Supporting Information

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A convenient synthesis of 3-arylideneindolin-2-ones and evaluation of their photoelectrochemical properties

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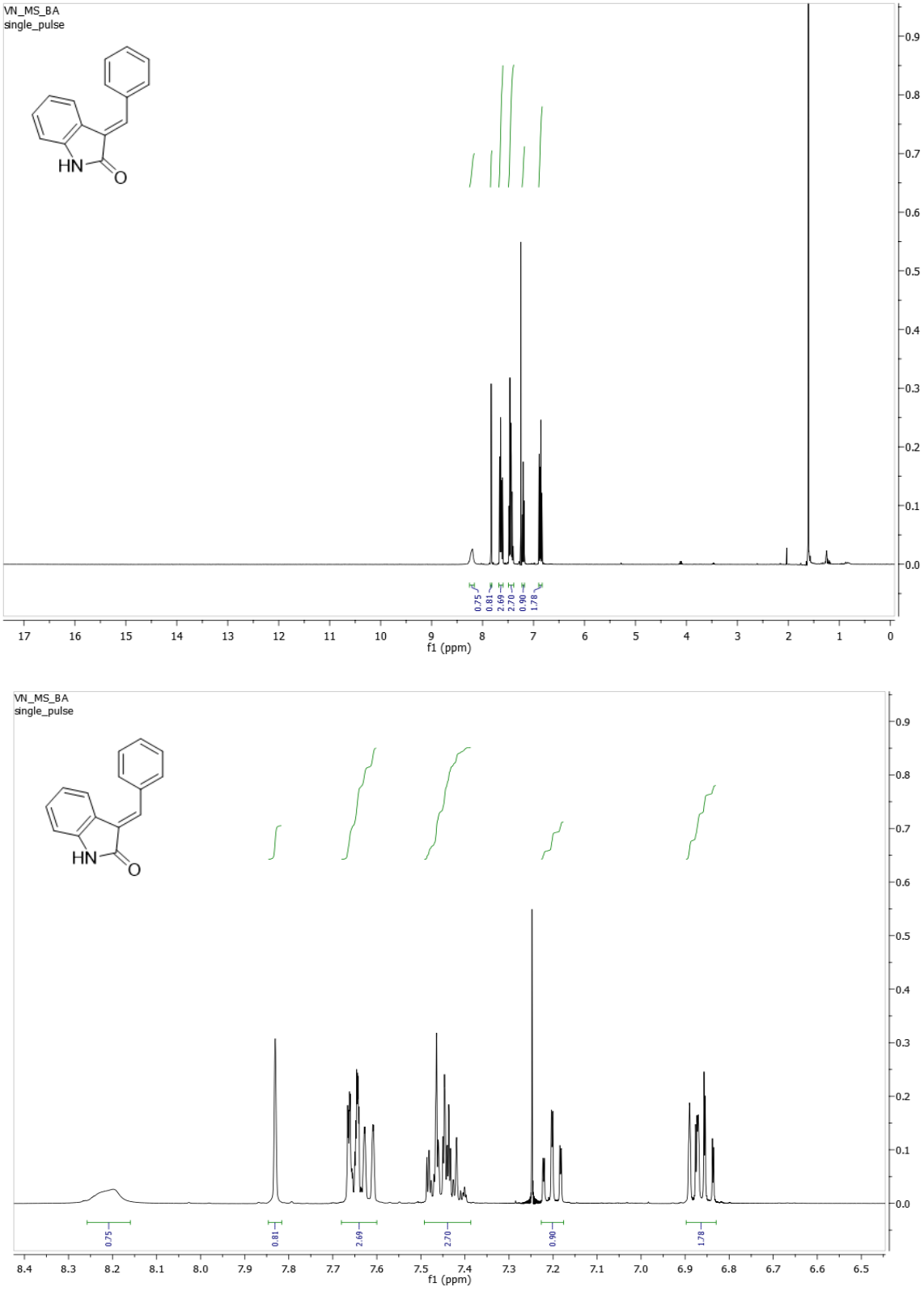


Figure S1: [1]H-NMR spectrum of (*E*)-3-benzylideneindolin-2-one **3a**

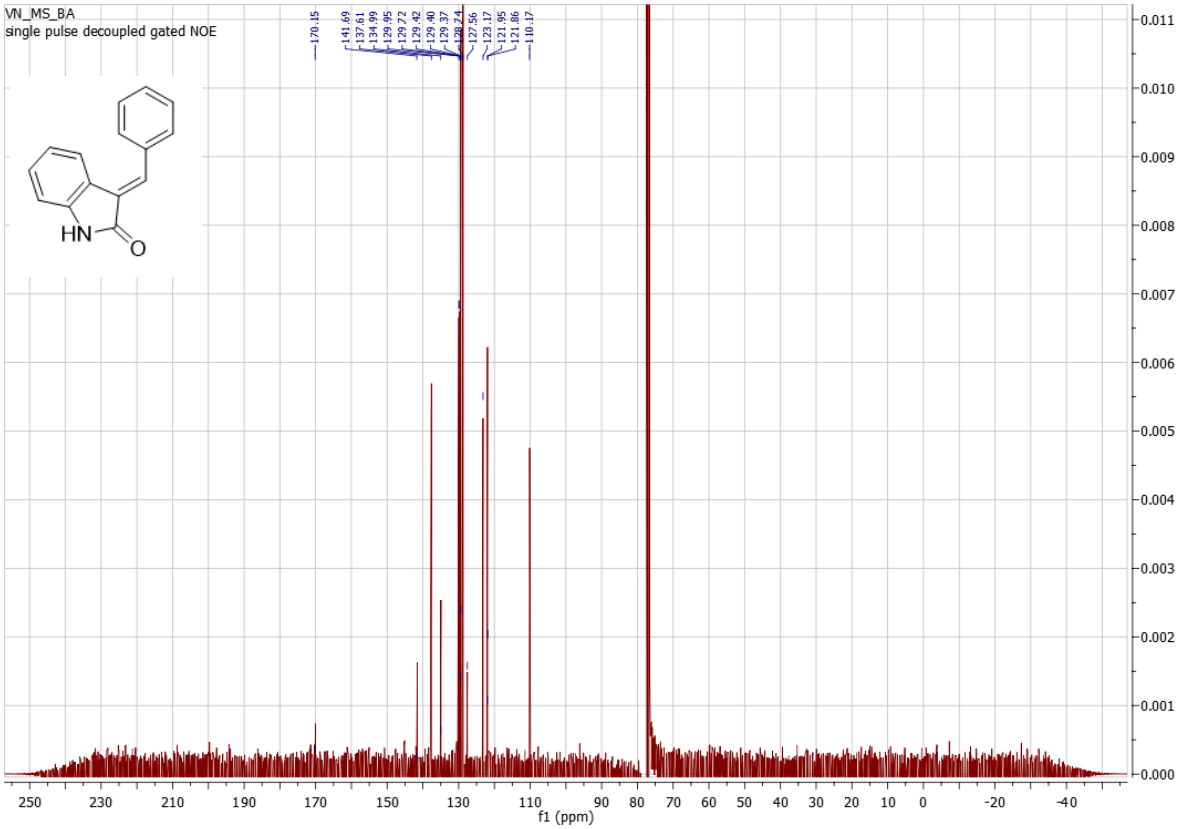


Figure S2: ^{13}C-NMR spectrum of (*E*)-3-benzylideneindolin-2-one **3a**

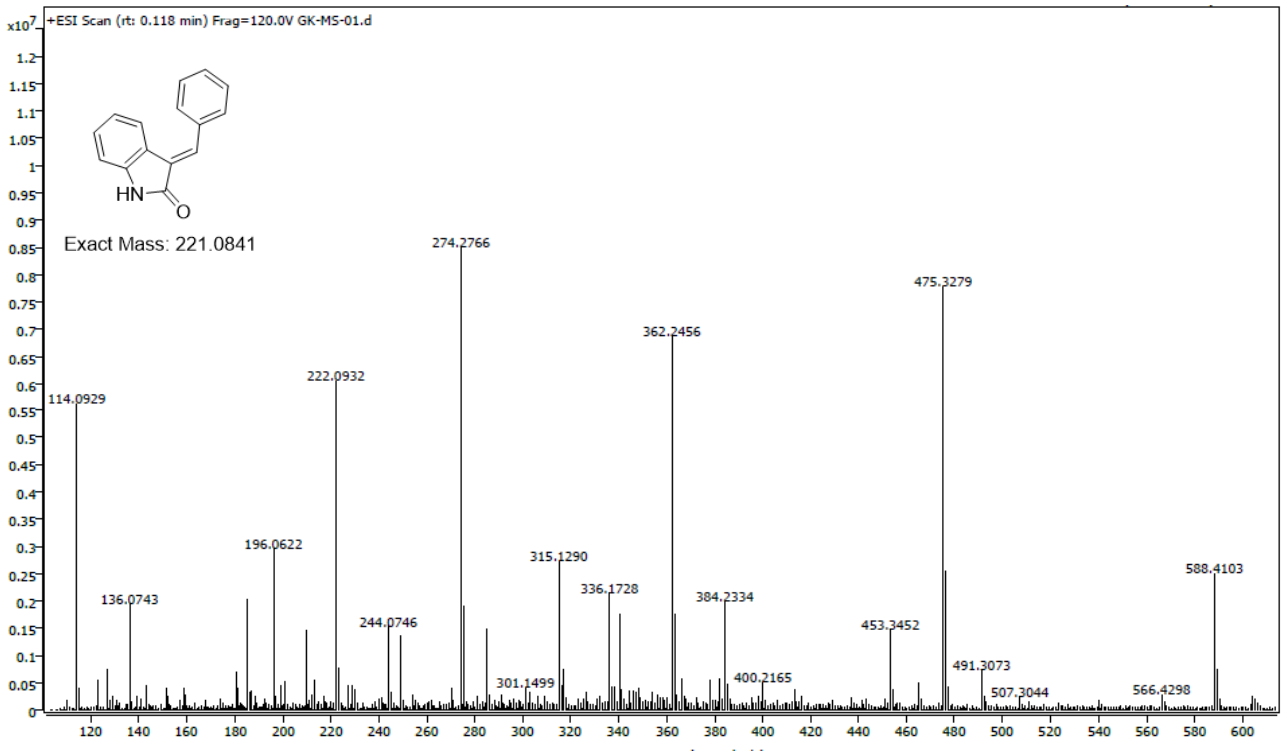


Figure S3: MS spectrum of (*E*)-3-benzylideneindolin-2-one **3a**

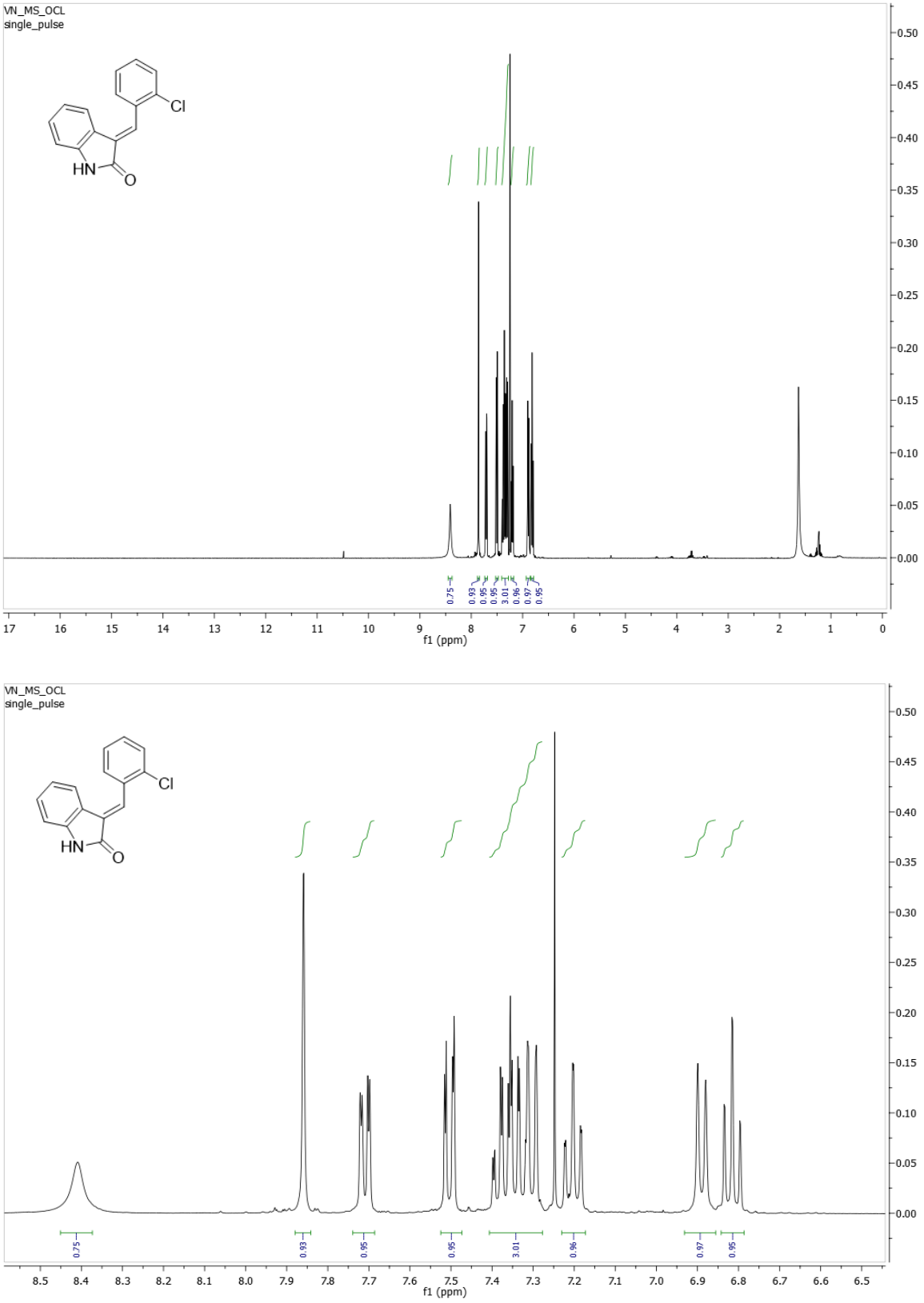


Figure S4: ^{1}H-NMR spectrum of (*E*)-3-(2-chlorobenzylidene)indolin-2-one **3b**

