Chemical deposition of films, functional oxides, chemical growth of superconducting films, chemical growth of oxide buffer layers, surface functionalization, nanostructured growth, self-assembly of nanoparticles, basic organic synthesis. Characterization of solids and liquids via IR, UV-VIS, NMR spectroscopy, X-Ray diffraction, Atomic Force Microscopy, Direct Current electrical measurements and data analysis. Good knowledge of data analysis softwares. Basic laboratory management.