



**Synthesis, Characterization and Biological Activity of (*N*¹*E*, *N*²*Z*)-*N*¹, *N*²-Bis
((1-Phenyl-3-Aryl-1*H*-Pyrazol-4-Yl) Methylene) Benzene-1, 2-Diamines**

N. J. P. Subhashini^{1*}, Jampaiah Amanaganti¹ and P. Acharya Nagarjuna²

1. Department of Chemistry, University College of Technology, Osmania University, Hyderabad, **INDIA**

2. Department of Microbiology, University College of Science, Osmania University, Hyderabad, **INDIA**

Email: njsubhashini@yahoo.co.in

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ABSTRACT

Seven novel Pyrazole ring containing Schiff's bases (*N*¹*E*, *N*²*Z*)-*N*¹,*N*²-bis((1-phenyl-3-aryl-1*H*-pyrazol-4-yl)methylene) benzene-1,2-diamines (6a-g) have been synthesized from 1-phenyl-3-aryl-1*H*-pyrazole-4-carbaldehyde (4a-g), and benzene-1, 2-diamine (5) by Microwave Irradiation method. The newly synthesized compounds were characterized by using IR, ¹H-NMR, ¹³C-NMR, Mass spectral data and Elemental analysis. These compounds were evaluated for their antibacterial activity against Gram positive viz. *Staphylococcus aureus* and *Bacillus subtilis* and Gram negative viz. *Escherichia coli*, *Klebsiella pneumoniae* strains using a micro dilution method. Synthesized compounds showed activity against a panel of microorganisms.

Keywords: (*E*)-1-phenyl-2-(1-phenylethylidene)hydrazine, 1-phenyl-3-aryl-1*H*-pyrazole-4-carbaldehyde, Schiff's base, Antibacterial activity.
