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Innovative SCR Materials and System for Low Temperature Aftertreatment

CRADA 460 (PNNL 78416)

May 2022

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FCA US LLC (Stellantis)

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Abstract

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Abstract

US automotive OEMs are required to meet the twin challenge of corporate average fleet fuel economy of 54.5mpg and stringent Bin30/SULEV30 emissions standards for light duty vehicles by 2025. This creates a heavy burden on the R&D community to discover and develop the necessary enabling technologies by 2023 to integrate into powertrain systems intended for 2025. Further amplifying the emissions challenge is the reduction in engine exhaust energy resulting from more fuel-efficient powertrains and the regulatory requirement of 15-year system performance. This forces aftertreatment systems to continue to push their operational limits to increasingly lower temperatures. This CRADA will focus on a broad and very important area of critical relevance to DOE and Stellantis, i.e., development of low temperature aftertreatment approaches, while not sacrificing durability.

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