

Home » News overview » Press Releases 2008 » LMS introduces unique fuel cell system simulation solution

[print page](#) 

# LMS introduces unique fuel cell system simulation solution

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Leuven, Belgium – LMS, the engineering innovation company, will introduce its latest fuel cell system simulation solution based on LMS Imagine.Lab AMESim at the Fuel Cell Seminar & Exposition 2008 held in Phoenix, Arizona, USA from October 27th - 30th, 2008.

Addressing one of the hottest topics in the automotive industry at the moment, the LMS Imagine.Lab Fuel Cells solution helps fuel cell manufacturers design and optimize fuel cell stacks and systems via an easily accessible one-dimensional modeling environment. With LMS Imagine.Lab Fuel Cells, users can size components, optimize architecture and geometries, and develop and test control strategies. In addition, electrochemical researchers can opt to integrate and test different gas mixtures and material solutions, and predict real-life reactions like voltage and transient temperature evolution, pressure and mass flow rates for the entire system.

LMS Imagine.Lab Fuel Cells is of particular interest to PEMFC or SOFC system integrators since it uses validated physical modeling, based on an energy exchange approach where basic elements can be easily assembled to represent a complete fuel cell system. Researcher and development can easily "try out" the performance traits of a complete system, reviewing both static and dynamic behavior. A complete solution, LMS Imagine.Lab Fuel Cells comes with all the tools and multi-disciplinary libraries to build, analyze and optimize a functional digital fuel cell mock-up.

"The LMS Imagine.Lab Fuel Cells solution proposes a unique platform to model from the stack to whole fuel cell system. It is even possible to run sensitivity analyses or parameter optimization to enhance the performance and efficiency of the complete system or just a specific component," commented Patrice Montaland, LMS' fuel cells expert. "It provides an unparalleled energy-exchange approach that lets users rapidly test and analyze new configurations and architecture for system efficiency and performance."

In addition to this unique dedicated solution for fuel cells, LMS will showcase the latest release of the LMS Imagine.Lab AMESim system simulation platform on its booth (#708) throughout the duration of the exhibition. Conference attendees will be given the unique opportunity to attend the presentation of a paper, "Multi-scale physical modeling of PEMFC and SOFC from subsystem to stack" on October 30th from 8:30 - 10:30 a.m. (room 102A-C).

A high resolution picture for this PR can be found under [www.lmsintl.com/pressimages](http://www.lmsintl.com/pressimages)

## About LMS:

LMS is an engineering innovation partner for companies in the automotive, aerospace and other advanced manufacturing industries. With approximately 30 years of experience, LMS helps customers get better products to market faster and turn superior process efficiency into key competitive advantages. With a unique combination of 1D and 3D simulation software, testing systems and engineering services, LMS tunes into mission critical engineering attributes, ranging from system dynamics, structural integrity and sound quality to durability, safety and power consumption. With multi-domain solutions for thermal, fluid dynamics, electrical and mechanical system behavior, LMS can address the complex engineering challenges associated with intelligent system design. Thanks to our technology and dedicated people, LMS has become the partner of choice of more than 5,000 manufacturing companies worldwide. LMS is certified to ISO9001:2000 quality standards and operates through a network of subsidiaries and representatives in key locations around the world.

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[print page](#) 