

National Center of Competence in Research Nanoscale Science

Best Nano Image Award

And the winners are ...



Laetitia Bernard: Dry aqueous colloidal solution on the top of a gold electrode



Martin Stolz: Imaging of the native asymmetric unit membrane (AUM) by contact mode scanning force microscopy (CMSFM)

SFM reconstruction based on averaging over 100 plaque particles each for the luminal and cytoplasmic face of the asymmetric unit membrane (AUM) of urine bladder epithelium. The luminal side (upper left half in orange) of particles protrudes about 6.5 nm relative to the lipid bilayer and the cytoplasmic face (lower right half in blue) only 0.5 nm, hence the name "asymmetric unit membrane". Averages are based on contact mode SFM imaging in buffer solution. These particles form 2-D crystalline plaques in situ. Center to center distance: 16 nm



Tobias Reichlin: SFM imaging of cultured fibroblasts

SFM imaging of rat-2 fibroblasts under optimal culture conditions. Confluent cells exhibiting their actin stress fiber network tightly adhering to the cytoplasmic face of the plasma membrane are depicted.



Michel Calame, Zuqin Liu and Christian Schönenberger: Carbon nanotubes (CNTs) grown by chemical vapour deposition from microcontact printed catalysts. A high-density of uniform and very long CNTs can be obtained.



Meike Stöhr: Submonolayer of DPDI (4,9diaminoperylene-quinone-3,10-diimine, a Perylen derivate) on Cu(111) surface. Under the influence of heat (300°C) a hexagonal network of Perylen-derivatives (DPDI) is formed. The emerging holes can be used to "catch" other molecules (here C60-molecules).