

JPK AFM User Training Course September 14th-15th 2017:

“From AFM Basics to Advanced Applications and Modes”

All JPK users are warmly invited to attend the hands-on training course at the JPK Training Center in Berlin (Germany) from September 14th to 15th 2017.

Scope of the Course

The course focuses on the principles of imaging and force spectroscopy applications at the interface of biology, physics and material sciences in combination with simultaneous optical microscopy. JPK offers all JPK users the opportunity to update their skills and to learn about additional modes within the JPK AFM product family.

The topics covered include:

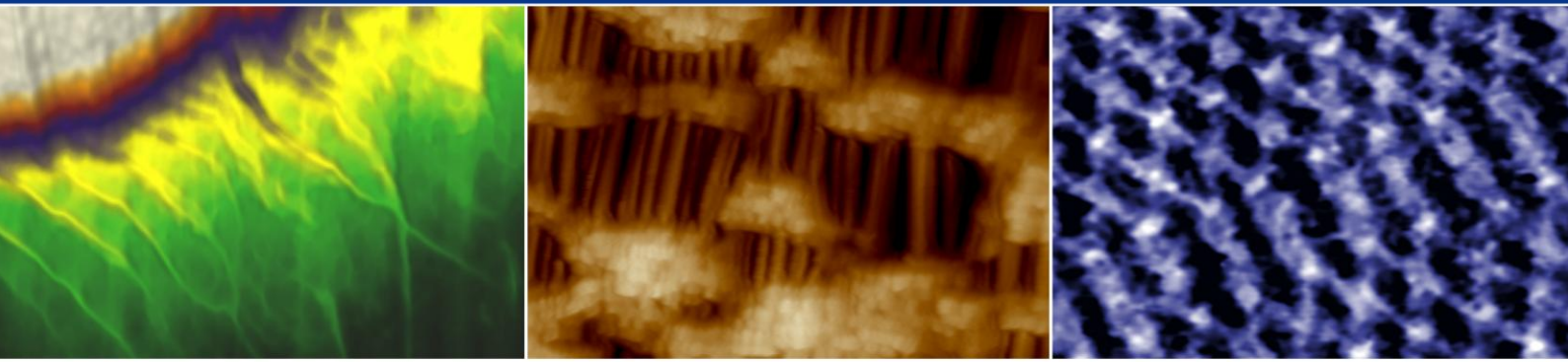
- **AFM imaging**
 - o Easy and robust image acquisition
 - o Imaging in different modes: Contact, AC and Quantitative Imaging
 - o Imaging in different environments: Air, Liquid, Temperature controlled environment
 - o Fast AFM: Imaging at higher temporal resolution
 - o Electrical AFM modes
- **Force Spectroscopy**
 - o Cell mechanics
 - o Force Spectroscopy & data analysis
- **Combining high performance optics and AFM**
 - o Combination of transmitted light microscopy (bright-field, phase-contrast, DIC) with AFM
 - o Combining super resolution microscopy techniques (STED) with AFM
 - o Software integration of optical and AFM imaging with DirectOverlay™

This course is aimed at beginners and users with moderate experience who would like to extend their work into Bio-AFM and want to learn about the possibilities and practicalities of using the AFM for imaging and for force spectroscopy studies on different samples. The training ranges from AFM theory covering imaging and force measurement techniques to sample preparation and data analysis.

The cost of the course will be 900 Euro (+ 19% VAT).

The Fee includes lunch and beverages on both days and a dinner on the first evening. It also includes full participation in the practical sessions, and all course materials. Accommodation is not included within the registration fee and must be booked separately.

For registration please fill out the form below and send it to events@jpk.com. Course size is limited and participation is according to registration. For further question you can also call +49 30 726243 500.



Program JPK AFM User Training Course September 14th-15th 2017:

**“From AFM Basics to
Advanced Applications and Modes”**

Program – Thursday, September 14th – AFM Modes of Operation

09:30 Welcome & Introduction

10:00 Presentation: AFM Principles and Modes
Applications Scientist, JPK Instruments AG

10:30 Coffee Break

11:00 Practical Session I: General AFM Imaging with Different Modes
Course Participants & Applications Scientists

Practical Session II: AFM Imaging in Conjunction with Super Resolution Microscopy
Course Participants & Applications Scientists

Practical Session III: Single Molecule Force Spectroscopy
Course Participants & Applications Scientists

