

Electronic Supplementary Information

Rhodium-catalyzed alkenyl C-H functionalization with amides

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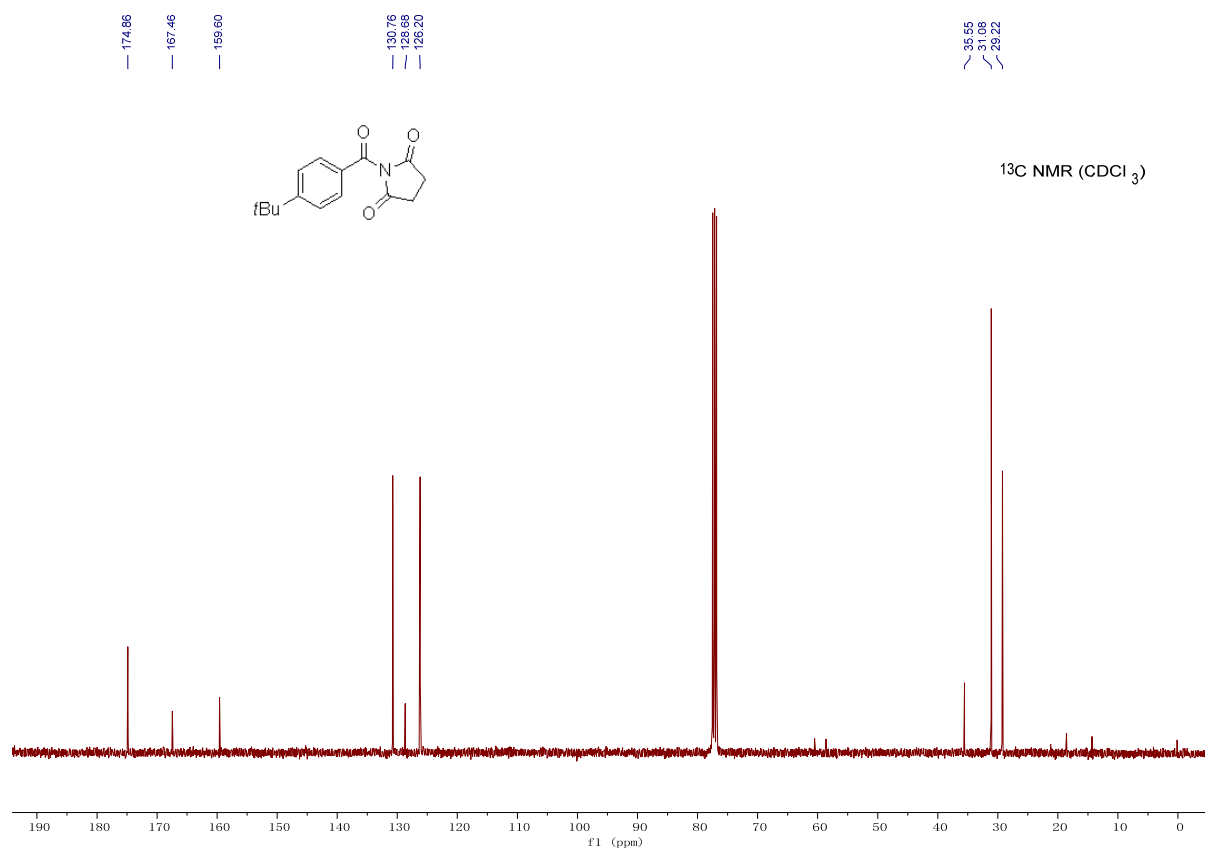
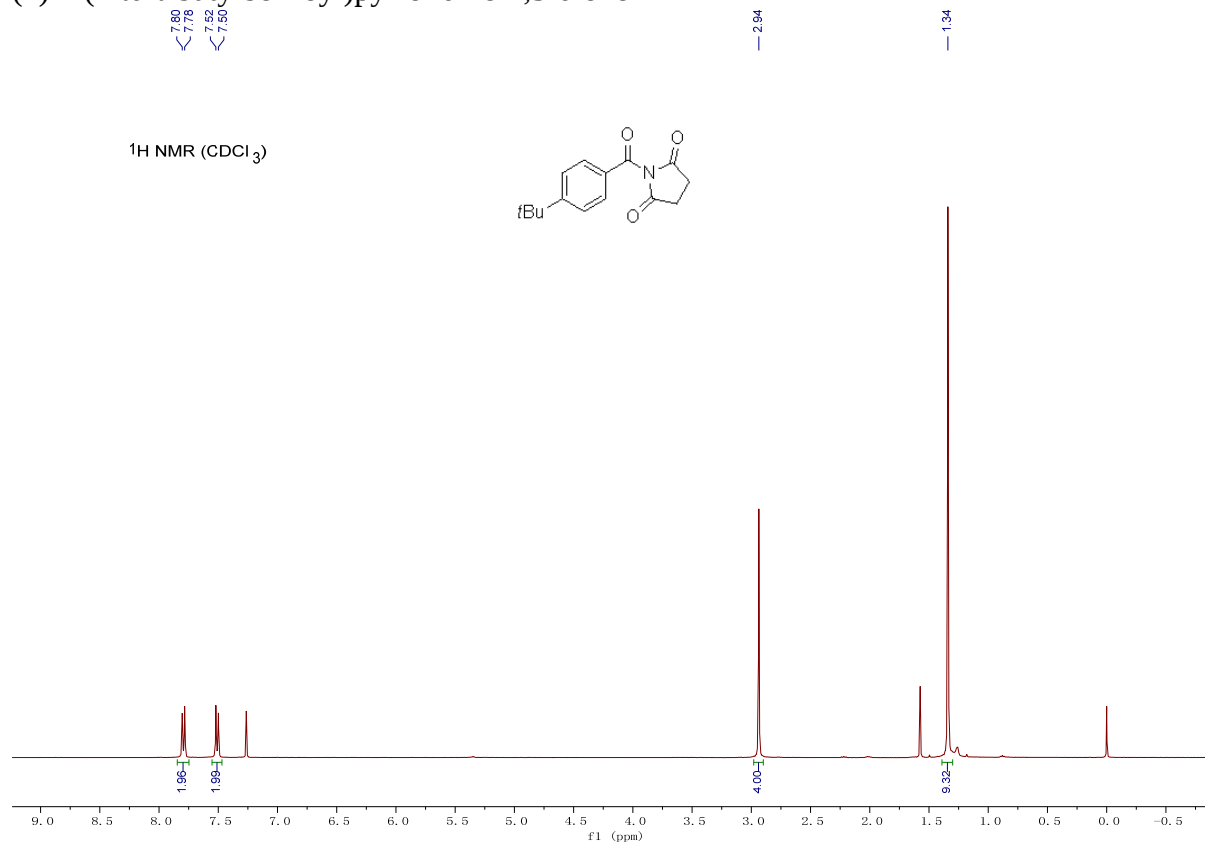
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Content

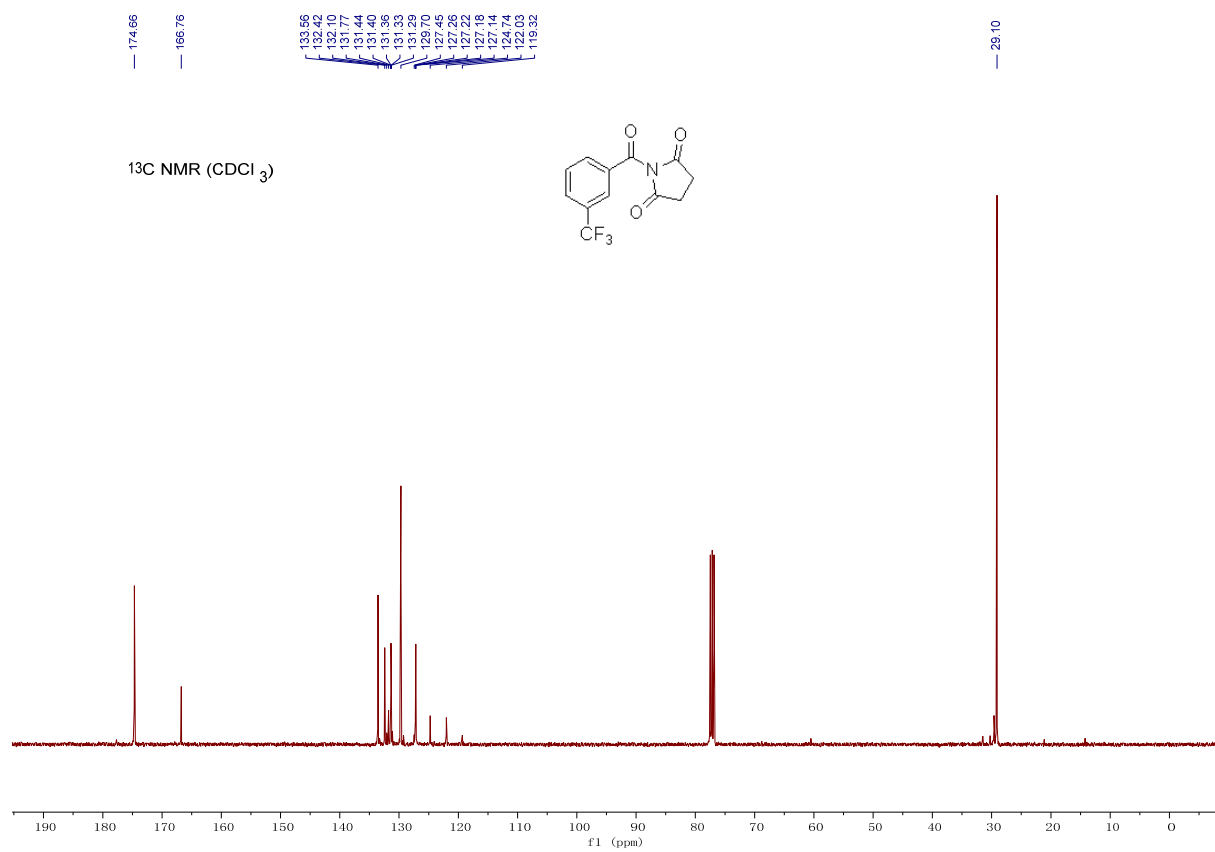
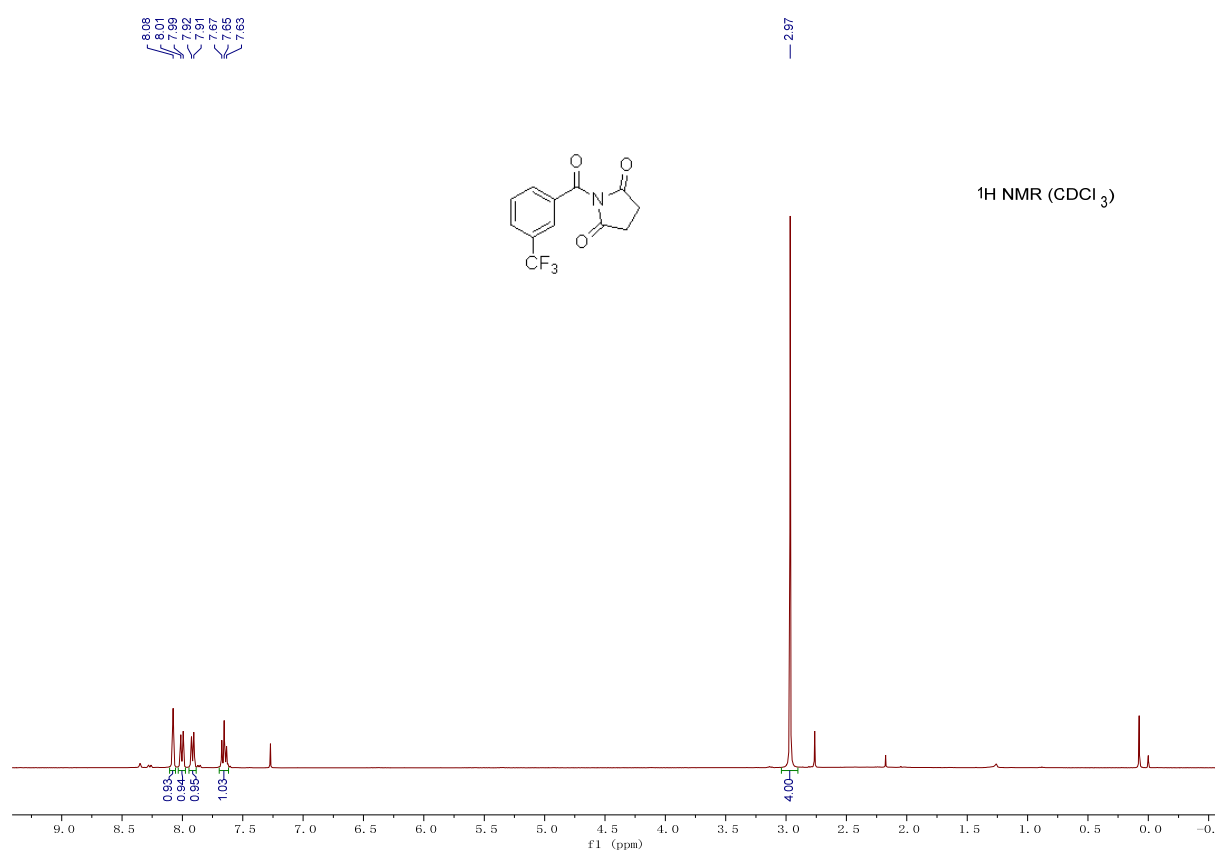
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Spectral copies of the unreported amides

(1) 1-(4-*tert*-butylbenzoyl)pyrrolidine-2,5-dione

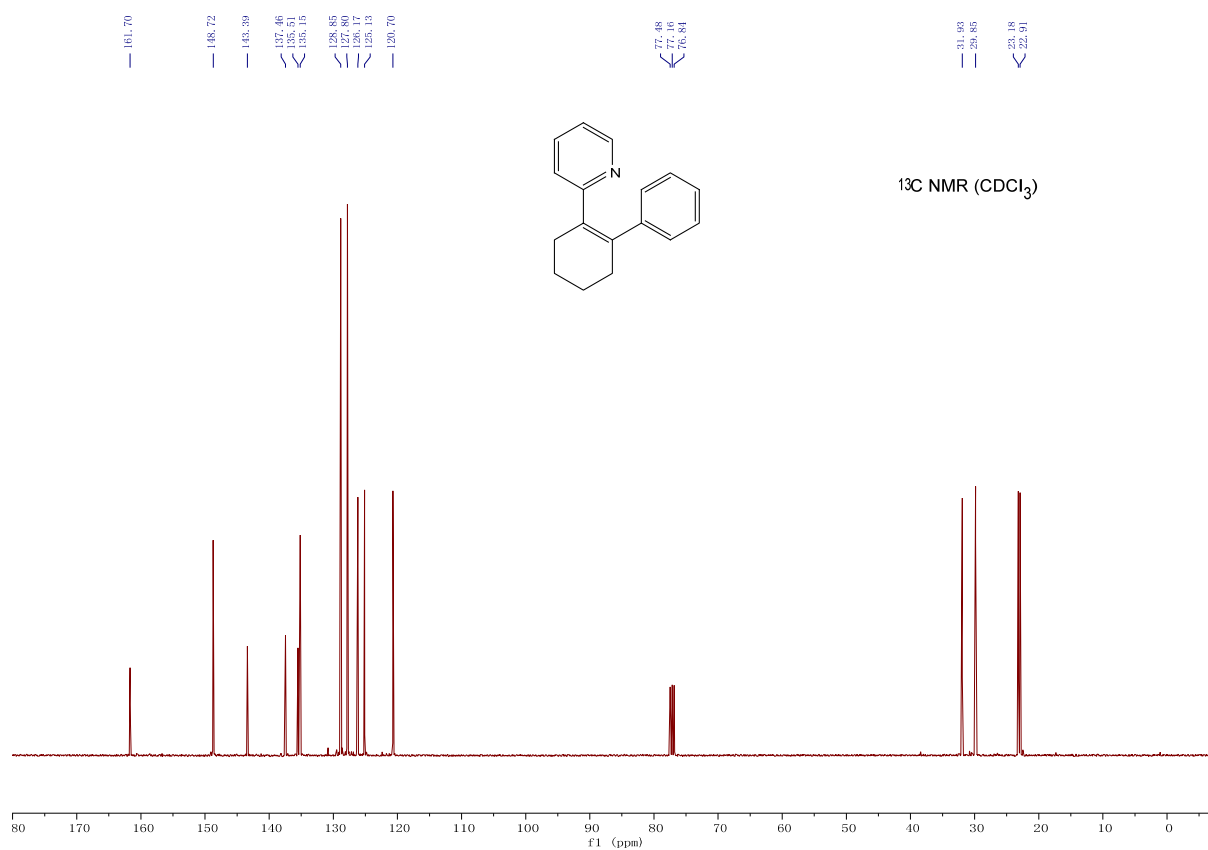
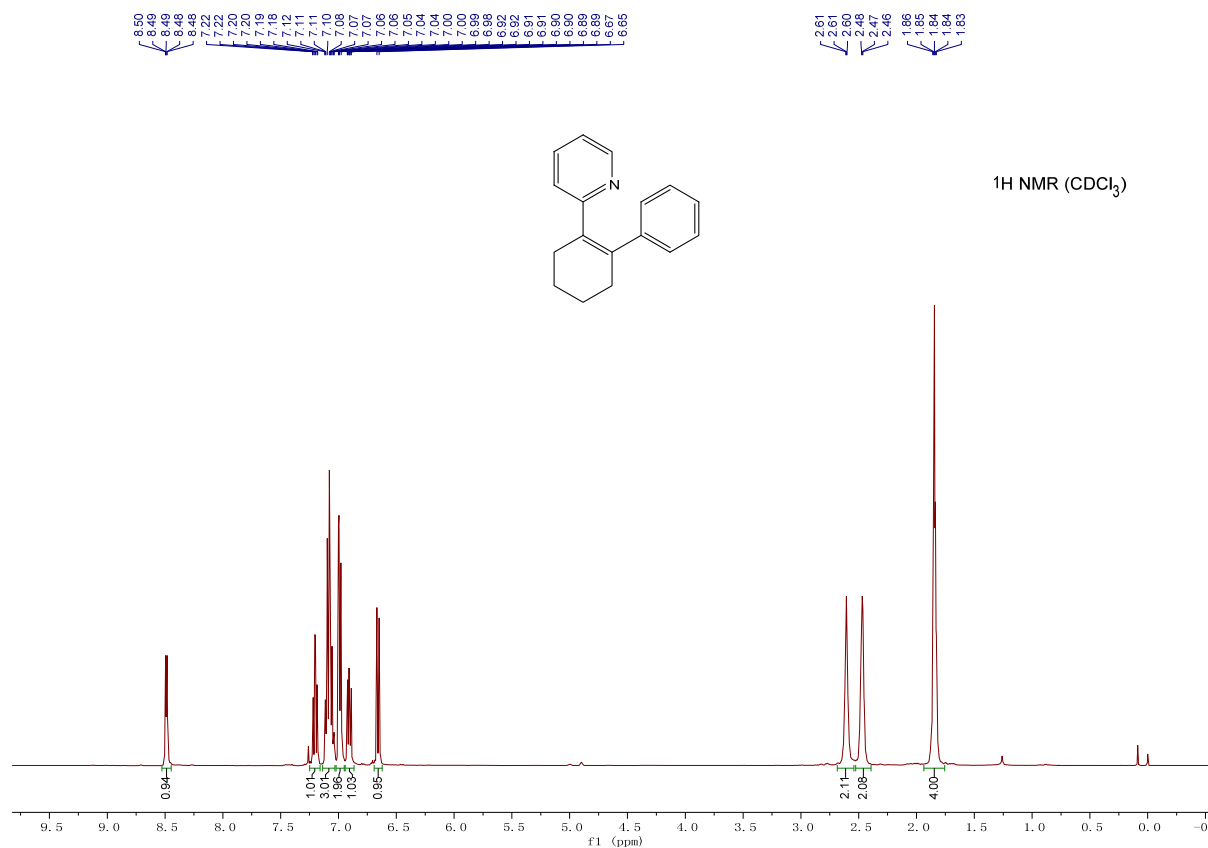


(2) 1-(3-(trifluoromethyl)benzoyl)pyrrolidine-2,5-dione

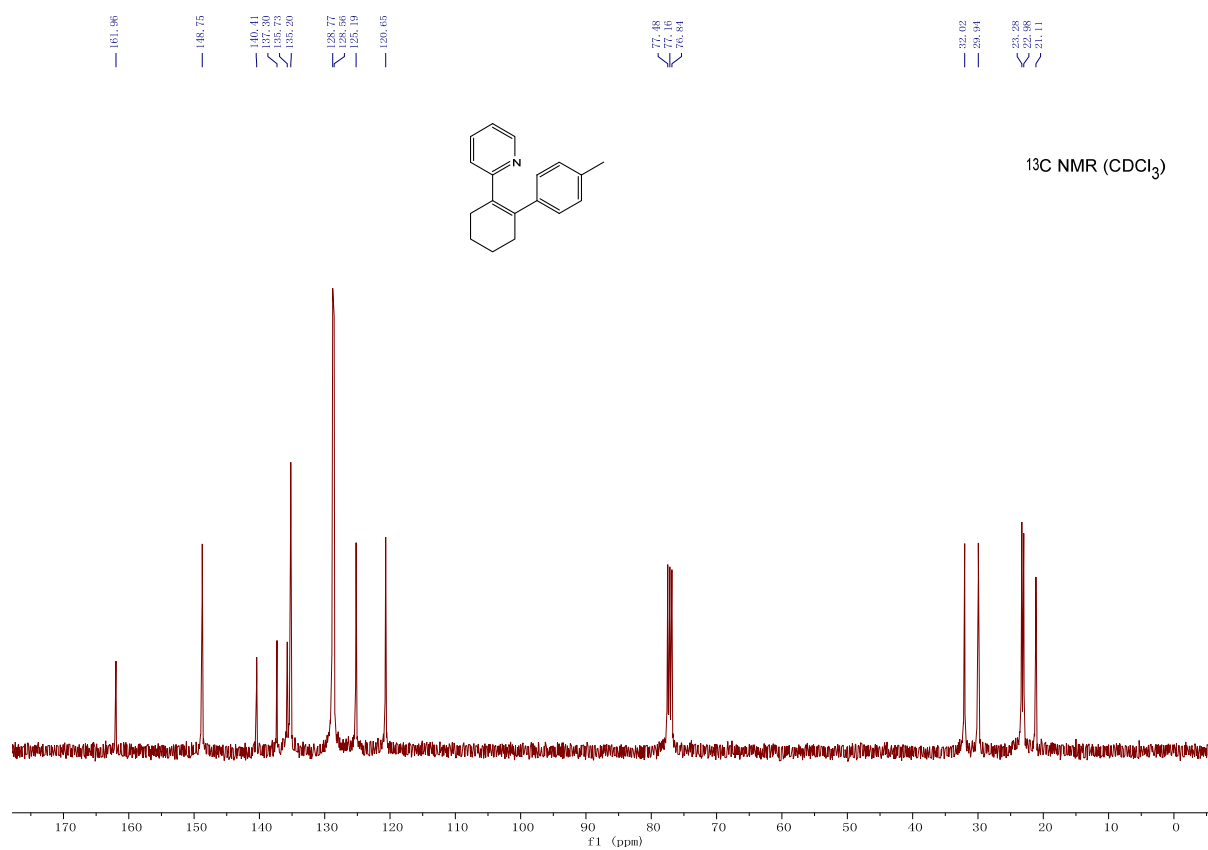
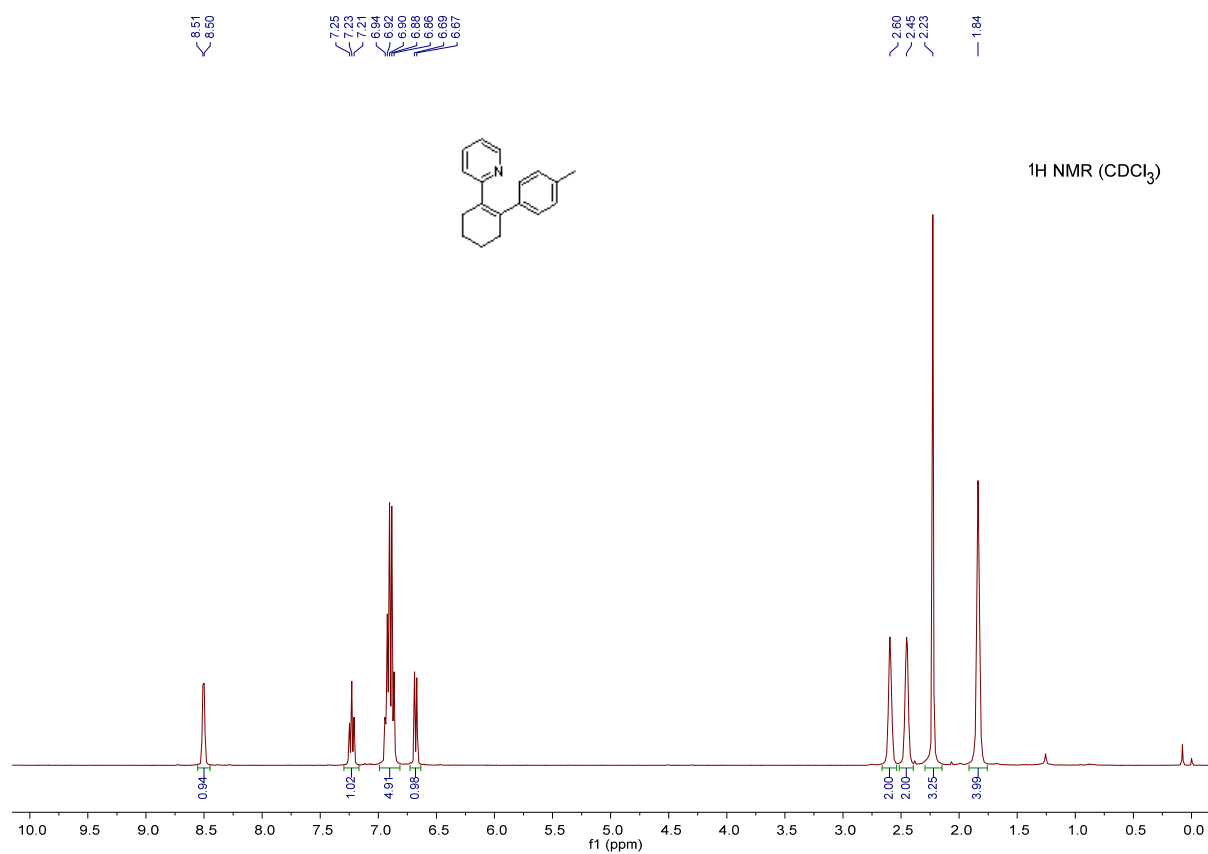


