

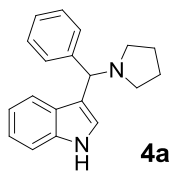
## **Supporting Information**

### **Catalyst-free, Solvent-promoted and Scalable Multicomponent Synthesis of 3-Aminoalkylated Indoles *via* a Mannich-type Reaction**

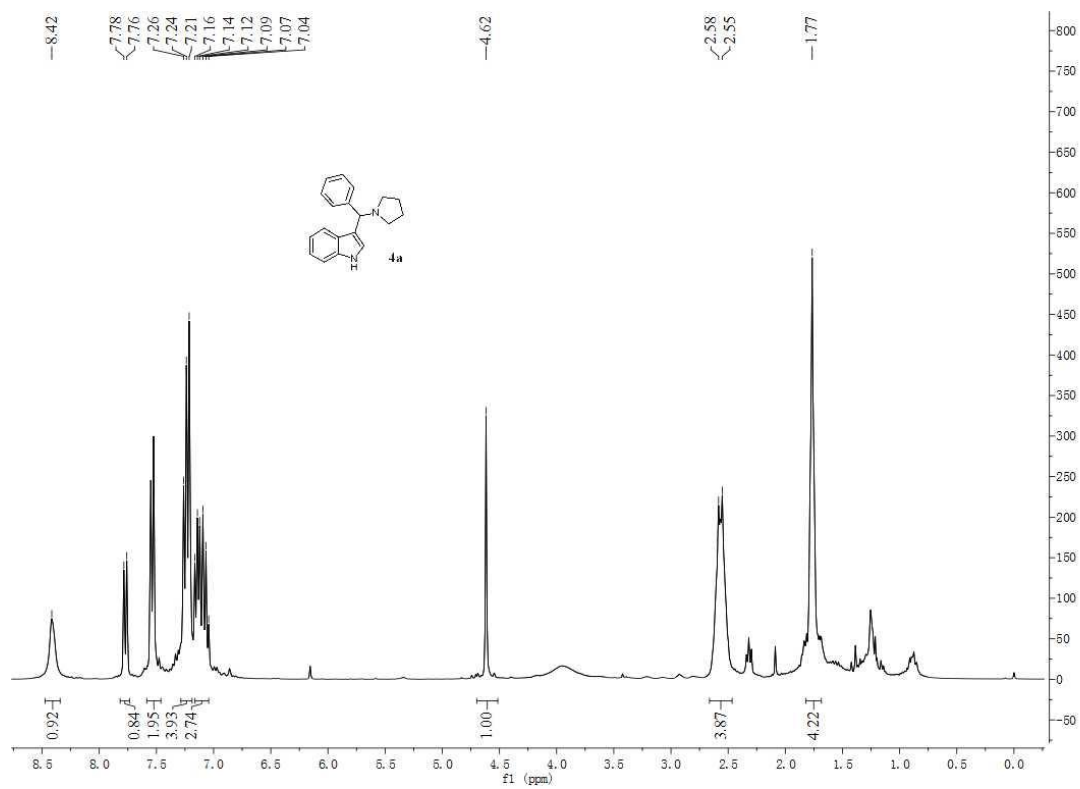
Jian-Fei Cao, Yan-Li Chen, Zhi Guan, and Yan-Hong He

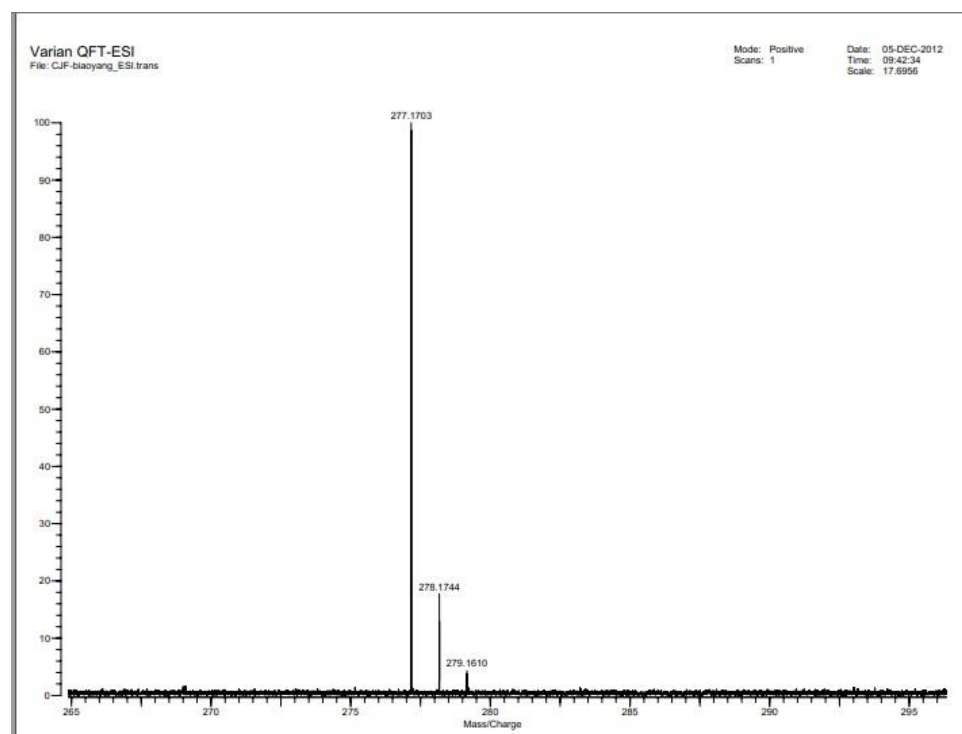
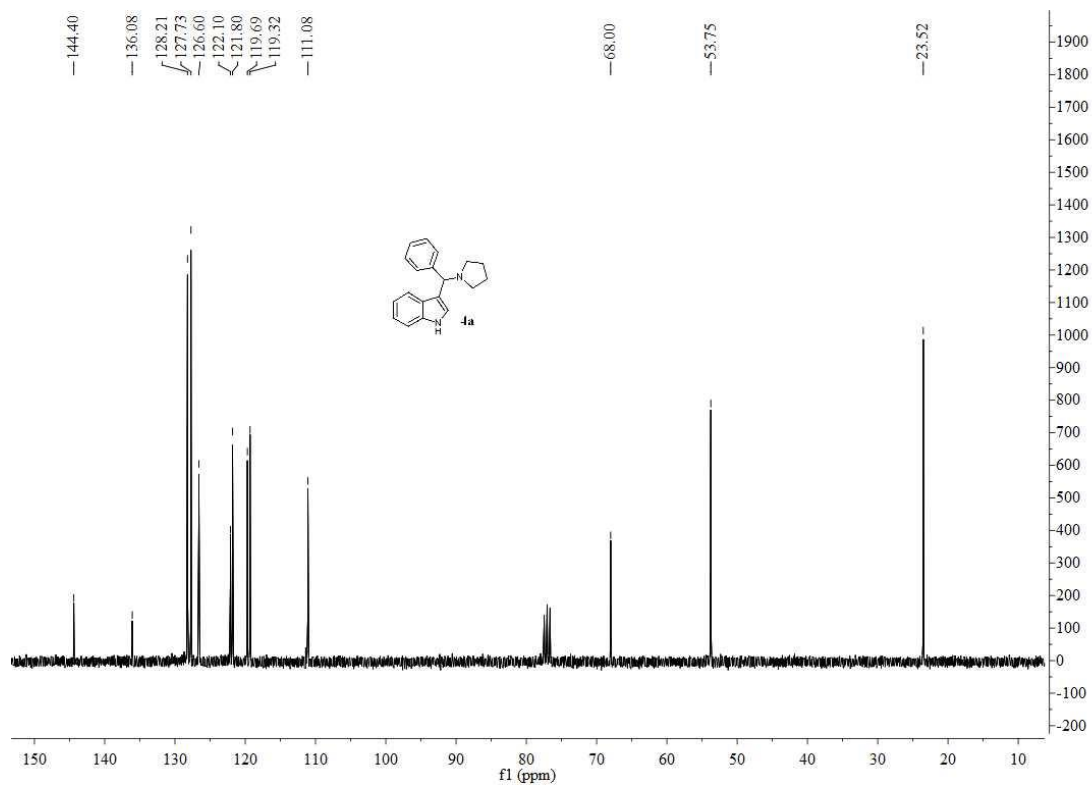
*School of Chemistry and Chemical Engineering, Southwest University, Chongqing*

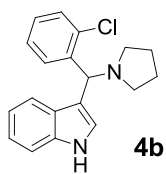
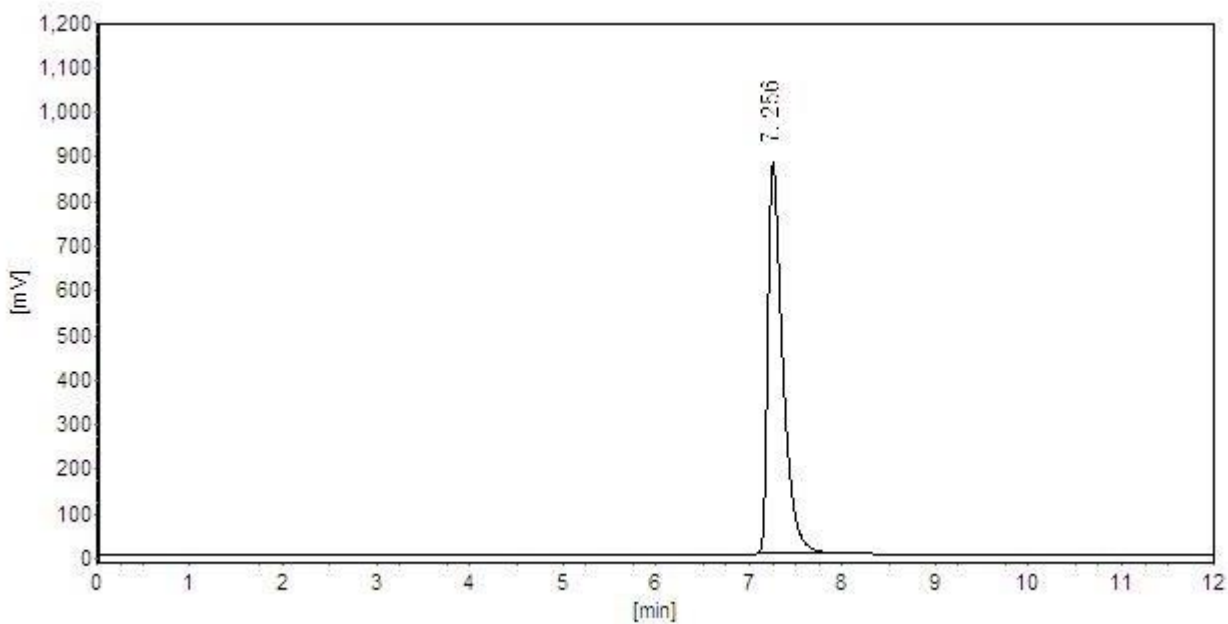
*400715, P. R. China*



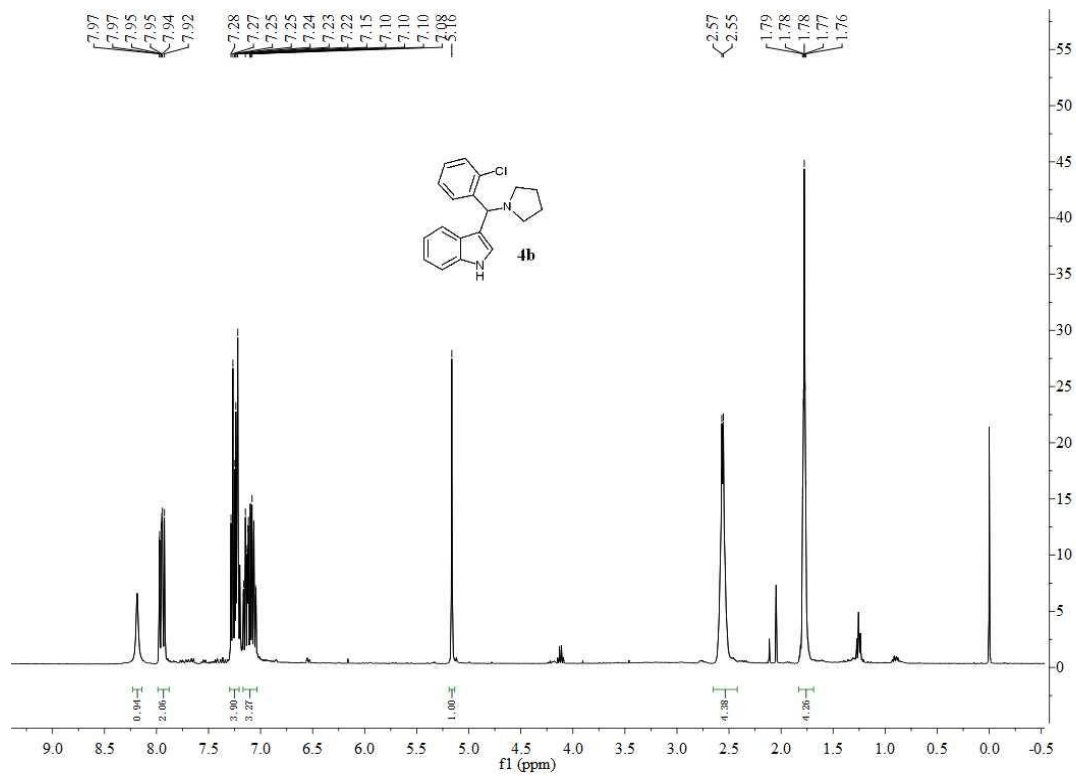
3-(Phenyl(pyrrolidin-1-yl)methyl)-1H-indole (**4a**)

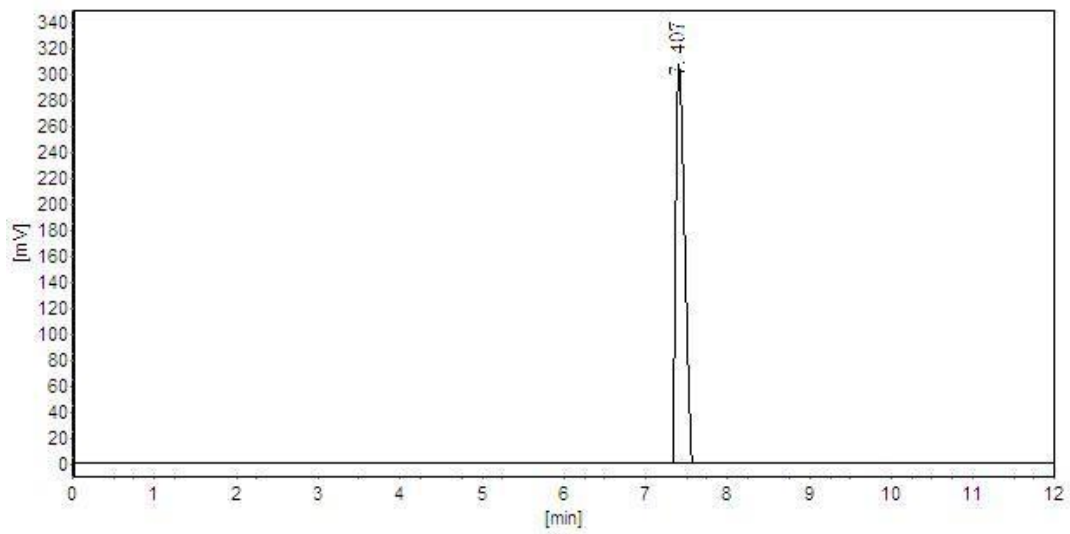
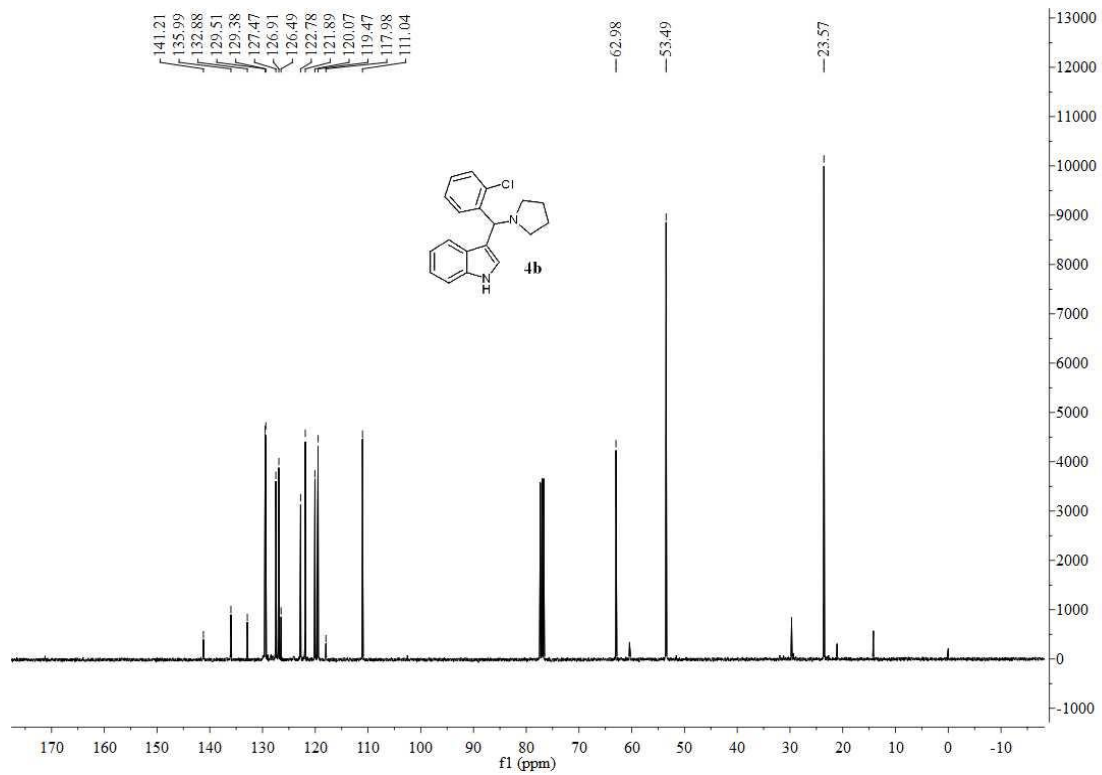


