PROGRAM

WORKSHOP ON MODELING AND SIMULATION IN MANUFACTURING, LOGISTICS, TRANSPORTATION AND TRAFFIC

20TH IFF SCIENCE DAYS, JUNE 21, 2017
WEDNESDAY, JUNE 21, 2017

WELCOME

9:30 am

Welcome
Tobias Reggelin
Otto von Guericke University, Magdeburg

Bastian Sander
Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg

SIMULATION IN TRAFFIC AND TRANSPORTATION
Chair: Tom Assmann

9:40 am

Mihails Savrasovs, Irina Pticina and Irina Yatskiv
Transport and Telecommunication Institute TSI, Riga

Environmental Impact Assessment Based on Microscopic Traffic Flow Simulation

10:10 am

Wladimir Hofmann and Tom Assmann
Otto von Guericke University, Magdeburg

Parisa Dolati Neghabadi and Van-Dat Cung
Université Grenoble Alpes

Simulation-Based Assessment Tool for Cargo Bikes in Multimodal Transportation Chains

10:40 am

Coffee break

SIMULATION IN TRAFFIC
Chair: Bastian Sander

11 am

Robert Protzmann
Fraunhofer Institute for Open Communication Systems FOKUS, Berlin

VSimRTI – Virtual Testing of Connected and Automated Driving

11:30 am

Peter Edward Finch
graphmasters GmbH, Hannover

Optimized Routing with NUNAV
12 am  Riccardo Bartolozzi, Eva-Maria Stelter  
Fraunhofer Institute for Structural Durability and System Reliability LBF, Darmstadt  
**Energy Consumption Simulation and Energy-Optimal Routing for Electric Vehicles**

12:30 am  **Lunch**  

**MESOSCOPIC SIMULATION IN MANUFACTURING AND LOGISTICS**  
*Chair: Tobias Reggelin*

1:30 pm  Tobias Reggelin  
Otto von Guericke University, Magdeburg  
**Introduction to Mesoscopic Simulation Modeling in Manufacturing and Logistics**

1:45 pm  Christian Schauf  
Volkswagen AG, Wolfsburg  
**Mesoscopic Discrete Rate Simulation Models for Production Planning: Requirements of Production Planners and First Applications**

2:15 pm  Toralf Wunder  
BMW Group, Munich  
Sebastian Lang  
Otto von Guericke University, Magdeburg  
**Mesoscopic Simulation Models for Logistics Process Planning in Receiving**

2:45 pm  Paul Aurich and Abdulrahman Nahhas  
Otto von Guericke University, Magdeburg  
**Marco Krist**  
Tectron GmbH, Worbis  
**Mesoscopic Discrete Rate and Microscopic Discrete Event Simulation Models for Simulation-Based Optimization of a Hybrid Flow Shop Problem in Electronics Manufacturing**

3:15 pm  **Coffee break**
MACHINE LEARNING AND AUTOMATED MODELING IN MANUFACTURING AND LOGISTICS MODELING FOR LARGE CAPITAL PROJECTS

Chair: Bastian Sander and Tobias Reggelin

3:45 pm  
Sergii Kolomiichuk  
Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg  
**Machine Learning in Manufacturing and Logistics: Trends and Prospects**

4:15 pm  
David Weigert and Paul Aurich  
Otto von Guericke University, Magdeburg  
Klaus Hanisch  
tarakos GmbH  
**Automatic Data Exchange System among Visualization, Simulation and Construction Tools**

4:45 pm  
Vasiliy Demin  
Scientific Center of Logistics MADI (Moscow Automobile and Road Construction State Technical University)  
**Modeling of Logistics Processes for Major Investment Projects in Russia**

7 pm  
**IFForum “Business Meets Research”**  
Joseph-von-Fraunhofer-Strasse 1 *(Entrance starts at 6pm)*
Register online for the workshop “Modeling and Simulation in Manufacturing, Logistics, Transportation and Traffic” during the 20th IFF Science Days on www.wissenschaftstage.iff.fraunhofer.de or use the registration form enclosed in this program.

Workshop registration is binding. Upon receipt of your registration, we will send you confirmation of registration in an email. The registration fee is due when you receive your bill. You will only be admitted to the workshop when you have already paid your bill by the deadline. Upon receipt of your payment, we will send you confirmation of attendance.

What if you are suddenly unable to attend? No problem: You may transfer your registration to a colleague from your organization. Please inform us of this in writing.

THE DEADLINE FOR REGISTRATION FOR ALL EVENTS IS JUNE 16, 2017.

CANCELLATION

If you cancel your registration later than June 16, 2017 but earlier than two days prior to the event, we will charge a processing fee of € 30. Thereafter, you will be charged the full conference fee. Cancellations must be in writing and include your invoice and VAT numbers. The workshop fee is exempt from sales tax.

The entire workshop fee will be due should you fail to appear.

PRIVACY POLICY

The Fraunhofer IFF treats all attendees’ personal data confidentially and takes every measure necessary to protect it. The Fraunhofer IFF collects and uses the data to organize this event and will not disclose it to any third parties.

PHOTO RIGHTS

Media representatives and photographers contracted by the organizer will be attending the IFF Science Days and the workshop. Please note that photographs taken in conjunction with the conference for publication and circulation in media (press, Internet, flyers, brochures, etc.) may be used by the organizer anytime and anywhere. By attending the event, attendees consent to such publication without compensation, i.e. without express consent of the individual concerned. If you do not consent, inform the photographers directly.

ACCOMMODATIONS

Take advantage of Magdeburg Marketing Kongress und Tourismus GmbH’s hotel booking service (Phone + 49 391 8380 402, http://www.magdeburg-tourist.de/index.php?La=2). This professional service will find the right accommodations for you free of charge.

REGISTRATION FEE

June 21, 2017

Workshop on Modeling and Simulation in Manufacturing, Logistics, Transportation and Traffic

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<td>University staff</td>
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I will attend the following events: (Check the appropriate events.)


Alternatively, register by faxing this form to: +49 391 4090-93-259

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<td>Transportation and Traffic</td>
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<td>IFForum “Business Meets Research”</td>
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Subject to change by the organizer without notice.
ORGANIZER

Fraunhofer Institute for Factory Operation an Automation IFF Magdeburg

Director
Prof. Michael Schenk
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VENUE

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