

The reactivity of 9-iodo-6H-indolo[2,3-b]quinoxaline and its N-benzyl derivative in the copper-catalyzed Ullmann reaction was studied. By condensation of 5-iodoindoline-2,3-dione and benzene-1,2-diamine the key product 9-iodo-6H-indolo[2,3-b]quinoxaline was synthesized. By reacting this system with benzyl chloride in the superbase, 6-benzyl-9-iodo-6H-indolo[2,3-b]quinoxaline was obtained. By the reaction between benzylamine and 6-benzyl-9-iodo-6H-indolo[2,3-b]quinoxaline in the presence of the catalyst CuI, in DMF, the target heterocyclic system 6-benzyl-N-phenyl-6H-indolo[2,3-b]quinoxaline-9-amine was synthesized.