

**Silica supported barium chloride (SiO<sub>2</sub>-BaCl<sub>2</sub>): efficient and heterogeneous catalyst for the environmentally friendly preparation of N,N'-alkylidene bisamides under solvent-free condition**

ABSTRACT

A series of N,N'-alkylidene bisamides were prepared via a green and environmentally friendly synthetic protocol from the reaction of phenyl acetylene/1-Hexyne, aromatic aldehyde and benzamide/acetamide. Silica Supported Barium Chloride (SiO<sub>2</sub>-BaCl<sub>2</sub>) catalyzes the reaction. The prepared catalysts were characterized by X-ray diffraction. The products were obtained with high conversion and yields.

**Keyword:** SiO<sub>2</sub>-BaCl<sub>2</sub>; Heterogeneous catalyst; Environmentally friendly synthesis; N,N'-alkylidene bisamides