

**ABSTRACT**

COMPARISON STUDY OF SYNTHESIS OF  
*N*-BENZYLIDENEISONICOTINOHYDRAZIDE WITH  
*N*-(2-METHOXYBENZYLIDENE)ISONICOTINOHYDRAZIDE  
FROM ISONICOTINOHYDRAZIDE

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In this research, the author synthesized *N*-benzylidene-isonicotinohydrazide and *N*-(2-methoxybenzylidene)isonicotinohydrazide. The obtained yield of products would be compared (with the same condition). Reaction mechanism of this synthesis is nucleophilic addition by eliminating water. Methoxy group at 2-methoxybenzaldehyde caused hindrance effect and made it is more difficult to be attacked by a nucleophile. The structure of the products were identified by UV spectrophotometry, IR spectrophotometry, and <sup>1</sup>H-NMR spectrometry. The *N*-benzylidene-isonicotinohydrazide is produced as white crystal with 98.32% yield and *N*-(2-methoxybenzylidene)isonicotinohydrazide is produced as white crystal with 66.52% yield. As conclusion, synthesis of *N*-benzylideneisonicotinohydrazide gave yield higher than *N*-(2-methoxybenzylidene)isonicotinohydrazide.

Keywords : *N*-benzylideneisonicotinohydrazide, *N*-(2-methoxybenzylidene)isonicotinohydrazide, nucleophilic addition, 2-methoxy, synthesis.

