#### International Scientific Committee

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# **Conference Sponsors**













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### Scientific Program

The Scientific Program of the conference will be daily arranged around Plenary Lectures by distinguished scientists, and parallel sessions for oral paper presentations. Paper presenta-tions in the form of Posters will also be possible, and facilities for that purpose will be available during the days of the M2D2026 conference.

### **Social Program**

In parallel with the Technical and Scientific Program, a full range of social activities will be offered to Delegates and Accompanying Persons during all days of the Conference. Most of these will be organised by a competent local travel agency to be associated with the M2D2026 conference.

### Registration

All attendees, including invited speakers, are strongly advised to register in advance of the Conference. The registration fees are as follows:

| Registration<br>Fee | Prior to 28 Feb<br>2026 | From 1 Mar to<br>30 April 2017 |
|---------------------|-------------------------|--------------------------------|
| Full Delegate       | 800.00 Euro             | 980.00 Euro                    |
| Student Delegate    | 650.00 Euro             | 800.00 Euro                    |
| Accompanying        | 200.00 Euro             | 250.00 Euro                    |
| Exhibitor           | 3000.00 Euro            | 3500.00 Euro                   |

Registered delegates are entitled to the presentation and online publication of one Abstract/Paper (oral or poster), attendance and participation in all technical sessions, a copy of the USB-pendrive with the conference proceedings and program, access to an international special colloquium and symposia as well as invited and contributed papers. access to special issues of affiliated international journals, early-bird registration, refreshments, coffee-breaks, and lunches. Registered delegates and accompanying persons are also entitled to the welcome/networking reception on June 23, the conference banquet on June 24, and optional access to all initiatives of the social program.

#### **Further Information**

For further information, please see the conference web site, or contact the Organising Committee at the following addresses:

> Prof. J.F. Silva Gomes FFUP/DFMec E-mail: sg@fe.up.pt

> > or

Prof. Shaker A. Meguid

MADL/U.Toronto E-mail: meguid@mie.utoronto.ca



### 11th International Conference on **MECHANICS AND MATERIALS IN DESIGN**

Algarve/Portugal, 22-26 June 2026

# 1<sup>ST</sup> ANNOUNCEMENT AND CALL FOR PAPERS

This is the First Announcement and Call-for-Papers for the 11th International Conference on Mechanics and Materials in Design, to take place in Algarye (Portugal) from 22 to 26 June 2026. The deadline for Abstract Submission is 23 January 2026. Full information about the conference can be found in the M2D2017 web site, at the following address:

https://.fe.up.pt/m2d/

#### **Institutional Sponsors**

The conference is jointly sponsored by

Faculty of Engineering, University of Porto MADL-University of Toronto APAET-Soc. Exp. Mech.(Portugal)

#### **Relevant Dates**

| Deadline for Receipt of Abstracts   | 23 January, 2026  |
|-------------------------------------|-------------------|
| Notification of Acceptance          | 30 January, 2026  |
| Deadline for Early Registration     | 27 February, 2026 |
| Deadline for Receipt of Full Papers | 27 March, 2026    |
| Conference                          | 22-26 June, 2026  |

#### **Conference Co-Chairs**

Prof. J.F. Silva Gomes

Faculty of Engineering, University of Porto, Portugal

Prof. Shaker A. Meguid MADL, University of Toronto, Canada

# **Organising Committee**

Carlos C. António (U.Porto); Catarina F. Castro (U.Porto); José M. Cirne (U.Coimbra); Paulo Piloto (I.P.Braganca) Teresa Morgado (ISEL), Tongyu Wu (U. Toronto)

#### Conference Venue

The M2D2026 conference will be held in the beautiful region of Algarve (south of Portugal), in a very convenient congress centre, well equipped for conferences in terms of facilities, transportation and proximity to restaurants, hotels and beaches.

It was in Algarve that, in the 15th century, the Portuguese set off on the epic journey that led them to discover other peoples and cultures... and it is in the Algarve that we cheerfully welcome many of our visitors. Even the climate is mild and sunny all year round!





There is no shortage of high quality beaches either. Sandy stretches as far as the eye can see, framed by golden cliffs, virtually deserted islands marking the boundary between Ria Formosa and the sea, and small coves sheltered by the rocks. The ocean, in every shade of blue and mostly calm and warm, invites you for long swims and to indulge in water sports.





And there are also the mountains, where people live in harmony with nature and maintain traditions that they love to share. And the cities. Silves preserves traces of its Arab past and Lagos from the time of the Discoveries. More cosmopolitan Portimão and Albufeira are bustling towns by night and day. Tavira is a showcase for traditional architecture and Faro, the gateway to the region, deserves a long stop to discover its beautiful historic centre.





At the table, you will be delighted with the fresh fish and seafood, either grilled or in a casserole. These are divine flavours which you can enjoy on a simple beach terrace or in the most refined Michelin-starred restaurants, where chefs turn out new versions of traditional cuisine. They are further experiences not to be missed on a visit to the region.

