Euro gas emission standards to reduce air pollution

The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with the EU’s commitment to global climate action under the Paris Agreement.

EUROPEAN EMISSION STANDARDS

- 2005: The catalytic converter and electronic fuel injection became mandatory for new registrations.
- 2017: Different limitations are introduced for petrol and diesel engines.
- 2021: The use of DPF filter becomes mandatory for diesel engines.
- 2021: EU is working on one new limited proposal that will be presented by the end of 2021.

Prometheus and Benchmark Catalysts’ Characteristics

The catalytic activity was examined for OEM benchmark catalyst and PROMETHEUS prototype.

Part II: Catalytic efficiency and Endurance as Compared with Original Catalysts

Catalytic Efficiency Experimental Conditions

Catalytic activity tests were performed under both stoichiometric (λ=0.99) and oxidizing (λ=1.03) conditions, in the temperature range between 100-600°C.

Catalytic Efficiency Apparatus

The catalytic activity of commercial TWCs and PROMETHEUS catalyst were tested in a lab-scale Synthetic Gas Bench (SGB) designed and developed by MONOLITHOS.

European Patent has been granted on November 2019 (EP3569309)