

Online Seminar Series

Developing Selective Reactions Under Mechanochemical Conditions

THURS. December 17, 2020 at 10:00 AM (CST)

on the CMCC YouTube Channel: Dr. James Mack Seminar



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ABSTRACT:

The allure of mechanochemistry is nearing a tipping point. With the rapid growth of articles about it, it is becoming clear that this once obscure discipline is becoming increasingly mainstream. There are many reasons for this, some are interested in improved laboratory safety as well as simpler, cheaper reaction procedures that allow for more efficient use of research time resulting in increased productivity. Many of the fundamental principles that govern this technique are still absent from the literature. We recently developed capabilities for performing mechanochemical reactions under a variety of unique conditions. This approach offers an opportunity for strengthening the fundamental understanding of the energetics in mechanochemical systems especially for stereoselective reactions. During this presentation, we will unlock some of the secrets of mechanochemical processes, to have a better understanding of when these reactions behave similar to traditional solution-based reactions and when they are wildly different.

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