





Special Issue Reprint

New Generation Coatings for Metals

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Edited by Tony Hughes Russel Varley

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In recent decades, there have been extensive developments in science and technology. These advances provide new techniques to deposit coatings onto various substrates, thus, addressing the ever-increasing performance requirements of various applications. Moreover, as technology itself develops, there are new problems that require new solutions, some of which can be solved through the application of coatings. Thus, the demands from coatings are continually increasing and the field is growing. The collection of articles contained within this volume cover a wide range of different research approaches to coatings reflecting the expanding field of coatings. It covers examples from topics such as a cold spray of magnesium alloys onto steel substrates, mechanical coatings of Ti-based materials onto steel balls, electroless plating of Ni-P coating onto an Mg-based alloy, magnetron sputtering of Ru-Zr coatings onto a Si wafer, a review of ionic liquids that form surface layers, as corrosion inhibitors, nano-composite epoxy coatings containing exfoliated clay (montmorillonite) for steel protection, a coating based on plasma electrolytic oxidation of an aluminum alloy and inhibited epoxy primer for aerospace aluminum alloys. This volume provides a wide-angle snapshot of current coating technologies through the presentation of some specific studies.





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