

## LEWIS ACIDIC BORANES IN SYNTHESIS AND CATALYSIS

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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.<sup>1</sup> 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 (Figure 1) and will also focus on our latest advances in novel borane and borocation usage.<sup>2-5</sup>

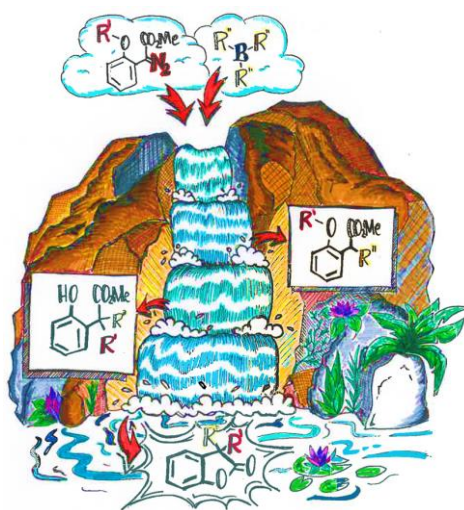


Figure 1

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