Smart Structures and Systems - Call for papers

Special Issue: Prognostics and Health Management (PHM) in Smart Structures and Systems

Prognostics and Health Management (PHM) is an engineering discipline that addresses the technique to install sensors at the critical components of structural or mechanical systems, monitor real time the fault signal from the various sensors, diagnose their severity and predict the failure time based on up-to-date information, by incorporating various disciplines including sensing technologies, physics of failure, machine learning, modern statistics, and reliability engineering. The PHM technique enables the prevention of catastrophic accidents and condition based maintenance which reduces the operation cost greatly as opposed to the current practice, periodic maintenance strategy. To consolidate existing knowledge in this area through review papers and focus dissemination of cutting edge research papers, the journal of Smart Structures and Systems is thus calling for papers for a special issue on "Prognostics and Health Management (PHM) in Smart Structures and Systems".

The topics of the special issue can include, but are not limited to:

- Advances in health monitoring and sensing technologies
- Detection, diagnosis, and prognostics of failure modes
- PHM-enabled structural health monitoring and control
- Residual useful life (RUL) prediction based on health and degradation modeling
- PHM systems design, performance assessment, and validation
- Maintenance modeling and optimization
- PHM for engineering applications

Publication timeline:

Papers submitted for this issue will go through the regular review process, but will receive expedited treatment in processing

- Deadline for submission: August 31st , 2017
- First review notification: October 31st, 2017
- Revision submission: December 15th, 2017
- Second review notification: January 15th, 2018
- Final notification to authors: February 1st, 2018
- Publication: April 2018

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