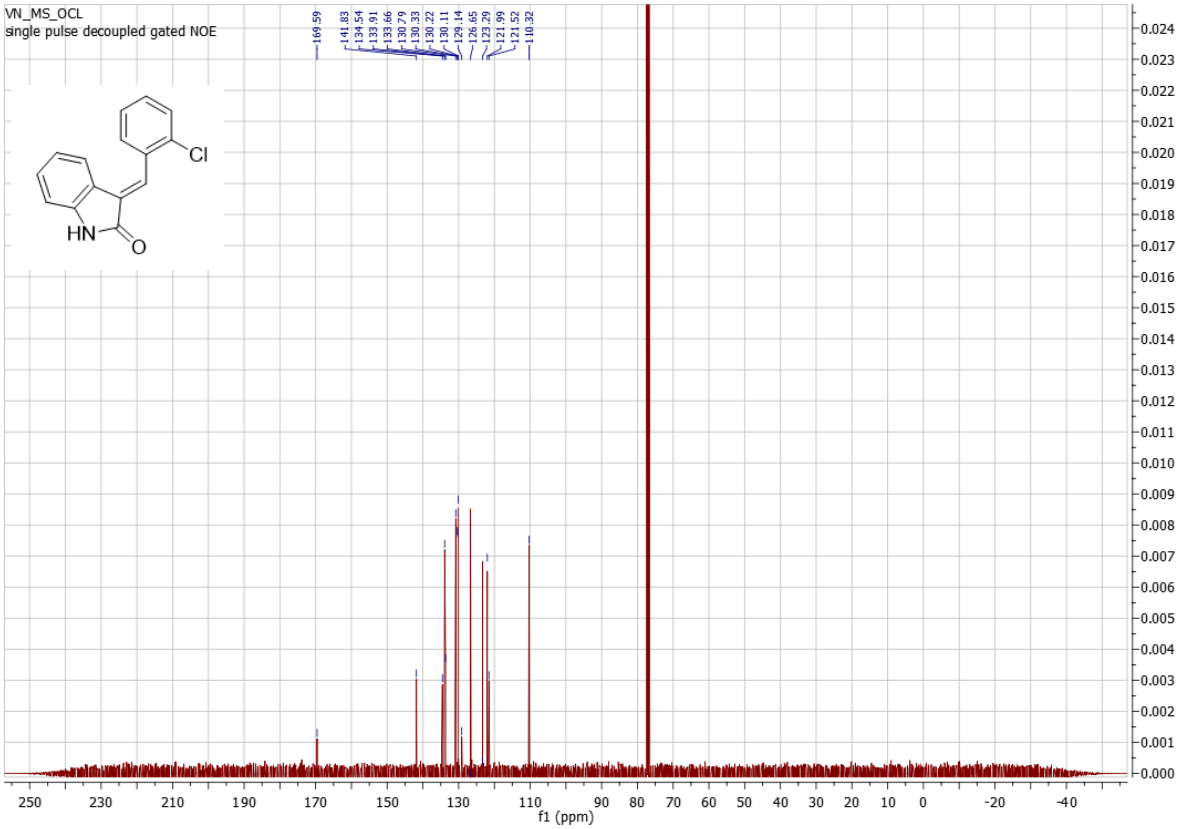


Figure S5: ^{13}C-NMR spectrum of (*E*)-3-(2-chlorobenzylidene)indolin-2-one **3b**

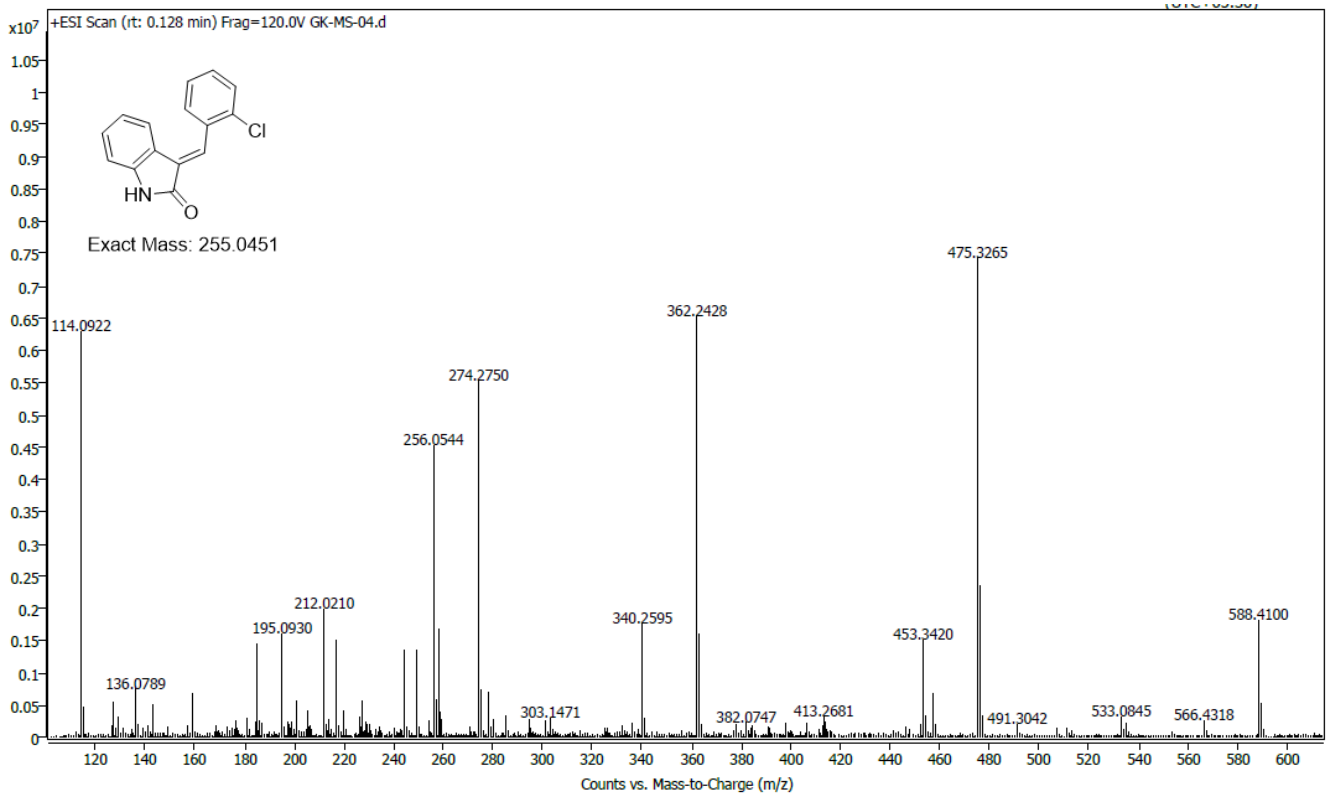


Figure S6: MS spectrum of (*E*)-3-(2-chlorobenzylidene)indolin-2-one **3b**

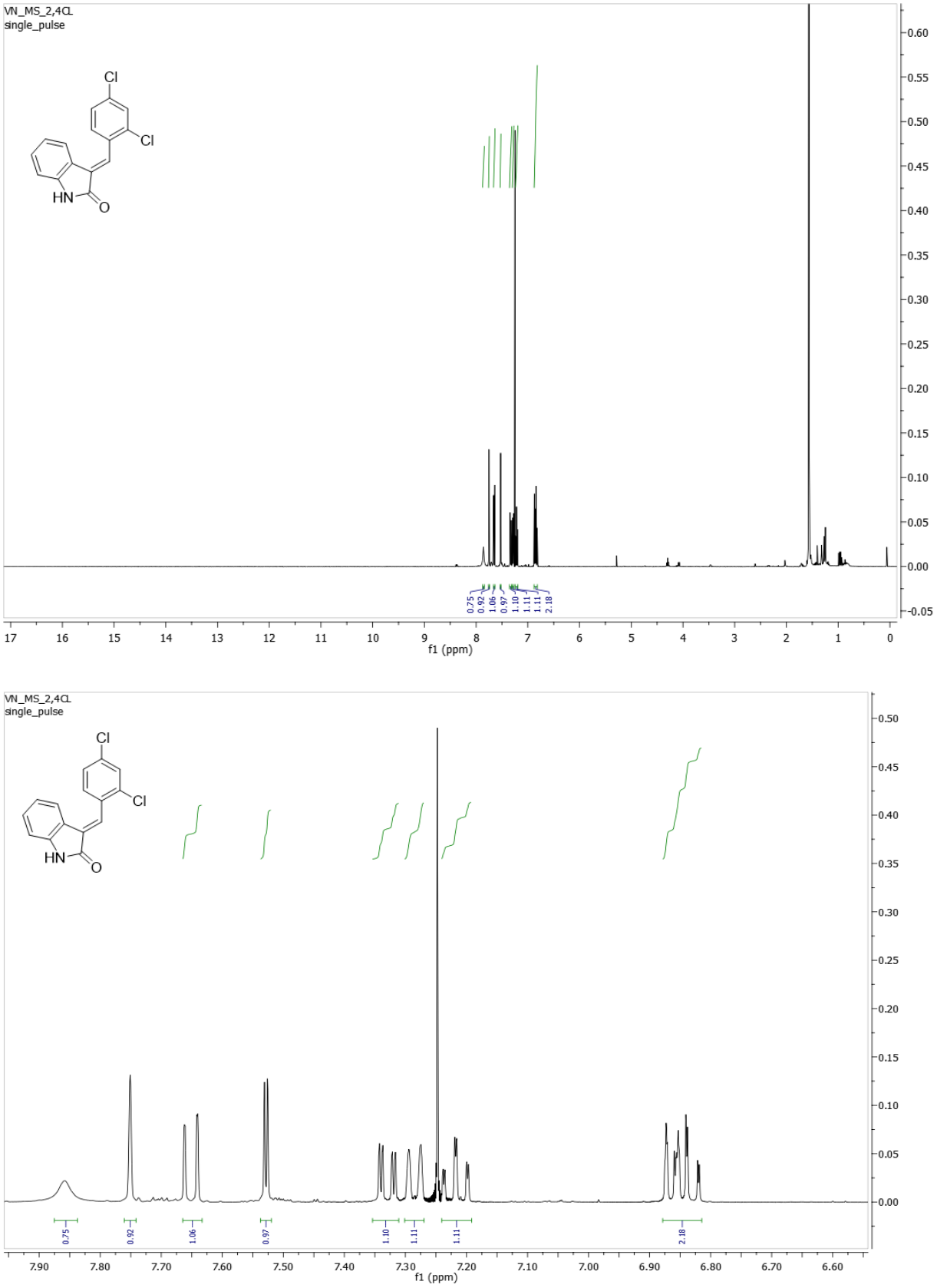


Figure S7: [1]H-NMR spectrum of (*E*)-3-(2,4-dichlorobenzylidene)indolin-2-one **3c**

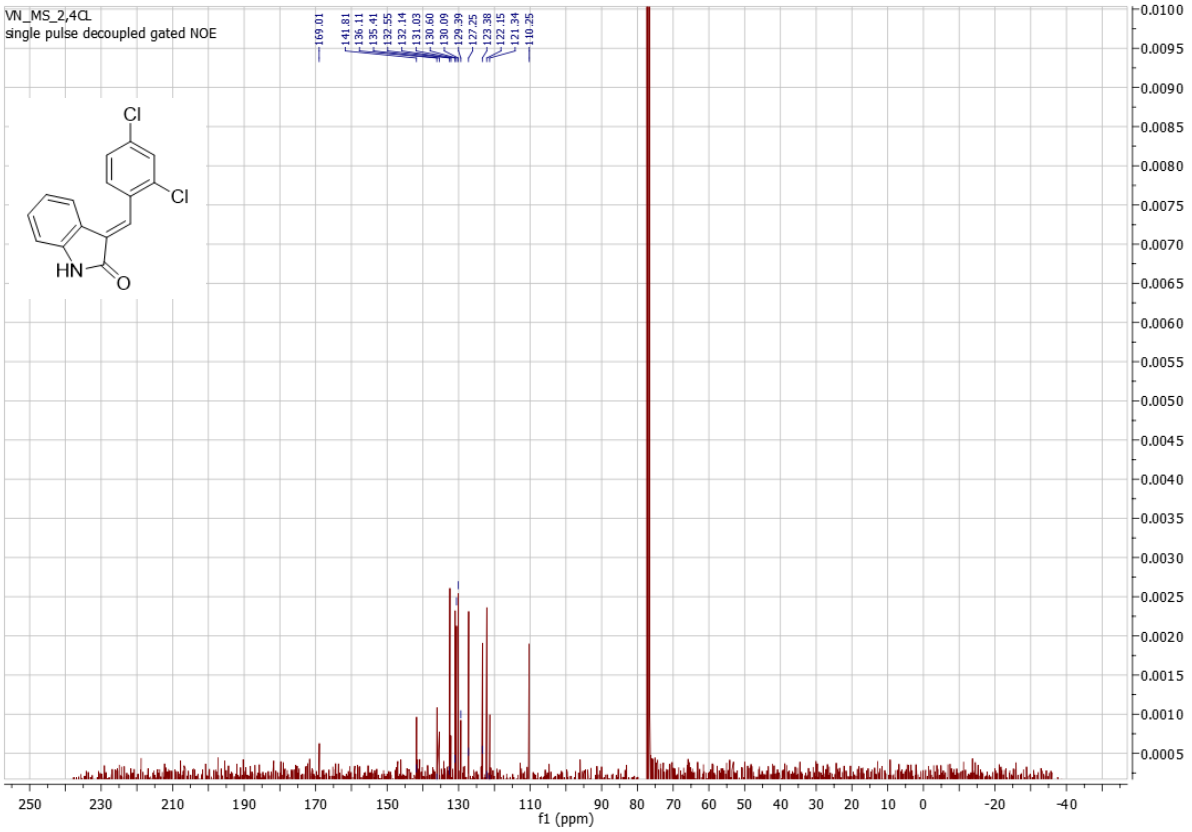


Figure S8: ^{13}C-NMR spectrum of (*E*)-3-(2,4-dichlorobenzylidene)indolin-2-one **3c**

