## CHEMICAL ENGINEERING SEMINAR SERIES



## **YONGKUI SUN**

**Monday, November 20, 2017** Executive Director Business Development and Licensing Merck & Co (retired)

## Development of Robust and Efficient Processes in Pharmaceutical Industry

**ABSTRACT:** Development of robust and efficient processes for manufacturing of novel therapeutics is one of the key steps in the effort to translate basic biomedical research discoveries in the laboratories to medicines that save lives and improve quality of life, and requires chemists and chemical engineers to work closely together. In this presentation, examples will be given to illustrate the importance of unconventional thinking in driving success in this effort.

**BIOGRAPHY:** Dr. Sun, member of National Academy of Engineering, gained a broad range of drug discovery and development experiences by rotating through six departments in his 22 years at Merck, from process scale up to process chemistry, to China R&D strategy development, to China R&D Operations, and to Business Development and Licensing.

He founded the Merck Catalysis Lab in 2002, an industry-leading lab, and delivered significant business value of science to Merck, accelerating API deliveries for early development and enabling definition of robust green manufacturing processes for late-stage development candidates. In 2015, he led the Merck effort to license from China, for the first time, an innovative therapeutic candidate, an immuno-oncology asset.

Due to his contributions to the development of novel therapeutics such as Crixivan®、Maxalt®、Emend®、Cordaptive®、taranabant、and Januvia®, he received the Presidential Fellows Award in 2006, the highest honor within Merck Research Laboratories. Externally he received the Thomas Alva Edison Patent Award (2009), the Presidential Green Chemistry Challenge Awards (2005 and 2006), Institute of Chemical Engineers' AstraZeneca Award for Excellence in Green Chemistry and Engineering (2005).

Dr. Sun did his undergraduate study in Xiamen University and graduate work at Caltech (Ph.D., 1990), and has 72 publications.

RECEPTION 3:30 • LECTURE 4:00 - 5:00 PHYSICS ASTRONOMY BLDG. PAA A110

