

Editorial

The Multidisciplinary Nexus: Engineering and Applied Discoveries

It gives us immense pleasure to present this issue of our Engineering Journal, a platform dedicated to showcasing the latest innovations, research insights, and technological developments across multiple disciplines of engineering —Computer Science and Engineering, Electrical and Electronics Engineering, Mechanical Engineering, Computer Applications, and Civil Engineering. As the frontiers of science and technology continue to expand, our journal strives to serve as a bridge between academic research, industrial applications, and societal advancement.

In the realm of Computer Science and Engineering (CSE), the rapid evolution of artificial intelligence, machine learning, data analytics, and cybersecurity continues to redefine how we live and work. The research contributions in this issue reflect how computing has moved beyond theoretical algorithms to practical, human-centered innovations. We encourage authors and readers to explore how interdisciplinary computing solutions can enhance productivity, sustainability, and human welfare.

The field of Electrical and Electronics Engineering (EEE) remains the backbone of modern technological progress. From renewable energy systems to embedded devices and power electronics, the discipline continues to enable innovation across sectors. The integration of smart grids, automation, and energy-efficient technologies holds the promise of a more sustainable future. We are proud to feature works that address these challenges and provide novel insights into energy conversion, communication systems, and electronic design.

Mechanical Engineering continues to play a pivotal role in the design and manufacturing of the physical systems that sustain modern civilization. Emerging technologies such as robotics, additive manufacturing, thermal systems optimization, and materials engineering are transforming industries worldwide. The papers and studies presented here highlight advancements that contribute to industrial efficiency, environmental stewardship, and human comfort.

The domain of Computer Applications has become increasingly significant in driving innovation across all branches of engineering. Software systems, data management platforms, and simulation tools form the digital foundation of modern engineering practice. As computation converges with design and analytics, this field opens up opportunities for automation, intelligent systems, and digital transformation across industries.

Finally, Civil Engineering continues to address some of society's most pressing challenges — urbanization, infrastructure resilience, water resource management, and sustainable construction. With the emergence of smart cities and green technologies, civil engineers are redefining the built environment for future generations. The studies featured in this issue emphasize sustainable materials, structural innovations, and environmental harmony.

As members of the Editorial Board we extend our gratitude to all the authors, reviewers, and contributors for their commitment to quality research and scholarly excellence. We also thank our readers and academic community for their continued support and engagement. Through this journal, we aim to foster collaboration, inspire innovation, and contribute meaningfully to the advancement of global engineering knowledge.

Let this issue stand as a testament to the creativity, rigor, and passion that define the engineering profession. Together, we look forward to building a smarter, cleaner, and more connected world through science and innovation.

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