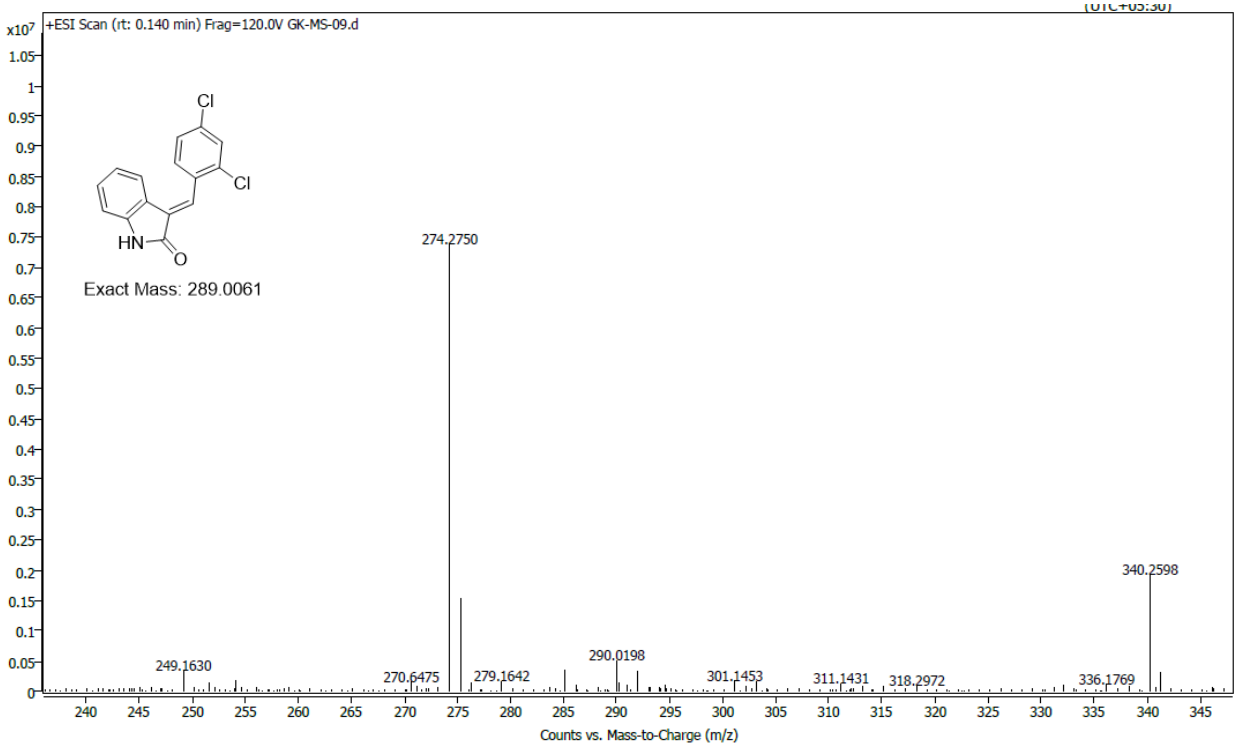


Figure S9: MS spectrum of (*E*)-3-(2,4-dichlorobenzylidene)indolin-2-one **3c**

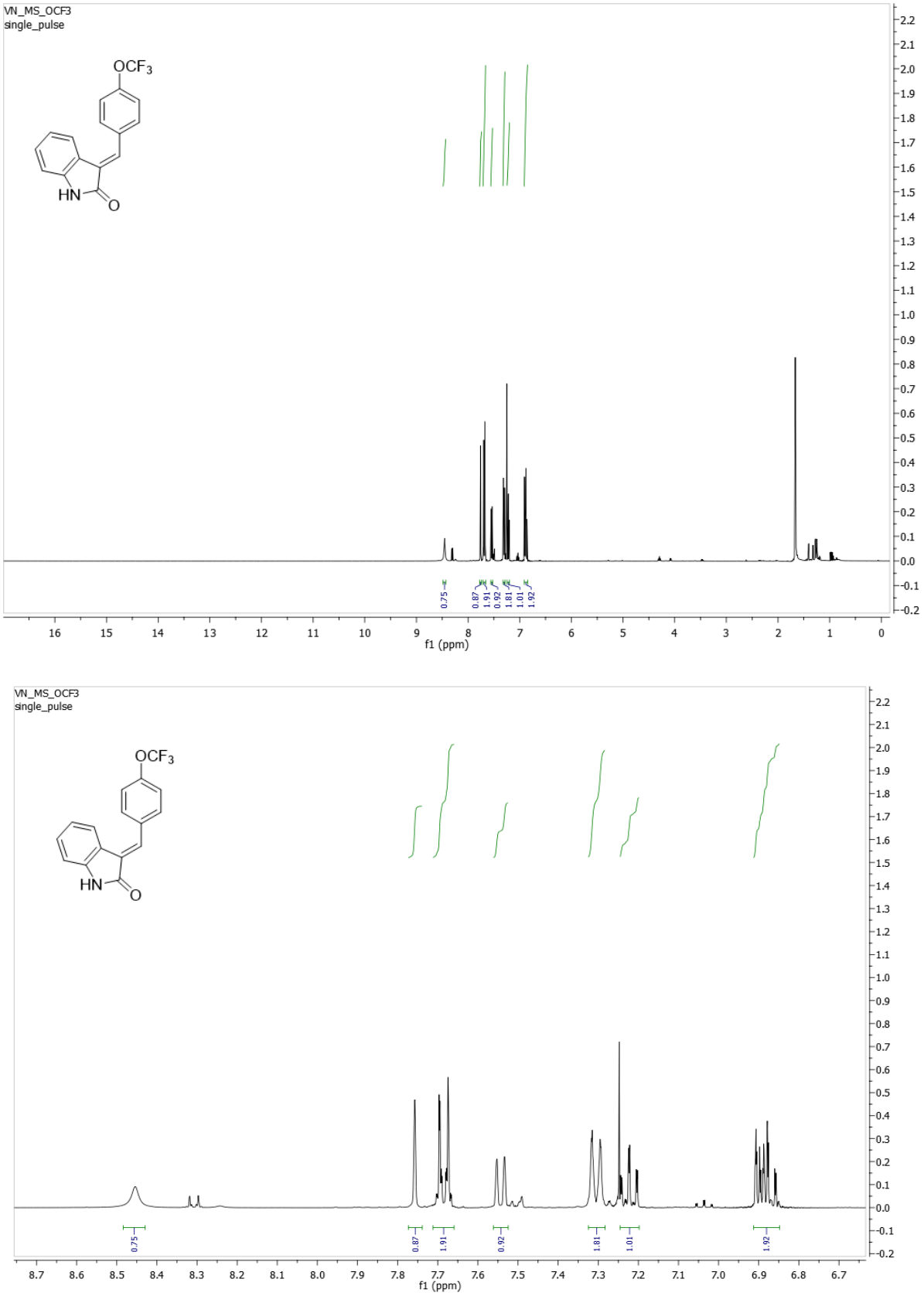


Figure S10: ^{1}H-NMR spectrum of (*E*)-3-(4-(trifluoromethoxy)benzylidene)indolin-2-one **3d**

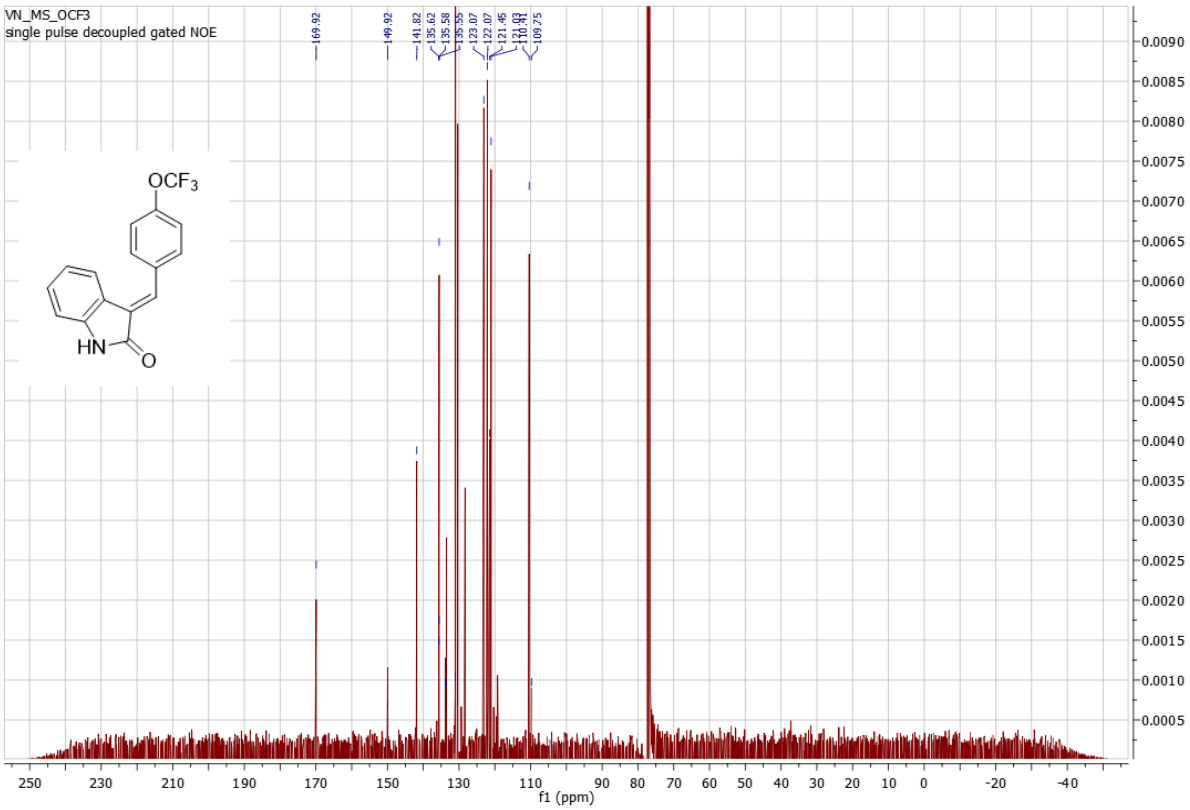


Figure S11: ^{13}C-NMR spectrum of (*E*)-3-(4-(trifluoromethoxy)benzylidene)indolin-2-one **3d**

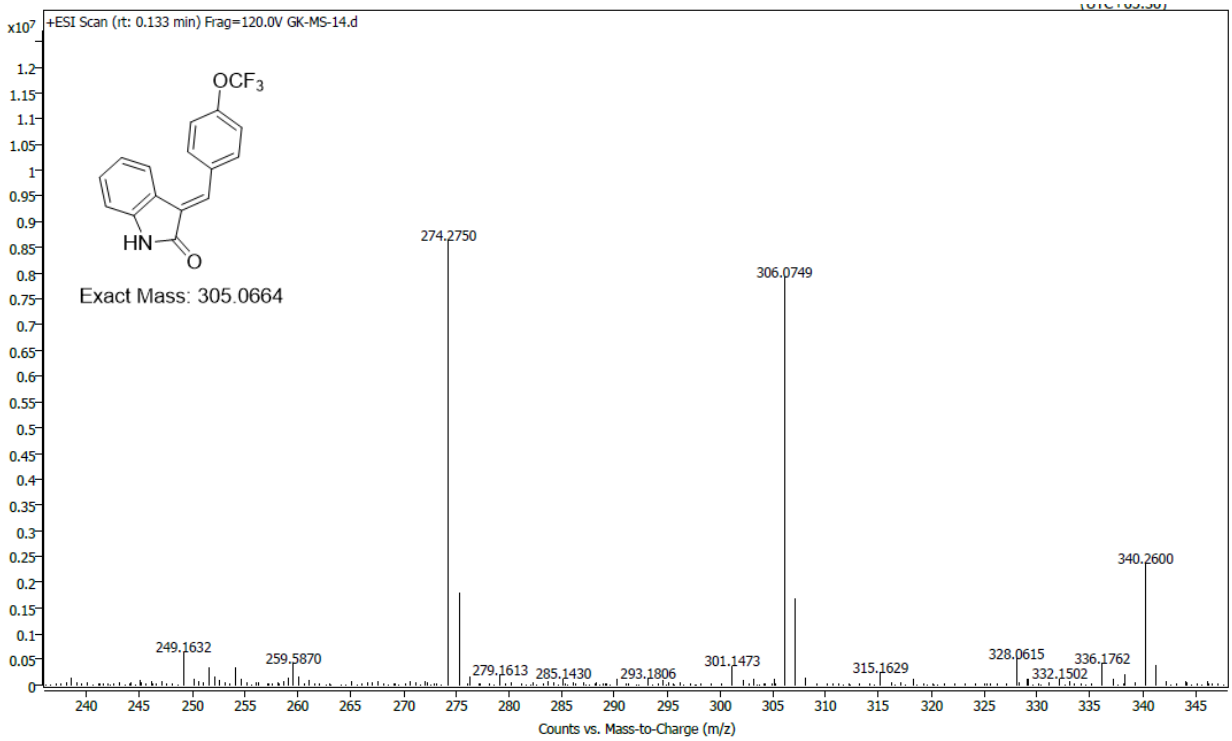
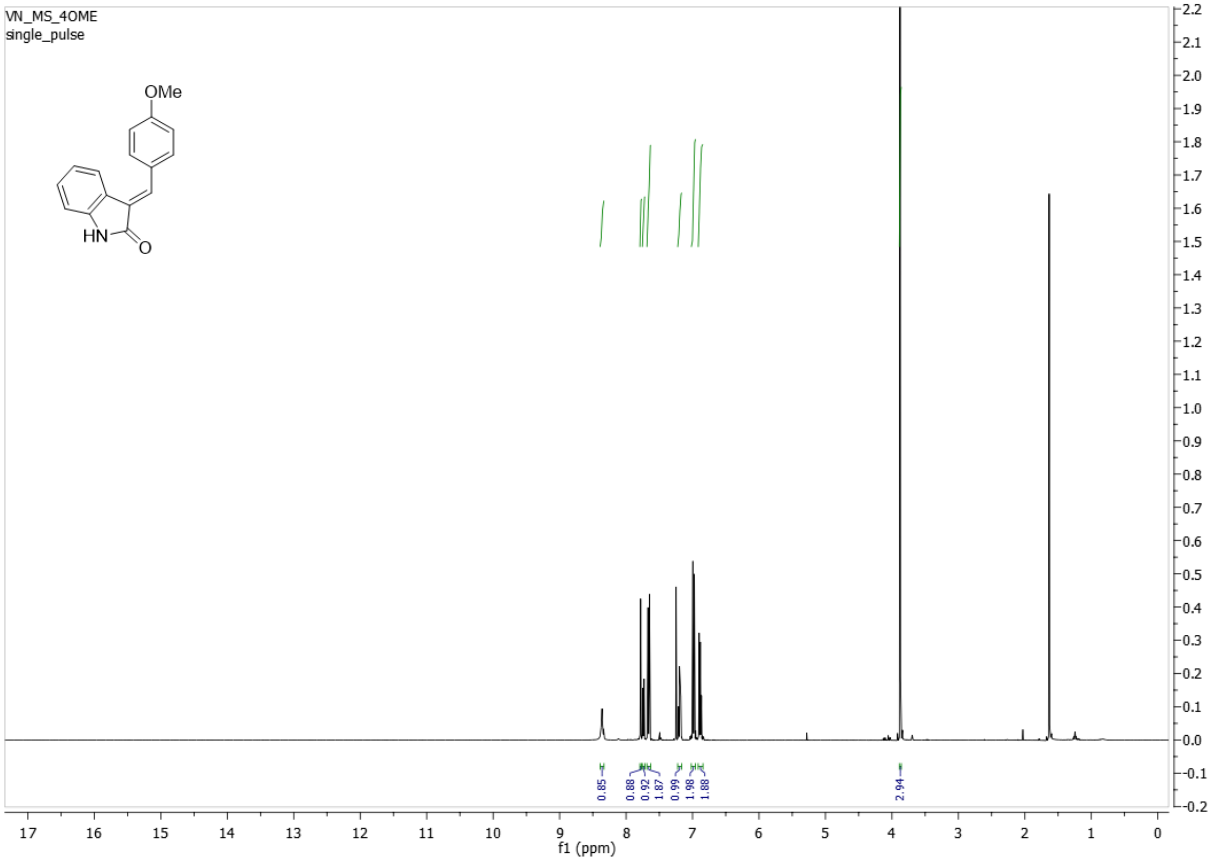


