



## Synthesis and spectral studies of organoarsenic(III) complexes of Schiff bases

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### ABSTRACT

Some phenylarsenic(III) Schiff base complexes of the type  $\text{PhAs}[\text{OC}(\text{R})\text{CHC}(\text{R}')\text{NC}(\text{R}'')]_n\text{Cl}_{2-n}$  (where  $n = 1$  or  $2$ ,  $\text{R} = \text{CH}_3$ ,  $\text{R}' = \text{C}_6\text{H}_5$ ,  $\text{R}'' = -\text{H}_2\text{CH}_2$ ,  $-\text{HCH}_2\text{C}_6\text{H}_5$ ;  $\text{R} = \text{R}' = \text{C}_6\text{H}_5$ ,  $\text{R}'' = -\text{H}_2\text{CH}_2$ ,  $-\text{HCH}_2\text{C}_6\text{H}_5$ ) have been prepared by the reaction of  $\text{PhAsCl}_2$  with sodium salt of Schiff base in 1: 1 and 1: 2 molar ratios in anhydrous benzene. These compounds have been characterized by elemental analyses, molecular weight measurement, IR, and multinuclear NMR ( $^1\text{H}$  &  $^{13}\text{C}$ ) spectroscopy. Antibacterial and antifungal potential of Schiff base and their corresponding phenyl arsenic (III) derivatives have also discussed.

**Keywords:** Phenylarsenic (III), Schiff base, spectroscopy, Antibacterial, Antifungal.

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