

Modelica is a freely available, object-oriented language that allows convenient and efficient modeling and simulation of complex, multi-domain physical systems described by differential, algebraic and discrete equations.

The comprehensive Modelica Standard Library provides a growing number of open source models covering the following domains:

- Analog and digital electrical circuits
- Electrical machines and drives
- Rotational and translational 1dim.-mechanics
- 3-dim. multibody mechanics
- Thermal heat transfer
- Fluid heat flow
- Hierarchical state machines
- Control engineering
- Mathematics

The development and promotion of Modelica and the Modelica Standard Library is organized by the non-profit Modelica Association.

Since March 2005, version 2.2 of the Modelica language definition has been available together with many free and commercial Modelica libraries, as well as commercial and open source Modelica simulation environments. Convenient interfaces are available for Matlab and Simulink (with Dymola) and to Mathematica (with MathModelica). The language, libraries and tools are used by a growing number of people in industry and academia for advanced and demanding applications, such as 3D vehicle and flight dynamics, hybrid electric powertrains, robotics, air conditioning systems, waste water treatment, electric power systems, hardware-in-the-loop simulations and embedded control systems with nonlinear Modelica models.

Since October 2000 the International Modelica Conference has been held every 18 months with a growing number of participants.

In 2006, arsenal research in Vienna will host the 5<sup>th</sup> International Modelica Conference.

It provides people interested in Modelica the opportunity to learn about the language, model libraries and tools, and to meet others working on similar modeling problems.

[www.modelica.org](http://www.modelica.org) | [www.arsenal.ac.at](http://www.arsenal.ac.at)



September 4-5, 2006  
Vienna, Austria

## Organizers



Modelica Association

Giefinggasse 2, 1210  
Vienna, Austria

## Conference Topics

- Multi-engineering modeling and simulation with Modelica
- Free and commercial Modelica libraries (mechanics, electrical, hydraulics, thermal, fluid, media, chemical, building, automotive, aircraft, ...)
- Automotive applications
- Thermodynamic systems applications
- Other industrial applications, such as electric drives, power systems, robotics, aerospace ...
- Hardware-in-the-loop simulation and embedded control systems
- Modelica modeling, simulation and design tools
- Symbolic algorithms for model transformations
- Modelica in other application areas (mathematical programming, databases etc.)
- Modelica for teaching and education

## Conference Program

- Four Modelica Tutorials for different levels of modelling experience
- Four parallel sessions (80 papers)
- Poster session
- User's group meetings
- Presentations from Modelica tool vendors
- Modelica Award for the 2 best free Modelica libraries



## Conference Venue

arsenal research  
Giefingasse 2  
1210 Vienna  
Austria

## Conference Fees

<b>Regular participant</b>	€ 500,-
Early registration until July 24 <sup>th</sup>	€ 420,-
Incl. VAT and ancillary events	
<b>Student participant</b>	€ 120,-
Early registration until July 24 <sup>th</sup>	€ 100,-
Incl. VAT, exkl. ancillary events	

## Schedule Deadlines

You are encouraged to submit an extended abstract of 2 pages, outlining the material you propose to present or a full paper of maximum length of 10 pages until May 8<sup>th</sup>.

Notification on acceptance of papers will be sent to the authors by May 29<sup>th</sup>.

Final papers are to be submitted until July 24<sup>th</sup>.

Additionally, you are encouraged to submit a free Modelica application library in Modelica source code form to [modelica2006@modelica.org](mailto:modelica2006@modelica.org) until May 8<sup>th</sup>. The best two application libraries will get an award of € 500 and € 250.

Companies wishing to take part at the exhibition are invited to contact [modelica2006@modelica.org](mailto:modelica2006@modelica.org) until May 8<sup>th</sup>.

[www.modelica.org/events/modelica2006](http://www.modelica.org/events/modelica2006)

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[www.arsenal.ac.at](http://www.arsenal.ac.at)

## Conference Chair

Dr. Christian Kral, arsenal research, Vienna, Austria

## Program Chair

Anton Haumer, arsenal research, Vienna, Austria

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