



## Metal (II) Complexes as Potent Apoptosis Inducers in Testicular Germ Cells of *Capra hircus*

Kiran Singh<sup>1</sup>, Sunita Raparia<sup>1\*</sup>, Jitender Kumar Bhardwaj<sup>2</sup> and Priyanka Saraf<sup>2</sup>

1. Department of Chemistry, Kurukshetra University, Kurukshetra, Haryana 136 119, **INDIA**

2. Department of Zoology, Kurukshetra University, Kurukshetra, Haryana 136 119, **INDIA**

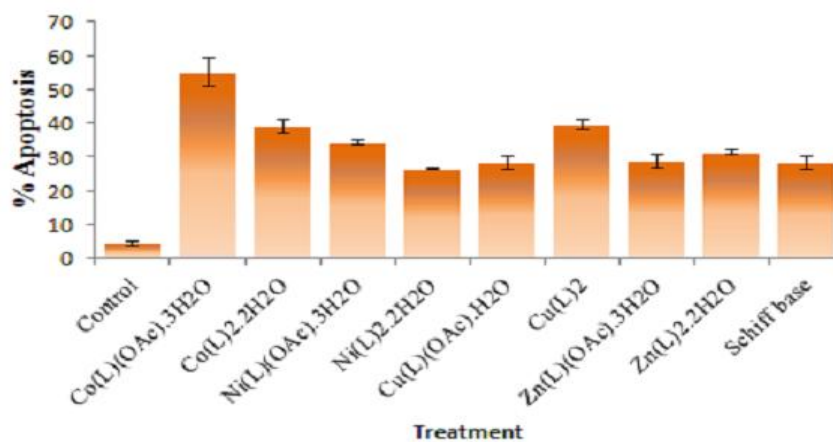
Email: [sunitaraparia@gmail.com](mailto:sunitaraparia@gmail.com)

Accepted on 4<sup>th</sup> January 2018, Published online on 27<sup>th</sup> January 2018

### ABSTRACT

Metal (II) complexes (Co, Ni, Cu, Zn) of an imine were synthesized. The synthesized compounds were characterized by analytical, spectroscopic and thermal techniques and evaluated for their apoptosis-induction potential in testicular germ cells of goat. In situ end labeling (TUNEL) assay demonstrate that the complexes exhibit increased incidence of DNA fragmentation. The current findings suggested that apoptosis comprised major mode of cell death by metal complexes.

### Graphical Abstract:



**Keywords:** Apoptosis, fluorescence, metal complexes, pyrazole, Schiff base.