Special Issue on
Fault Detection and Diagnosis of Wind Turbines

Call for Papers

Today wind turbines contribute to an ever increasing part of the world’s power production. To keep pace with the demands, the size of the standard turbine steadily increases. Because wind turbines in the megawatt range, as most often installed at present, are expensive, it is paramount to minimize their down time and maximize their reliability.

The main focus of this special issue will be on the description of fault diagnosis strategies applied to wind turbine systems. The special issue aims to provide an international forum for researchers and engineers in control and fault diagnosis to summarize the most recent developments for improved performance, reliability, safety, effectiveness, and robustness, with a special emphasis given to recent wind turbine case studies.

Emphasis will be given to papers that discuss the validation and comparisons of proposed fault detection and diagnosis strategies with respect to a recommended specific benchmark model of wind turbine, proposed in connection with an international competition and sponsored by kk-electronic a/s and MathWorks. More details are available at http://www.kk-electronic.com/Default.aspx?ID=9385. Potential topics include, but are not limited to:

- Robust model-based and data-driven methods
- Statistical and PCA-based methods
- Discrete event and hybrid systems
- Computational intelligence in fault diagnosis
- Evaluation of fault detection and isolation (FDI) methods on the benchmark system

Before submission authors should carefully read over the journal’s Author Guidelines, which are located at http://www.hindawi.com/journals/jcse/guidelines/. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at http://mts.hindawi.com/ according to the following timetable:

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