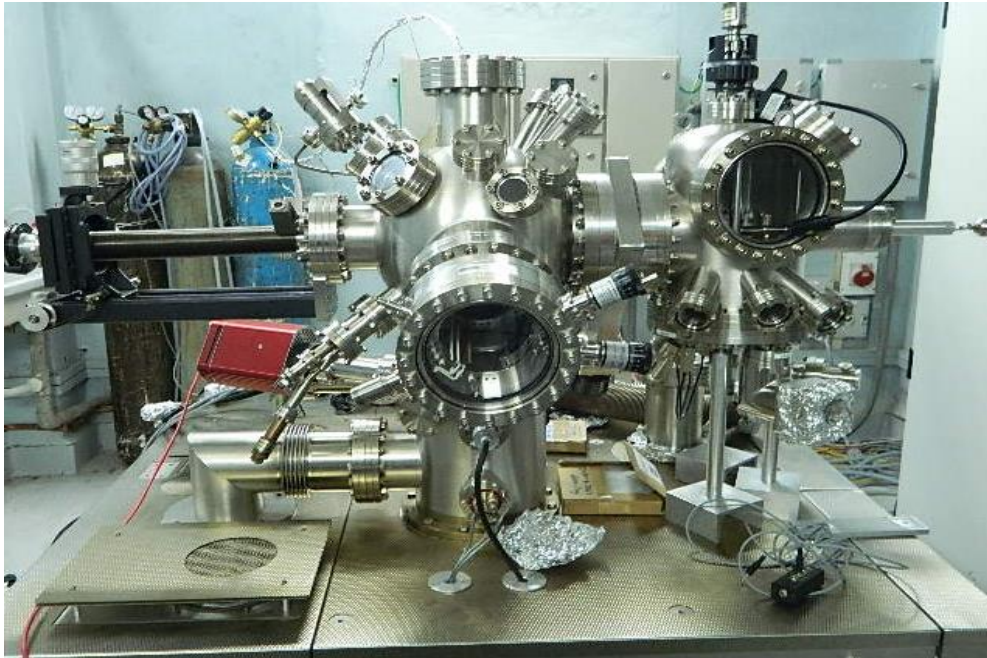
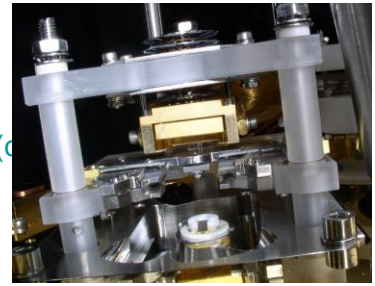


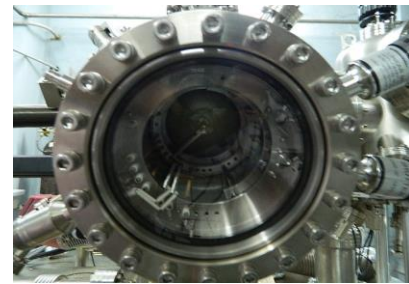
# Ultra high vacuum STM



STM work station

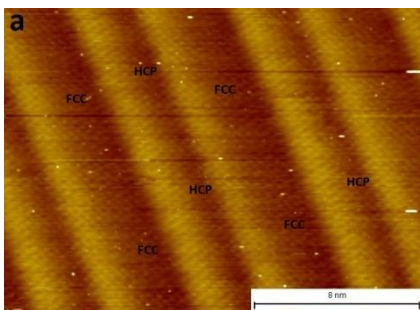


Sample stage

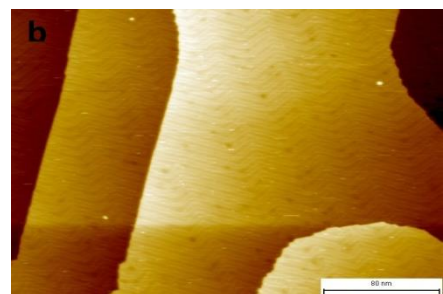


LEED / Auger equipment

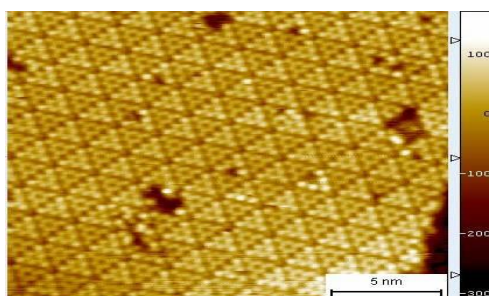
- Scanning Tunneling Microscopy images for single crystal surfaces with resolution better than 0.01 nm
- AFM in both Contact & Non-Contact mode with atomic resolution.
- Temperature variation:
  - Heating facilities at stage: Direct heating – Max temp. 1000K
  - Radiative heating- Max. temp. 750K
  - Controlled cooling facilities: Minimum sample temperature - 25 K (with LHe)
  - 120 K (with LN2)
- Low Energy Electron Diffraction facility.
- Electron induced Auger electron spectroscopy with energy up to 3000 eV
- Base vacuum of chamber:  $4 \times 10^{-11}$  mbar



Zoomed image of herringbone reconstruction on Au(111) showing fcc and hcp regions.



Herringbone reconstruction on Au(111) at step surface



STM image of Si(111) at RT at  $V_{\text{gap}} = -1.8\text{V}$