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AIPW₁₂O₄₀ as an Effective and Reusable Catalyst for Three-Component Mannich Reactions of Cyclohexanon

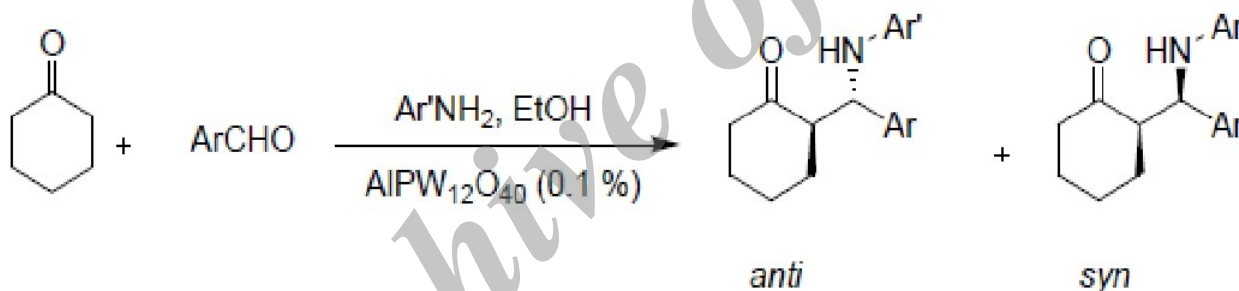
Elaheh Akbarzadeh,^{a,*} Abbas Shockravi,^a M. Saeed Abaee^b

^a Faculty of Chemistry, Kharazmi University, 49, Mofatteh Avenue 1571914911, Tehran, Iran,

^b Chemistry and Chemical Engineering Research Center of Iran, P.O. Box 14335-186, Tehran, Iran

E-mail: akbarzadeh.elaheh@yahoo.com

The asymmetric Mannich reaction has been known as one of pivotal synthetic routes for C-C bond forming reactions to produce chiral β -amino carbonyl compounds from enolizable ketone and a Schiff base [1]. These products as key intermediates has been drawing attention due to their atom-economy [2] and applications in naturally [3, 4], pharmaceutically and biologically active compounds [5]. In this investigation we designing the direct, three- component mannich reactions in ethanolic mixture of cyclohexanon systems with a variety of aromatic aldehydes and aniline derivatives proceeded to afford the corresponding β -amino ketones with anti selectivity in good to high yields within short time. The process is mild, highly efficient and recyclable with the use of very catalytic amount of hetropolyacid.



References

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