

## **Webinar**

### **Multicomponent and Biocatalytic Organic Synthesis**

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This talk will outline the use of multicomponent reactions and biocatalysis in organic synthesis. Multicomponent synthesis is a promising methodology for rapid and easy access to scaffolds with high structural diversity and molecular complexity. Additionally, this strategy features high chemical efficiency, convergency and atom economy and thus has broad applications in pharmaceutical and organic industries. The first part of talk will be focused on the design and development of novel multicomponent reactions to explore chemical space and generate diverse libraries for drug discovery. The second part of the presentation will highlight the novel biocatalytic strategies for the asymmetric synthesis of cyclopropanes, which are highly valuable building blocks for the synthesis of pharmaceuticals and other high-value compounds. Engineered variants of myoglobin, a small and robust metalloprotein with no native catalytic function, can serve as highly selective and efficient biocatalysts for the inter- and intra-molecular cyclopropanation of a broad range of olefins.

***Monday, Mar 1<sup>st</sup> 2021***

***5:00 PM***