

ELECTRODEPOSITION OF METAL ALLOYS OF TECHNOLOGICAL AND INDUSTRIAL INTEREST

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As part of the Regional POR CREO GADGET - ERDF 2014-2020 Call No.2 project, sequencing studies of precious metal alloys are planned in order to increase their resistance to corrosion and wear. These studies provide for the knowledge and use of the main metal Electrodeposition techniques and of the main electrochemical techniques for the development of galvanic baths. At the same time, morphological characterization, surface analysis and corrosion resistance measurements will be carried out. What is required for conducting the Research is an excellent knowledge of basic electrochemical techniques and surface characterization techniques such as AFM (Atomic Force Microscopy) and SEM (Electronic Scanning Microscopy) in-situ and ex-situ.

Thin films made of various materials are used in many scientific, technological and industrial environments. They are deposited through a variety of physical, chemical and electrochemical techniques. In all these fields, it is essential to measure the thickness, the colour, the morphological and compositional of the deposit because the properties of mechanical strength, corrosion, costs, optics and visual appearance depend on this feature.



Regione Toscana

