



MASM 2008

Call for Papers

4th International Conference on Modeling and Analysis of Semiconductor Manufacturing (MASM) 2008

Miami, Florida, USA

December 7th-10th

The 2008 International Conference on Modeling and Analysis of Semiconductor Manufacturing (MASM) will again be a forum for the exchange of ideas and best practices between researchers and practitioners from around the world involved in modeling and analysis of high tech manufacturing systems. We are convinced of the worth and importance of the continuation of the MASM events held in Tempe, AZ in 2000 and 2002, and Singapore 2005

The MASM 2008 conference will be fully contained within the Winter Simulation Conference 2008 (WSC '08), the leading conference in discrete event simulation (<http://www.wintersim.org/>). WSC '08 features a comprehensive program ranging from introductory tutorials to state-of-the-art research and practice. WSC will take place in Miami, Florida, USA. All attendees of the MASM conference will register for WSC at the same cost. All participants of the WSC can attend MASM 2008 sessions.

While we seek to know what is going on within the semiconductor industry, neither presenters nor attendees need to be in the semiconductor industry to participate. We are interested in any methodologies, research, and/or applications from other industries such as TFT-LCD and biochip that might also be utilized for the semiconductor industry, and vice versa.

In the face of the challenges driven by Moore's Law for continuous cost reduction and technology evolution, novel theoretical developments and empirical studies are needed to maintain profitable growth of semiconductor industry. In particular, to deal with increasing complexity in processes and materials as well as shorter lifecycles and faster ramps, improvements at all levels are expected to contribute to future cost reductions and industry growth: At the operational level, improvements to equipment and operator productivity are as important as ever. At the system level, capital effectiveness and operational improvements are expected to make very significant strides. And at the strategic level, fab economics and supply

chain efficiency promises to magnify equipment and factory level advances upstream and downstream in the business. To achieve this, economical analysis, new statistical methods, and enabling computing techniques will be required in addition to operations research methods. We invite you to present on topics related to modeling and analysis that will help address these challenges.

The conference includes tutorials and related software demonstrations within the Winter Simulation Conference 2008. A broad range of papers is sought, including theoretical developments, applied research, and case studies. Interested individuals within academia, government agencies, equipment suppliers, manufacturers, students, contractors, and other interested parties are encouraged to participate.

The conference will be built around the following three tracks, each of which will be supervised by an international panel.

1. Operational Modeling and Simulation.
2. Supply Chain Management and Fab Economics.
3. Enabling Computing Techniques and Statistical Methods.

MASM will feature an international panel discussion titled “Modeling and Analysis of Semiconductor Analysis in a Shrinking World: Challenges and Successes”.

A special issue of European Journal of Industrial Engineering (EJIE) will be dedicated to a selected number of high-quality papers presented at the MASM 2008 conference. The expanded versions of selected papers will undergo the peer review process of EJIE.

Conference Location: MASM 2008 will be held in vibrant Miami, Florida at the InterContinental Hotel from December 7-10, 2008. Overlooking picturesque Biscayne Bay, The InterContinental Miami is a luxurious international destination located in the heart of the “Gateway to the Americas”. Enjoy world-class shopping, dining, and nightclubs in one of the world's most glamorous cities. The hotel location is minutes from South Beach, the Port of Miami, Coconut Grove, and Coral Gables, and only 7.5 miles from Miami International Airport. Bayside Marketplace, lined with more than 200 fashionable shops, restaurants, and clubs, is a short 5 minute walk. The hotel features 641 luxurious rooms with views of the Miami skyline and Biscayne Bay, high speed internet access, a heated outdoor pool, modern fitness center and three stylish restaurants and cocktail lounges.

Conference Organizer

John W. Fowler, Arizona State University (U.S.A), John.Fowler@asu.edu

Program Chair WSC 2008

Lars Mönch, University of Hagen (Germany), Lars.Moench@fernuni-hagen.de

Chen-Fu Chien, TSMC (Taiwan), cfchiena@tsmc.com

International Advisory Committee

Hans Ehm, Infineon (Germany)

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Peter Lendermann, D-SIMLAB Technologies (Singapore)

Mike Tao Zhang, Spansion Inc. (U.S.A)

Track Coordinators

- **Operational Modeling and Simulation**

Stephane Dauzere-Peres, Ecole Nationale Supérieure des Mines (France),

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Gerald Weigert, Dresden University of Technology (Germany),

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- **Supply Chain Management and Fab Economics**

Kenneth Fordyce, IBM (U.S.A), fordyce@us.ibm.com

Tae-Eog Lee, KAIST (Korea), telee@kaist.ac.kr

- **Enabling Computing Techniques and Statistical Methods**

Argon Chen, National Taiwan University (Taiwan), achen@ntu.edu.tw

Leon McGinnis, Georgia Tech (U.S.A), leon.mcginnis@isye.gatech.edu

Paper Submission:

Please follow the WSC 2008 Author Kit to prepare your MASM 2008 paper at <http://www.wintersim.org/MASM.htm>.

Important Dates:

Deadline for Paper Submission: April 15, 2008

Notification of Acceptance: June 5th 2008

Camera Ready Paper due: July 17th 2008