**AFM**

**Equipment:** Atomic Force Microscope(Bruker Dimension Icon)

**No. of Equipment: UACH1**

**Responsible coordinator:** Ing. Petra Ecorchard, PhD.

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**Equipment Description**

**Description of equipment:**

Atomic Force microscope provides imaging sample topography at high resolution, measuring

magnetic structure of the sample surface by MFM and measuring electrical properties by STM.

PeakForce QNM maps and distinguishes between nanomechanical properties - including modulus, adhesion, dissipation, and deformation - while simultaneously imaging sample topography at atomic scale resolution.

**Specification of expertise relevant to NanoEnviCz workpackages:**

**WP3**a,b-h, **WP4**a,b, **WP5**c, **WP6**a,d-f, **WP7**a,b,c,g, **WP8**d,e,f

**Detailed description of expertise**

**Please, specify the main research topics connected with equipment**:

**Measuring of topography and materials properties of prepared materials:**

nanomaterials

composite materials

2D materials

polymers

magnetic and electrical materials

**Please, specify the secondary research topics connected with equipment**:

**Keywords describing research area:**

Topography, materials properties, magnetic structure, electrical properties

**Competence**

**Relevance for applied and industrial research:**

quality control of materials (smoothness, material properties, materials defects…)

**Relevance for fundamental studies:**

control of synthetized materials (particle size, roughness…), partical homogeneity of samples