**Catalytic Enantioselective Redox-Neutral Processes for Efficient Chemical Synthesis**

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The development of economical and selective catalytic methods is of significant importance for the promotion of sustainable chemical synthesis. My group at National University of Singapore focuses on the identification of catalytic enantioselective redox-neutral transformations to access valuable chiral building blocks in organic synthesis. Such methods have the significant advantage of circumventing the redundant oxidation/reduction steps to reduce waste production in chemical synthesis. In particular, the stereo-convergent chiral amine and higher-order alcohol synthesis from readily available racemic alcohols via borrowing hydrogen and enantioselective heterocycle functionalization will be discussed in details.

