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Continuous-Flow Reductive Alkylation: Synthesis of Bio-Based Symmetrical and Dissymmetrical Ethers

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Continuous-Flow Pd/C-Catalyzed Reductive Alkylation of Alcohols with Aldehydes

Results:

Significance: The authors have developed a continuous-flow system for the reductive alkylation of alcohols with aldehydes catalyzed by Pd/C in the presence of hydrogen, giving the corresponding ethers in 35–93% yield.

Comment: In the long-term flow reaction of butan-1-ol with octanal, butyl octyl ether was obtained in 50% yield after eight hours.

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