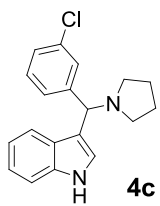




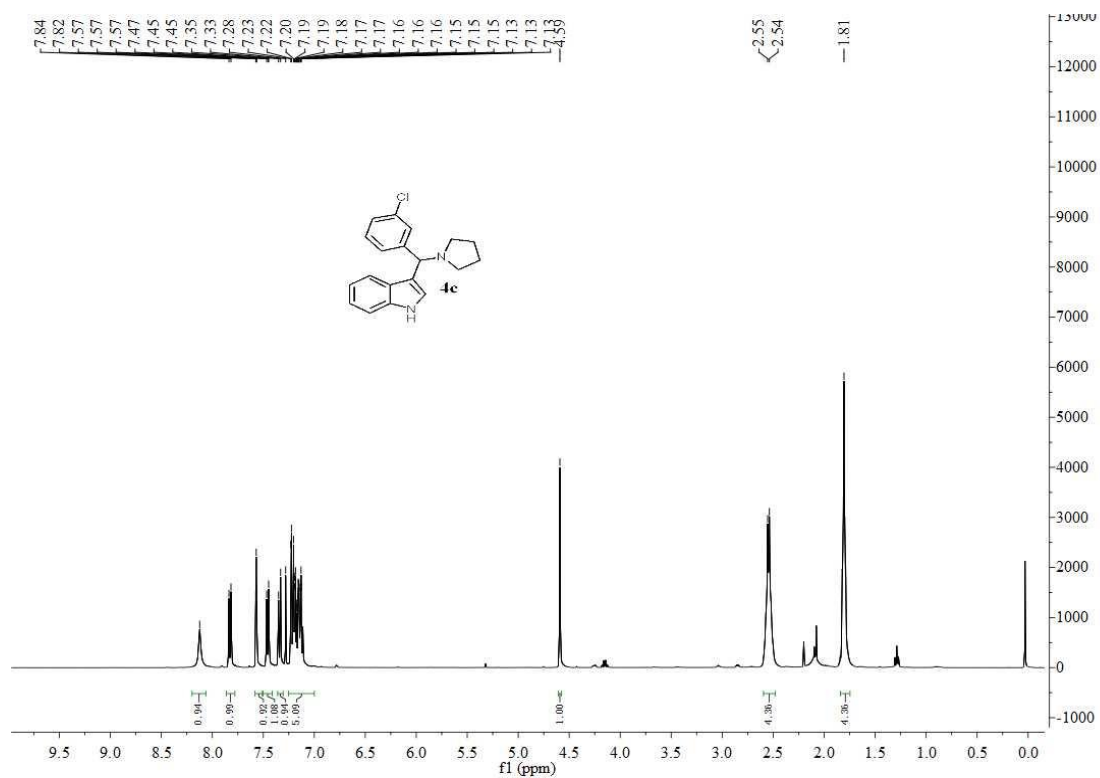
3-((2-(Chlorophenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4b**)

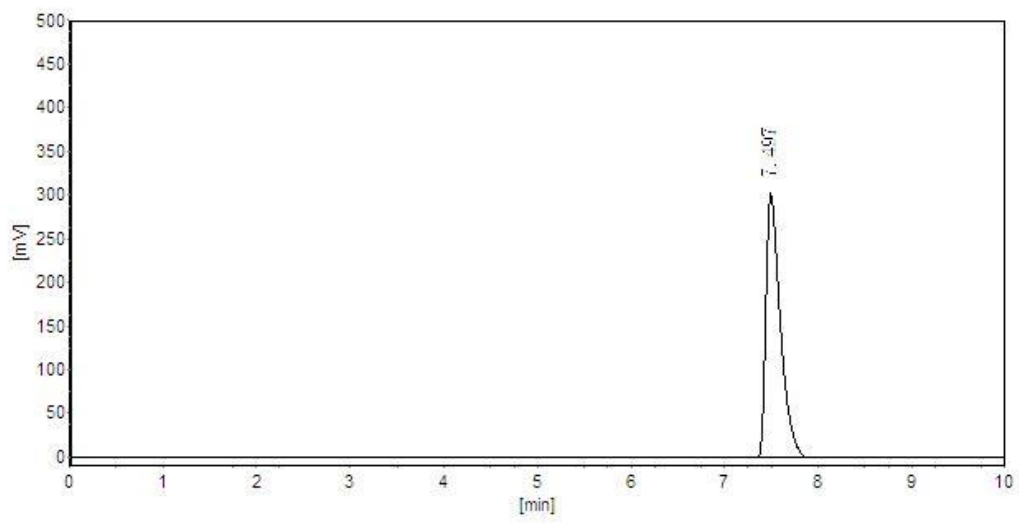
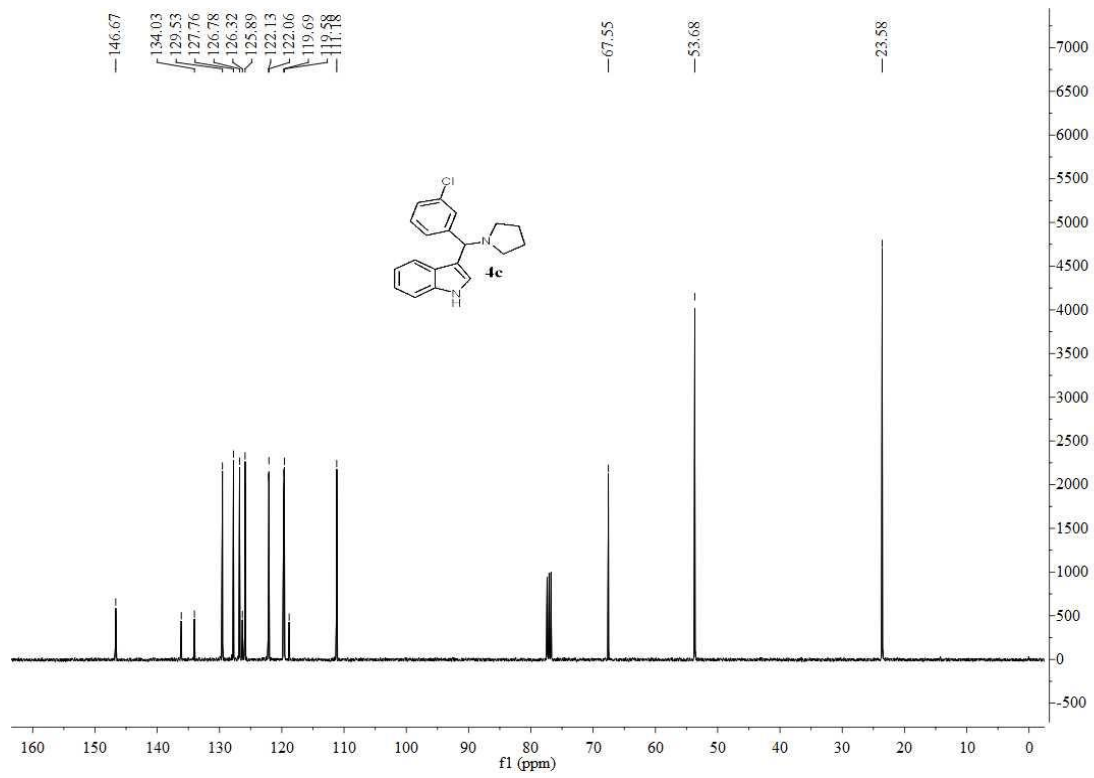


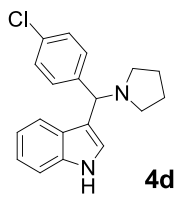




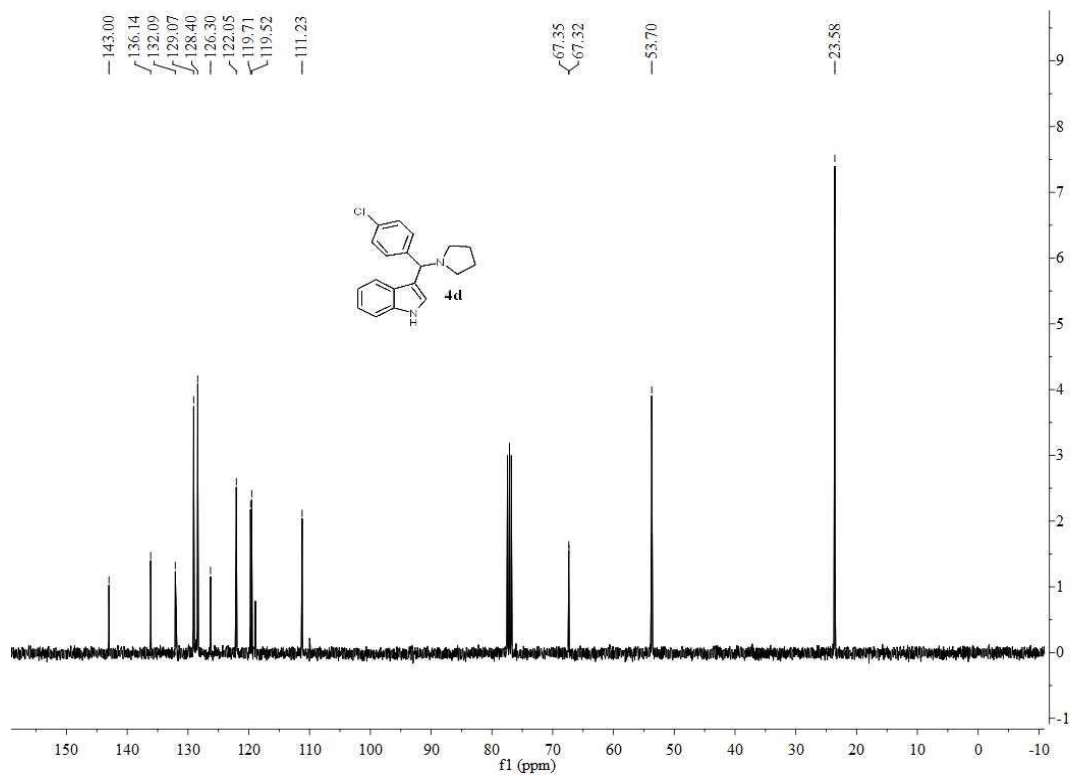
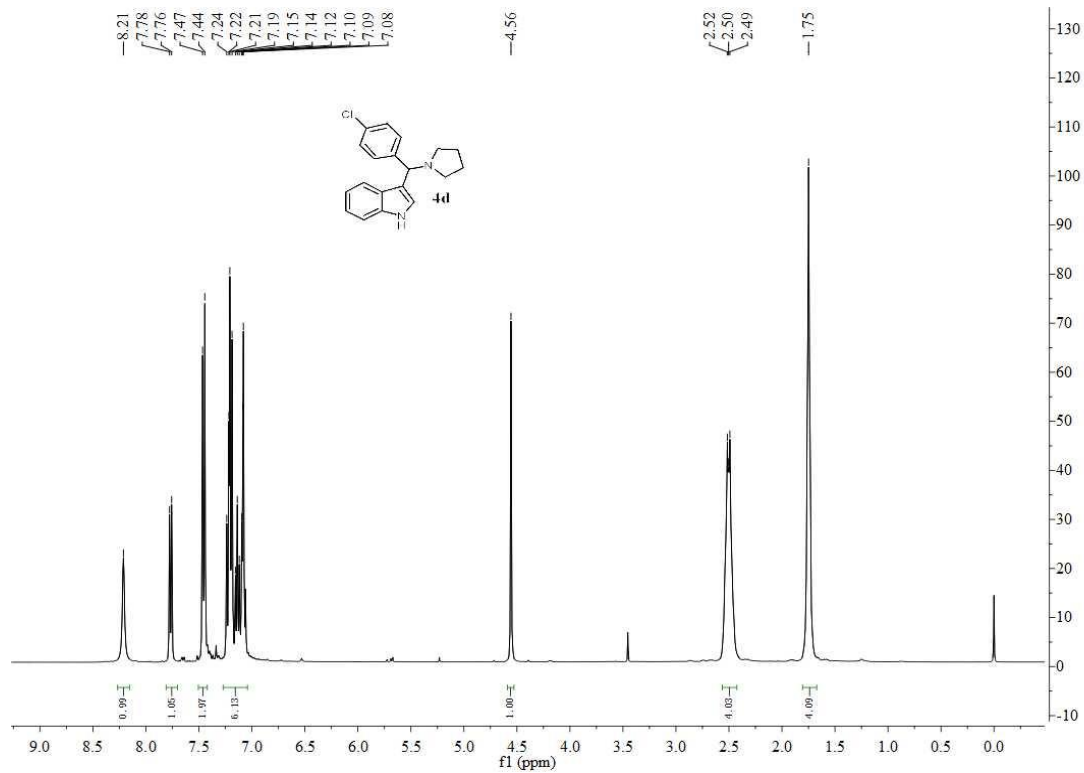
3-((3-Chlorophenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4c**)



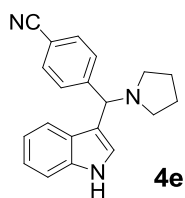
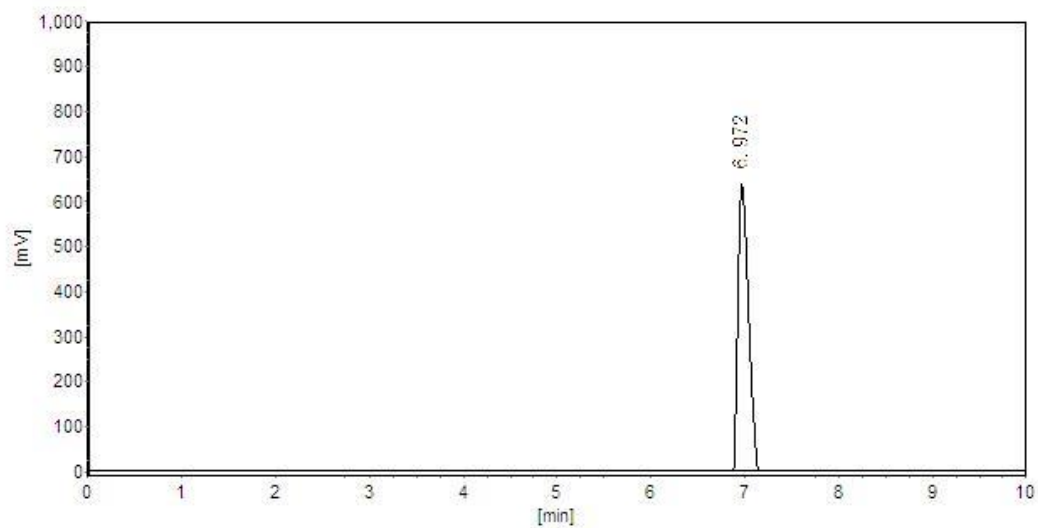




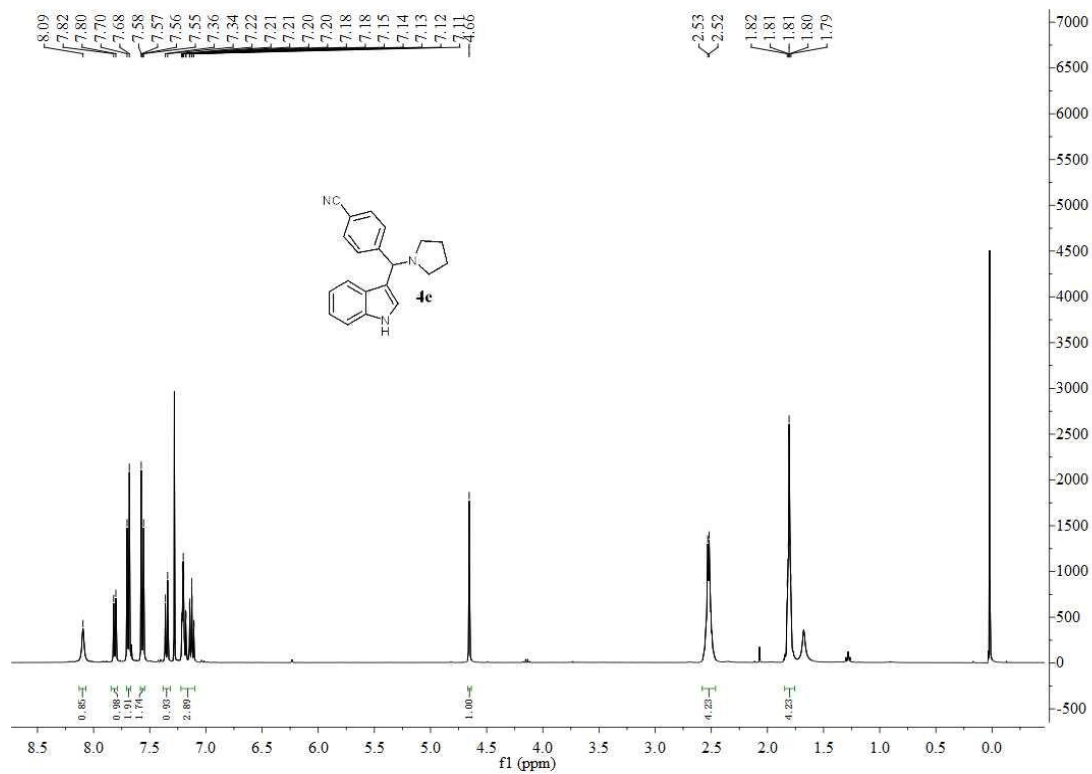
3-((4-Chlorophenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4d**)

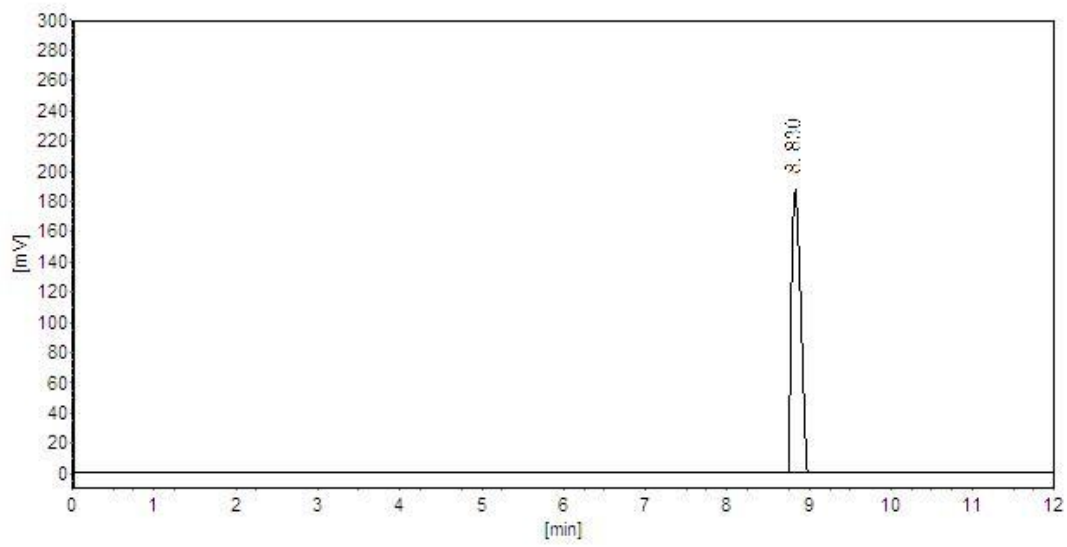
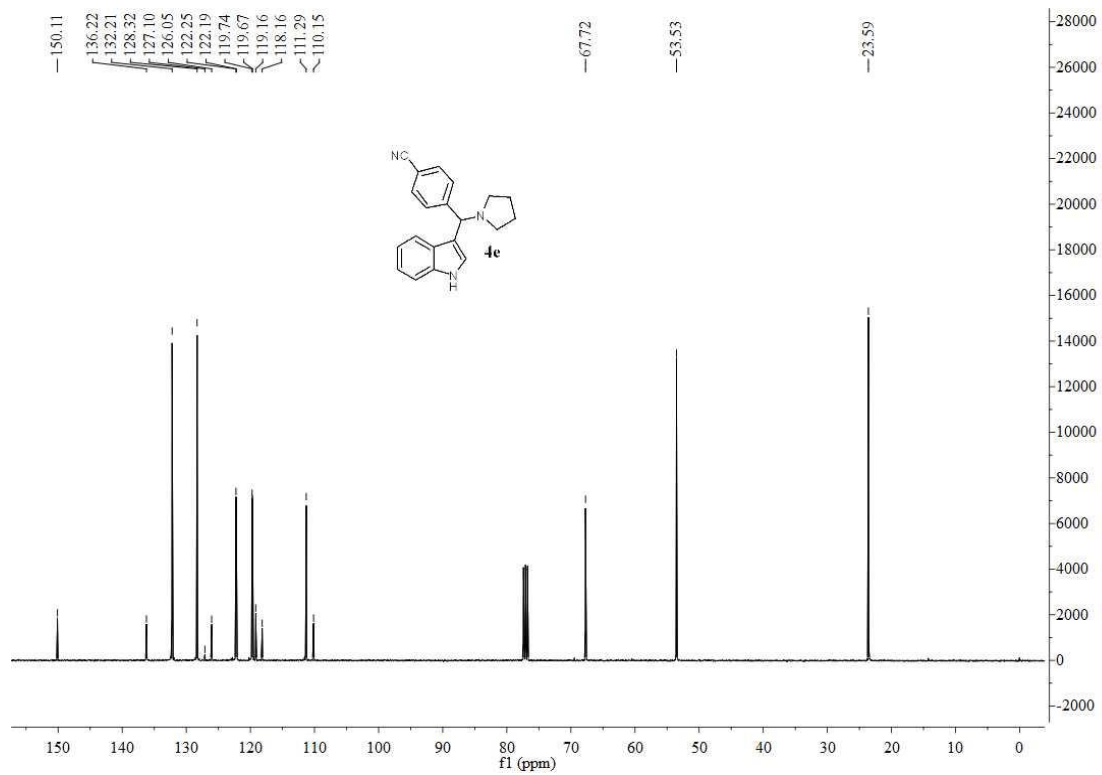


