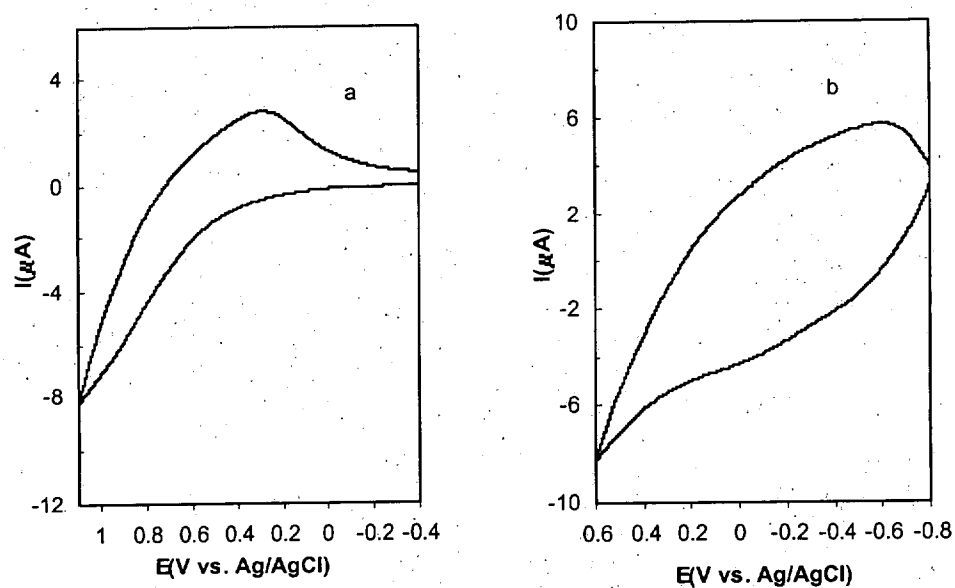
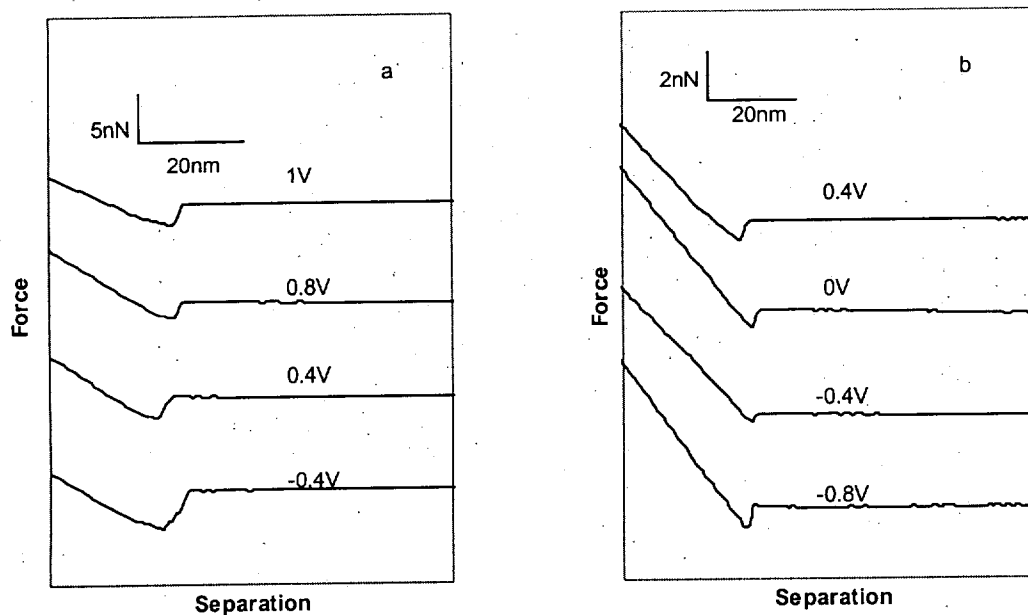


Supporting information: CV of poly(3-methylthiopene)(a) and polypyrrole(b)
in 0.01M KClO_4 , scan rate: 0.1 V/s.



