

Amgen Seminar Series in Chemical Engineering
in
Cherry Auditorium, Kirk Hall, 1 PM

Presents on February 4, 2010

Dripping, Jetting, Drops and Wetting: The Magic of Microfluidics

By

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This talk will discuss some of the new opportunities that arise by precisely controlling fluid flow and mixing using microfluidic devices. I describe studies to elucidate the instabilities that lead to drop formation and use these to create new materials that are difficult to achieve with any other method. I also show how the exquisite control afforded by the microfluidic devices provides enabling technology to use droplets as nanoreactors to qualitatively increase the rate of screening of biological reactions, and will demonstrate how this can be used in new applications relevant for biotechnology.

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