Spectral copies of the coupling products

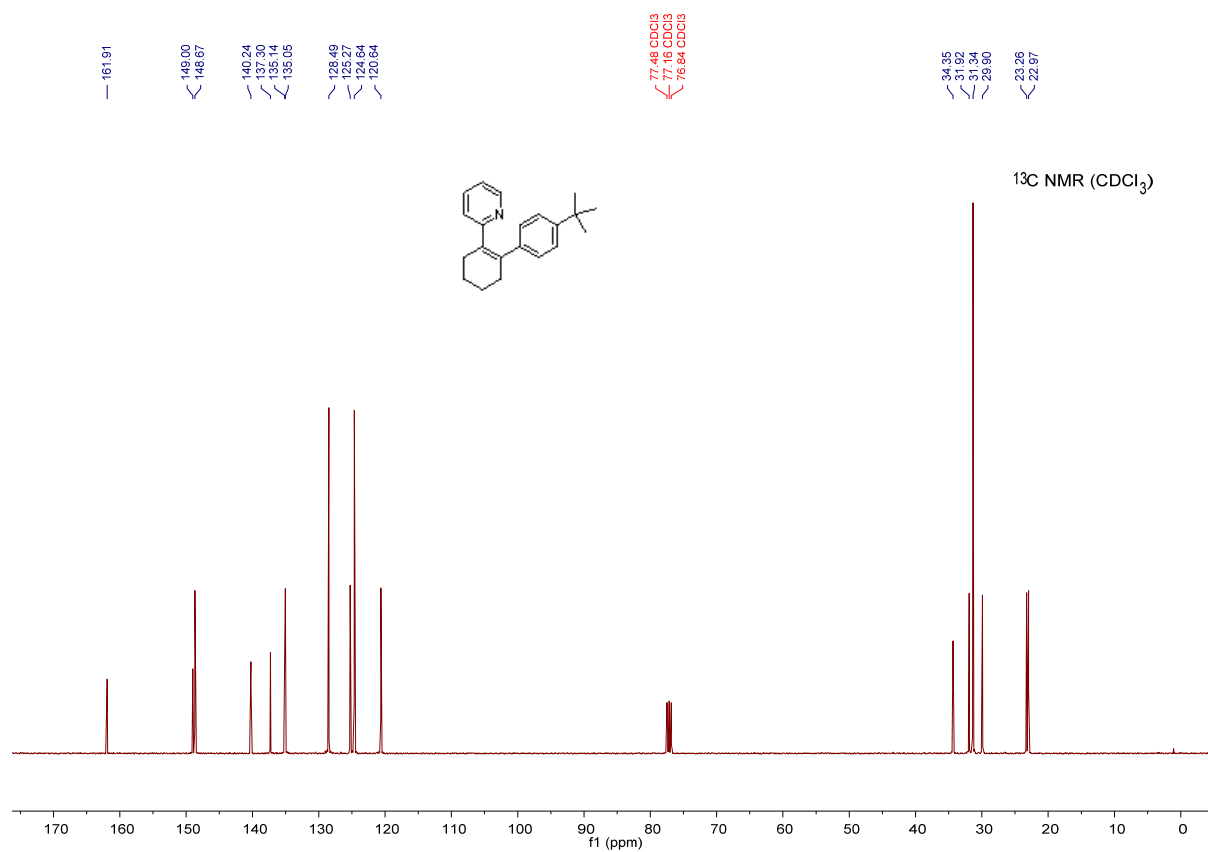
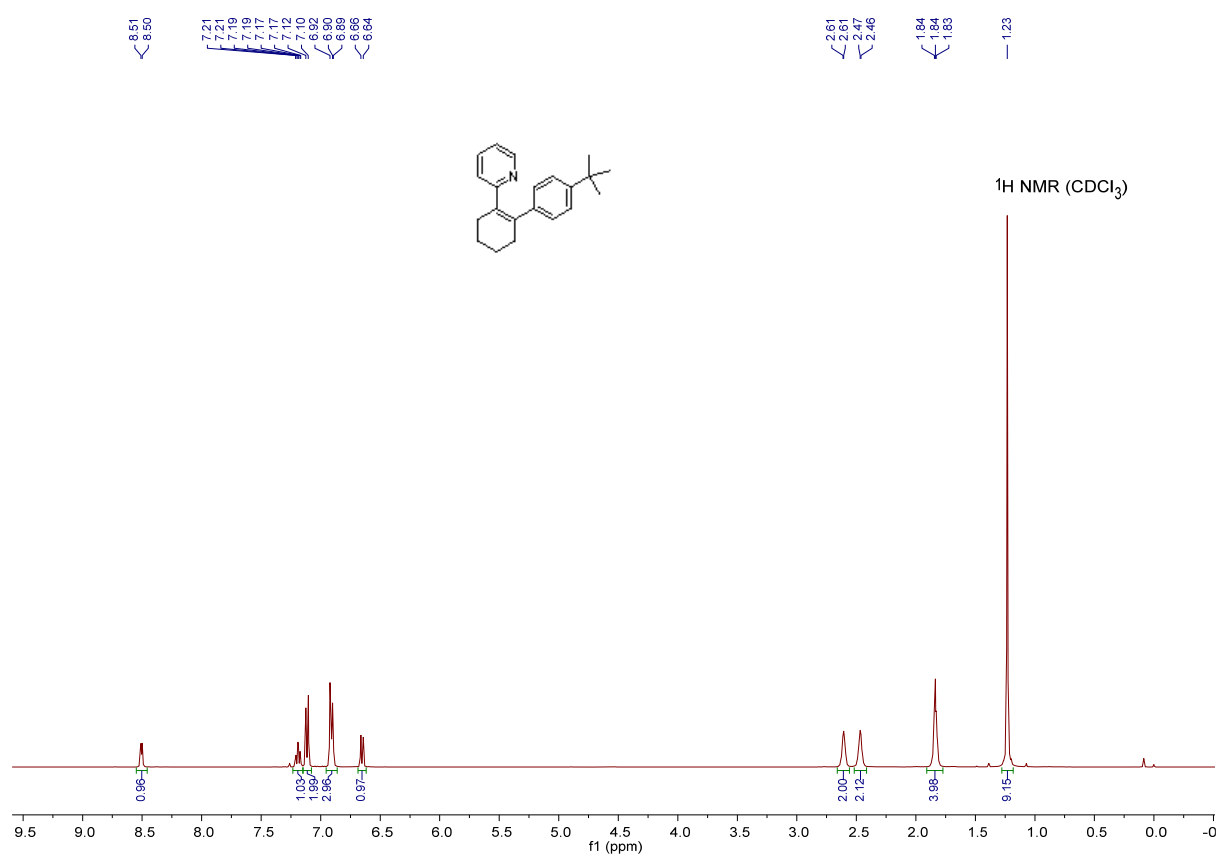
(1) 2-(2-phenylcyclohex-1-enyl)pyridine (**3a**)



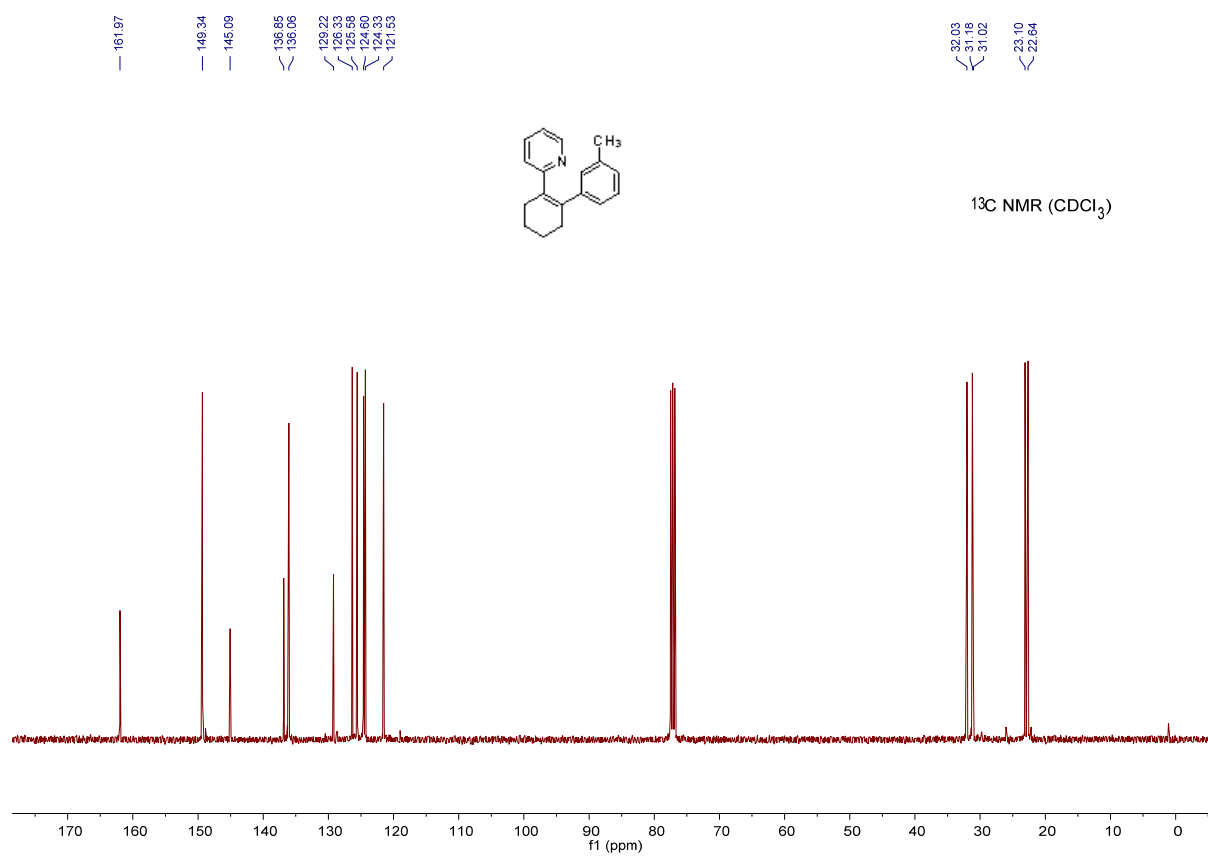
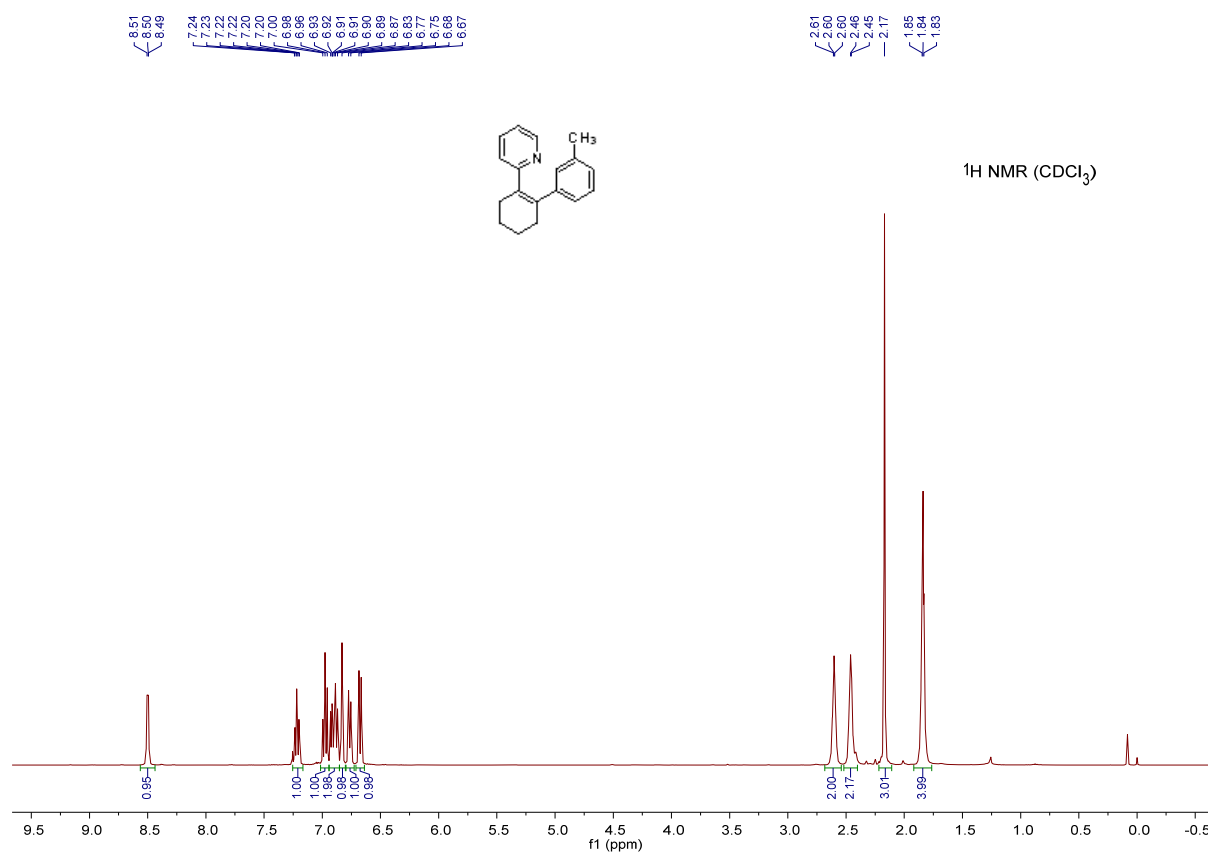
(2) 2-(2-*p*-tolylcyclohex-1-enyl)pyridine (**3b**)



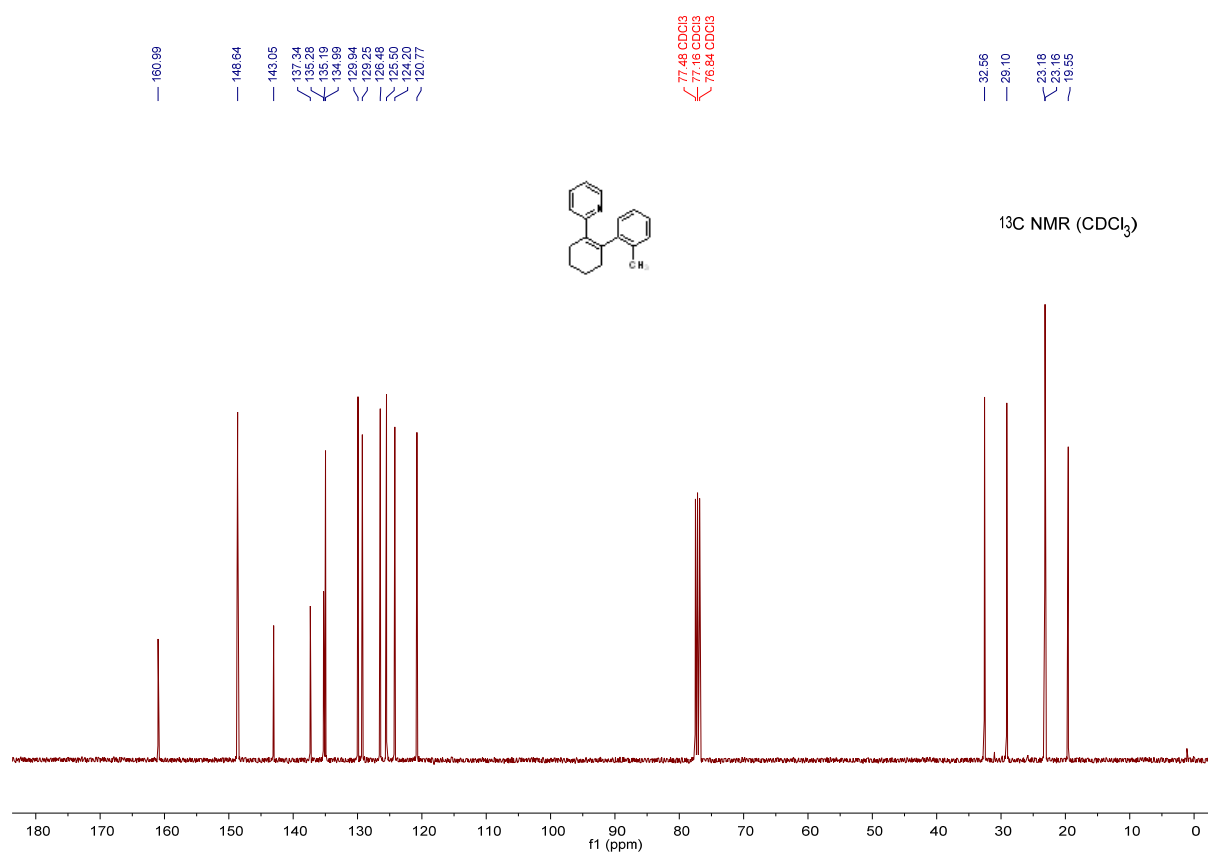
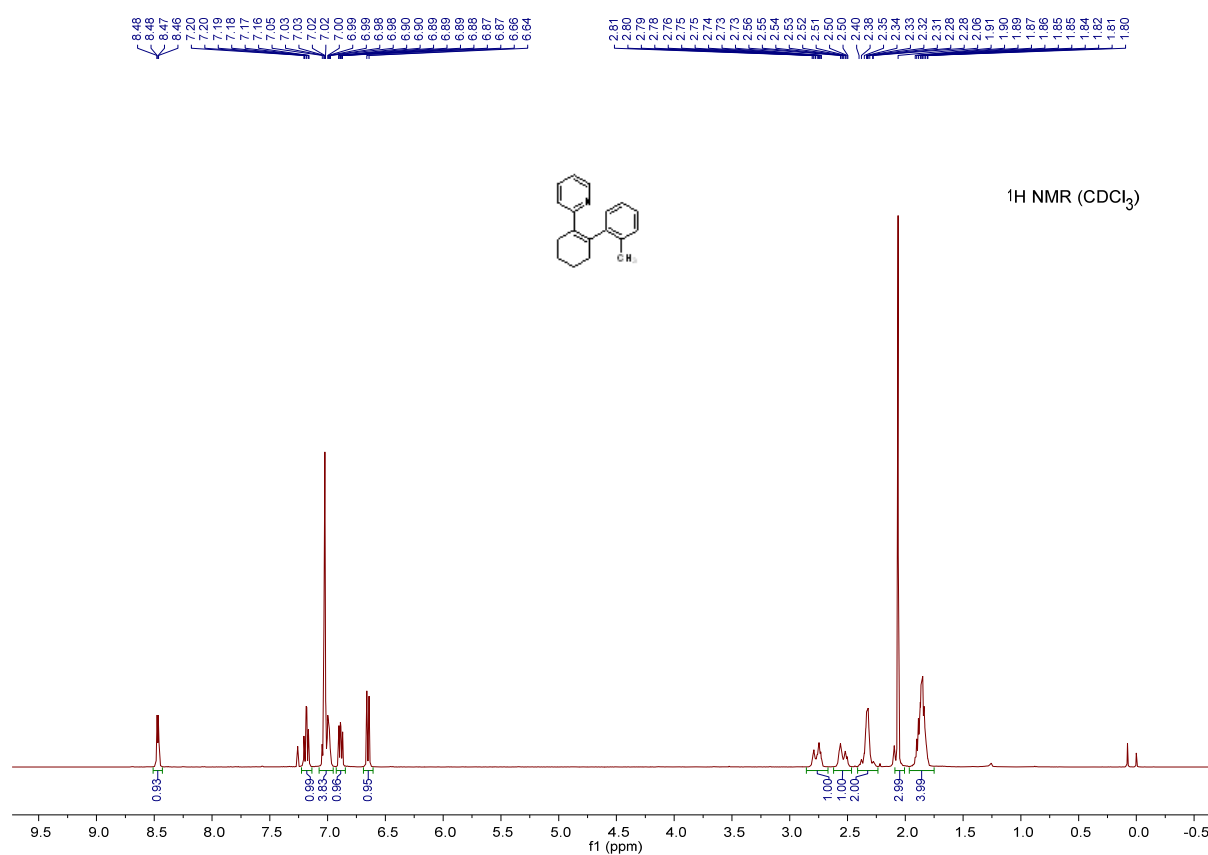
(3) 2-(2-(4-*tert*-butylphenyl)cyclohex-1-enyl)pyridine (**3c**)