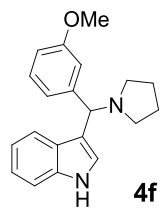




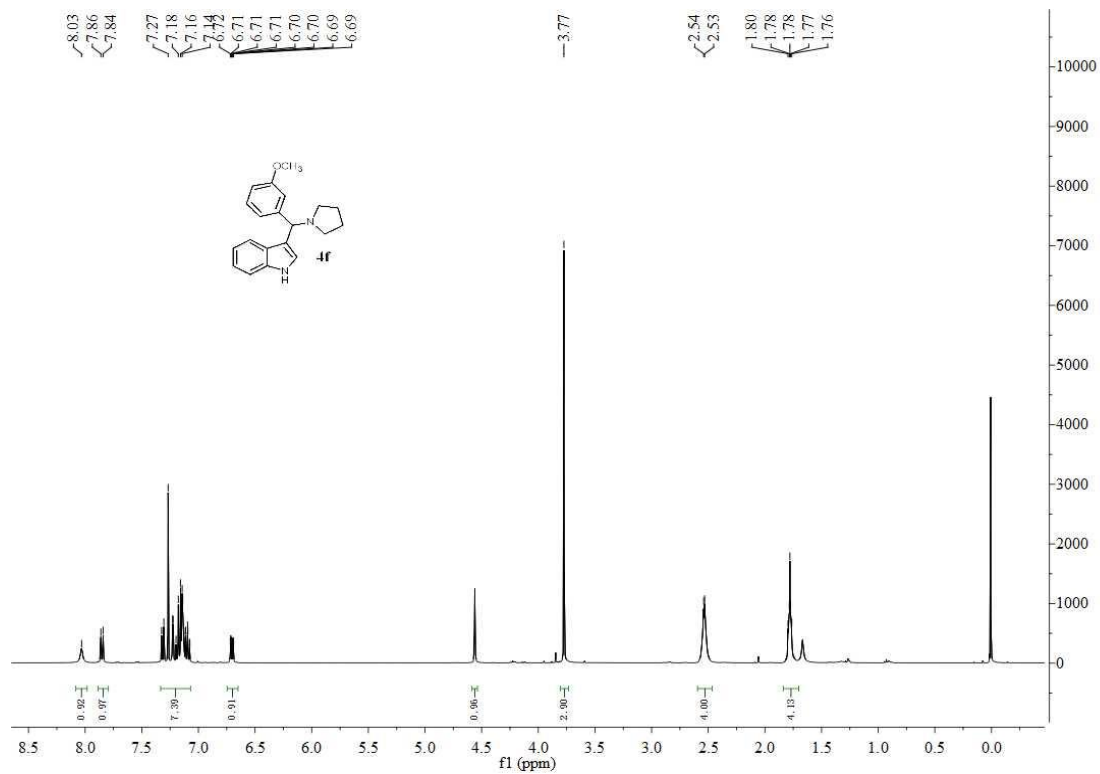
4-((1H-Indol-3-yl)(pyrrolidin-1-yl)methyl)benzonitrile (**4e**)

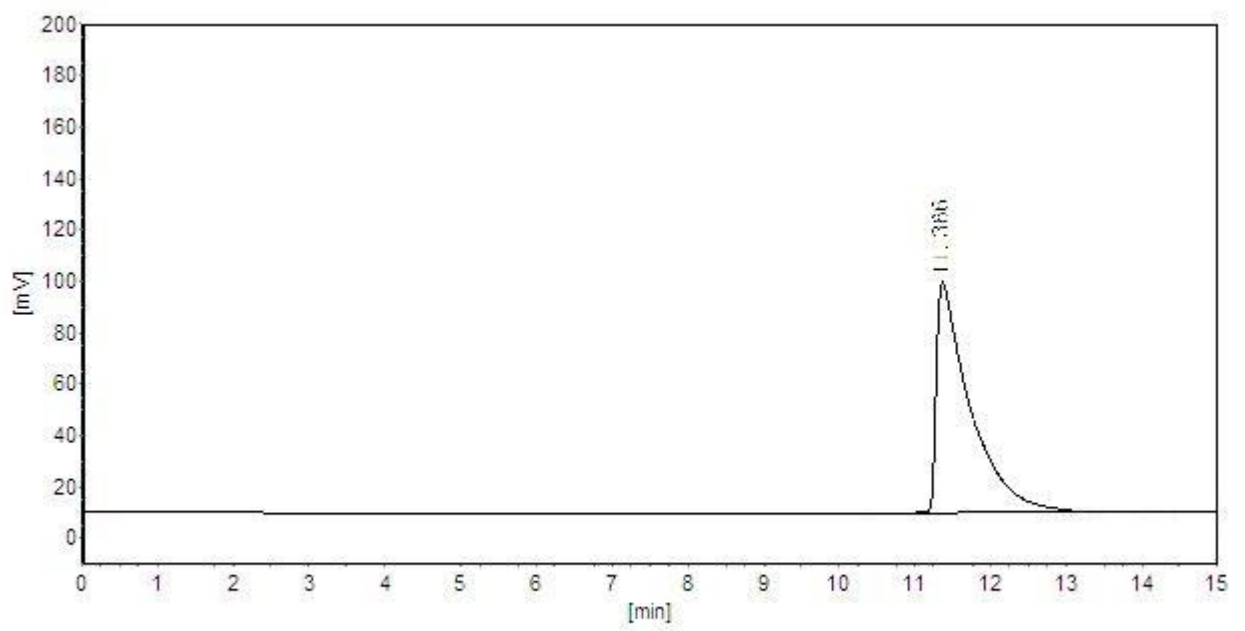
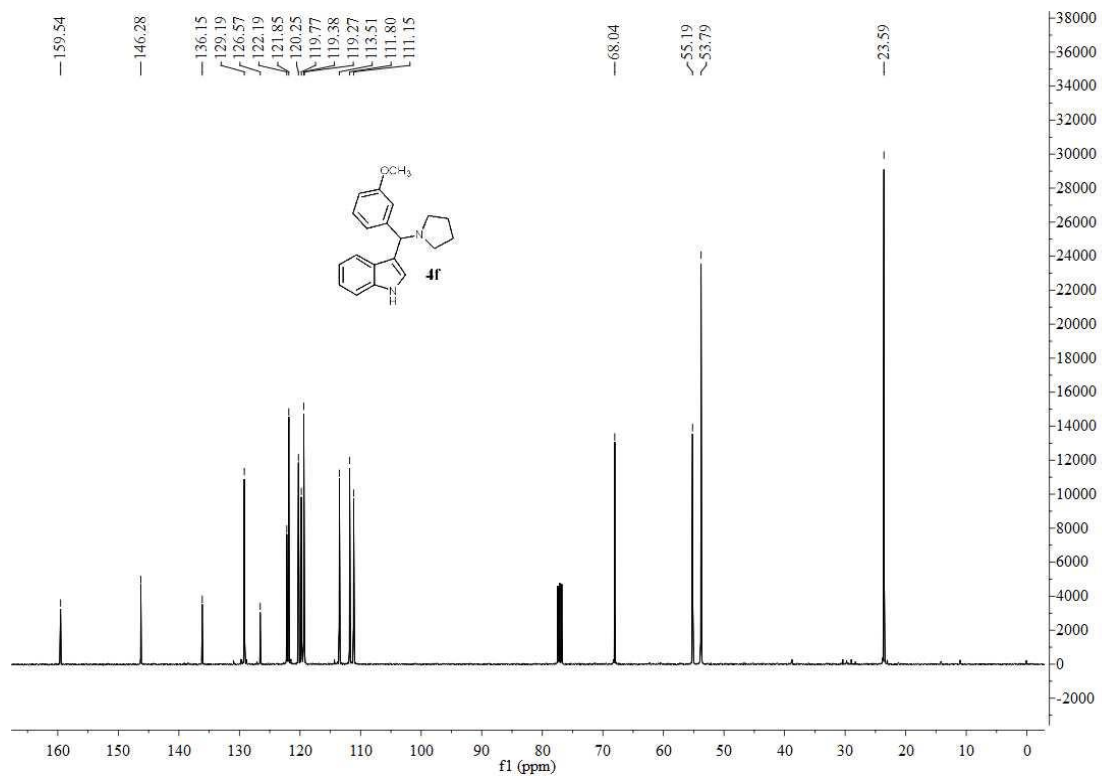


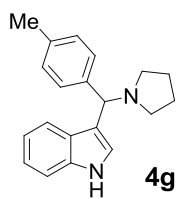




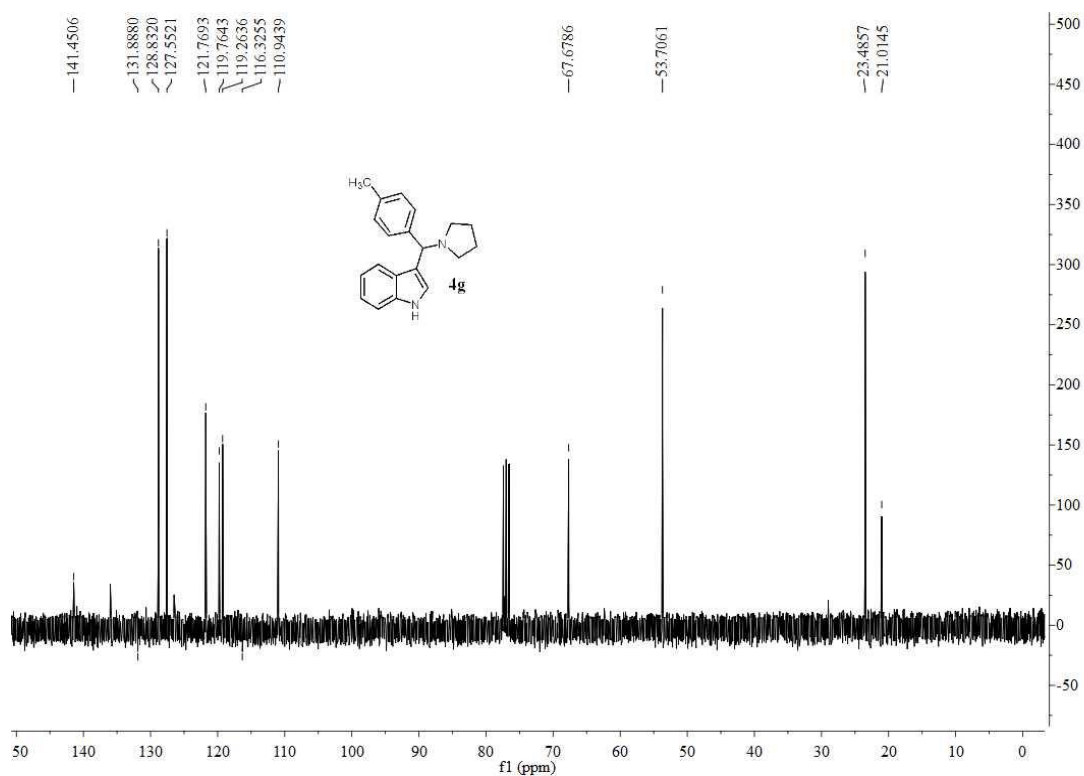
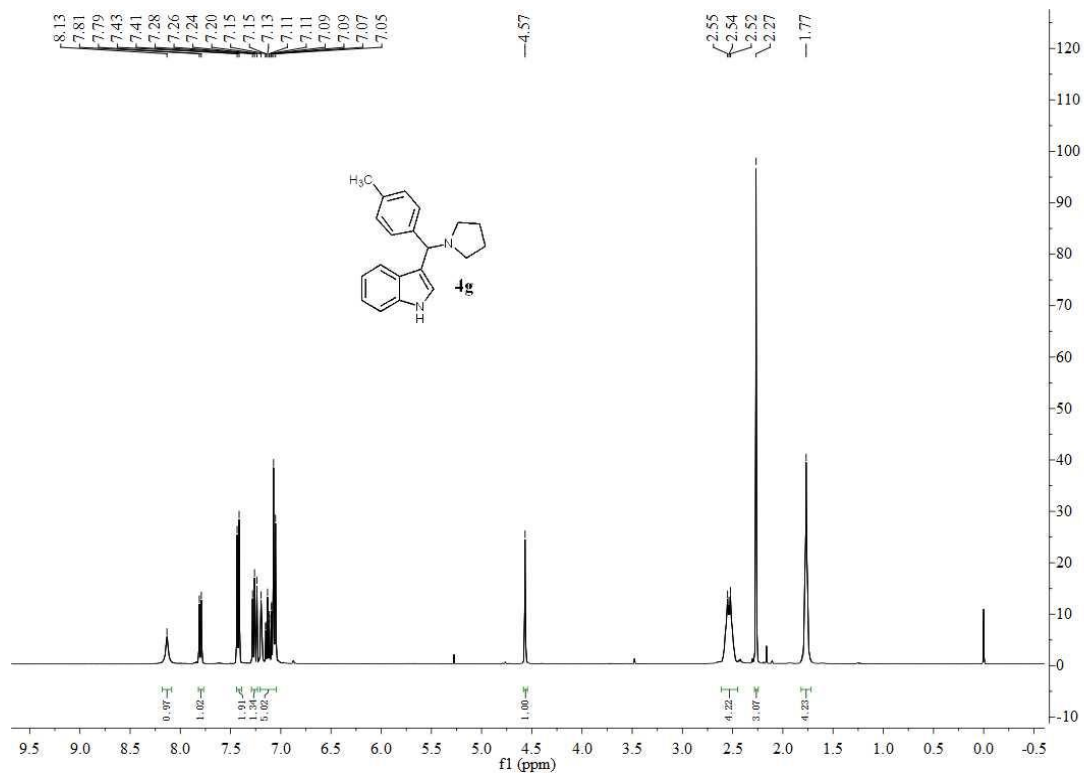
3-((3-Methoxyphenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4f**)

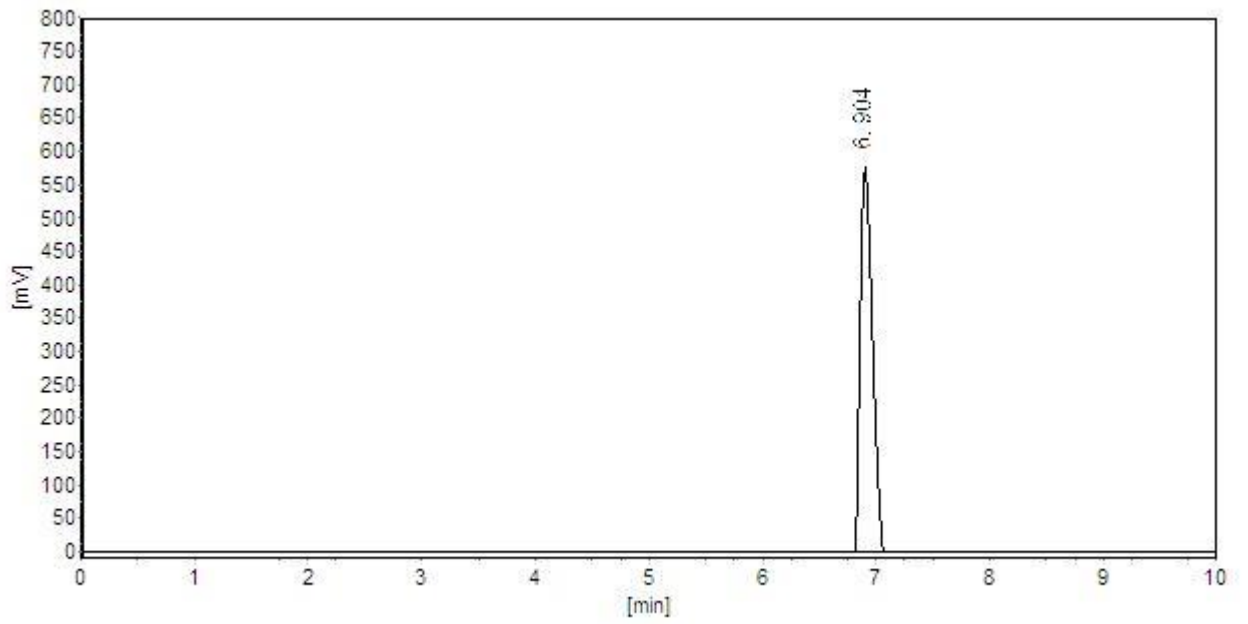
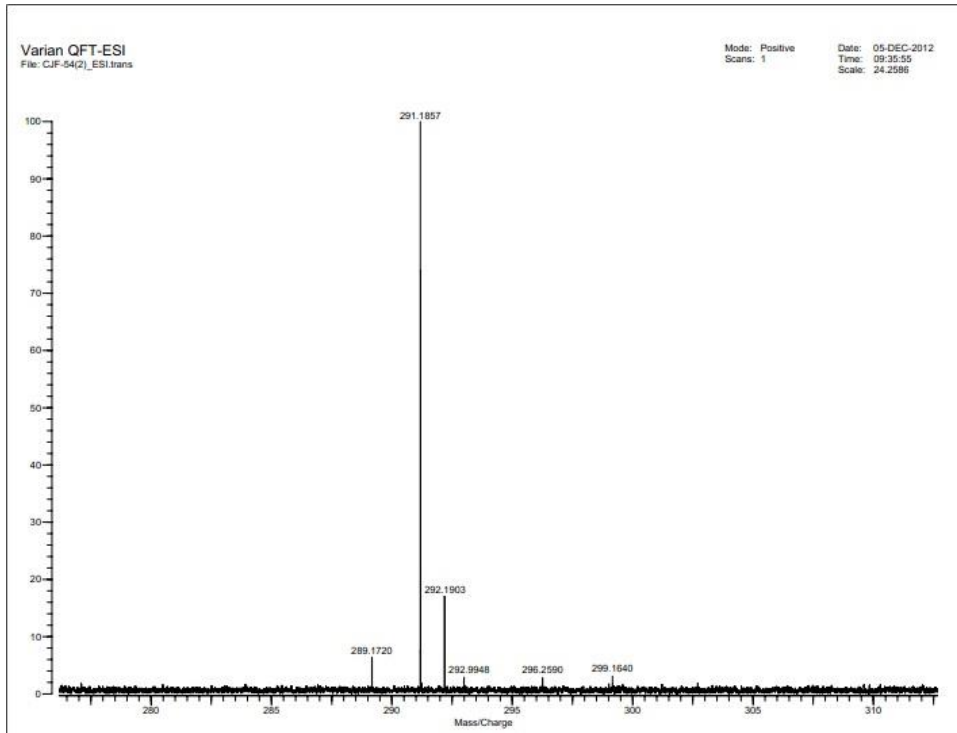


