

Preface

This edition presents to readers the research results on materials and technologies in the construction sector and analyses the properties of the ceramic anti-corrosion coating, polymer materials and gallium arsenide semiconductor structure for optoelectronic application.

The first chapter is mainly devoted to the study of properties and preparation methods for green concrete. The behaviour of railway embankment constructed on soft deltaic deposits was also investigated on a 2D finite element model.

Analysis of anti-corrosion properties of hard ceramic coating, investigation of the effect of ultraviolet light stabilisers on colour stability, melt properties and tensile properties of mixed waste plastics blends and thermophysical behaviour of polycarbonate are topics of the second chapter. The pressure effect on the structural, elastic properties and mechanical parameters of Al-Doped gallium arsenide is also analysed in this section.

The book will be useful to many specialists in materials science and construction sector.