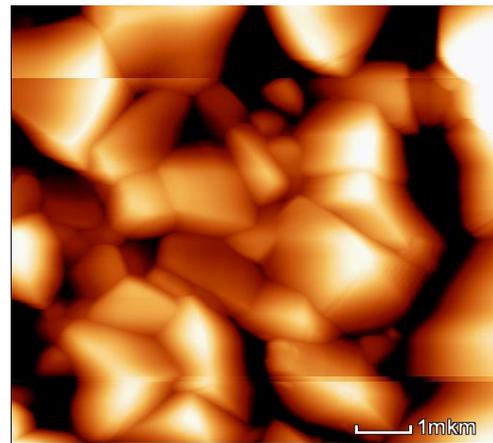
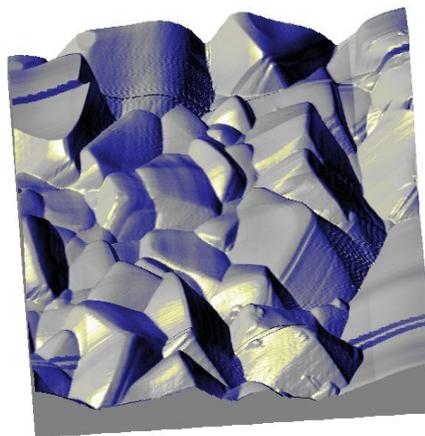
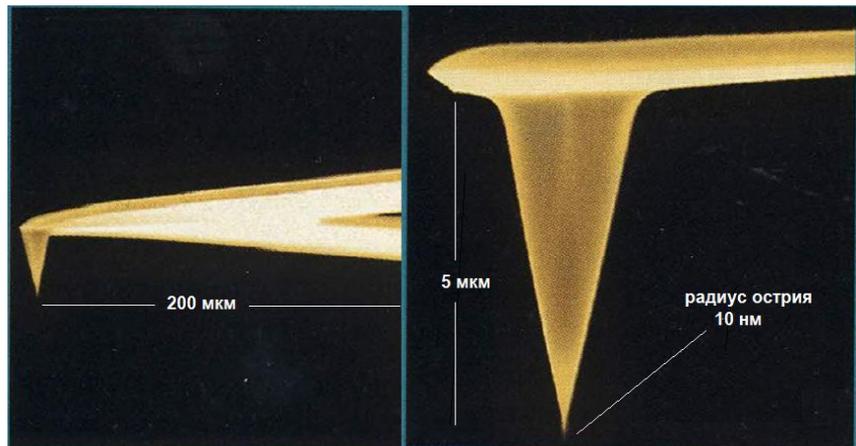
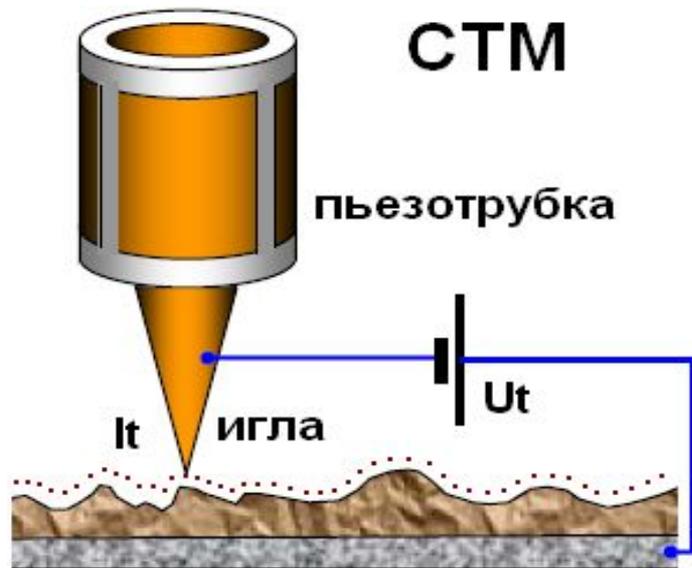


Атомно-силовой микроскоп (АСМ): что в нём нового по сравнению с СТМ ?

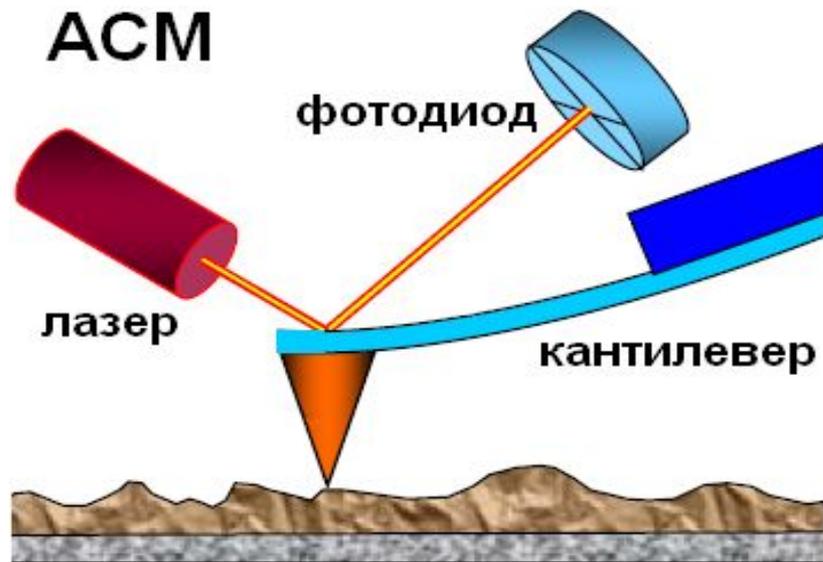


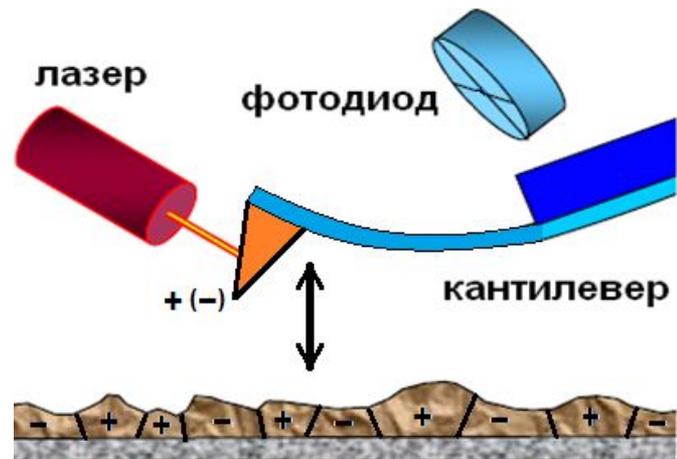
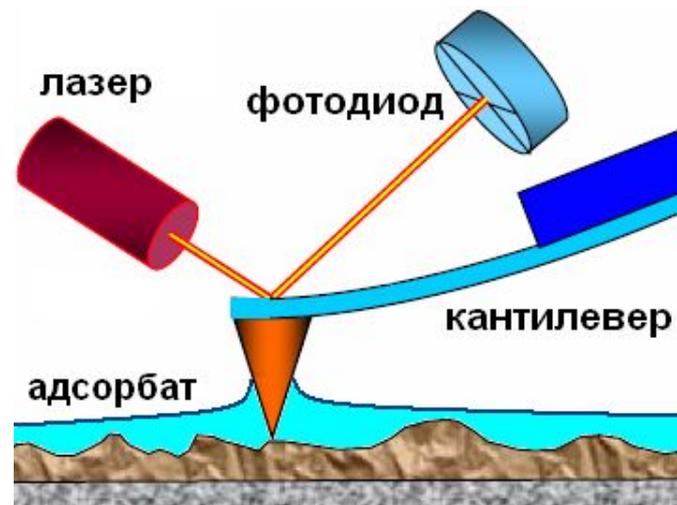
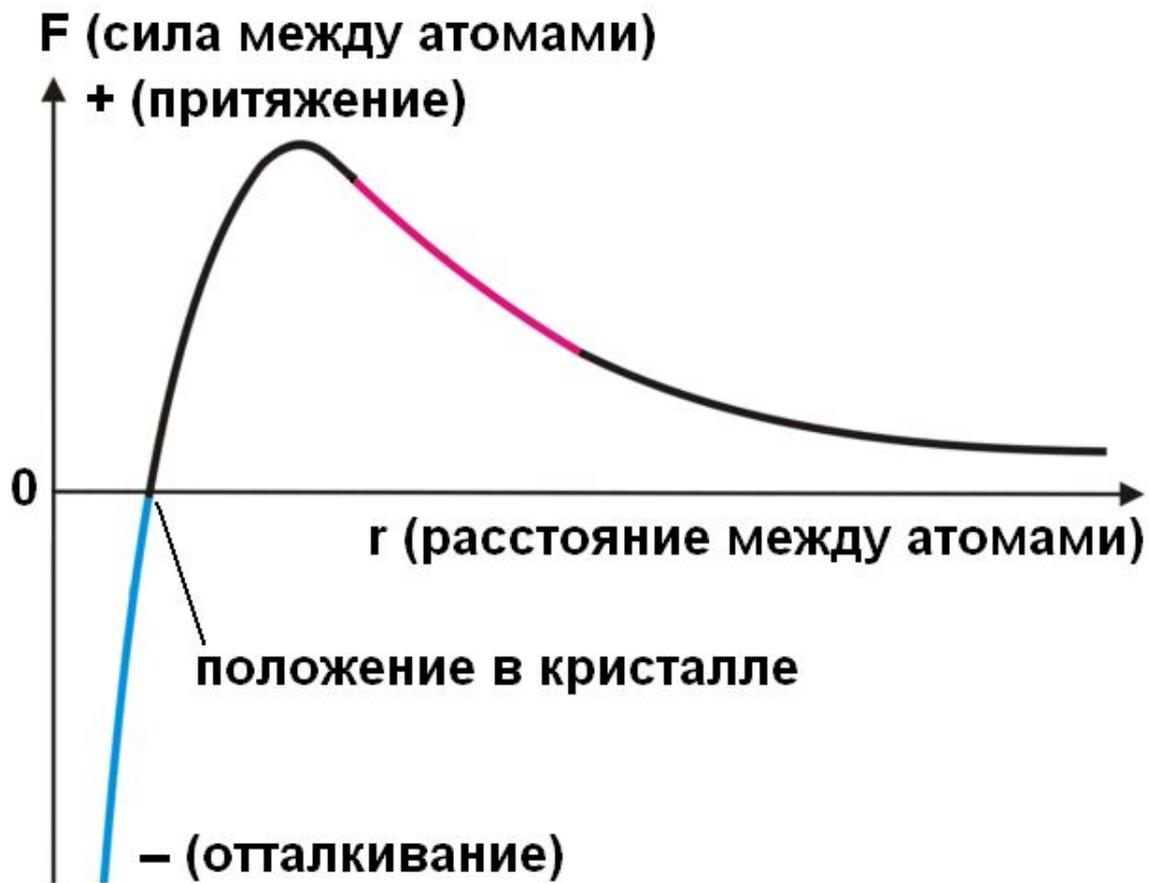


