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Preparation of Ni-microsphere using Ascorbic acid as coordinating ligand and study of its catalytic properties in sulfoxidation reactions And synthesis of 5-substituted 1H-tetrazoles

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In this study, a novel ascorbic acid-based Ni-microsphere was prepared via the hydrothermal method. The obtained Ni-microsphere's morphology and porosity were assessed using the following techniques: XRD, FTIR, TGA, EDS, WDX, AAS, DSC, BET, and SEM. Examining the produced MOF's catalytic activity in cyclo-condensation and sulfoxidation reactions. It was found that Recycling the Ni-microsphere five times without any loss of catalytic effectiveness was simple.

Keywords: Ascorbic acid, Coordinating, 5-substituted 1H-tetrazoles, Oxidation reactions

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