Figure S12: MS spectrum of (*E*)-3-(4-(trifluoromethoxy)benzylidene)indolin-2-one **3d**



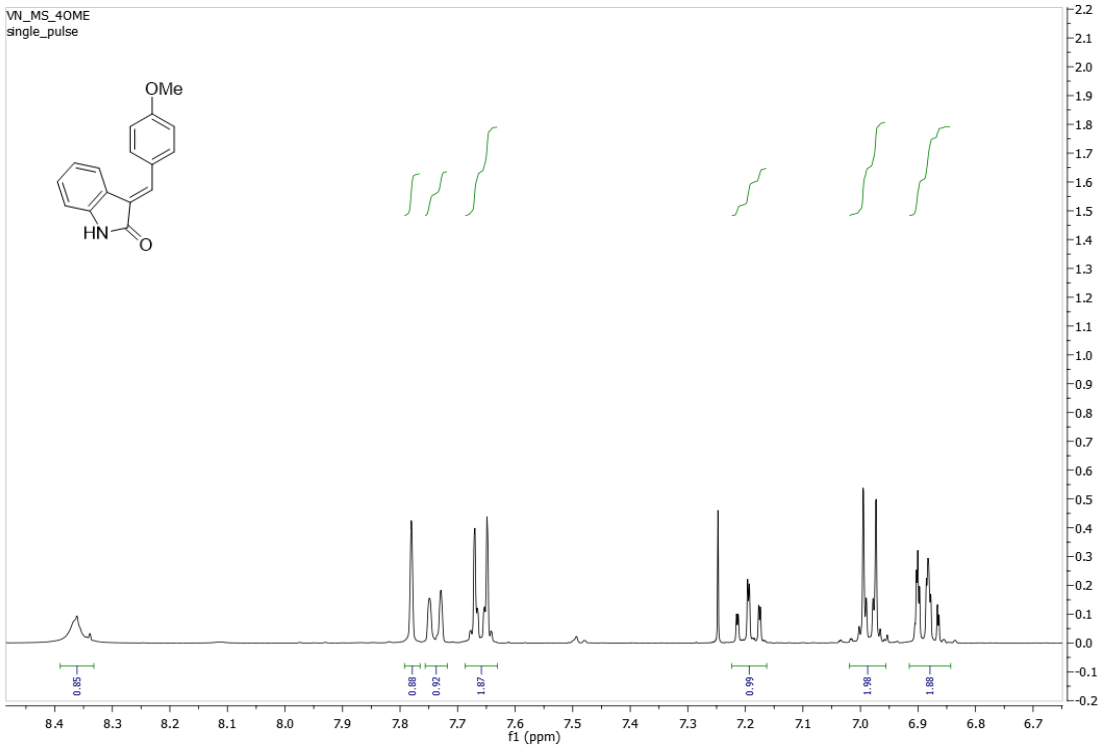


Figure S13: ^{1}H-NMR spectrum of (*E*)-3-(4-methoxybenzylidene)indolin-2-one **3e**

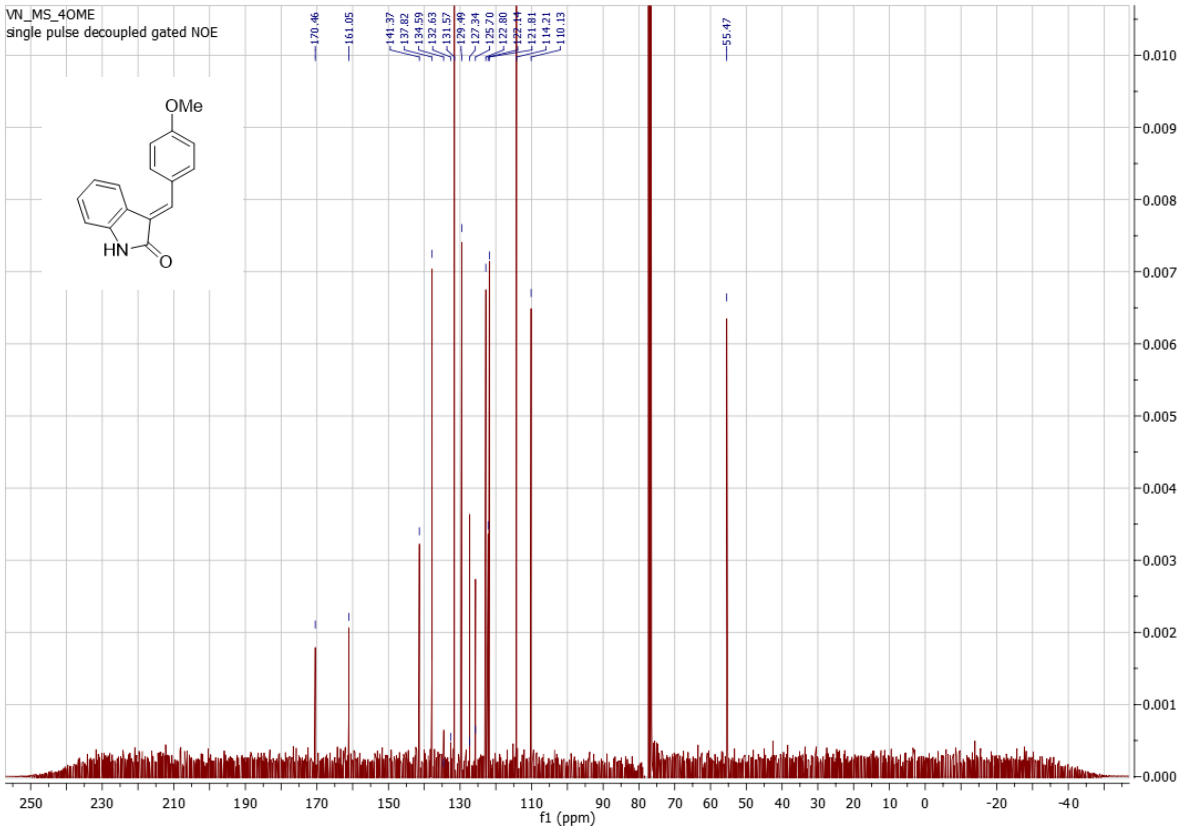


Figure S14: ^{13}C-NMR spectrum of (*E*)-3-(4-methoxybenzylidene)indolin-2-one **3e**

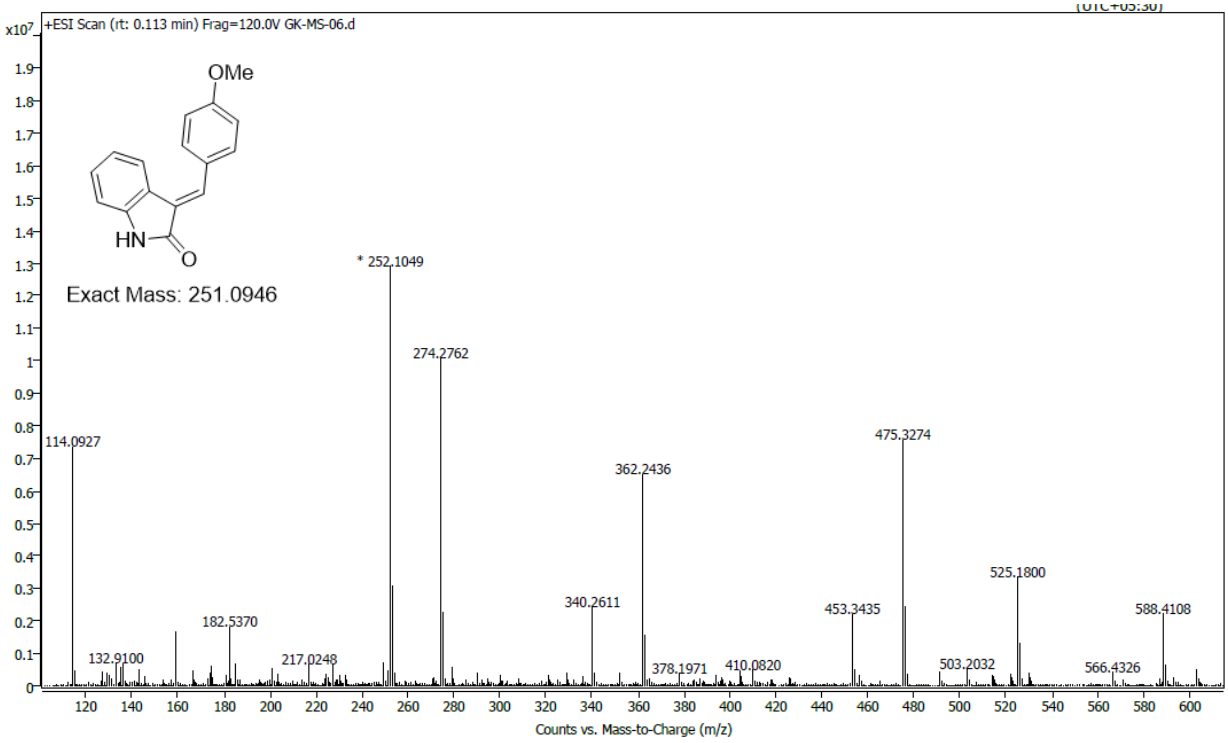


Figure S15: MS spectrum of (*E*)-3-(4-methoxybenzylidene)indolin-2-one **3e**

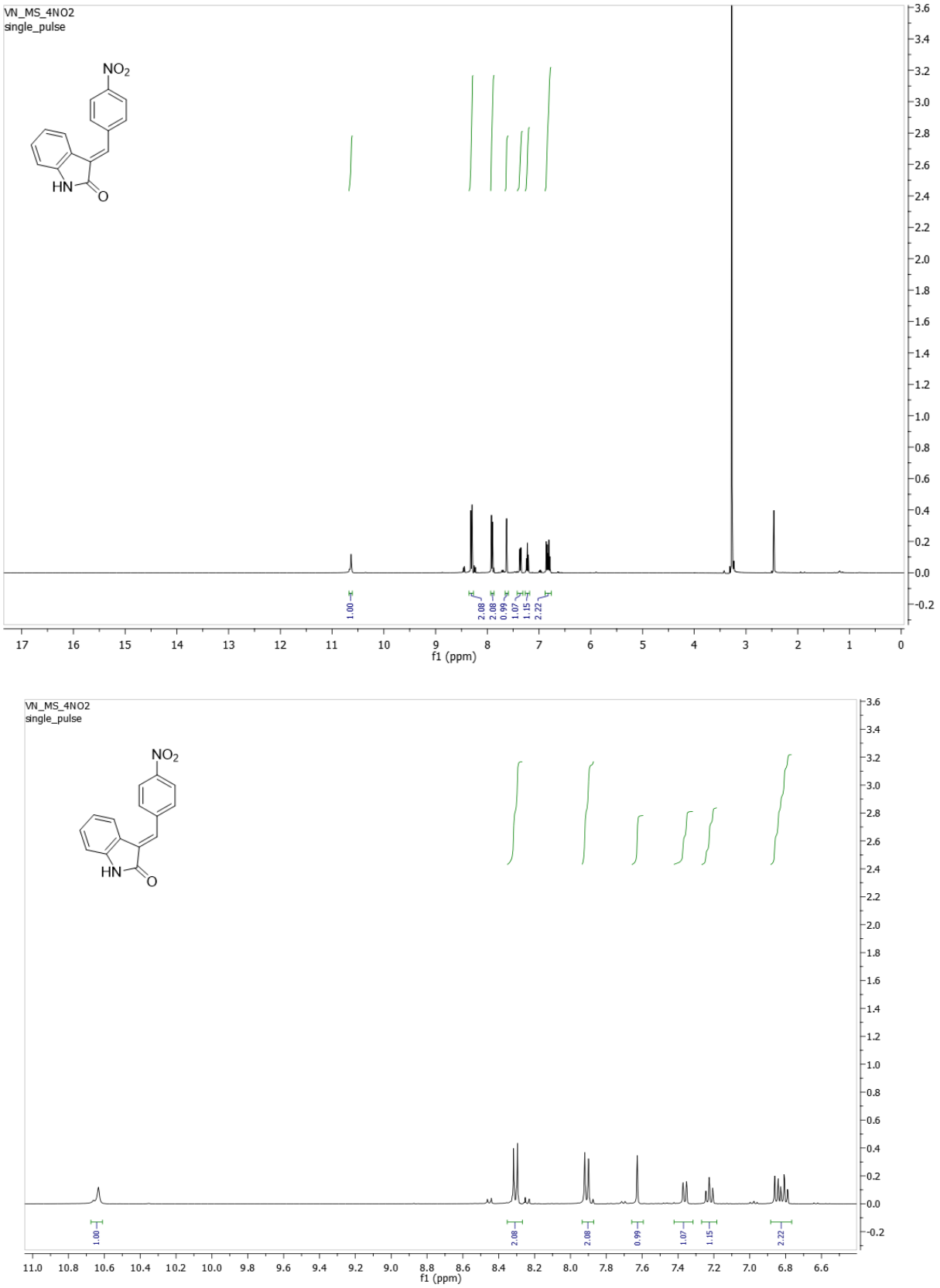


Figure S16: [1]H-NMR spectrum of (*E*)-3-(4-nitrobenzylidene)indolin-2-one **3f**

