Prognostics and Health Management Conference
May 4-7, 2020

Following the successful PHM conferences over the past 10 years, the 2020 Prognostics and Health Management Conference (PHM 2020) will be held in Besançon, France, on May 4-7, 2020. This conference will be held together by Femto St, Le Cnam, Université Paris Saclay, L2S, GeePS, Alstom Digital Mobility, HBM Prenscia, IEEE Reliability Society, IEEE France Section, International Society of Measurement, Management and Maintenance, CTBU, and CJA. Papers will be submitted for inclusion into IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. Selected excellent papers will be published in the special issues of several SCI journals. Please refer to the conference website (www.phmice.org) for more details. Please contact us (phm2020@phmice.org) if you have any questions.

Besançon, the ancient city in the eastern part of France near the border with Switzerland, is known as the watch capital of France. The city is the birthplace of Victor Hugo and the Lumière brothers, the home of Femto-St (i.e., the research institute that launched two data challenges in the past PHM conferences), the University of Franche-Comté and a Unesco World Heritage site for its citadel and fortifications, part of the defensive system built around France by Sébastien Le Prestre de Vauban under orders from King Louis XIV.

Topics of Interest

PHM 2020 - Besançon is seeking original papers for presentations at the conference. Researchers and participants from industry, academia, and government organizations are invited to submit their papers on the following topics. Participants with only abstract submissions are also welcome to the conference.

**Principles**
- Sensors and devices
- Structural sensing
- Modeling and simulation
- Data-driven methods
- Model-based methods
- Sensor fusion
- Logic/reasoning techniques
- Verification, validation, and maturation
- Machine/deep learning for PHM
- Affordability aspects and business cases for PHM
- Standards and methodologies

**System Designs & Implementation**
- Requirements development
- System design & engineering
- Automated reconfiguration
- Statistical analysis of uncertainty
- Component-level PHM
- Nondestructive evaluation technologies with PHM utilization
- Decision support & simulation
- PHM computer-aided engineering technologies
- Physics of failure
- Blockchain for PHM

**Applications**
- Rail transportation
- PHM for power smart grid
- PHM for electronics components and systems
- PHM within innovative aerospace and defense, appliance, medical, electric vehicle, deep drilling, and energy applications
- Fleet/industrial PHM-based maintenance management
- Lessons learned from PHM systems design and integration
- Cloud computing for PHM
- PHM for energy systems