

## Continuous production and separation of fatty acid ester in ionic liquids

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The lipase-catalyzed transesterification of butyl alcohol and vinyl laurate in [Omim][TfO] was investigated as a model reaction for the continuous production and separation system in ionic liquids. Since the ester product is insoluble in ionic liquids, the product could be easily separated from reaction mixture. The continuous process which uses a double-layer type continuous stirred tank reactor was developed for the production of butyl laurate. The results showed that our developed system could be successfully operated for at least 60 hours with the optimum flow rate of 0.375 mL/h for this system.