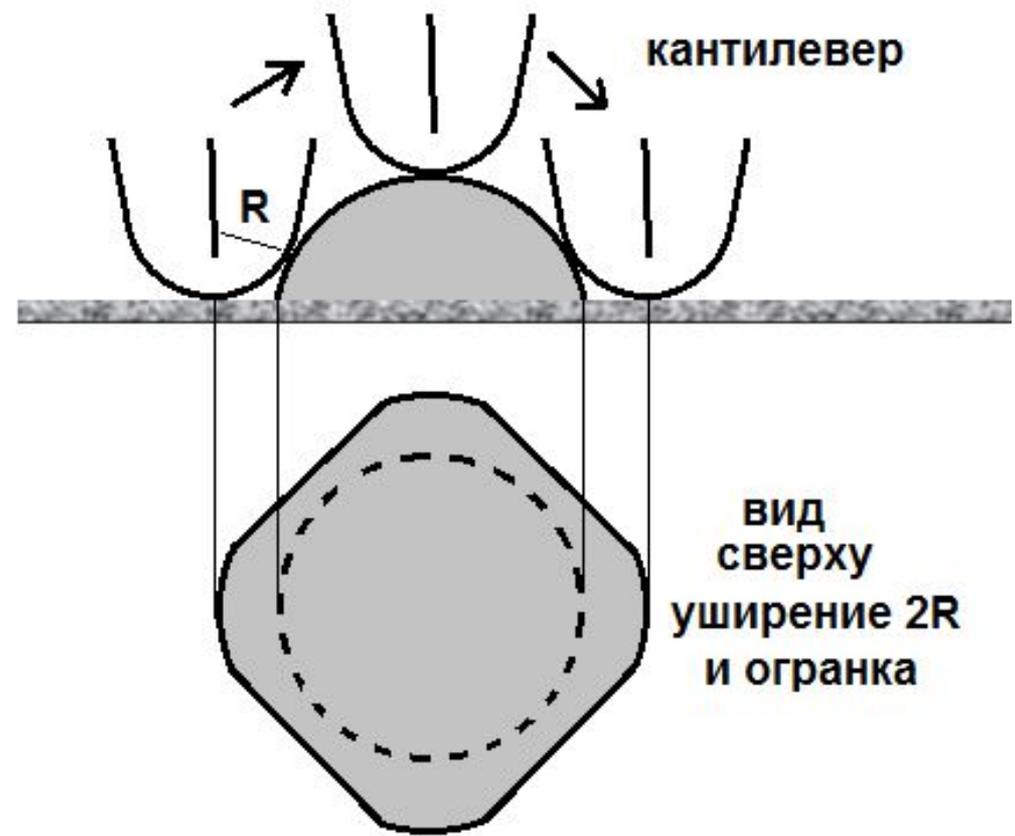
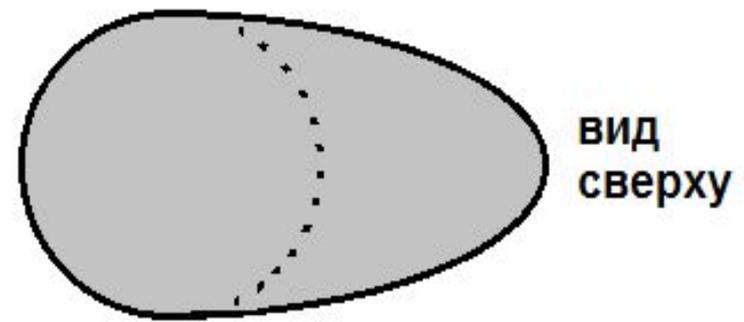
Сканирующий туннельный микроскоп

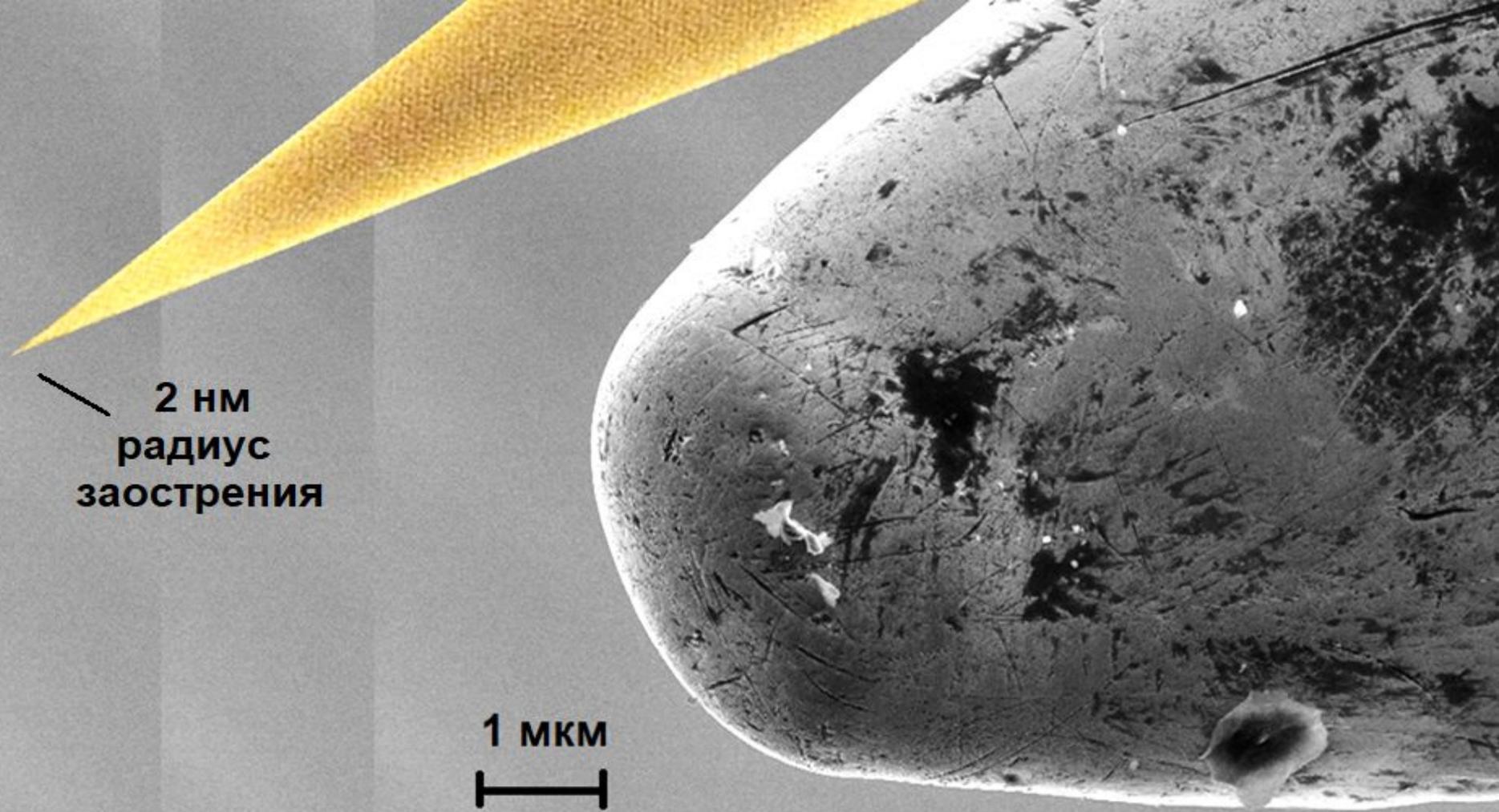


Атомно- силовой микроскоп



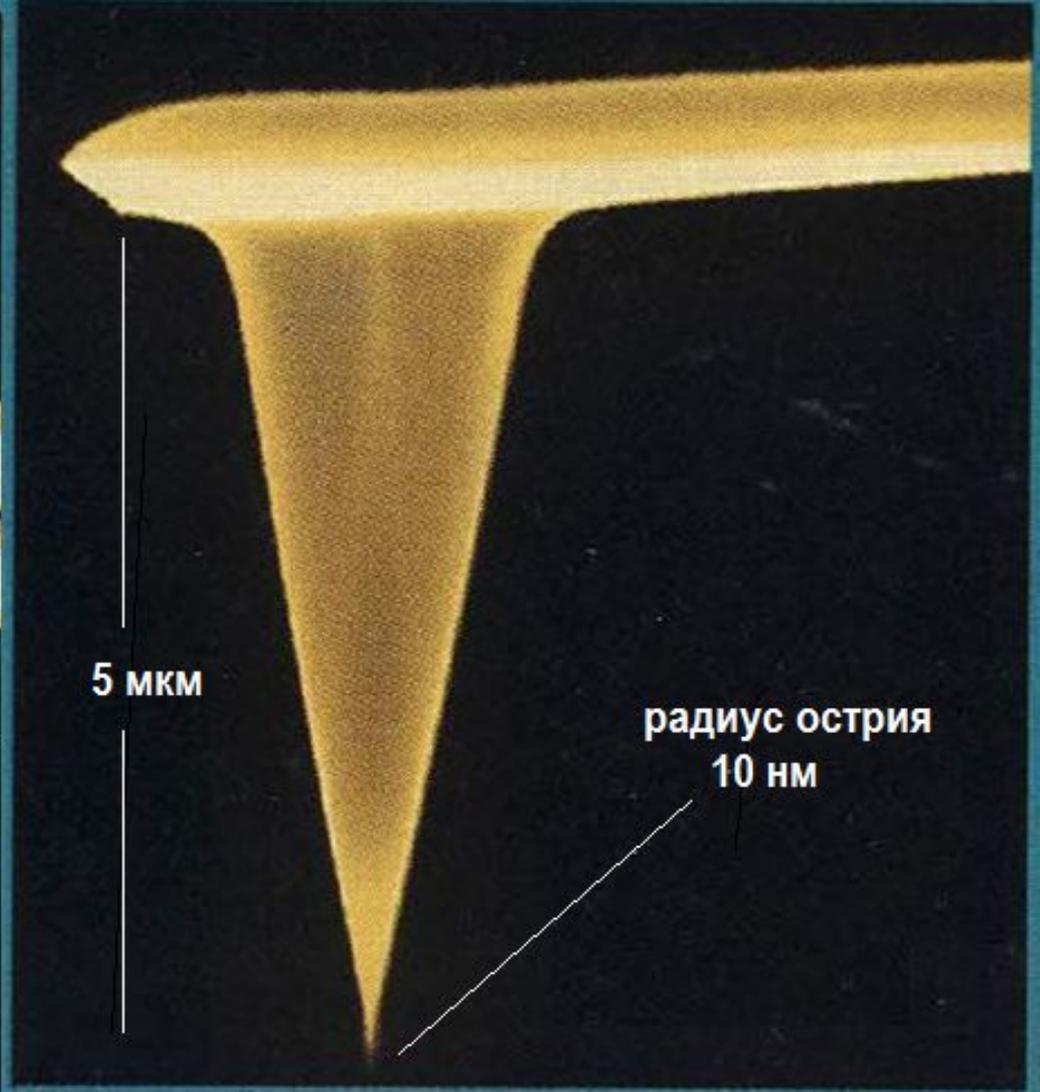
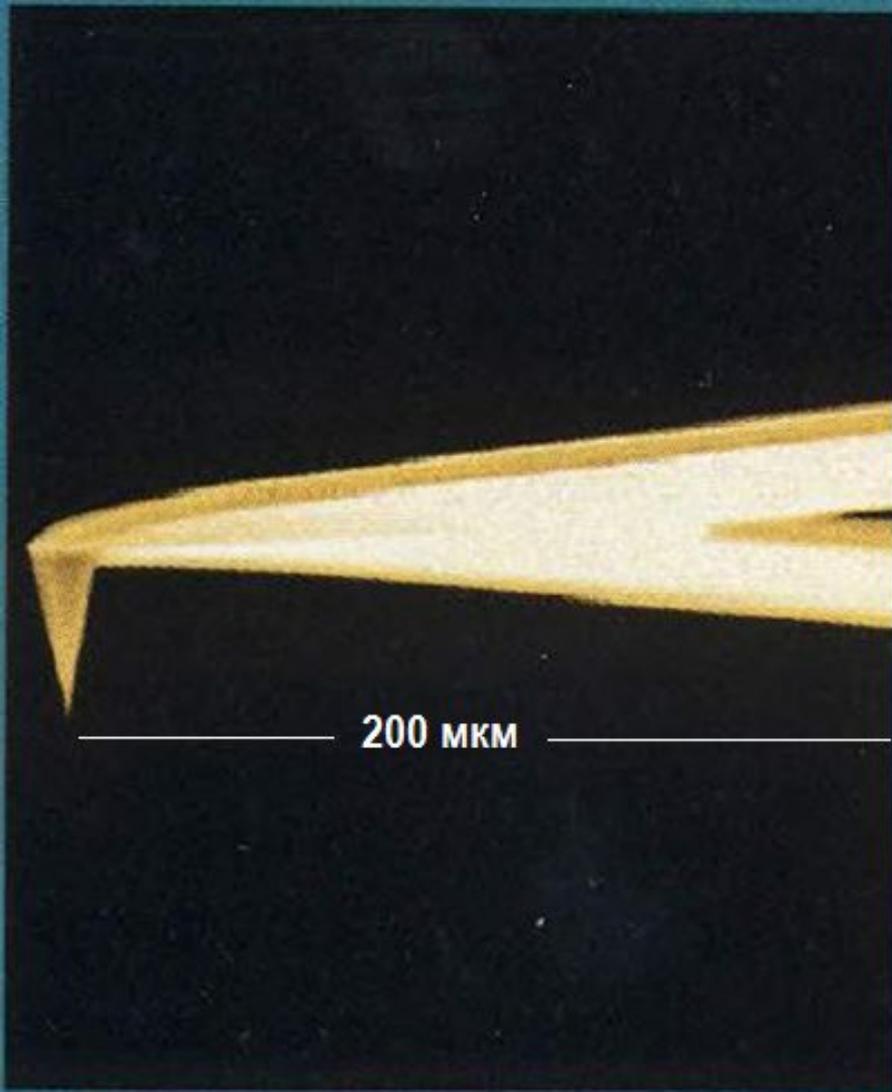






