Atomic Force Microscopy, Nano Machines, Mechanical and Acoustic detection of Gametes

## KAWAKATSU LAB.

## TOUCHING NANO WITH SOUND AND FORCE

Centre for Interdisciplinary Research on MicroNano Methods Laboratory for Integrated Micro-Mechatronics Systems (LIMMS/CNRS-IIS (IRL2820))

Applied Scientific Instruments

Department of Precision Engineering, Graduate School of Engineering

http://www.inventio.iis.u-tokyo.ac.jp/

Fig.3 Liquid AFM

## Coupling to the Nano Regime through Force, Sound and Emission



(1)Our chief interest lies in mechanical interactions in the atomic to the nano regime. We work on imaging mechanisms and novel detection techniques. We are also looking into possible application to mechanical biosensing.

(2) We welcome young students and interns from all over the world.(3) We also organize MakerSpace or Fablab for students and staff.



## Fig1.Chemical contrast AFM Fig.2 UHV TEM AFM

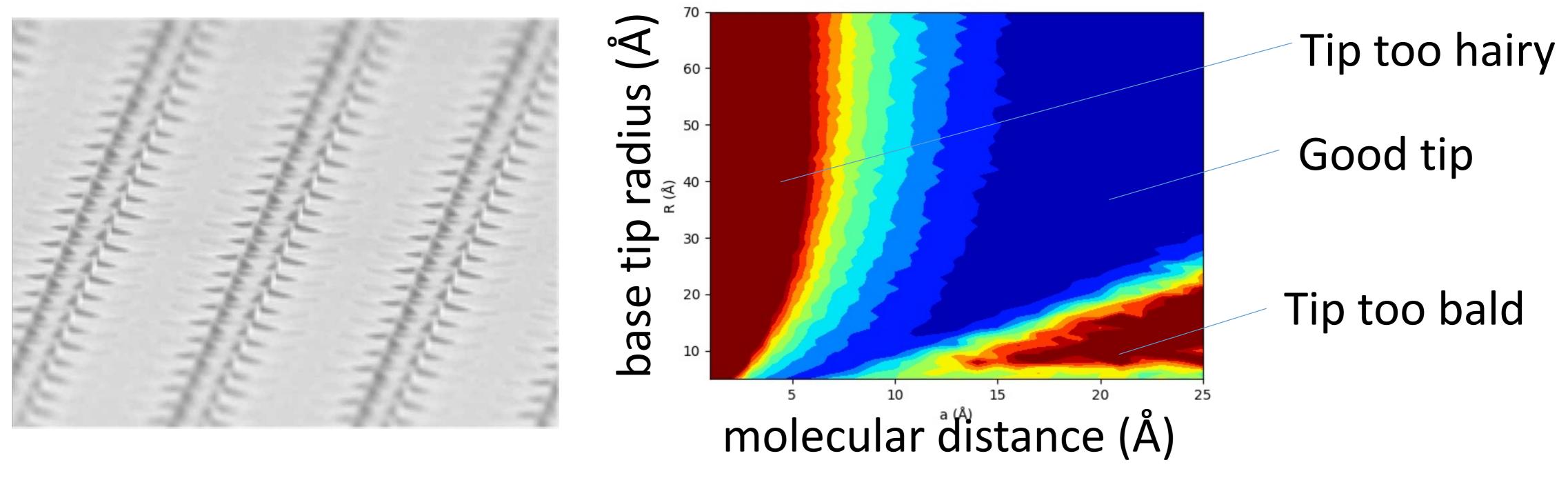


Fig4.Millions of cantilevers Fig.5 Ideal AFM tip by molecular functionalisation

