



**CALL FOR PAPERS
SPECIAL SESSION ON**

**“Prognostics and Health Management for renewable energy systems”
for CODIT’18**

April 10-13, 2018 –Thessaloniki, Greece

Session Co-Chairs :

Dr. Jaouher Ben Ali, *University of Tunis and University of Sousse, Tunisia*

Dr. Lotfi Saidi, *University of Tunis and University of Sousse, Tunisia*

Dr. Eric Bechhoefer, *Green Power Monitoring Systems, LLC, USA*

Prof. Mohamed Benbouzid, *University of Brest, France and Shanghai Maritime University, China*

Session description

This special session deals with the problem of Prognostics and Health Management (PHM) for renewable energy systems. In fact, all power generation systems will degrade over time. Nevertheless, their related failures are not only losses of production time; it can also have key harmful consequences. Thus, in order to maintain critical industrial systems before the failure takes place, maintenance strategies should be planned. PHM is an enabling discipline that aims at exploiting real collected monitoring data using advanced sensor integration, as well as various algorithms and intelligent models to enable relevant indicators and trends that depict the health of a system.

The goal is to aggregate the latest research efforts contributing to theoretical, methodological and technological advances in the integration of various aspects of renewable energy systems PHM applications within a broad range of disciplines. The main intention of this special issue is to present works dealing mainly (but not exclusively) with up-to-date solutions of acoustic and vibration signal processing, feature extraction and classification, health assessment and diagnosis, performance degradation prediction, remaining useful life estimation and dynamic maintenance decision making based on PHM. Prospective authors are invited to submit high-quality original contributions and reviews for this Special Issue.

The topics of interest include, but are not limited to:

- Data acquisition, processing, for PHM;
- Advanced health assessment and diagnosis techniques for renewable sources;
- Advanced prognostics for remaining useful life and performance degradation;
- Implementation of PHM systems for applications in the fields of renewable energy;
- Sound/Vibration based machinery diagnosis and prognosis;
- Acoustic emission based machinery diagnosis and prognosis.

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **December 10, 2017**: <http://controls.papercept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDIT 2018 link** **“Submit a Contribution to CoDIT'18” and follow the steps.**

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

December 10, 2017: deadline for paper submission

February 4, 2018: notification of acceptance/reject

February 28, 2018: deadline for final paper and registration.