

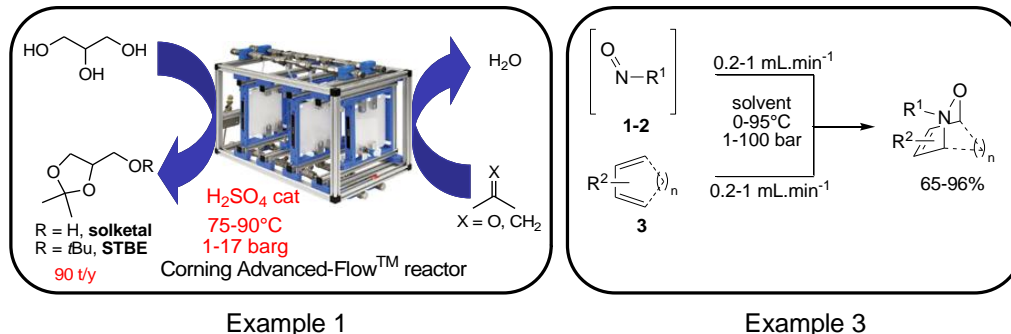


Continuous Flow Opportunities for Reactions difficult to Scale-up

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During the last decades, microflow technology has gained an enormous interest in both academic research and within the chemical, but especially within the pharmaceutical industry. The advantages of the flow chemistry are now well established; mixing rates are extremely high and the temperature profile is very narrow due to a big surface-to-volume ratio, compared to those in batch vessels. Back-mixing is minimized and the reaction time is narrowly controlled. As a consequence, switching from batch to continuous processing is beneficial because of the use of similar conditions, minimizing the expensive and time-consuming process of scaling-up.



The lecture will focus on various reaction types that benefit from continuous processing (exothermic reactions, dangerous reagents, ...). Since 2005, the technological platform of the SynBioC research group dedicated to flow reactors has been involved in various industrial and fundamental projects. Selected and recent examples will be discussed within this presentation.

References:

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