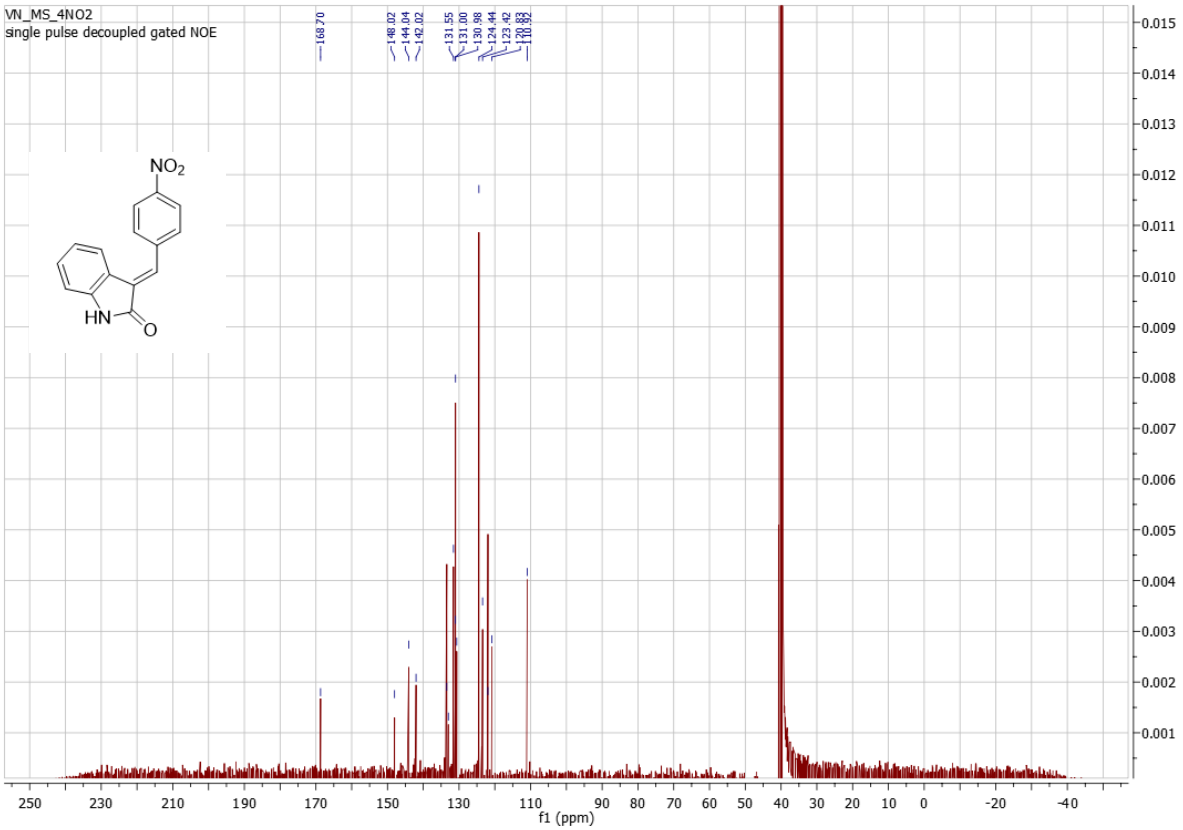


Figure S17: ^{13}C-NMR spectrum of (*E*)-3-(4-nitrobenzylidene)indolin-2-one **3f**

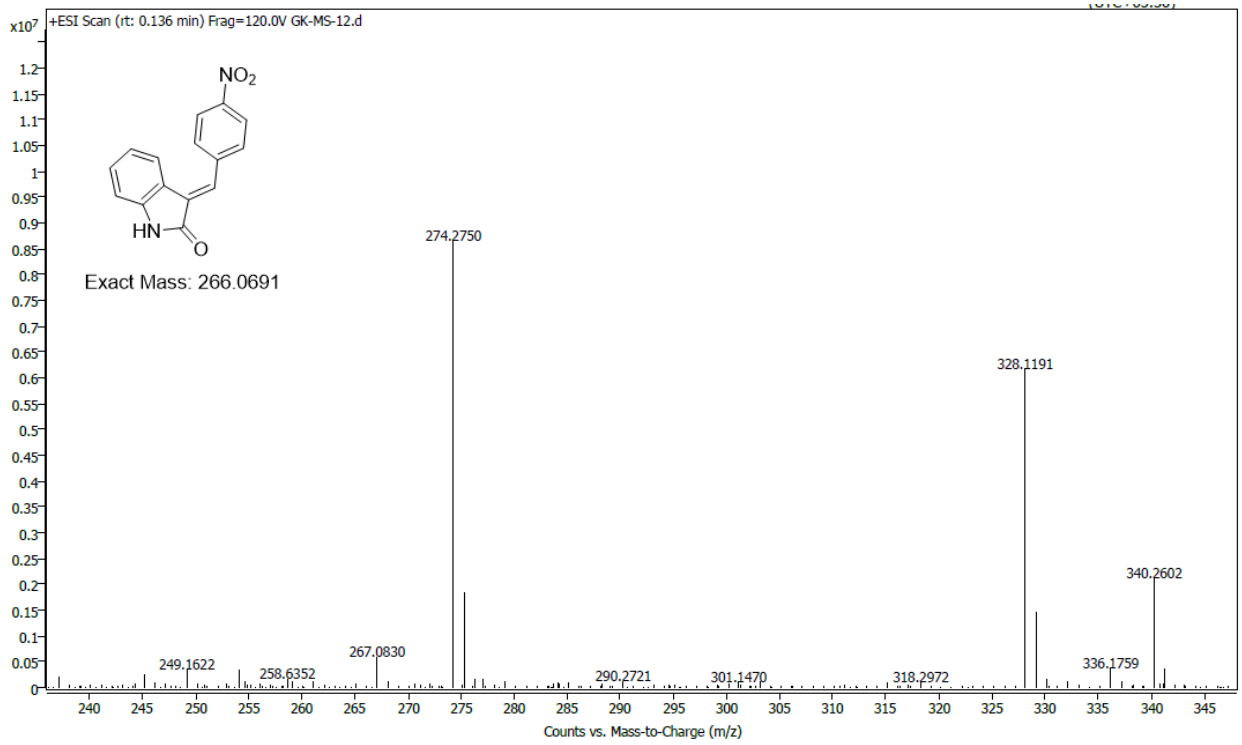


Figure S18: MS spectrum of (*E*)-3-(4-nitrobenzylidene)indolin-2-one **3f**

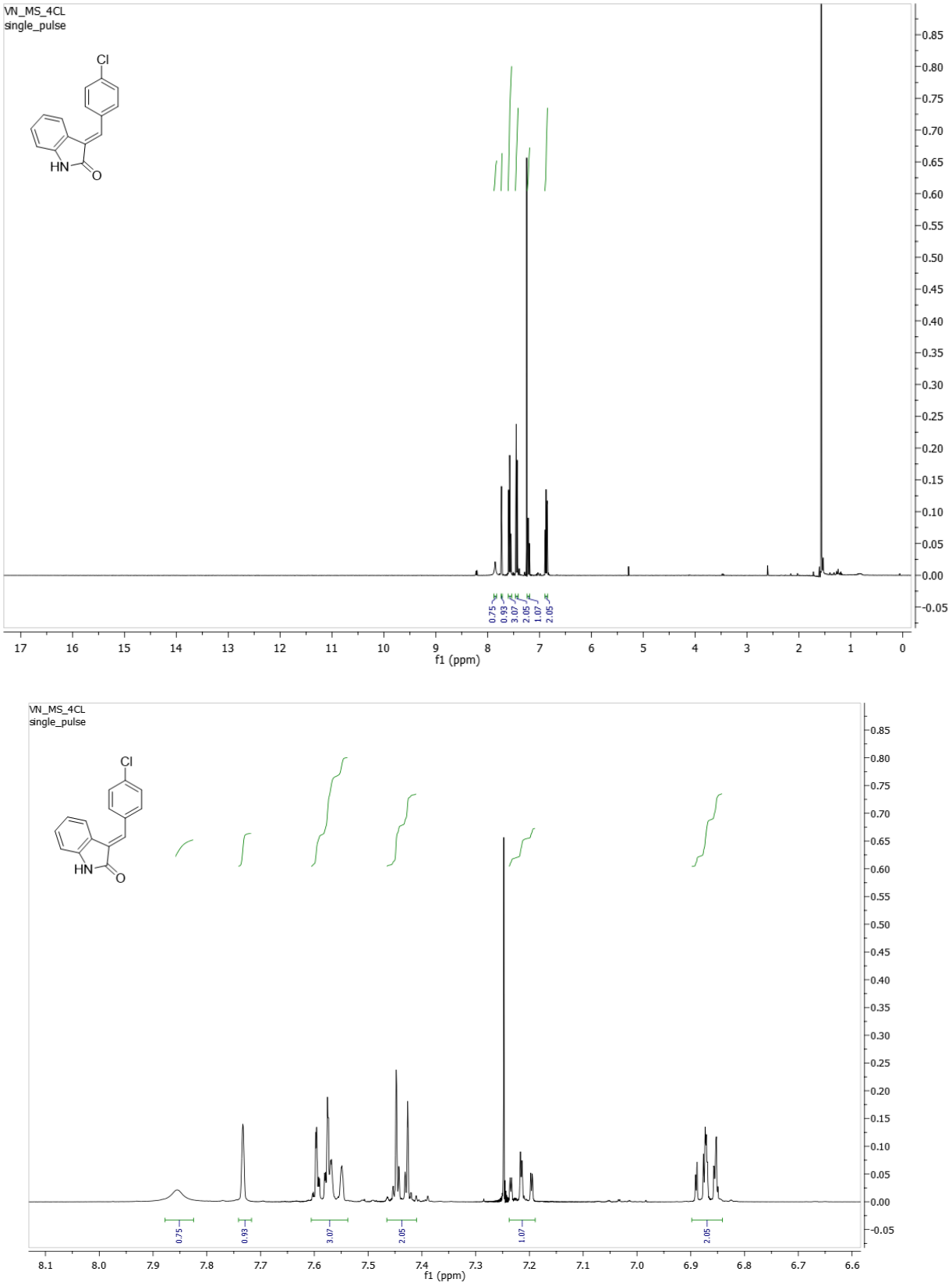


Figure S19: ^{1}H-NMR spectrum of (*E*)-3-(4-chlorobenzylidene)indolin-2-one **3g**

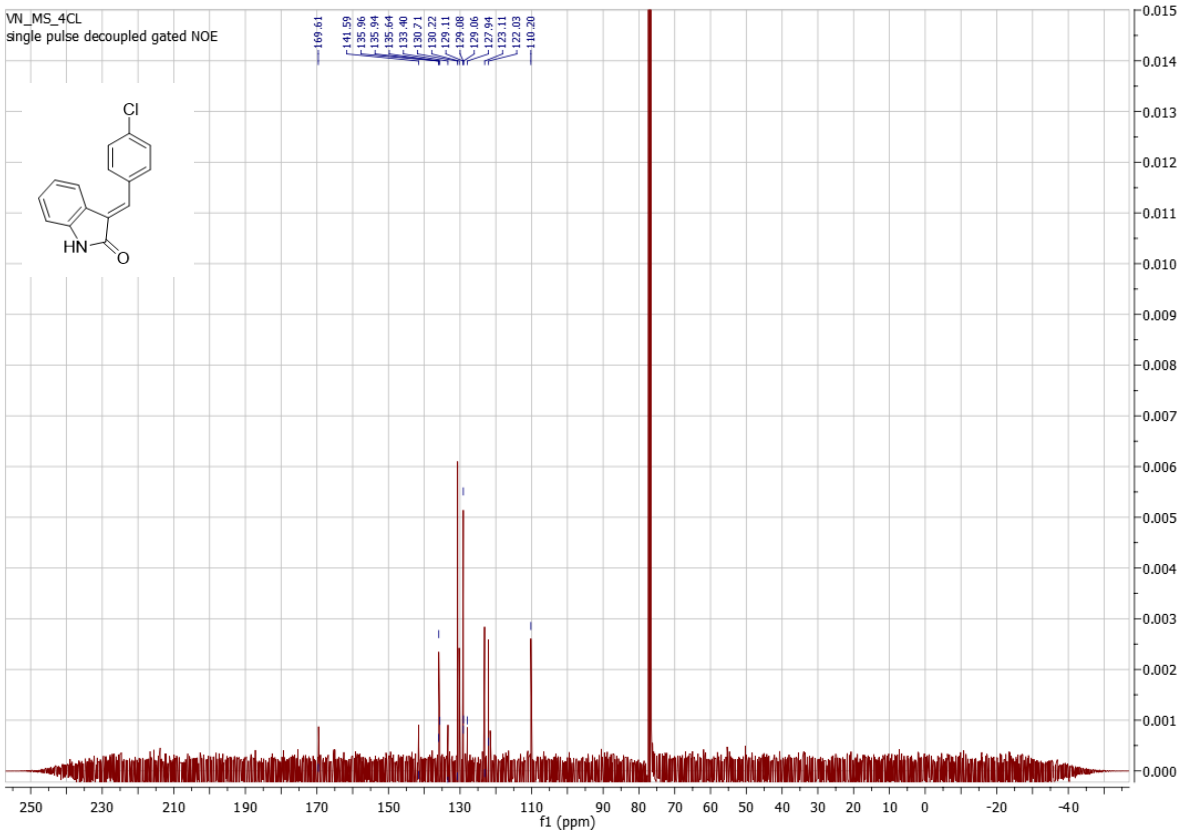


Figure S20: ^{13}C-NMR spectrum of (*E*)-3-(4-chlorobenzylidene)indolin-2-one **3g**