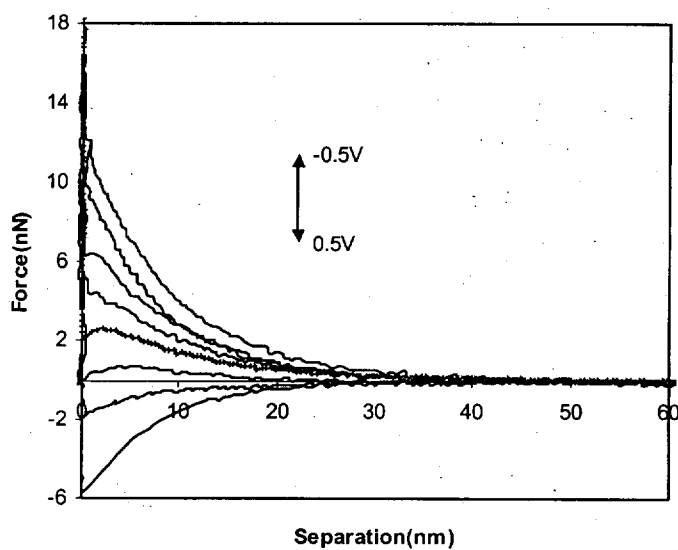
Supporting Fig. 1

Supporting information: Forces between silica and conductive polymer film in 0.01M KClO_4 as a function of electrode Potential:
(a) poly(3-methylthiophene); (b) polypyrrole



