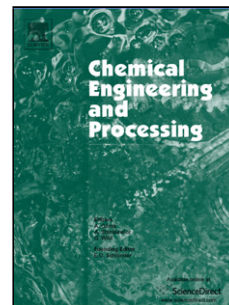


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Application of pervaporation in the bio-production of glycerol carbonate

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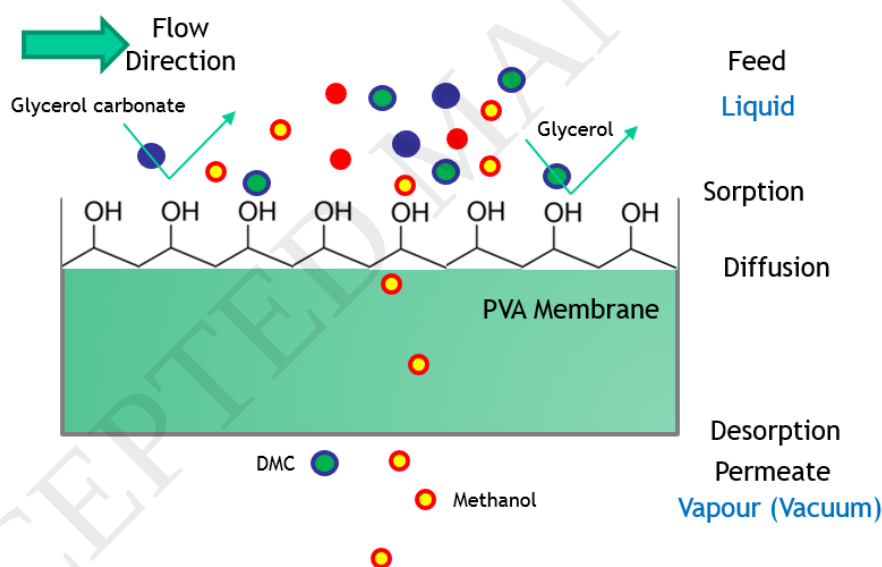
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Graphical abstract



Highlights

- The performance of commercial membranes for separation quaternary bio-production of glycerol carbonate mixture is studied.
- These membranes enhance the permeation of methanol and has a high selectivity.
- The McCabe-Thiele diagram shows that pervaporation can separate methanol more effectively than flash distillation.

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