

# Preface

This special edition presents a collection of research results and developments addressing actual challenges and innovations in modern engineering and applied sciences. The contributions reflect the growing integration of advanced materials with intelligent systems and efficient machine design.

The chapters cover advanced materials, mechatronics and control, and machines and equipment design, highlighting interdisciplinary approaches that support high-performance, reliable, and innovative engineering solutions.

This edition is designed to offer researchers, engineers, and practitioners in-depth insights into emerging technologies and practical methodologies across various engineering fields.