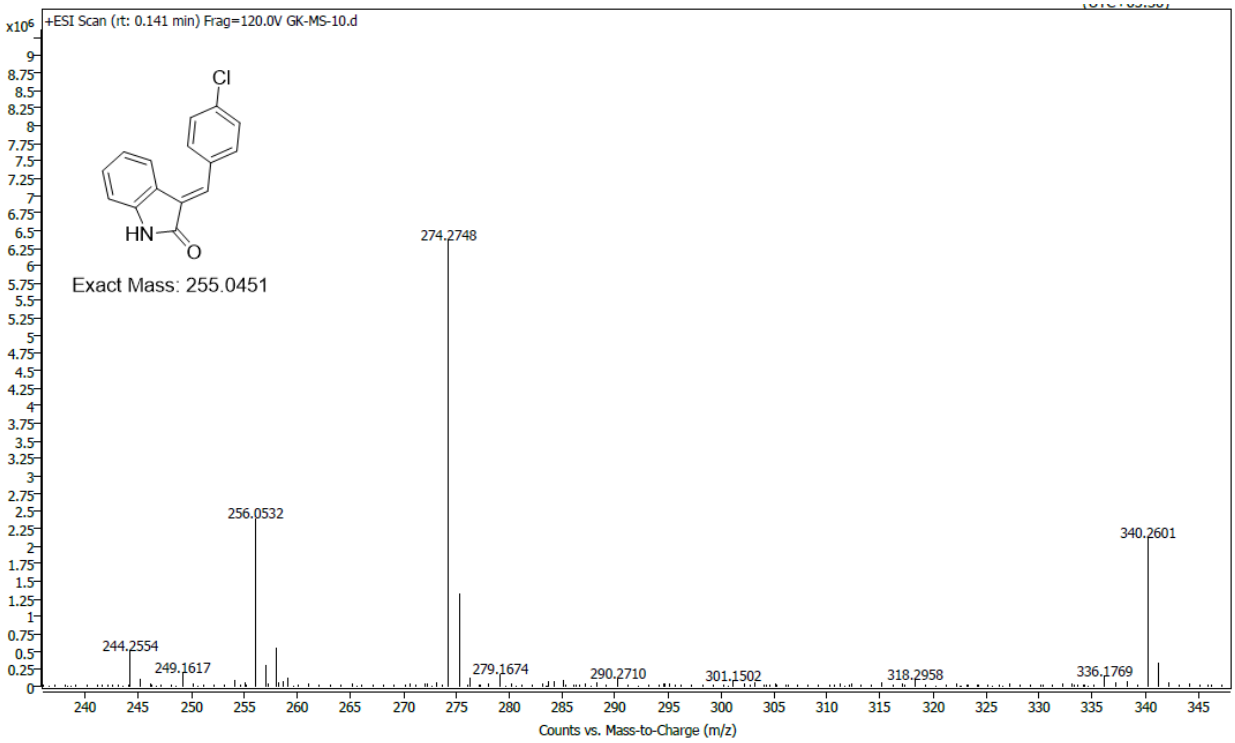


Figure S21: MS spectrum of (*E*)-3-(4-chlorobenzylidene)indolin-2-one **3g**

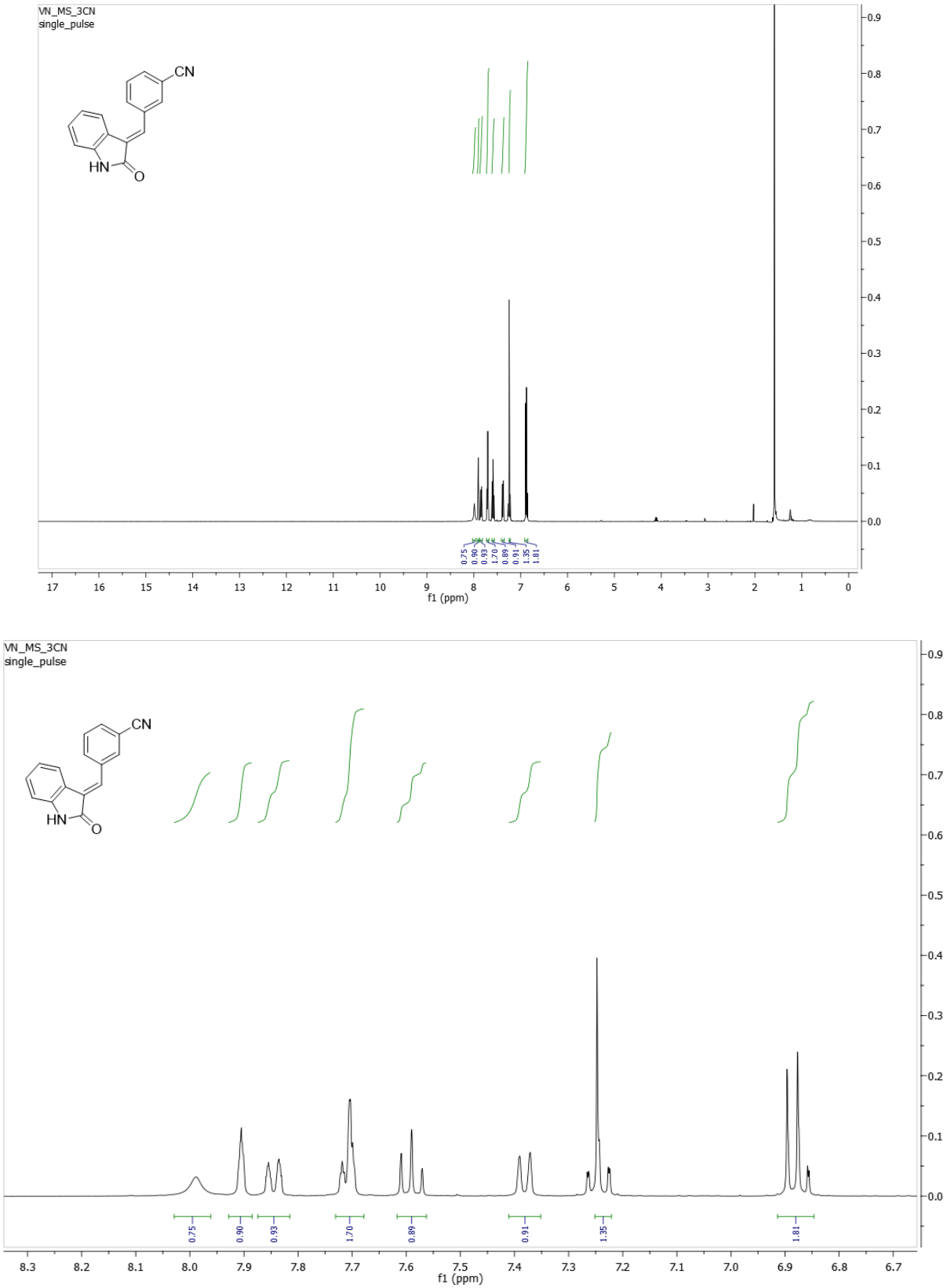


Figure S22: [1]H-NMR spectrum of (*E*)-3-((2-oxoindolin-3-ylidene)methyl)benzonitrile **3h**

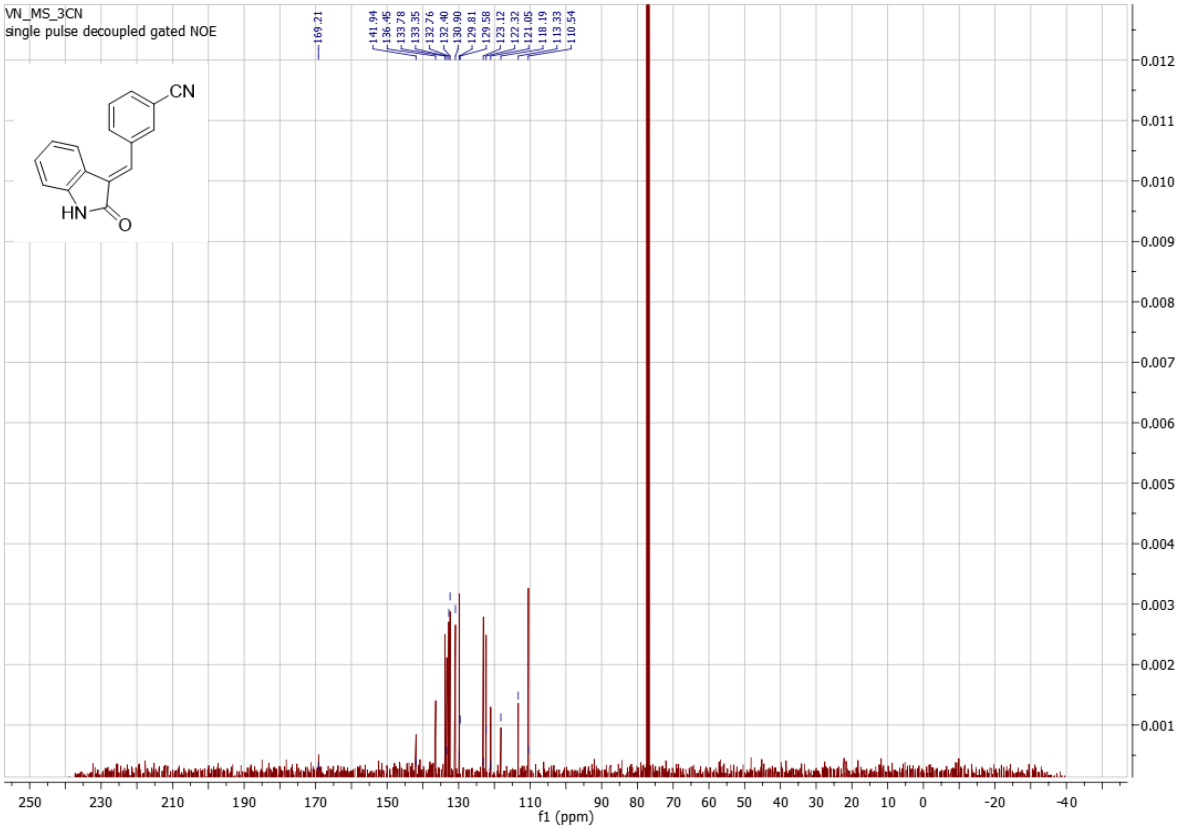


Figure S23: ^{13}C-NMR spectrum of (*E*)-3-((2-oxoindolin-3-ylidene)methyl)benzonitrile **3h**

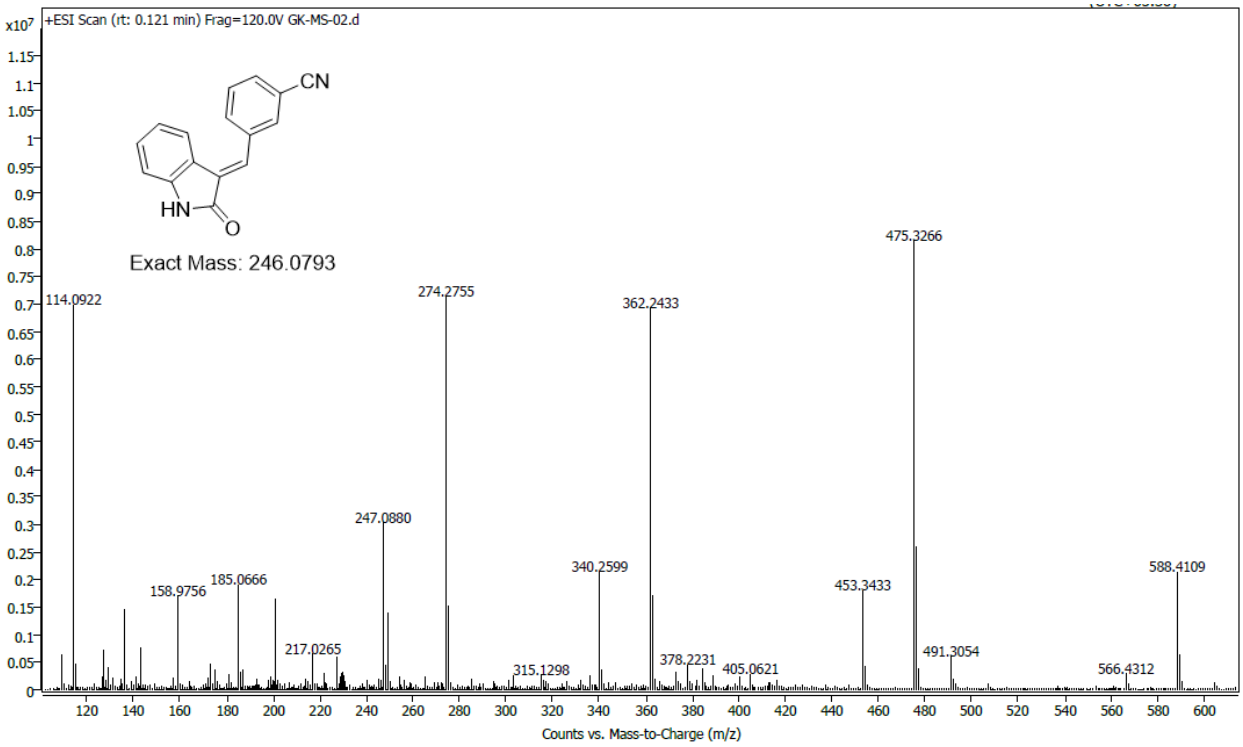


Figure S24: MS spectrum of (*E*)-3-((2-oxoindolin-3-ylidene)methyl)benzonitrile **3h**

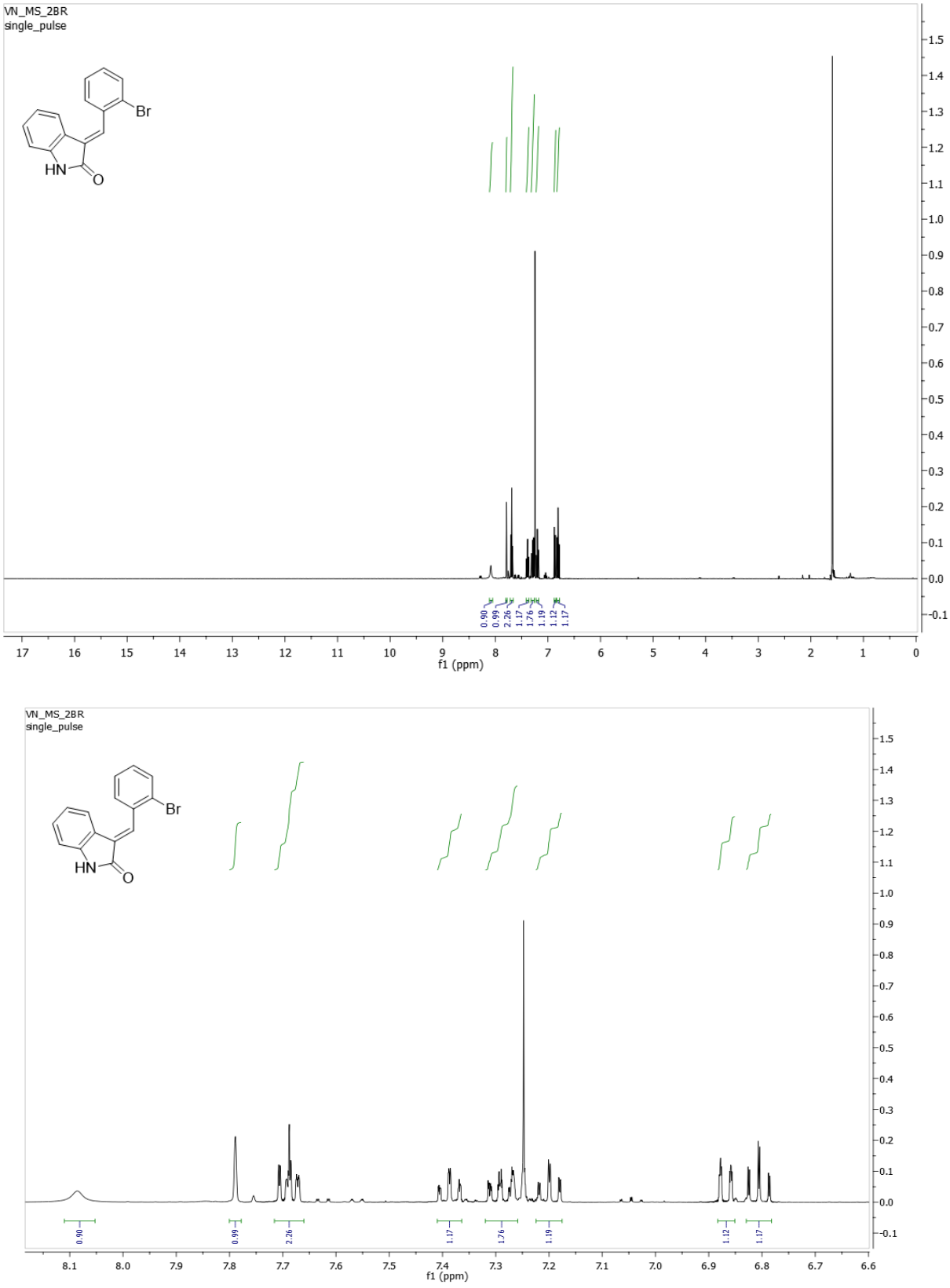


Figure S25: ^{1}H-NMR spectrum of (*E*)-3-(2-bromobenzylidene)indolin-2-one **3i**

