Preface

This special publication presents to readers the latest engineering investigations in the area of materials science including thin films and nanomaterials for microelectronics and surface treatment technologies in machinery.

Protective coatings against the external environmental impact, properties of coatings and treatment surfaces and some technologies of coating deposition and surface processing are the subject of engineering research in the first chapter.

The second chapter is devoted to the analysis of properties and deposition technologies for thin films that are used in electronics, optics and water-splitting applications.

The third chapter contains articles presenting the research results in low-dimensional quantum structures such as quantum dots, and quantum wells. There were analysed their properties and microstructures.

The special edition will be useful to many researchers and engineers whose activities are related to machinery and electronics.