

## Preface

This special edition brings together an exploration of materials and their application methods in diverse branches, spanning from construction and machinery to food chemistry.

Chapter 1: Properties of Structural Metals examines the basic characteristics of steel and alloys used in construction and engineering, emphasizing their strength, durability, and versatility in use.

Chapter 2: Building Materials explores the development, mechanical properties and application methods of cement, concrete and innovative materials for the protection of living organisms from electromagnetic radiation.

Chapter 3: Polymers and Composites delves into the world of advanced materials, focusing on their properties and how they enable lightweight, durable, and versatile solutions across industries. The properties of some biopolymers and biocomposites are also investigated here.

Chapter 4: Food Chemistry focuses on consideration of the degradation beta-carotene model of degummed red palm oil.

This special edition will be helpful to many specialists in the above-mentioned branches of manufacturing.