

Technology for Scale-up Studies and Demonstration

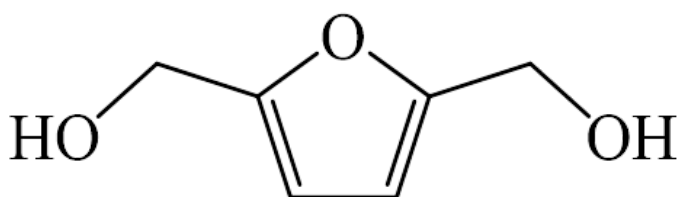
Process For Production of 2,5-bis(hydroxymethyl)furan (BHMF)

Background & Existing Challenge

BHMF is a biobased diol useful in the synthesis of bio-based polyesters, polyurethane, and self-healing polymers. It may produced by selective hydrogenation of 5-hydroxymethyl furfural (HMF). Challenges in the existing process includes lack of active/selective catalysts, use of organic solvents and base and Catalyst reuse/stability

Why CSMCRI Process

- Low-cost polymer based catalyst
- No organic solvents or base required (works in H₂O)
- Reusable catalysts /can be used in a fixed-bed reactor
- Mild process conditions (20 bar, 30-90 oC)



TRL
3