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# Synthesis and Characterization of Cu Coordinated L-Ascorbic Acid as coordination Polymer and its Catalytic Performance in the Multi-Component Reactions

**Mostafa Koolivand**,[a] **Mohsen Nikoorazm**,[a,*]

[a] *Department of Chemistry, Faculty of Science, Ilam University, Ilam, Iran.*

[*] *E-mail: e_nikoorazm@yahoo.com*

A Cu@AACP Metal-Organic Framework was synthesized and characterized by TGA, FT-IR, AAS, SEM, BET, MAP and EDX. The results of the analyses confirmed the successful synthesis of Cu@accorbic acid coordination polymer (Cu@AACP). And also show any deformation of the porous structure of the parent coordination polymer. The catalytic performance was examined in synthesizing of 2, 3-dihydroquinazolin-4(1H)-ones and polyhydroquinolines. The results show that an improved product yield is obtained between 84-95%. Recycle test of the catalyst confirmed that the heterogeneous catalyst exhibited good catalytic stability, efficiency and very high activity in successive runs because of its unique pore network.

***Keywords:*** coordination polymer, Metal-Organic Framework, 2, 3-dihydroquinazolin-4(1H)-ones, catalyst

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[*] Address correspondence to M. Nikoorazm, E-mail address: e_nikoorazm@yahoo.com & Arash Ghorbani-Choghamarani, E-mail addresses: a.ghorbani@basu.ac.ir & arashghch58@yahoo.com

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