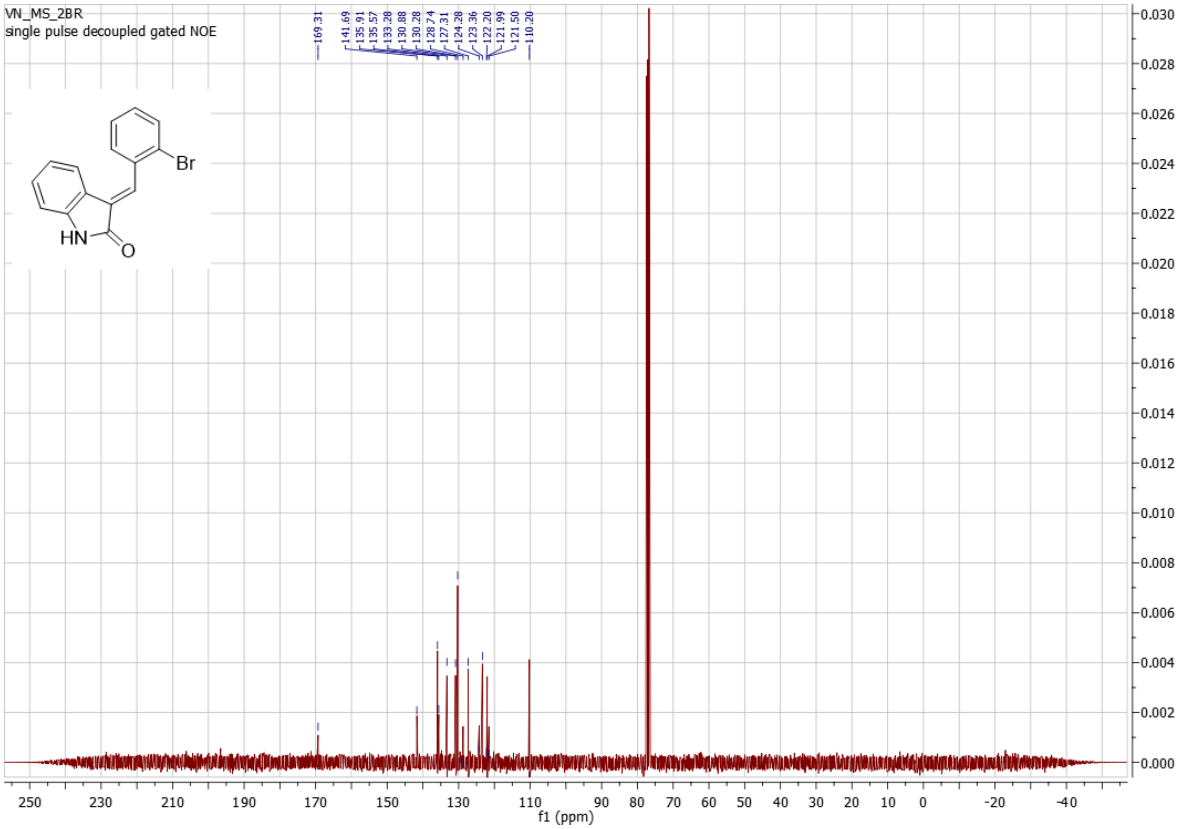


Figure S26: ^{13}C-NMR spectrum of (*E*)-3-(2-bromobenzylidene)indolin-2-one **3i**

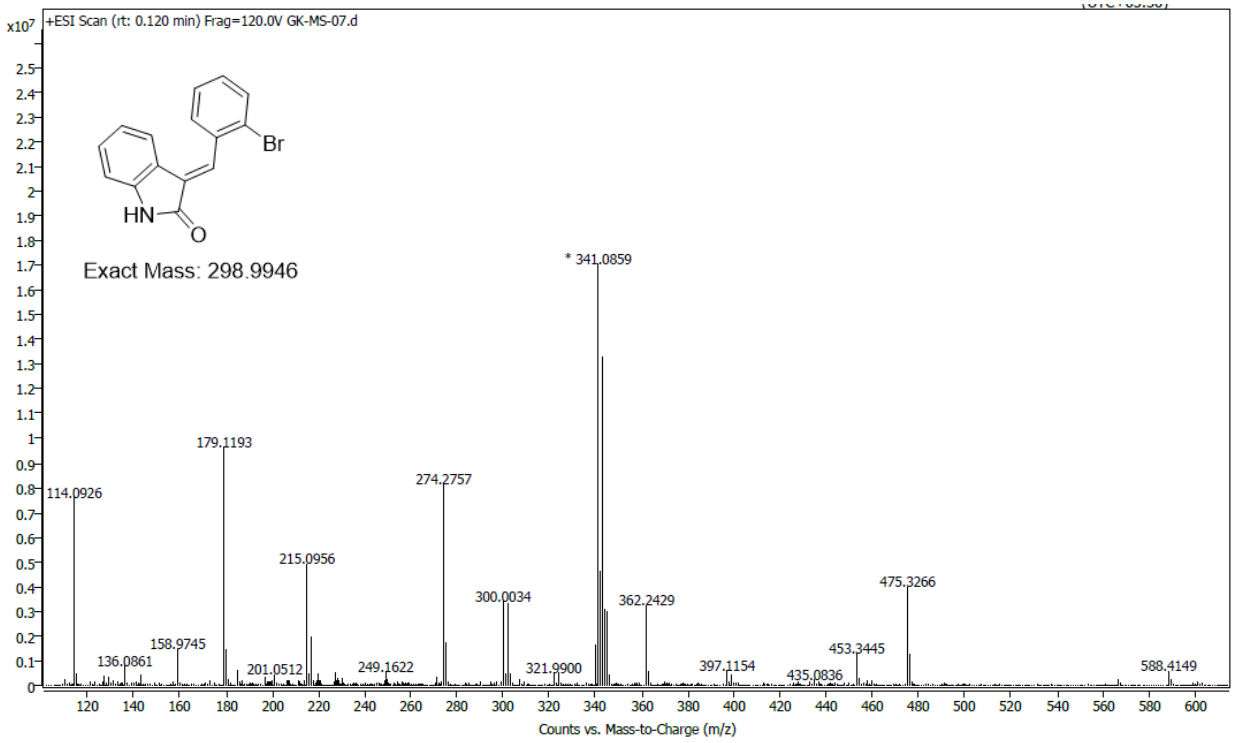


Figure S27: MS spectrum of (*E*)-3-(2-bromobenzylidene)indolin-2-one **3i**

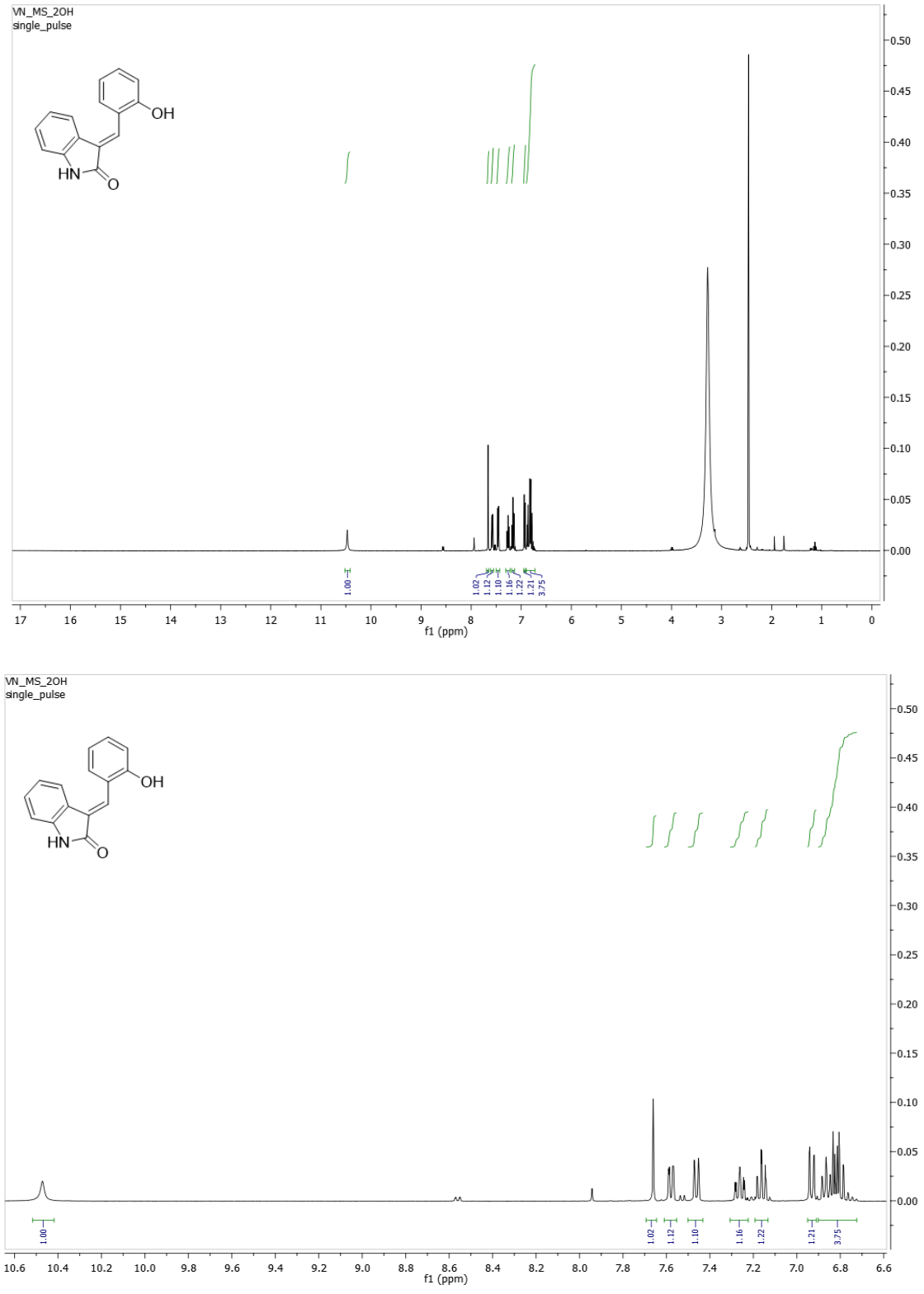


Figure S28: ^{1}H-NMR spectrum of (*E*)-3-(2-hydroxybenzylidene)indolin-2-one **3j**

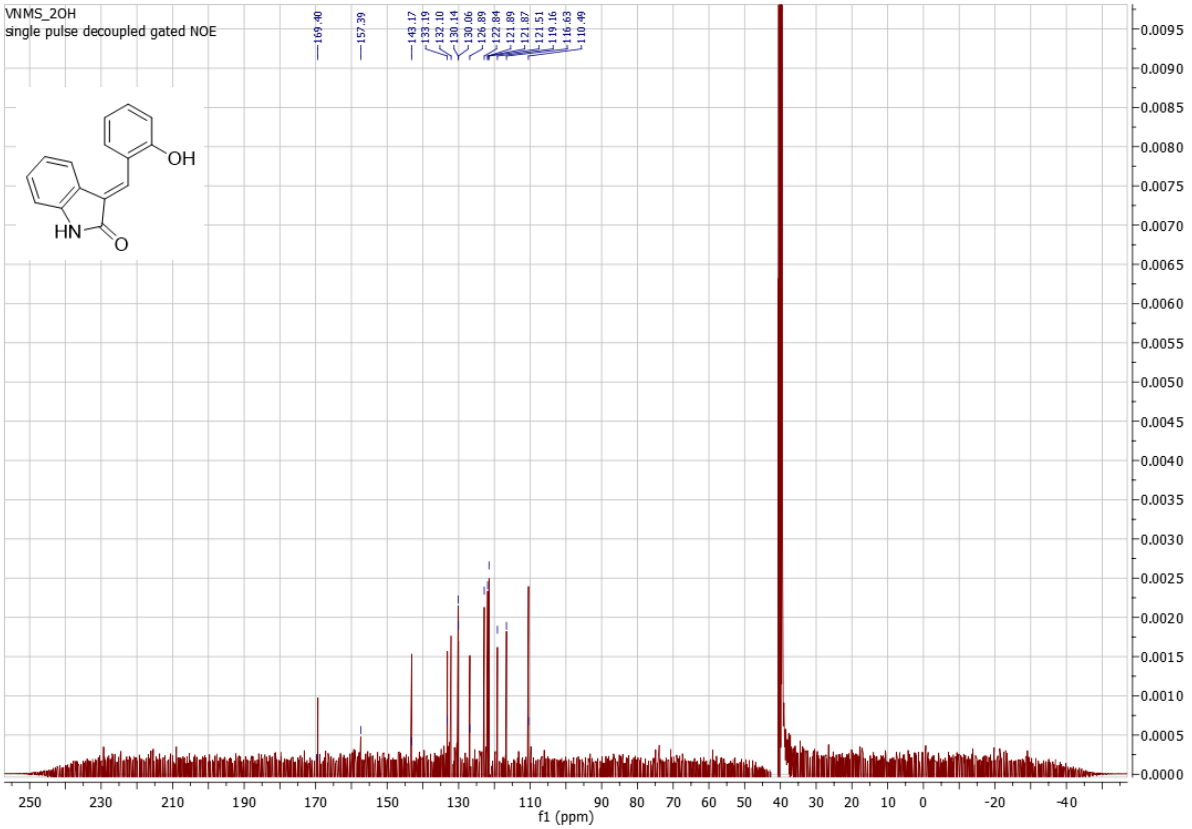


Figure S29: ^{13}C-NMR spectrum of (*E*)-3-(2-hydroxybenzylidene)indolin-2-one **3j**

