Mathematical Problems in Engineering

Special Issue on
Recent Advances in Industrial Mathematics and Applications

Hindawi

CALL FOR PAPERS

Industrial mathematics is one of the fastest-growing branches in mathematical sciences that has attracted the attention of scientists, researchers, and engineers from both academia and industry. In addition to mathematics, industrial mathematics plays a growing role in developing robotics and automation systems, mechanical engineering, civil engineering, and others. It is concerned with developing and finding the most efficient mathematical methods to solve problems arising in industrial settings.

In the past two decades, the economic and ecological industrial sector has been changed dramatically due to the enormous increase in the knowledge-based economy. Several challenges have arisen in economic and ecological industries that necessitate innovative methods and solutions to meet new demands. For example, finding inexpensive and fast computing, reducing cost and increasing quality, logistics and complex transportation management, analyzing big data and finding optimal solutions, and so on. Industrial mathematics is the key factor to design, realize, and implement these methods.

This Special Issue intends to provide a timely chance to scientists, researchers, as well as engineers to discuss and summarize the latest achievements in applied mathematics methods and mathematical models in engineering. We especially focus on the applications of mathematical methods for industrial robotics and automation systems, mechanical and civil engineering. In addition, review articles that discuss the current state-of-the-art are welcome. We hope that the Special Issue contributes to addressing real-world industry problems.

Potential topics include but are not limited to the following:

- ▶ Applied mathematical modelling
- ▶ Mathematical methods for industrial robotics and automation systems
- ▶ Mathematical methods for mechanical and civil engineering
- ▶ Algorithms, optimization, and optimal control
- ▶ Partial differential equations and their applications in engineering

Authors can submit their manuscripts through the Manuscript Tracking System at https://review.hindawi.com/submit?specialIssue=583353.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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