

Preface

This special edition presents a multidisciplinary collection of research and developments across various engineering fields that shape modern industrial technology, infrastructure development, and sustainable power supply practices.

Chapter 1: Sustainable Power Supply focuses on technologies and strategies that support reliable, efficient, and environmentally responsible power systems. The contributions emphasise the application of renewable energy sources, smart grids, energy supply optimisation, and innovations that advance the global transition toward sustainability.

Chapter 2: Structural Engineering presents studies on the analysis, design, and performance of structural objects. Topics include computational modelling, seismic and failure analysis, and approaches that enhance safety, durability, and resilience in infrastructure.

Chapter 3: Robotics and Mechatronics explores integrated mechanical–electronic systems, autonomous platforms, and intelligent control solutions. The research highlights innovations in robotics, sensors, and actuators that enable higher precision, adaptability, and efficiency in both engineering and biomedical applications.

Chapter 4: Engineering Management addresses organisational, economic, and strategic aspects of engineering practice. The chapter covers project management, optimisation of industrial processes, decision-making tools, and management frameworks that support effective leadership and innovation.

The presented research results offer a broad and coherent overview of current trends and emerging directions in engineering research and practice. This special edition is designed as a valuable resource for students, researchers, and professionals seeking to understand modern production issues.