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Effects of Lewis Acids on the Baeyer-Villiger Oxidation Reaction

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Poster Presentation P2

EFFECTS OF LEWIS ACIDS ON THE BAEYER-VILLIGER OXIDATION REACTION

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The products of the Baeyer-Villiger oxidation, viz. esters and lactones are useful synthetic intermediates and often difficult to make by other synthetic methods. There are many applications of the Baeyer-Villiger oxidation, some of which include the synthesis of antibiotics, steroids, pheromones, and monomers for polymerization. We have studied the effect of Lewis acids such as bismuth triflate, erbium triflate, and iron(III) chloride on the Baeyer-Villiger oxidation of various cyclic ketones. These catalysts are relatively non toxicity, and non-corrosive. Preliminary results from this study will be presented.