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A DETAILED REACTION MECHANISM FOR OXIDATIVE COUPLING OF METHANE OVER $\text{Mn}/\text{Na}_2\text{WO}_4/\text{SiO}_2$ CATALYST FOR NON-ISOTHERMAL CONDITIONS

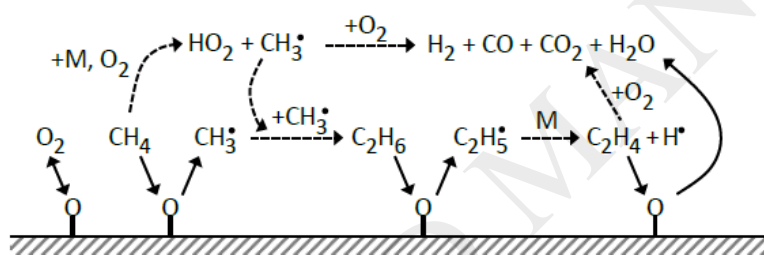
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Graphical Abstract



Highlights

- New gas-phase and surface kinetic model for oxidative coupling of methane.
- Validated experimentally over wide range of temperatures and methane/oxygen ratios.
- Model accurately accounts for non-isothermal behavior.
- Will enable improvements to ethylene from natural gas production processes.

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