Message from Editors

In recent years, 4th Industrial Revolution and Industry 4.0 have swept the world and deeply influenced the development of global industry market. This movement arises wide attention to electric motor drive system which is playing an increasing important role in energy consumption transformation and environment protection. Amid this tremendous change in industry field, the concept of high-efficient, energy-saving and intelligent motor system has been proposed. On one hand, motor system with advantages such as low vibration, low noise, weak magnetic interference, renewable utilization capacity, high-efficiency and high-reliability could promote the progress of major industries such as mining, renewable energy and cutting-edged equipment manufacturing. On the other hand, the realization of intelligent and automated operations of motor drive system would help boosting the automation of industrial production.

To fulfill this target, dedicated efforts from both industry and academic communities are constantly required to confront the challenges in areas of motor design, manufacture technology and motor control. Moreover, the novel operation principles, advancing topological structures, and new materials application also need intensive study.

The special issue (SS) “High Efficient, Energy-saving and Intelligent Motor Systems” is aimed to help and progress high-end motor and drive industrial applications by providing a forum for both academia and industry to exchange their experience and latest research. Due to time constraints and the impact of COVID-19, only 4 peer-reviewed papers are included in this SS at first and a few more possibly in later issues. These papers reflect some of the advancements on the optimized design of motor, intelligent control techniques of motor system, application of new materials, etc.

We would like to take this opportunity to express our gratitude to the authors, reviewers and editors for their support and understanding throughout the submission and review of the papers. It is our hope that this special issue could excite more interests and bring valuable ideas on the advanced motor systems, and the valuable research results of related researchers will contribute to a safer, happier and better future for humanity.

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