

PR-32. SYNTHESIS OF TETRAIODO-10-(4-PHENYL-1*H*-1,2,3-TRIAZOL-1-YL)PYRIDO[1,2-*a*]INDOLE *VIA* BENZYNE-MEDIATED REARRANGEMENT OF 6-PHENYL-3-(PYRIDIN-2-YL)-1,2,4-TRIAZINE

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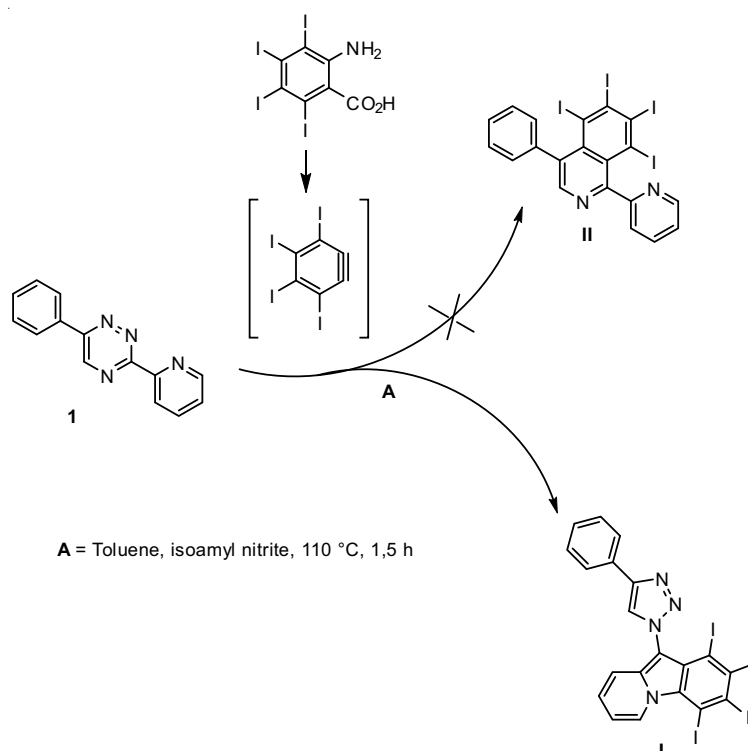
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Aryne chemistry has a great interest in the last three decades for the synthesis of various 1,2-disubstituted benzenes [1]. Employing arynes is a convenient method for double functionalization of arenes and the synthesis of benzo-fused heterocycles [2]. Aryne intermediates are also used for the synthesis of various heteroaromatic systems, including photoluminescent intercalators and other physiologically active compounds, such as alkaloids and their carbo- and heterocyclic analogs and fluorescent sensors for nitroaromatics [3]. In a single operation, aryne chemistry can be utilized for the rapid construction of molecular complexity through the formation of multiple carbon–carbon and carbon–heteroatom bonds in a selective manner [4]. Herein we report the results of our study on the reactions of het(aryl)-substituted-1,2,4-triazines with tetraiodobenzynes, which was aimed to the development of a convenient method for the one pot conversion of 1,2,4-triazines into isoquinolines **I**. Aryl-substituted 3-(2-pyridyl)-1,2,4-triazines **1** were synthesized according to published methods and were used as the starting materials.



Surprisingly, in the reactions between **1** and tetraiodobenzynes generated in situ from 2-amino-tetraiodobenzoic acid and isoamyl nitrite in toluene under reflux, we did not observe the formation of the expected pyridyl-isoquinolines **II**.

References

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