BF₃-Mediated Coupling of Organotrifluoroborates and Acetals

Significance: A novel C–C bond formation approach using organotrifluoroborates for the synthesis of unsymmetrically substituted dialkyl ethers has been developed.

Comment: The reaction is general and well-tolerant of functional groups. Sterically demanding and sensitive dialkyl ethers which would be difficult to prepare via the common Williamson ether synthesis could be easily accessed.

Mechanistic proposal:

Selected examples:

Selected examples:

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