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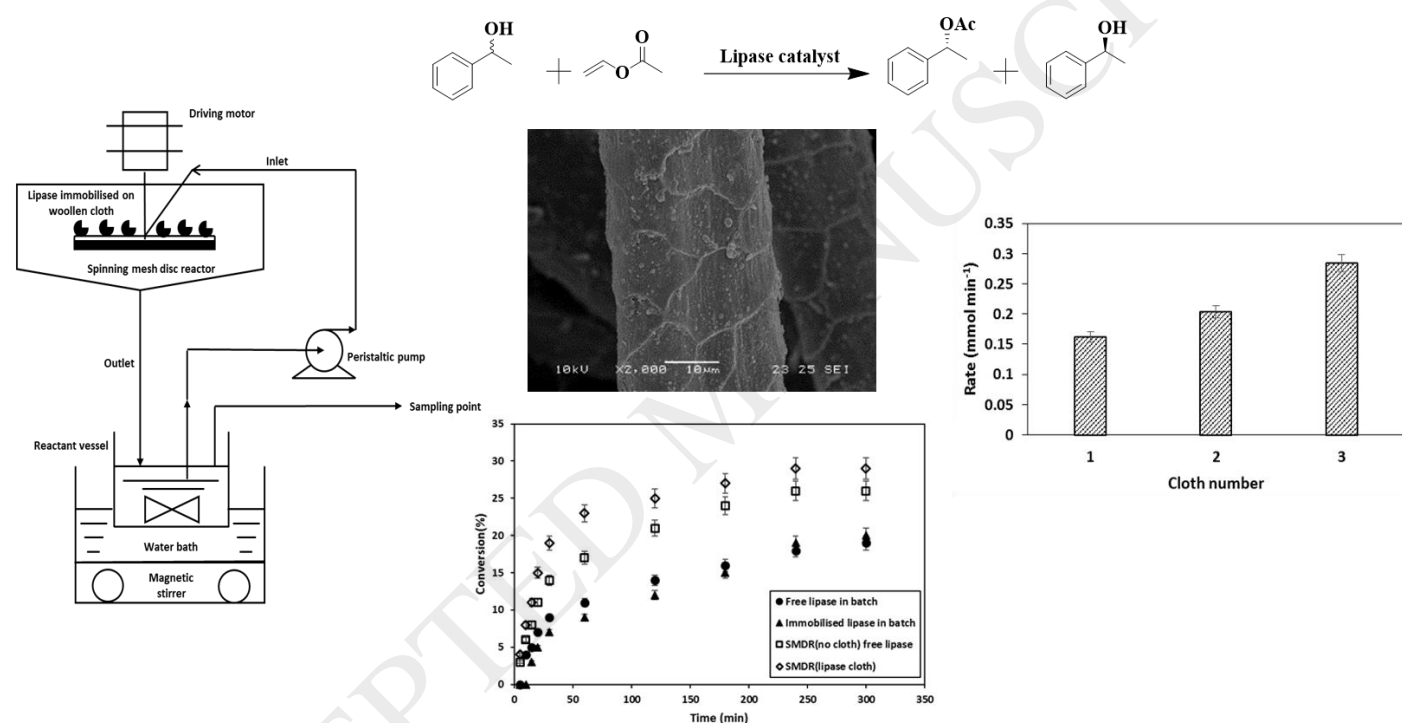
Kinetic resolution of 1-phenylethanol in the spinning mesh disc reactor: Investigating the reactor performance using immobilised lipase catalyst

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Graphical abstract



Paper Highlights

- Enzyme catalysed kinetic resolution investigated for the first time in the SMDR
- Inexpensive amano lipase was immobilised on wool and used as a catalyst
- Feed throughput in the SMDR scaled up to 250 ml without loss in reaction efficiency
- Productivity in the SMDR was 10.92 g l⁻¹ h⁻¹ compared to 7.05 g l⁻¹ h⁻¹ in batch
- Improved reaction rate: 0.16 mmol min⁻¹ (one cloth) to 0.28 mmol min⁻¹ (three cloths)

Abstract

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