



## A Spontaneous, Convenient Synthesis and Biological Evaluation of Indole Derivatives

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# **A spontaneous, convenient synthesis and biological evaluation of Indole derivatives**

Mamta H. Chauhan, Nilesh L. Solanki<sup>†</sup>, Neha K. Baku<sup>†</sup> and Viresh H. Shah<sup>†</sup> \*

\* All correspondence should be addressed to Dr. Viresh Shah.

\*E-mail address: [drmamtachauhan83@gmail.com](mailto:drmamtachauhan83@gmail.com), [drvireshshah@gmail.com](mailto:drvireshshah@gmail.com)

## **Abstract**

Oxindoline derivatives are interesting heterocyclic compounds which show diverse biological and pharmacological properties. In this research oxindoline derivative was prepared by one-pot condensation reaction of isatin, dimedone, and various active methylene using piperidine as a basic catalyst and methanol as a solvent under stirring at room temperature. The products were characterized by FT-IR, Mass, <sup>1</sup>H NMR and <sup>13</sup>C NMR spectroscopy.

**Keywords:** Multi-component reactions, Isatin, Dimedone, oxindolines, Antimicrobial evaluation.

## **Introduction**

In 1900, Bayer created the first spiran described as a bicyclic hydrocarbon connected by a single carbon. The term spirocyclohexanes was used to describe the family of such hydrocarbon. Due to the tetrahedral nature of the Spiro-linked carbon, the ring planes are nearly perpendicular to each other.

The chemistry of spiro indoles in which an indole ring is joined to S and N containing heterocycles at the C-3 position through a spiro carbon atom is of great