

Expanding chemistry's horizon with continuous-flow reactors

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Continuous-flow micro- and mesofluidic reactors come with inherent properties that can be advantageously utilized for expanding the horizon of synthetic organic chemistry. Accurate control over local process parameters, even under extreme conditions, inherent safety, production homogeneity and seamless scale-up are amongst the most important assets of continuous-flow chemistry. Besides, flow chemistry enables the design of efficient multistep processes with significantly reduced footprints. In this lecture, we will discuss some of the most fascinating aspects of continuous-flow micro- and mesofluidic reactors in the specific context of preparative organic chemistry. Multiple examples illustrating the development and implementation of continuous-flow multistep strategies for the synthesis of high-value added organic targets will be presented.