



Emission Control Catalysis

Guest Editors:

Dr. Todd J. Toops

National Transportation
Research Center, Oak Ridge
National Laboratory, Knoxville,
TN 37932, USA

Dr. Sreshtha Sinha Majumdar

National Transportation
Research Center, Oak Ridge
National Laboratory, Knoxville,
TN 37932, USA

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editors

Mobile and stationary engines such as internal combustion engines in transportation and gas turbines in power plants and distributed power generation systems, operate in conditions ranging from stoichiometric to lean to maximize efficiency, minimize fuel consumption, and meet rigorous emissions standards. Depending on the fuel, combustion mode and operating air-to-fuel ratio, engine-out emissions may contain varying levels of harmful regulated pollutants which can lead to the formation of acid rain, ground level ozone, and smog. Regulations on these criteria pollutants are getting stricter as the world is moving towards near-zero emissions regulations.

Catalytic emissions abatement technologies are promising for effectively reducing pollutant emissions.

We invite manuscript submissions on catalytic emissions control technologies which will address these challenges including:

- Three-way catalysts;
- Gasoline particulate filters;
- Diesel particulate filters;
- Hydrocarbon traps;
- Passive NO_x adsorbers;
- Ammonia slip catalysts;
- Selective catalytic reduction of NO_x;
- Low temperature methane oxidation catalysts.

