CALL FOR PAPERS

– Asian Modelica & FMI Conference 2026 –

September 21-22, 2026

Modelica is a freely available, equation-based, object-oriented language for convenient and efficient modeling of complex, multi-domain cyber-physical systems described by ordinary differential, difference and algebraic equations. The Modelica language and the companion Modelica Standard Library have been utilized in a variety of demanding industrial applications, including full vehicle dynamics, power systems, robotics, buildings and district energy systems, hardware-in-the-loop simulations and embedded control systems. The Functional Mock-up Interface (FMI) is an open standard for the tool-independent exchange of models and for co-simulation. It is supported by many Modelica and non-Modelica tools and is the key to utilizing Modelica models in non-Modelica environments.

The Modelica & FMI conference will bring together people using Modelica and/or other Modelica Association standards for modeling, simulation, and control applications, such as Modelica language designers, tool vendors and library developers. The Modelica Conference provides Modelica users with the opportunity to stay informed about the latest language, library, and tool developments, and to get in touch with people working on similar modeling problems. The conference will cover topics such as the following:

- Multi-engineering modeling and simulation with free or commercial Modelica libraries
- Applications and new tool developments for the Functional Mock-up Interface (FMI) and Layered Standards (LS)
- Applications and new tool developments for the System Structure and Parameterization (SSP) standard
- Applications and new tool developments for the FMI for embedded Systems (eFMI) standard
- System Simulation as an integrative part of Model-based Systems Engineering (MBSE)
- Machine Learning and AI in system simulation
- Automotive applications
- Applications in thermodynamic, energy systems and building physics
- Mechatronics and robotics applications
- Medicine and biology applications
- Maritime and offshore applications
- Other industrial applications, such as electric drives, power systems, aerospace, etc.

- Large-scale system modeling and simulation code generation for parallel computing architectures
- Real-time and hardware-in-the-loop applications; Code generation for embedded control systems
- Use of Artificial Intelligence (AI) methods in simulation; SimToReal for AI training purposes
- Applications of Modelica and FMI for optimization and control design
- Modelica modeling, simulation and design tools
- Symbolic algorithms and numerical methods for model transformation and simulation
- Experimental language designs and implementations related to Modelica standards
- Modelica in other application areas (mathematical programming, databases etc.)
- Modelica for teaching and education

Prospective authors of scientific presentations are encouraged to submit a full paper (minimum 4 pages, maximum 10 pages) addressing the aforementioned topics by **April 30, 2026**. Each submission will undergo peer review by no fewer than 3 independent reviewers.

In line with conference tradition, the proceedings will be published by **LiU Electronic Press** (Linköping University, Sweden). For the 2026 Asian Modelica & FMI Conference, the organizing committee has collaborated with the Editorial Board of the *International Journal of Modeling Simulation and Scientific Computing* (IJMSSC). Selected papers from the conference proceedings will be recommended for publication in an **IJMSSC Special Issue on Modelica**, while outstanding submissions will be nominated for the journal's **regular issue**. Both the Special Issue and Regular Issue of IJMSSC are indexed in EI.

Recommended authors are required to revise and restructure their manuscripts to comply with IJMSSC's specific formatting guidelines and complete the journal's subsequent peer review process. All associated publication costs shall be borne by the authors.

For industrial participants, in addition to submitting scientific papers, you may opt to present an **industrial case study/presentation**. For this category, only an abstract is required, with submissions due by **June 30, 2026**. Please note that these industrial presentations will not be included in the conference proceedings nor considered for the IJMSSC Special Issue.

Important Dates:

April 30, 2026   Deadline for paper submissions

June 15, 2026   Notification of acceptance for papers and presentations

June 30, 2026   Deadline for Industrial User Presentation submissions

August 1, 2026   Submission of final papers, presentations, and one-page abstracts