



البحث الرابع

"A New Sustainable Strategy for Synthesis of Novel Series of Bis-imidazole and Bis-1,3-thiazine Derivatives"

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Abstract:

An expeditious, eco-friendly, and efficacious protocol was achieved for the preparation of bis-imidazoles and bis-1,3-thiazines from the reaction of tetracyanoethylene with dialdehydes or bis-thiosemicarbazones, respectively. Merely mixing and sonicating the starting materials furnishes the desirable products in considerable yields. This reaction smoothly proceeded and presented many merits, over conventional and mechanochemical approaches, including simple experimental workup procedure, no by-products, and short reaction time. Moreover, the protocol scoring admirably in various green metrics, as a consequence, shows these approaches to be an ideal sustainable and green process.