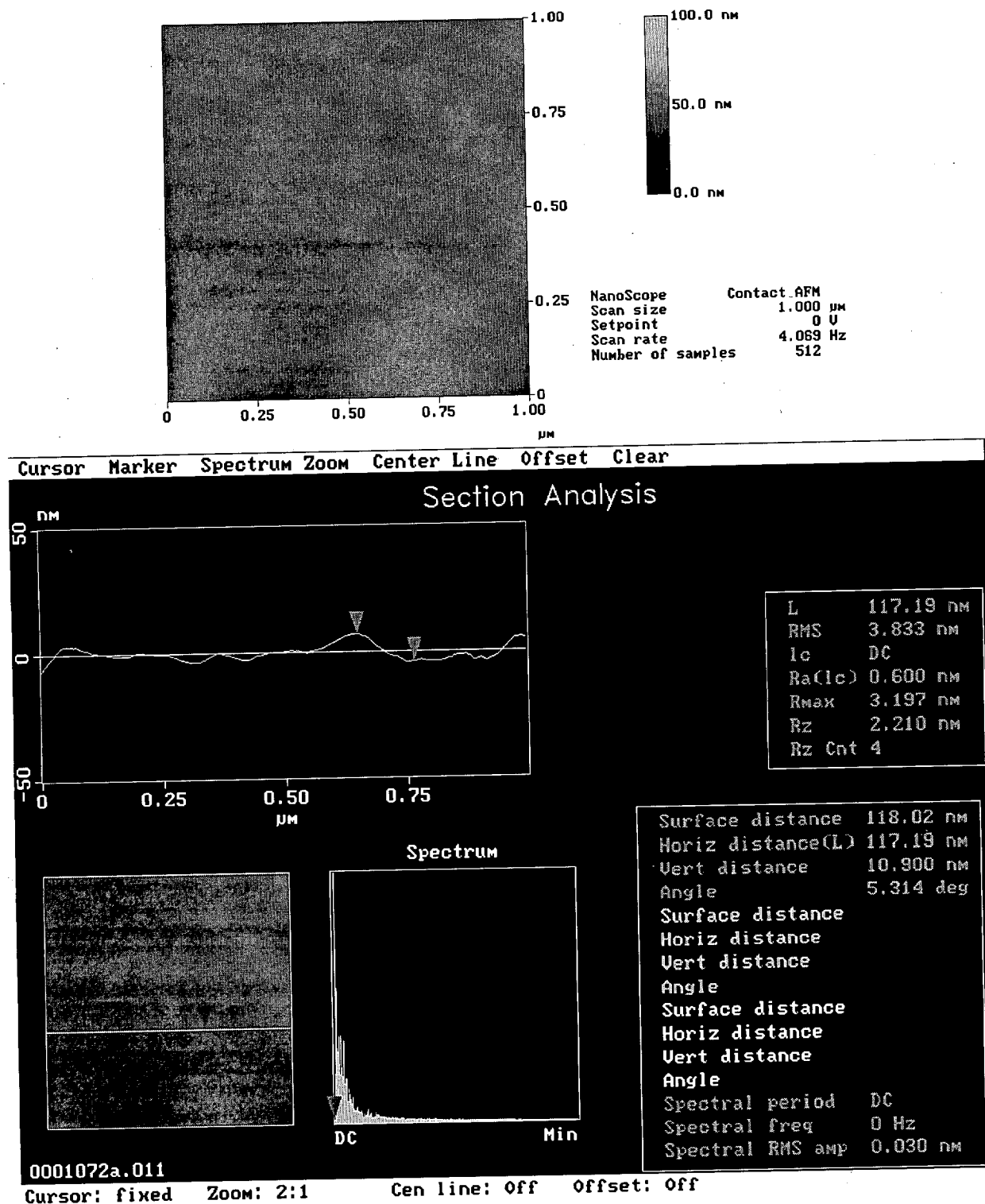
Supporting Fig. 2

Supporting information: forces between a silica probe and polished Au electrode in 0.001M KClO₄ solution as a function of electrode potential. The force curves correspond to controlled potentials of from top to bottom, -0.5, -0.3, -0.1, 0, 0.2, 0.3, 0.5V vs. Ag/AgCl.



