Available online at www.joac.info

ISSN: 2278-1862

Journal of Applicable Chemistry

2015, 4 (5): 1477-1485

(International Peer Reviewed Journal)

Synthesis of some transitional metal ion complexes derived from 2-{(*E*)-[(6-amino-2-phenylpyrimidin-4-yl) imino] methyl}-5-chlorophenol

Manohar V Lokhande

Department of Chemistry, Sathaye College, Vile Parle (E), Mumbai-400057 Maharashtra, **INDIA**

Email: manohar2210@gmail.com

Accepted on 7th August 2015

ABSTRACT

Novel complexes of 2-{(E)-[(6-amino-2-phenylpyrimidin-4-yl) imino]methyl}-5-chlorophenol with Mn(II), Co(II), Ni(II), Cu(II), Zn(II) and Pd(II) were prepared. On the basis of some analytical and physicochemical techniques they are characterized by elemental analysis, molar conductivity, UV-Vis, IR, magnetic susceptibility, TGA, Mass and X-Ray Powder diffraction spectra. Electronic and magnetic susceptibility measurements of the complexes were octahedral geometry for Pd (II) and Ni (II) and square planar geometry for all the other complexes. The ESR spectral data provide information about their structures on the basis of Hamiltonian parameters and the degree of covalence parameters. These metal complexes were also screened for its anti-bacterial activities for its inhibiting potential.

Keywords: Schiff base, Spectral studies, Magnetic moments, Microbial studies.