

# ATOMIC FORCE MICROSCOPY (AFM)

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MANUFACTURER : Bruker

MODEL : Multimode8

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## Applications

Atomic Force Microscopy (AFM) is a microscopy technique that allows to study the topography of a surface. For this, a very sharp tip (2 to 20 nm at its end) scans the sample surface. By detecting the interatomic forces between the tip and the sample, a 3D image of the surface is then reconstituted.

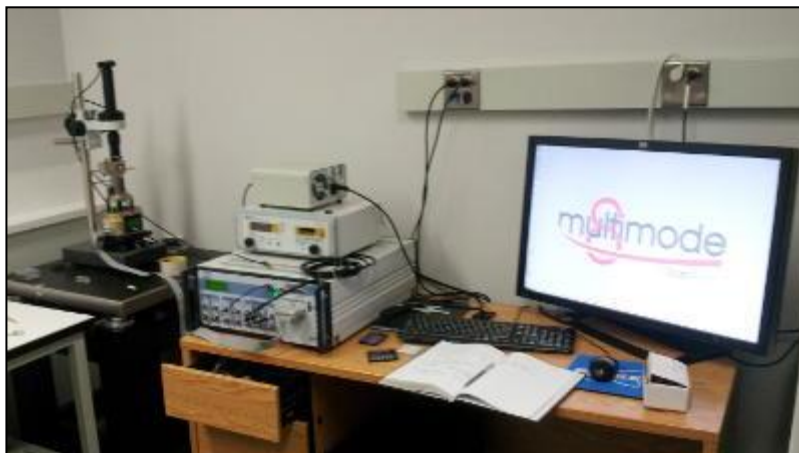
Multimode 8 instrument is a very high resolution AFM dedicated to the study of small samples (DNA, RNA, proteins). It makes it possible to use several operating modes (contact, tapping, peak force tapping) in air and in liquid medium.

## Analyses

- Modes : contact, tapping, lateral force (LFM), magnetic force (MFM), tunneling (STM)
- Quantitative topographical measurements
- Qualitative viscoelastic measurements
- Lateral resolution: 2 nm
- Temperature control :  $\leq 185$  °C (ambient);  $\leq 60$  °C (liquid)
- Liquid cell

## Applications

- Topographical measurements in air or liquid milieu, measurement of mechanical properties, friction properties, roughness, magnetic gradients, electrical gradients, tip/surface interaction forces, and electrochemical measurements.



Atomic Force Microscope (AFM), Bruker, MultiMode8