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Predictive Maintenance for Complex Systems—from Sensor Measurements to Prognostics to Maintenance Planning

Guest Editors:

Message from the Guest Editors

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Deadline for manuscript submissions: closed (16 December 2023) This Special Issue focuses on advancements in predictive maintenance for complex systems where maintenance tasks are planned based on Remaining-Useful-Life (RUL) prognostics, anomaly detection, and/or the availability of spare components. Objectives to be considered are, for example, the minimization of maintenance costs, reliability guarantees, the minimization of asset downtime, and the efficient usage of spare parts. Research on the development of optimization models for predictive maintenance planning and simulations to evaluate the impact of prognostics on maintenance objectives are highly encouraged. Work on the development of probabilistic RUL prognostics and stochastic optimization for maintenance planning is also encouraged. Contributions on the development of Remaining-Useful-Life prognostics and diagnostics (model-based/machine learning/physics-based) are very welcome, together with discussions on the integration of these results into maintenance planning. Applications to be considered are, for example, aircraft systems, wind turbines, engines, and actuators.









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Message from the Editor-in-Chief

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