

*Special Issue Reprint*

## **Recent Developments of Electrodeposition Coating**

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Edited by  
Andrzej Zieliński

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This e-book presents a selection of papers focused on some novel aspects of electrodeposited coatings, in particular for medical applications. The biocoatings applied for surface modification of load-bearing implants are still being developed, especially for titanium implants, for which hundreds and thousands of possible technical solutions have been proposed using different techniques and materials. This book is a collection of papers that demonstrate appropriate attempts using various electrodeposition methods. The specific objectives are different, with several looking for improved bioactivity, another for antibacterial properties, and another for increased adhesion on the helix lines on dental implants. The e-book starts with a paper on the methodic development of electrodes for electrowinning. This is followed by paper on the real performance of the surface of dental implants, a subject not often addressed. The next paper focuses on electro-oxidation: a novel two-stage oxidation method, characteristic of the oxide layer on helix line of a model dental implant, and micro-arc oxidation of 3D printed titanium. The last paper focuses on coatings, describing the carbon nanotubes- (hydroxyapatite, chitosan), Eudragit-, and Fe-containing coatings. The e-book concludes with a review of all electrodeposition methods. It is a collection of papers describing novel results in electrodeposition biocoatings, which will be of interest for many scholars and researchers

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