

Special Issue

Preferential Oxidation of Carbon Monoxide

Message from the Guest Editors

CO-PROX is one of the preferred technologies for the removal of CO contamination from H₂-rich fuel gases coming from reforming processes. Along with the CO oxidation, the H₂ oxidation, the WGS equilibrium and the CO and CO₂ hydrogenation reactions can proceed. CO-PROX requires very selective catalysts able to remove CO without oxidize H₂. The selectivity can be improved by working at low temperatures, where CO oxidation is favoured and the reverse Water Gas Shift limited. Besides, due to the very fast chemical kinetics and exothermicity of CO-PROX, the use of metallic structured catalysts and microreactors can avoid the existence of hot spots, thus favoring the selectivity. These systems are ideal for small-scale fuel processors for portable and on-board applications.

This Special Issue of *Catalysts* focuses on the different aspects dealing with the CO-PROX reaction. The design, characterization and testing of active catalysts and catalytic devices, as well as operando and kinetics studies aimed at solving the mechanism of the considered reaction will be welcomed.

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