## Special Issue

## Al-Based Machinery Health Monitoring

## Message from the Guest Editors

This Special Issue seeks original research articles, case studies, and review papers covering the latest advancements and future trends in Al-based machinery health monitoring. Potential topics include, but are not limited to, the following:

- Machine learning, deep learning, and hybrid techniques for fault diagnosis and prognostics.
- Advanced sensing technologies, Internet of Things (IoT) integration, and edge/cloud architectures.
- Digital twin development for real-time monitoring and "what-if" simulations.
- Remaining useful life (RUL) estimation and performance optimization.
- Applications of augmented/virtual reality in maintenance tasks.
- Industry 4.0/5.0 concepts and sustainable, energyefficient maintenance solutions.

## **Guest Editors**

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## Deadline for manuscript submissions

30 December 2025



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## **About the Journal**

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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