

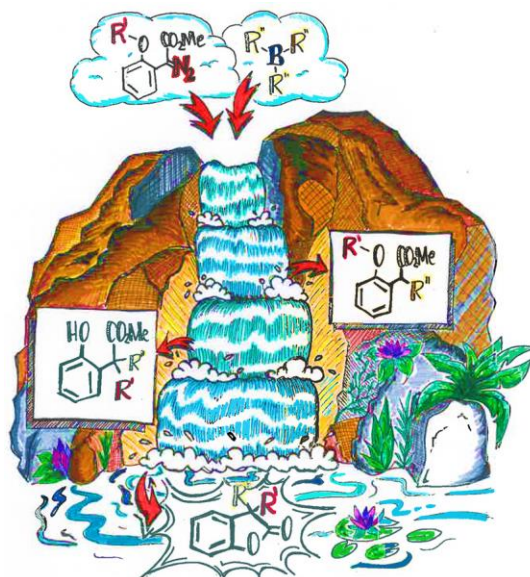
Single or Double? Understanding one and two electron pathways with Lewis acidic boranes

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ABSTRACT

As main group chemistry, in particular boron chemistry, has expanded and developed over the past 20 years, one reagent has risen to prominence as well. Tris(pentafluorophenyl)borane, $B(C_6F_5)_3$, (commonly known as BCF) has demonstrated extensive applications in a wide variety of chemistry, including borylations, hydrogenations, hydrosilylations, frustrated Lewis pair chemistry, Lewis acid catalysis and more.^[1] The high Lewis acidity of $B(C_6F_5)_3$ is achieved from the electronic effects of its three C_6F_5 rings, rendering it a versatile reagent for a great number of reactions. The talk will show our recent uses of Lewis acidic boranes in organic synthesis and catalysis.^[2]



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