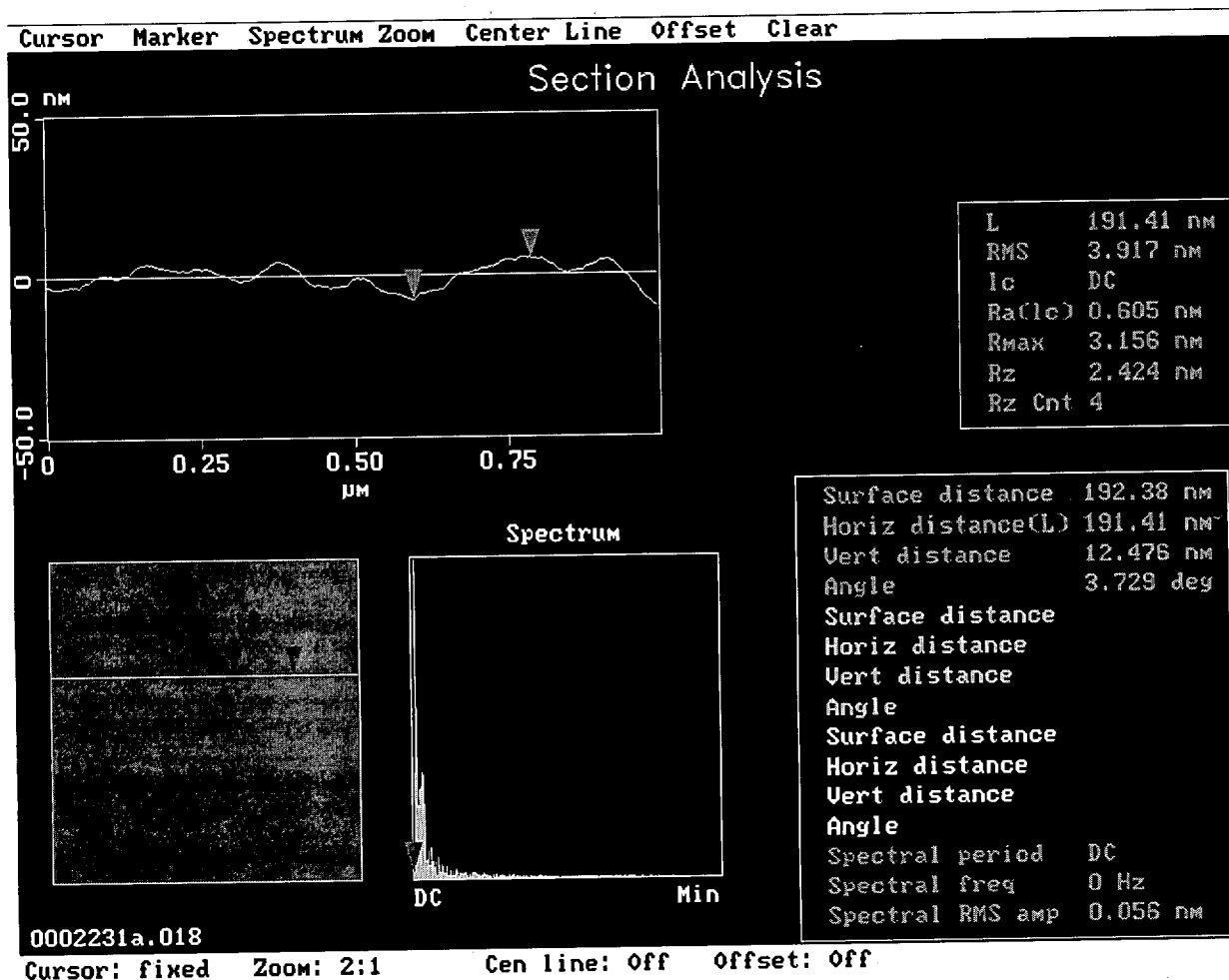
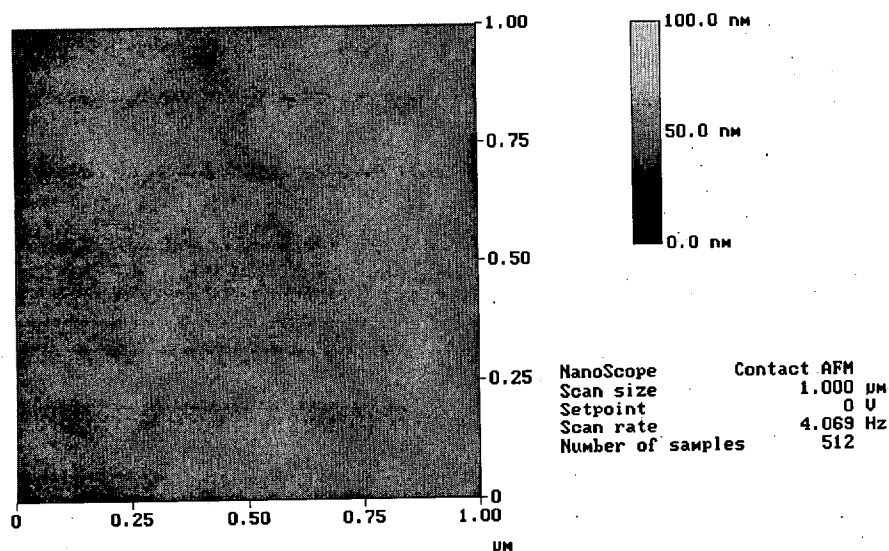
Supporting Fig. 3

Supporting information: AFM image of the smoothest part of the surface of poly(3-methylthiophene). RMS~3.5nm with a maximum peak-to-valley height of ~11nm over a 1 μ m x 1 μ m area



