

Dec 8-11, 2025

<https://phmap25.org/>

Singapore Institute of Technology (Punggol Campus), Singapore



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Award and Data Challenge	Thomas Tie Luo (UKY, USA) Pradeep Kundu (KU Leuven, Belgium)
Tutorials	Chen-Khong Tham (NUS, Singapore) Dhika Pratama (UniSA, Australia)
Poster Sessions and Doctoral Symposium	Sivaneasan Bala Krishnan (SIT, Singapore)

We invite researchers, engineers, experts, and students interested in Prognostics and Health Management (PHM) to join us for **PHMAP 2025**. This conference will facilitate synergetic exchanges of ideas and practices between industrial and academic professionals. Esteemed global thought leaders will deliver high-quality presentations, and participants are encouraged to submit original research and technical contributions for poster presentations. Outstanding papers will have the opportunity to be published in EI and SCI indexed journals and be selected as Best Papers.

Topics of Interest:

PHM Theory and Methods:

- Condition-based and Predictive Maintenance
- Explainable and trustworthy Detection, Diagnostics & Prognostics Methods
- Artificial Intelligence (including machine learning and deep learning)
- Data-driven, Model-based, and Hybrid methodologies for Modeling of Degradation
- Verification and Validation
- Physics-of-Failure
- Fault-Adaptive Control

PHM Design and Integration:

- Digital Twin and Digital Thread
- IoT for PHM cost-benefit and Return-on-investment analysis
- Failure Mode, Effects & Criticality Analysis
- Smart Manufacturing (Planning, Automation, Device, Sensor)
- Decision Support Systems
- Software and Hardware for PHM
- Standards for PHM

PHM and Emerging AI Applications:

- Large language models for Manufacturing
- Foundation models for manufacturing
- Emerging AI models (federated learning, self-supervised learning, continual learning, reinforcement learning, few-shot learning, etc.)
- Energy Systems (power plants, wind turbines, photovoltaics, etc.)
- Mobility and Transport (automobiles, rail, marine, etc.)
- Aerospace Systems (aviation, UAVs, rocket engines, artificial satellites, etc.)
- Process Industry (steel, chemical, glass, oil & gas, semiconductor, etc.)
- Electronic and Electrical Systems (semiconductors, batteries, substrates, solder, elevators, HVAC, automatic ticket gates, etc.)
- Structural Health Monitoring (bridges, roads, buildings, tunnels, etc.)
- Cyber Physical Systems (smart grids, autonomous vehicles, medical monitoring, etc.)
- Commercial Aviation and Maintenance Repair Organizations

Proposals for Tutorials, Special Sessions, Doctoral Symposiums, and Data Challenges are invited for PHM Asia-Pacific 2025.

Paper Submission Instruction

All papers can be submitted via the conference management system.

For any queries, please contact:

phmap2025.singapore@gmail.com

Important Dates

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| • Abstract submission: | Jan 15 – Jun 30, 2025 | • Paper submission: | May 01 – Aug 15, 2025 |
| • Special session proposal: | May 01, 2025 | • Acceptance notification : | Sep 15, 2025 |
| • Pre-registration: | Sep 15, 2025 | • Camera ready submission: | Oct 30, 2025 |