## **Preface**

This special edition is dedicated to modern building materials, focusing on innovations that address the pressing needs of modern infrastructure and sustainability development of the construction branch.

Chapter 1, "Materials and Technologies in Geotechnical Engineering", examines the advanced materials and methods used in modern geotechnical practices. This chapter highlights how cutting-edge technologies and materials are enhancing the stability, safety, and resilience of geotechnical structures.

Chapter 2, "Sustainable and High-Performance Building Materials", delves into the development of materials that prioritize environmental sustainability while meeting rigorous performance standards. This chapter focuses on eco-friendly solutions, such as recycled materials and energy-efficient composites, that are shaping the future of construction in an era of heightened environmental awareness.

This special edition is a comprehensive resource for researchers, engineers, and students from the area of construction engineering, offering insights into how innovative materials and technologies are driving progress in resilient infrastructure development.