Call for papers for the Conference on

Measurement for Diagnostics, Optimisation and Control to Support Sustainability and Resilience

Warsaw, Poland, September 26–27, 2022

www.imekotc10-2022.ire.pw.edu.pl

August 29, 2022	September 1, 2022	September 14, 2022
Submission of extended abstracts	Notification of acceptance	Submission of full papers

INVITATION

The International Measurement Confederation IMEKO, Technical Committee 10 on Measurement Diagnostics, Optimization & Control kindly invites you to attend the 18th IMEKO TC10 Conference: *"Measurement for Diagnostics, Optimisation and Control to Support Sustainability and Resilience"* to be held in Warsaw, Poland on September 26–27, 2022. After the long turmoil, caused by the pandemic, we have the pleasure of organizing the event in the traditional way, on location. Therefore we are determined to spread the information about the event as widely as possible, to gather the most respected scientists and practitioners.

The conference is the platform for broadening horizons and exchanging ideas regarding problems, their solutions and supporting technologies for the diagnostic principles, applications and standards.

Participants will have the exceptional opportunity to meet specialists from industry and academia sectors on the European and worldwide range. The program will feature scientists and experts as leading keynote speakers for selected presentations on the main topics of the conference.

The conference will be a forum for advancing knowledge and exchange ideas on methods, principles, instruments, technologies, IT tools, standards, industrial applications, conformity assessment, quality management and measurement challenges on testing, diagnostics & inspection as well as their diffusion across the scientific community. The conference programme will feature leading keynote speakers from industry for selected presentations on the main topics of the conference.

CALL FOR PAPERS

Authors are kindly invited to submit extended abstracts in the appointed scientific topics, three to four pages long in A4 format. The abstract should report original research results of theoretical or applied nature and should explain the significance of the contribution to the research field. The abstracts will be reviewed by the International Programme Committee. Electronic abstracts must be in Adobe Acrobat (pdf) format and should be sent according to the procedure described on the website. Proceedings identifier: ISBN 978-92-990090-0-0.

SPECIAL ISSUE

Selected papers of the conference will be invited to the Measurement and ACTA IMEKO Special Issues. All submitted papers will undergo a regular peer review process. The manuscript MUST be significantly extended beyond the IMEKO TC10 conference paper.

SCIENTIFIC TOPICS

- T1 - Basic principles and development trends in Measurement for Diagnostics, Optimization & Control
- T2 - Sensors, signal acquisition and processing for Diagnostics, Optimization & Control
- T3 - Condition monitoring and maintenance of industrial processes, plants and complex systems
- T4 - Failure & fault detection and prognosis
- T5 - Artificial intelligence, machine learning and data science for Diagnostics, Optimization & Control
- T6 - Industry 4.0 foundations, applications, trends and novelties
- T7 - Methods and algorithms for real-time Diagnostics, Optimization & Control
- T8 - In the loop testing, design, and simulation approaches of dynamic systems
- T9 - Embedded systems in Diagnostics, Optimization & Control
- T10 - Uncertainty in Diagnostics, Optimization & Control
- T11 - Digital transformation
- T12 - Internet of Things (IoT) oriented Measurement for Diagnostics, Optimization & Control
- T13 - Human aspects in Diagnostics, Optimisation & Control
- T14 - Measurement for Diagnostics, Optimization & Control for the improvement of quality of life and environment
- T15 - Product conformity assessment, quality management and process analysis
- T16 - Measurement for Diagnostics, Optimization & Control for safety and risk assessment
- T17 - Non-destructive Testing for Diagnostics, Optimization & Control
- T18 - Standards in Measurement for Diagnostics, Optimization & Control
- T19 - Mechanical systems' principles in Measurement for Diagnostics, Optimization & Control
- T20 - Instrument fault detection, optimization & control in autonomous driving vehicles
- T21 - Diagnostics, Optimization & Control applications in various sectors like industry, transportation, mechatronics, electronics, acoustics, urban systems, living environment, civil engineering, technology of health systems, avionics, automotive, energy, machining, green environment, water treatment and biomedical fields, etc.

CONTACT

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Warsaw University of Technology

POLSPAR