



universidade  
de aveiro



Universidade do Minho



## 12. Curricular Unit

Advanced Physics Topics 1

### Module

Experimental techniques of nanomaterials (ETN)

### Type

Lecture course

### Contact hours

18

### Professor/Researcher in charge

Martin Andritschky, U. Minho

### Summary of Contents

Within the frame of this module, the synthesis of nanomaterials by vacuum techniques is discussed. After a short introduction of the main aspects of vacuum technology, the condensation and growth of nanoclusters in vacuum is presented, followed by the growth of thin films (MBE, PVD, evaporation and (PE)CVD) with and w/o nanoinclusions. The last topic covered is directed to the physics of nanostructured Semiconductors.

### Evaluation

Oral presentation

### Juri

Martin Andritschky, Paulo Marques, Joaquim Leitão