

**Aluminum tris(dihydrogen phosphate) [Al(H<sub>2</sub>PO<sub>4</sub>)<sub>3</sub>] as an efficient and heterogeneous catalyst for the environmentally friendly preparation of N,N'-alkylidene biscarbamates**

**ABSTRACT**

A tri-component reaction of phenyl acetylene/1-Hexyne, aromatic aldehyde and benzyl/methyl carbamate. Aluminum tris(dihydrogen phosphate) [Al(H<sub>2</sub>PO<sub>4</sub>)<sub>3</sub>] has been described to establish different kinds N,N'-alkylidene biscarbamates. The corresponding N,N'-alkylidene biscarbamates have been obtained in good to excellent yields. The prepared catalysts were characterized by X-ray diffraction. The products were obtained with high conversion and yields.

**Keyword:** Al(H<sub>2</sub>PO<sub>4</sub>)<sub>3</sub>; Environmentally friendly synthesis; Heterogeneous catalyst; N,N'-alkylidene biscarbamates