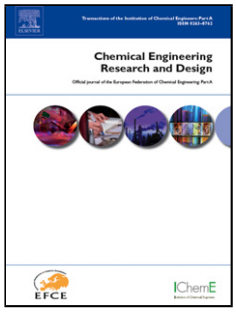

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Kinetic modelling and kinetic parameters calculation in the lipase-catalysed synthesis of geranyl acetate.

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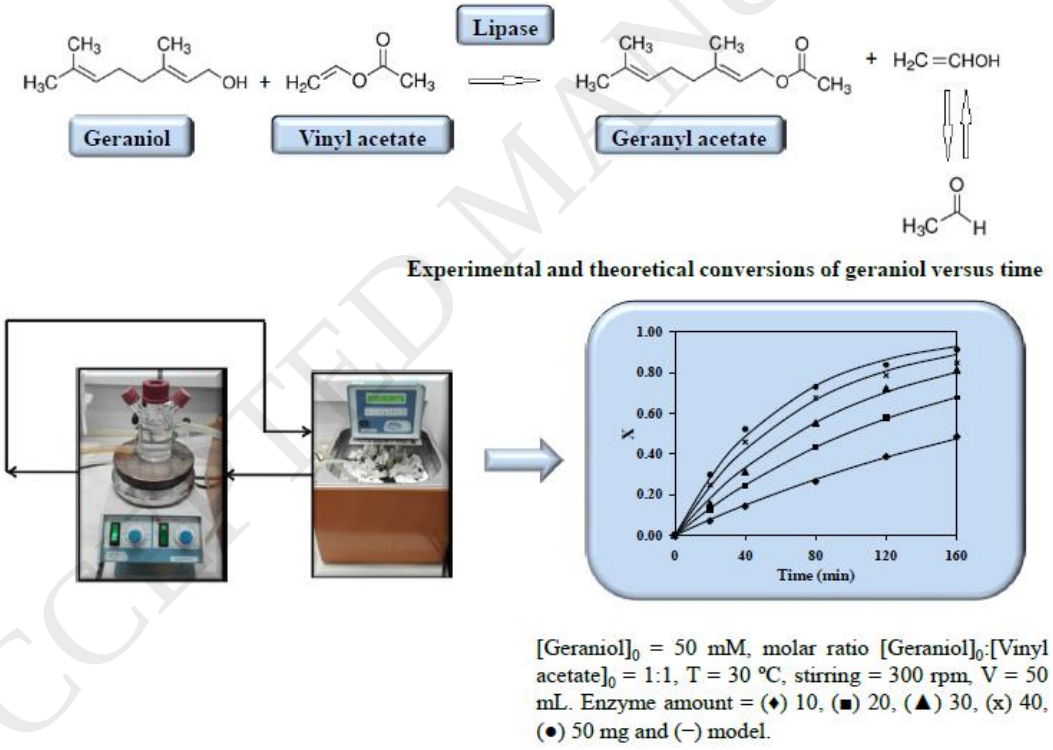
Graphical abstract



[Geraniol]$_0$ = 50 mM, molar ratio [Geraniol]$_0$:[Vinyl acetate]$_0$ = 1:1, T = 30 ºC, stirring = 300 rpm, V = 50 mL. Enzyme amount = (♦) 10, (■) 20, (▲) 30, (x) 40, (●) 50 mg and (−) model.

Highlights

- Geranyl acetate was synthesized by transesterification with Novozym® 435 lipase
- High geranyl acetate conversion (98.4%) was obtained in some of assayed conditions
- Enzyme amount is the most significant variable on the reaction rate and yield