

## Seminar

# Nanostructure-based Neural Interface for Non-destructive *in situ* Dissection of Cellular Activities

**Dr. Peng Shi**

*Assistant Professor*

*Department of Mechanical and Biomedical Engineering, City University of Hong Kong*

**Date:** 8 September 2016 (Thursday)  
**Time:** 12:00 nn – 1:30 pm (Reception with light sandwiches starts at 11:45 am. To facilitate the order of sandwiches, please register through email [yfung2222@cityu.edu.hk](mailto:yfung2222@cityu.edu.hk).)  
**Venue:** B6605, Academic 1, City University of Hong Kong  
**Language:** English

### Abstract

Understanding intracellular signaling cascades and network is one of the core topics in modern biology. Novel tools based on nanotechnologies have enabled probing and analyzing intracellular signaling with unprecedented sensitivity and specificity. In this talk, I will introduce a series of techniques developed in our lab, which are based on diamond nanoneedle arrays and are specifically designed for *in situ* dissection of cellular activities in living neurons with minimum invasiveness.

### Biography



Dr. Peng Shi is currently an Associate Professor in the Department of Mechanical and Biomedical Engineering at City University of Hong Kong. He obtained his B.S. in Electrical Engineering at Wuhan University (China), Ph.D. in Biomedical Engineering at Columbia University. He completed his postdoctoral work at MIT in Electrical Engineering and Biological Engineering, where he was a Simons postdoctoral fellow. Since October 2011, he has been a faculty member of CityU's MBE department. His research cover mainly neural engineering, biomaterials, neurotechnology and Tissue Engineering.

**\*\* ALL ARE WELCOME \*\***