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Advanced Equipment—Synergizing Mechanics and Intelligence for Engineering Excellence

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The inaugural issue of *Advanced Equipment* marks the launch of a new open-access, peer-reviewed journal dedicated to disseminating cutting-edge research and technological advancements in the field of advanced equipment engineering. The creation of this journal is motivated by the rapid progress of industrial technology and the increasing demand for a high-level academic platform to share breakthrough discoveries and innovative engineering solutions.

In contemporary engineering and industrial domains, advancements in equipment science serve as a cornerstone for technological evolution, optimizing operational efficiency, and propelling scientific innovation. From intelligent manufacturing systems to high-performance mechanical structures, cutting-edge technologies are revolutionizing the way we design, produce, and optimize engineering equipment. *Advanced Equipment* aims to document these advancements and facilitate the exchange of knowledge among researchers, engineers, and industry professionals.

As a comprehensive academic journal, *Advanced Equipment* will thoroughly explore a diverse range of topics, including but not limited to:

- Intelligent manufacturing and automation systems
- High-end mechanical design and optimization
- Advanced materials and structural engineering
- Robotics and mechatronics
- Precision machining and ultra-high-performance equipment
- Digital twins and smart monitoring technologies
- Energy-efficient and sustainable equipment design
- Aerospace and transportation: innovations in systems and vehicles
- Medical equipment and healthcare technologies
- Bio-inspired engineering and nature-inspired designs



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The journal is committed to publishing original research articles, review papers, technical reports, perspective articles, and other contributions that highlight groundbreaking advancements and novel methodologies in equipment science and technology. By providing an open-access platform, we strive to ensure that these valuable insights are accessible to researchers and practitioners worldwide, fostering collaboration and accelerating progress in the field.

The success of *Advanced Equipment* is made possible by the dedication of our esteemed editorial board members, reviewers, and contributors. We extend our sincere gratitude to all who have supported the launch of this journal. We encourage scholars, engineers, and industry experts to submit their high-quality research findings, engage in constructive discussions, and contribute to shaping the future of advanced equipment technology.

On behalf of the entire editorial board, we warmly welcome you to explore the content of this inaugural issue and look forward to your valuable contributions in the years to come.