



Zanjan University



Iranian Conference of Organic Chemistry
Zanjan University, August 18-20th, 2009



Synthesis of new heterocyclic systems: pyridazino[4,3-e][1,3,4]oxadiazines

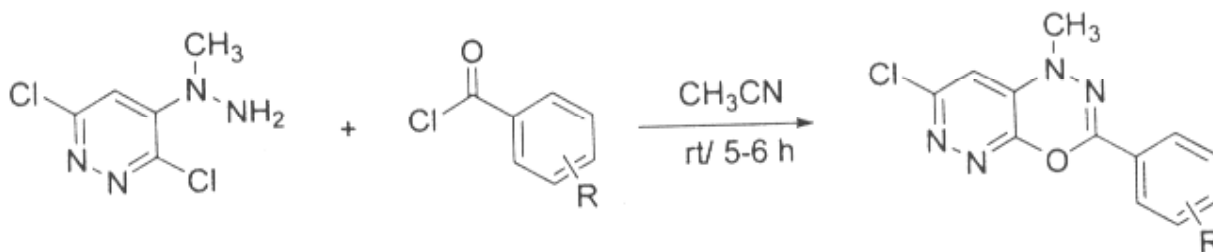
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Oxadiazines are a branch of heterocyclic compounds having great challenges for the synthesis of them. They have a diversity of biological effects [1]. The published methods for the synthesis of oxadiazines especially fused [1,3,4]oxadiazines systems are limited and there is no report on the synthesis of pyridazino[4,3-e][1,3,4]oxadiazine systems in the literatures. In this study, treatment of methylhydrazine with 4-bromo-3,6-dichloro pyridazine gave 3,6-dichloro-4-(1-methylhydrazino) pyridazine.[2] The reaction of this precursor with various aromatic acyl halides in the presence of sodium amide at room temperature yielded the corresponding new heterocyclic ring systems of pyridazino[4,3-e][1,3,4]oxadiazine derivatives.



Reference

1. Barbaric, M.; Kraljic S.; Grcic M.; Zorc B. *Acta Pharm.*, 2003, 53, 175.
2. Bakavoli M.; Mollashahi E.; Seyyedi S. M.; Rahimizadeh M.; Shiri A.; Nikpour M. *J. Sulfur Chem.*, 2007, 28, 613.