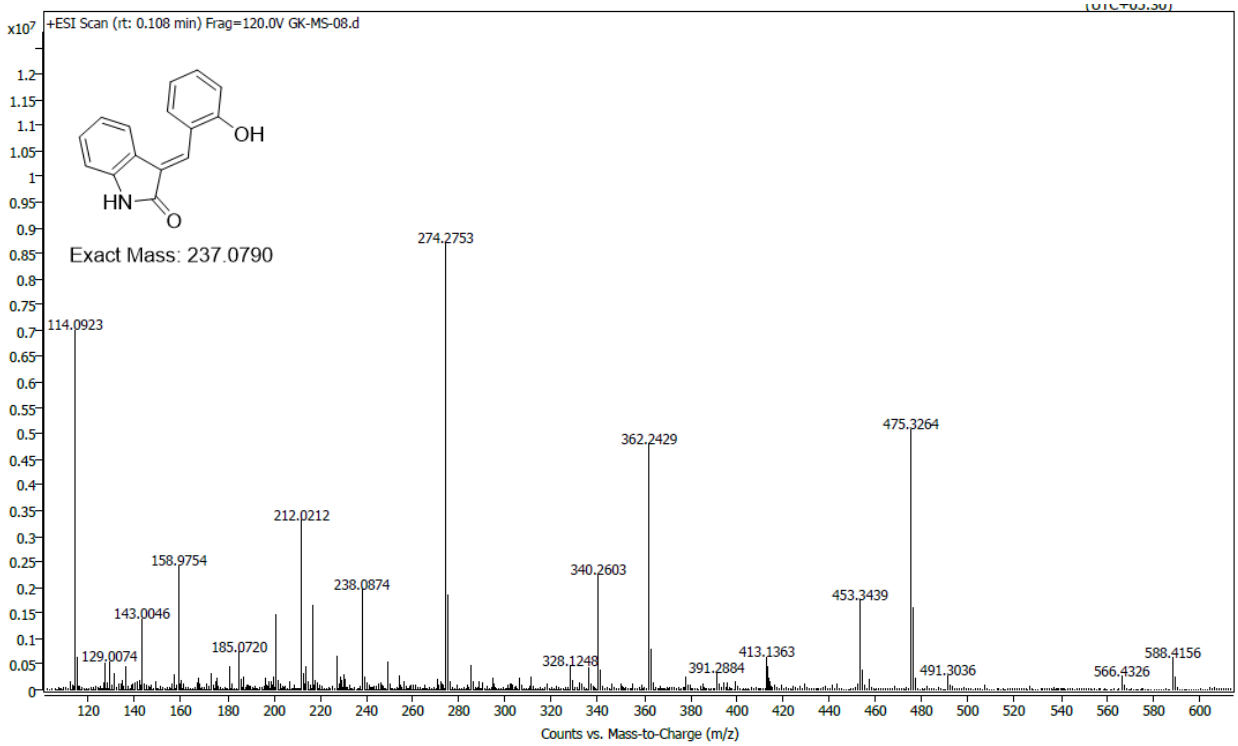


Figure S30: MS spectrum of (*E*)-3-(2-hydroxybenzylidene)indolin-2-one **3j**

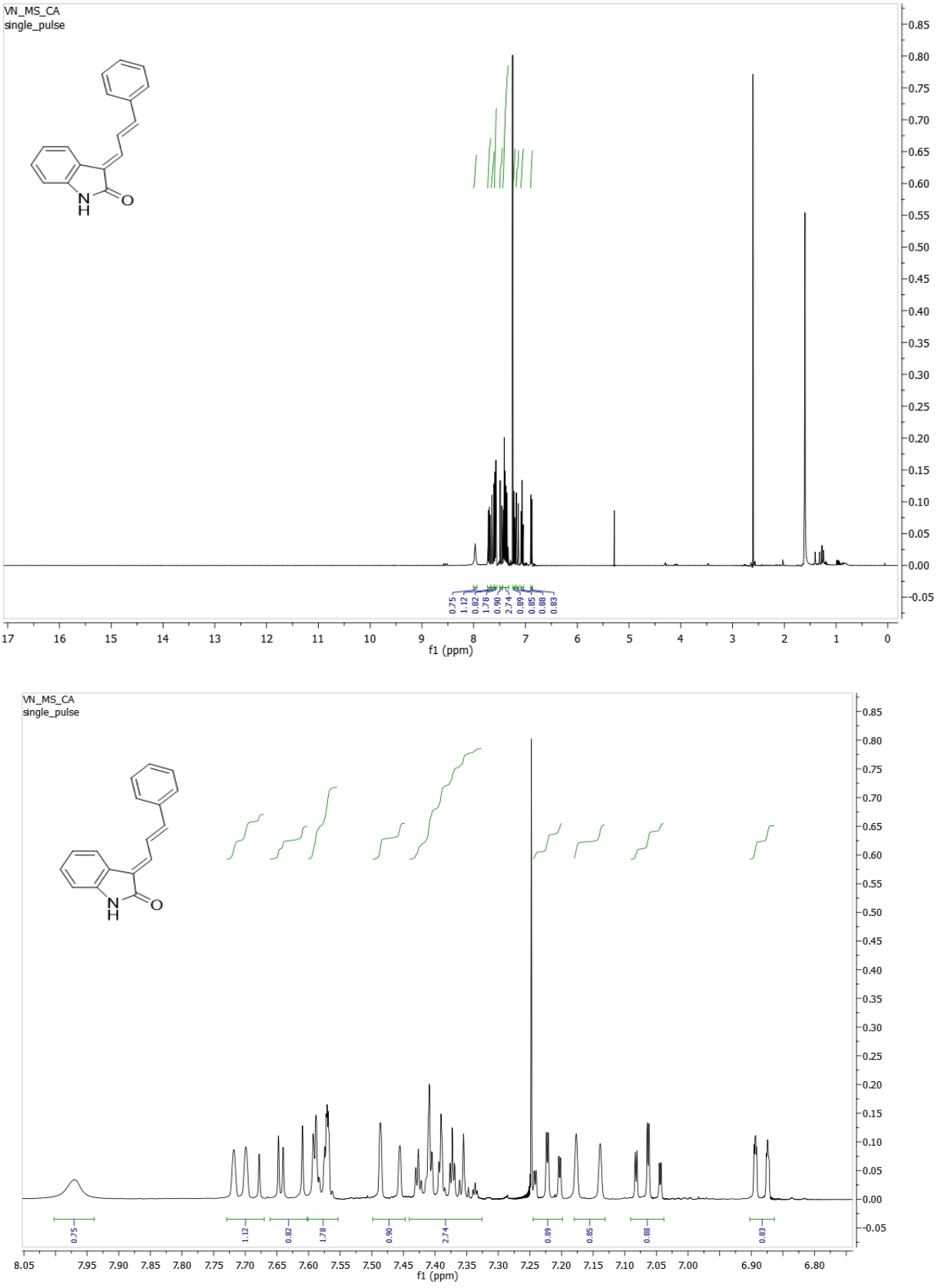
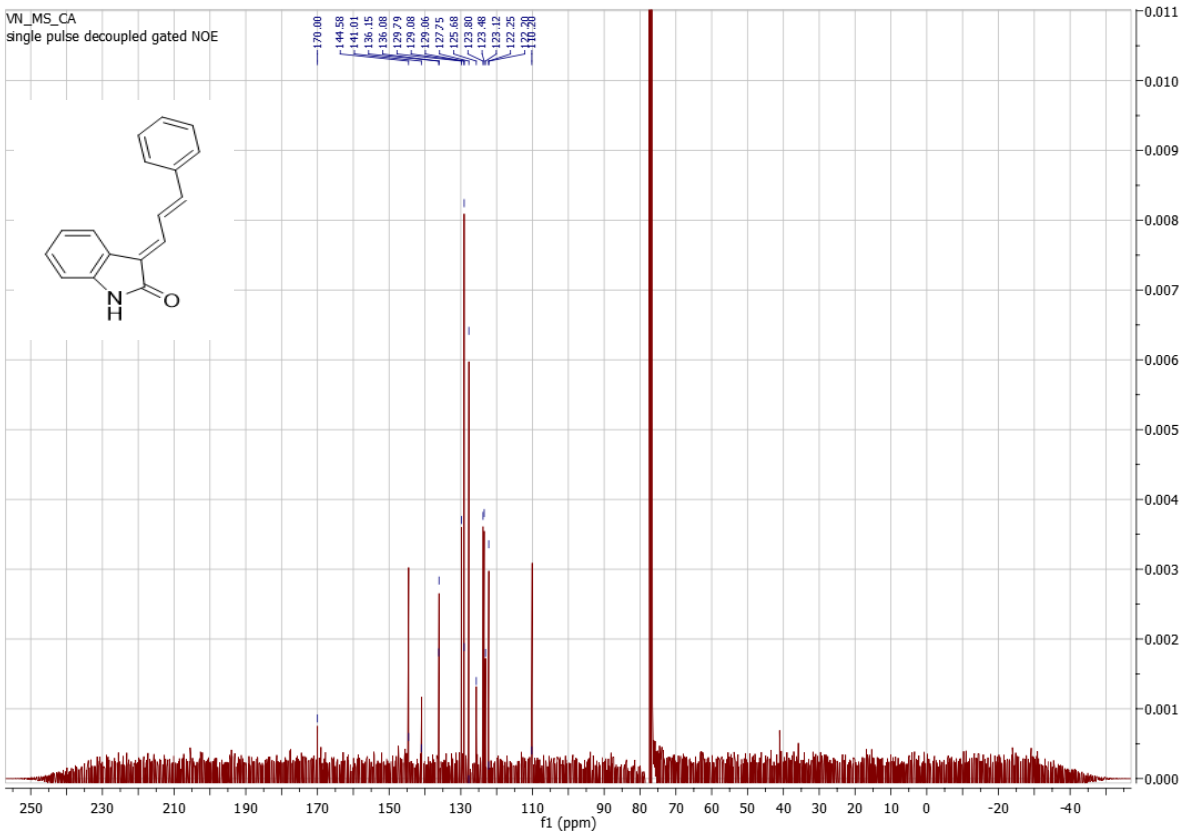


Figure S31: ^{1}H-NMR spectrum of (*E*)-3-((*E*)-3-phenylallylidene)indolin-2-one **3k**



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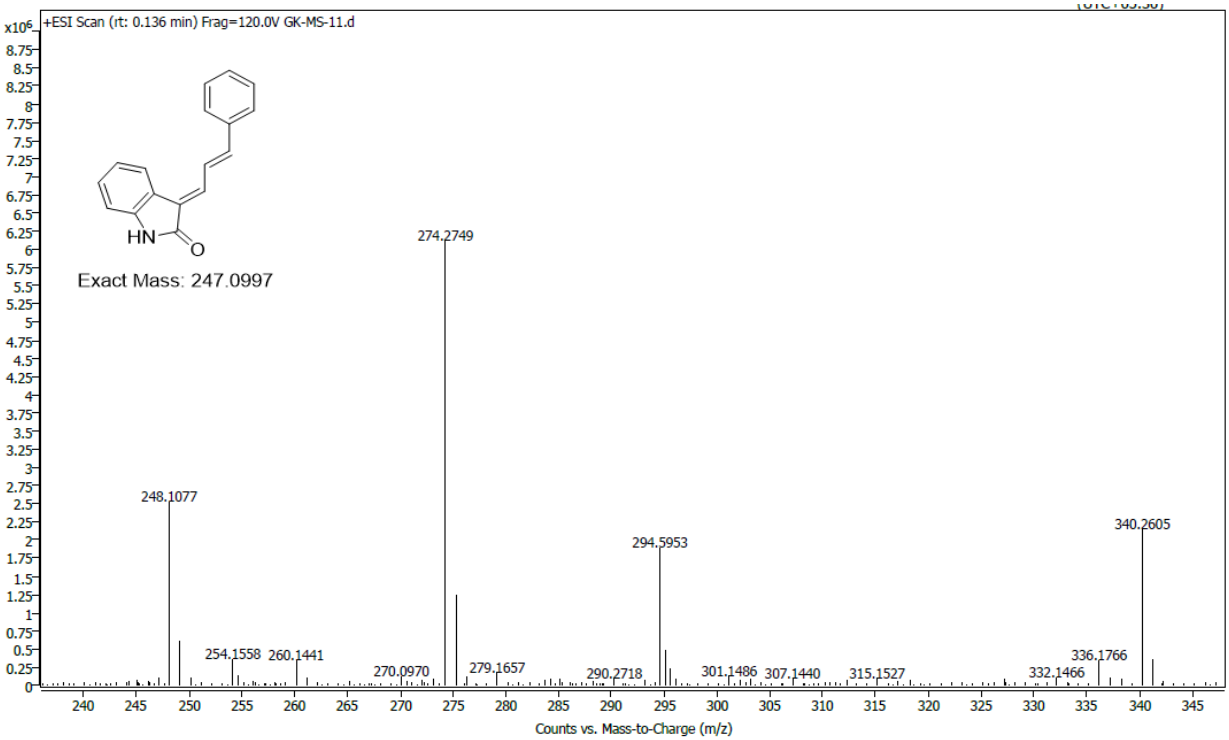

Figure S33: MS spectrum of (*E*)-3-((*E*)-3-phenylallylidene)indolin-2-one **3k**

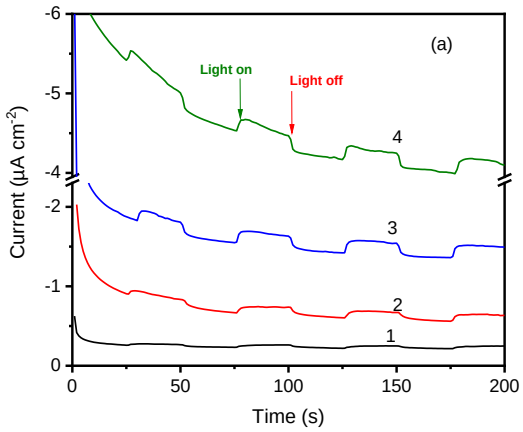

Figure S34: Photocurrent responses of a) (*E*)-3-benzylidineindolin-2-one in 0.5 M Na_2SO4 at (1) 0.3 V, (2) 0.4 V, (3) 0.5 V and (4) 0.6 V vs Ag/AgCl in sat. KCl

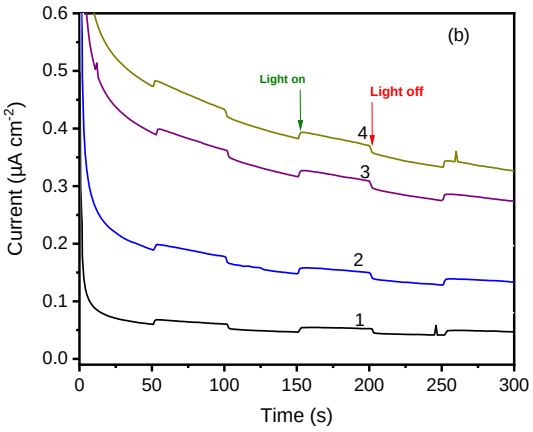

Figure S35: Photocurrent responses of *(E)*-3-(4-chlorobenzylidene)indolin-2-one in 0.5 M Na_2SO4 at (1) 0.3 V, (2) 0.4 V, (3) 0.5 V and (4) 0.6 V vs Ag/AgCl in sat. KCl

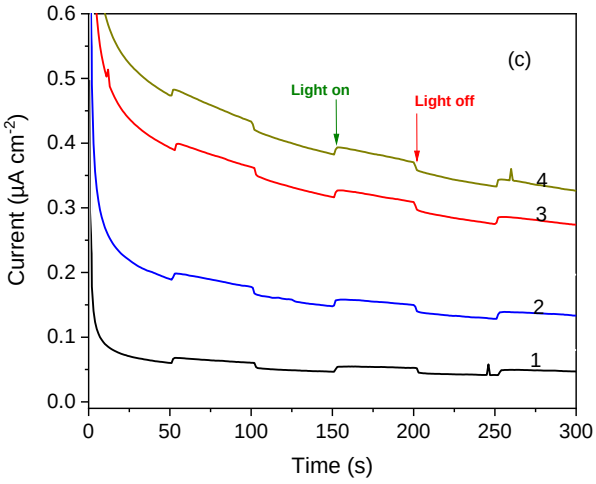

Figure S36: Photocurrent responses of (*E*)-3-((*E*)-3-phenylallylidene)indolin-2-one in 0.5 M Na_2SO_4 at (1) 0.3 V, (2) 0.4 V, (3) 0.5 V and (4) 0.6 V vs Ag/AgCl in sat. KCl