# **ISIR** Newsletter



### Report on the ISIR 12th ISIR Summer School August 17-21, 2015 – Kuehne Logistics University, Hamburg, Germany

### Value-Driven Inventory Management in Logistics and Supply Chains New and Classical Streams in Inventory Management



The 12th ISIR summer school was organized by Prof. Sandra Transchel. There were keynotes, tutorials, and presentations by distinguished professors and Ph.D. students on recent research around the central theme

In addition to presentations that focused on rather conventional problems of inventory research, such as spare parts management, safety stock calculation, and replenishment frequency optimization, there were also several other interesting talks that presented research which focuses on extended supply chain problems, such as the determination of stocking quantities as function of transportation modes, product allocation in humanitarian operations, or the effects of CEO incentives on inventory levels.

Regarding research methodologies, literature reviews, case studies, analytical and empirical methods were presented. Each presentation was followed by a discussion session that was led by a senior researcher and a Ph.D. student. Because all participants had strong common backgrounds in inventory research, each of the discussions was very rich with insights - some discussion were so heated that they continued offline.

Exciting excursions and socializing events with a group of more than 10 different nationalities conveyed the unique spirit of Hamburg and provided opportunities for Professors and Ph.D. students to get to know each other.

After the welcoming of the participants, the summer school started its official scientific program, on Monday, 17th of August, with a keynote presentation by Prof. Attila Chikán from Corvinus University, addressing the issue of "Global trends of national inventory behaviour". In a lively and comprehensive presentation he introduced the participants to the

# 3/2015

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# UPCOMING ISIR related EVENTS

January, 3-5, 2016 San Francisco, CA, USA **ISIR session at the ASSA** 

meetings February 22-26, 2016

Innsbruck, Austria 19th International Working Seminar on Production Economics

# Call for Special Session

at the

19th International Symposium on Inventories

August 22-26, 2016 Budapest, Hungary

Submit your idea before

**DECEMBER 7** 

at

http://bit.ly/10dwDo9

### NEW MEMBERS OF THE ISIR EXECUTIVE COMMITTEE 2014-16

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#### SECTION CHAIRPERSONS

Economics: JAMES KAHN, Yeshiva University in NY, USA

Management: PETER KELLE, Louisiana State University, USA

Modelling: REFIK GÜLLÜ, Bogazici University, Turkey

Forecasting: JOHN BOYLAN, Buckinghamshire Chilterns University Collage, UK

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LUCIO ZAVANELLA, University of Brescia, Italy

### AUDITING COMMITTEE

SZABOLCS DULEBA, University of Nyíregyháza, Hungary

CHRISTIAN LARSEN, Aarhus University, Denmark JOHAN MARKLUND, Lund University, Sweden different features and importance of inventory investment in various countries. He concluded that the globalization of economic activity has a great impact on national inventory accumulation, leading to rather similar behavior in various countries.

The afternoon's keynote by Prof. Henk Zijm from the University of Twente on "Coordination and collaboration in freight logistics" reported a number of projects, at both national and international levels, that have been undertaken in order to address problems in today's logistics and supply chains and to propose smarter logistics and mobility solutions. The presentation ended with a brief discussion of a long-term vision on future logistics and supply chains: The Physical Internet.

On Tuesday 18th, the second day of the summer school, Prof. Mirko Kremer from the Frankfurt School of Finance gave a tutorial on "On the usefulness of (laboratory) experiments in OM research and how to actually pull one off". The aim of the presentation was to introduce laboratory experiments as part of the methodological toolbox of Operations Management researchers that has recently gained huge recognition in academia and to discuss some of the issues regarding the design and conduction of experiments.

In the afternoon, Dr. Marcel Sieke gave some useful insights about Barkawi Management Consultants by presenting "Inventory Management – Putting theory into practice". Following Marcel's presentation, a case study competition on "Integrating complex data streams into causal and fact based prediction models" was introduced. The case study, which was led by Barkawi Management Consultants, was based on a real company project with E.ON

Connecting Energies GmbH and gave the students the opportunity to collaborate in teams and gain some more practical experience.

On Thursday, 20th the last tutorial of this Summer School was given by Prof. Nagesh Gavirneni on "Initiating, conducting, and completing research in operations management: Observations from the past twenty years". By promoting an open discussion between the participants, Professor Nagesh Gavirneni from Cornell University shared his personal opinion regarding these topics, gave helpful advice, and as such inspired the audience to find their own path to good research.

