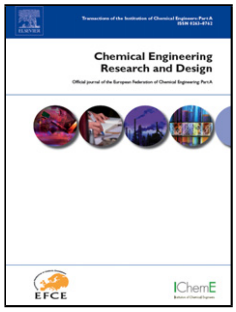

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Development of Alternative Methanol/Dimethyl Carbonate Separation Systems by Extractive Distillation - A Holistic Approach

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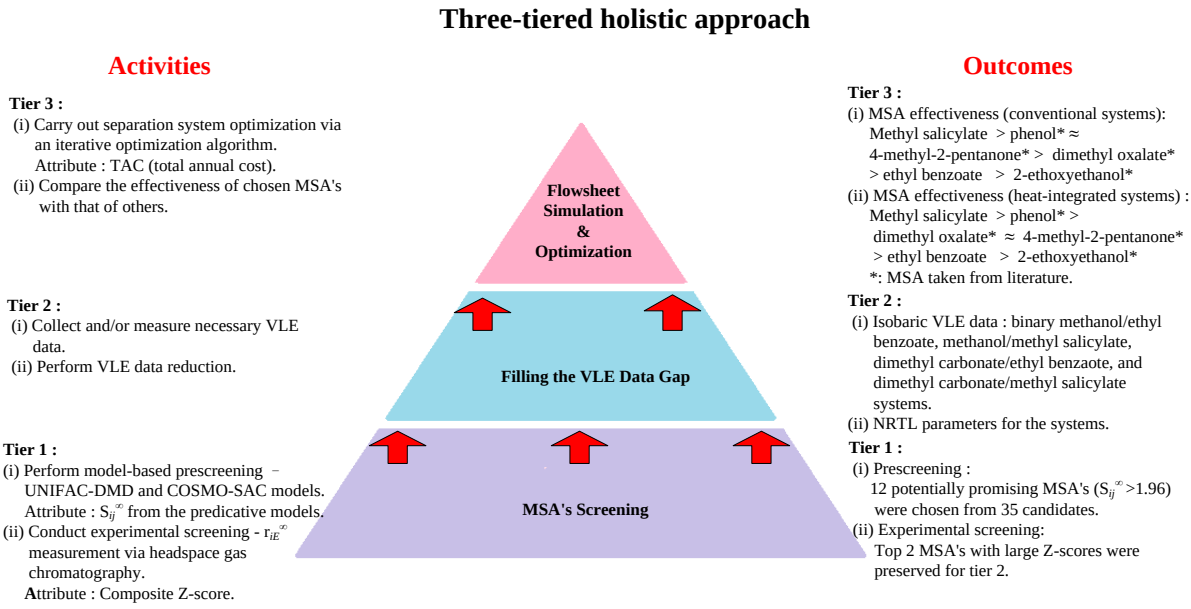
Graphical abstract



Highlights

- A holistic, three-tier approach is employed to develop MeOH/DMC separation systems.
- A two-level screening strategy is deployed in the search of good entrainers.
- A composite Z-score is incorporated to aid in the entrainer search.
- Effectiveness of the entrainers is assessed via process simulation and optimization.
- One of the proposed entrainers (methyl salicylate) outperforms all other entrainers.