

Preface

This volume presents a multidisciplinary selection of research results from the 7th FUTA Engineering Conference (7th FUTA-EC, 22-24 July 2025, Akure, Nigeria) addressing key challenges and innovations across engineering, energy systems, digital technologies, and resource management. The research reflects the growing integration of traditional engineering disciplines with advanced technologies and management practices.

The chapters cover mineral resource exploration and production, agricultural technology, thermal management in power and energy systems, wireless communication, electronic devices and monitoring systems, autonomous vehicles, and infrastructure design with human resource management. Together, they highlight technological solutions that support sustainability and manufacturing efficiency.

The publication aims to provide researchers, engineers, and practitioners with concise insights into current trends and emerging directions across diverse engineering fields, fostering interdisciplinary collaboration and innovation.

We gratefully acknowledge the authors for their valuable contributions and the readers for their interest in this edition.

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