



## Synthesis and Characterization of Zn(II) Schiff Complex Derived from Pyrazole

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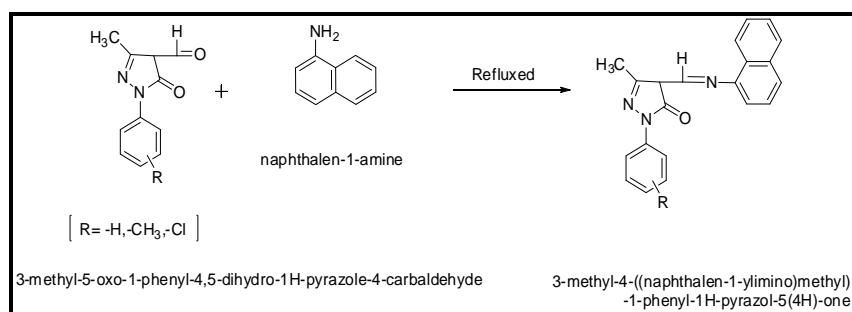
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Accepted on 8<sup>th</sup> August, 2018

### ABSTRACT

A series of novel Schiff base ligands and its Zn(II) coordination compounds were synthesized, characterized and evaluated for antibacterial and antioxidant activity. All the synthesized ligands and complexes were characterized by spectroscopic techniques and Electronic spectra. The in-vitro antimicrobial Schiff base complexes bear polar and nonpolar properties together; this makes them suitable for permeation to the cells and tissues, it enhances the activity against the bacteria and fungi. The antioxidant properties were measured with DPPH (1,1-diphenyl-2-picrylhydrazyl). These properties were due to the unique feature of ligands such as highest lipophilicity, lowest electron withdrawing power and highest polarizability.

### Graphical Abstract



Synthesis of Schiff base ligands

**Keywords:** Schiff base pyrazolone, Zn(II) complexes, Antibacterial, Antioxidant.