2 нм
радиус
заострения

1 мкм

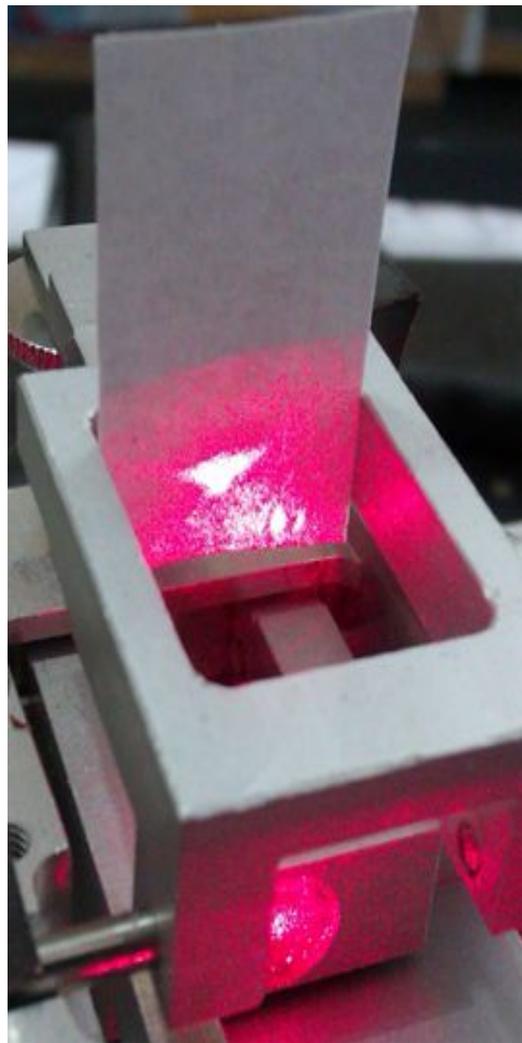
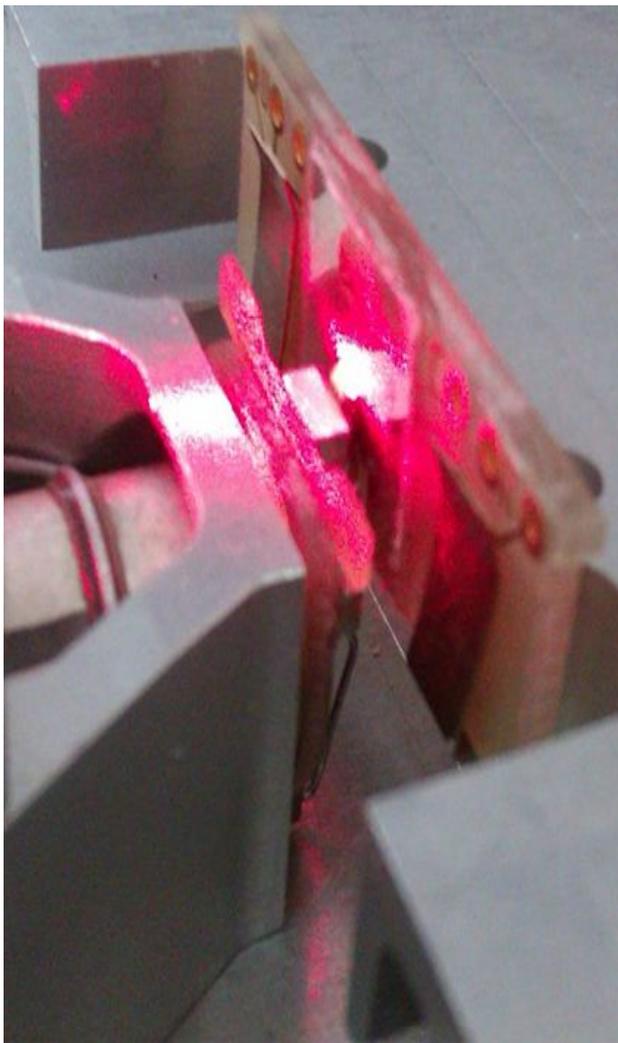
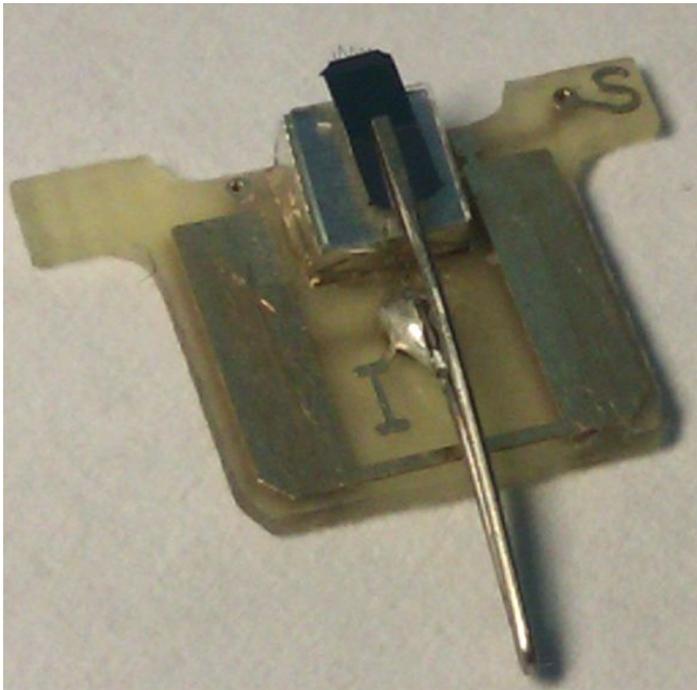
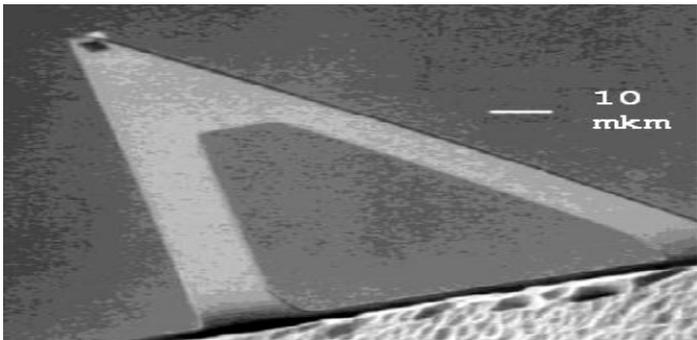


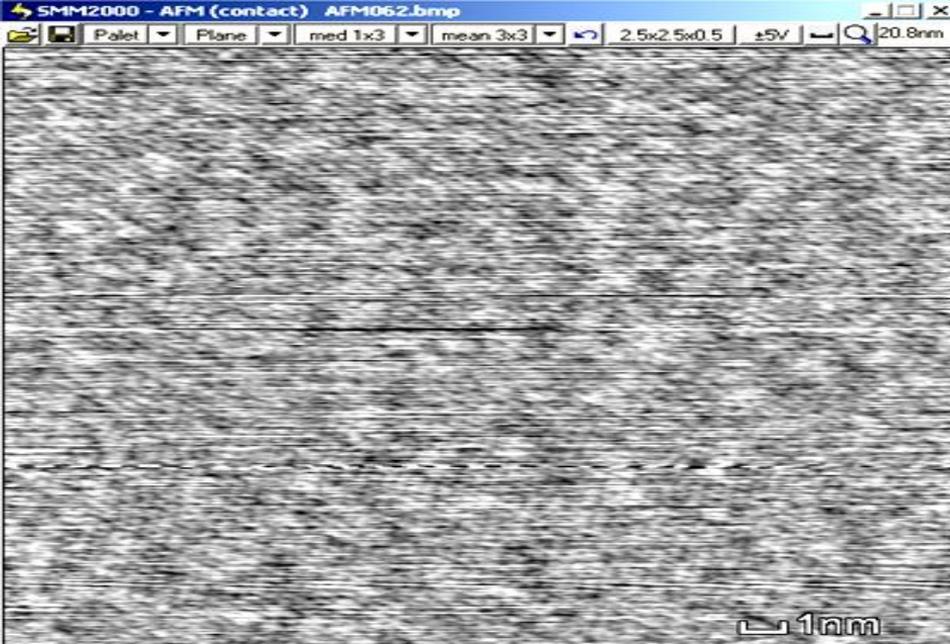
Кантилевер
MSNL
фирмы
Bruker
6 разных
консолей
2 нм радиус
острия



