

ABSTRACT FOR POSTER PRESENTATION

CHEMICAL SCIENCE

Synthesis of novel Imidazole based Coumarin's as potential antimicrobial activity

D.Ashok* and Katta Ramakrishna

*Green and Medicinal Chemistry Laboratory, Department of Chemistry, Osmania University,
Hyderabad, 500007, Telangana, India.*

E-mail: ashokdou@gmail.com, krishnakattarama@gmail.com

Imidazoles are an important class of heterocycles and include many substances of both biological and chemical interest. Synthetic imidazoles are present in many fungicides and antifungal, antiprotozoal, and antihypertensive medications. A series of novel imidazole based Coumarin derivatives were designed and synthesized by the reaction of substituted imidazoles with different substituted Coumarin compounds in DMF solvent, anhydrous K_2CO_3 to give good yields. All the synthesised compounds were characterized by IR, 1H NMR, ^{13}C NMR and Mass spectral analysis. The *in vitro* antibacterial screening of the all compounds was carried out.

Key Words: Imidazole, Coumarin, in vitro, Microbial activity