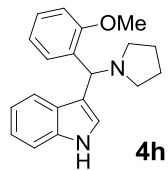




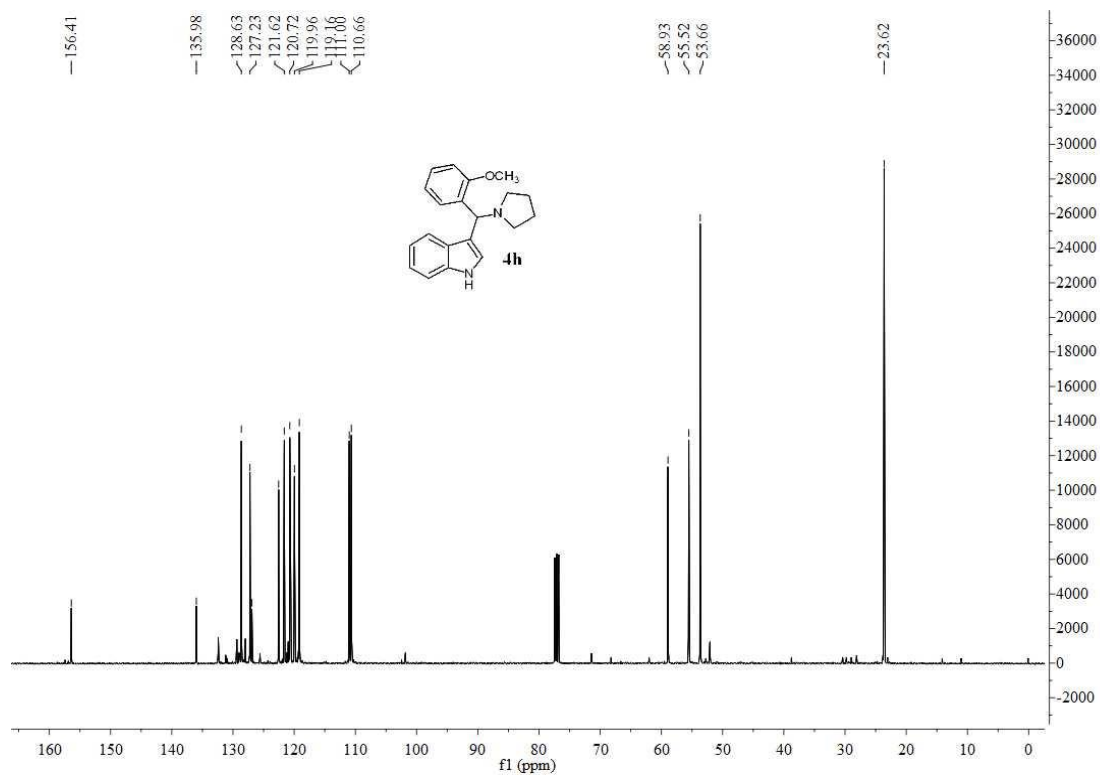
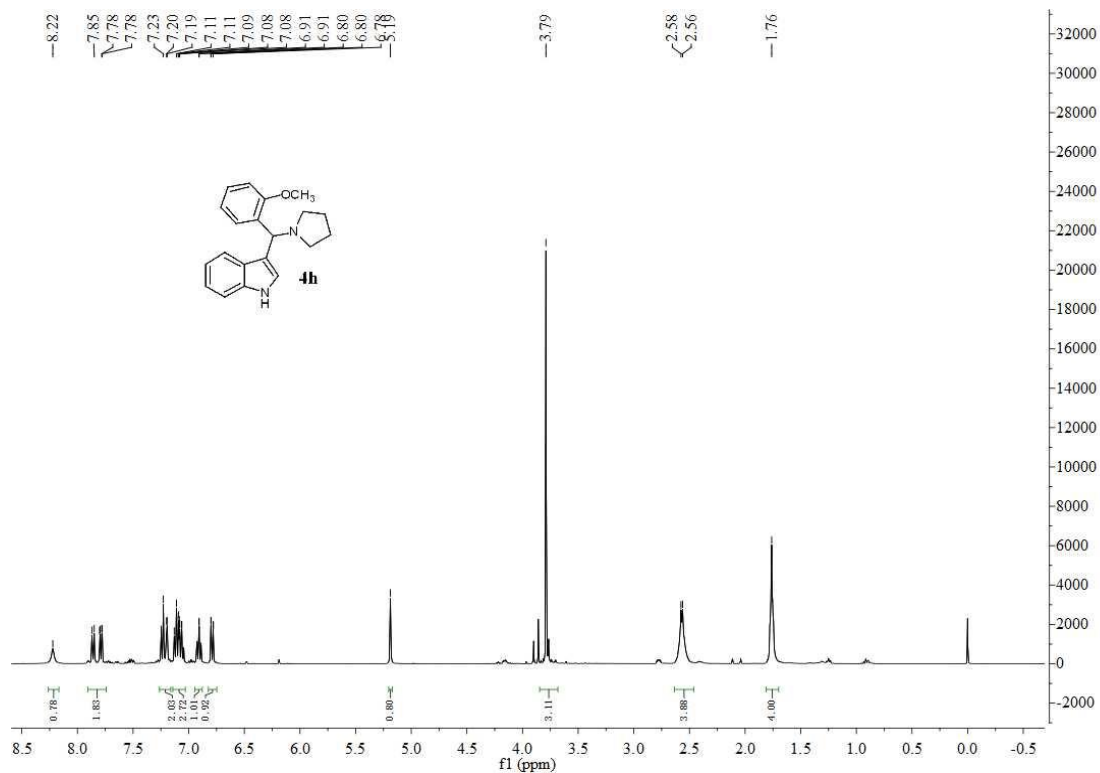
3-(Pyrrolidin-1-yl(p-tolyl)methyl)-1H-indole (**4g**)

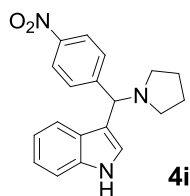
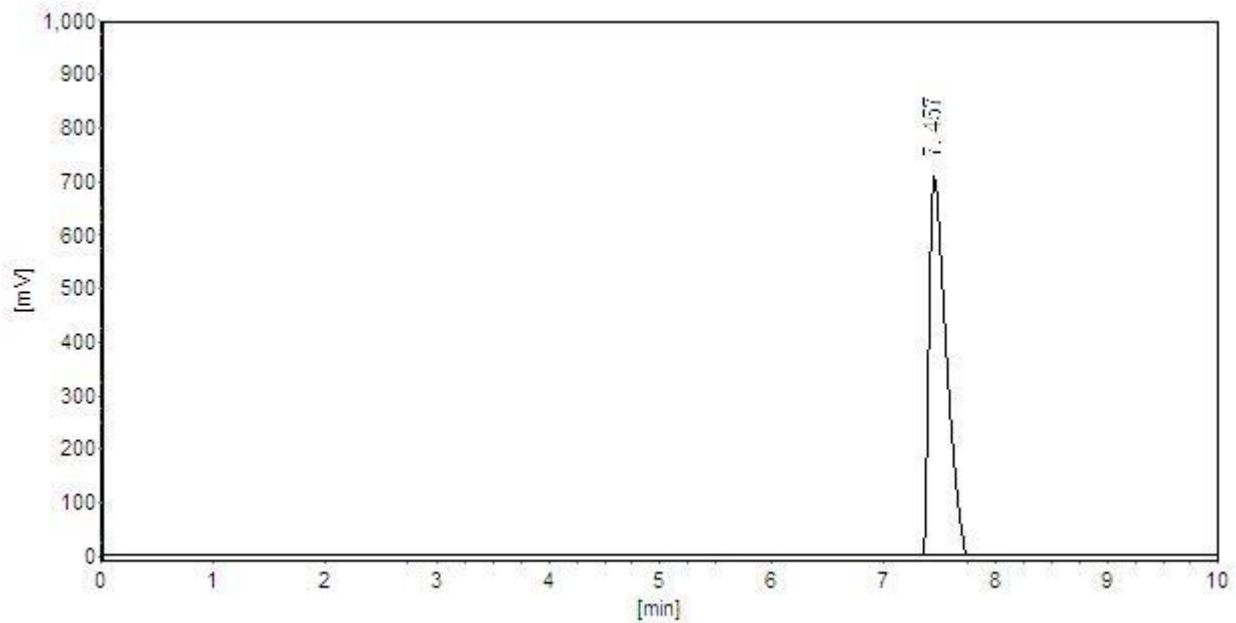




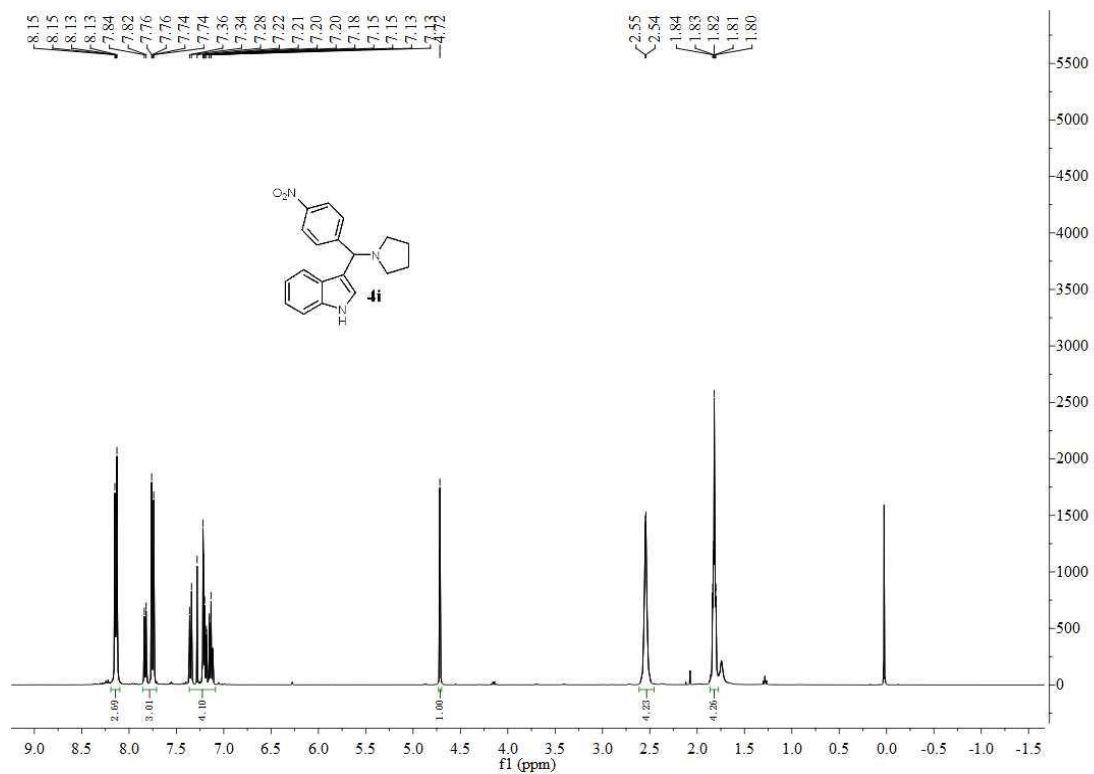


3-((2-Methoxyphenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4h**)

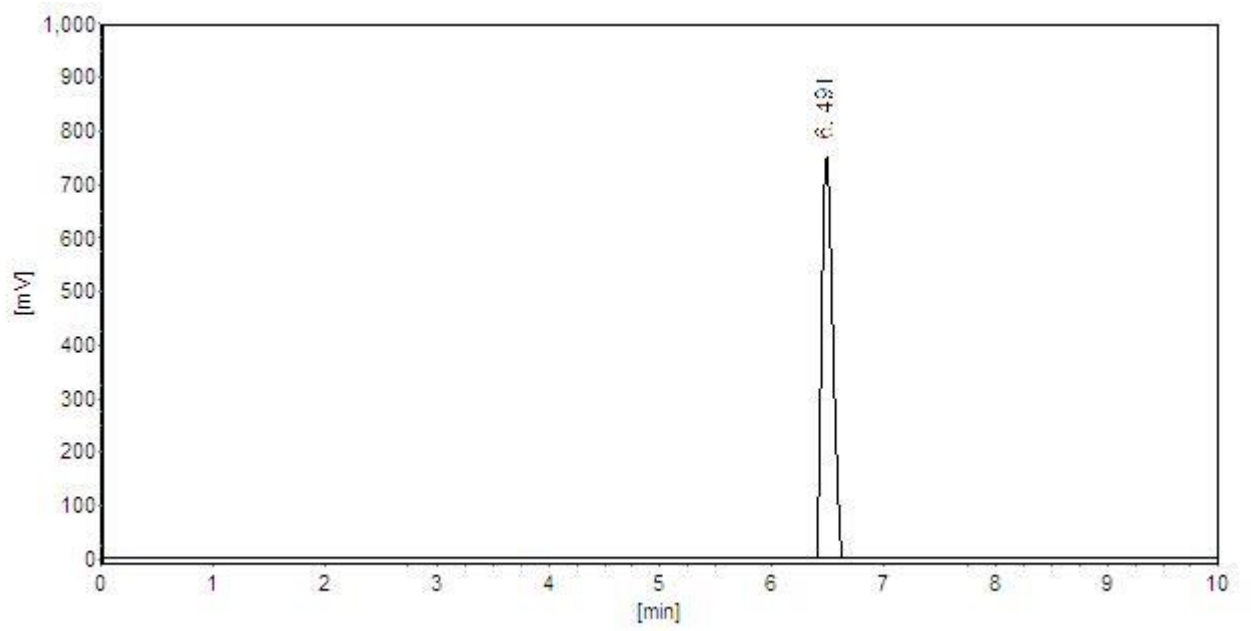
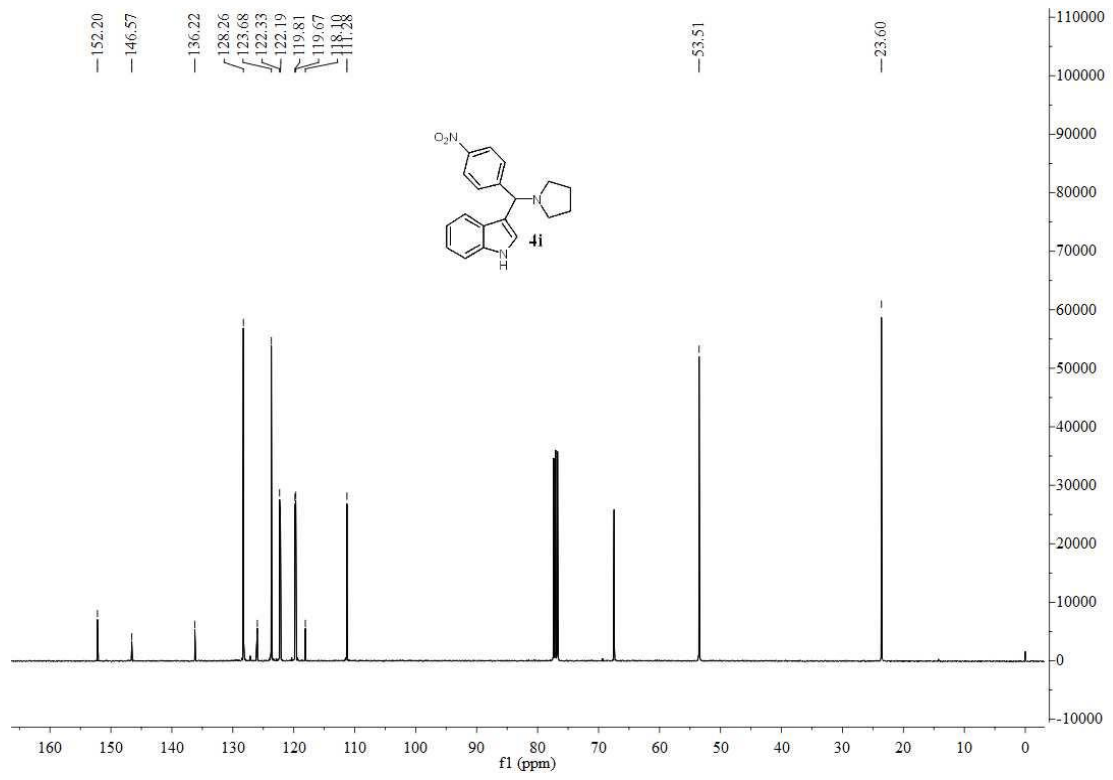


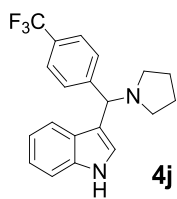


3-((4-Nitrophenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4i**)

