# The Department of Chemistry and Biochemistry

### **Seminar Series**

#### Presents a Seminar Titled:

## "Streamlining Pharmaceutical Processes into Continuous Operations"



#### Presented By

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Technology advancements in chemical processing have more recently been driven by the development of novel equipment and methodologies that have the potential to transform our concept of chemical manufacturing. These efforts have been motivated by the growing need to develop safer, more environmentally friendly and more sustainable chemical processes which share a common focus on process intensification. The concept of process intensification consists of technological innovations (equipment and/or methods) which produce dramatic improvements in the form of energy consumption, throughput, waste reduction or capital investments resulting in a strategic cost advantage. These advancements are typically driven by expanding the window of process operability through immense increases in heat transfer and operational pressure. Recent advancements in continuous chemical processing technology have led to the development of new mesofluidic reactor systems. These continuous chemical processing systems provide the potential to streamline existing pharmaceutical processes and improve process operability. Specific applications for the continuous synthesis of active pharmaceutical ingredients will be provided to demonstrate the advantages of this alternative approach to drug synthesis.

Friday, September 6, 2013 at 3:00 in OCNPS 100