

Abstract Submitted
for the MAR06 Meeting of
The American Physical Society

Investigation of atomic force microscopic image resolution of organic molecules MASANORI HARADA, MASARU TSUKADA, Waseda University, NARUO SASAKI, Seikei University — We simulated atomic force microscopic images of organic molecules using MM3 force field. Especially we investigated how higher the resolution of images can change using single atom tip compared with realistic tip model. This investigation was motivated by the fact that the resolution of the AFM images of organic molecules is not as good as the images of inorganic surfaces. The difference of the image resolutions can be seen for different element atom, which means using different van der Waals parameter. We also investigated the relation between resolution and mobility of molecules.

Masanori Harada
Waseda University

Date submitted: 15 Jan 2006

Electronic form version 1.4