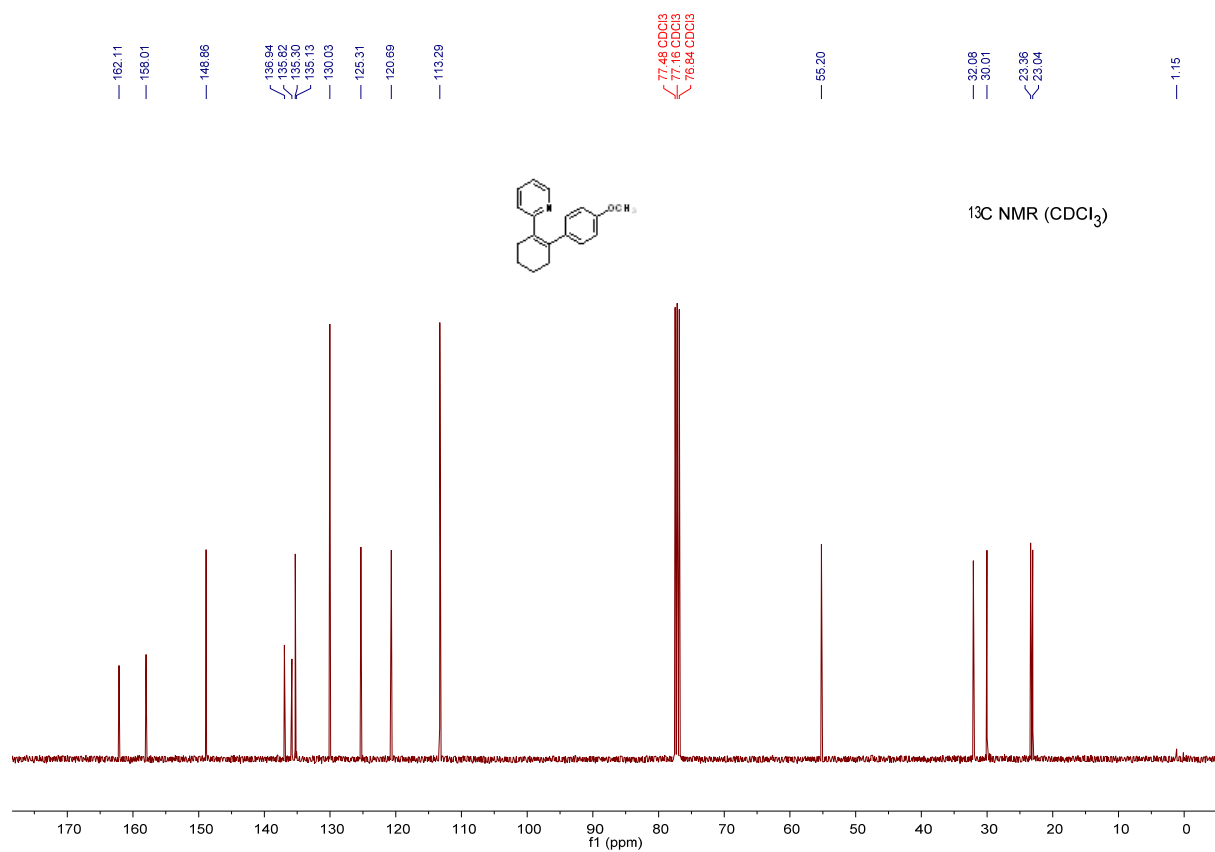
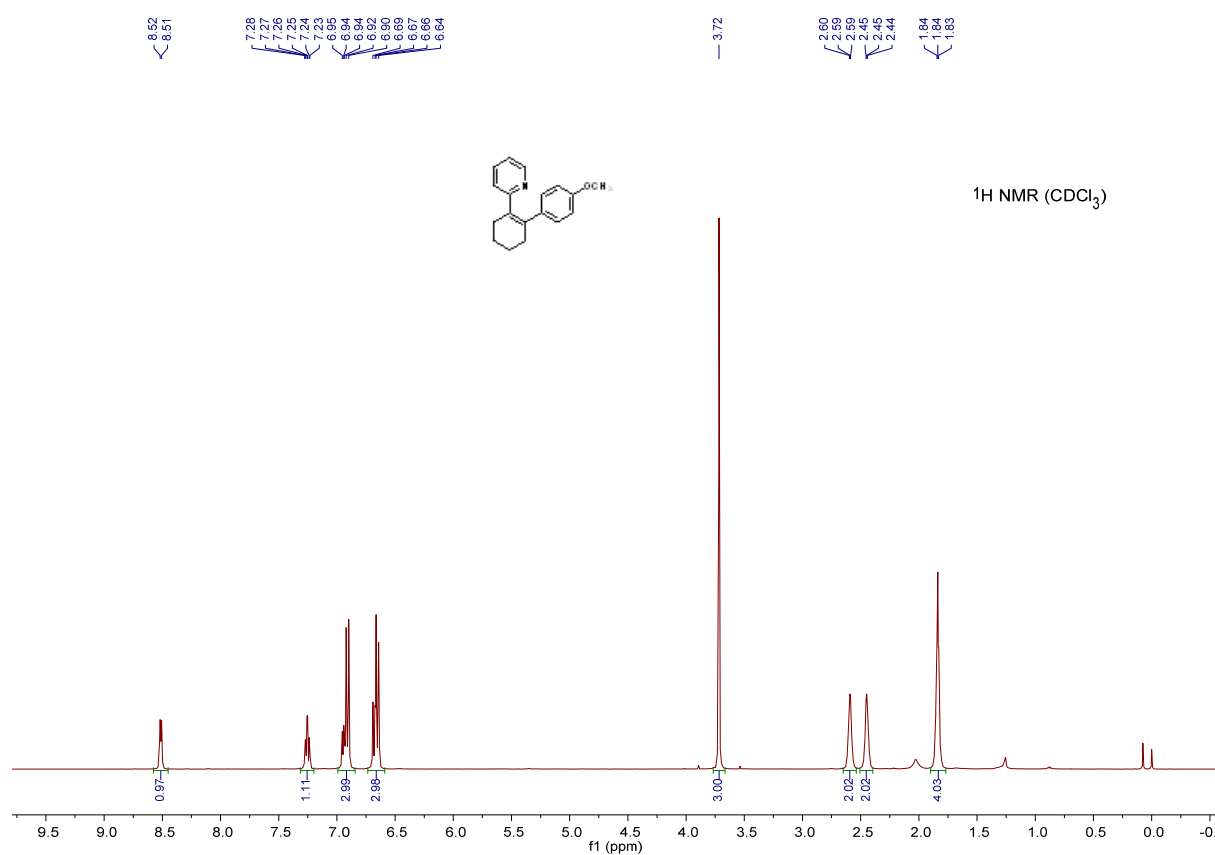
(4) 2-(2-*m*-tolylcyclohex-1-enyl)pyridine (**3d**)



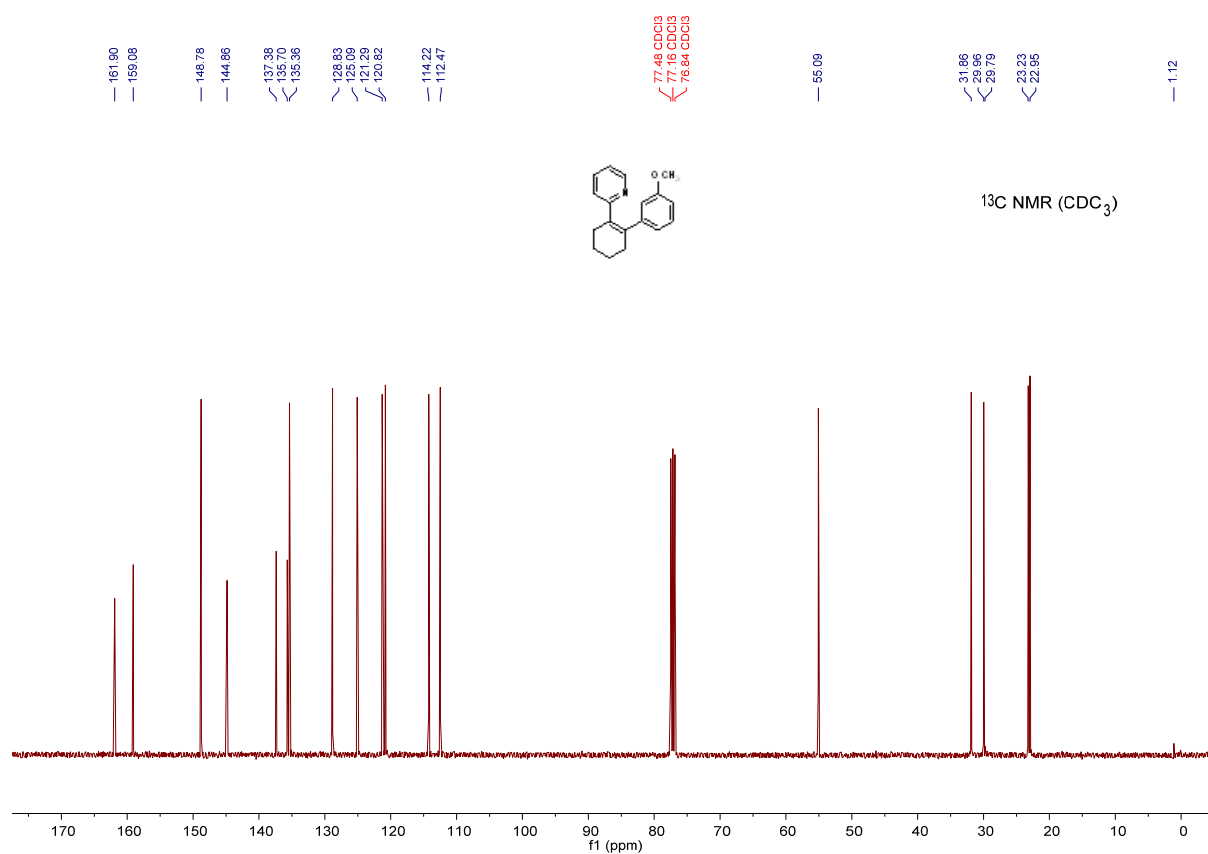
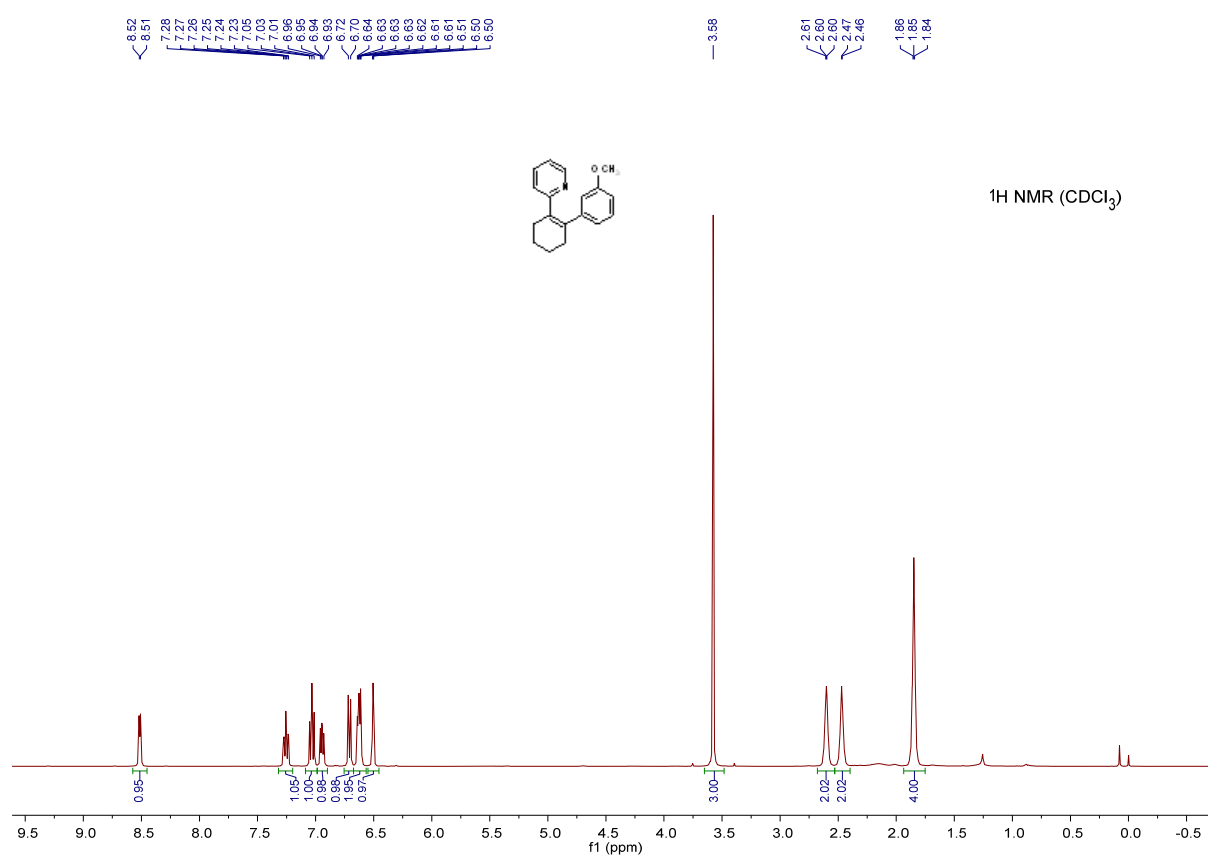
(5) 2-(2-o-tolylcyclohex-1-enyl)pyridine (**3e**)



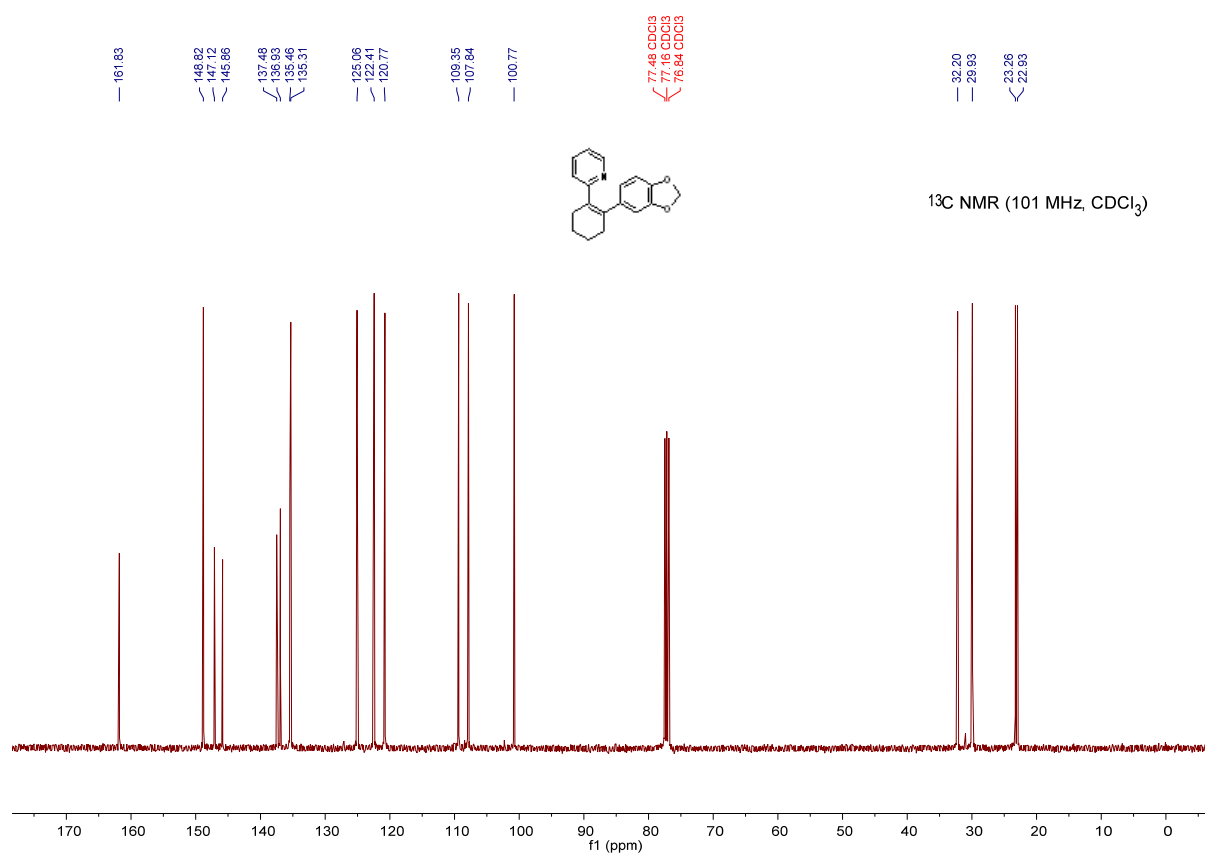
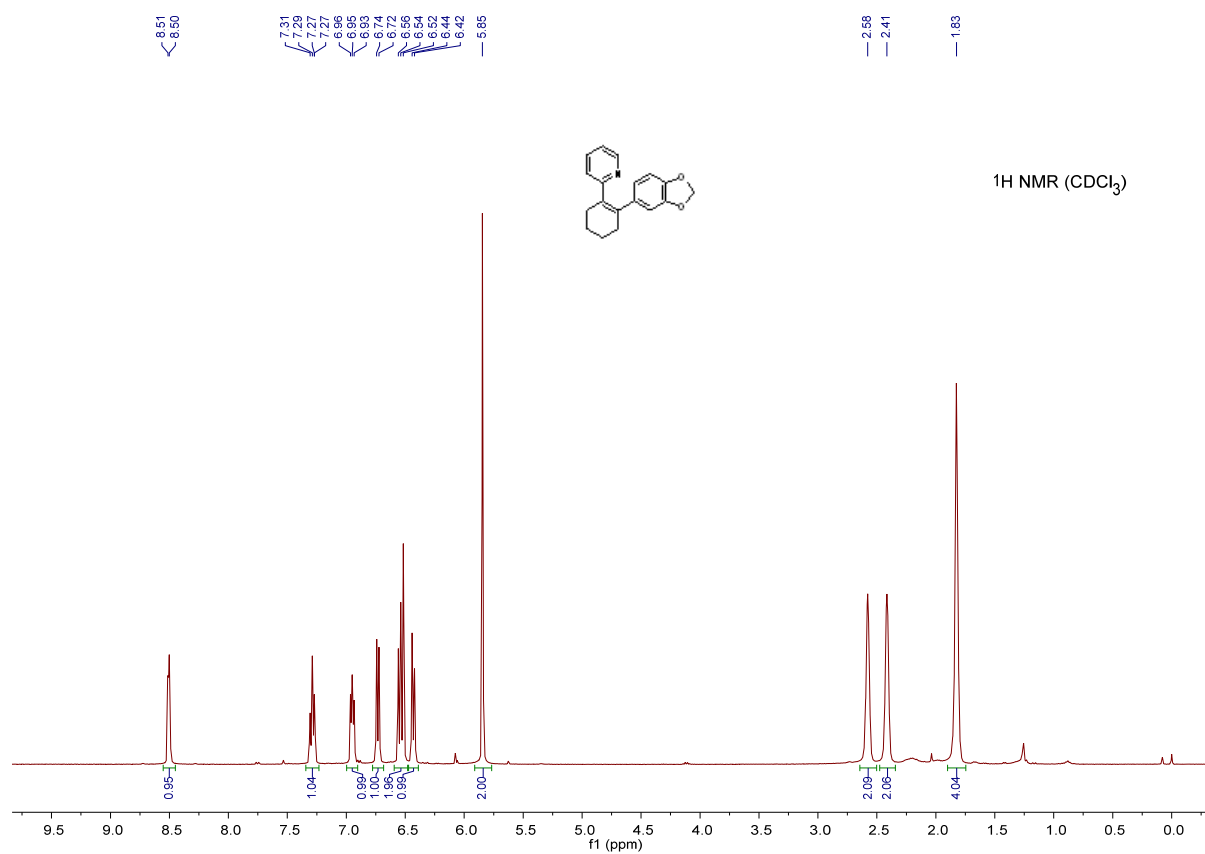
(6) 2-(2-(4-methoxyphenyl)cyclohex-1-enyl)pyridine (**3f**)



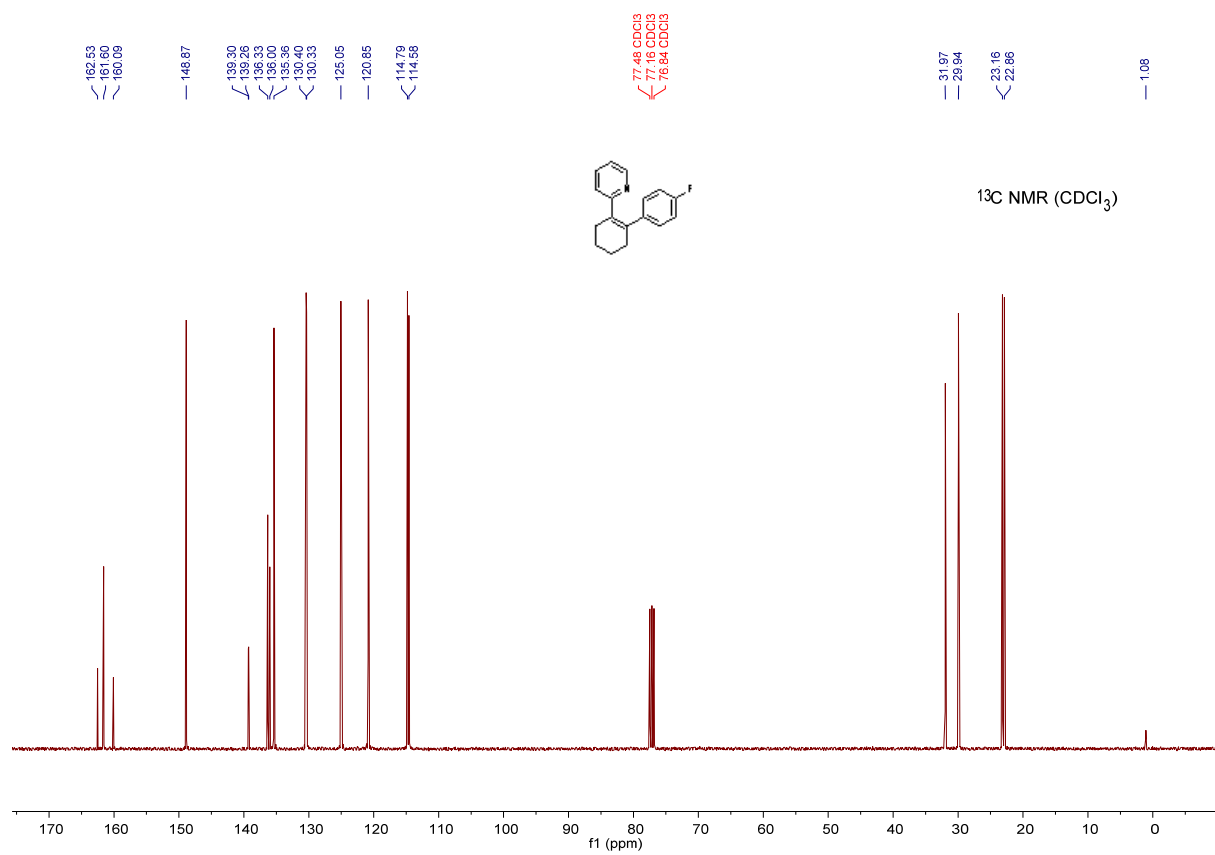
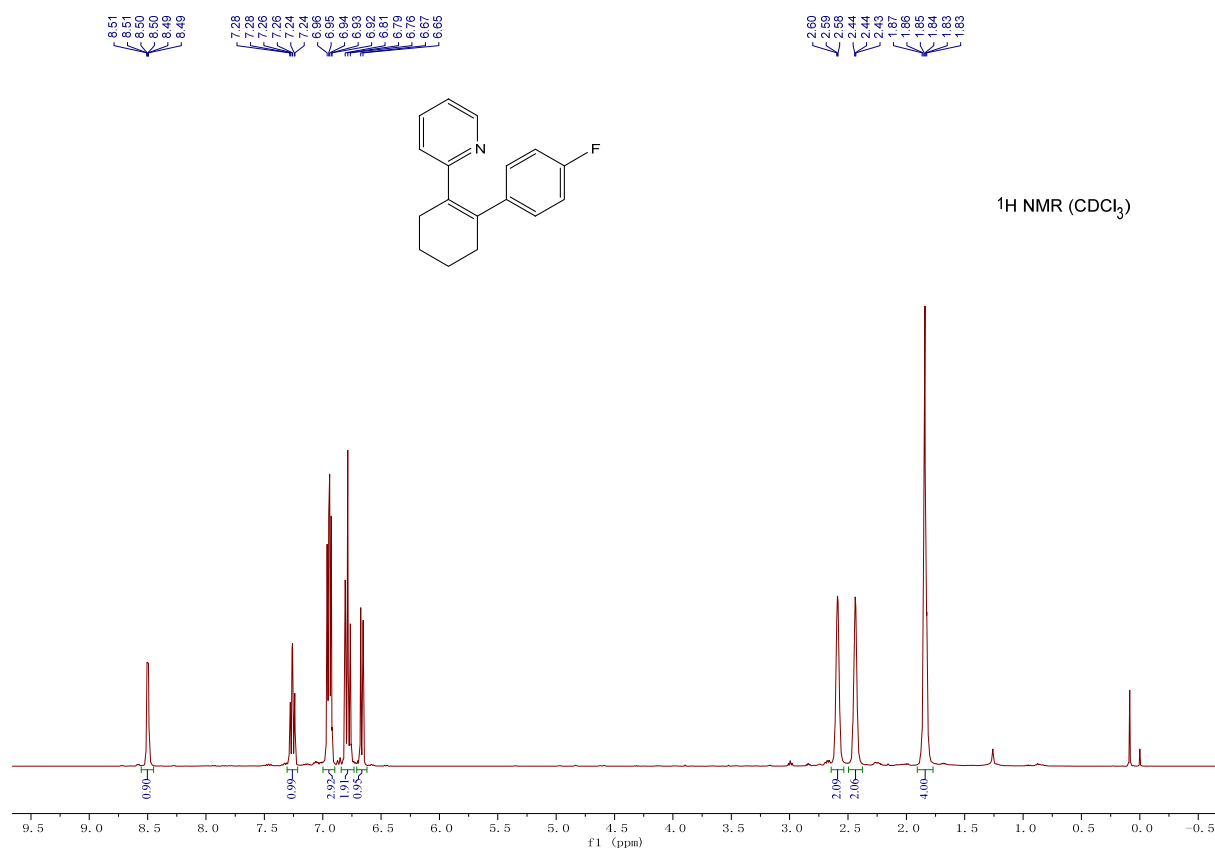
(7) 2-(2-(3-methoxyphenyl)cyclohex-1-enyl)pyridine (**3g**)



