



## Editorial

It is of great pleasure and honour we introduce this issue of *Mapana-Journal of Sciences*. This issue focuses on Biological Sciences with four articles from different fields.

The first article is on the drug resistant *Mycobacterium tuberculosis* wherein the authors have studied the mutations associated with the Pyrazinamide Resistance in Clinical Isolates of *M. tuberculosis* isolated from Kerala. This study is of much importance as the magnitude of the drug resistance in *M. tuberculosis* isolates are on the raise and Pyrazinamide resistance is important as it is one of the five first-line drug in the anti-tuberculosis treatment regimen. The authors have analysed the pyrazinamide susceptibility of 65 clinical isolates of *Mycobacterium tuberculosis* by *pncA* gene sequencing and correlated the observations with pyrazinamidase activity.

While the first article is of medical importance, the second article is of importance to environment and in bioremediation. Phenol and Phenolic compounds like halophenols, nitrophenols and alkylphenols are important constituents of petrochemical waste waters arising from transformation processes. Phenol is known to its antimicrobial activity by denaturing proteins and disrupting cell membranes. In this article the authors describe the ability of *Arthrobacter citreus* spp. strain MSA - 2005 to metabolize various levels of phenols and phenolics and the possibility of its use to treat the phenolic wastes which otherwise enter into the water bodies unless treated properly.

The third article deals with the Bioprospecting potential of bacteria isolated from Arctic region, and portraits its industrial importance. In the paper the authors describe their view on different uses and potential of these organisms in various industrial applications and they have shown the novel biofilm inhibition activity of some of the *Actinomycetes*, which they have isolated during the Indian Arctic Expedition- 2009, against the *Vibrio cholerae*, the causative organism of Cholera.

Microbes being one of the oldest inhabitants on the earth, have successfully survived the harsh environments by a number of survival strategies. The fourth article, a review article, deals with one of such strategy, the formation of biofilms. The authors have made a good image of Formation, Properties and Industrial impact of Biofilms, and mention different Strategies for Control of Biofilms.

We thank all the authors and reviewers for their contribution and all the readers for their support and constructive criticism. We look forward for your continued support and cooperation and also invite you all to publish your valued research outcomes in various issues of *Mapana-Journal of Sciences*.

We specially place on record of our gratitude to Dr Biljo V Joseph and Dr Suma S for their support for this issue of *Mapana*.

Both the printed and electronic versions of the journal are available. In combination with the above, the intense publicity activities started have also helped to improve the Journal's visibility. The Journal has wide circulation across many of the major research centres and universities in India and abroad.

### *Editorial Team*