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# Spectrophotometric Determination of Aromatic Aldehydes Based on Their Condensation with 3-Methyl-1-Phenylpyrazolin-5-one. A Comparative Kinetic Study.

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## Abstract

The condensation reaction of 3-methyl-1-phenylpyrazolin-5-one with benzaldehyde and some substituted benzaldehydes in chloroform medium and in the presence of piperidine has been investigated spectrophotometrically at 30 – 45°C. The reaction follows overall second order kinetics, first order in each of the reactants and zero order with respect to piperidine. The rate of condensation decreases with the presence of electron withdrawing groups and increases with electron donating groups

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aromatic aldehydes in a concentration range of 0.01-0.1 mM is proposed.

**Q Key Words:** [Aromatic aldehydes](#) [3-Methyl-1-phenylpyrazolin-5-one](#) [spectrophotometry](#).

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