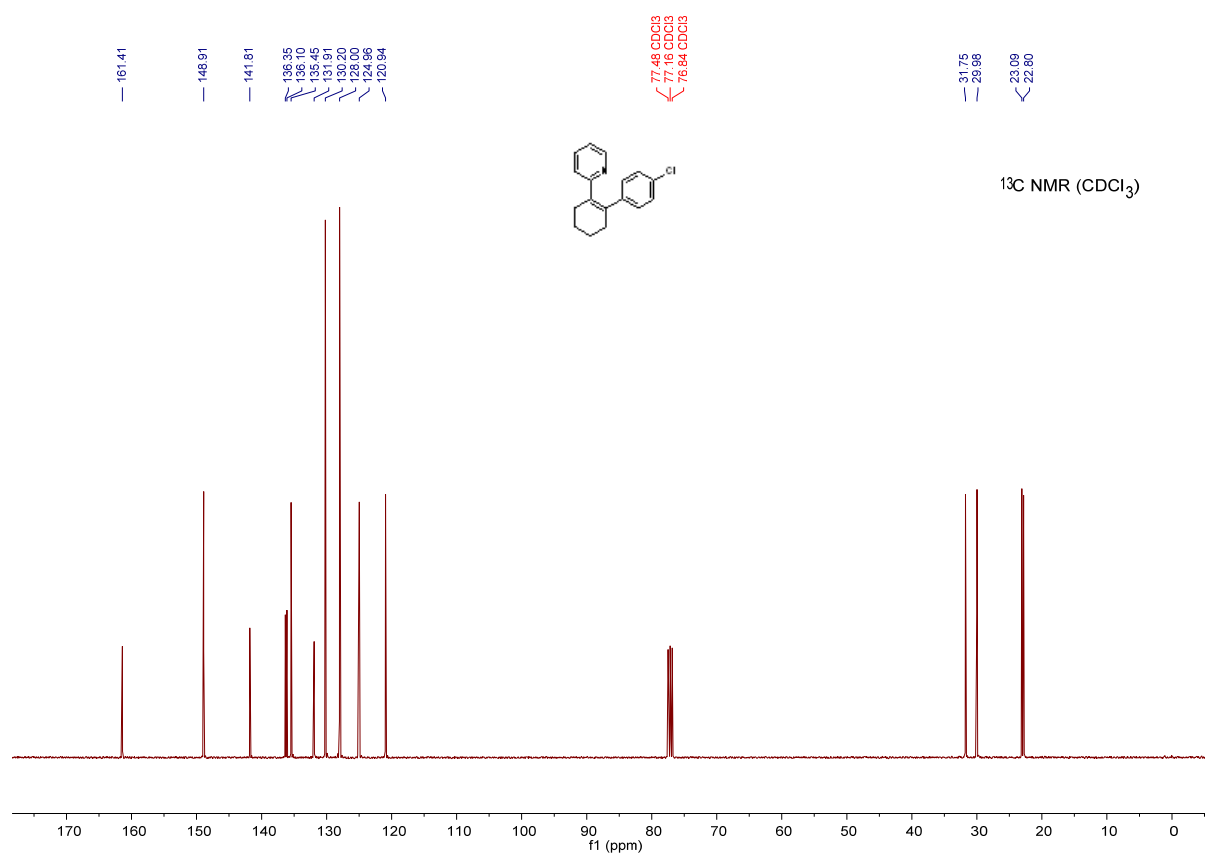
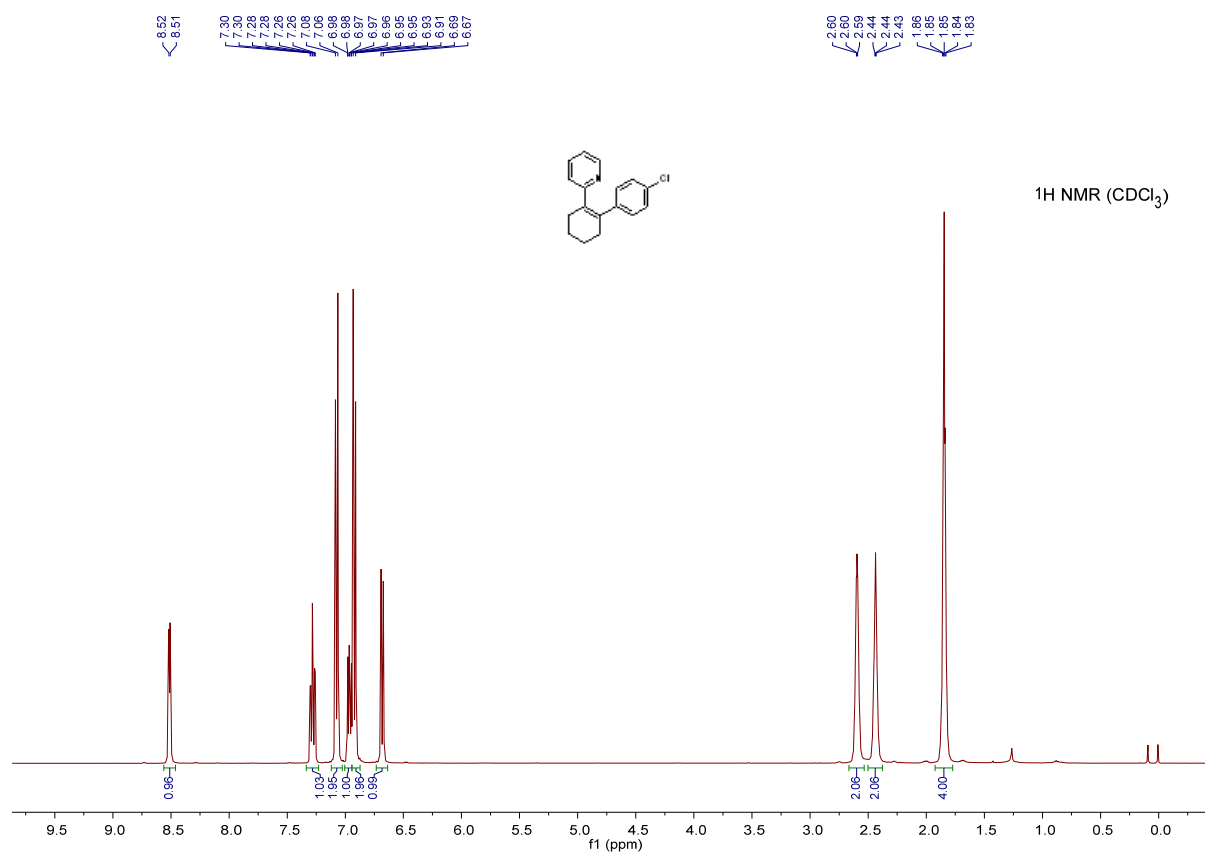
(8) 2-(2-(benzo[*d*][1,3]dioxol-5-yl)cyclohex-1-enyl)pyridine (**3h**)



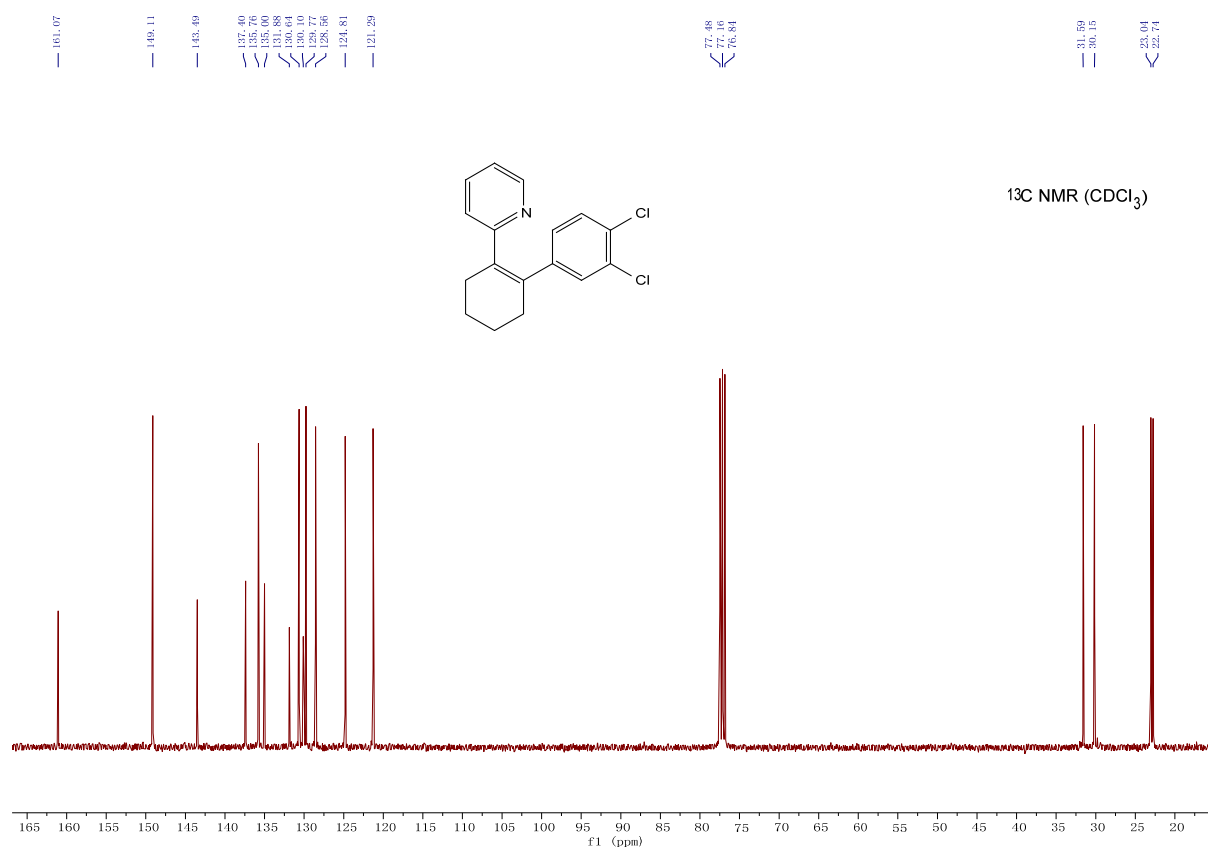
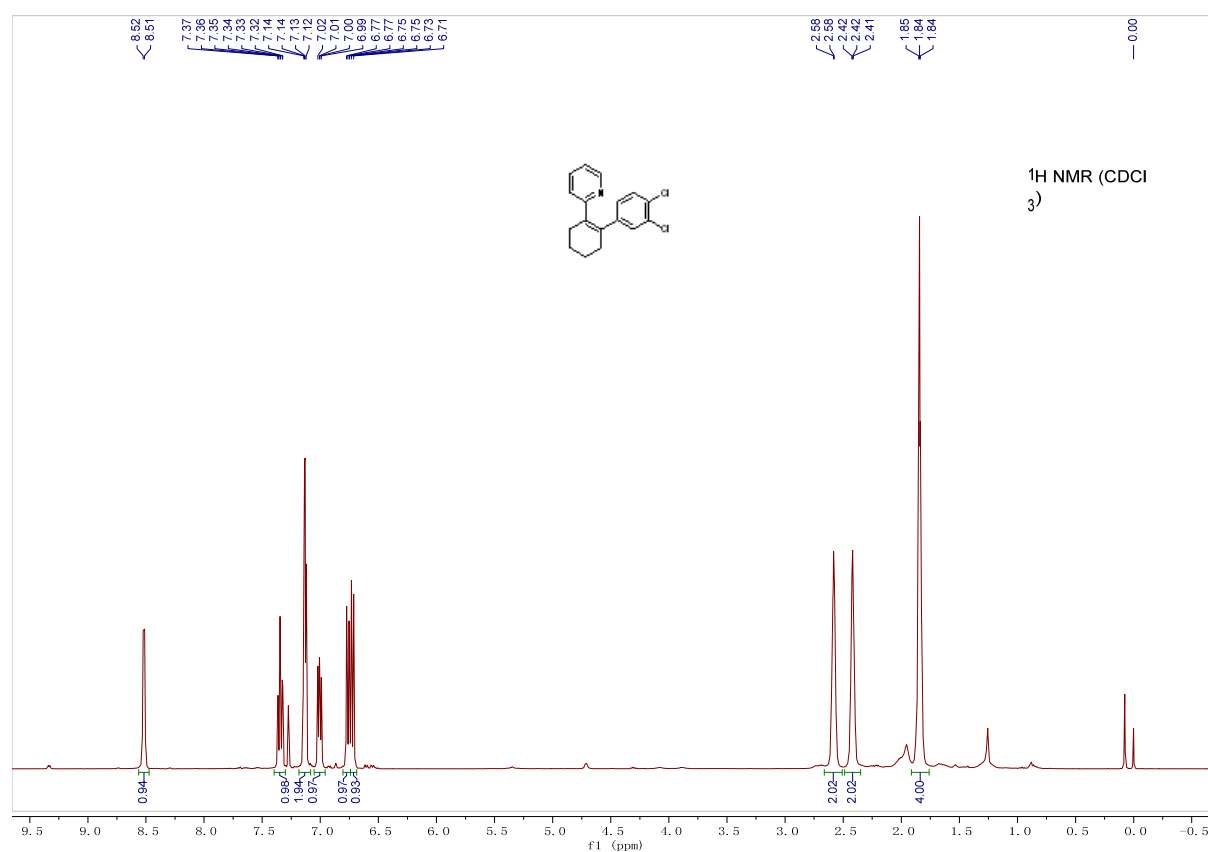
(9) 2-(2-(4-fluorophenyl)cyclohex-1-enyl)pyridine (**3i**)



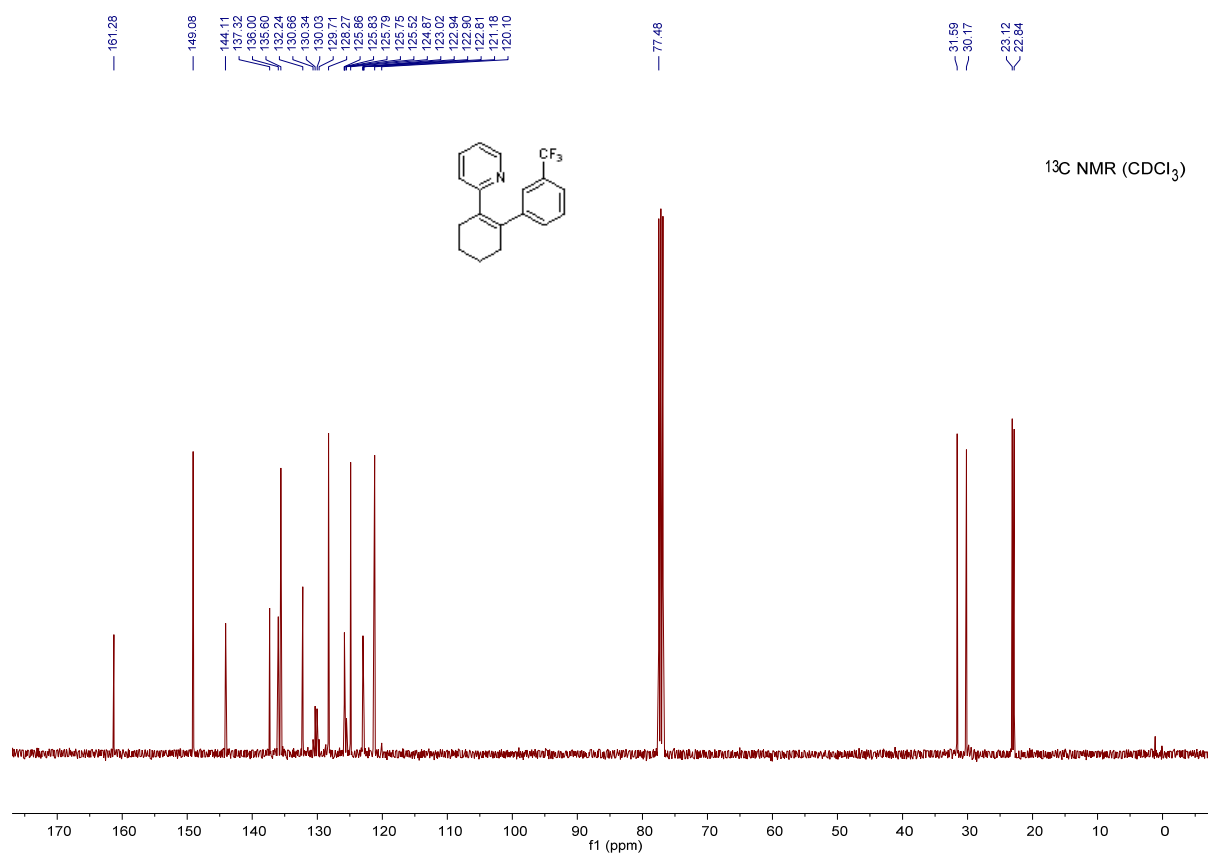
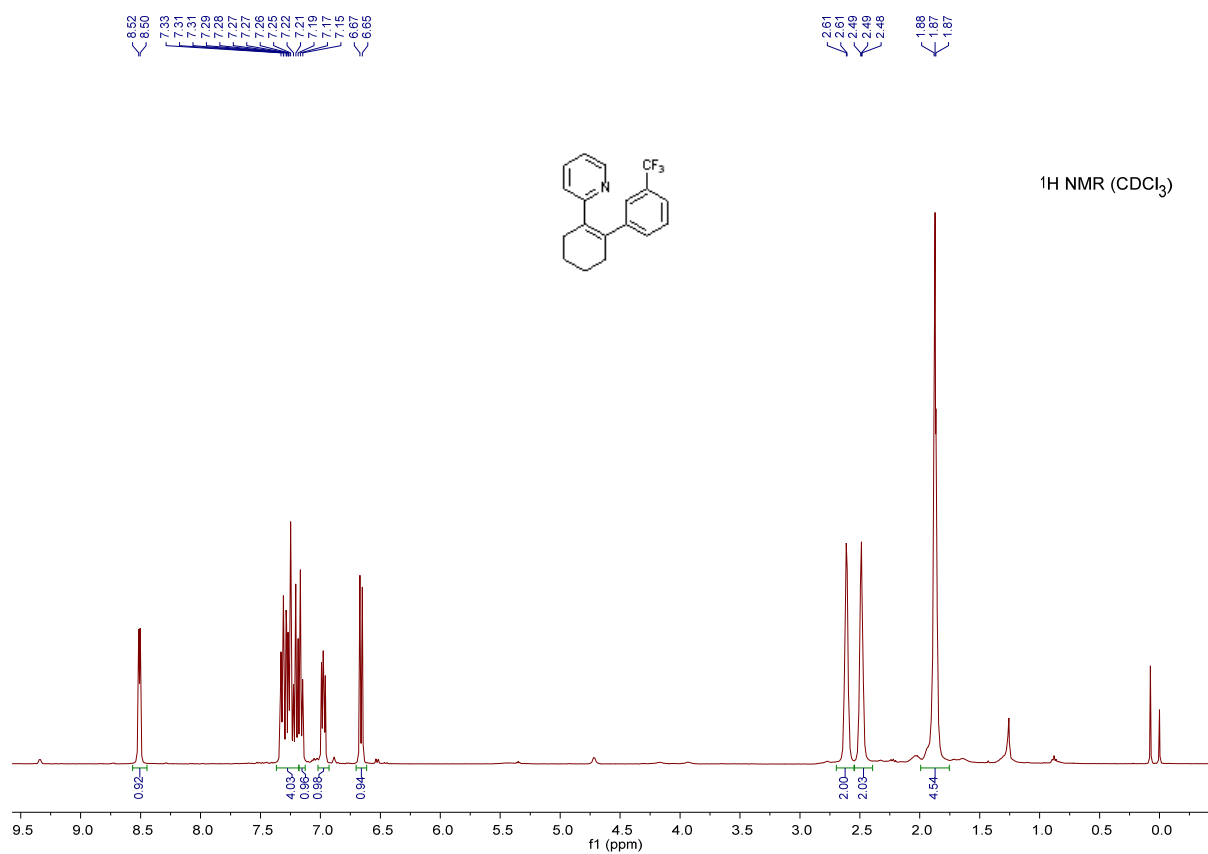
(10) 2-(2-(4-chlorophenyl)cyclohex-1-enyl)pyridine (**3j**)



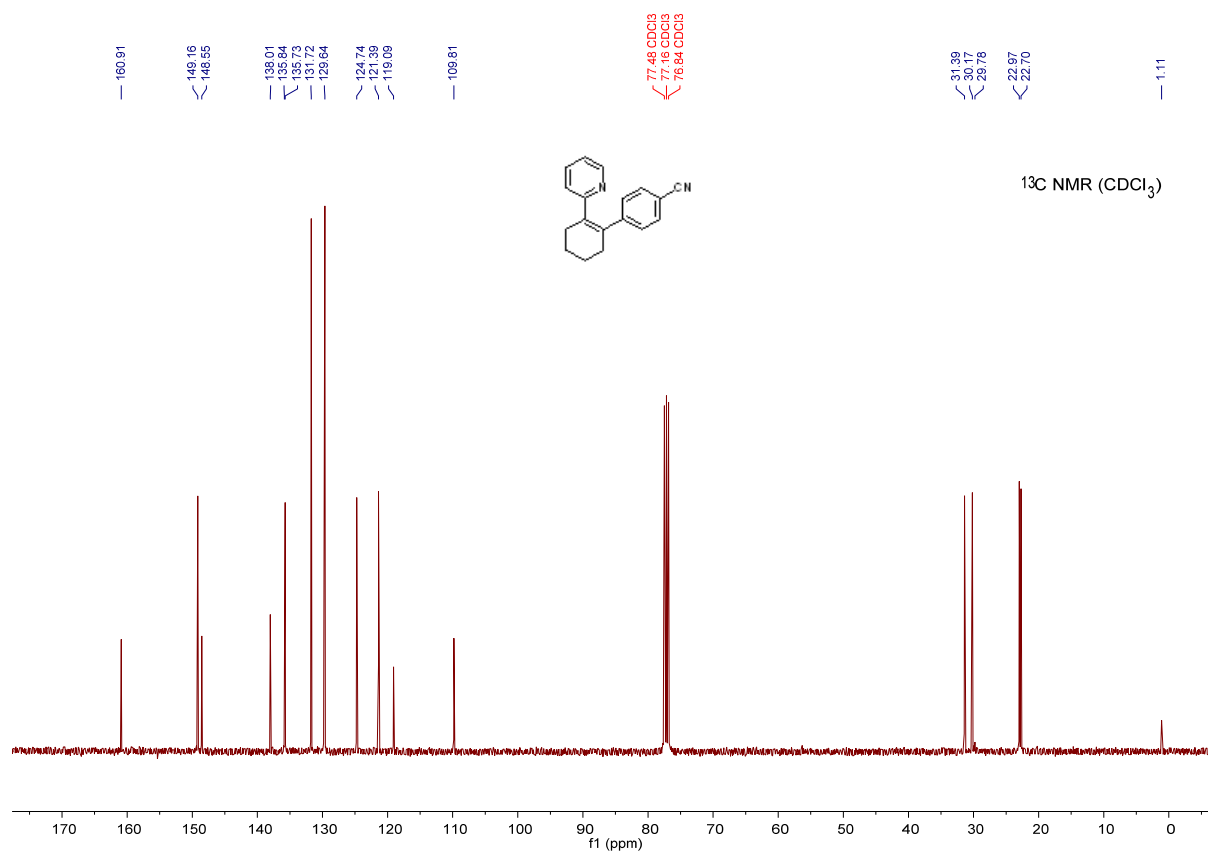
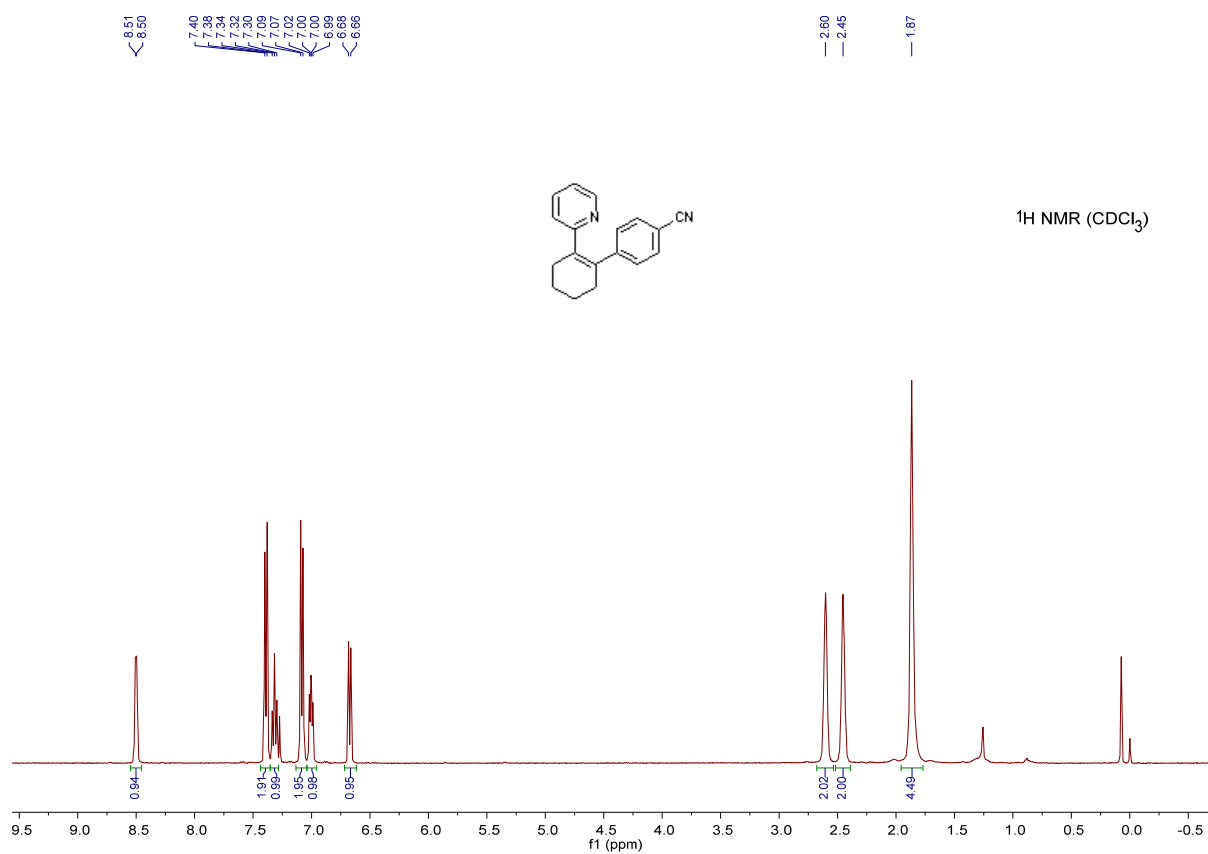
(11) 2-(2-(3,4-dichlorophenyl)cyclohex-1-enyl)pyridine (**3k**)



