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**Abstract**

**Asymmetric Synthesis in Contemporary Drug Discovery and Development**

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Asymmetric synthesis plays an important role in the chemical production of pharmaceutical agents since many of them were launched as chiral molecules. Catalytic asymmetric catalysis is one of the most efficient protocols to set the desired chiral center in chemical process in pharmaceutical industry. In this presentation, the process development of several important chiral drugs will be described, with emphasis placed upon the application of catalytic asymmetric reactions such as asymmetric hydrogenation, dynamic kinetic resolution, enantioselective cross-coupling and transaminase reactions.