Кантилевер
CSG-01
фирмы
TipNano.ru
1 консоль
6 нм радиус
острия

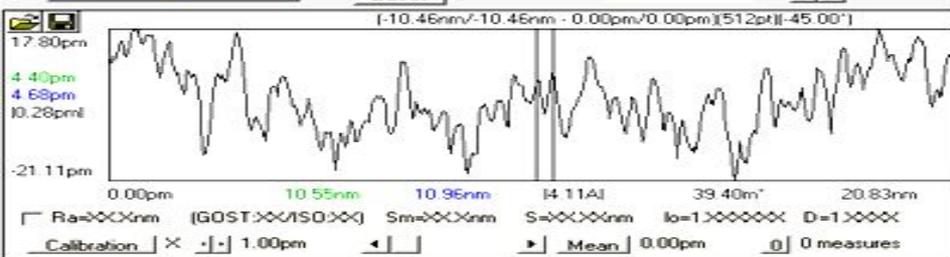




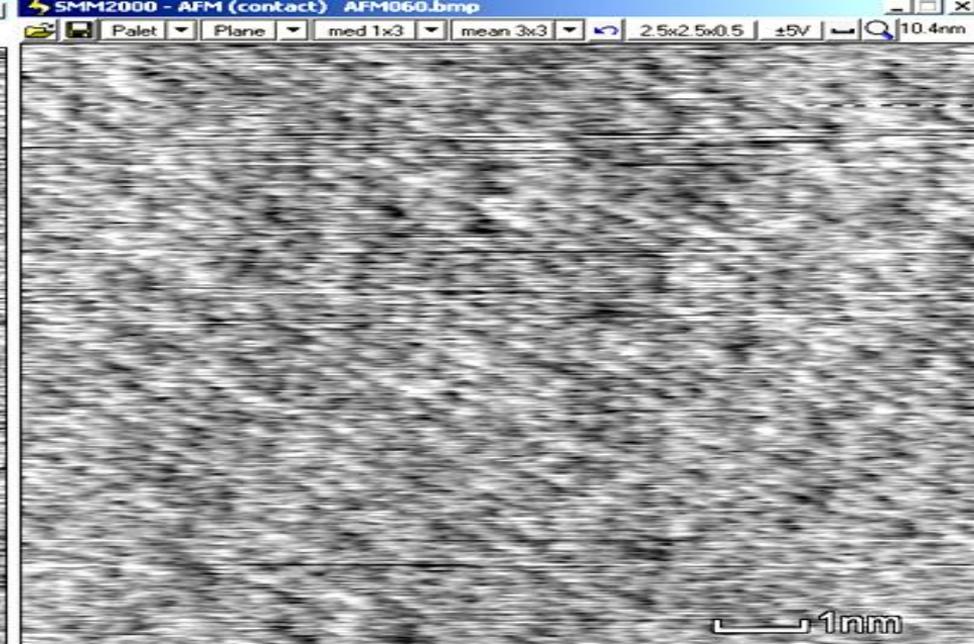


Scanning: line= 512, time ~ 0.00ns, 4.6Hz

Z[nm]= +0.5 Fb[p:0.0] i:5.0 Plane Adapt V-set
 Z appr Back Z F(V)= +0.598 Step(A): 0.41⁻¹
 Laser F0(V)= 0.600 V(um/s): 2.03 Filter: 4

