



## Diesel Soot Catalysis

Guest Editor:

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### Message from the Guest Editor

Dear Colleagues,

Among the different alternatives to mitigate the Particulate Matter emissions from diesel vehicles, the entrapment of particulates from exhaust gases by Diesel Particulate Filters (DPFs) has received much interest. As the soot can be burnt off at  $>600$  °C, while typical diesel engine exhaust temperature is 200–500 °C, it's necessary to increase the catalytic oxidation rate at low temperatures. Moreover, the feasibility of soot combustion depends much on the catalyst–soot contact conditions, hence it's necessary to maximize their interaction. The most promising catalysts are stable materials that exhibit high mobility of the oxidizing species able to be effectively transferred to the soot surface under required conditions.

The Special Issue aims to cover promising research in the field of diesel soot oxidation catalysis. Welcome are studies in: (1) novel catalytic materials and catalysts designs (2) scientific understanding of reaction pathways and kinetics (3) strategies for catalytic coatings into DPFs and filter regeneration and (4) coated-DPF modelling and simulation approaches.

Prof. Avelina García-García  
Guest Editor

