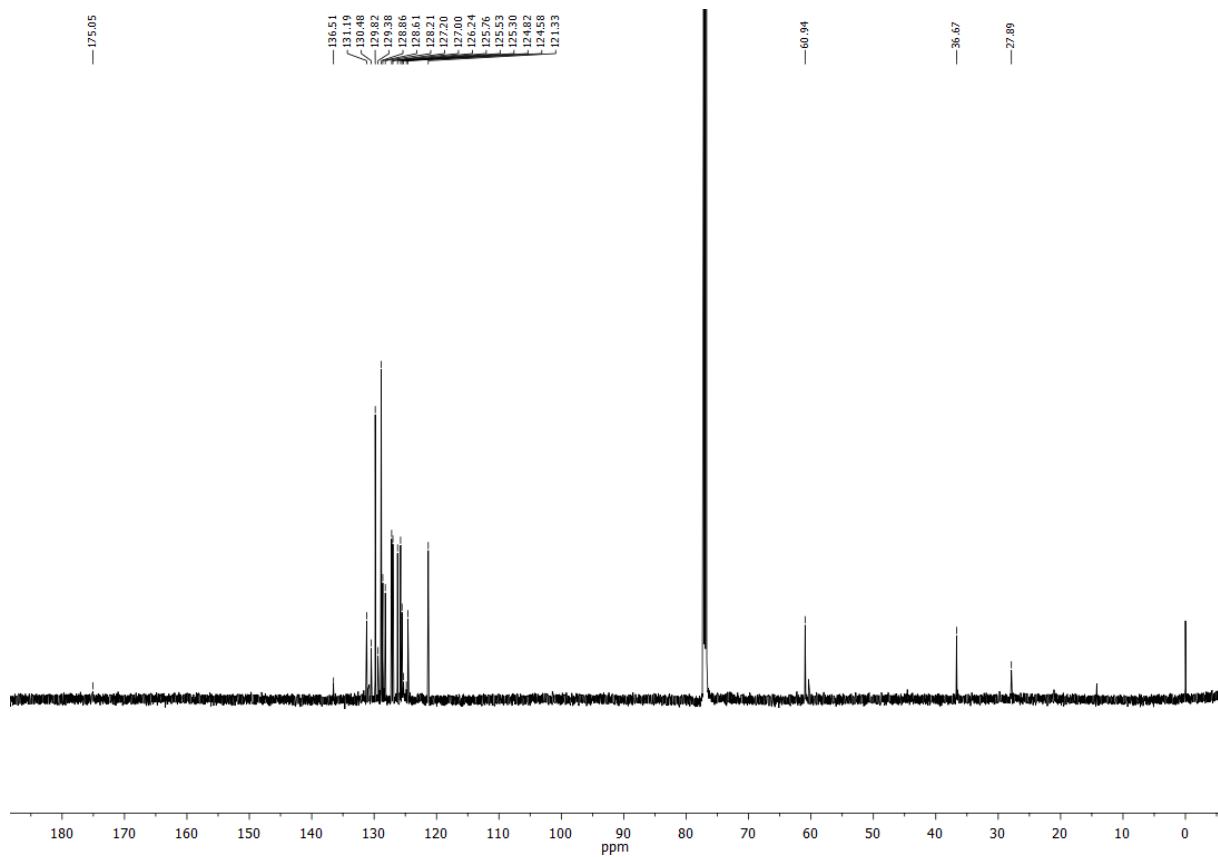


(¹³C NMR, 150 MHz, CDCl₃)

(2*S*,5*S*)-(-)-5-Benzyl-3-methyl-2-(pyren-1-yl)imidazolidin-4-one ((*S*,5)-3b)

