



**PennState**

**AGRICULTURAL AND  
BIOLOGICAL ENGINEERING**

## **Spring 2018 Seminar Series**

### **“Process Development in Biotech Industry: Fermentation and Formulation”**

The talk will focus on areas in the biotech industry where Bioprocessing is the main need and what are the key elements for process development we need to consider. Also a technical discussion around fermentation and formulation process development followed by sharing a few personal learning experiences during the past 7 years in industry.

**Presented By  
Farzaneh Rexaei, Ph.D.**

Farzaneh graduated from Penn State in 2008 with a PhD degree in ABE with focus on agricultural waste products and “microbial fuel cell” to be able to produce electricity from those wastes. With a bachelor degree in Irrigation Engineer and masters degree in ABE with focus on storm water management, during her PhD candidacy was the first time she was exposed to the amazing world of microorganisms and started to learn what microbes can do and how as an engineer she could design an environment that would enable their growth and help having microbial based products that support sustainable food, feed or fuel! For her it was love at first sight and since then the focus of her technical expertise has been on process development for different types of microbes including bacteria (gram positives and gram negatives) and yeast (fungi). In the past 10 years, she has been involved in microbial process development for various lines of business with most years spent in BioAg! After 3 years as postdoctoral research at UC Davis working on solid state fermentation (SSF) process development for enzyme production, she joined Novozymes, a world leader in biological solution, in 2011 as senior scientist first and then as part of leadership team responsible for formulation team. With 10 years’ experience in bioprocessing/process development field, she joined PivotBio team at the end of 2017 after learning about ON technology and could see a great future in using this technology for farmers and for the environment to direct fermentation and formulation (F&F) efforts that would enable us having robust and scalable process for our first generation product!

**Wednesday, March 21, 2018**

**12:00 PM**

**304 FOREST RESOURCES LAB**