



## Synthesis, Characterization and Antifungal Studies of Terephthalamide & its Complex with La-N

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**ABSTRACT:** The antimicrobial effect of compound terephthalamide synthesized through aminolysis of PET waste and its complex formed through its complexation with lanthanum nitrate was investigated on different fungal species after their characterization through elemental analysis and various spectroscopic studies i.e. FTIR, UV-Visible, NMR etc. The conidia of various fungal species were exposed to both terephthalamide and its complex at variable concentration from 0.4mg/ml- 1.0 mg/ml media at 37 °C. Fungal species as controls and in the presence of solvent DMSO only, were also included in the study to study the interference of solvent in antimicrobial activity of amide synthesized. Compound exposure on microbial species resulted in suppression of growths for microbes and work as good antifungal agent when complexed with La-N. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

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