

Article Info

 Open Access

Citation: Iqbal, M.N., Ashraf, A., 2020. Copper(II) Complexes as Potential Antibacterial Agents. Int. J. Nanotechnol. Allied Sci., 4(1): 9-11.

Published: January 31, 2020

***Corresponding Author:**
Muhammad Naeem Iqbal

Email:
driqbalnaeem@hotmail.com

Copyright: ©2020 PSM. This work is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International License.

Copper(II) Complexes as Potential Antibacterial Agents

Muhammad Naeem Iqbal^{1,2*}, Asfa Ashraf^{2,3}

¹The School of Life Sciences, Fujian Agriculture and Forestry University, Fuzhou 350002, China.

²Pakistan Science Mission (PSM), Narowal (Noor Kot 51770), Pakistan.

³The School of Life Sciences, Fujian Normal University, Fuzhou 350117, China.

Abstract:

There is increasing interest in the use of copper (Cu)-containing complexes to combat bacterial infections. The antibacterial potential of two copper(II) complexes namely, (+) -(S)-2-(6-Methoxynaphthalen-2-yl) propanoic acid (Naproxen) and N-(4-Nitro-2-phenoxyphenyl)methanesulfonamide (nimesulide) was studied against a range of medically significant pathogens, including *Staphylococcus aureus*, *Bacillus spizizenii*, *Escherichia coli*, and *Klebsiella pneumonia*. The antimicrobial assay showed that the complexes are active against *S. aureus* and *B. spizizenii*, *E. coli* and *K. pneumonia*. Hence, complexes possess biological activities and can be used to treat medically significant pathogens.

Keywords: Cu(II) complexes, *Staphylococcus aureus*, *Bacillus spizizenii*, *Escherichia coli*, *Klebsiella pneumonia*.