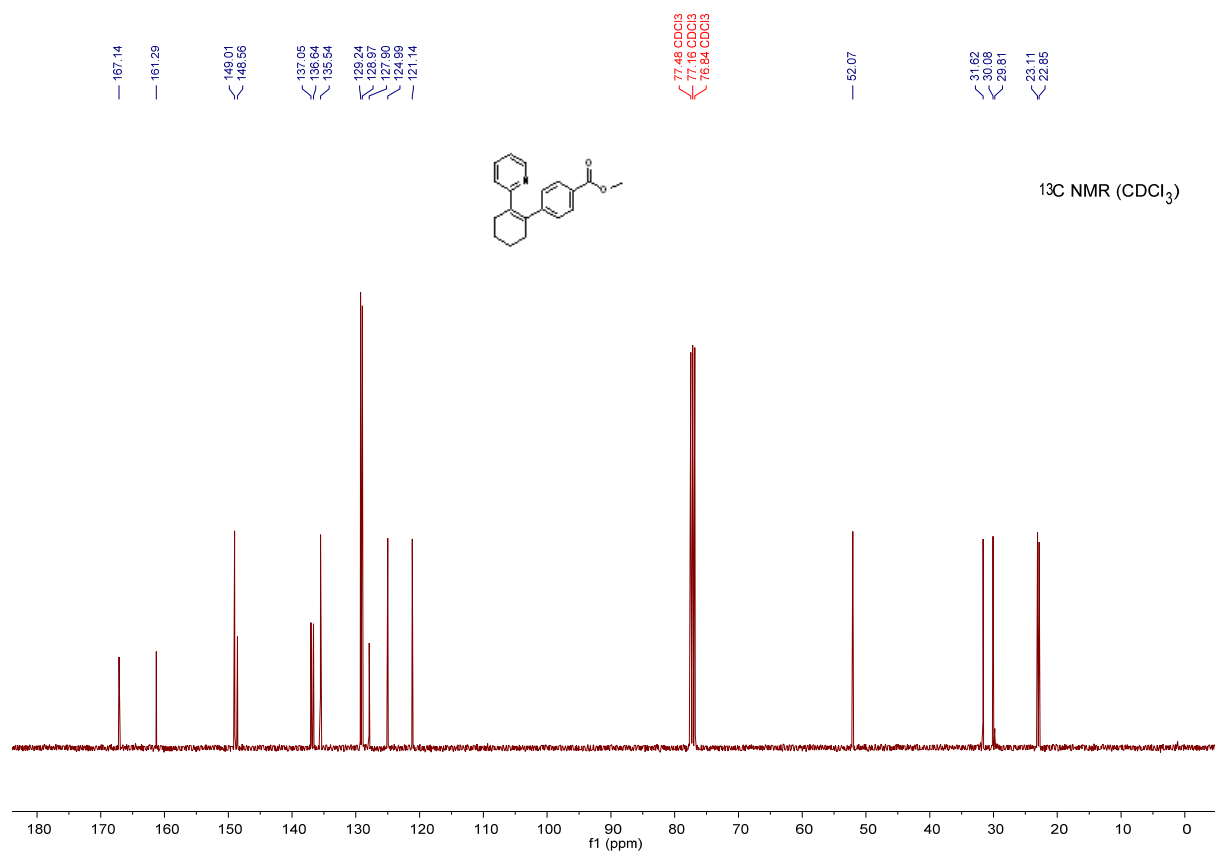
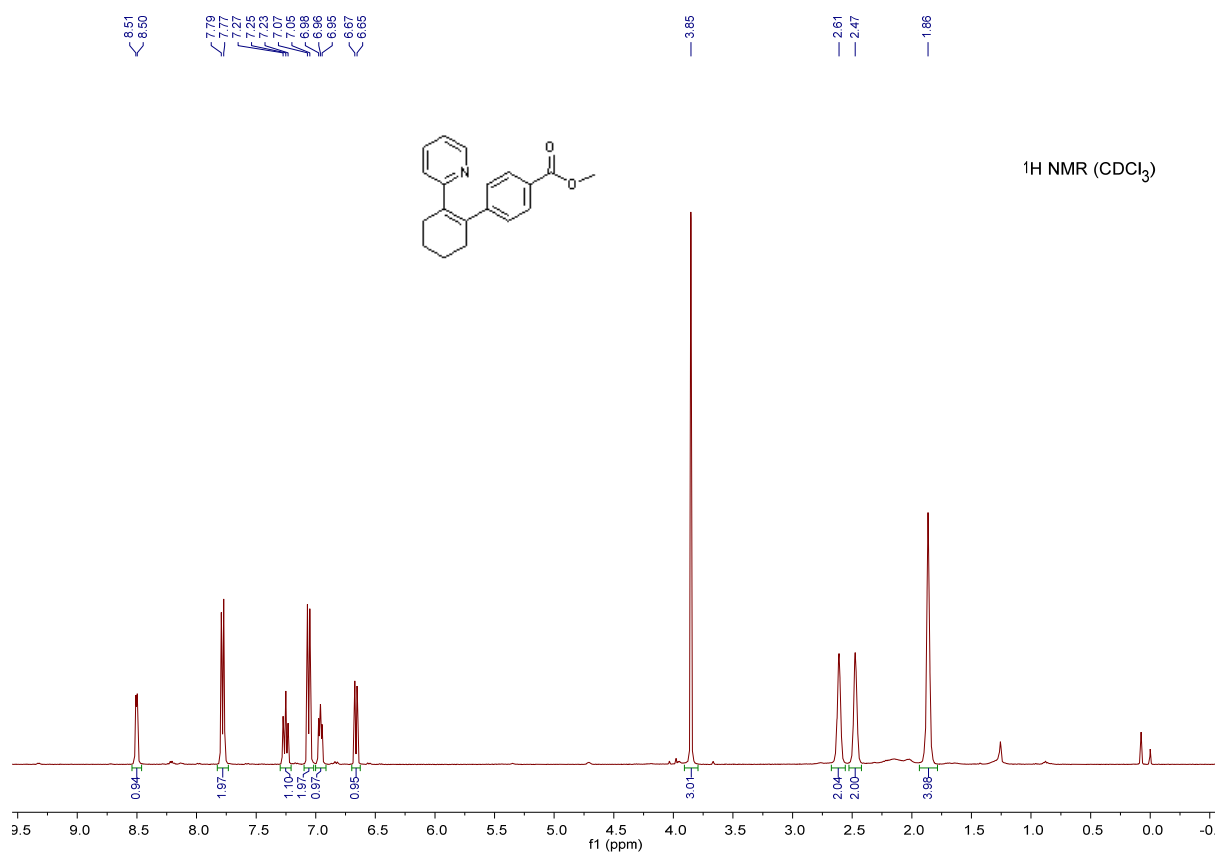
(12) 2-(2-(3-(trifluoromethyl)phenyl)cyclohex-1-enyl)pyridine (**31**)



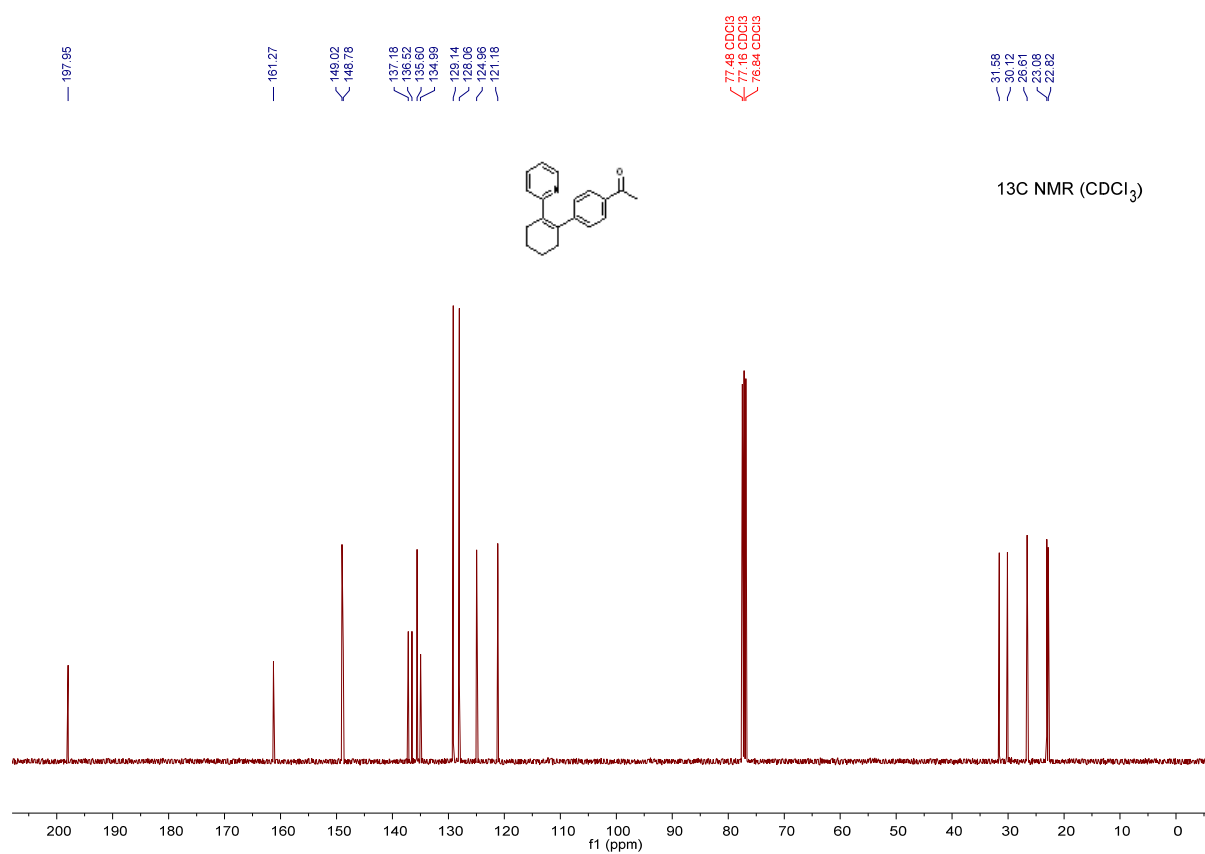
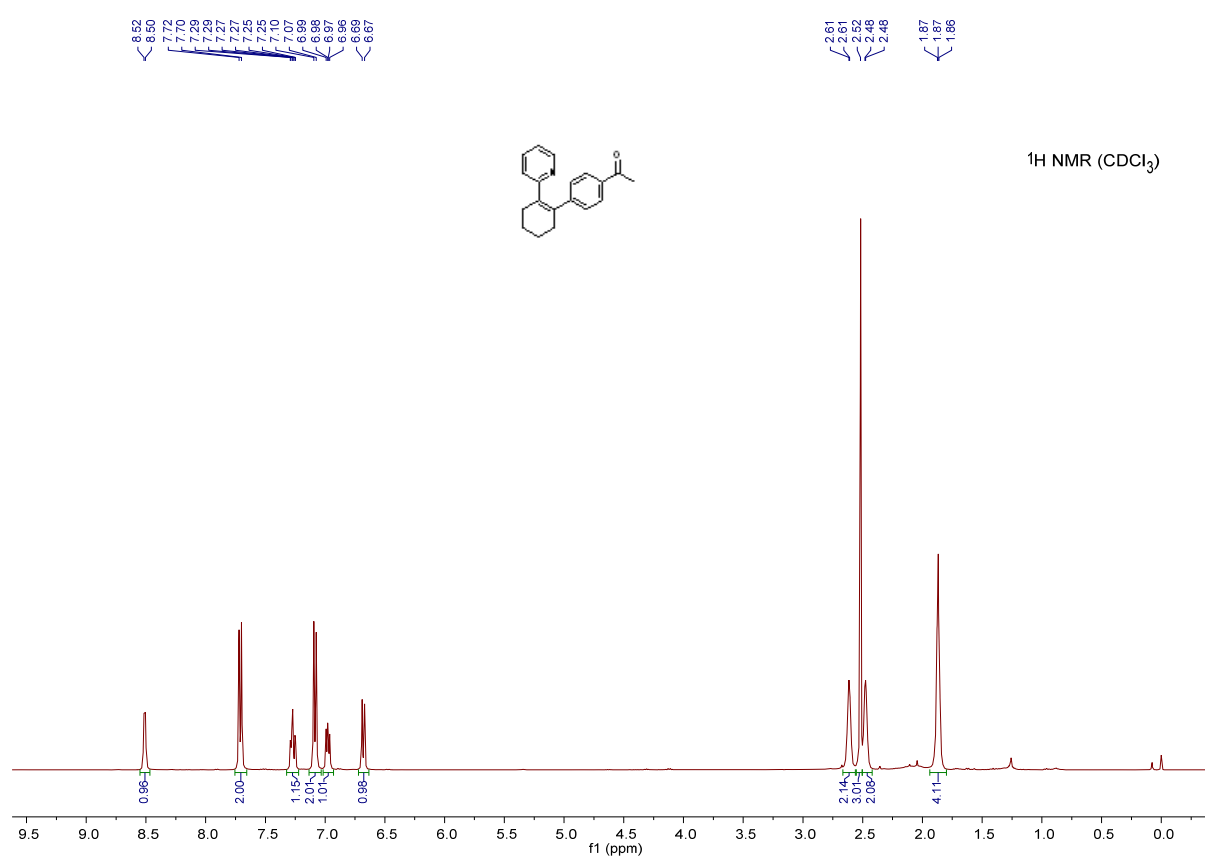
(13) 4-(2-(pyridin-2-yl)cyclohex-1-enyl)benzonitrile (**3m**)



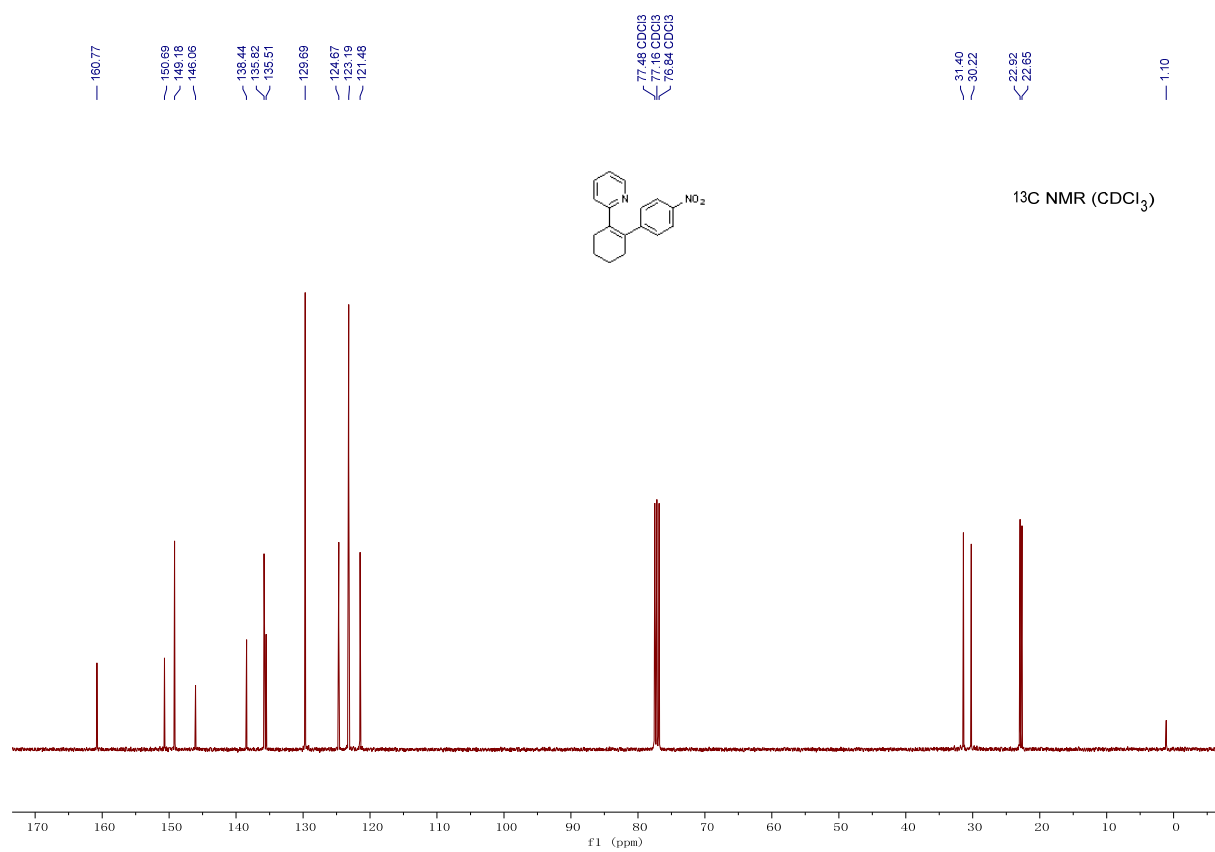
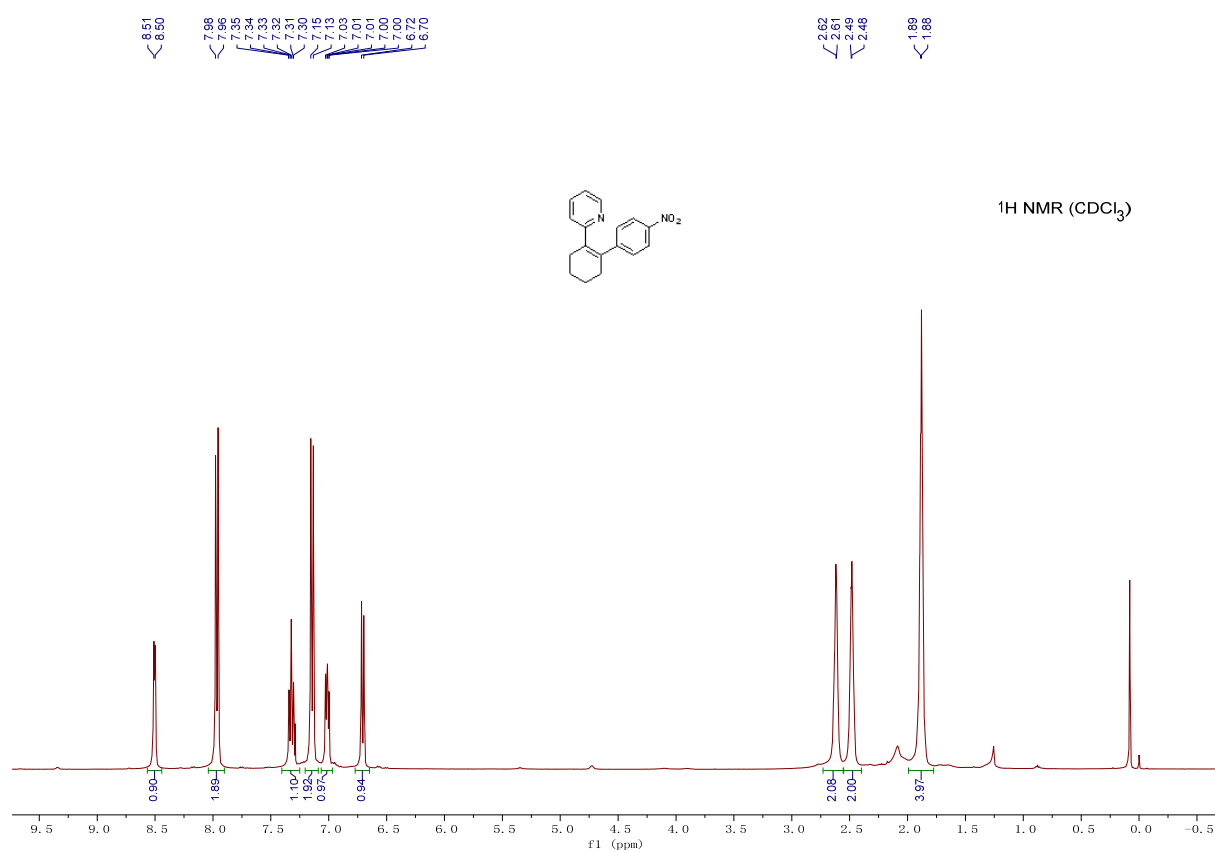
(14) methyl 4-(2-(pyridin-2-yl)cyclohex-1-enyl)benzoate (**3n**)



