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Selective Catalytic Reduction: From Basic Science to deNOx Applications

Guest Editors:

Dr. Feng Gao
Institute for Integrated Catalysis, Pacific Northwest National Laboratory, Richland, WA 99354, USA

Dr. Todd J. Toops
National Transportation Research Center, Oak Ridge National Laboratory, Knoxville, TN 37932, USA

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Message from the Guest Editors

The development and commercialization of catalytic processes for remediating toxic emissions from stational sources and from vehicles has been a truly remarkable achievement for the environmental catalysis community. Selective catalytic reduction (SCR) of NOx with ammonia is among the most important and successful such techniques that we have witnessed, evolving from vanadia- to exchanged zeolite-based over the past 50 years. This Special Issue welcomes both review and original research articles on all aspects of SCR catalysis, including but not limited to the following topics:

- Recent advances in the synthesis and optimization of oxide- and zeolite-based SCR catalytic materials;
- The latest studies on the chemical mechanisms of SCR;
- Studies on deactivation and regeneration of SCR catalysts;
- Advances in in situ and operando methods for studying SCR catalyst materials and processes;
- Recent advances in computational research for SCR research.