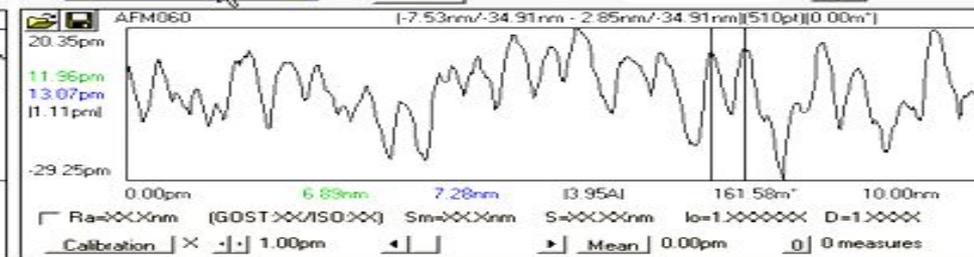


Слюда, атомы, период 4,11 А, кадр 20x20nm
микроскоп SMM-2000

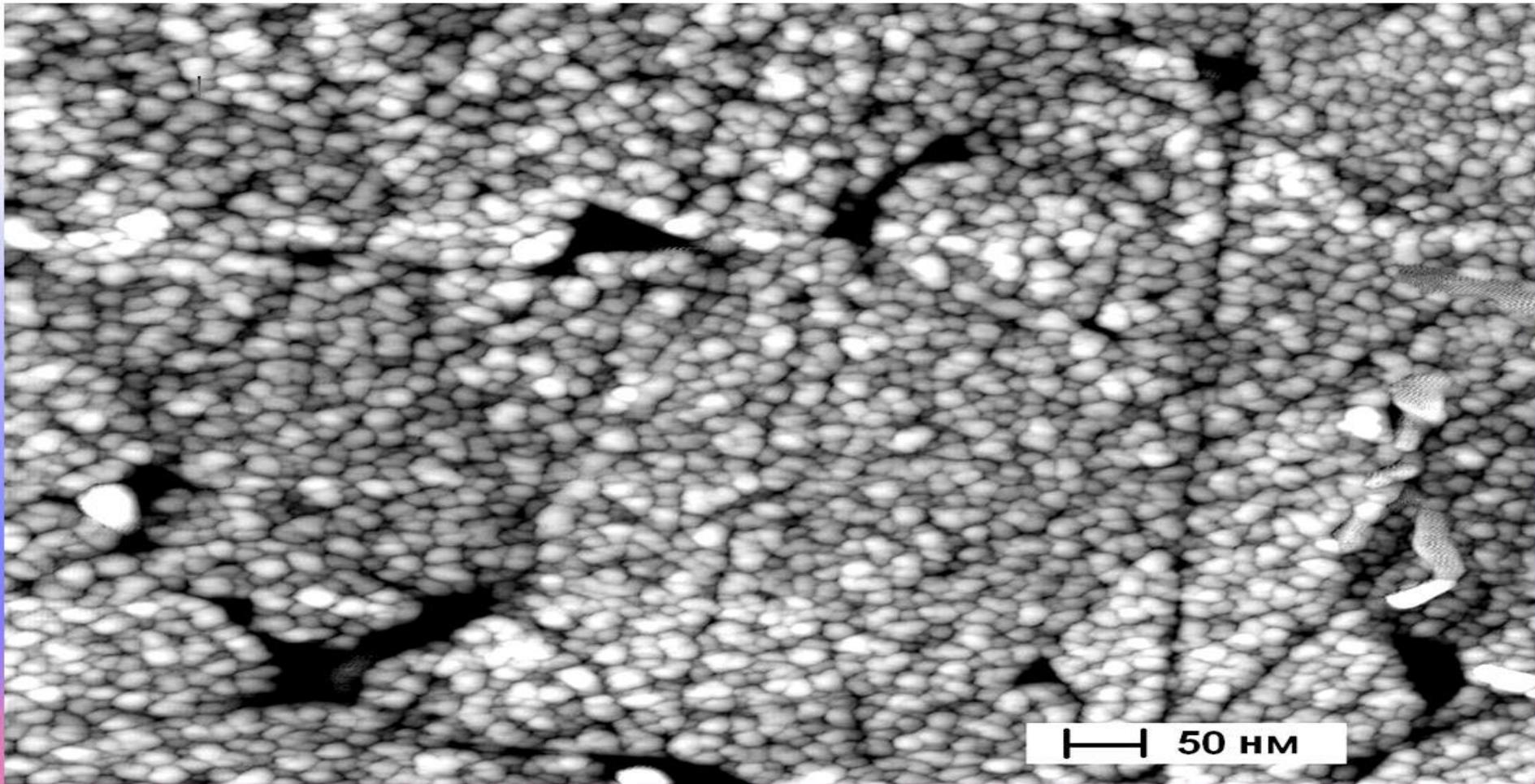


Scanning: line= 512, time ~ 0.00ns, 4.6Hz

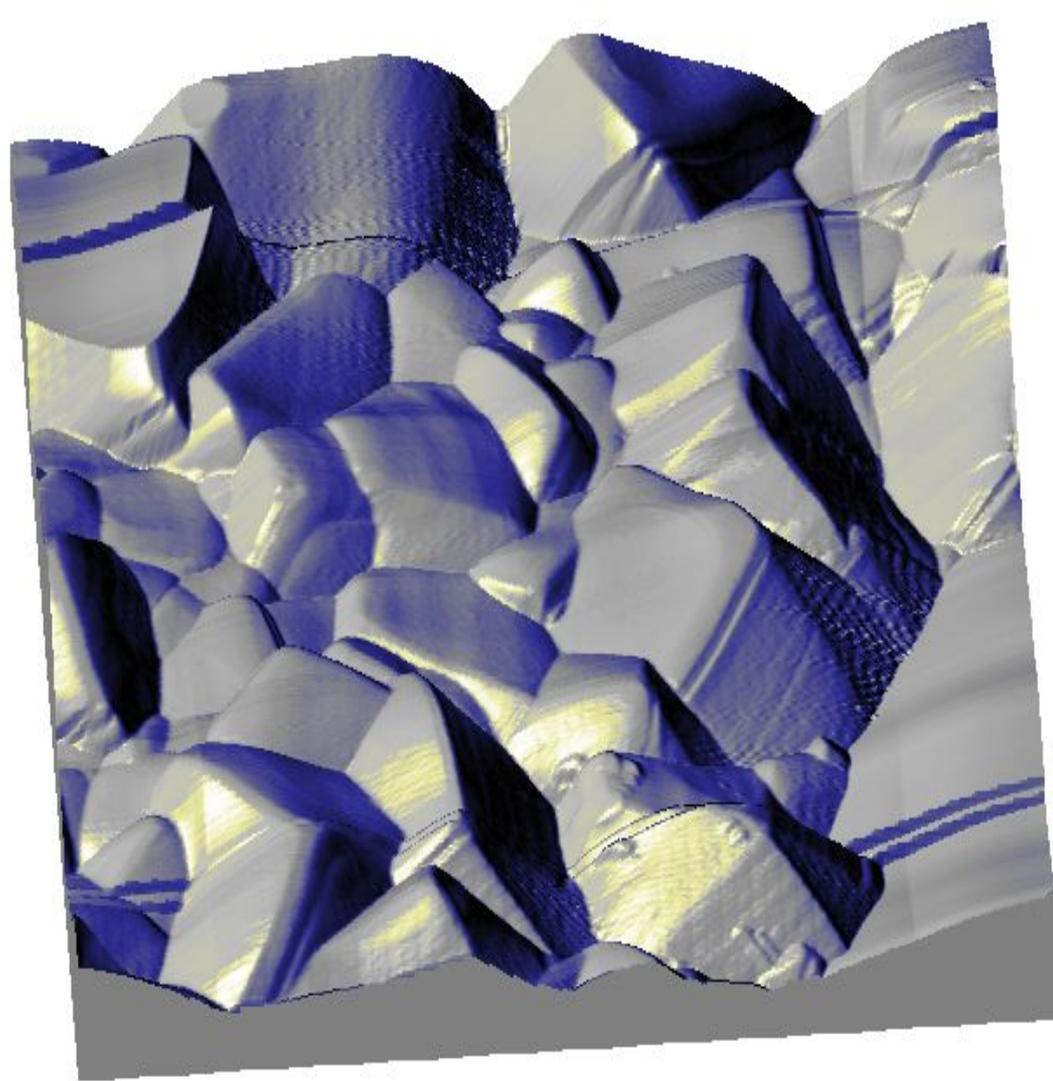
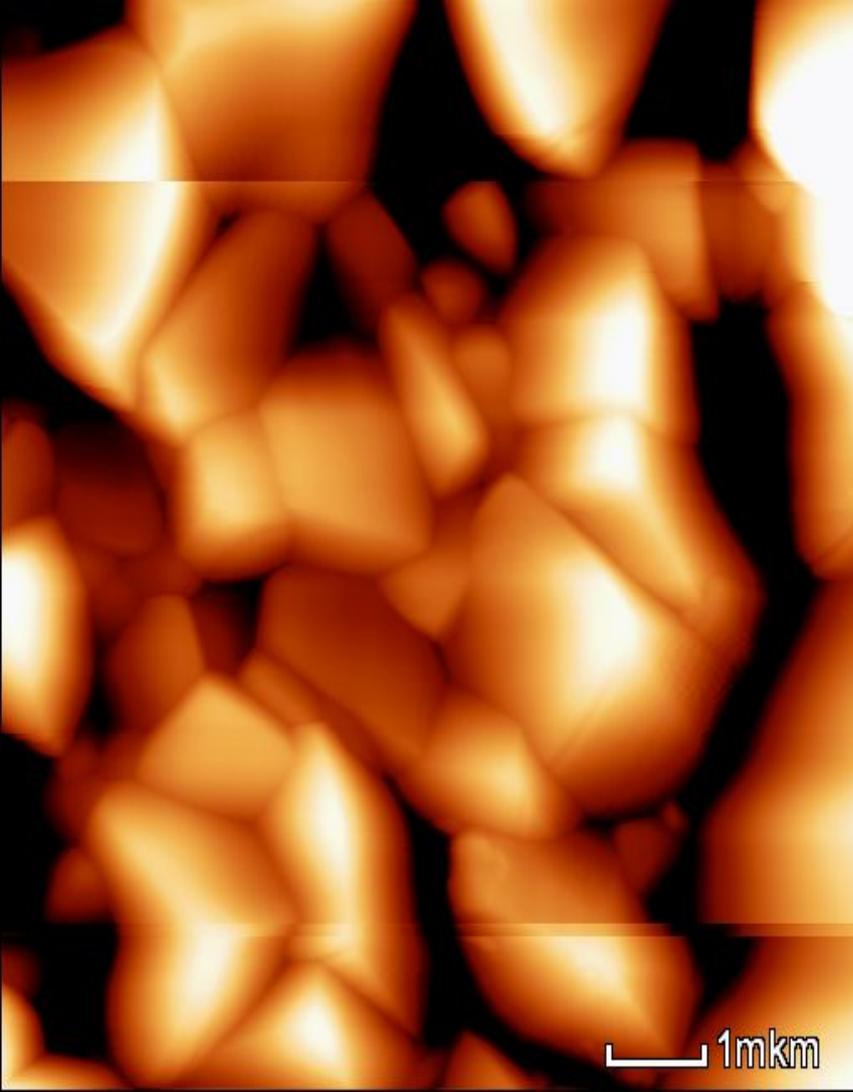
Z[nm]= +1.5 Fb[p:0.0] i:5.0 Plane Adapt V-set
 Z appr Back Z F(V)= +0.604 Step(A): 0.20⁻¹
 Laser F0(V)= 0.600 V(um/s): 1.02 Filter: 4

