Development
of
Optimal Catalyst Designs & Operating Strategies
for
Lean NOx Reduction
in
Coupled LNT-SCR Systems

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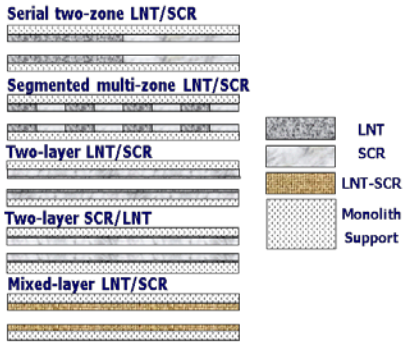
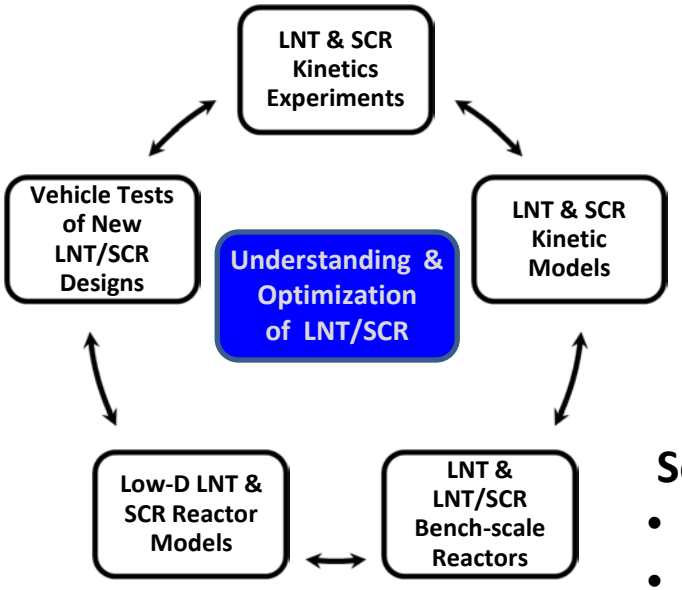
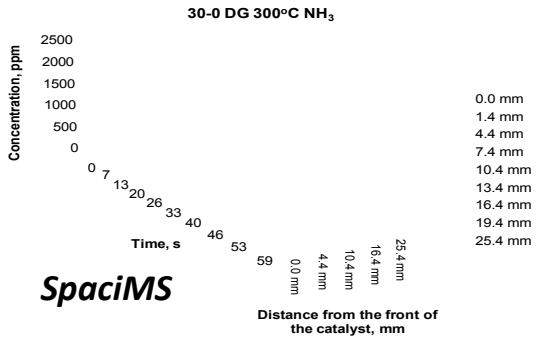
Location: P-5

Project Goal, Activities & Findings

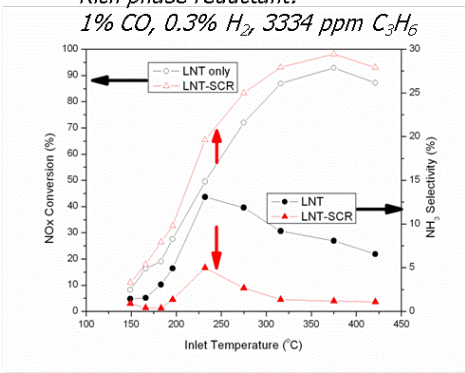


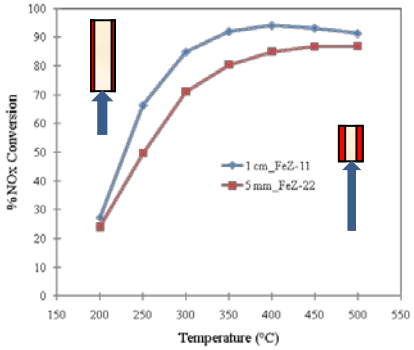
Goal: Identify NO*x* reduction mechanisms in LNT and *in situ* SCR catalysts, and to use that knowledge to design optimal LNT-SCR catalyst architectures and operating strategies.





Rich phase reductant:
1% CO, 0.3% H_2, 3334 ppm C_3H_6





Selected Findings

- Maximal NH_3 yields quantified in LNT
- Non-NH_3 mechanism operative in LNT-SCR
- Diffusion limitations in standard & fast SCR