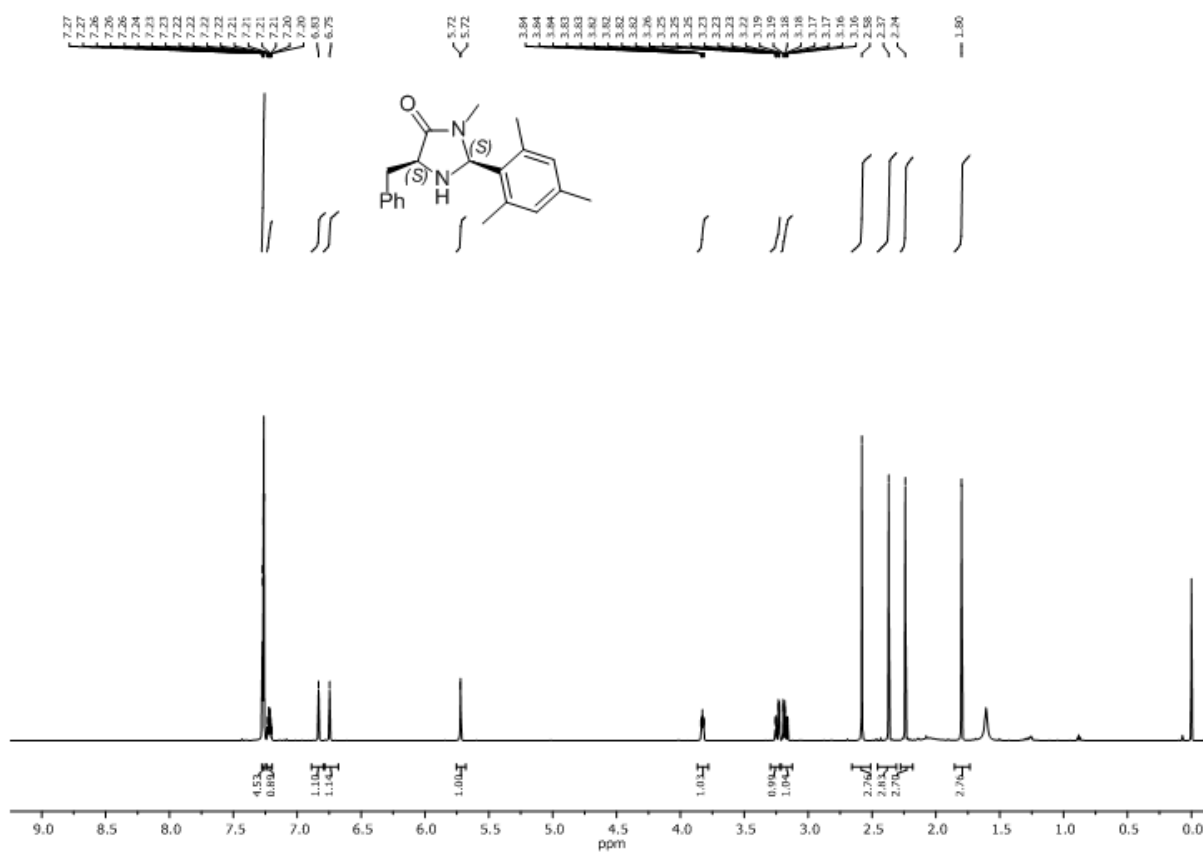


(¹H NMR, 600 MHz, CDCl₃)