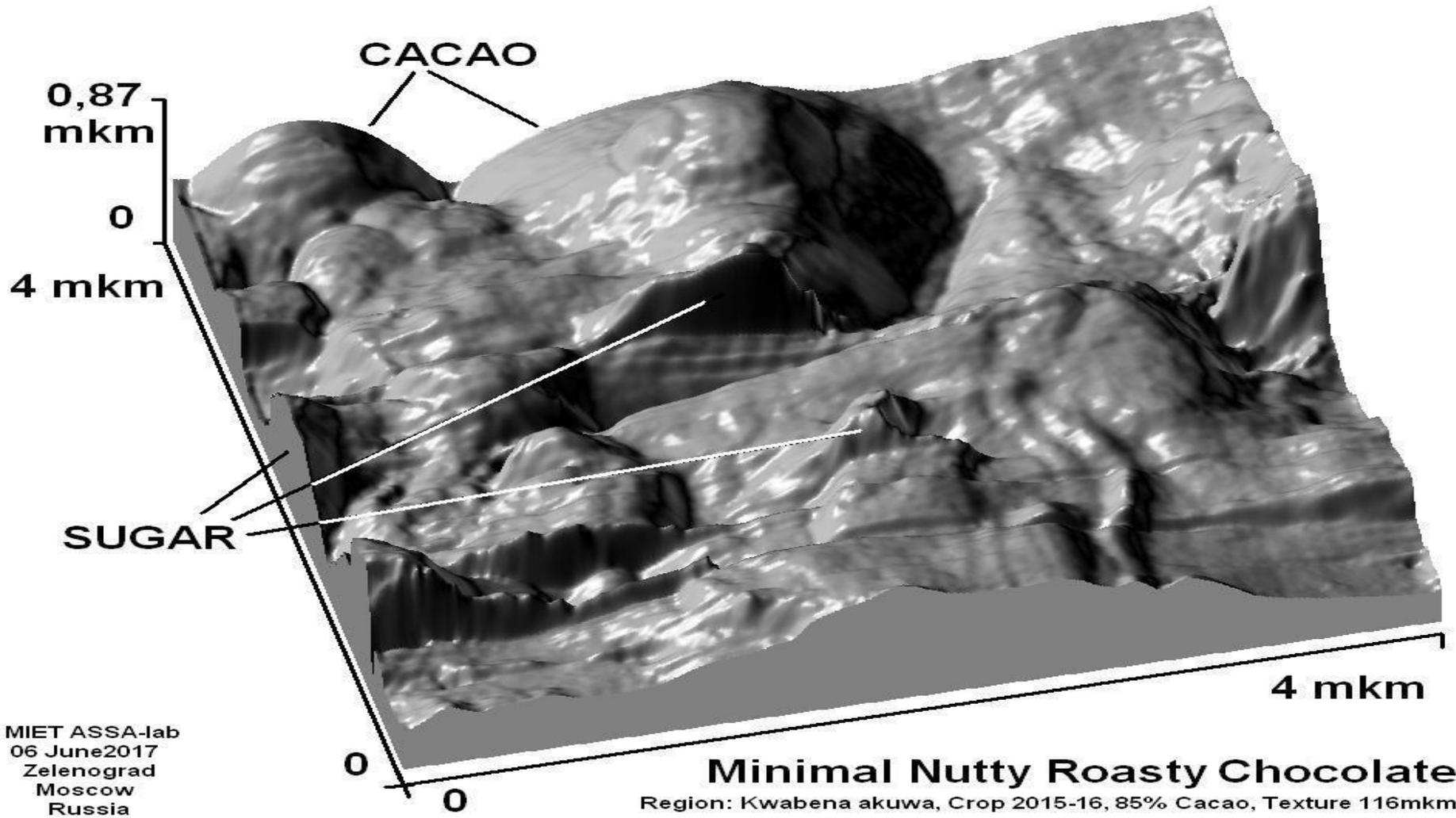


Слюда, атомы, период 3,95 А, кадр 10x10nm
микроскоп SMM-2000



Наноструктура пьезокерамики



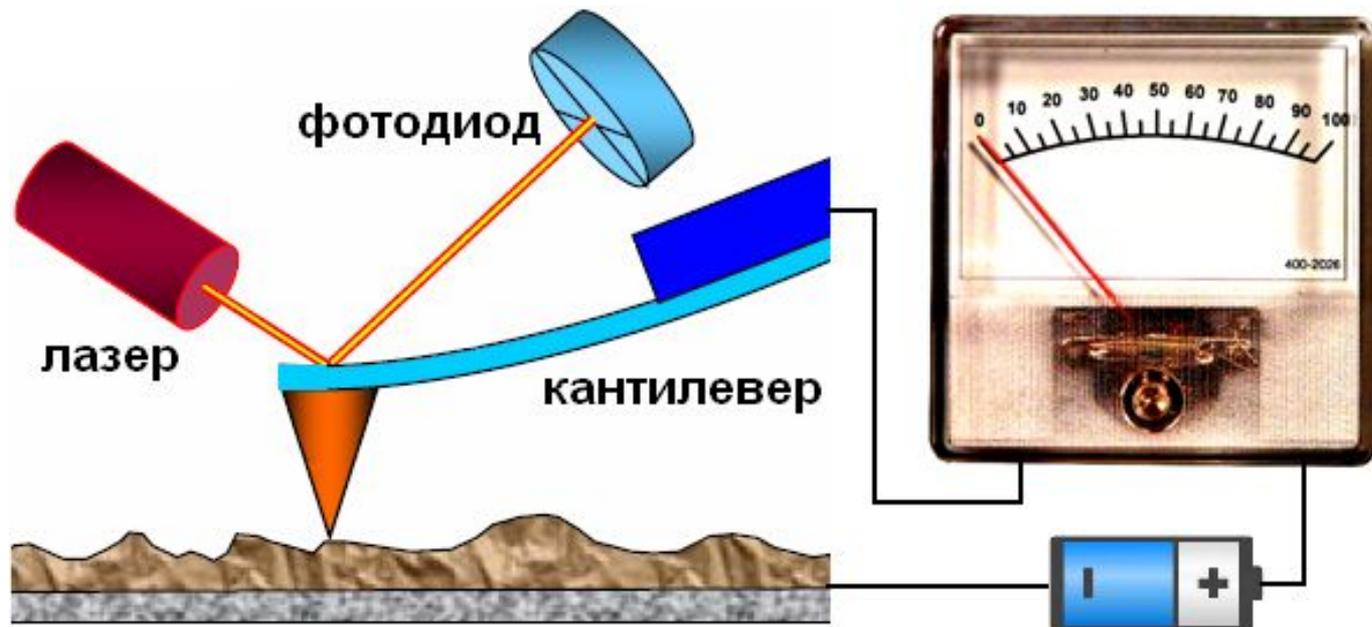


MIET ASSA-lab
06 June 2017
Zelenograd
Moscow
Russia

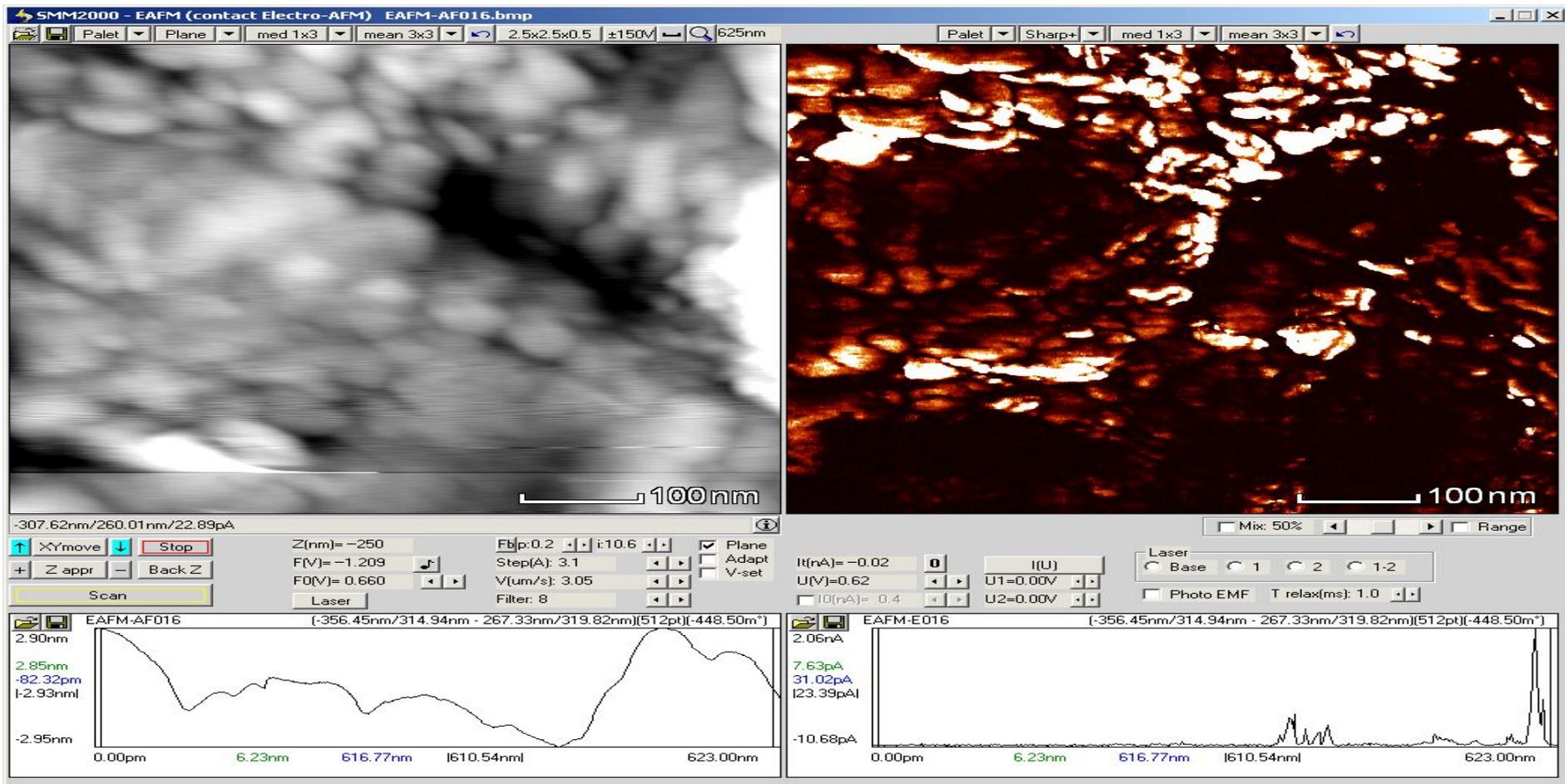
Minimal Nutty Roasty Chocolate

Region: Kwabena akuwa, Crop 2015-16, 85% Cacao, Texture 116mkm

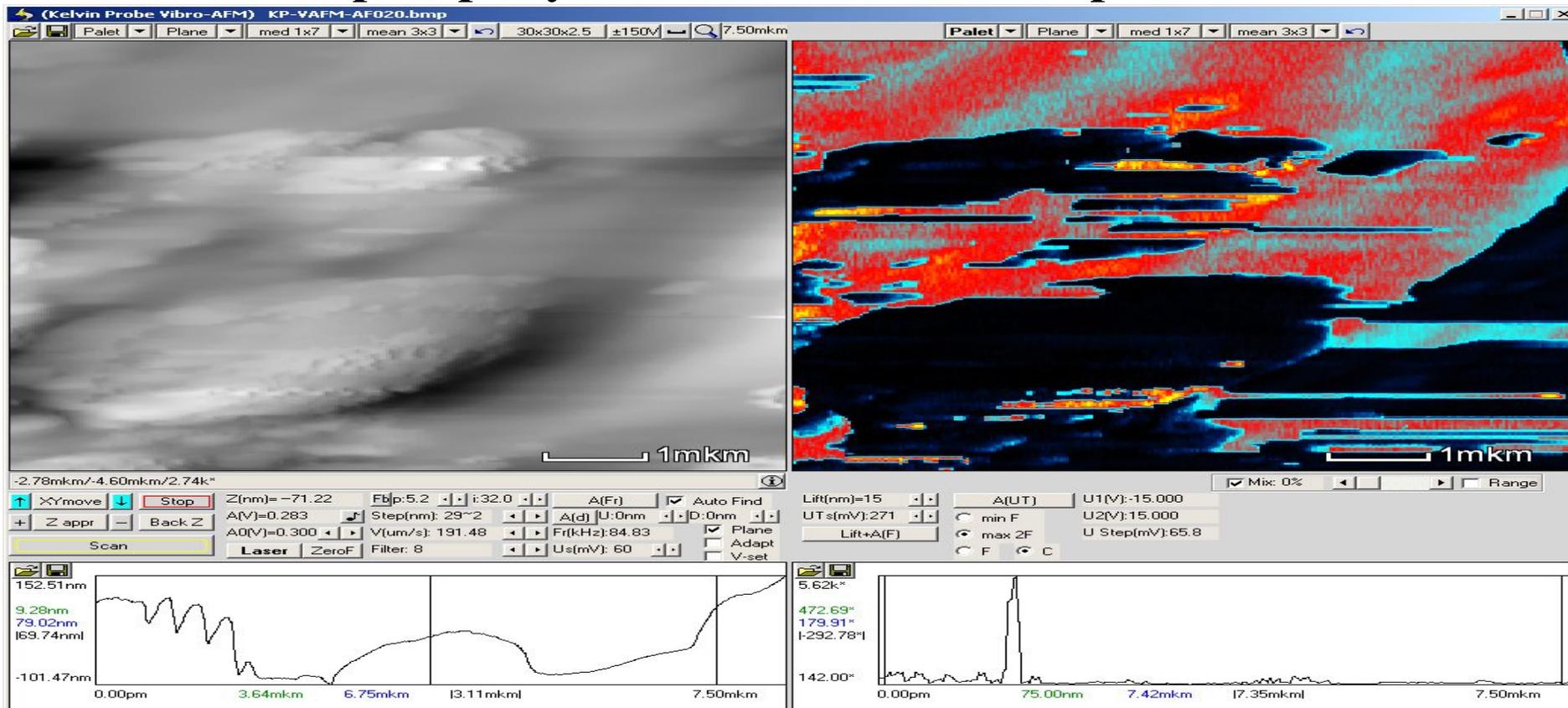
Атомно-силовой микроскоп : измерение рельефа и тока