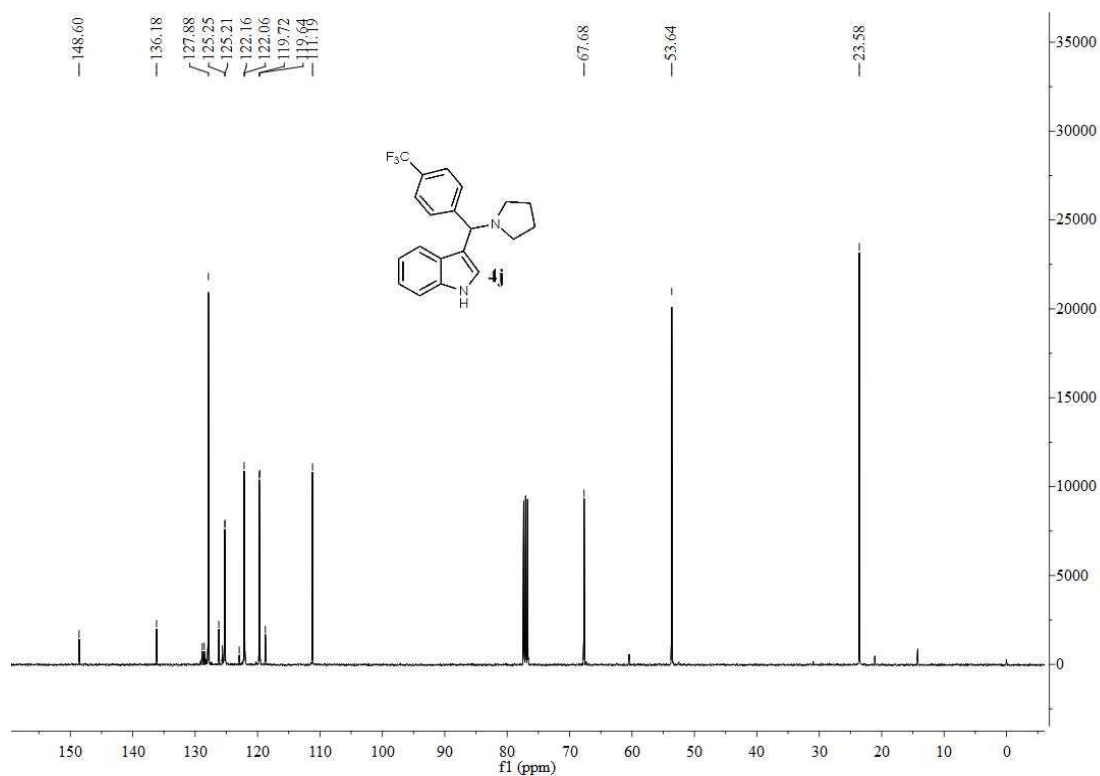
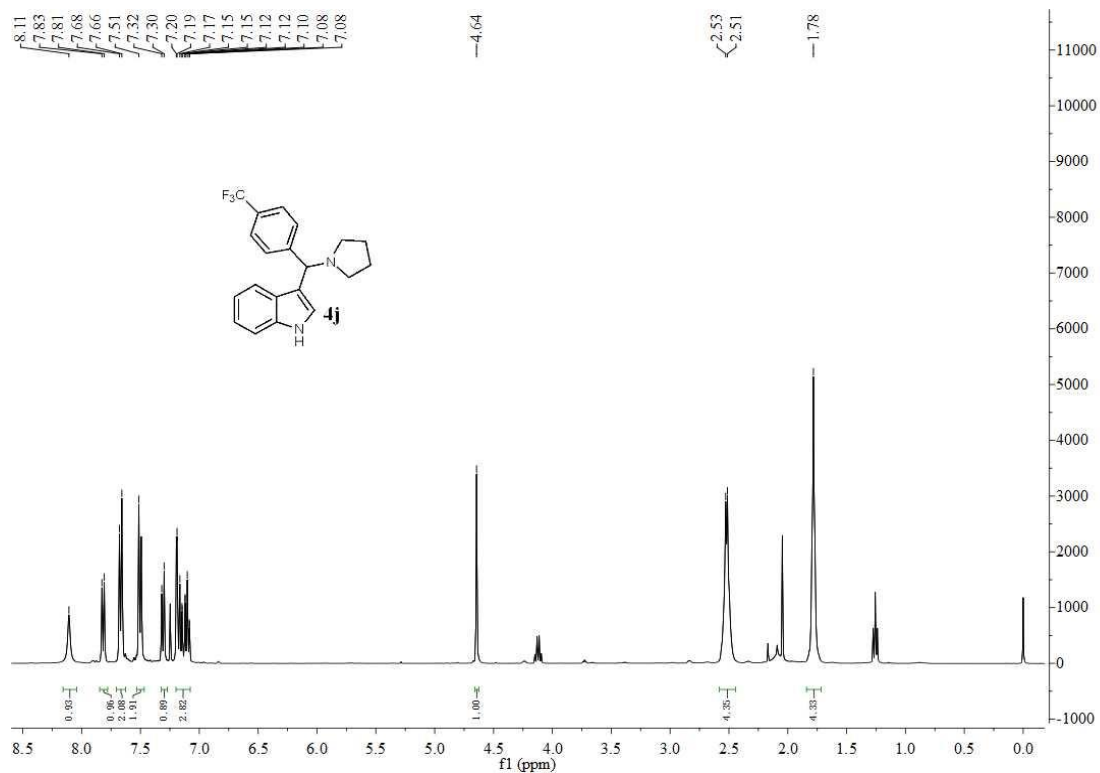


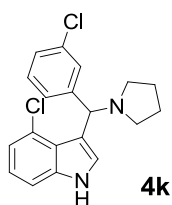
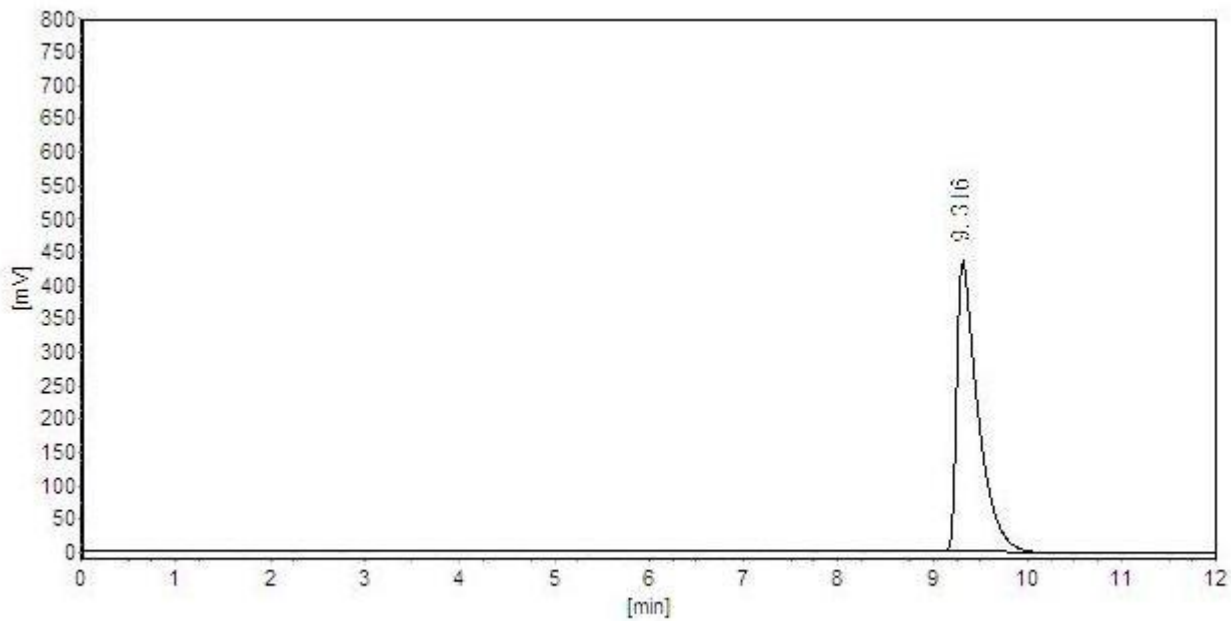




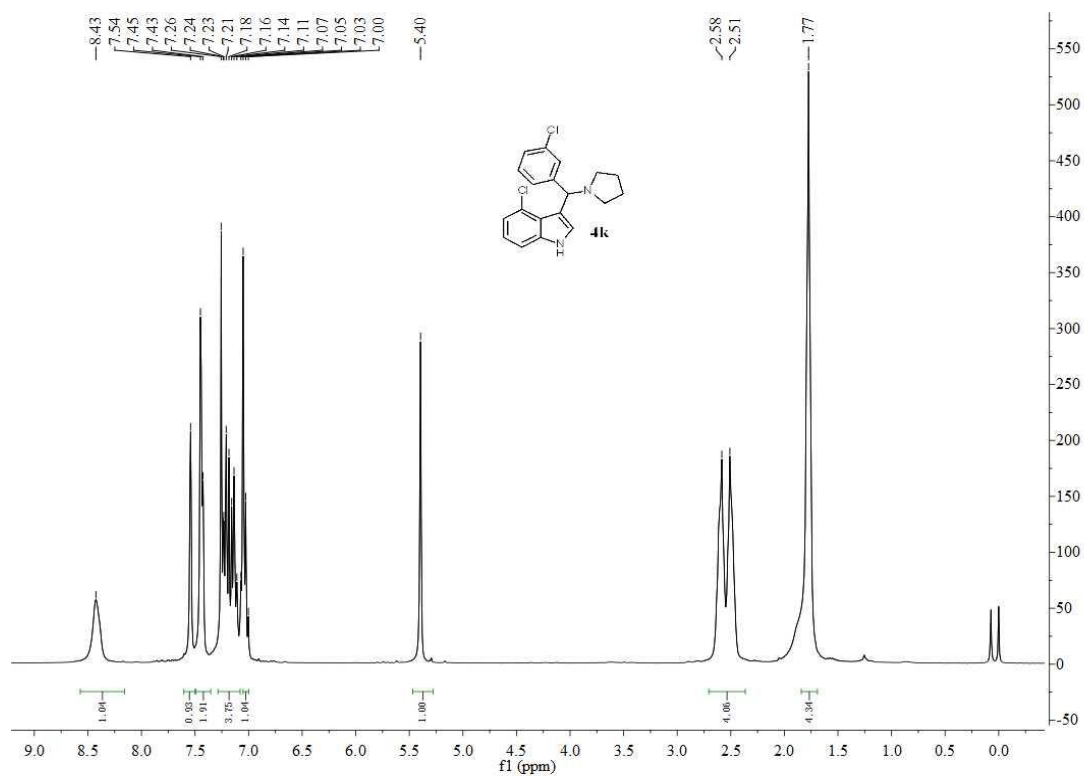


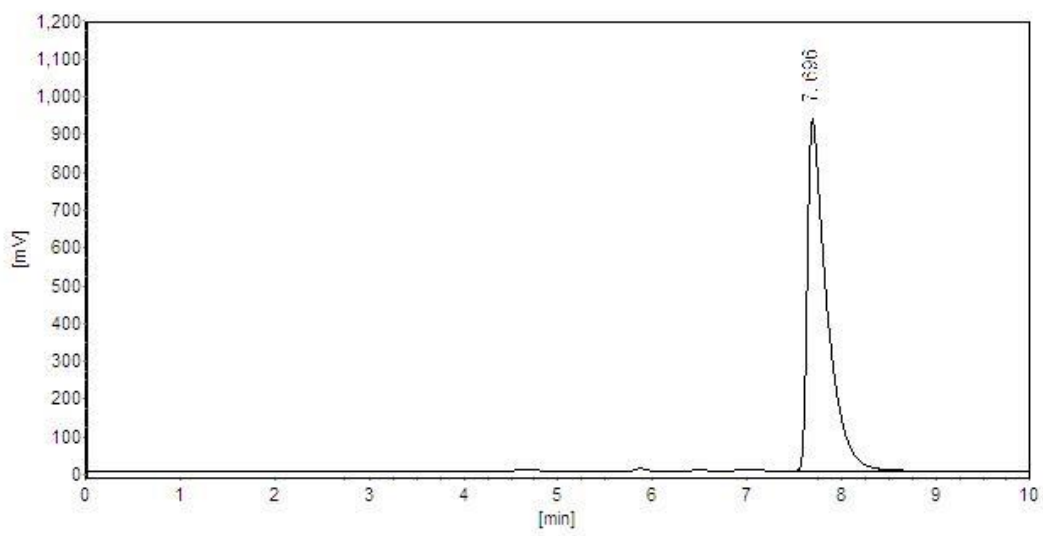
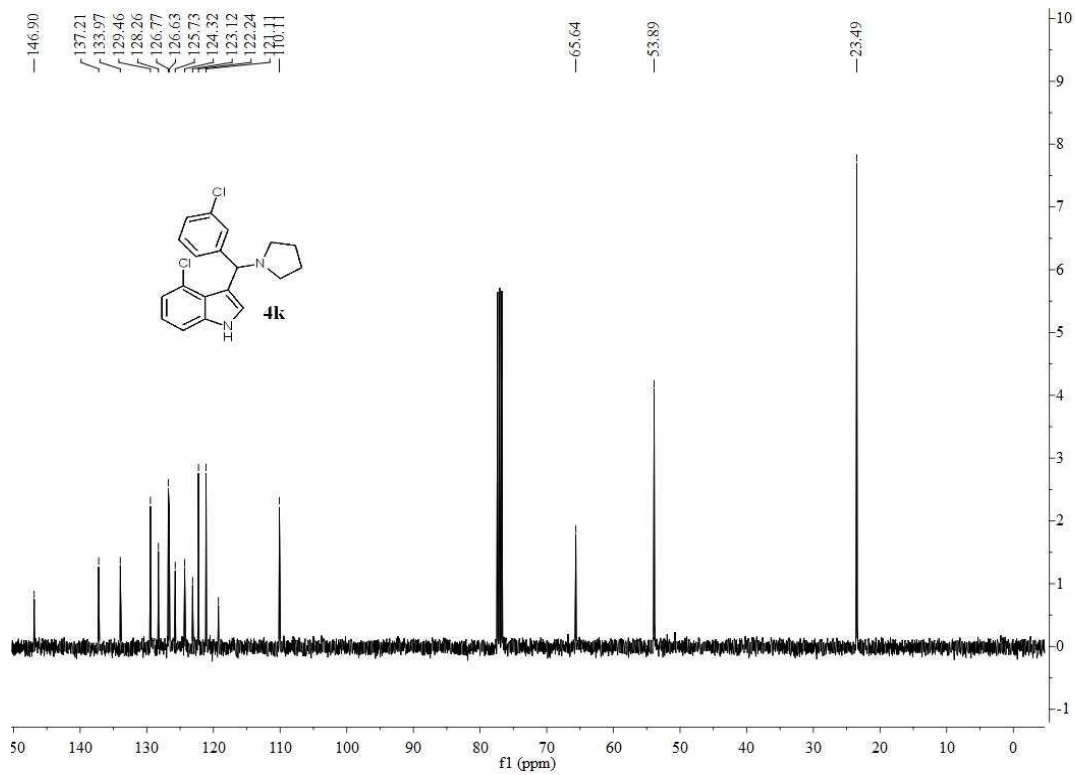
3-(Pyrrolidin-1-yl(4-(trifluoromethyl)phenyl)methyl)-1H-indole (**4j**)

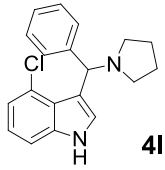




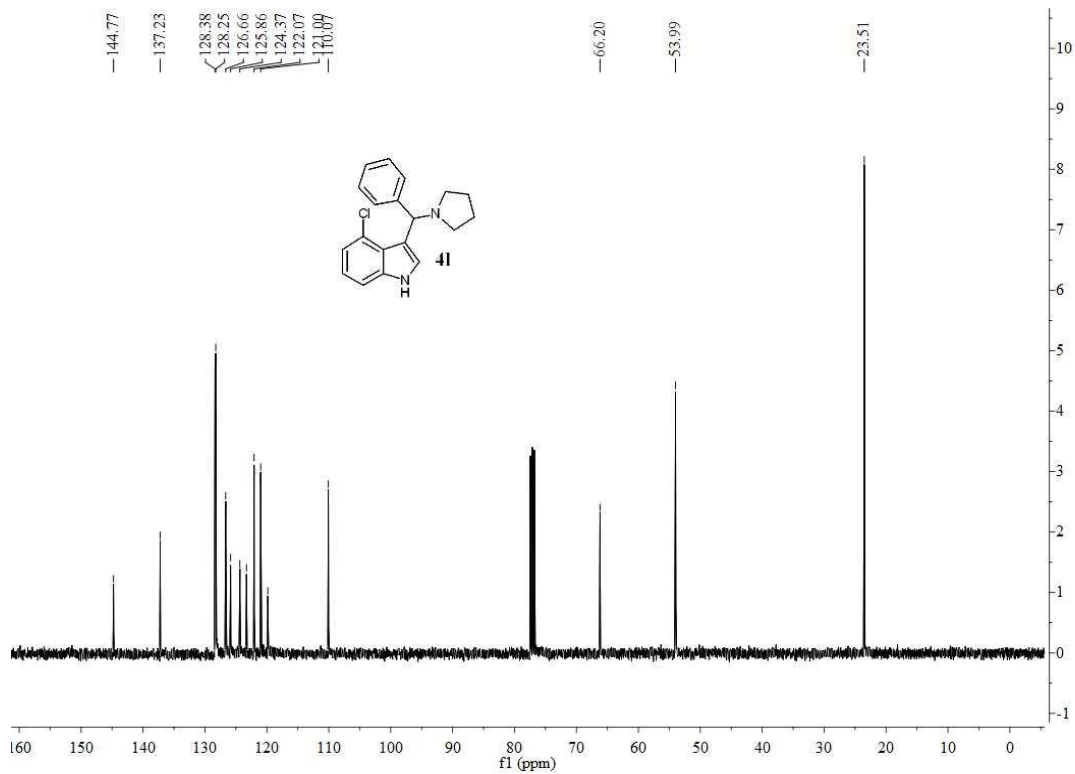
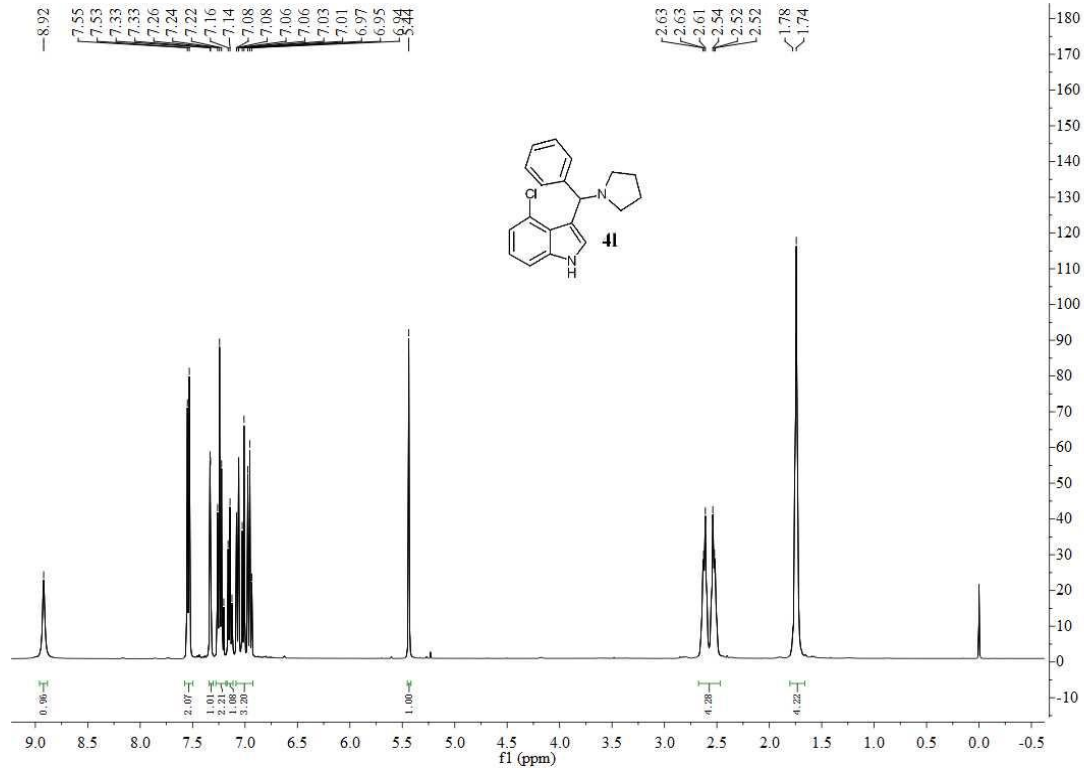
4-Chloro-3-((3-chlorophenyl)(pyrrolidin-1-yl)methyl)-1H-indole (**4k**)