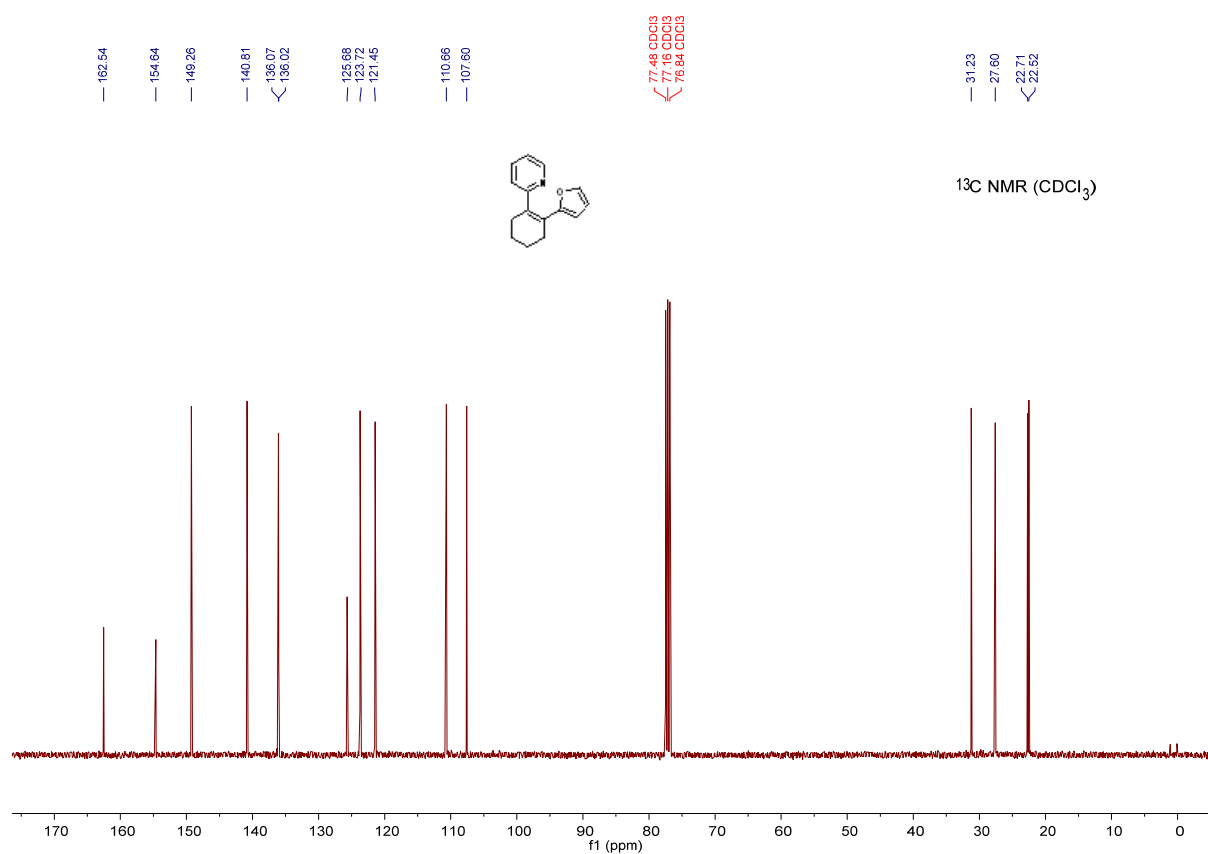
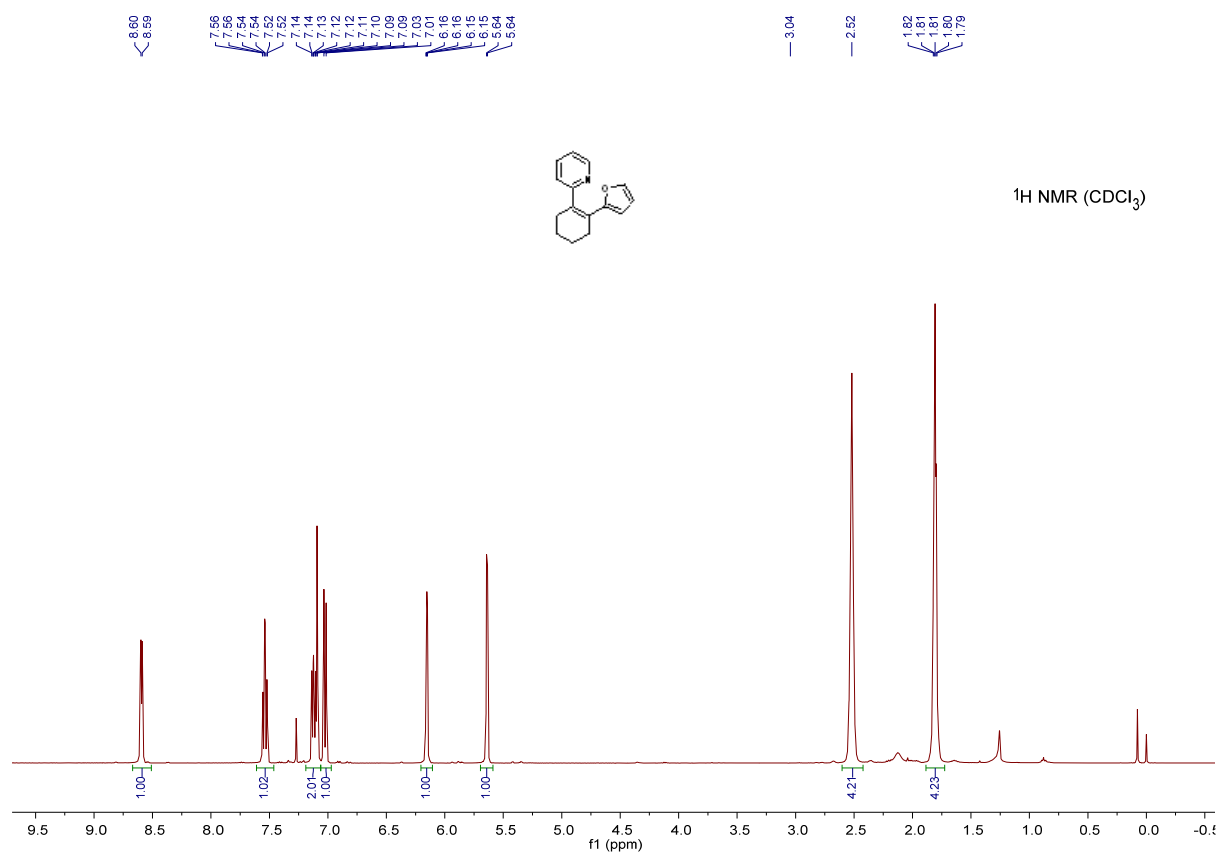
(15) 1-(4-(2-(pyridin-2-yl)cyclohex-1-enyl)phenyl)ethanone (**3o**)



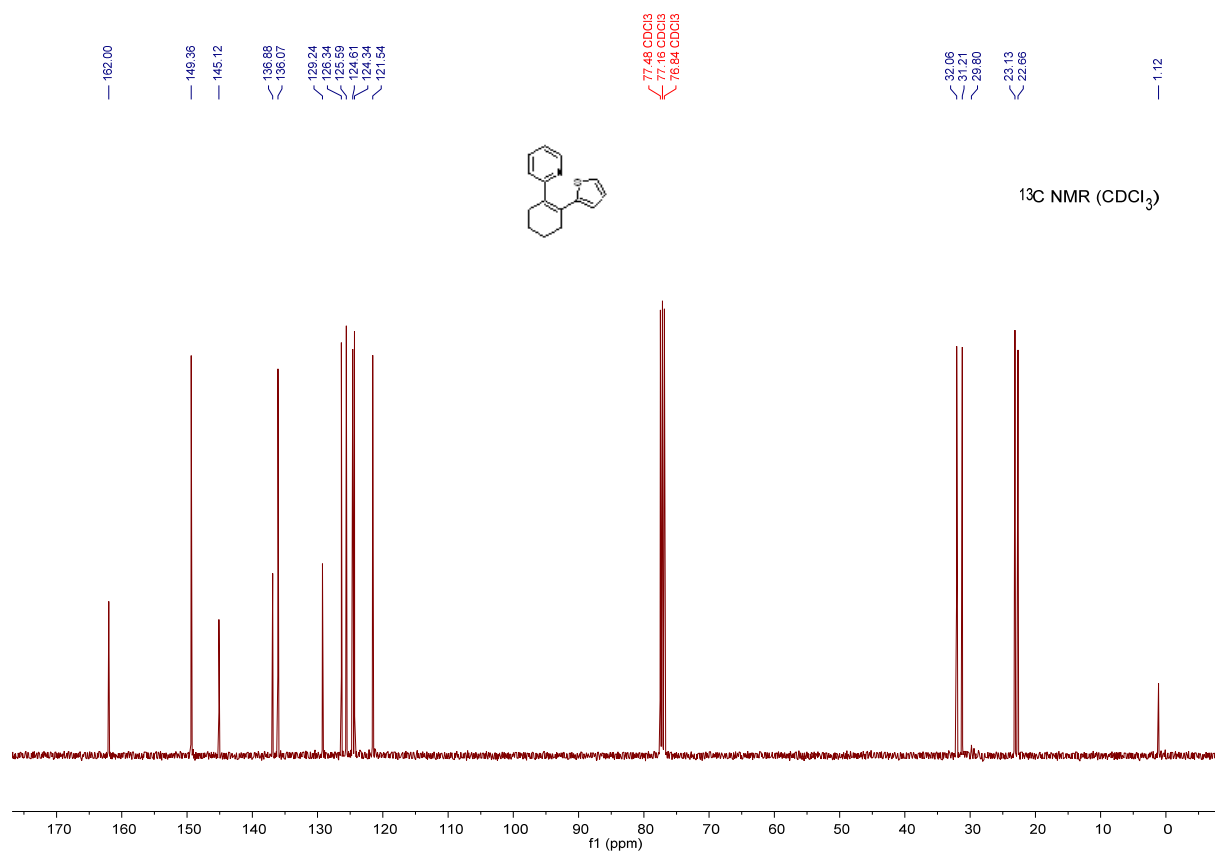
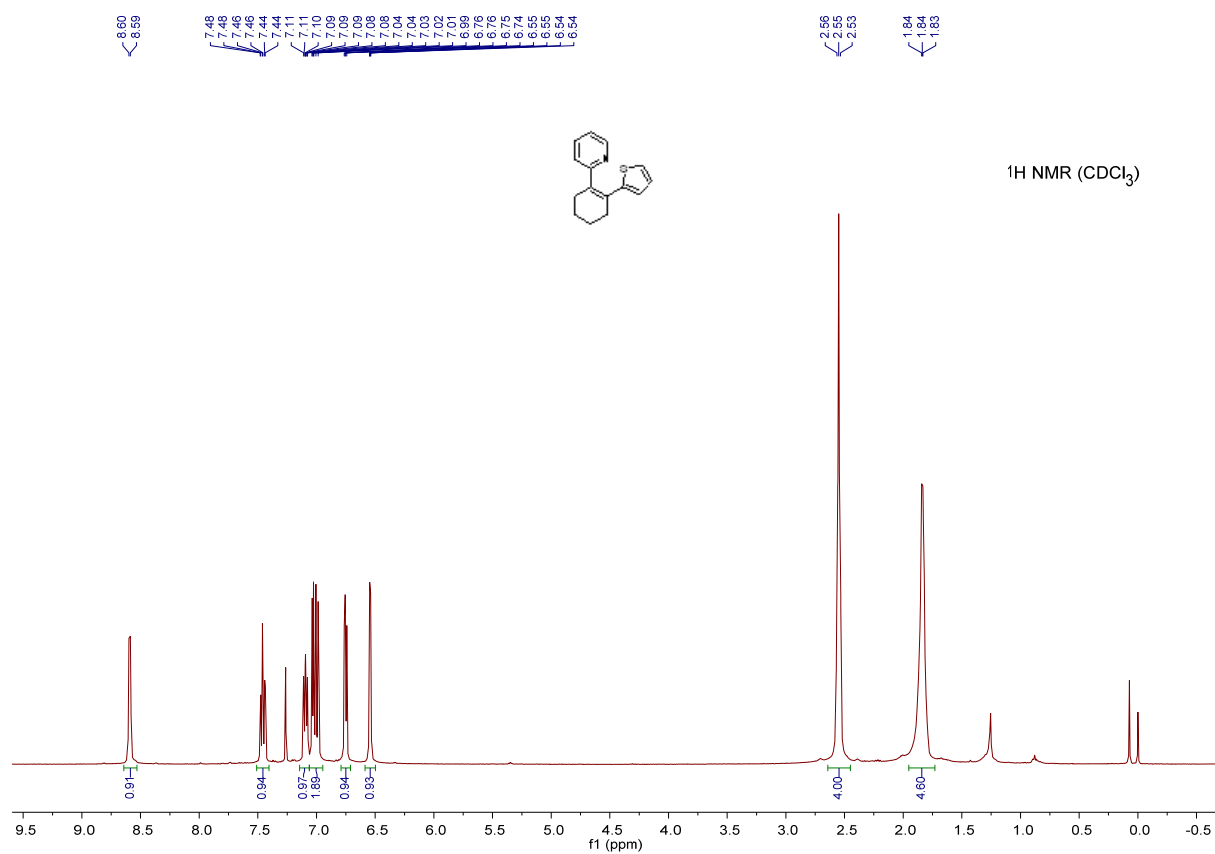
(16) 2-(2-(4-nitrophenyl)cyclohex-1-enyl)pyridine (**3p**)



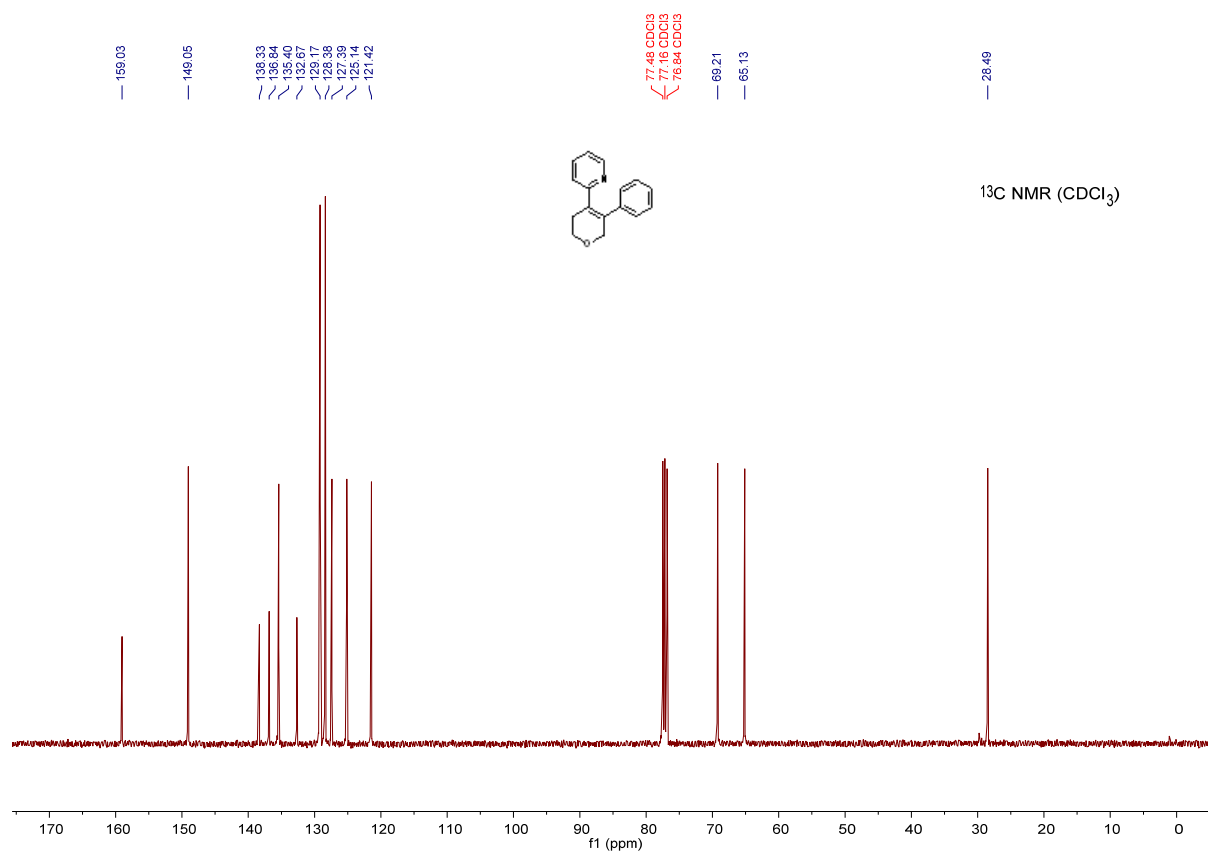
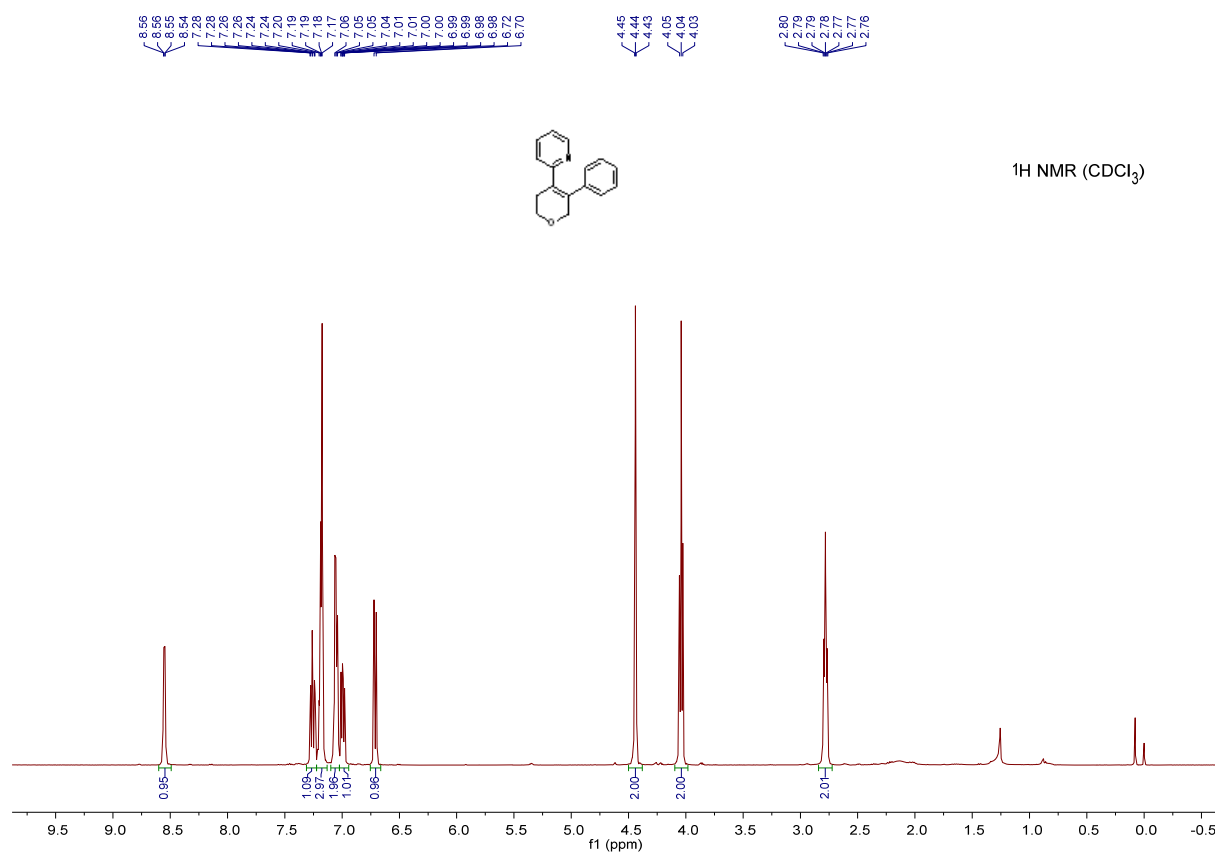
(17) 2-(2-(furan-2-yl)cyclohex-1-enyl)pyridine (**3q**)



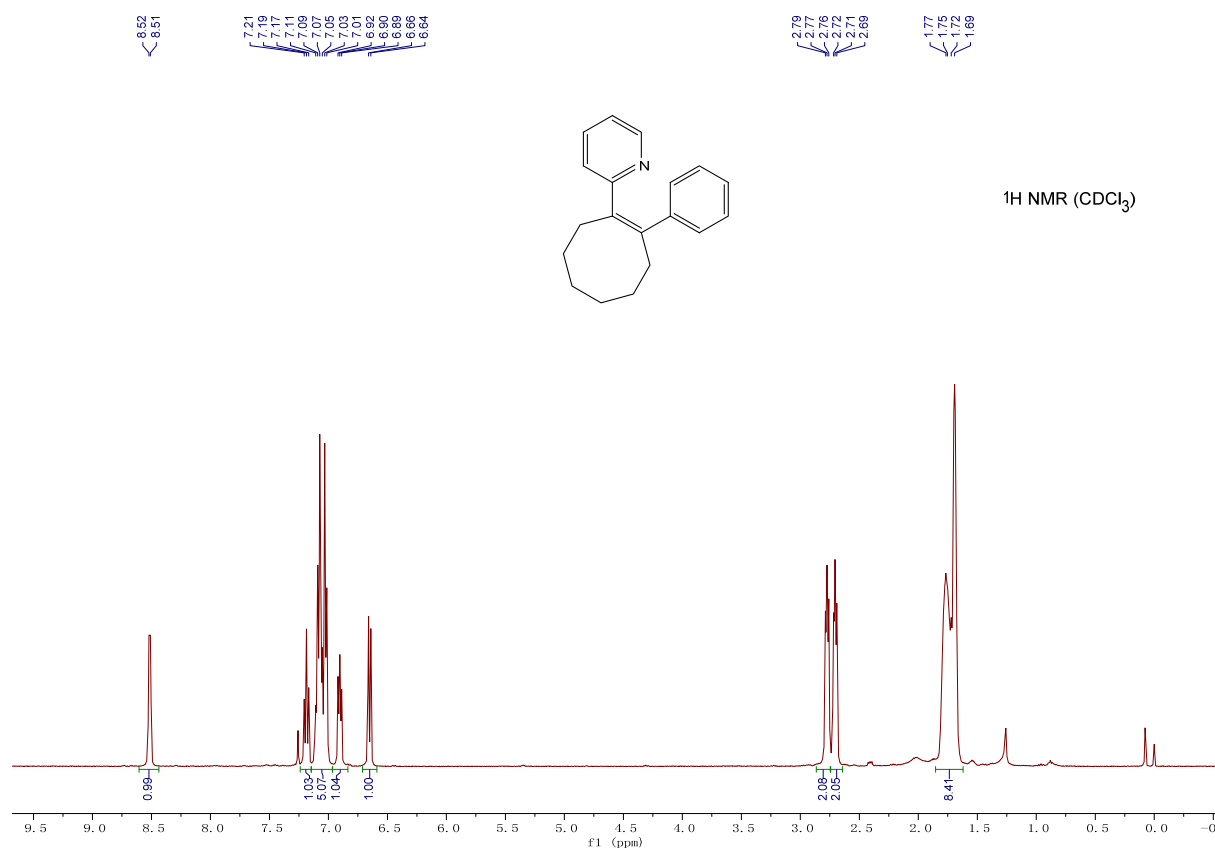
(18) 2-(2-(thiophen-2-yl)cyclohex-1-enyl)pyridine (**3r**)



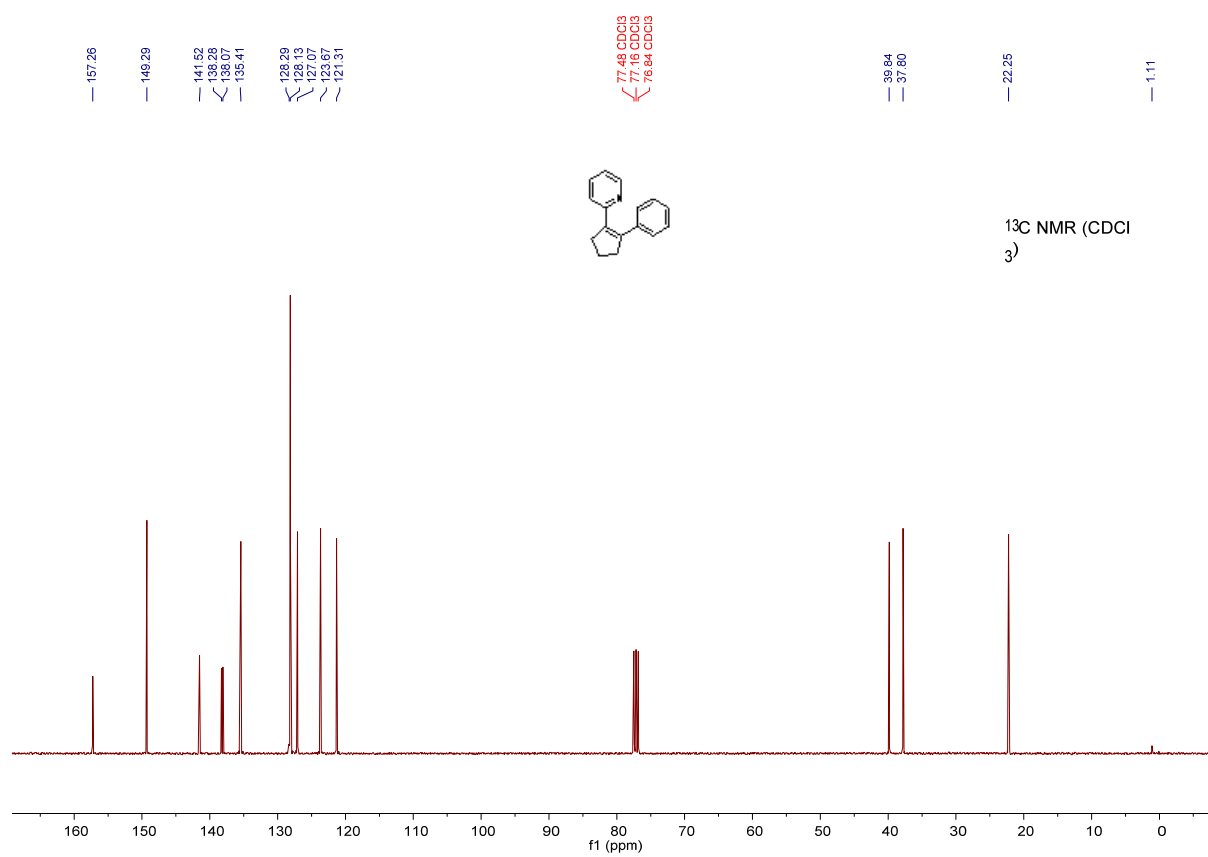
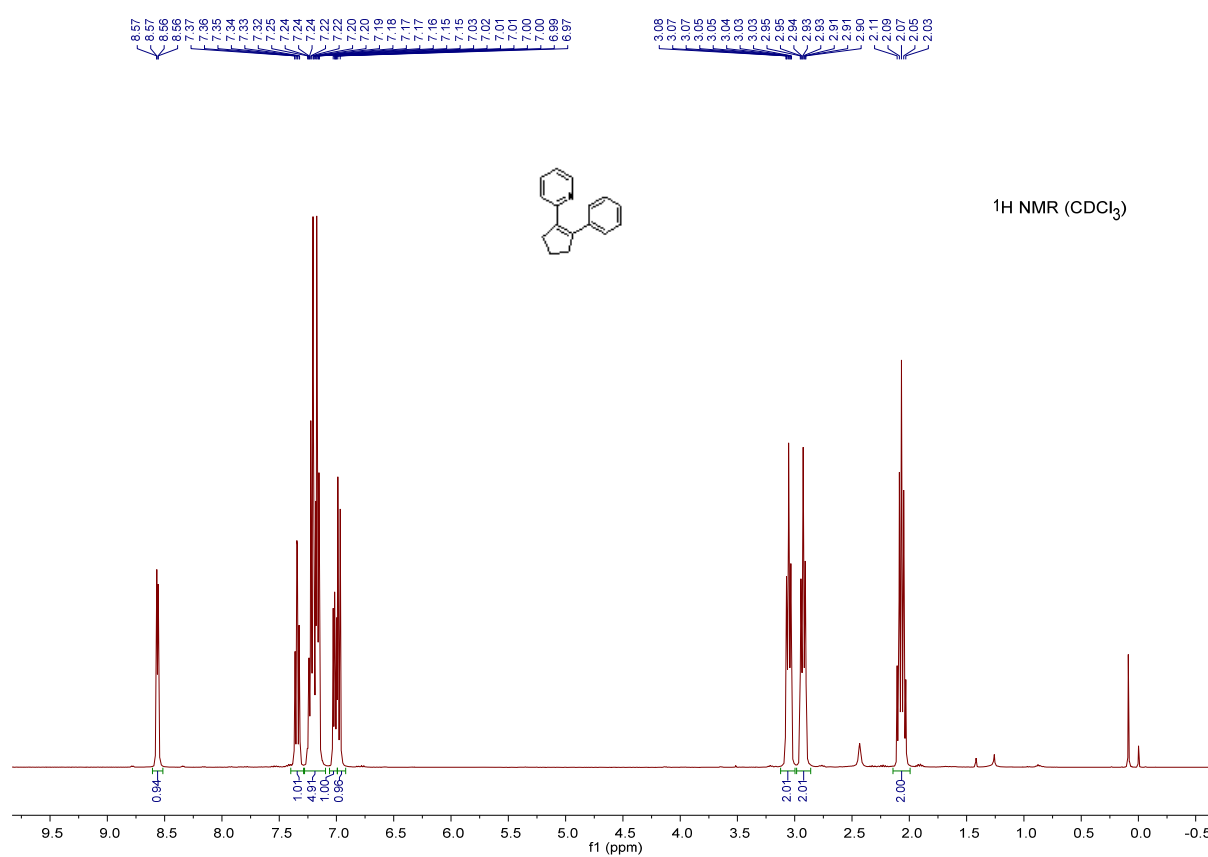
(19) 2-(5-phenyl-3,6-dihydro-2H-pyran-4-yl)pyridine (**3s**)



