



High Yield Synthesis of Some Aromatic Phosphonic Acid Derivatives and Related Compounds as Surface Tethers for Energy Harvesting Technologies

Amshumali Mungalimane

Department of Chemistry/Industrial Chemistry, Vijayanagara Sri Krishnadevaraya University,
Jnanasagara campus, Cantonment, Ballari-583105, **INDIA**

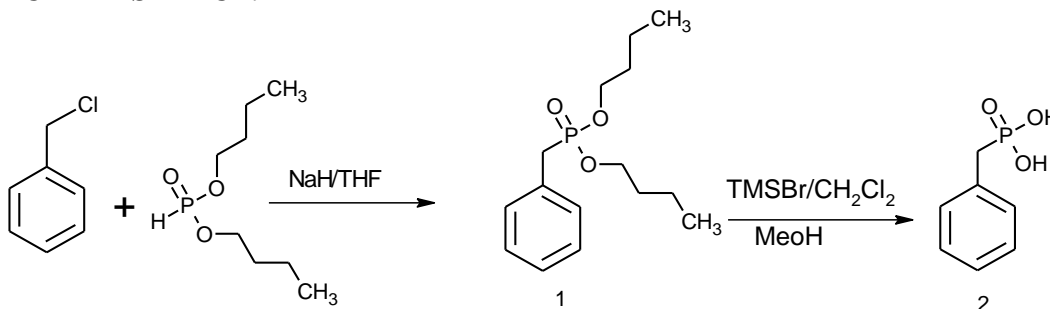
Email: amshumali@vskub.ac.in

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ABSTRACT

Efficient synthesis of novel 1-Phenyl ethyl phosphonic acid, 4-vinylbenzylphosphonic acid. Benzyl phosphonic acid and Perfluorophenyl methacrylate and such other derivatives are reported here. These derivatives have a potential application as tethers to nanoparticle surfaces that can promote efficient electron transfer process in solar energy conversion.

GRAPHICAL ABSTRACT:



Keywords: Surface tethers, Coupling reaction, Phosphonic acid derivatives, perfluorophenyl methacrylate, Solar energy conversion