Atomic Force Microscopy/Scanning Probe Microscopy

AFM TRAINING COURSE

Laboratory instruction will take place on Bruker’s MultiMode 8 AFM

April 3rd-4th, 2019
Location: Hooke College of Applied Science - 850 Pasquinelli Dr.
Westmont, IL 60559

This overview of AFM/SPM is a practical, hands-on course to teach the principles of operation, basic and advanced imaging modes, and overall capabilities of atomic force microscopy/scanning probe microscopy. In lectures interwoven with labs on a variety of samples, students will learn, understand, and operate state-of-the-art microscopes.

This AFM/SPM course provides a foundation for students in the operation of atomic force microscopes to understand (and be able to select appropriately) the various modes and how best to operate the microscope by understanding the operating principles. At the end of the course, students will be able to set up an imaging experiment and run basic static and dynamic AFM modes. They will also gain an understanding of the various imaging parameters involved and how to optimize the parameters for best imaging results. Some advanced topics such as advanced imaging modes and simulation capabilities are also covered to provide students with a comprehensive background to the field. Finally, students will learn the various image processing tools available to properly analyze and interpret their images.

Who Should Attend?
This course is intended for students new to atomic force microscopy/scanning probe microscopy or for experienced users who desire additional training. The audience is broad and includes both academic and industrial scientists and engineers, from advanced undergraduates to seasoned professionals, who are interested in learning about AFM and how it can improve their R&D efforts. Students include instrument operators, lab facility managers, materials scientists, technicians, and advanced undergraduates or graduate students.

Course Instructor
Dalia Yablon, Ph.D.
Adjunct Instructor | Hooke College of Applied Sciences

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