

Green Chemistry

IUPAC Postgraduate Summer School

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Sustainability through Green Chemistry

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**IUPAC Postgraduate Summer School on Green Chemistry
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Book of Abstracts

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The synthesis of substituted 6-((1H-1,2,3-triazol-1-yl)methyl)-5,6-dihydrothiazolo[2,3- c][1,2,4]triazoles by using click reaction

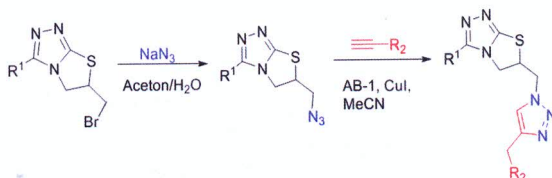
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Nitrogen contained heterocyclic compounds are very common in Nature, including amino acids, purines, pyrimidines, and many other natural products. One of the most interesting heterocyclic compounds is triazoles. They may have potential biological activities and there are various examples in the literature including anti-HIV activity, antimicrobial activity against Gram positive bacteria, selective adrenergic receptor agonist, etc.[1]. From another side the copper(I)-catalyzed union of terminal alkynes and organic azides to give 1,4-disubstituted 1,2,3-triazoles show remarkably broad scope and exquisite selectivity[2]. We tried to combine the biologically interesting groups into our system by using 1,2,3- triazoles as a linker molecule. For that reason the click reaction is used. Based on the conditions from the literature[3] we developed specific conditions for our system. We tried to keep all requirements of click chemistry.



References:

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Two-Step Continuous Synthesis of Dicarbonyl Indoles via I₂/DMSO Promoted Oxidative Coupling: A Green and Practical Approach to Valuable Diketones from Aryl Acetaldehydes