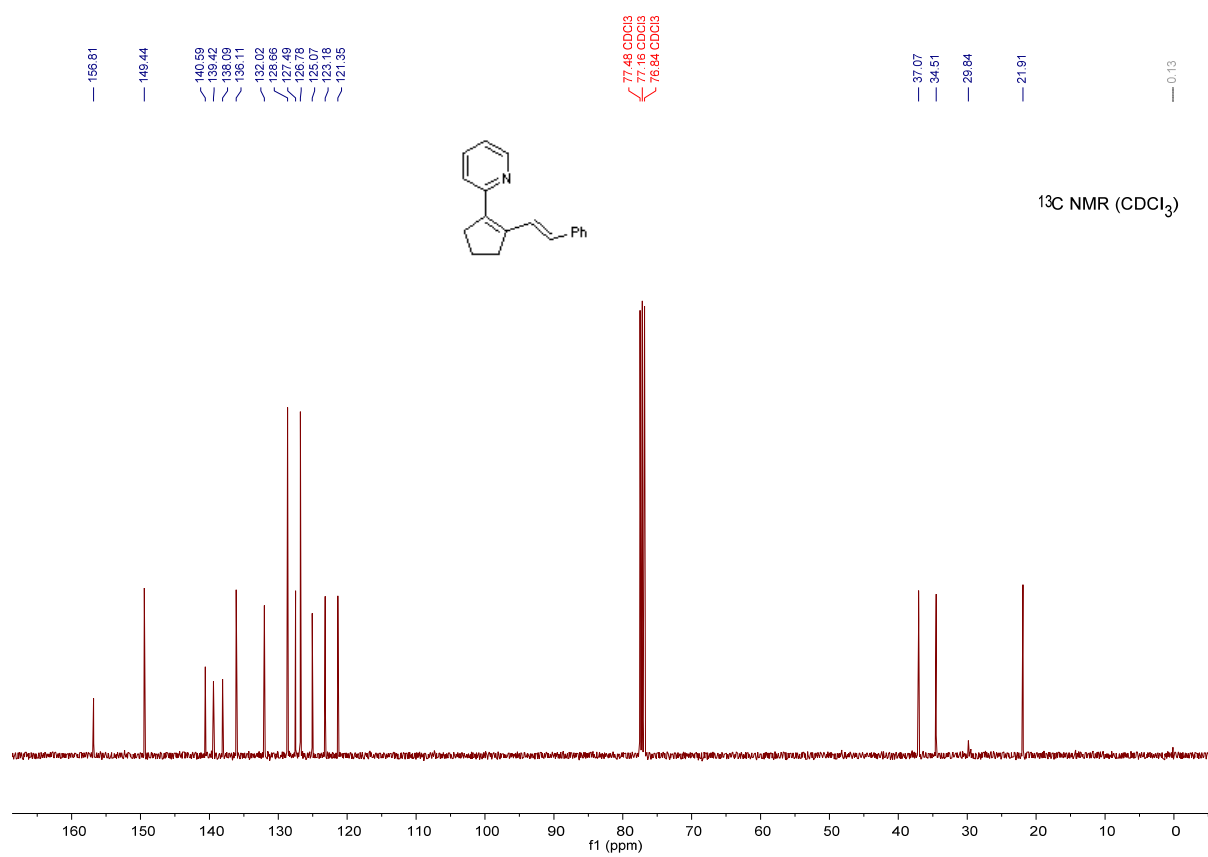
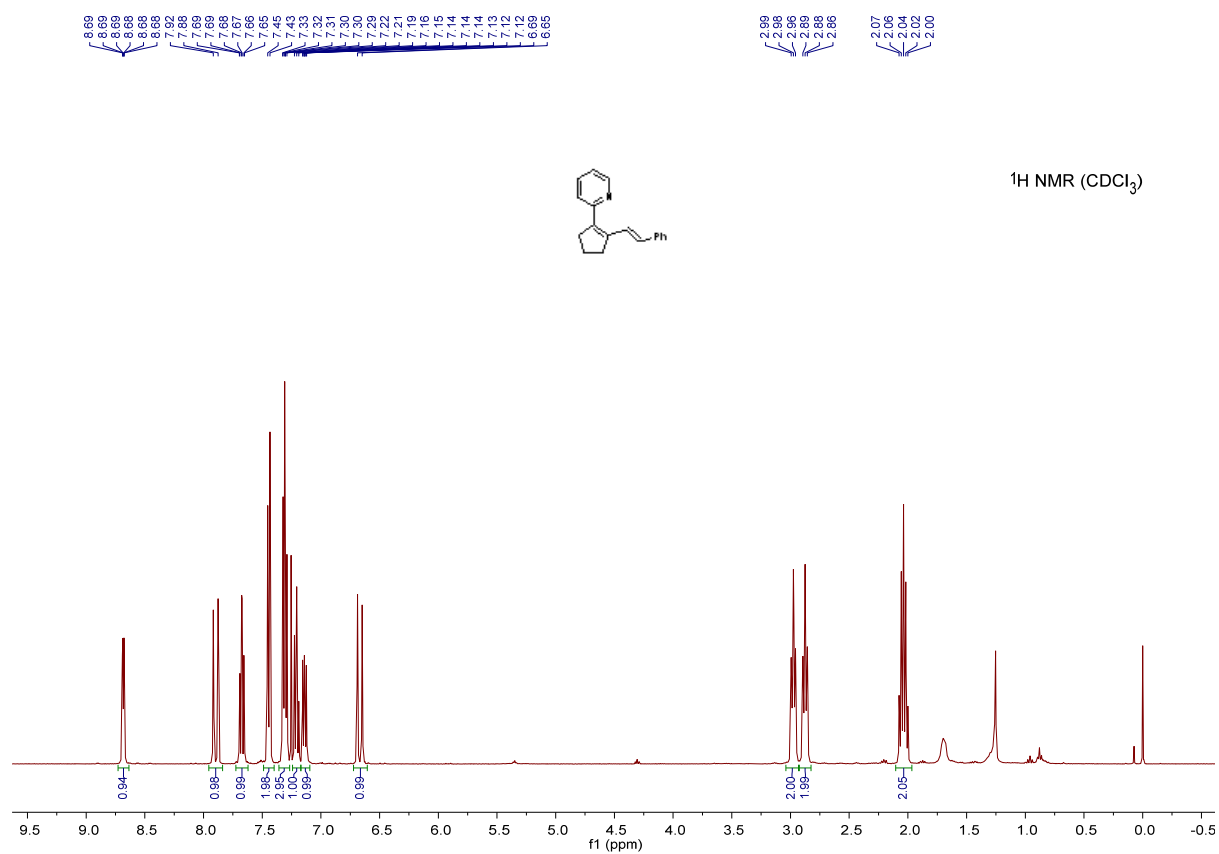
(20) (Z)-2-(2-phenylcyclooct-1-enyl)pyridine (**3t**)



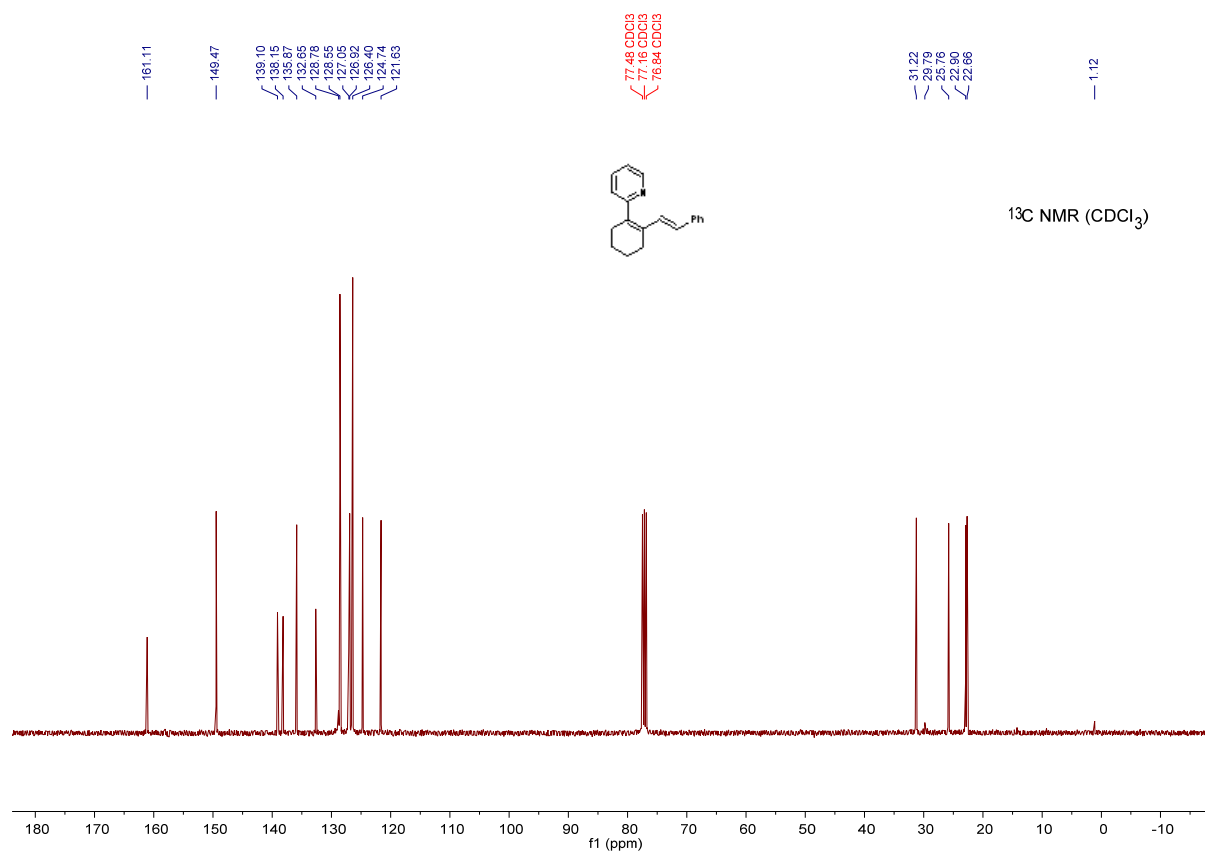
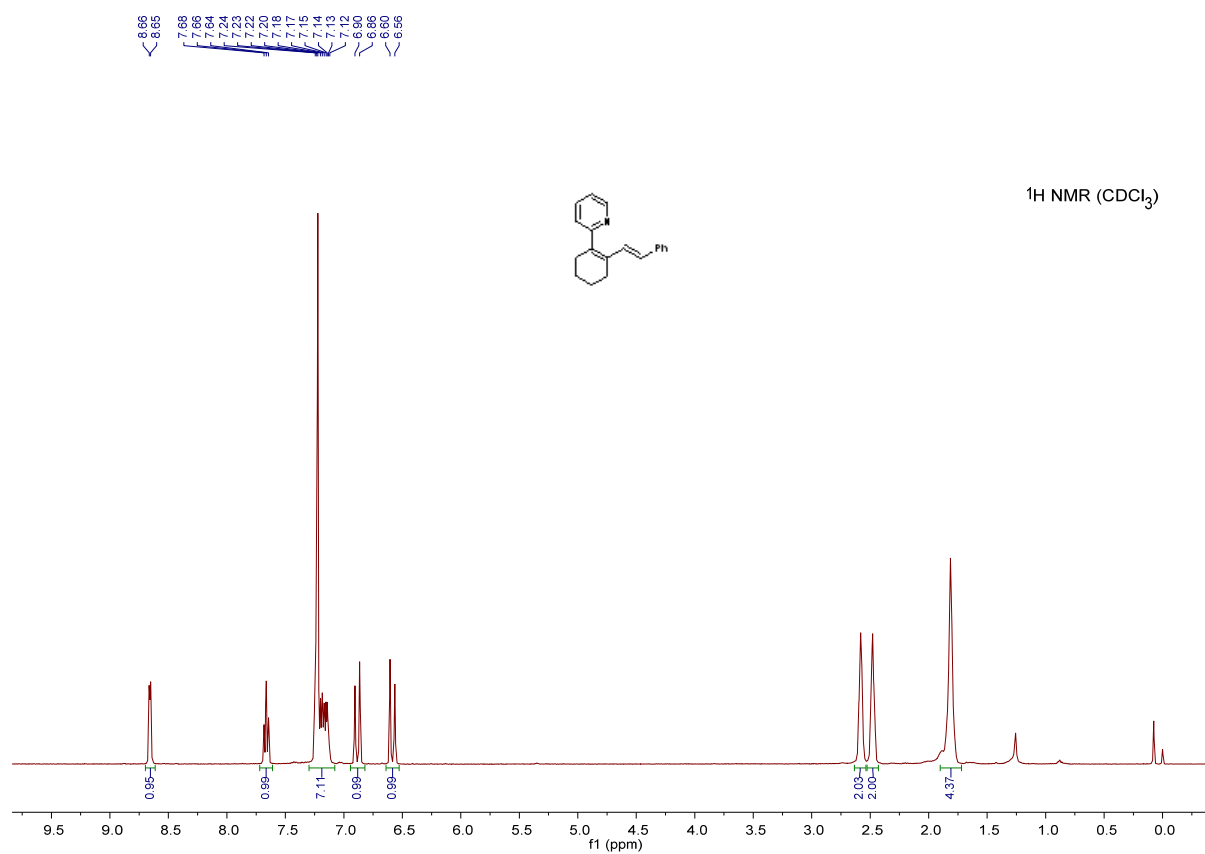
(21) 2-(2-phenylcyclopent-1-enyl)pyridine (**3u**)



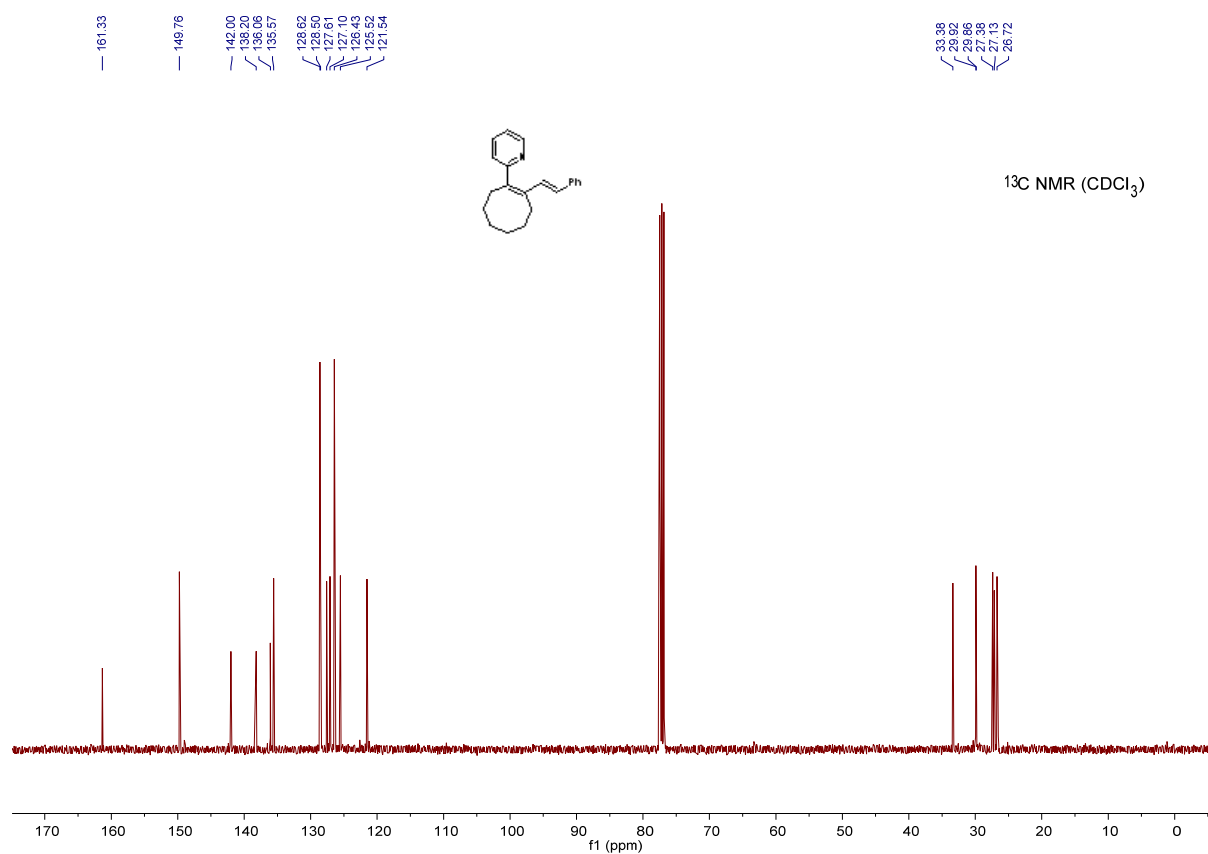
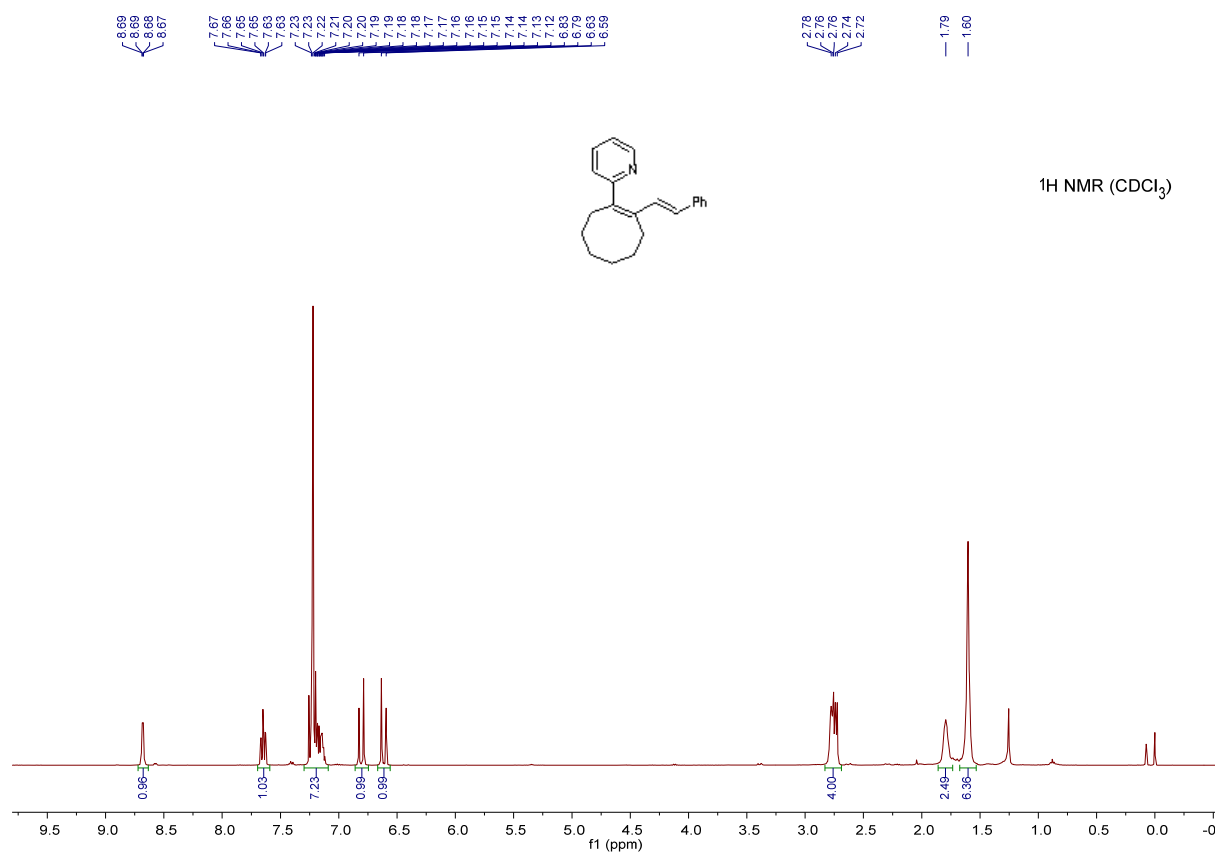
(22) (E)-2-(2-styrylcyclopent-1-enyl)pyridine (**4a**)



