DR-51. SYNTHESIS OF 2-PHENYL-2-(5-PHENYL-2,2′-BIPYRIDIN-6-YL)-ACETONITRILE BY «1,2,4-TRIAZINE» METHOD WITH USING AUTOCLAVE

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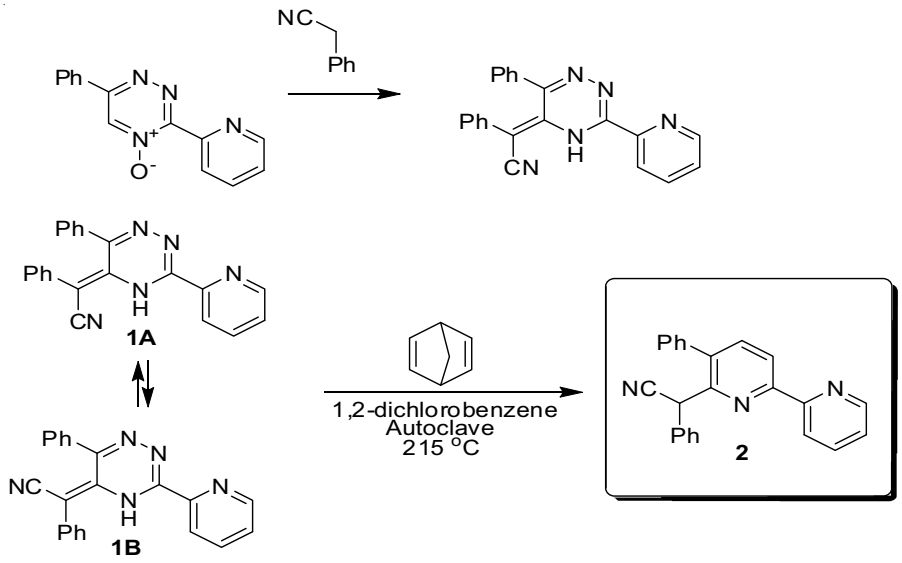
2,2′-Bipyridines are widely used ligands in coordination and supramolecular chemistry. The conversion of the corresponding 3-(2-pyridyl)-1,2,4-triazine derivatives by aza-Diels-Alder reaction with various dienophiles is one of the synthetic approaches to such compounds. In recent years, nucleophilic substitution of hydrogen (or other good leaving group) and the following aza-Diels-Alder reaction sequence has developed within the framework of this synthetic strategy, due to which the 2,2′-bipyridines with a unique set of the substituents can be obtained. Recently, this research has been updated by implementing the aza-Diels-Alder reaction under increased temperature and pressure (in an autoclave), due to which it is possible to obtain bipyridines with electron-donating substituents in the alpha position (alcohols or aliphatic amines moieties). In this work we demonstrate the possibility of obtaining bipyridines with C–H-active compounds on the example of phenylacetonitrile.



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