Innovation in catalytic methodology development through flow chemistry

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Until recently, many reactions have been exclusively performed in conventional batch LabWare. With the advent of microreactor technology, significant effort has been devoted to develop a wide variety of continuous-flow techniques to facilitate organic synthesis. Microreactor technology offers several advantages compared to traditional batch reactors, such as, enhanced heat- and mass-transfer, improved irradiation, safety of operation and the possibility to integrate several reaction steps and subsequent separations in a single streamlined process.\(^{(1)}\)

In this presentation, we will give an overview of our catalytic methodology development, exemplified by photoredox catalysis\(^{(2)}\) and C–H activation chemistry,\(^{(3)}\) and how these synthetic methods were impacted by continuous-flow microreactor technology.

References