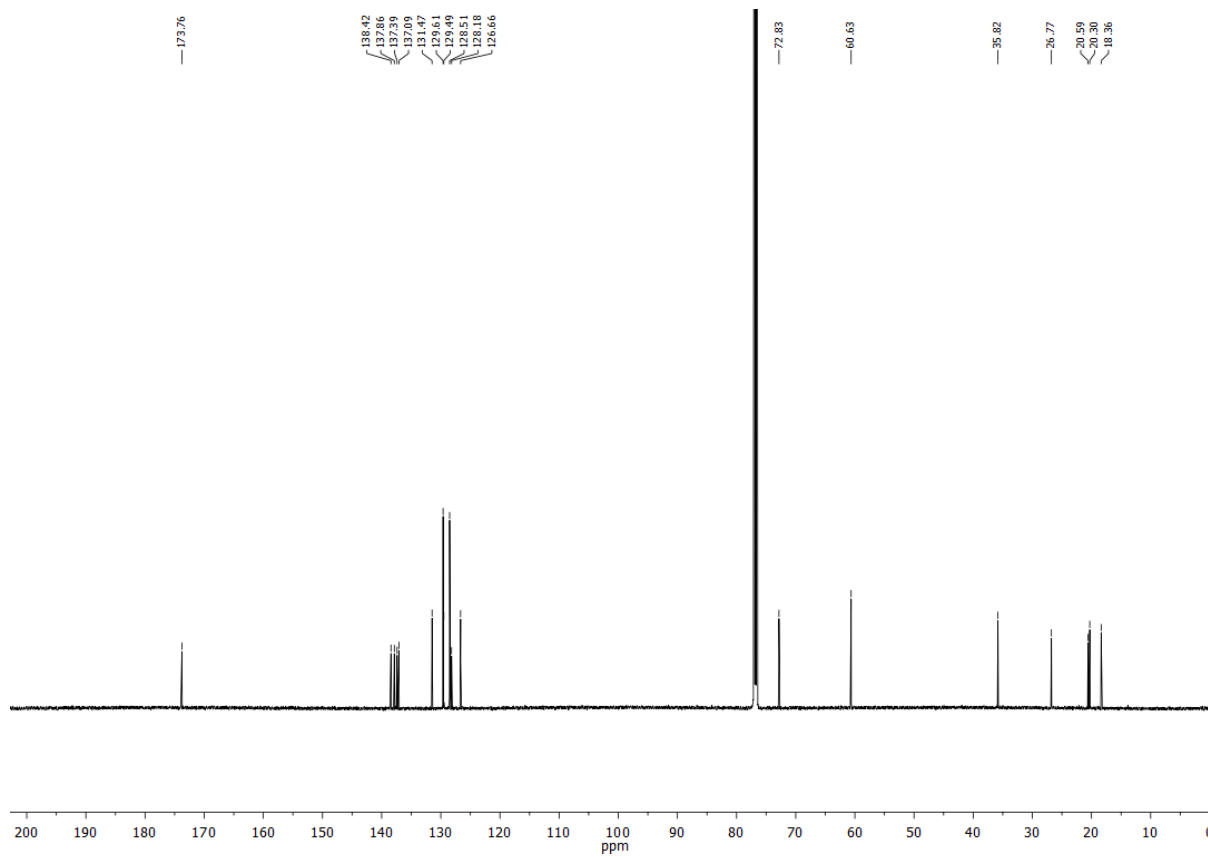


(¹³C NMR, 150 MHz, CDCl₃)

(2*S*,5*S*)-(-)-5-Benzyl-3-methyl-2-mesitylimidazolidin-4-one (3c)

