

# Journal of Intelligent Manufacturing

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## Call for Papers - Special Issue on Machinery Health Monitoring, Diagnostics and Prognostics

**Guest Editors:** David He and Eric Bechhoefer

### Special Issue Description

As industries worldwide are undergoing a fundamental shift towards Condition Based Maintenance (CBM) to improve equipment availability and readiness at reduced operating cost throughout the system life cycle, advanced health monitoring, diagnosis, and prognosis methods and tools to monitor actual usage, assess component condition and system integrity in real-time or near real time, and schedule appropriate maintenance action only upon evidence of need are becoming more important. In this special issue, research and application problems of machinery health monitoring, diagnostics and prognostics in diverse application areas such as manufacturing, service, aerospace, transportation, automotive, energy, and industrial automation will be addressed. This special issue is devoted to papers that attempt to synthesize, integrate, and formalize findings from real application case studies, and propose insightful conceptual models and framework that can contribute to the advance of machinery health monitoring, diagnostics and prognostics theories and technologies.

### Topics

Suitable topics for this special issue include but are not limited to:

- Data-driven methods for anomaly detection, diagnosis, and prognosis
- Model-based methods for fault detection, diagnosis, and prognosis
- Health management system design and engineering
- Physics of failure modeling and simulation
- Health monitoring sensors and sensing
- Industrial applications
- Informed logistics
- Verification, validation, and maturation

### Submission

- Papers submitted to IESM09 Special Session on Machinery Health Monitoring, Diagnostics and Prognostics will be automatically accepted for review.
- Authors should submit their manuscripts online directly to the Springer system at: <http://www.editorialmanager.com/jims/default.asp>
- Submission deadline: April 30, 2009
- Expected date for the completion of the first round of reviews: July 31, 2009
- Expected deadline for submission of revised manuscripts: October 1, 2009
- Expected publication date: Spring 2010
- All manuscripts will be reviewed according to the norms of *Journal of Intelligent Manufacturing*

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