## Rapid Aging Protocols for Diesel Aftertreatment Devices: NO $\mathbf{x}_{\mathrm{x}}$ Abatement Catalysts <br> 

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## Thermal Aging of Lean NO $\mathbf{x}_{\mathbf{x}}$ Traps (P-10)

- Thermal Aging Protocol developed
- Both engine and bench procedures
- LNTs from BASF and Delphi evaluated
- Thermal aging at $\mathrm{T}<800^{\circ} \mathrm{C}$ has only small impact
- $\mathrm{T} \geq 900^{\circ} \mathrm{C}$ significantly degrades performance

- Some materials effects observed at all temperatures
- Above $\sim 850^{\circ} \mathrm{C}$ additional effects observed
- Correlation and modeling of performance and material changes


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Potassium Migration


