

Photon-STM

Objectives

Surface science. STM at low temperature refrigerated with liquid Helium and Nitrogen closed circuit. Possibility to study the sample at different temperatures and pressure ranges without changes in the base pressure.

Environmental conditions

- Sample temperature range: from <5K (STM) up to 800K in sample holder.
- Atmosphere: vacuum base pressure 10^{-11} mbar by turbo pumps, Ion pumps, and TSP.
- Thin films preparation with different evaporators.
- Sample preparation for UHV. Ion gun up to 5KV.
- Quartz microbalance
- Hydrogen cracker

Analytical Techniques

- **TPD** (Temperature Programmed Desorption).
- **LEED** (Low Electron Energy Diffraction).
- **STM** (Scanning Tunneling Spectroscopy).
- **RAMAN**