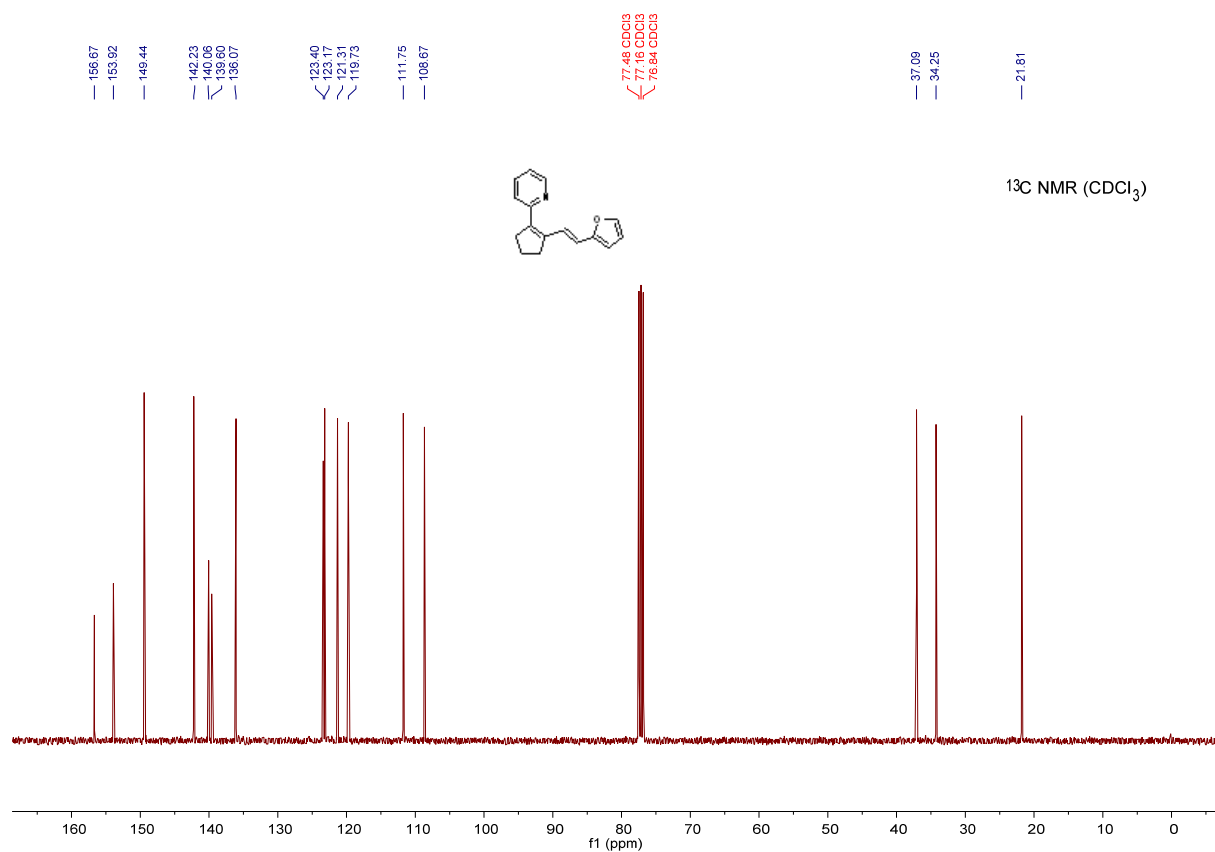
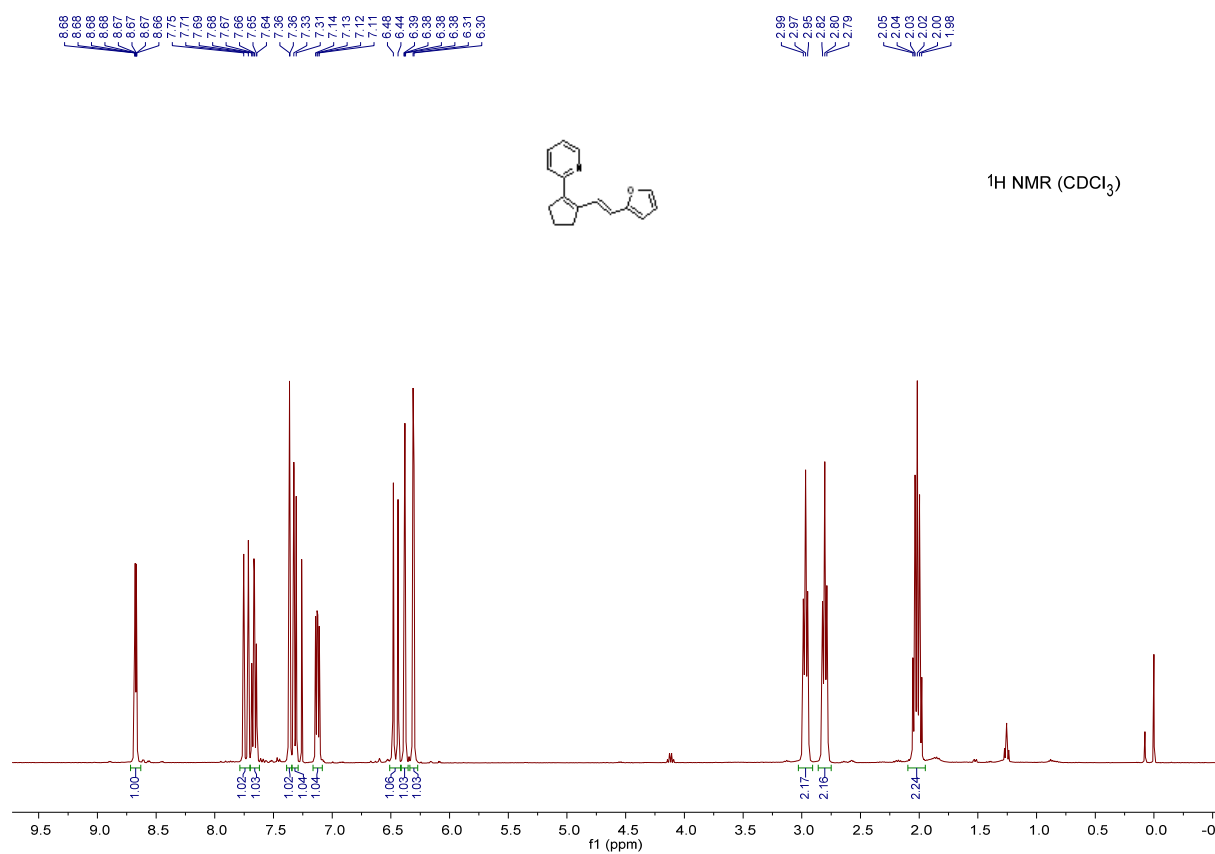
(23) (E)-2-(2-styrylcyclohex-1-enyl)pyridine (**4b**)



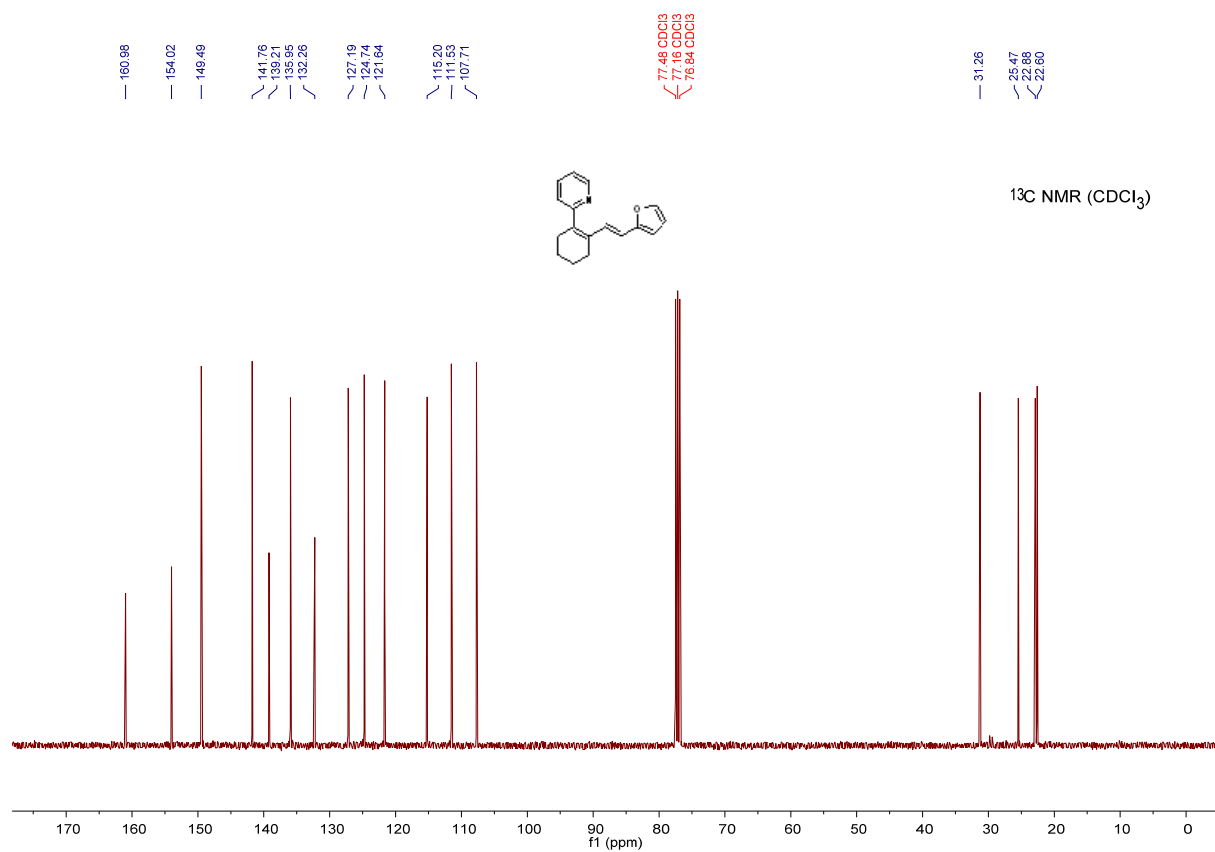
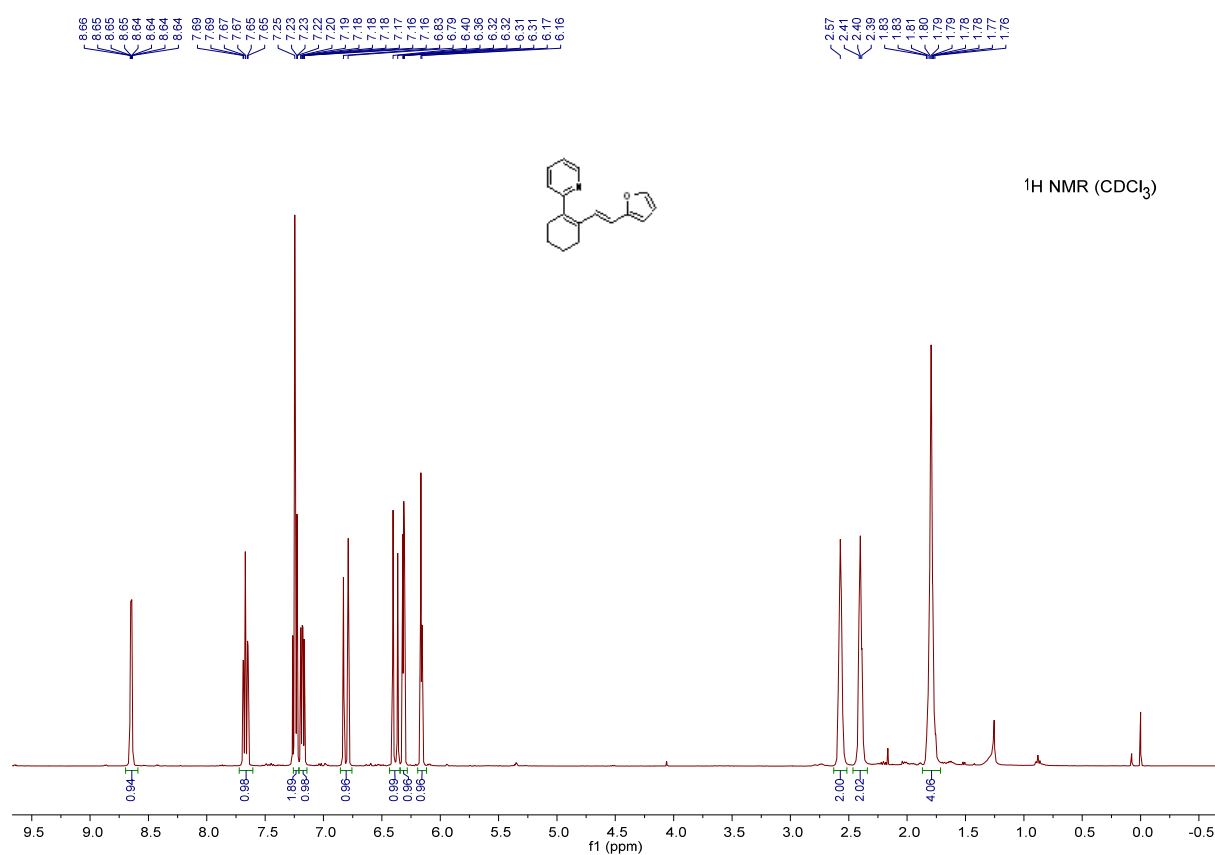
(24) 2-((Z)-2-styrylcyclooct-1-enyl)pyridine (**4c**)



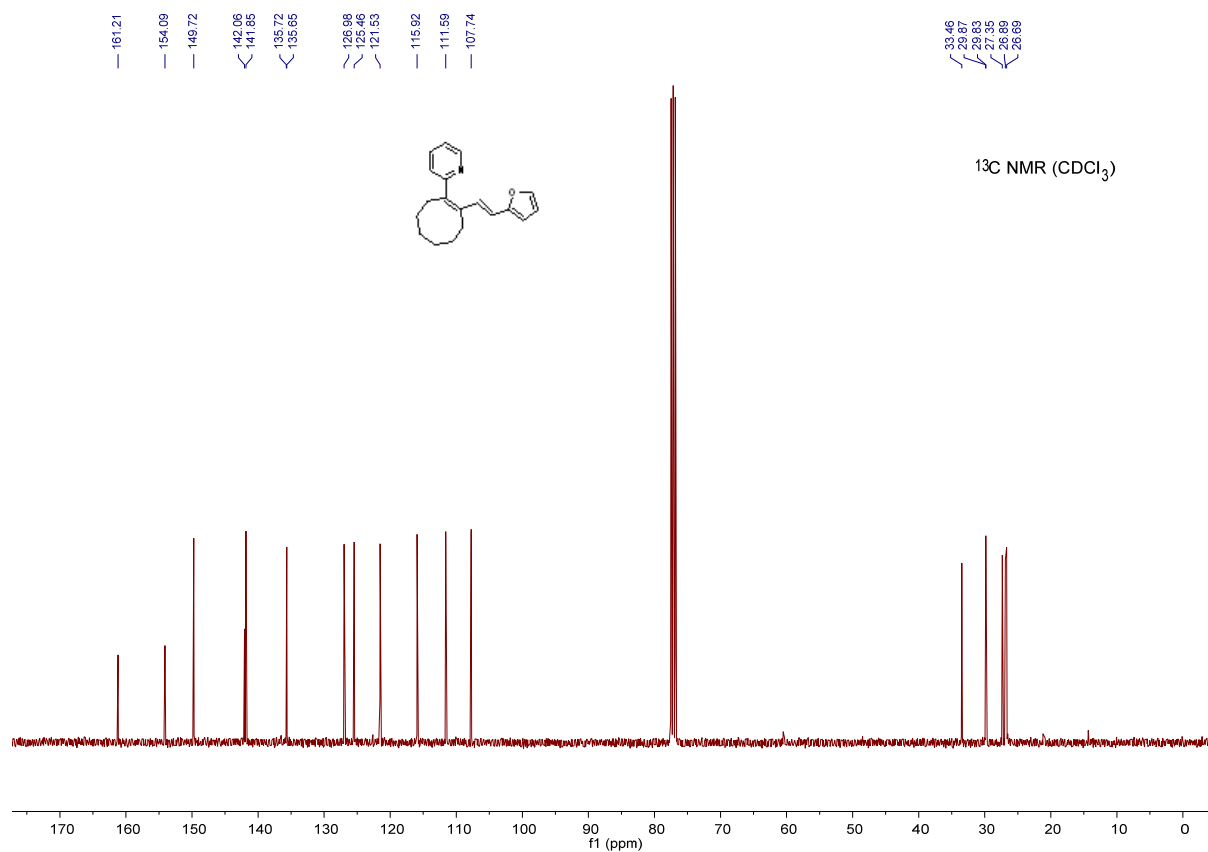
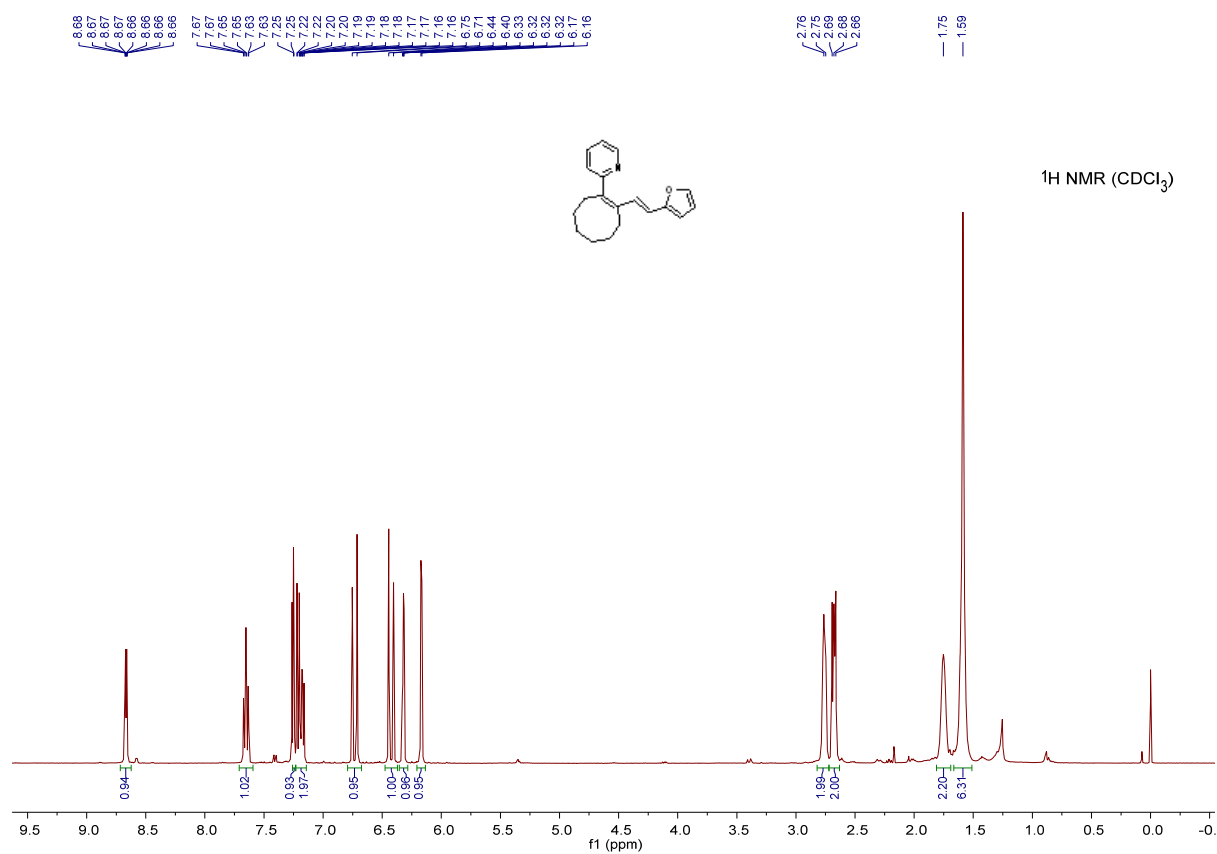
(25) (E)-2-(2-(2-(furan-2-yl)vinyl)cyclopent-1-enyl)pyridine (**4d**)



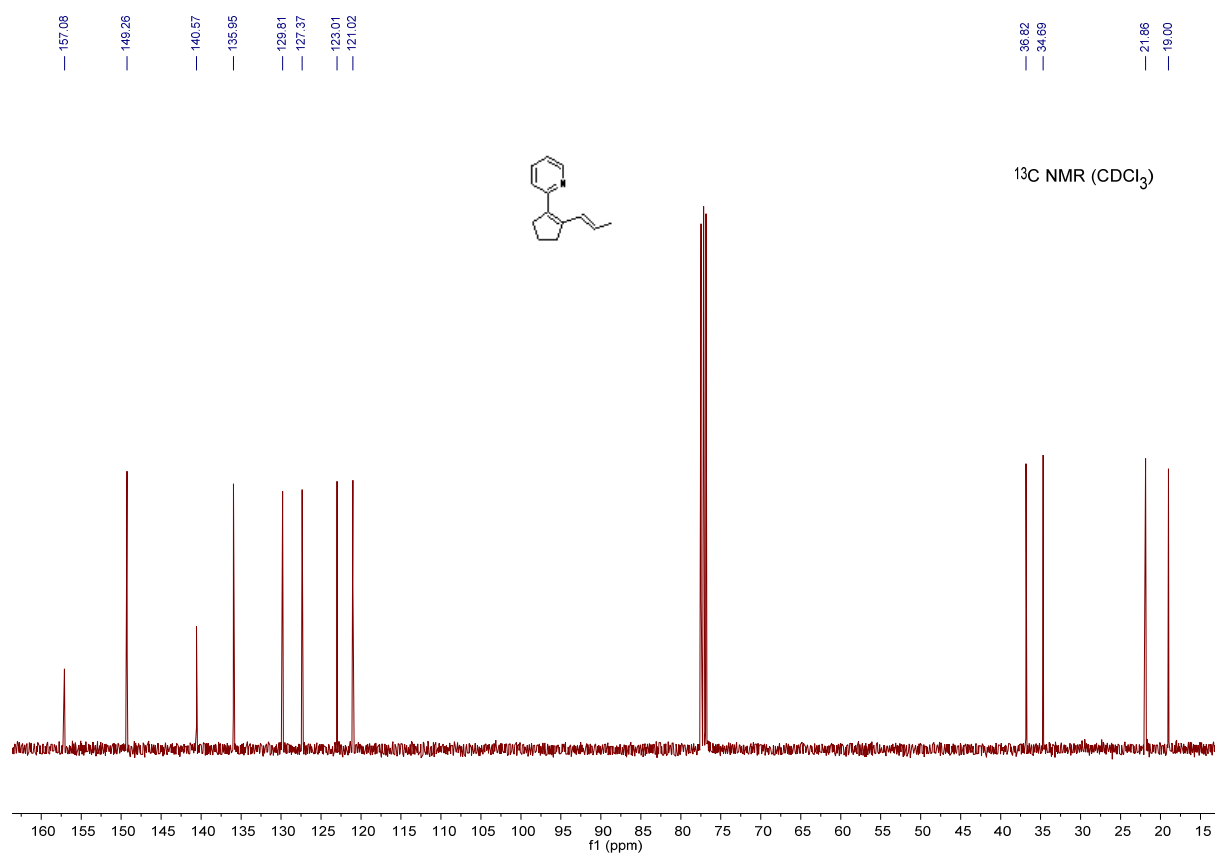
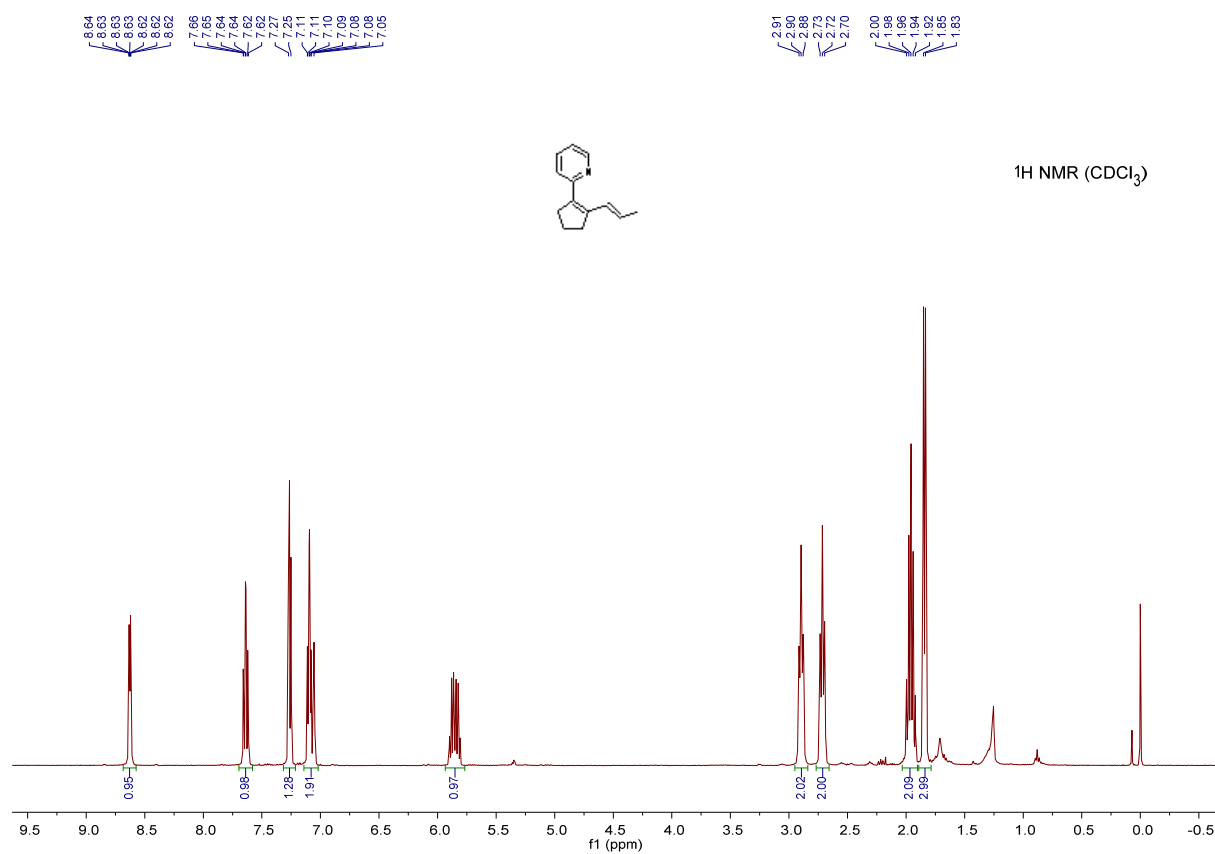
(26) (E)-2-(2-(2-(furan-2-yl)vinyl)cyclohex-1-enyl)pyridine (**4e**)



(27) 2-((Z)-2-((E)-2-(furan-2-yl)vinyl)cyclooct-1-enyl)pyridine (**4f**)



(2E)-2-(2-(prop-1-enyl)cyclopent-1-enyl)pyridine (**4g**)



(29) (E)-2-(2-(prop-1-enyl)cyclohex-1-enyl)pyridine (**4h**)

