

Phosphorous Acid: An Efficient and Recyclable Liquid Catalyst for the Synthesis of α -Aminophosphonates

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Abstract : A simple, efficient and general method has been developed for the high diastereoselective synthesis of diethyl α -aminophosphonates in water through "one-pot" three-component reaction of aromatic aldehydes, aminophenols and dialkyl phosphites in the presence of a low catalytic amount (10mol%) of phosphorous acid as highly stable catalyst is described.

Keywords : DFT, HOMO-LUMO, phosphonic acid, aminophenols

Conference Title : ICCBE 2017 : International Conference on Chemical and Biological Engineering

Conference Location : Istanbul, Turkey

Conference Dates : July 27-28, 2017