

CATALYSIS VIA NANOPARTICLES: MAGNETICALLY RECOVERABLE NANO-CATALYSTS IN BENIGN MEDIA

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Abstract:

Microwave (MW)-assisted hydrothermal process has been used to generate nanoferrites [1] and micro-pine structured catalysts. [2] Sustainable syntheses involving nano-catalysts will be highlighted [3] with the main focus being recyclable and reusable magnetic ferrites using MW irradiation. [4] The application of several nano-catalysts (Pd, Ni, Ru, Cu etc.) immobilized on biodegradable and recyclable supports e. g. cellulose and chitosan or on magnetic ferrites via ligands such as dopamine or glutathione will be described, [5,6] including environmental remediation. [7]

Keywords: Microwave-assisted Synthesis, Magnetic Nano-ferrites, Sustainable Synthesis, Nano-Catalysts

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