Dear Colleagues,

I would like to inform you of the 2nd International Conference on Machine Design that will take place in Porto, Portugal, 7-8 September, 2023 (https://www.md-conferences.com/). The conference venue is the campus of the Faculty of Engineering of the University of Porto (FEUP).

The conference is chaired by António M. Lopes and co-chaired by Lucas F. M. da Silva and Carlos M. da Silva (Faculty of Engineering of the University of Porto, Department of Mechanical Engineering, Portugal). The conference will be held in a mixed format, where presentations can be held physically but also remotely, using a video-conferencing system.

Machine design involves the conception, design and development of machines. It requires the knowledge of basic sciences and multiple engineering topics, such as physics, mathematics, mechanical drawing, mechanics, machine theory, materials, metallurgy, thermodynamics, fluid mechanics, manufacturing processes, computation, sensors, actuators, mechatronics, automation and control.

As the industry evolves and becomes more demanding, it is worth focusing on the new directions and the most promising achievements in machine design, able to develop machines that meet the industry requirements.

The conference is an opportunity for researchers and scientists in the area of machine design to present their most recent results, to discuss together new solutions, and to establish new contacts and find out common interests for further cooperation. The conference will focus on original and new research results on machine design. Contributions addressing novel theoretical issues, as well as specific applications, are welcome. The topics include, but are not limited to:

- design theory and methodology
- design of machine elements
- design of mechanisms
- design optimization
- design management
- CAD/CAM/CAE technology for design
- sustainability and renewable energy in design
- reliability of mechanical systems in design
- expert systems in design
- theoretical and experimental analyses in design engineering
- kinematics and dynamics of mechanisms and machines
- nonlinear phenomena in mechanisms, machines and mechanical systems
- rapid prototyping
- modelling and Simulation
- experimental testing techniques
• intelligent sensors
• micro electro - mechanical systems (MEMS)
• electric, hydraulic and pneumatic systems
• automation, robotic systems, CNC machines, mechatronics
• micromachines
• automatic and intelligent control systems
• machine learning algorithms
• human-machine interfaces, haptic systems
• digital twins
• internet of things

Authors who wish to make a presentation (oral or poster) are requested to submit a short abstract (one single A4 page possibly with a diagram and references) in English, by 8th of May 2023. The abstracts should be sent electronically to aml@fe.up.pt. Indicate in the email if you want oral or poster presentation. The abstract template can be downloaded from the conference web site (https://www.md-conferences.com/). Conference proceedings with the accepted abstracts will be available at the registration.


The full papers (not compulsory) should be sent to the e-mail aml@fe.up.pt before the 8th of September 2023. The text should be in single column format and double line spacing.

Important dates:
8 May 2023   Abstract submission deadline
31 May 2023   Notification of acceptance to authors
31 May 2023   Early bird registration

Yours sincerely,
António M. Lopes
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