



**CALL FOR PAPERS
SPECIAL SESSION ON**

**Cyber Physical System (CPS) based Proactive Collaborative Maintenance
for CoDIT'18
April 10-13, 2018 –Thessaloniki, Greece**

Session Co-Chairs:

Dr Erkki Jantunen, VTT Technical Research Centre of Finland, Finland

Dr Urko Zurutuza, Mondragon University, Spain

Dr Michele Albano, CISTER, ISEP/INESC-TEC, Polytechnic Institute of Porto, Portugal

Session description

This special session deals with the issue of Cyber Physical System (CPS) based Proactive Collaborative Maintenance. Current developments in embedded technologies and machine learning allow for the application of Industry 4.0 concepts to the wide area of machine maintenance. It is thus possible to evolve from reactive (repair after it breaks) and preventive (time-based) maintenance, to driving maintenance operation by means of measurements taken on the environment and on the machines, and by means of machine learning used to “understand” when a machine’s behaviours is getting astray from a healthy one.

The goal of the special session is to bring together experts from academia and industry to stimulate discussion regarding current status and directions for maintenance in the context of Industry 4.0. In particular, special focus is given on how new sensing CPS can capture maintenance relevant and critical information with virtual plug and play, and easy to configure solutions and deploy complex maintenance services and secure wireless solutions increasing the possibility to reach inaccessible places for a wired network.

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

- Proactive maintenance
- Cyber Physical Systems
- Condition monitoring
- Diagnosis & Prognosis
- Remaining useful life
- Industrial IoT

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.