Preface

In the rapidly evolving construction, the demand for innovative and sustainable materials is growing. This special edition delves into the complexities and highlights advancements in the use of green and advanced building materials, showcasing their mechanical properties and the integration of natural and engineered materials like marble, wood, geopolymers and various concrete composites.

By exploring the properties of concrete, shotcrete and methods for soil stabilisation, this edition provides insights into the durability and performance of modern building materials for road pavements and geotechnical objects.

A separate chapter addresses the recent structural mechanics approaches for the calculation of strength and durability of some structural members and structures, providing a comprehensive understanding of how advanced materials contribute to the development of resilient infrastructures.

This special edition serves as a valuable resource for engineers and researchers seeking to enhance their knowledge of cutting-edge construction materials and techniques.