Microbial screening of carbonyl di-imidazolium salts under well/disc diffusion techniques

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Ionic liquids are attractive field of research towards greener approach and major role of replacement of toxic as well as volatile organic solvent with safer alternatives. Ionic liquids are showed some important biological activities with most common imidazolium type of carbons have been studied in a number of systems to access potential environment value. Pyridinium imidazolium type of ionic liquids are ability to exert toxicological activities on microorganism like bacterium and fresh water green algae are reported past decade. Demberelnyamba and co-workers reported that the antimicrobial screening of a series of some substituted imidazolium halides against some of the clinically important bacterial and fungal microorganisms. They have mentioned that unsubstituted imidazolium salts showed lesser microbial activity than the substituted imidazolium salts. Antimicrobial activities varied from substituent present in imidazolium salts. Biocidal behaviors of larger organic cations like imidazolium, pyridinium and benzalkonium types of species are commonly used because of it inhibits the bacterial (or) fungal growth. Toxicity itself can be alternating behaviors which may be useful in a variety of application like antibacterial, antiseptics, biocides, disinfectants, and antifouling properties. We have synthesized carbonyl diimidazolium salt under conventional and silica supported solvent free condition. We have screened the anti-bacterial screening of our synthesized ionic liquids under well diffusion/disc diffusion methods.

Biography
P. Ganapathi is Research Scholar from Presidency College. He have 3 International journal publications and have given poster and oral presentations in the National and International conferences.

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