



Vali-e-Asr University
of Rafsanzan



19th Iranian Seminar on Organic Chemistry
Vali-e-Asr University of Rafsanzan, 5 -7 Sep. 2012



Microwave Assisted Solvent Free Reaction of β -nitrostyrene and Trimethylsilyl Azide

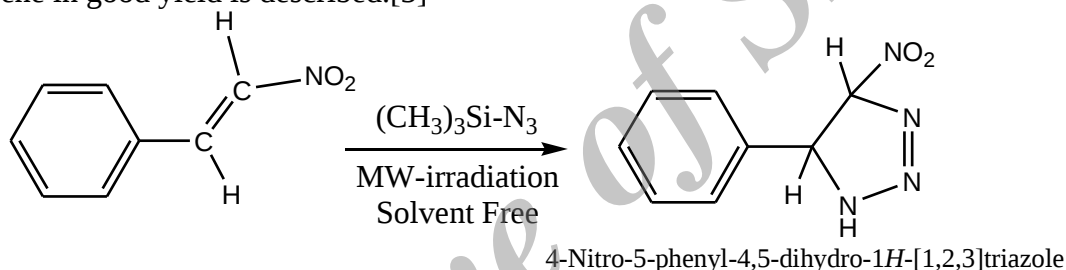
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Microwave-assisted synthesis has been utilized as a powerful and effective technique to promote a group of chemical reactions. Since the first publications on the use of microwave irradiation in organic chemistry, the accelerated process described have been a lure for chemists to further apply new reactions to this technology. Huisgen's 1,3-dipolar cycloaddition of alkynes and azides yielding triazoles is, undoubtedly, the premier example of click chemistry reactions.[1-4] A fast one-pot microwave-assisted solvent free synthesis of 4-Nitro-5-phenyl-4,5-dihydro-1H-[1,2,3]triazole by 1,3-dipolar cycloaddition reactions with trimethylsilyl azide ($\text{Me}_3\text{Si-N}_3$) on β -nitrostyrene in good yield is described.[3]



References:

- [1] Y. Lan, L. Zou, Y. Cao and K. N. Houk, *J. Phys. Chem. A*, **2011**, 115, 13906–13920.
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- [3] A. A. Taherpour and K. Kheradmand, *J. Heterocyclic Chem.*, **46**, **2009**, 131-133.
- [4] A. A. Taherpour, N. Adams and C. Wentrup, , 4th Heron Island Conference On Reactive Intermediates & Unusual Molecules, *Australia*(Queensland), 7-14 July-2007.