

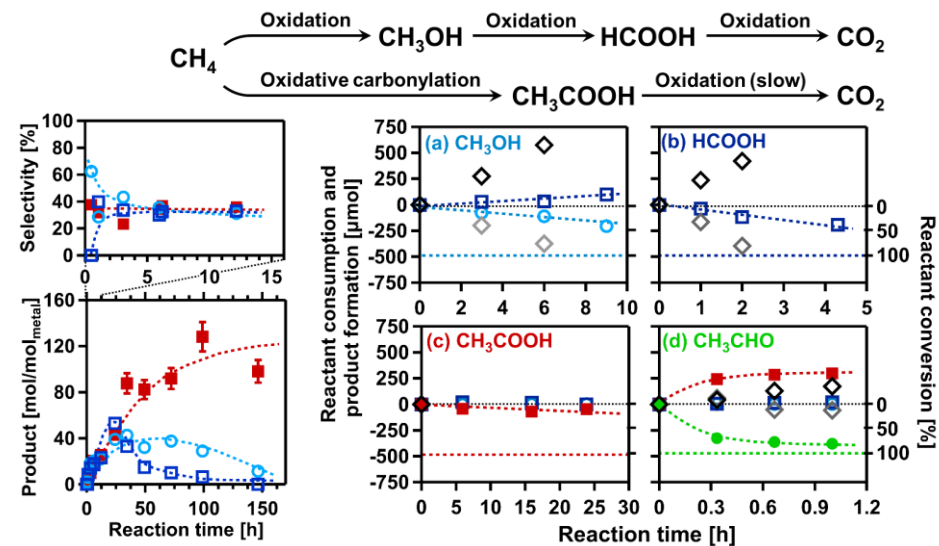
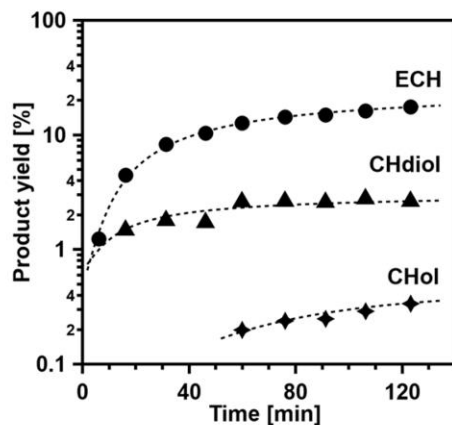
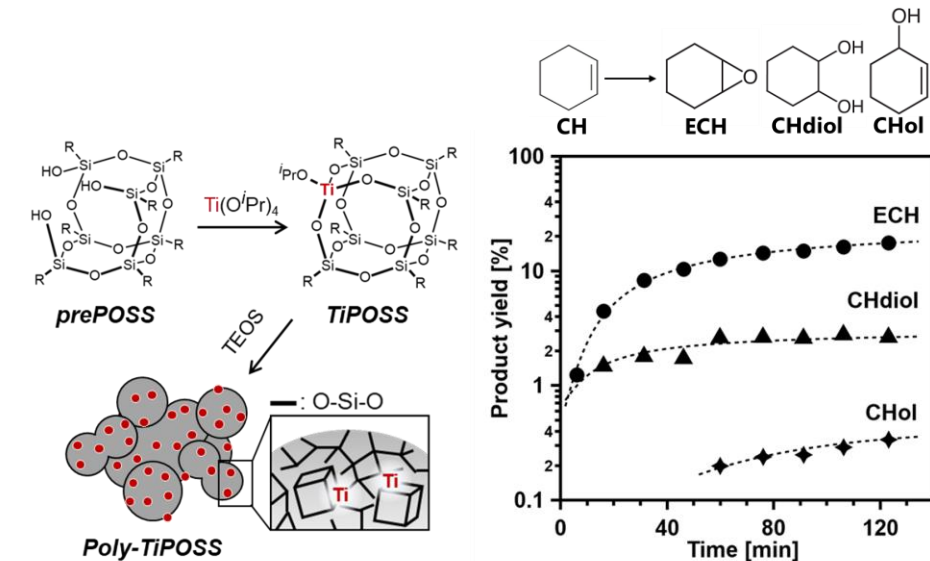
Theme: Catalyst and Reaction Engineering towards small molecules upgrading

Purpose:

1. Novel nanoporous material design for heterogeneous catalyst
2. Catalytic reaction inside nanospace for small molecules upgrading

Achievement:

1. Development of porous metallosilicate possessing dispersed active catalytic site
2. Investigation of reaction mechanism of partial oxidation reaction over Rh-ZSM-5



Nanoporous titanosilicate catalyst synthesized from siloxane precursor molecule possessing 4-coordinated Ti species

Nanoscale, 15, 9792 (2023)

Reaction mechanism investigation of CO-assisted methane partial oxidation over Rh-ZSM-5 catalyst

ChemCatChem, 12, 2957 (2020)