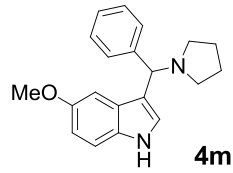
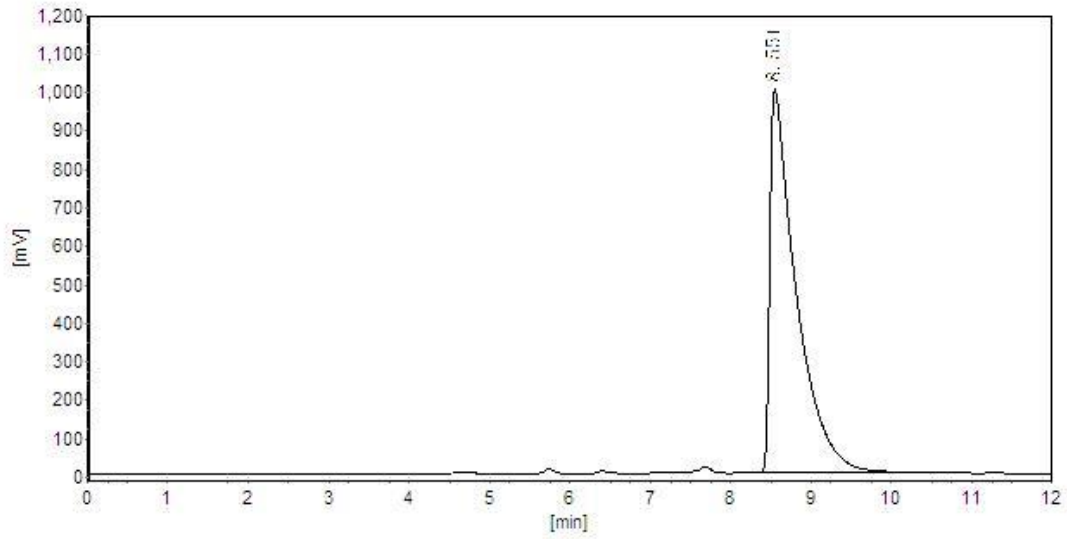




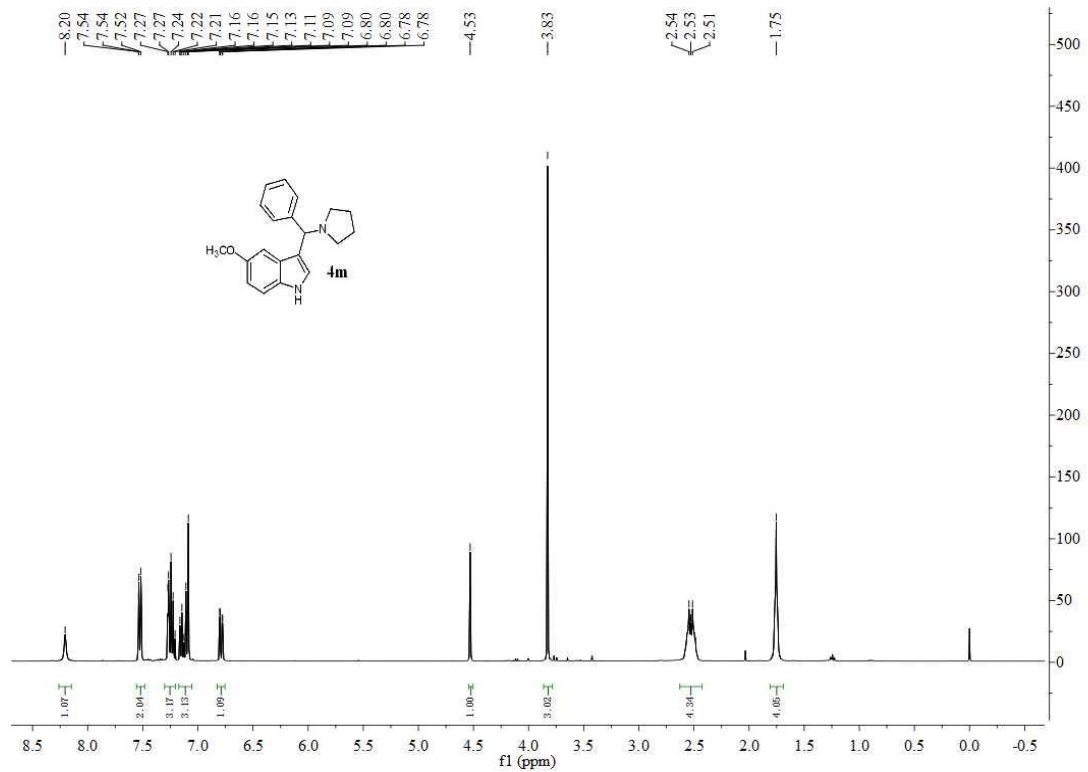


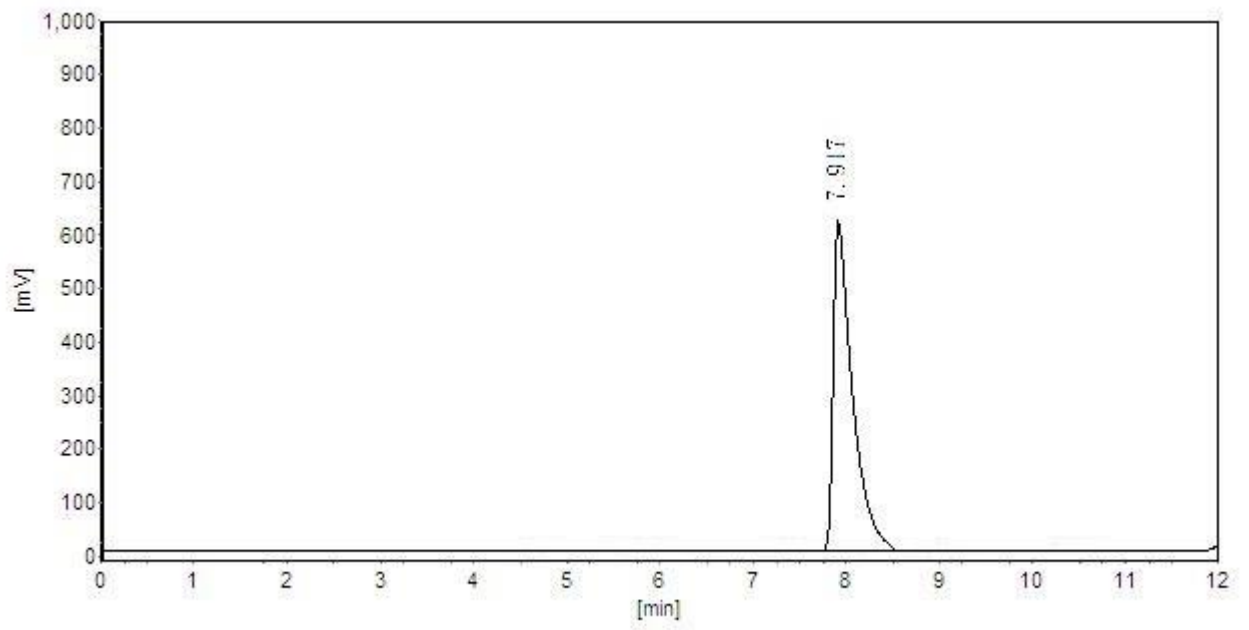
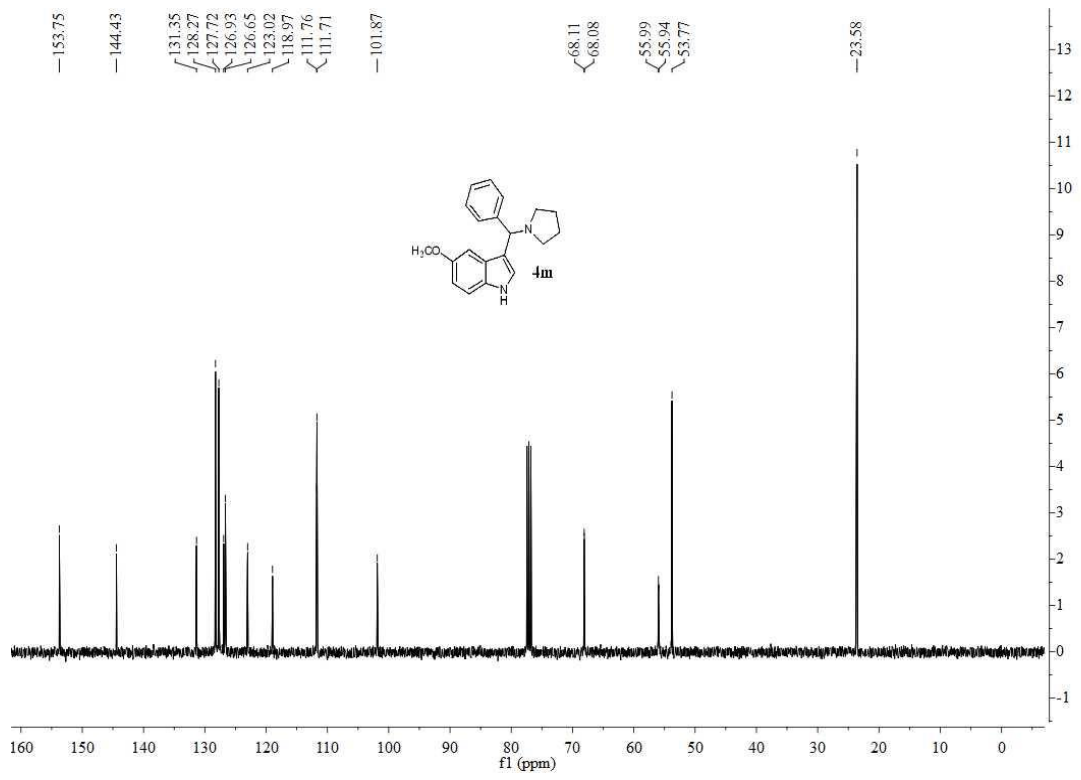
4-Chloro-3-(phenylpyrrolidin-1-yl)methyl-1H-indole (**4I**)

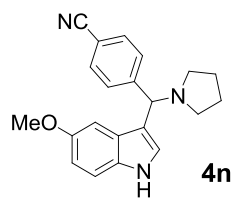




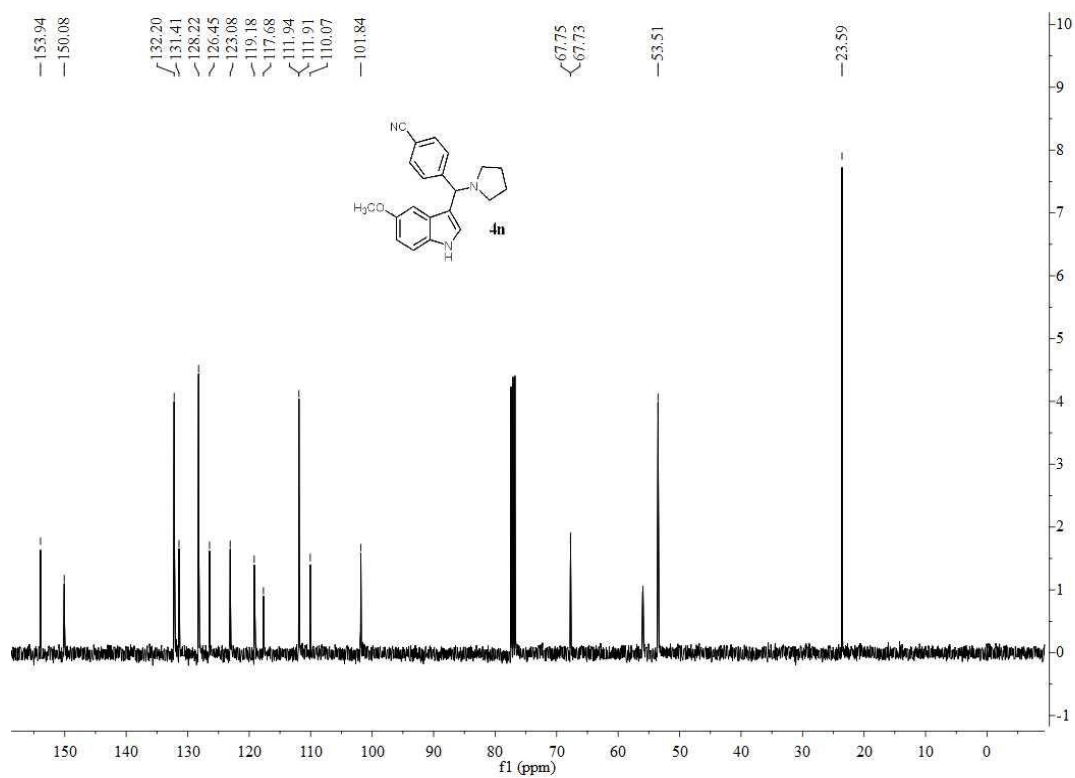
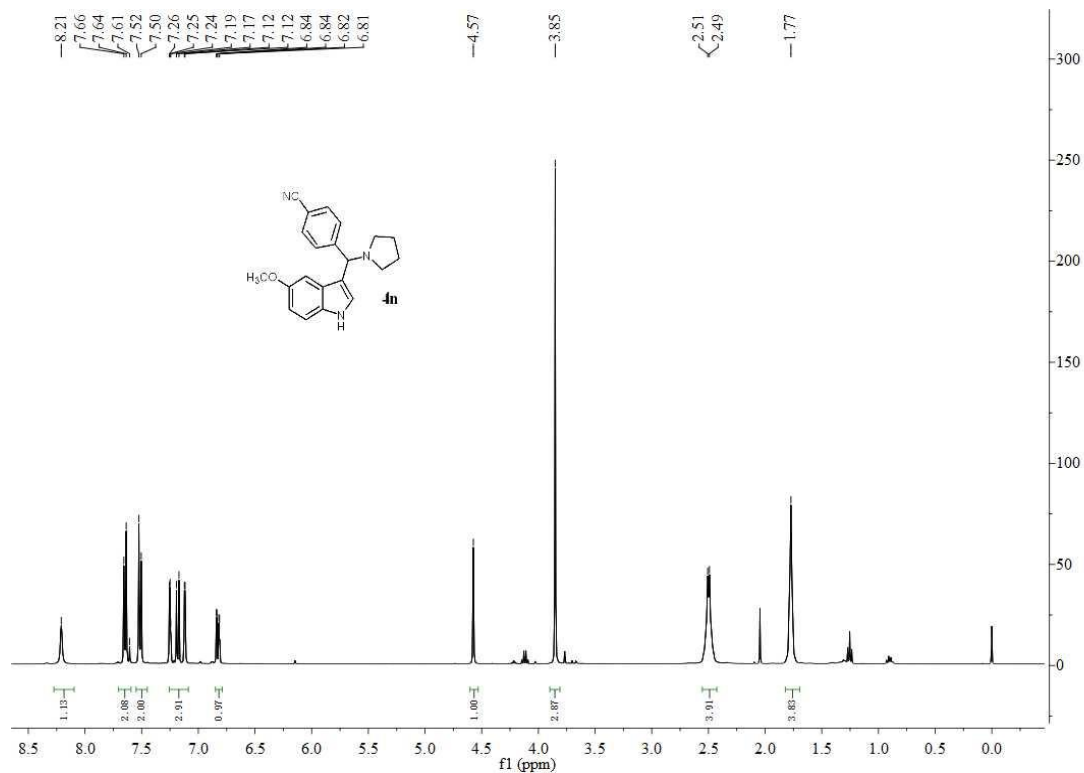
*5-Methoxy-3-(phenyl(pyrrolidin-1-yl)methyl)-1H-indole (4m)*



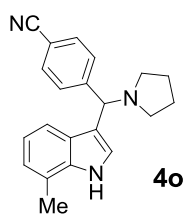
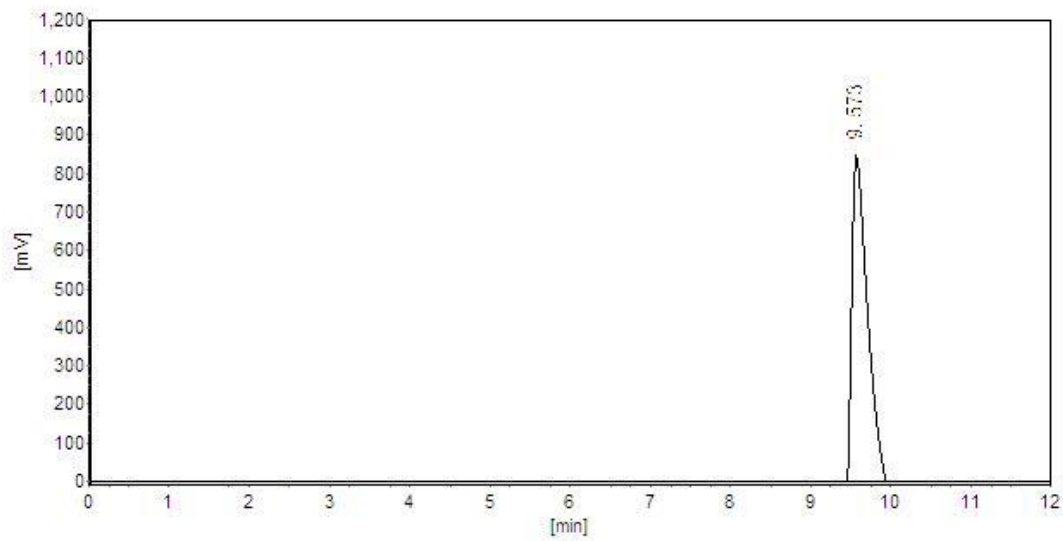