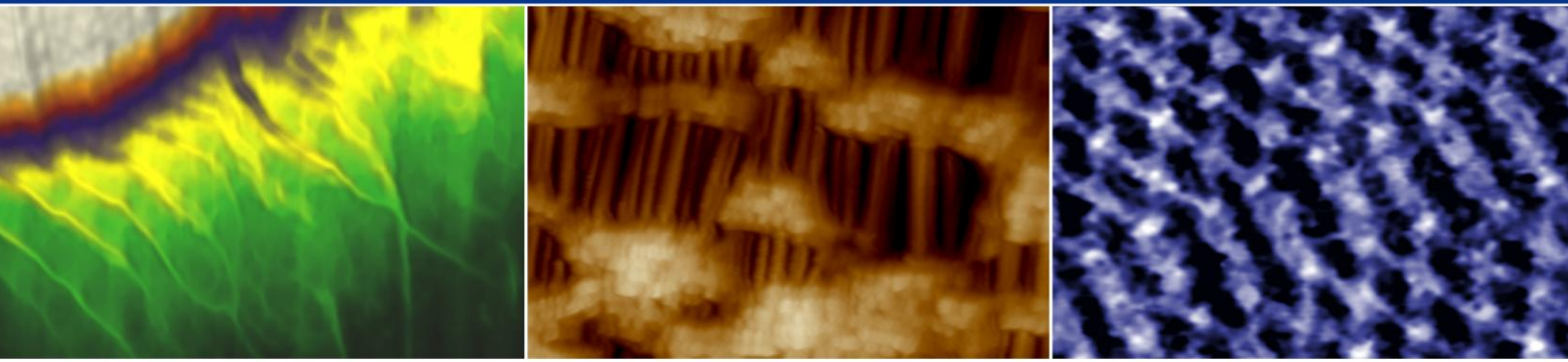
13:00 Lunch

14:00 Practical Sessions continued

15:30 Coffee Break

16:00 Practical Sessions continued

17:30 End of Day 1
Departure to Social Event + Dinner



Program – Friday September 15th – Advanced AFM Modes*

09:00 Presentation: Force Spectroscopy and Data Analysis

Applications Scientists, JPK Instruments AG

09:30 Presentation: Advanced Imaging Modes

Applications Scientists, JPK Instruments AG

10:00 Tour de JPK

10:15 Coffee Break

10:45 Practical Session I: Fast and High Resolution AFM Imaging

Course Participants & Applications Scientists

Practical Session II: Living Cell Imaging with Quantitative Imaging

Course Participants & Applications Scientists

Practical Session III: Cell Adhesion Force Spectroscopy

Course Participants & Applications Scientists

12:30 Lunch

13:30 Practical Sessions continued

15:00 Coffee Break

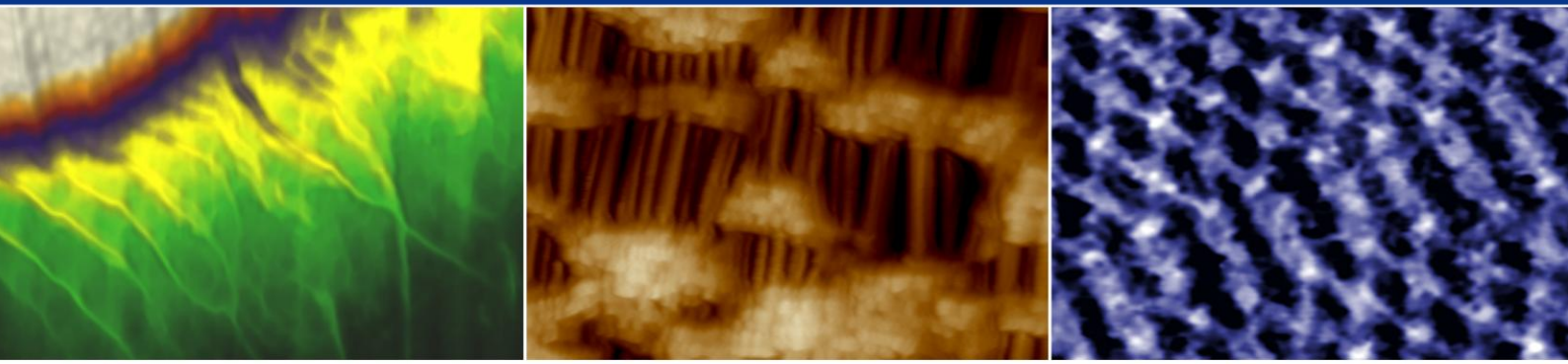
15:30 Practical Sessions continued

17:00 Closing Session

17:30 End of Training

This program is subject to change

* Some advanced imaging modes covered here are not available on former generations of the NanoWizard® family!



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Personal details:

Title _____
Name _____
Surname _____
Institution (billing address) _____

Email _____

AFM experience

Length of experience (please tick one):

No hands-on experience Less than 6 month
6 months to 2 years More than 2 years

Range of experience (please tick all that apply):

AFM imaging in air AFM imaging in liquid
Quantitative Imaging Indentation/elasticity
Force spectroscopy Cell adhesion
Fast AFM imaging Electrical Modes (CAFM, KPM, ...)
Optical phase contrast, DIC, fluorescence Super Resolution Microscopy (STED, STORM...)

Systems (please tick all that apply):

NanoWizard® II NanoWizard® 3 NanoWizard® 4 other _____

One thing I hope to learn from this course:
