Preface

The International Conference on Emerging Technologies for Multidisciplinary Innovation and Sustainability (ETMIS 2025) was conceived as a platform to bring together diverse perspectives on how rapidly evolving technologies can be harnessed to address complex global challenges. In an era marked by digital transformation, climate uncertainty, and growing social demands, innovation can no longer remain confined within disciplinary boundaries. ETMIS 2025 responds to this need by encouraging dialogue across engineering, computing, health sciences, education, and sustainability-focused domains.

The conference was held on December 4–5, 2025, in hybrid mode, enabling participation from researchers, academicians, industry professionals, and policymakers across different regions of the world. Hosted by the Faculty of Allied Health and Applied Sciences (FAHAS), Coal City University, Enugu, Nigeria, and technically supported by the MG Aricent Educational Foundation, ETMIS 2025 aimed to create a collaborative environment where theoretical advances and practical applications could be discussed side by side.

The central theme of ETMIS 2025 focuses on the role of emerging and digital-driven technologies in fostering innovation while supporting sustainable development. Contributions to the conference explored areas such as artificial intelligence, smart computing systems, data science, sustainable engineering, resilient infrastructure, healthcare technologies, educational innovation, and multidisciplinary applications aligned with the United Nations Sustainable Development Goals (SDGs). Particular attention was given to ethical considerations, cybersecurity, and the responsible use of technology in both rural and urban contexts.

This proceedings volume includes selected peer-reviewed papers presented at ETMIS 2025. The papers reflect the diversity of topics and approaches discussed during the conference and provide insights into current research trends, applied methodologies, and real-world case studies. Together, they highlight how emerging technologies are being used to improve decision-making, enhance system resilience, promote inclusivity, and support long-term sustainability.

We extend our sincere appreciation to all authors for their valuable contributions and to the reviewers for their time and expertise in ensuring the quality of the accepted papers. We are also grateful to the organizing committee, technical program committee, session chairs, and volunteers whose efforts made ETMIS 2025 a success. Special thanks are due to Coal City University and MG Aricent Educational Foundation for their continued support.

It is our hope that this volume will serve as a useful reference for researchers, practitioners, and students, and that it will inspire further interdisciplinary collaboration in the pursuit of as conclusions, but as starting points for future research and meaningful technological impact.

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