

Call for Papers

MCMD 2021

The 5th International Conference on Maintenance, Condition Monitoring and Diagnostics

Dear friends and partners,

It is our great pleasure to invite you to join us at the Fifth Conference on Maintenance, Condition Monitoring and Diagnostics, MCMD 2021, which will take place on 16 – 17 February 2021 as a virtual conference. The background of this conference series is in the 20-years history of MCMD conferences and the 10-years history of International Society of Condition Monitoring, ISCM. The conference is organized by University of Oulu, Finnish Maintenance Society (Promaint) and Expomark Oy in cooperation with ISCM and Finnish Society of Automation.

The MCMD 2021 provides a forum where condition monitoring and risk management professionals from industry and science exchange knowledge, experiences and strengthen multidisciplinary network. On the stage, visions are presented and shared with old and new colleagues. The conference focuses on the latest developments in maintenance and monitoring especially in the process and energy industries. Central themes include condition monitoring and diagnostics as factors improving productivity, quality and operational reliability increasing profitability and reducing environmental load of industrial processes. The program includes invited talks, parallel, special and poster sessions. All scientific papers are going to be reviewed for the conference proceedings Lecture Notes in Mechanical Engineering (LNME) by Springer. Industrial, discussion and student papers and all extended abstracts will be published by Promaint.

We are inviting you to submit your contribution to the high standard international condition monitoring and maintenance conference.

Please visit <http://www.intiscm.org> for further information. We look forward to meeting you at the Virtual MCMD 2020 Conference on February 2021!

Esko Juuso, MCMD 2020 Chair

Mika Ruusunen, IPC Chair

Jaakko Tennilä, NOC Chair

February 16 – 17, 2021

Virtual conference

Key dates

Thematic session proposals and short abstracts

Proposals with short abstracts	November 30, 2020
Notification of acceptance	December 7, 2020

Full Scientific and Industrial Contributions

Short abstracts	December 7, 2020
Notification of acceptance	December 11, 2020
Full draft paper submission	December 23, 2020
Notification of acceptance	January 11, 2021
Final camera-ready manuscripts	January 31, 2021

Discussion and Student Contributions

Short abstracts	December 21, 2020
Notification of acceptance	December 28, 2020
Short draft paper submission	January 4, 2021
Notification of acceptance	January 11, 2021
Final camera-ready short papers	January 31, 2021

Industrial Extended Abstract Contributions

Short abstract	December 21, 2020
Notification of acceptance	December 28, 2020
Draft extended abstract	January 4, 2021
Notification of acceptance	January 11, 2021
Final extended abstract	January 31, 2021

Author registration **January 20, 2021**

MCMD 2020 Conference **February 16 – 17, 2021**

MCMD 2021 Secretariat

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Areas of Interest

Papers from authors with academic and/or industrial affiliation are encouraged. Topics are focused but not limited to:

Condition monitoring (CM)

- CM in process industry
- Structural health monitoring
- CM of vehicles
- CM in energy production and energy conservation
- Signal processing for CM
- Advanced reasoning and diagnostic methods in CM
- Sensor technologies
- IoT and AI in CM
- Prognostics and CM

Maintenance

- Efficiency, effectiveness, productivity
- Life cycle cost optimization
- Quality, risk and maintenance services
- Maintenance management systems
- E-maintenance
- Maintenance tools and innovations
- Performance measurements
- Safety and maintenance

Maintenance trends

- Novel technologies
- Maintenance applications of mobile robot technologies
- Environmental impacts of maintenance technologies
- Energy conservation via maintenance
- Augmented Reality and Mixed Reality applications in maintenance
- On-line maintenance

Pitch sessions and tutorials

Pitch sessions and tutorials are available for presenting products and services. The pitch sessions include short presentations for wide audience. Tutorials provide an additional option for longer presentations. Further information for pitch sessions and tutorials TBD.

Submissions

Five types of contributions can be offered to the MCMD 2021 conference:

- **Scientific papers** must be written in English and will be accepted for presentation based on a peer review of the draft papers. The peer-reviewed conference articles planned to be published in Lecture Notes in Mechanical Engineering (LNME) by Springer.
- **Industrial papers** can be submitted as scientific papers. Additionally, industrial papers written in English, Finnish or Swedish can be submitted as full papers to be reviewed for publication in the conference proceedings published by Finnish Maintenance Society, Promaint. Interesting case reports are welcomed as well.
- **Extended abstracts:** The presentation at the conference can also be accepted on the basis of extended abstracts without a full paper. Extended abstracts will be published by Promaint.
- **Short papers:** Student/Discussion papers should follow the writing guidelines of scientific papers when applicable. The final guidelines will be available in review phase. Selected short papers will be published by journals of Promaint, <https://www.promaint.net/>.
- **Posters:** Submissions are accompanied with short papers or extended abstracts.

EasyChair is used for submissions of all abstracts, extended abstracts, industry papers and short papers (discussion & student). Please follow the link <https://easychair.org/conferences/?conf=mcmd2020>.

Springer is planned to be used for scientific papers whose extended abstracts have been accepted at EasyChair. The link will announced later. The final manuscripts of industry papers and short papers as well as all final extended abstracts will be handled in EasyChair.

Scientific advisory committee

- Adjunct prof **Esko Juuso** (chair), University of Oulu, Finland
- Prof **Diego Galar**, Luleå University of Technology, Sweden
- Prof **Mika Ruusunen**, University of Oulu, Finland
- Prof **Jens Strackeljan**, Otto von Guericke University Magdeburg, Germany
- Prof **Len Gelman**, University of Huddersfield, UK
- Dr **Nadine Martin**, French National Centre for Scientific Research, CNRS, France
- Prof **Andrew Starr**, Cranfield University, UK
- Prof emeritus **Sulo Lahdelma**, University of Oulu, Finland
- Dr **Renata Klein**, Ben-Gurion University of the Negev, Israel
- Dr **Suri Ganeriwala**, SpectraQuest, USA
- Mr **Konsta Karioja**, University of Oulu, Finland

Venue

All the sessions and social program will be held online. Physical conference attendance is not possible since physical venues are not provided. The software platform for the Virtual Conference and the Conference program will be released duly before the conference.