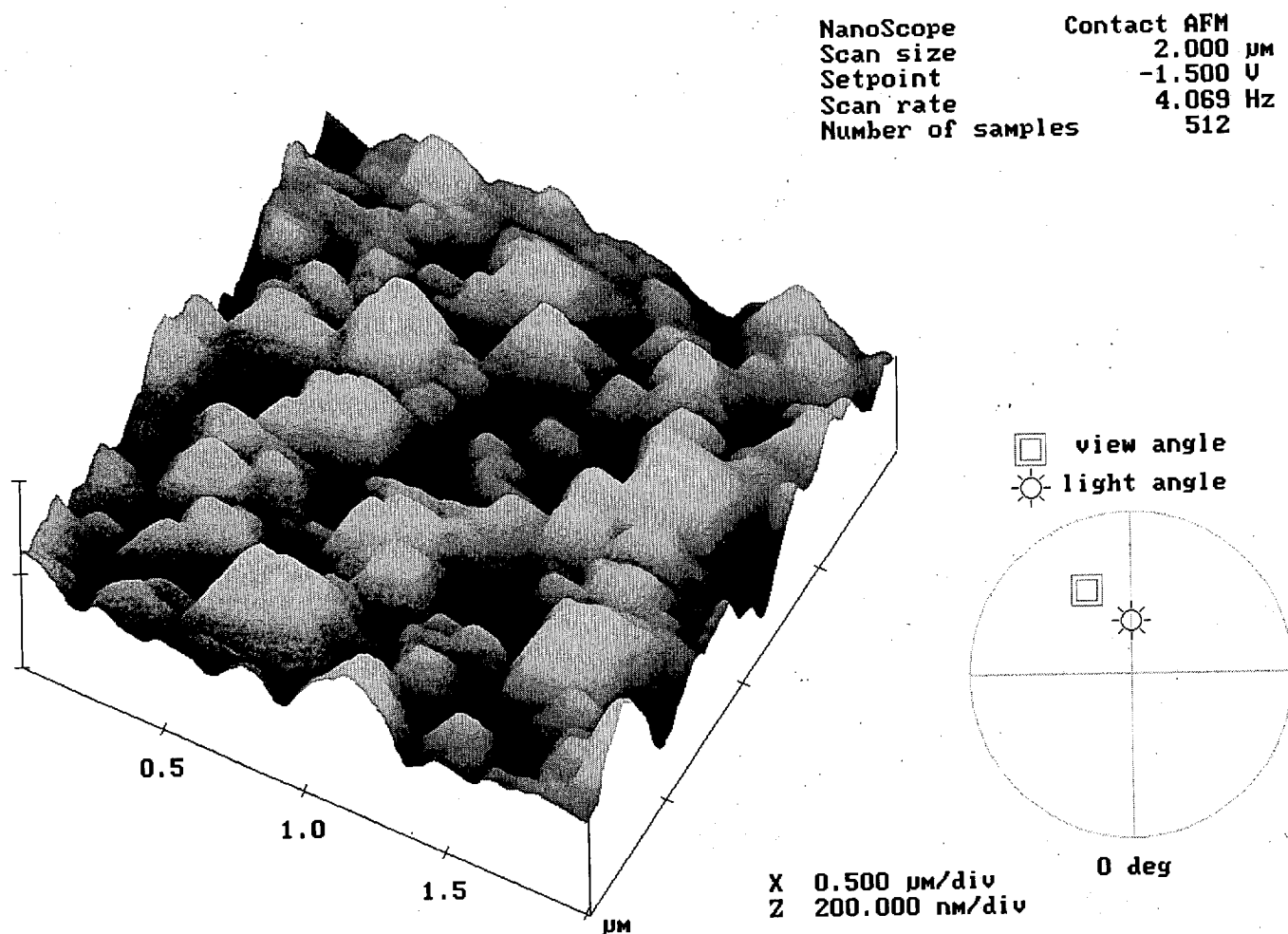
Supporting Fig. 4

Supporting information: AFM image of the smoothest part of the surface of polypyrrole. RMS~3.8nm with a maximum peak-to-valley height of ~12.5nm over a 1 μ m x 1 μ m area



