



Deposition Cluster



Pulsed Laser Deposition system (PLD)

In our deposition cluster, users can grow single- or multi-layered thin film samples with different techniques. The cluster allows transferring the samples from one of its chambers to another keeping them under UHV pressure. It consists of:

- A Pulsed Laser Deposition (PLD) system, mostly used to grow oxides and manganites. PLD growth can be monitored by means of Reflection High-Energy Electron Diffraction (RHEED);
- A Chemical Vapor Deposition (CVD) chamber to grow organic layers;
- A metal evaporation chamber to grow metallic (Co, Al, Au, etc.) layers;
- A mask exchange chamber, where masks can be applied over substrates to change the geometry of the layers;
- A load-lock chamber to get sample in and out the cluster;
- A central transfer chamber with a rotating, elongating arm. It serves also as storage unit.