

Camere Process

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Background

The CAMERE process (carbon dioxide hydrogenation to form methanol via a reverse-water-gas-shift reaction) was developed and evaluated in OpenModelica with the help of OMChemSim Library developed by . The reverse-water-gas-shift reactor and the methanol synthesis reactor were serially aligned to form methanol from CO₂ hydrogenation. Carbon dioxide was converted to CO and water by the reverse-water-gas-shift reaction (RWReaction) to remove water before methanol was synthesized.

This Process is adopted from Shim Joo et. al.

Reference

Oh-Shim Joo, Kwang-Deog Jung, Il Moon, Alexander Ya. Rozovskii, Galina I. Lin, Sung-Hwan Han, and Sung-Jin Uhm, "Carbon Dioxide Hydrogenation To Form Methanol via a Reverse-Water-Gas-Shift Reaction (the CAMERE Process)" Ind. Eng. Chem. Res. 1999, 38, 1808-1812