



New York ACS Local Section Microwave Chemistry Topical Group

***“Advancing Chemical Synthesis to Meet Discovery Milestones
with Microwave Assisted Organic Synthesis (MAOS)”***

by Drs. Bob Bickler and Paren Patel (Biotage)

Academic researchers are challenged to creatively explore new synthetic routes and discovery chemists in commercial environments feel real pressure to increase their R&D productivity. These science-driven investigators are expected to be more efficient and deliver novel target compounds faster to advance discovery projects. To address the issue, microwave synthesis is used to investigate a large number of reactions in a very short amount of time, helping to overcome research bottlenecks for chemists so that discovery milestones can be achieved. With microwave assisted organic synthesis (MAOS), a reaction that might originally have taken hours can be reduced to a few minutes and improves compound purity at the same time. MAOS facilitates the completion of multi-step reactions in a fraction of the time by increasing the speed of chemical reactions in a safe and controllable way. Thus, rapid iterative experimental design can be explored with ease and far less time. Although microwave irradiation is a well-established method of increasing the reaction rate of chemical processes, many researchers lack familiarity with the technique or do not utilize it for its full advantage. This presentation will expose chemists to the vast utility of the MAOS technique and highlight the range of chemical conversions that have been performed successfully in a compressed timescale. Best practices for practically employing MAOS will also be shared followed by a hands-on demo of a laboratory microwave.

Date : Friday, April 20, 2018, Time : 3:00 pm

Location : S-111 (Science Building)

Queensborough Community College
222-05, 56th Avenue
Bayside, NY 11364

Contact: Prof. Jun Shin (jshin@qcc.cuny.edu) or
Prof. Paris Svoronos (psvoronos@qcc.cuny.edu)

Members of the New York ACS Local section and their colleagues are cordially invited to the workshop. Students are welcome!!