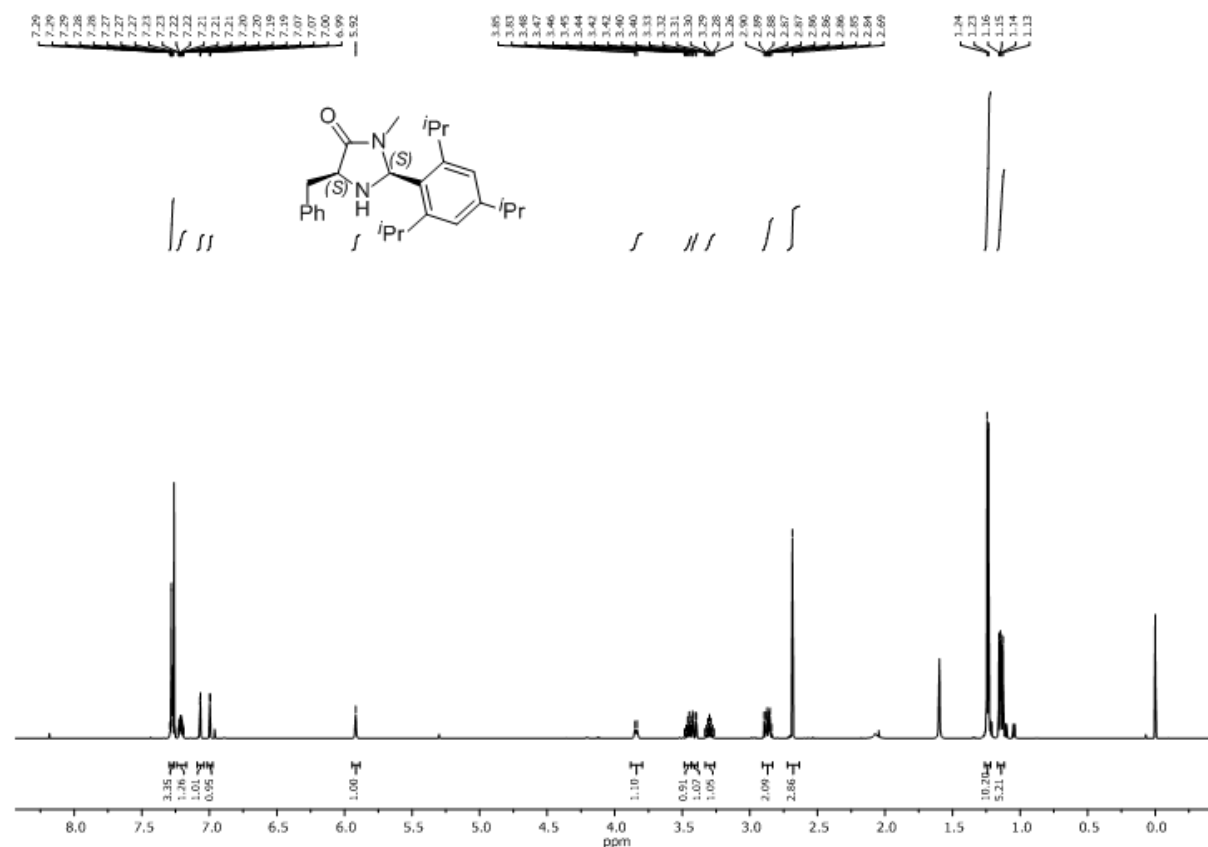


(¹H NMR, 600 MHz, CDCl₃)

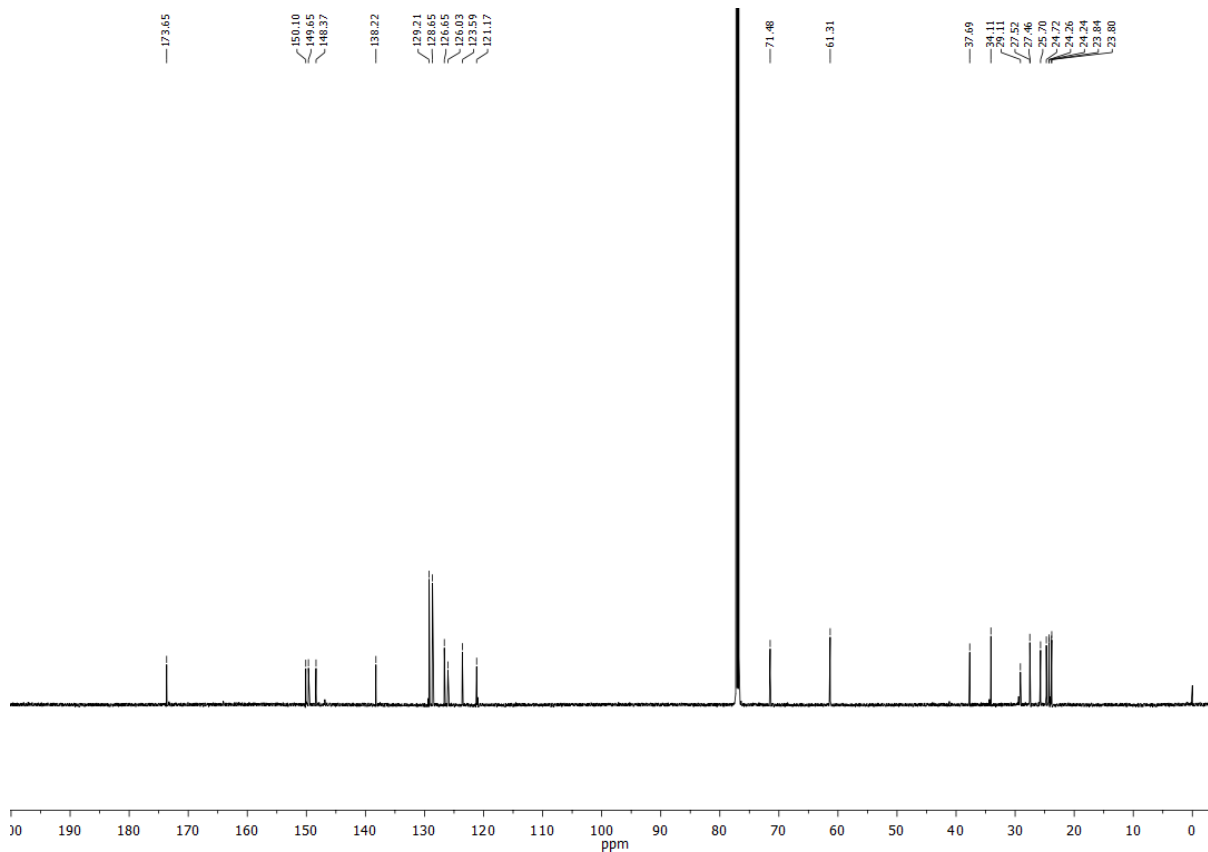


(¹³C NMR, 150 MHz, CDCl₃)

(2*S*,5*S*)-5-Benzyl-3-methyl-2-(2,4,6-triisopropylphen-1-yl)imidazolidin-4-one (3d)



(¹H NMR, 600 MHz, CDCl₃)



(¹³C NMR, 150 MHz, CDCl₃)