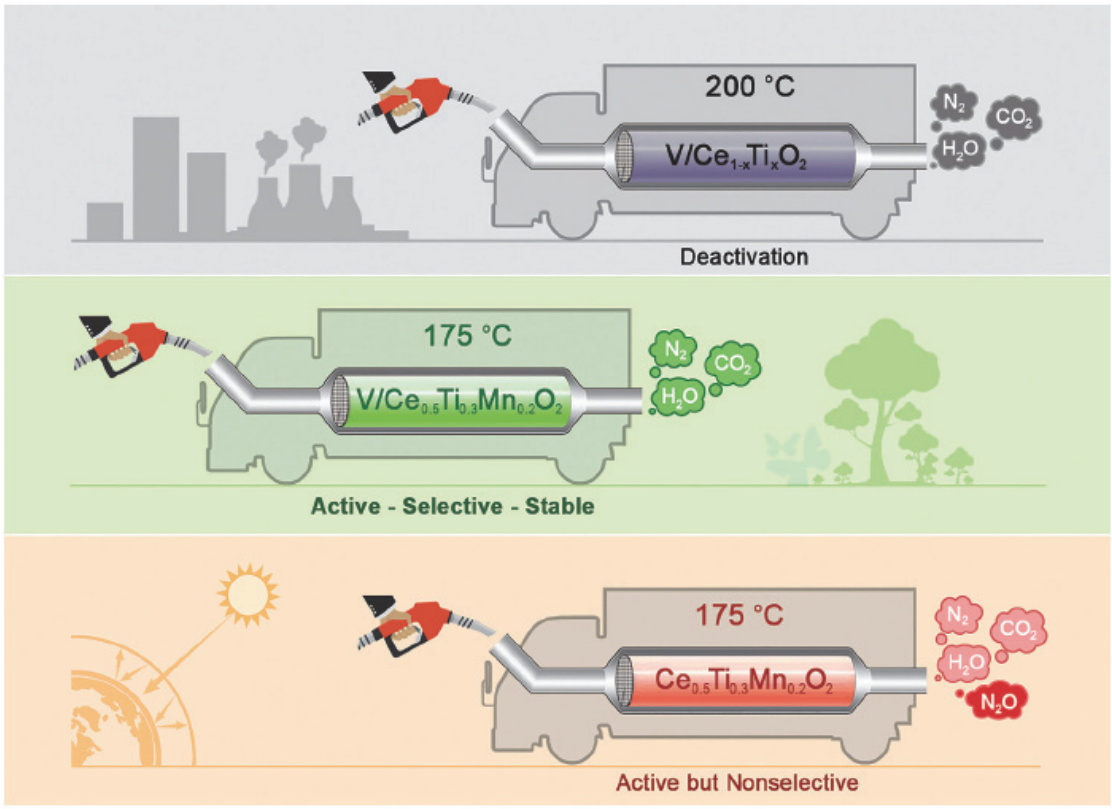
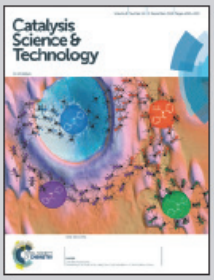


Showcasing research from Angelika Brückner's laboratory, Department of Catalytic In situ Studies, Leibniz Institute for Catalysis at the University of Rostock.

Synergistic effect of VO_x and MnO_x surface species for improved performance of $V_2O_5/Ce_{0.5}Ti_{0.5-x}Mn_xO_{2-\delta}$ catalysts in low-temperature NH_3-SCR of NO

Efficient catalysts with 100 % NH3/NO conversion and negligible N2O formation at 175 °C have been obtained by incorporating Mn and V in Ce1−xTixO2, due to the interplay of Mn3+/Mn2+ and VO3+/VO2+ couples in close vicinity. Remarkable resistance against SO2 and water results from the partial coverage of MnOx by VOx.

As featured in:



See Angelika Brückner *et al.*, *Catal. Sci. Technol.*, 2018, **8**, 6360.

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T. H. Vuong, S. Bartling, U. Bentrup, H. Lund, J. Rabeah, H. Atia, U. Armbruster, and **A. Brückner**. *Catalysis Science and Technology* **2018**, *8,* 6360–6374. Synergistic effect of VO_x and MnO_x surface species for improved performance of $V_2O_5/Ce_{0.5}Ti_{0.5}-xMn_xO_{2-\delta}$ catalysts in low-temperature NH_3-SCR of NO.