

# AFM WORKSHOP

# NANOSCALE WITH AFM

## 17TH – 18TH OCTOBER 2022

THIS WORKSHOP IS REALIZED IN COOPERATION  
OF CEITEC NANO WITH COMPANY MT-M

### FOR WHO?

This workshop is intended especially  
for AFM users (beginners or intermediate level)  
or for anyone who is interested in this topic

### HOW TO PARTICIPATE?

Register on **CEITEC website** and pay for  
the participation **fee**:

- 1) **Academic users** – seminars only: 605 CZK,  
seminars + hands-on: 1 210 CZK (including lunch and refreshment)
- 2) **Commercial users** – seminars only: 1 210 CZK, seminars + hands-on:  
2 420 CZK (including lunch and refreshment)

### REGISTRATION DEADLINE OCTOBER, 12

Capacity of practical measurements is **very limited**!  
(Participants out of Brno will be preferably placed in the morning  
group)

### WHERE SHOULD I COME?

CEITEC NANO RI  
PURKYŇOVA 123  
BUILDING C  
MEETING ROOM  
C2.11



[www.ceitec.cz](http://www.ceitec.cz)

  
CEITEC  
NANO **mt.m**  
měřicí  
technika  
morava

# AFM WORKSHOP

## NANOSCALE WITH AFM

### PROGRAMME

## OCTOBER, 17

- 09:00 – 09:15 CEITEC CORE FACILITY
- 09:15 – 09:45 TECHNICAL BACKGROUND OF AFM (BASIC PRINCIPLES, PIEZO ELEMENTS, PROBES AND FEEDBACK SETTINGS)
- 09:45 – 10:15 CONTACT MODE AFM (PRINCIPLES, PARAMETERS SETTINGS, LATERAL FORCES MICROSCOPY)
- 10:15 – 10:30 COFFEE BREAK 1
- 10:30 – 11:00 TAPPING MODE AFM (PRINCIPLES, PARAMETERS SETTINGS, PHASE IMAGING)
- 11:00 – 12:00 ELECTRICAL PROPERTIES IN NANOSCALE USING AFM (CONDUCTIVITY, SURFACE POTENTIAL, MAGNETIC MEASUREMENT)
- 12:00 – 13:00 LUNCH BREAK
- 13:00 – 14:45 MECHANICAL PROPERTIES IN NANOSCALE USING AFM (FORCE CURVES, SCANASYST, PEAKFORCE QNM)
- 14:45 – 15:00 COFFEE BREAK 2
- 15:00 – 15:15 AFM IMAGE QUALITY IMPROVEMENT
- 15:15 – 16:00 AFM IMAGE ANALYSIS
- 17:00 – 21:00 INFORMAL CITY TOUR

## OCTOBER, 18

- 09:00 – 12:00 HANDS-ON / GROUP 1 (CEITEC NANO LABORATORIES)
- 12:00 – 13:00 LUNCH BREAK
- 13:00 – 16:00 HANDS-ON / GROUP 2 (CEITEC NANO LABORATORIES)

\*REFRESHMENT WILL BE AVAILABLE IN A SMALL MEETING ROOM DURING PRACTICE BLOCKS