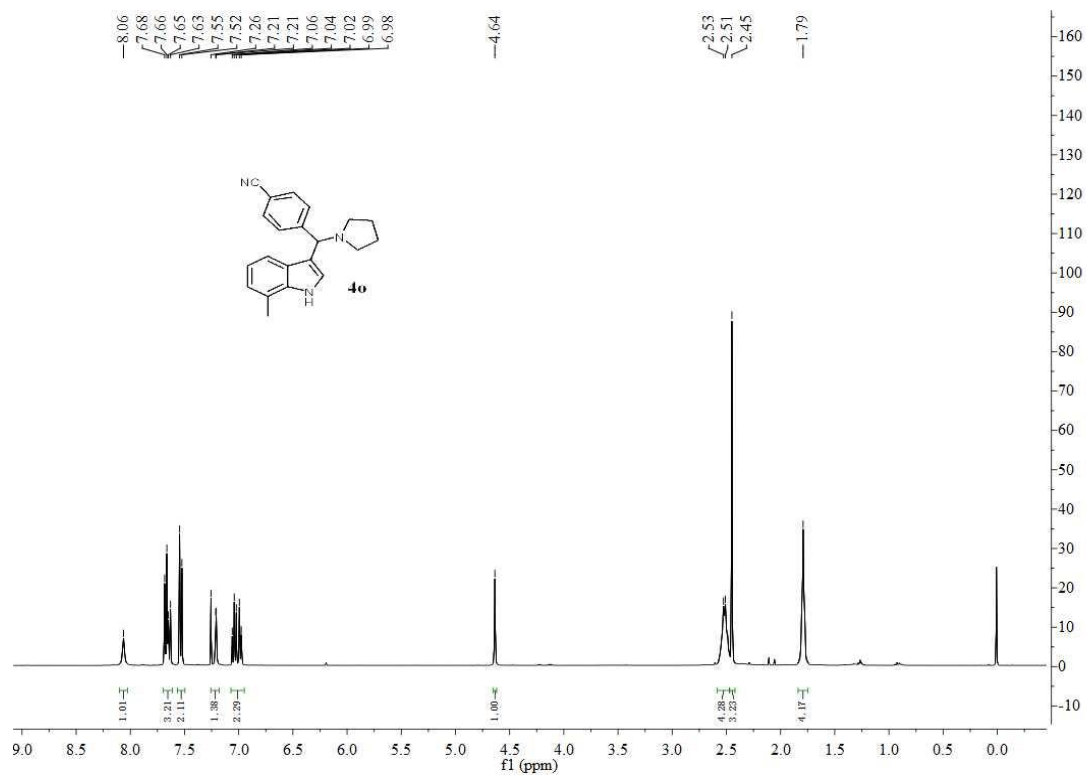
4-((5-Methoxy-1H-indol-3-yl)(pyrrolidin-1-yl)methyl)benzonitril(**4n**)

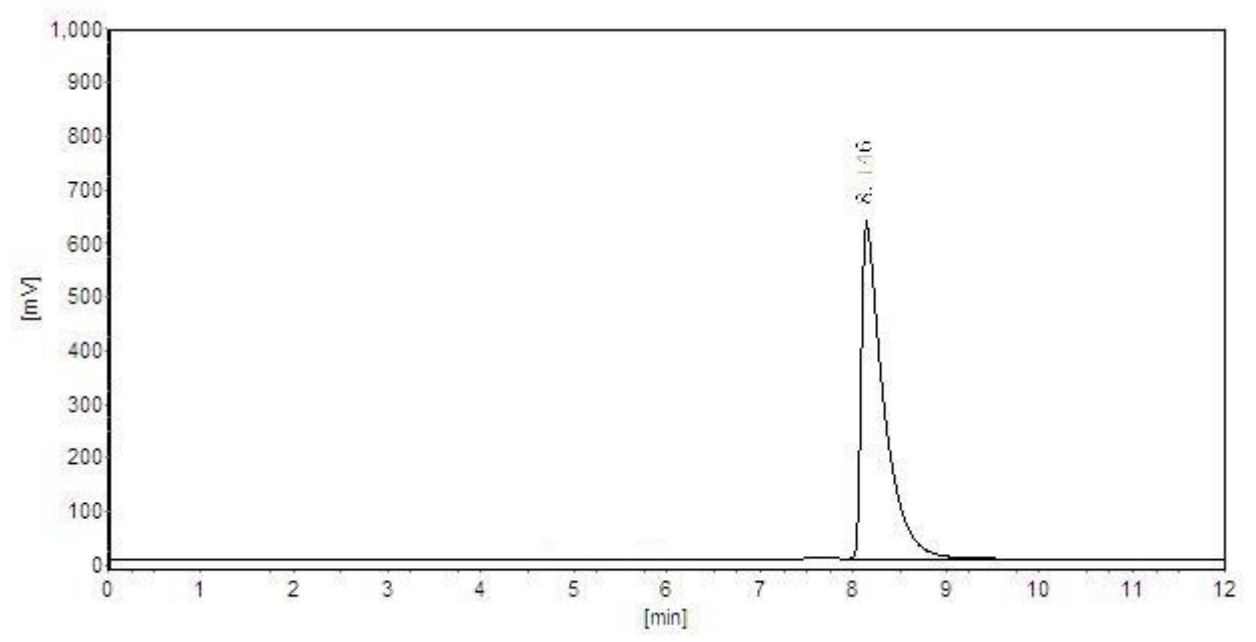
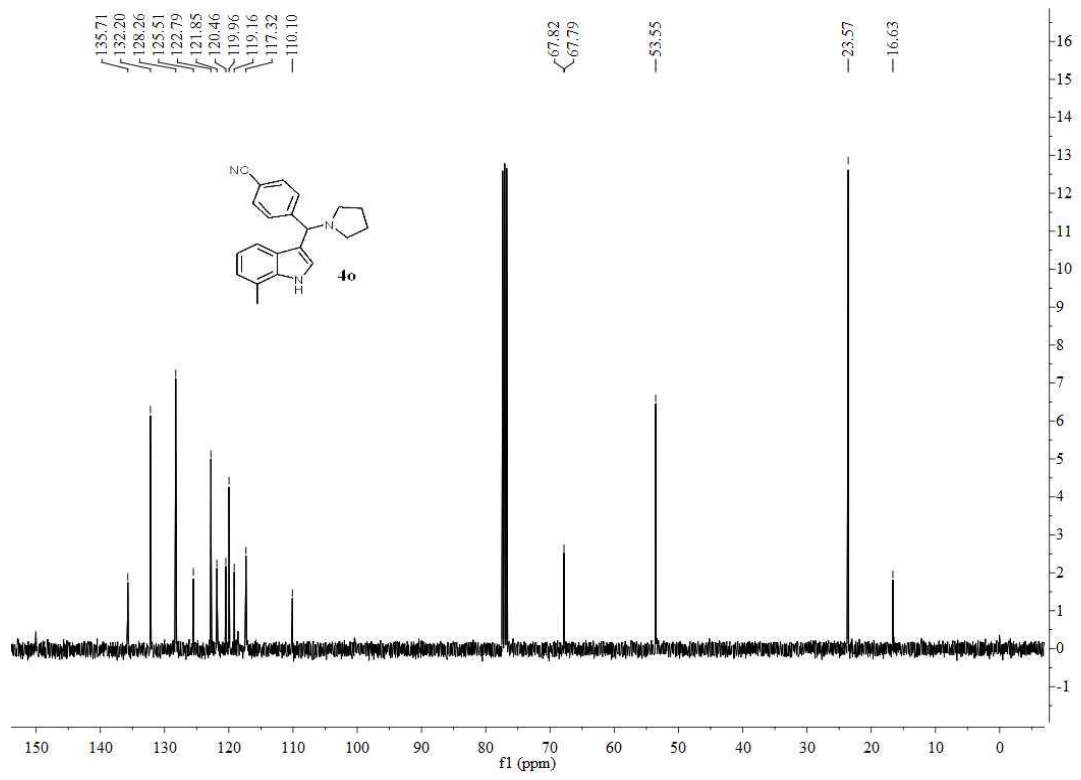


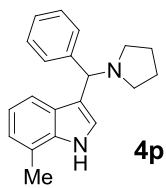




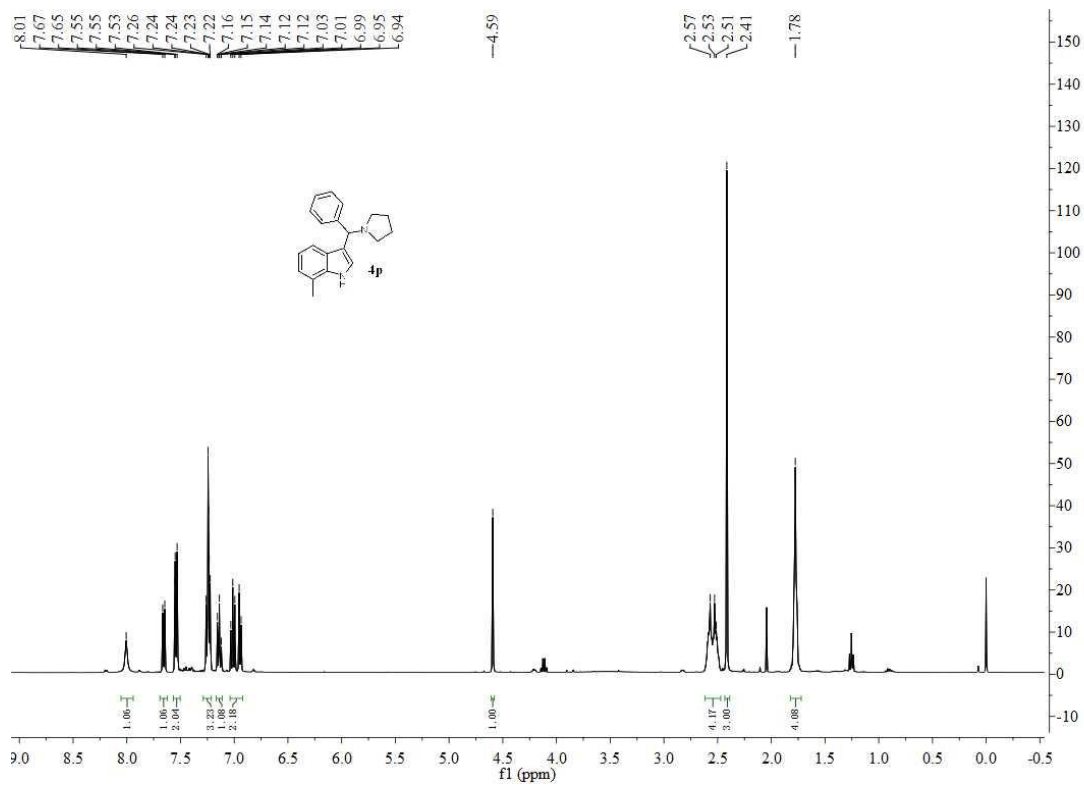
4-((7-Methyl-1H-indol-3-yl)(pyrrolidin-1-yl)methyl)benzonitrile (**4o**)

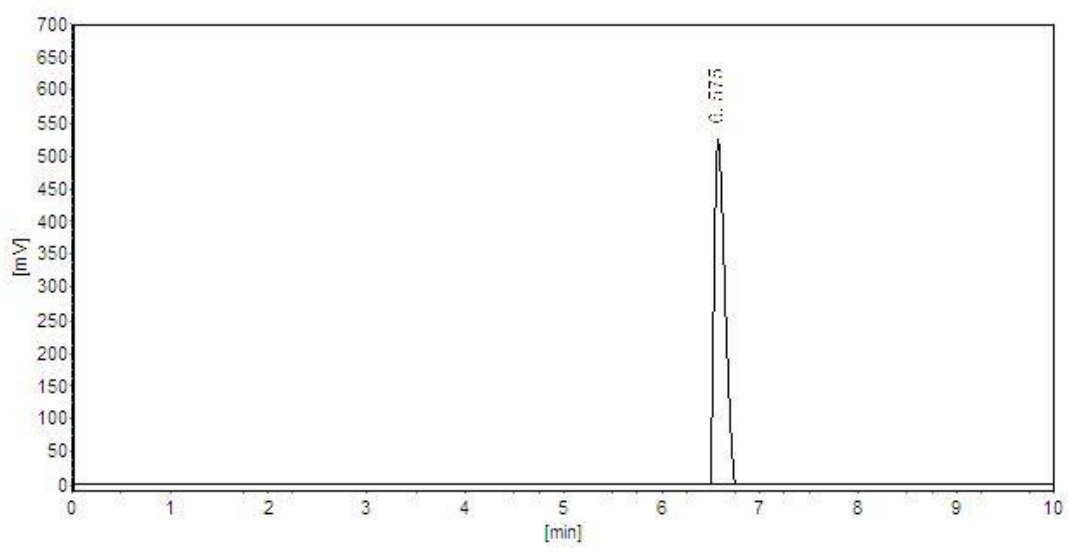
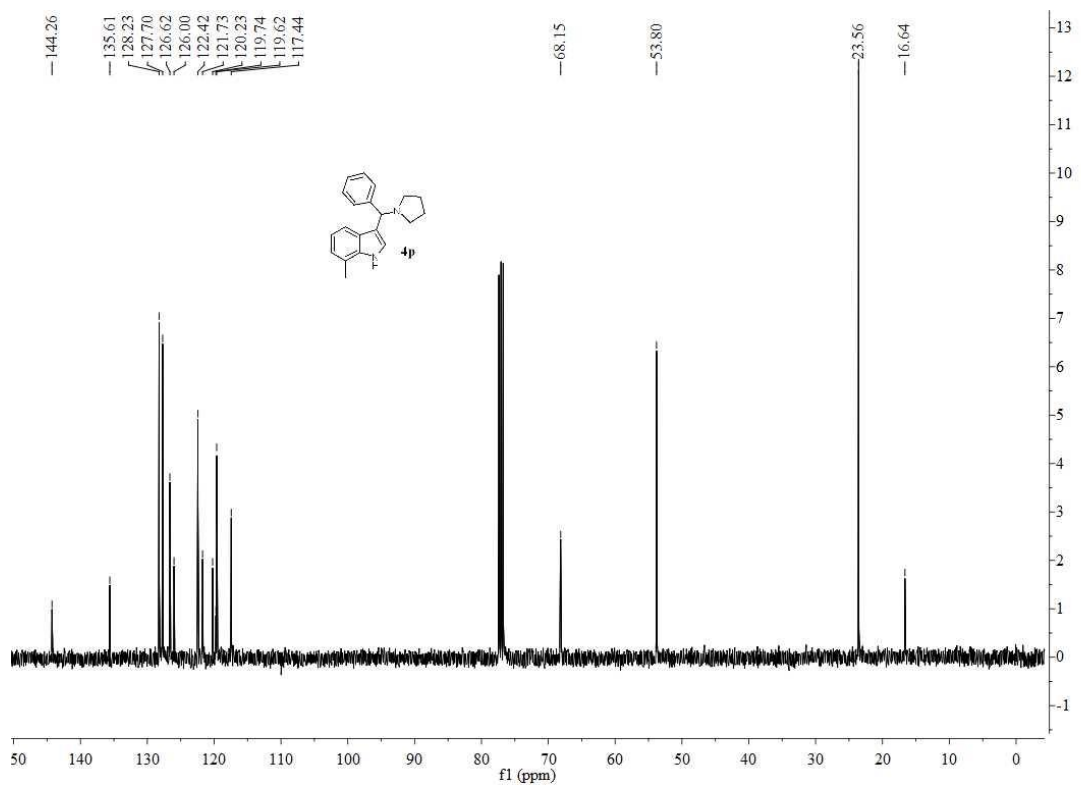


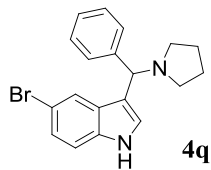




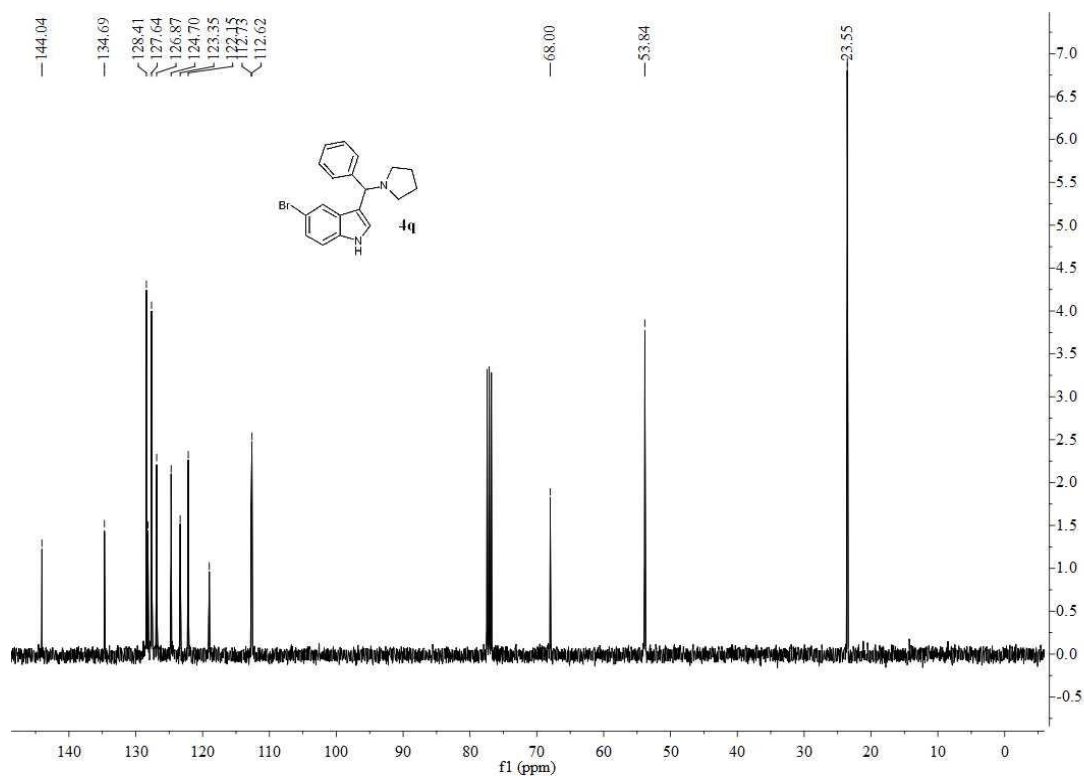
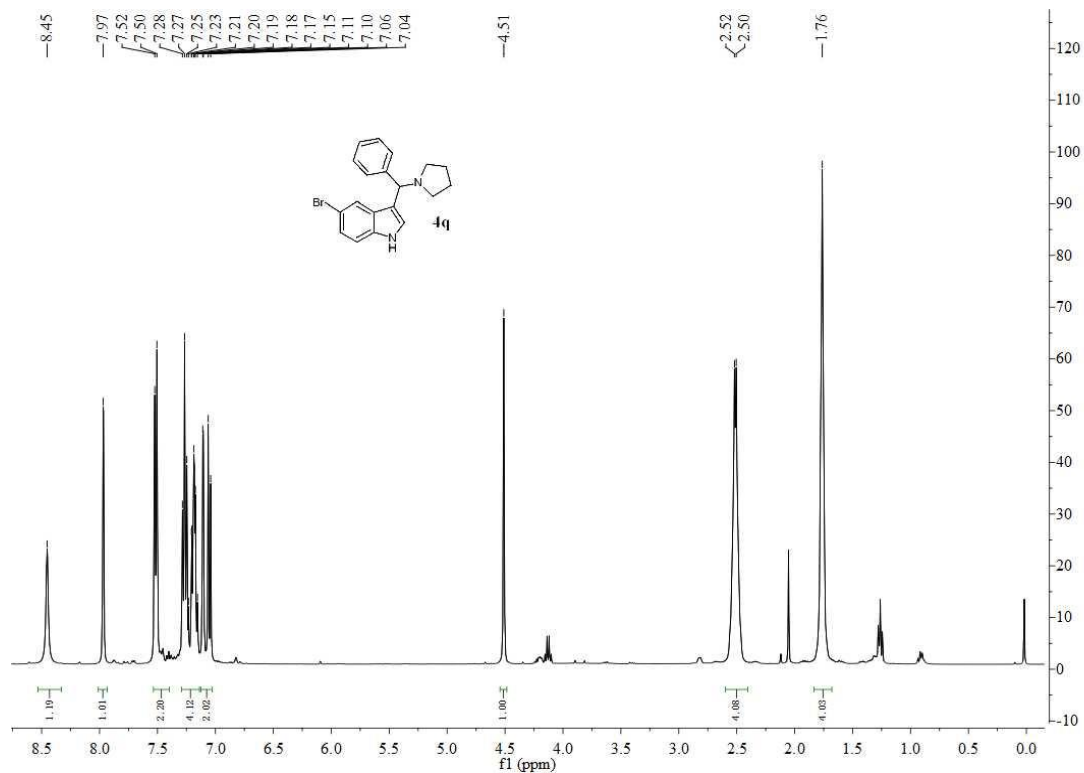
7-Methyl-3-(phenyl(pyrrolidin-1-yl)methyl)-1H-indole (**4p**)

