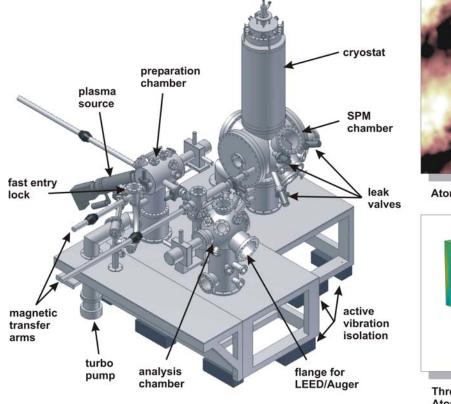
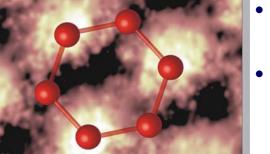
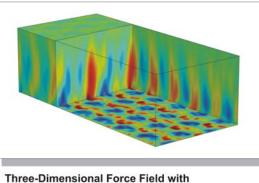
CRISP High Resolution Low Temperature Ultrahigh Vacuum Scanning Tunneling/Noncontact Atomic Force Microscope

Part of the CRISP Shared Equipment is a unique high-resolution, low-temperature ultrahigh vacuum scanning probe microscope for simultaneous operation in noncontact atomic force microscopy and scanning tunneling microscopy mode at 4 K.





Atoms on Graphite



Three-Dimensional Force Field with Atomic Resolution on Graphite

- Three chamber vacuum system
- Entirely homebuilt, students played a key role in designing, building, and testing
- Enables atomic-scale investigations of insulating oxide surfaces
- This instrument enabled the first threedimensional surface force field imaging

B. J. Albers, T. C. Schwendemann, M. Z. Baykara, N. Pilet, E. I. Altman, and U. D. Schwarz

CRISPCenter for Research on Interface Structures and Phenomena
Yale University | Southern CT State University | Brookhaven Natl LabNSF-MRSEC
DMR-0520495

