

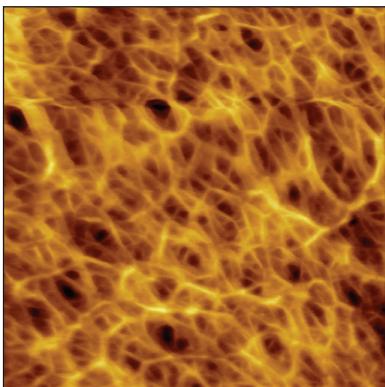


# SUMMER 2015 AFM APPLICATIONS COURSES

## July, 2015 - Signal Hill, CA

AFMWorkshop is pleased to announce two new AFM Applications workshops. Open to AFM users with any make or model of AFM, the workshops will take place at the AFMWorkshop headquarters in Signal Hill, CA, and will be led by AFM experts **Peter Eaton, Ph.D.** and **Paul West, Ph.D.**, authors of **Atomic Force Microscopy** from Oxford University Press.

- **ADVANCED AFM OPERATION TECHNIQUES**
- **AFM BIOAPPLICTIONS**



*It is relatively easy to measure images of samples with dimensions of 50 nm (requiring a magnification of 10,000X) or greater with an atomic force microscope (AFM). However, it's often necessary to measure images with features as small as 1 nm (requiring a magnification of 1,000,000X). Measuring images with such high magnification requires specialized skill in the operation of an AFM.*

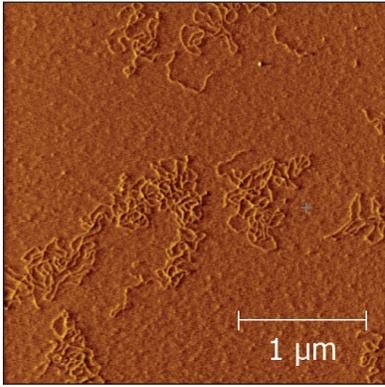
### ▶ **Advanced AFM Operation Techniques** July 13-14, 2015 | Signal Hill, CA

The advanced operator class is designed to help attendees learn the skills required for measuring high-resolution AFM images.

The class covers scanning four samples; each sample is used to assure a specific skill is mastered. The four samples and their associated skills are as follows:

Sample	Skill
Silicon Test Pattern	AFM instrument calibration, basic operation skills
Silicon Substrate	Measure noise floor
Nanoparticles	Probe approach
BOPP Polymer Sample	Control probe-sample forces





*Atomic force microscopes (AFMs) enable advanced measurements of biological samples that are not possible with other microscopy techniques. These include measuring high resolution images of biomolecules and cells in ambient as well as in situ liquid environments. In addition to measuring images, an AFM can capture force/displacement curves that give a quantitative measurement of a specimen's stiffness or of molecular interaction forces.*

## ▶ **AFM Bioapplications**

**July 16-17, 2015** | Signal Hill, CA

This course provides the operational concepts of an atomic force microscope as well as hands-on experience with AFMWorkshop AFMs. Morning classes cover the range of AFM bioapplications, while afternoon labs provide hands-on applications training with the TT-AFM as well as the LS-AFM. Attendees with all levels of AFM experience, and owners of all makes and models of AFMs, are welcome.

### **Biological topics covered in the course**

- Sample preparation for biological experiments
- Imaging biological samples in air and in liquid
- Measuring Force-Distance curves for sample stiffness or intermolecular force determination

### **TO REGISTER**

**Contact AFMWorkshop**

(888) 671-5539

[info@afmworkshop.com](mailto:info@afmworkshop.com)

[www.afmworkshop.com](http://www.afmworkshop.com)

Location Information: Courses take place at the AFMWorkshop manufacturing facility in Signal Hill, CA. Close to Los Angeles Airport, Orange County Airport, and Long Beach Airport, Signal Hill offers a wide variety of nearby hotel accommodations. Please contact us for more information about lodging and transportation.

### **Course Fee:**

- **ADVANCED AFM OPERATION TECHNIQUES** **\$1,495**
- **AFM BIOAPPLICATIONS** **\$1,495**