#### **Objectives**

**M2D2026** is the eleventh international gathering of scientists and engineers interested in the fields of mechanics, engineering design, advanced materials, energy harvesting, reliability, quality and safety engineering, and is planned for June 22-26, 2026 in Algarve/Portugal. Contributions in the fields of Nanotechnologies, Nanomaterials, Biomechanics and Experimental and Computational Mechanics applied to Mechanical, Aeronautical, Space, Civil, Automotive, Biomedical, Environmental, and Nuclear Engineering will be welcome. The goal is to enable engineers, researchers and scientists to exchange ideas on the following and derivative topics:

#### **Main Topics**

- Aerospace: Novel Aircraft Designs, Electric Aircraft, Advanced Aerospace Materials, Gas Turbine Engine Design, Aircraft Safety, Thermal Barrier Coatings, Morphing in Aircraft Design, Micro Aerial Vehicles, Birdstrike, Deicing of Aircraft, AI in Aircraft Design.
- Automotive Engineering: Al in Automotive Engineering, Autonomous Cars, Automotive Cyber Security, Automotive Safety, Crashworthiness, Fluid Coupling, Transmission Systems, Future of EPVs, Hybrids and ICEs, Case Studies.
- Civil and Structural Engineering: Buildings, Bridges and Infrastructures, Materials Characterization, Wood Mechanics and Timber Engineering, Structural Analysis, Structural Integrity, Experimental Tests and Structural Monitoring, Concrete and Composite Structures, Metallic Structures, Structural Rehabilitation, Case Studies.
- Bioengineering and Biomechanics: Biomaterials, Nanotechnology in Drug Delivery, Biosensors, Genetic Engineering, Robots in Bioengineering, Functional Materials, Biofluid Mechanics, Computational Biomechanics, Implant Design and Analysis, AI in Life Sciences.
- Computational Mechanics: Shape & Topology Optimization, Al an Neuronal Network, Computational Biomechanics, Computational Nanomechanics, Micromechanics, Homogenization Techniques, Multiscale Modeling, MD, DFT, FE, Meshless and Particle Methods, Computational Failure Analysis, Case Studies.
- Advanced Materials: Functional Materials, Multifunctional Materials, Nanotechnology, Shape Memory Polymers, Biomaterials, Crashworthiness and Numerical Human, Morphing in Automotive. Cellular Materials.
- Experimental Mechanics: Optical Methods, Residual Stress Measurements, X-Ray and Neutron Diffraction, Al in Experimental Mechanics, Time Dependent Materials, Advanced Photoelasticity, Novel Techniques in Experimental Mechanics, Experimental Mechanics in Forensic Engineering, Thermo-Electro-Mech Testing.

### **Topics (continued)**

- Tribology and Surface Engineering: Surface Engineering, Tribo-Surfaces and DLCs, Nano-Tribology, Nano-Fabrication, Modeling and Simulation, Lubricants and Additives, Friction and Wear, Fretting Damage, Contact Mechanics, Al in Tribology.
- Energy and Thermo-Fluid Systems: Sustainable and Renewable Energy, Thermo-Fluid-Mechanical Properties, Electronics Packaging, Boiling and Multi-Phase Flow, Micro and Nano Scale Transport, MEMS, Transport Phenomena in Solid Mechanics, Turbulence and Flow Instabilities, Heat and Mass Transfer, Combustion and Reacting Flows. Air Conditioning and Refrigeration.
- Industrial and Safety Engineering: Manufacturing Engineering, Occupational Safety, Ergonomics, Emergency Response Planning, Accident Prevention, Safety Management Systems, Fire Protection, Safety Training, Risk Management.
- Additive Manufacturing: 3D and 4D Printing, Powder Metallurgy, Intelligent Additive Manufacturing, Powder Fusion and Precision Sintering, Metal Additive Manufacturing, Design and Quality Assurance, Applications of AM to Healthcare, Aerospace and Defence.

### Colloquium on App. & Exp. Mechanics

Following the success of the recent colloquium held in Chios, Greece (July 24–26, 2025), a second edition will run as an affiliated Colloquium within the main **M2D2026** conference and will be open to all M2D delegates. We believe this broader format will encourage more dynamic discussions, fruitful interactions, and valuable networking opportunities. Special issues dedicated to the colloquium are planned for publication in one or more affiliated international journals.

# **Thematic Symposia**

A number of thematic symposia will also be organized under the auspices of **M2D2026** - 7<sup>th</sup> International Conference on Mechanics and Materials in Design. Interested authors should contact the coordinators directly.

Individuals interested in running a Symposium on any or derivatives of the main conference topics should inform the conference chairs of their intention as soon as possible. Upon approval, the symposium organiser will be requested to submit a summary of his/her plans with regards to the title of symposium, number of sessions required (5 papers per session), names of potential authors and any other special requirements.

#### **Technical Exhibition**

**M2D2026** will provide facilities for a technical exhibition on equipments, software and services related to *Mechanics and Materials in Design* during the whole period of the conference. Companies and individuals interested in displaying software, apparatus or any other kind of material at the technical exhibition should inform the conference chairs of their intention as soon as possible.