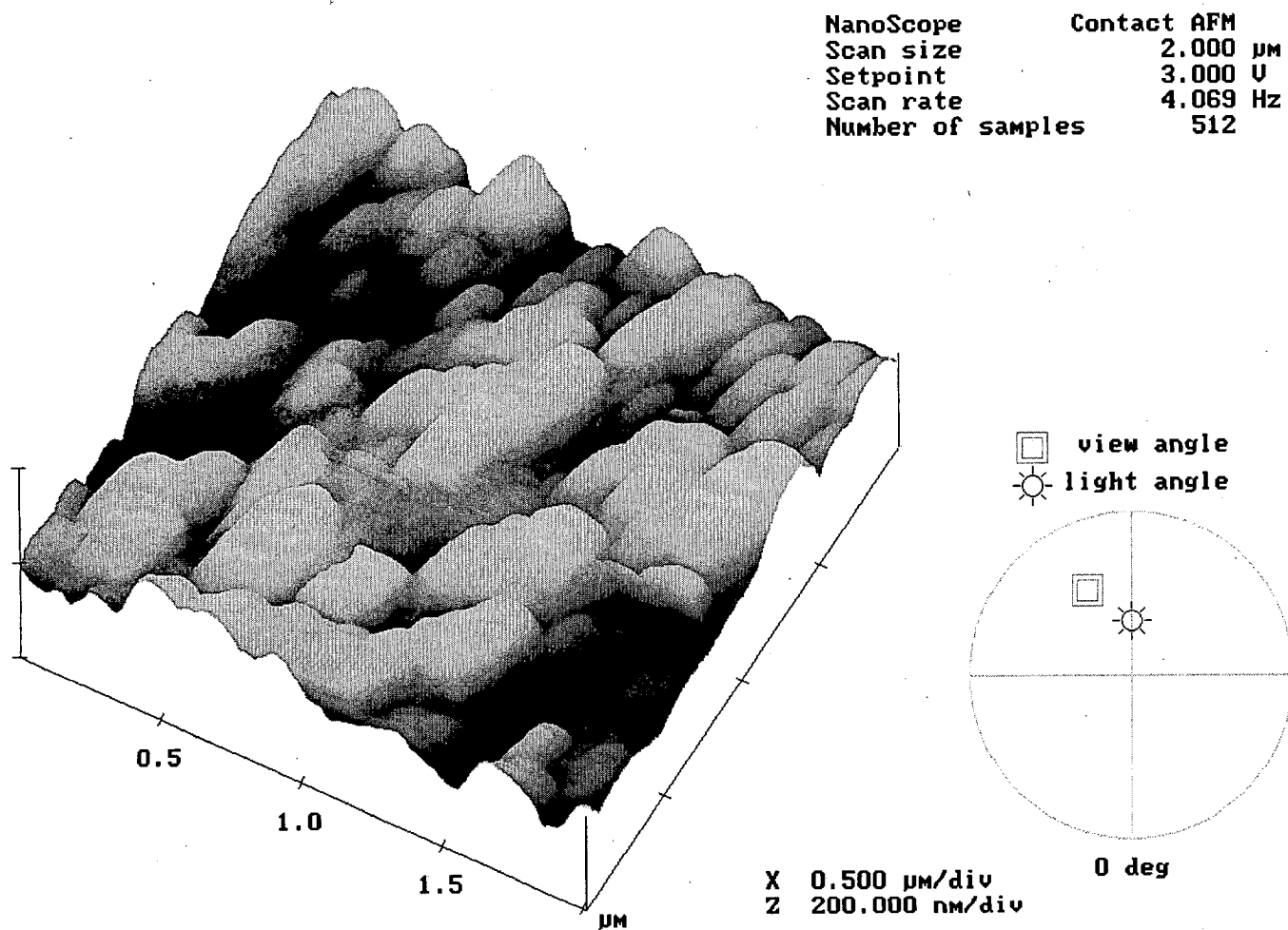
Supporting Fig. 5

Supporting information: AFM image of poly(3-methylthiophene)



Supporting Fig.6

Supporting information: AFM image of electrochemically roughened Au surface



Supporting Fig. 7