

## NAUTILUS (STM to low temperature with sample preparation)

### Objectives

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

### Environmental conditions

- Sample temperature range: from <10K (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).