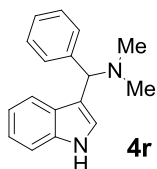
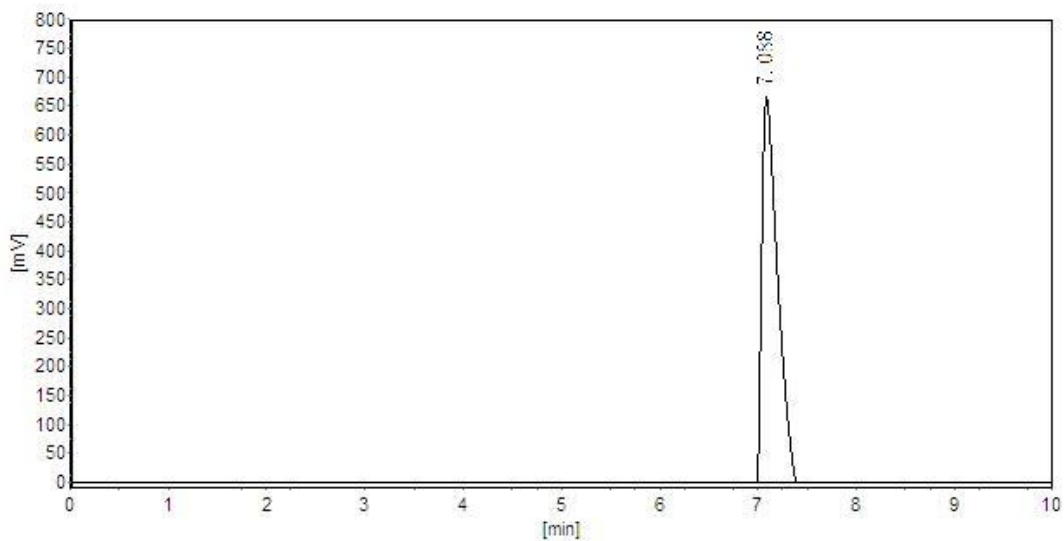




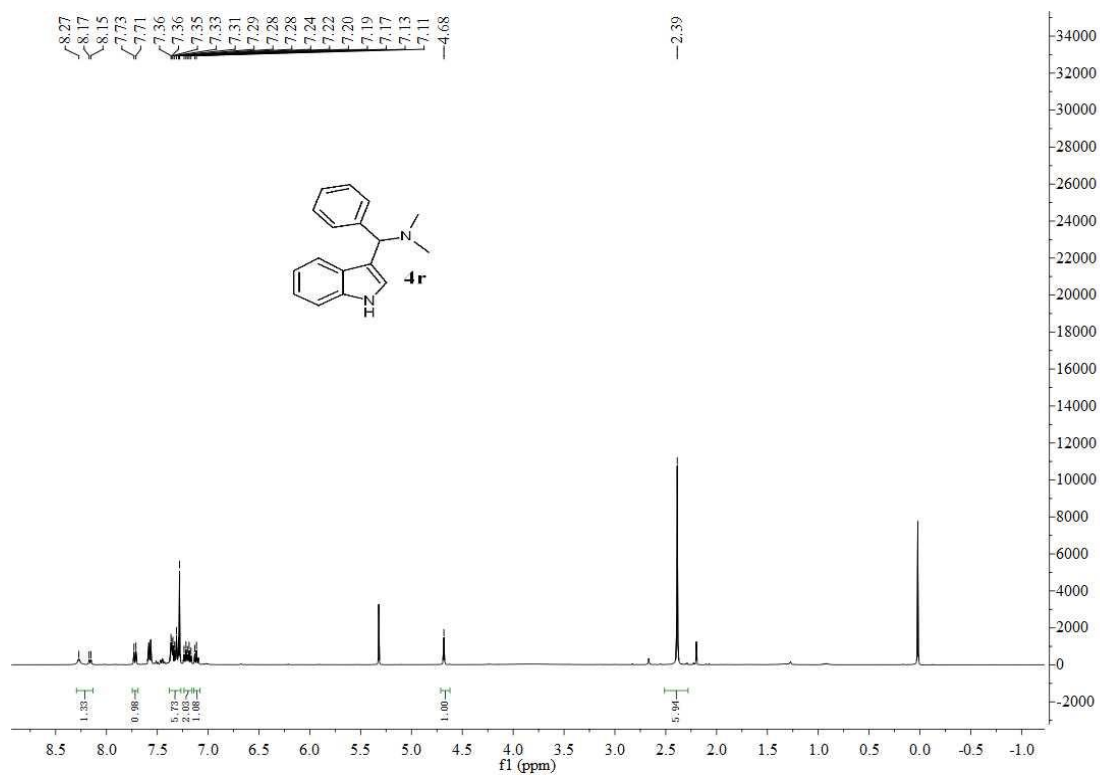


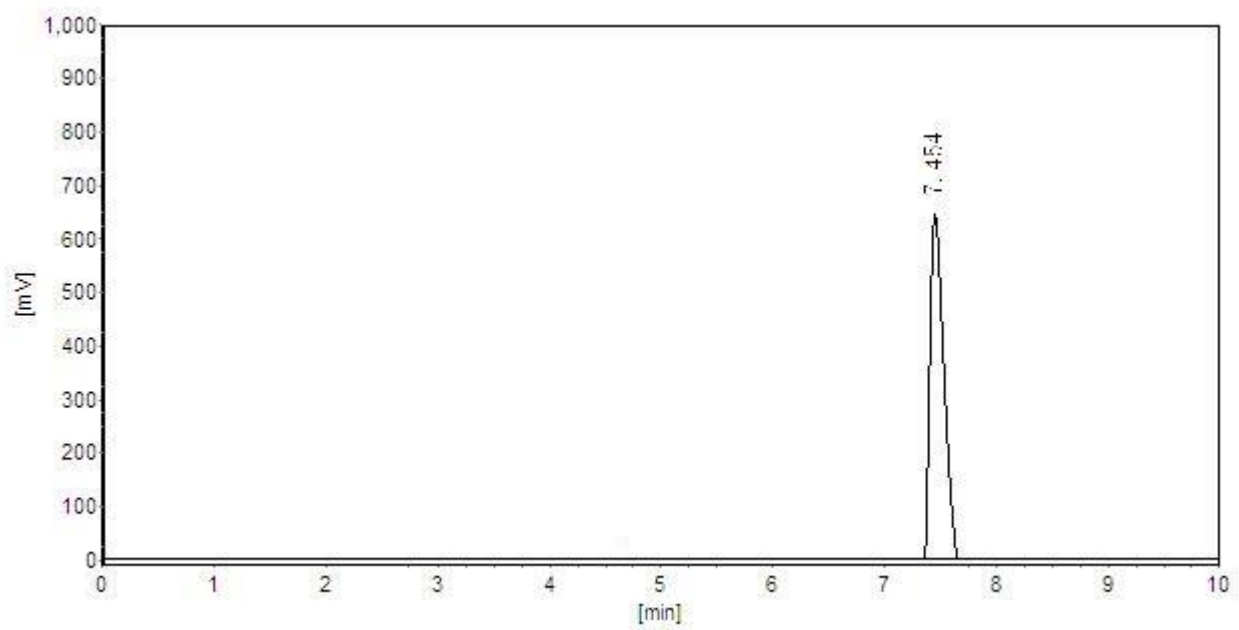
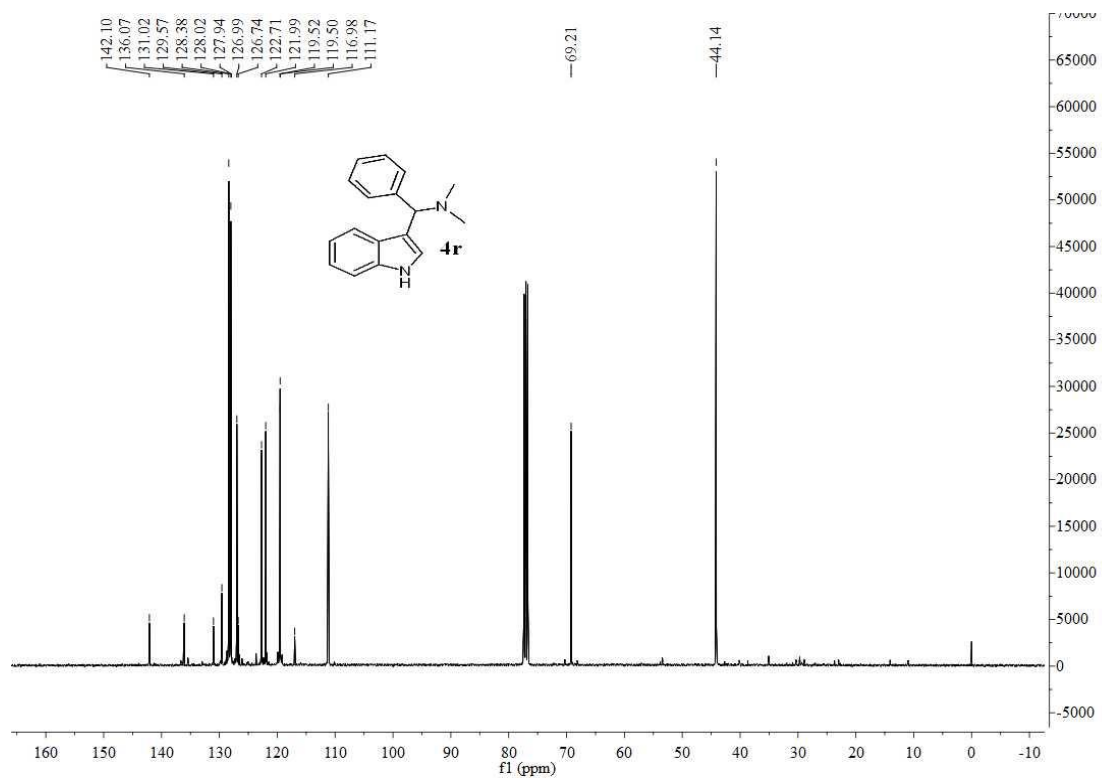
*5-Bromo-3-(phenyl(pyrrolidin-1-yl)methyl)-1H-indole (4q)*

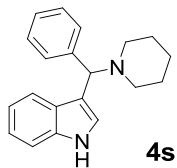




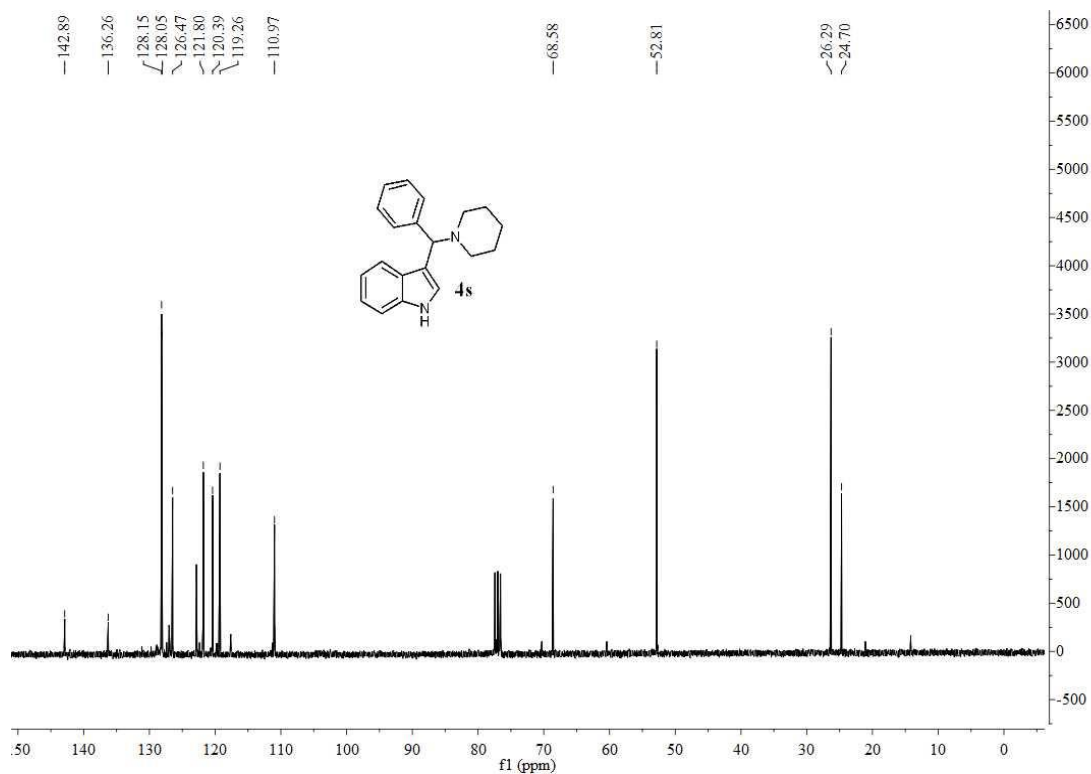
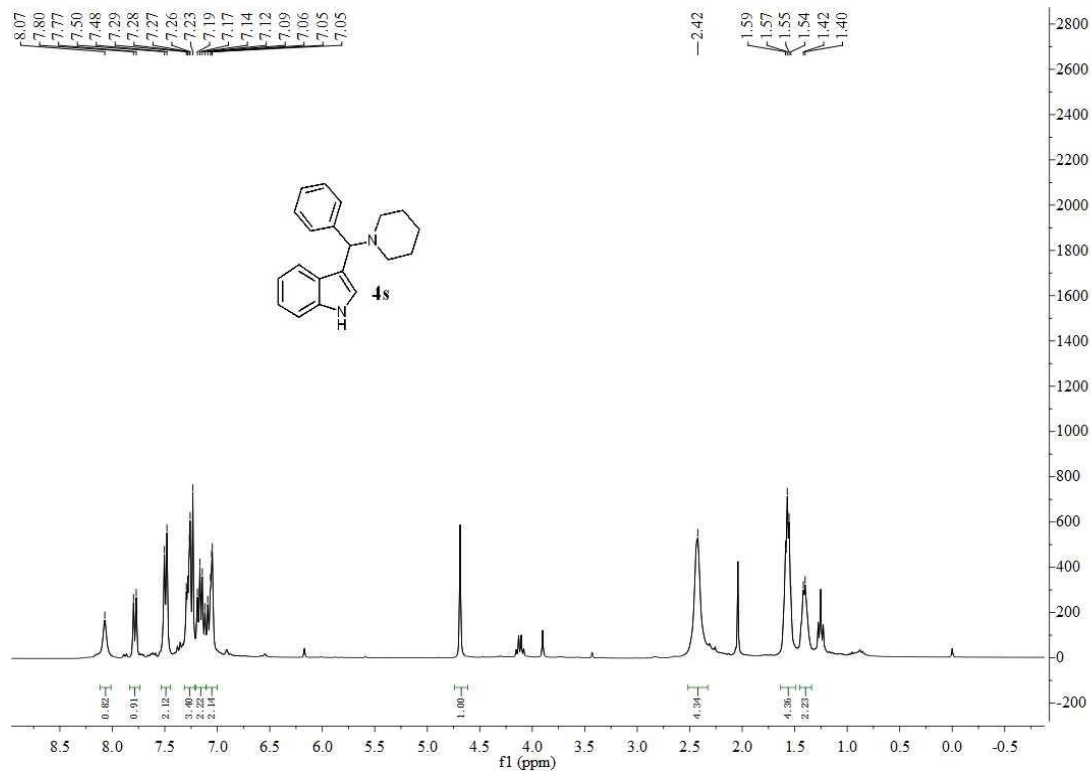
1-(1H-indol-3-yl)-N,N-dimethyl-1-phenylmethanamine (**4r**)



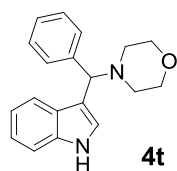
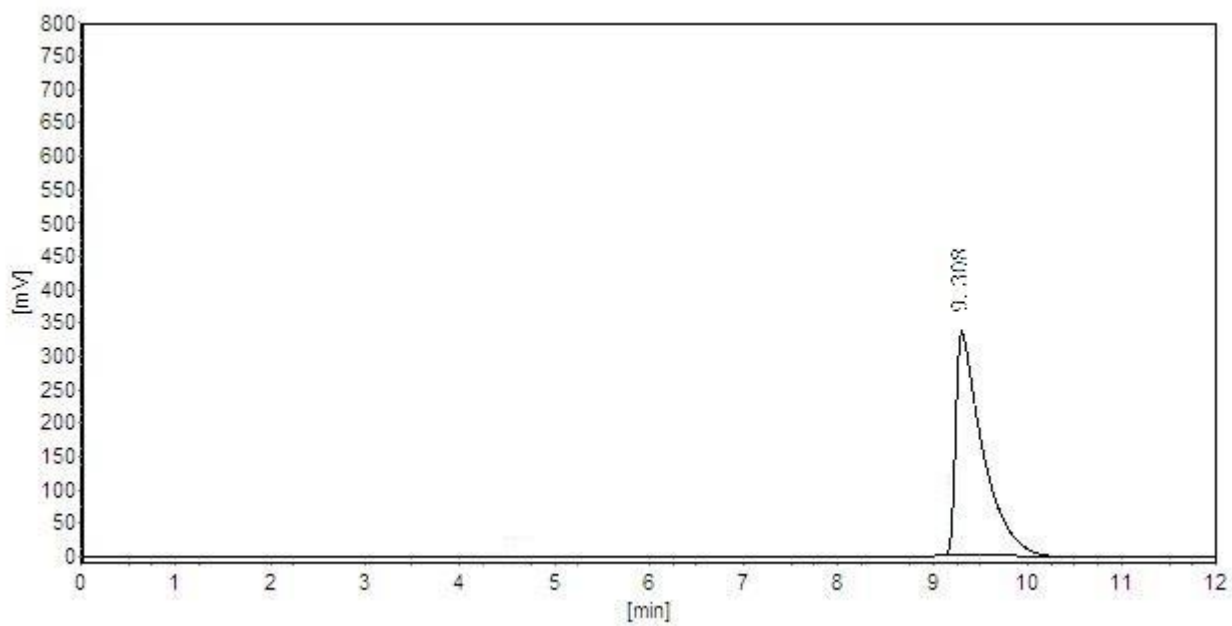




3-(Phenyl(piperidin-1-yl)methyl)-1H-indole (**4s**)







4-((1H-indol-3-yl)(phenyl)methyl)morpholine (**4t**)