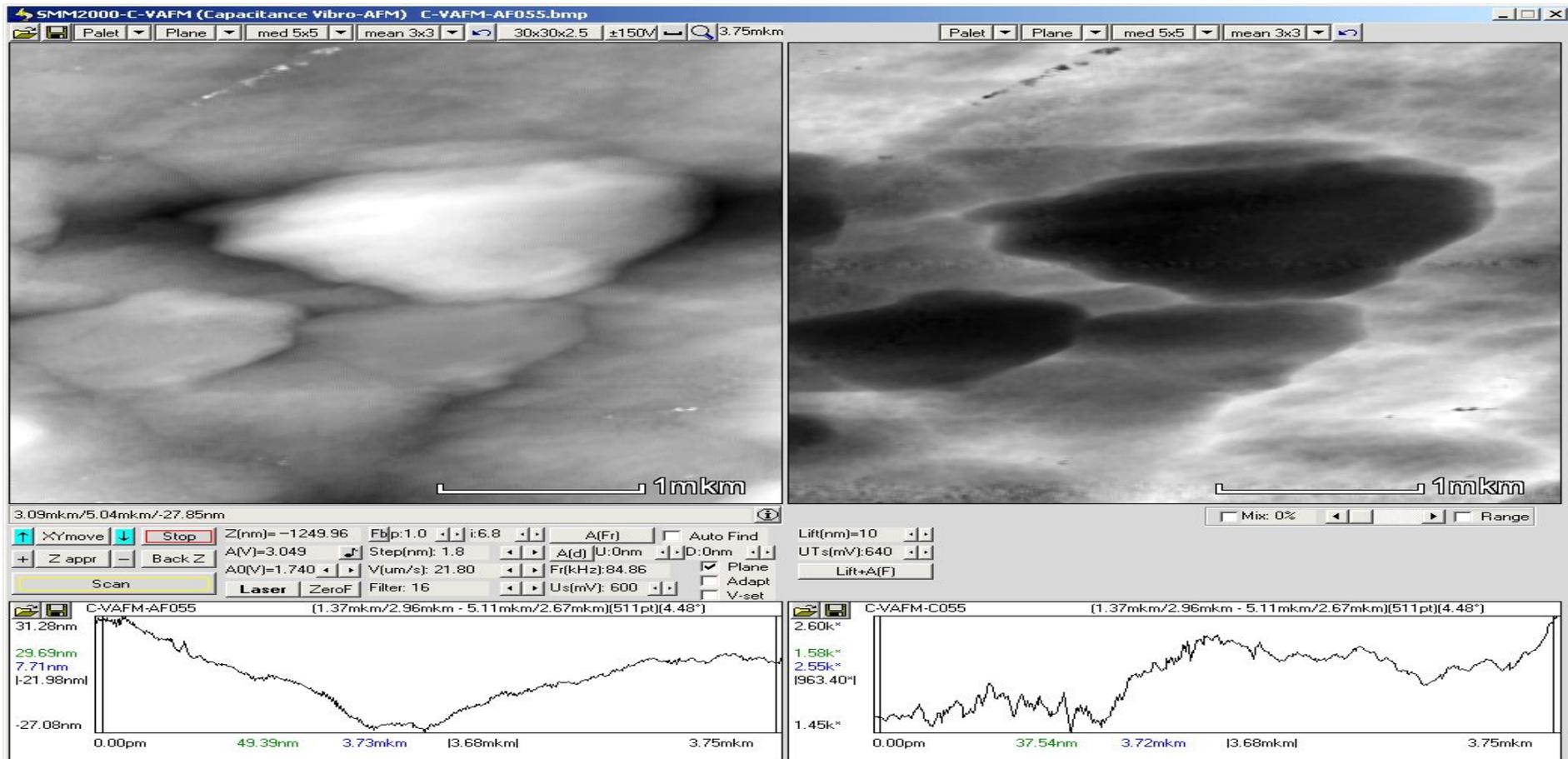
Карта электропроводности



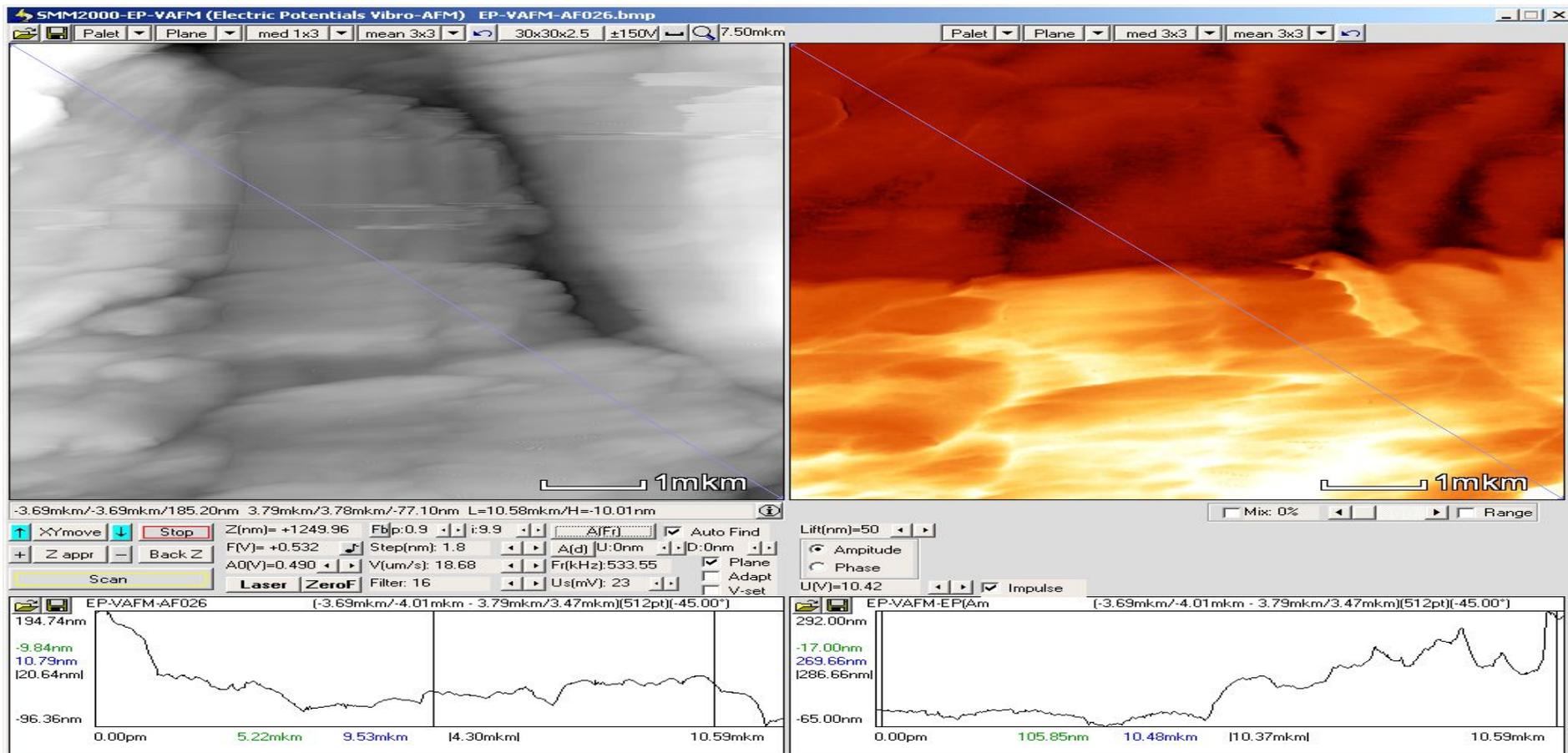
Карта электрических потенциалов при пропускании тока вдоль образца



