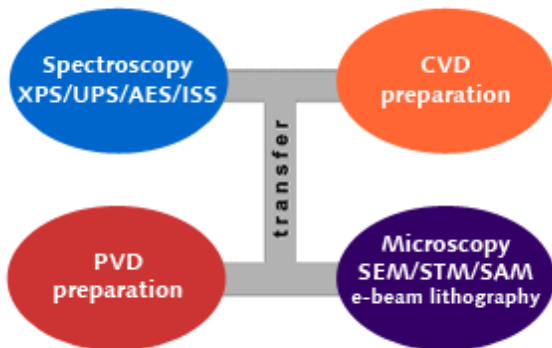
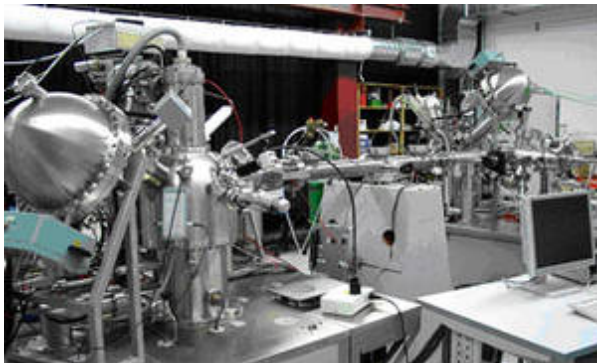


# Laboratory for Preparation and Characterization of Nanostructures



## Spectroscopy

XPS (X-Ray Photoelectron Spectroscopy)  
UPS (Ultraviolet Photoelectron Spectroscopy)  
AES (Auger Electron Spectroscopy)  
ISS (Ion Scattering Spectroscopy)  
Depth profiling (ARXPS, sputtering)



## Microscopy

SEM (Scanning Electron Microscopy)  
SAM (Scanning Auger Microscopy)  
STM (Scanning Tunneling Microscopy)

## Preparation

PVD (Physical Vapor Deposition)

CVD (Chemical Vapor Deposition)  
Low Energy Electron Irradiation  
Sample heating/cooling  
Sputtering

## Cleanroom



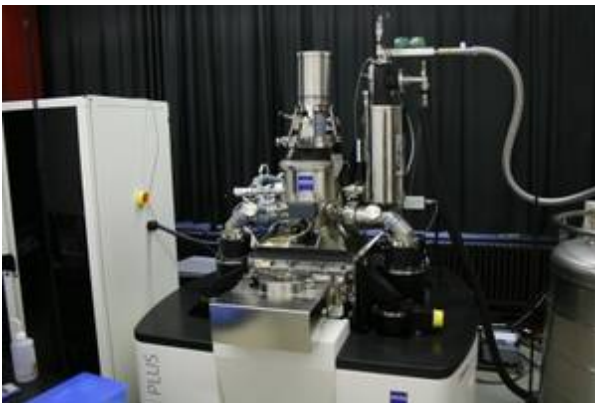
### Whiteroom (Class 1000)

Wetbench  
Optical Microscopes  
Spin Coater  
Photolithography

### Greyroom

Optical Microscopes  
Critical Point Dryer  
Ozone Cleaner  
Contact Angle Measurement System

## Helium Ion Microscope

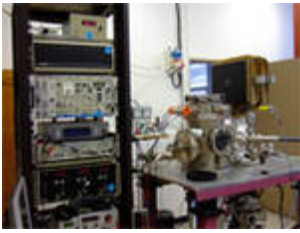


Helium Ion Microscope Orion from Zeiss



ELPHY MultiBeam Pattern Generator from Raith ([link to product](#))

## LEEPS Microscopes

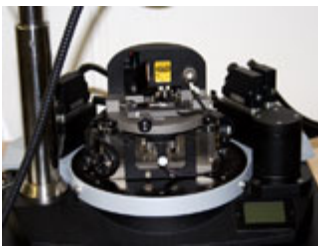


Low Energy Electron Point Source (LEEPS) microscope  
Nanomanipulator  
Single nanowire experiments



Low Energy Electron Point Source (LEEPS) microscope  
High resolution detector  
Electron Holography

## Scanning Probe Microscope



AFM (Atomic Force Microscopy)  
STM (Scanning Tunneling Microscopy)  
Electrochemistry

## Infrared Spectroscopy



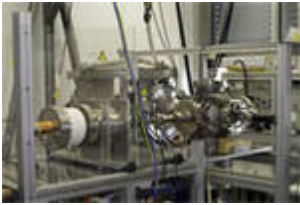
IRRAS (Infrared Reflection Absorption Spectroscopy)  
ATR-IR (Attenuated Total Reflection Spectroscopy)

## Projection Lithography



Low Energy Electron Irradiation

## Ionbeam



Ion-Source (15kV)  
Duo-Plasmatron Ion-Source (30kV)  
Space-/Time-resolved Fragment-Spectrometer