

# Atomic Force Microscopy (AFM)

## Atomic Force Microscopy:

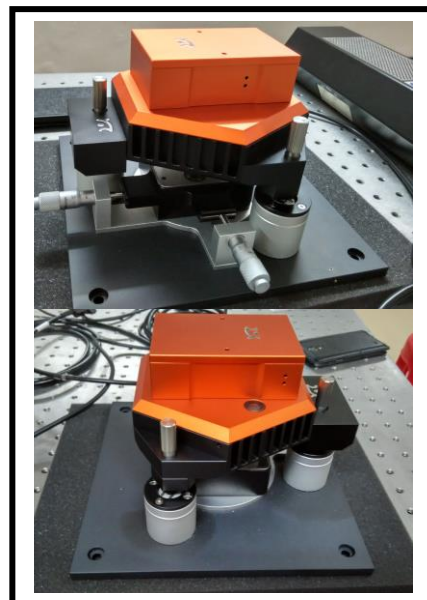
Measurement provides topographic (height) information or size (height/thickness) distribution in solid samples (soft/hard materials) under ambient conditions.

## Make and Model:

NanoSurf FlexAFM; EasyScan2

## Specification/ Features:

AFM Single scan head for height or topographic profile down to  $\sim 1$  nm (Z) and  $\sim 25$  nm (XY)  
Maximum scan range XYZ up to  $10 \times 10 \times 3$   $\mu\text{m}$   
CCD Camera for tip surface distance adjustment  
Automatic Laser alignment for tip-approach  
Data acquisition and analysis software



## Available mode of use:

- Contact and tapping (dynamic) mode
- Possible to perform Phase contrast Imaging,, Force Modulation microscopy, Magnetic Force Microscopy (user need to buy tips), and Force spectroscopy
- Measurements at ambient conditions; require special cell(petridish) for solution

## Whether the facility is open to external users: Yes

Available to faculty and students of Chemistry Department being a part of the Physical Chemistry (teaching) Laboratory.

**Note:** Limited availability of AFM tips – regular users have to replace tips if they are damaged during usage.

**Location:** 1<sup>st</sup> Floor of Physics Department, Room PH21

**Department:** Department of Chemistry

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