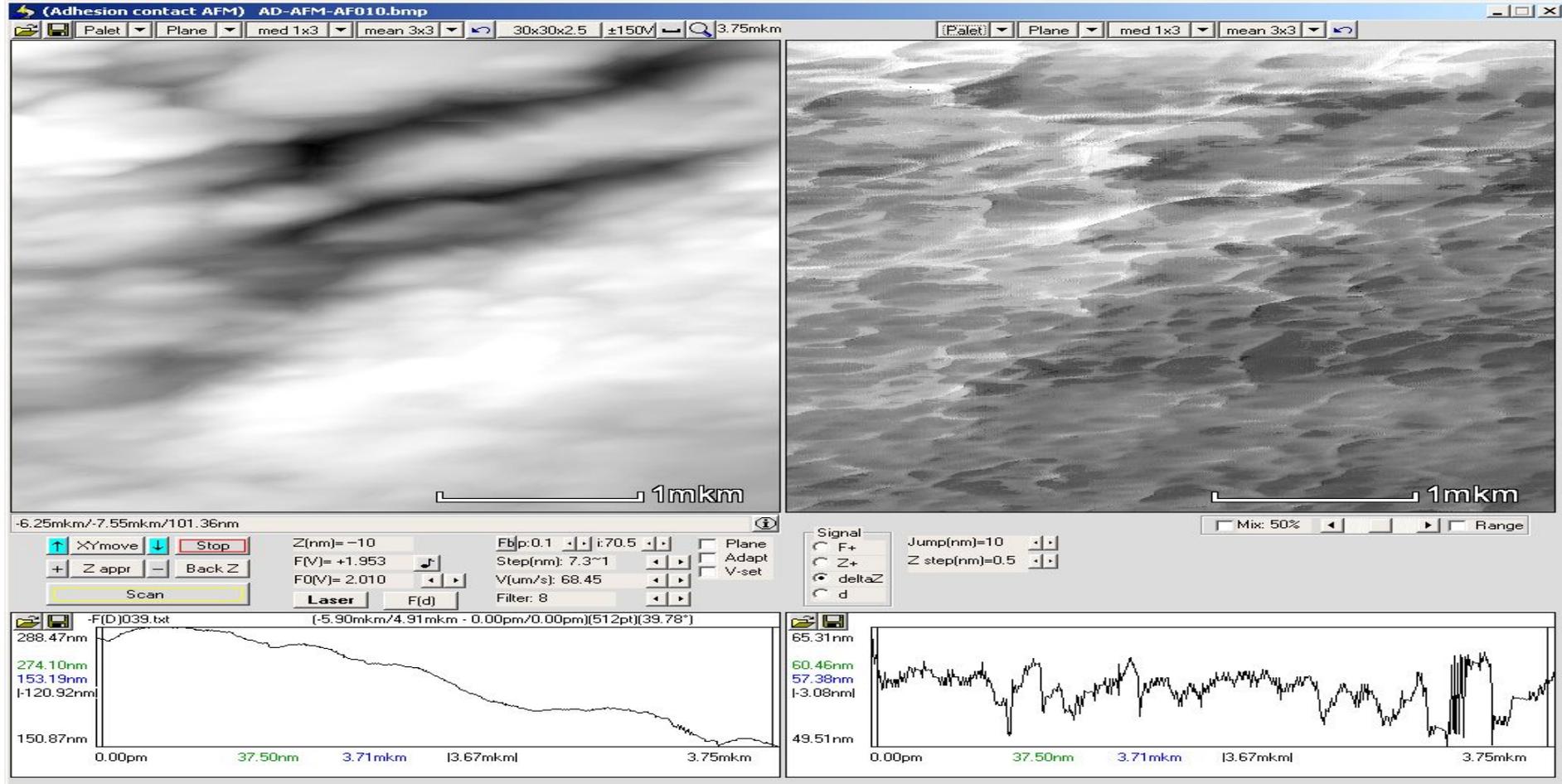
Карта упругости



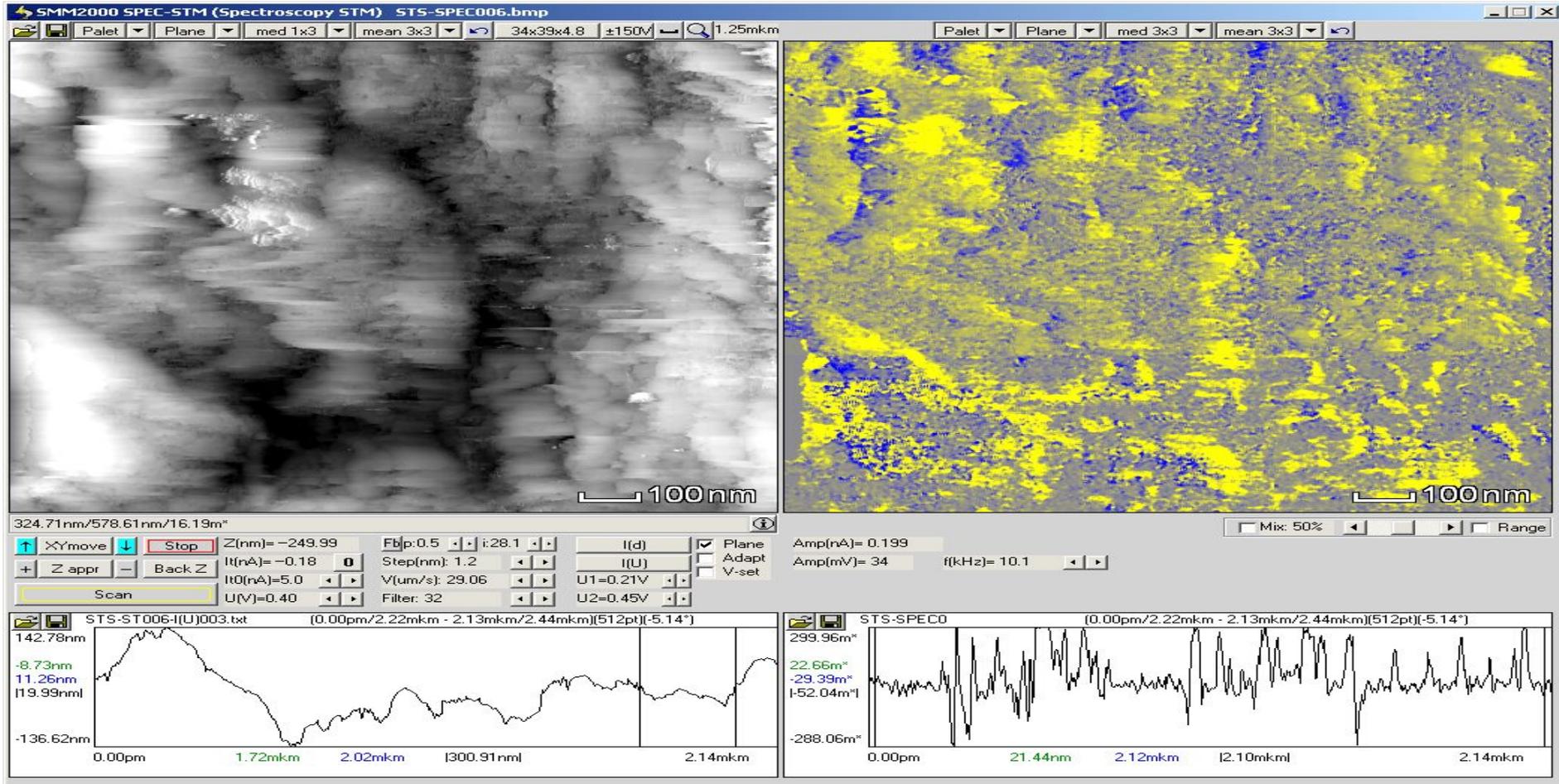
Карта вязкости



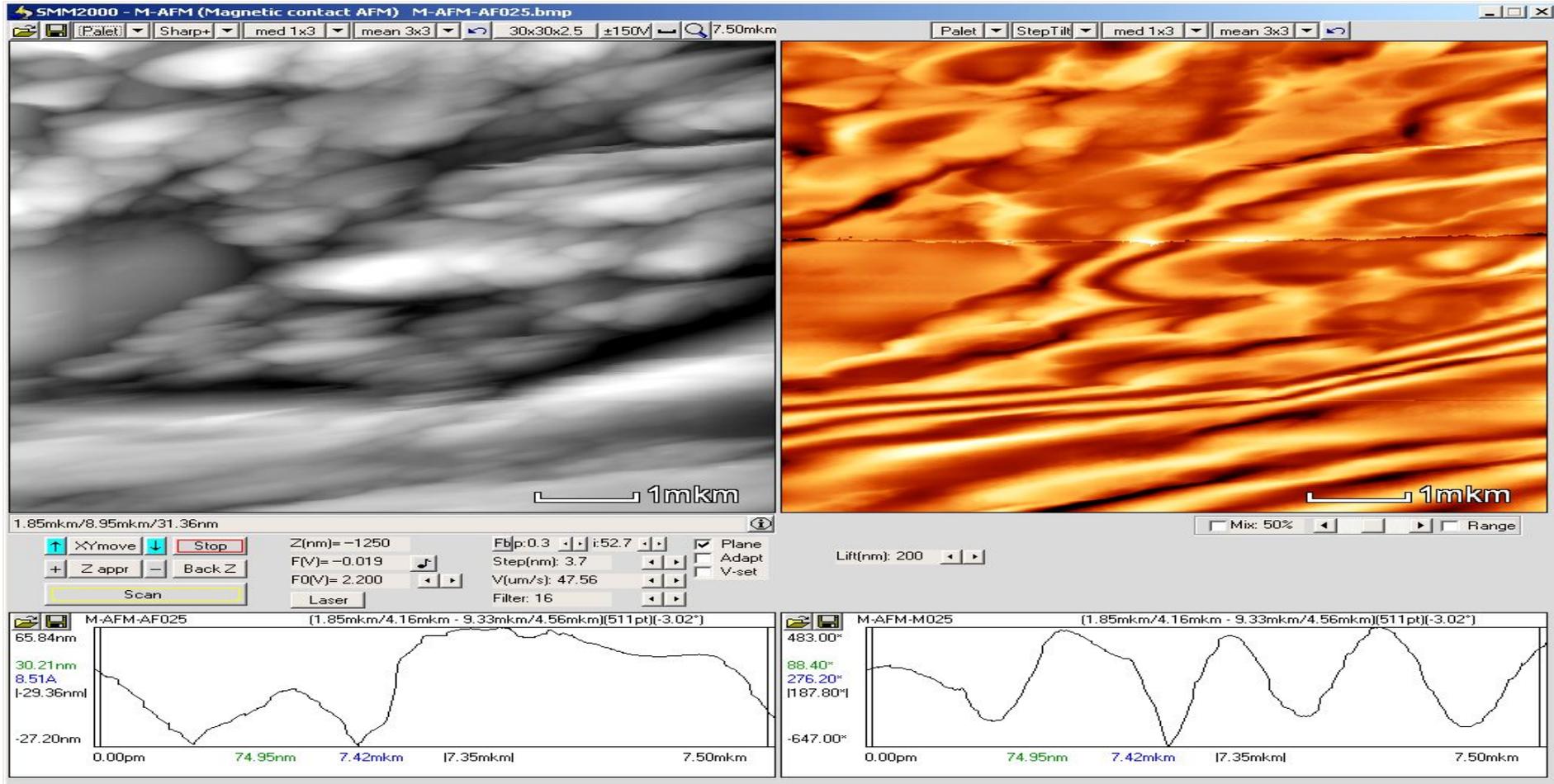
Карта адгезии (к определённому материалу)



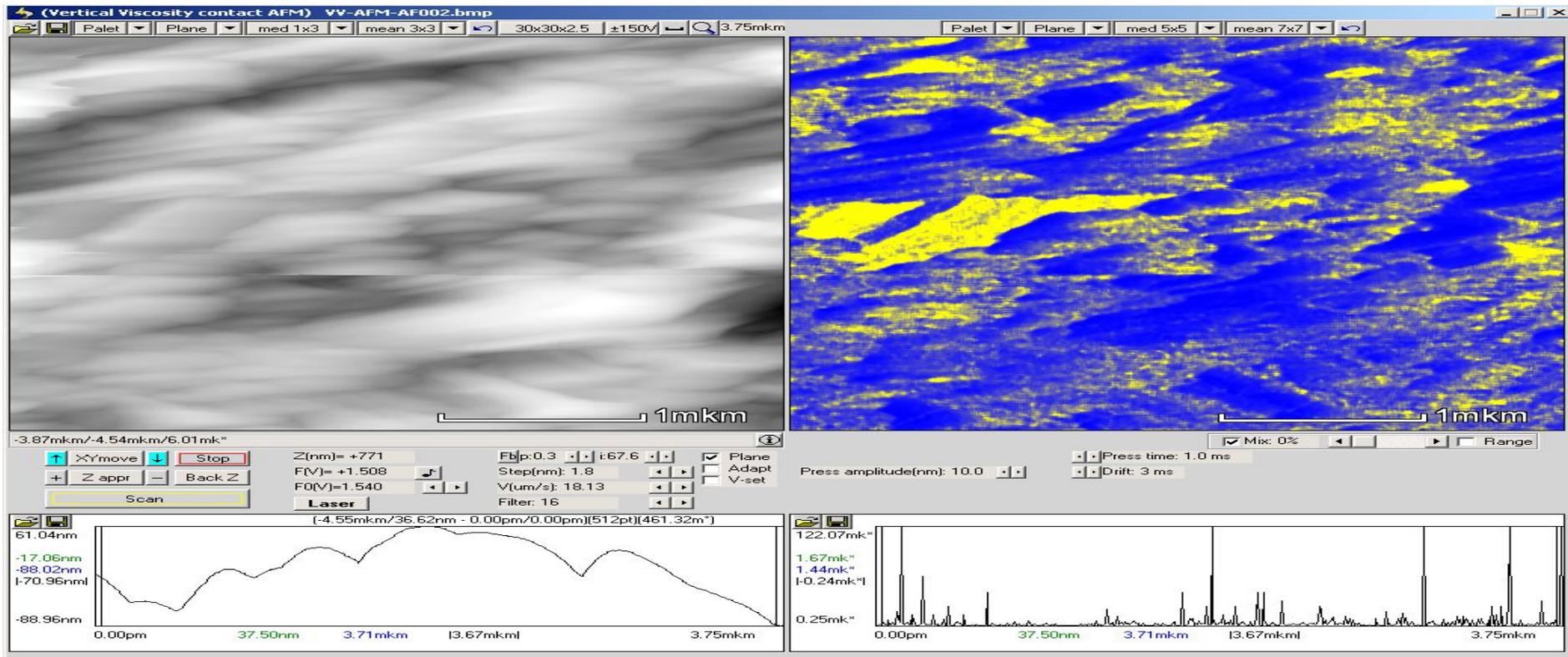
Температурная карта (теплопроводности)



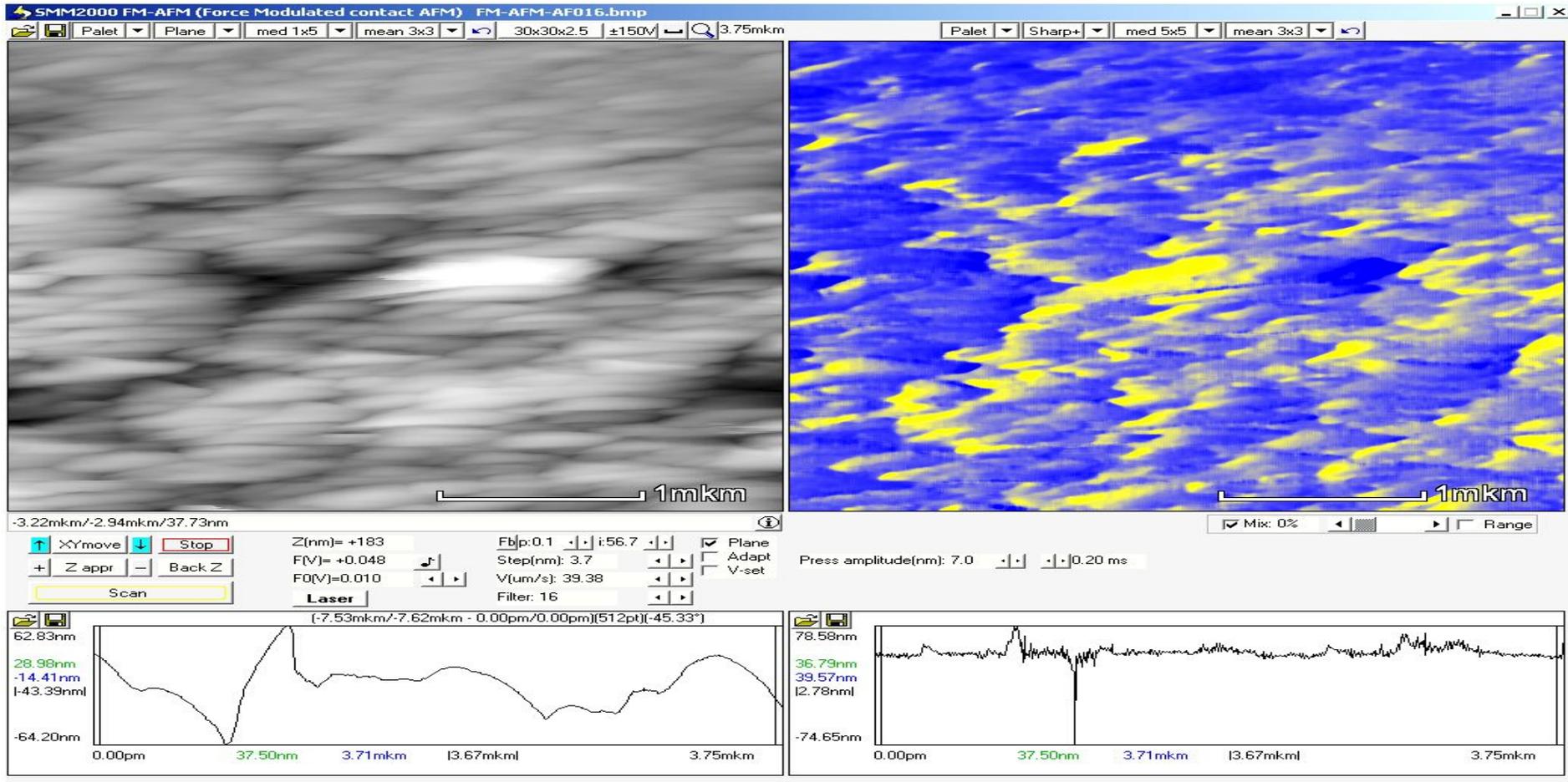
Карта намагниченности поверхности образца



Карта коэрцитивной силы (поля насыщения, чувствительности) магнитного или пьезоэлектрического материалов



Карта примеси в полупроводнике



Карта электролюминесценции (квантовые точки)

