# FLASH CHEMISTRY GUIDED BY FLOW MICROREACTOR RESEARCH


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Many successful applications reported in the literature speak well for the power of the flow-microreactor method in chemical synthesis. The reaction time in a flow microreactor is defined as the residence time between a reagent inlet and the quencher inlet, which can be controlled precisely and reduced to millisecond order by adjusting the length between these positions and the flow speed. Such a feature of flow microreactors enables the use of short-lived highly reactive intermediates for synthesis. Various chemical reactions using highly reactive short-lived organolithium species that are difficult or even impossible to perform in batch processes can be accomplished in flow microreactors using space integration of reactions. In this presentation, we slow our recent results to various synthetic reactions based on flash chemistry conducted in flow reactors, especially utilizing space-integration of the flow reactions.



*Representative references -*

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**Convergent approach for direct cross-coupling enabled by flash irreversible generation of cationic and anionic species**
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