

Preface

This edition summarises research results and engineering solutions in materials science and chemical engineering, materials and technologies for environmental safety, reliability assessment and restoration of concrete structures and elements, and building materials properties research.

The first two chapters are devoted to research in chemical engineering and a broad spectrum of issues in ecology safety - from materials for pollutants degradation to wastewater and water treatment technologies.

A separate part of this book reflects achievements in surface treatment and coatings of structural materials. These research results will help to improve the wear resistance and functionality of structural units of machines and mechanisms.

The two last chapters are dedicated to the research of reliability assessment, methods of restoration of concrete structures and elements, and properties study of some building materials.

The book will be useful to a wide range of engineers and researchers.