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# Synthesis, characterization and antibacterial activity of Pyrrolidine based Mannich base ligand and its metal (II) complexes

S Ravichandran<sup>1\*</sup> and M. Petchiammal<sup>2</sup>

<sup>1</sup>Associate Professor in Chemistry, Sree Vidyanikethan Engineering College, Tirupati-517 102, India.

<sup>2</sup>Research Scholar in Chemistry, Research and Development Centre, Bharathiar University, Coimbatore – 641 046, India.

**Abstract** : Mannich base, N-(1-pyrrolidinobenzyl)semicarbazide (PBS), formed by the condensation of pyrrolidine, semicarbazide and benzaldehyde, and its Cu(II), Ni(II), Co(II) and Zn(II) complexes have been synthesized. Their structures have been elucidated on the basis of analytical, magnetic, electrical conductivity, spectral study as well as elemental analyses. The X-band ESR spectra of Cu(II) complex in DMSO at 300 and 77 K were recorded and their salient features are reported.

**Keywords** . : Mannich base; transition metal (II) complexes; spectral study; antimicrobial activity.

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