

## Instructions for preparation and labeling of samples for SEM

1. Cut samples from places without any mechanical damage nor fingerprints
2. The sample size is a maximum of 10x10cm (a 5x5mm sample is inserted into the microscope).
3. Label the sample with a proper namng (max. 5 characters, only numbers and uppercase/lowercase letters) **from the side on which the nanolayer is located**
4. make sure to not touch the sample apart from where the labeling is, to prevent scanning a sample damaged by fingerprints and/or sweat
5. Samples **must not contain solvent residues** (a wet or damp sample can permanently damage the microscope).
6. Wet samples must be completely dried out. Use a vacuum oven for samples containing oils or other greasy components.
7. For samples containing inorganic substances, the elements that the sample contains must be listed (e.g. ferromagnetic substances can damage the detector - the microscope operator will use the type of microscope and detector according to the information).
8. The cut samples can be interlaced with spunbond or paper if needed and are placed in paper envelope marked with the name of the folder, **do not put the samples in plastic bags as it could damage the nanofibrous layer.**
9. Legibly labeled samples have to be sent to microscope laboratory together with a **properly filled out "Instructions for external sample processing for SEM" form**

### Labeling the type of sample on a dispatch form:

FS - higher quality images (if the sample type allows) and scans of all of the found defects

Screening - with one selected magnification (such that defects are visible - usually 600x or 300x), a series of scans is taken (10-30 images from one sample)

Inorganics - samples containing inorganic materials - write down which ones

Others - normal quality samples