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Title: SAPO-18 and SAPO-34 catalysts for propylene production from the oligomerization-cracking of ethylene or 1-butene

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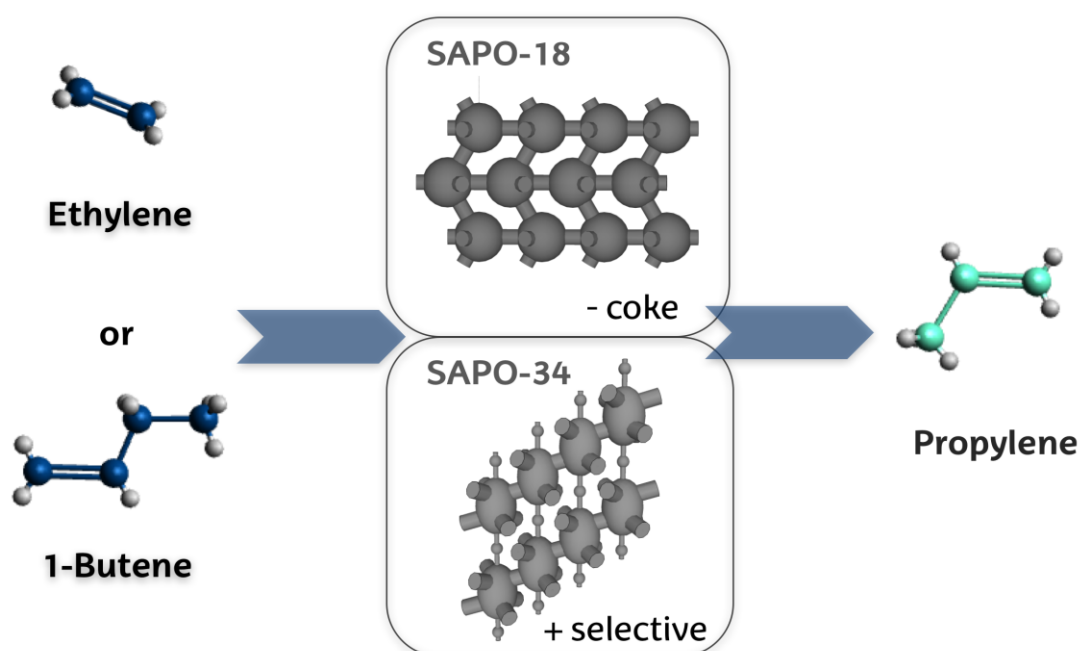
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SAPO-18 and SAPO-34 catalysts for propylene production from the oligomerization-cracking of ethylene or 1-butene

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Graphical abstract



Highlights

- Comparison between SAPO-34 and SAPO-18 catalysts for the conversion of ethylene or 1-butene into propylene
- SAPO-18 catalyst suffers less deactivation by coke due to the higher accessibility of acid sites, while this coke is more aliphatic in nature
- SAPO-34 catalyst has higher selectivity of propylene but deactivates completely after 100 min
- The deactivation is faster in the conversion of ethylene compared with that of 1-butene for both catalyst

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