By provision of an ideal platform for people from around the globe, the Summer School proved once again to be extremely valuable beyond mere academic purposes. Amongst others, Tuesday's dinner in the Wasserschloss, a traditional restaurant in the old warehouse district of Hamburg, and Wednesday's visit of the HHLA container terminal, complemented by a harbor cruise on a barge, provided room for fruitful discussions and conversations while at the same time some of the sights in Hamburg were seen. Finally, a joint visit of and bar tour through the famous Reeperbahn in Hamburg's red light district definitely broke the last ice among the participants.

We hope everyone enjoyed the Summer School and we look forward to meeting all of you soon again.



Full report at http://isir.hu/main-events/summer-schools/

# CALL FOR PAPERS

UNIVERSITY OF TECHNOLOGY OF TROYES, **FRANCE** JUNE 28 30 2016



MIM 2016



8<sup>th</sup> IFAC Conference on Manufacturing Modelling, Management & Control

The general theme of the 8th IFAC Conference on Manufacturing Modelling, Management and Control is **Optimization and Systems Science for Risk Management and Disruption Recovery Control.** 

The conference will focus in particular on the most innovative methods proposed in the last few years in the context risk management, resilience, and disaster recovery control in the 21st century.

This conference will provide a remarkable opportunity for the academic and industrial communities to address new challenges, share solutions and discuss future research directions. The agenda will include plenary speeches, invited/special sessions, and industrial panel sessions. Contributions are expected from academia, industry, and government institutions and agencies.

It is an honor to welcome **Pr Wilhelm Bauer**, **Pr Michel Gendreau**, **Pr Stanley B. Gershwin**, **Pr Kathryn E. Stecke** and **Pr Xiaolan Xie** as Keynote Speakers. **Important Dates** 

Paper submission deadline:

### December 1, 2015

Details about submissions are available at <u>http://mim2016.utt.fr/soumission.htm</u>.

All paper submissions must be electronically submitted through the PaperPlaza Conference Manuscript Management System (https://ifac.papercept.net/conferences/scripts/sta rt.pl)

Notification of acceptance: February 1, 2016

Registration: March 31, 2016

Website

http://mim2016.utt.fr/



### PRESENT AND FUTURE OF OPERATIONS MANAGEMENT 5th World Conference on Production & Operations Management September 6-10, 2016 – Havana, Cuba

co-organized by POMS, EurOMA and JOMSA

### Please follow the upcoming details about the conference at

### http://www.pomhabana2016.com/index2.php?module=invitation

The World Conferences were initiated in 1998, as a new kind of Conference, where the main OM Associations in America (POMS), Europe (EurOMA) and Asia (JOMSA) joined their efforts for the first time. They take place every 4 years with increasing success.

After Seville (2000), Cancun (2004), Tokyo (2008) and Amsterdam (2012), it is the time now for the 5th one, which will be held in Havana.

It is again time for a great joint effort in the field!!!

We want P&OM Havana 2016 to be a new benchmark in every aspect!!.



P&OM Havana 2016: September 6th-10th

5th World Conference on Production and Operations Management

#### **Steering Committee**

- Sose A.D. Machuca (SteeringCommitteeChair, EurOMA-POMS-JOMSA, Universidad de Sevilla, Spain)
- RaffaellaCagliano (EurOMA, Politécnico di Milano, Italy)
- Sergio E. Gouveada Costa (POMS, Pontificia UniversidadeCatolica do Paranaand Federal University of Technology, Brazil)
- Andreas Groessler (EurOMA, RadboudUniversityNijmegen, TheNetherlands)
- Dorothee Honhon (POMS, University of Texas at Dallas, U.S.A.)
- Munehiko Itoh (JOMSA, KobeUniversity, Japan)
- Yoshiki Matsui (JOMSA, Yokohama NationalUniversity, Japan).

### **Important Dates**

February 20, 2016	Deadline for submission of abstracts
April 25, 2016	Notification of abstracts acceptance
May 15, 2016	Full papers (not mandatory) deadline

### Special ISSUE on Computers & Industrial Engineering Human factors in industrial and logistic system design

### **Aims and Scope**

Despite the opportunities the automation of industrial and logistic systems offers, many companies still rely on human work and manual materials handling in many areas. Most decision support models that were proposed in the past to assist managers in designing industrial and logistic systems have neglected the specific characteristics of human workers, which often led to unrealistic outcomes. To guarantee a high level of productivity and efficiency and to make sure that decision support models better reflect reality in daily operations, an interdisciplinary perspective is necessary that considers human factors in addition to economic aspects in designing industrial and logistic systems.

There seems to be a large gap in the literature concerning the integration of human factors into decision support models for industrial and logistic systems design. In addition, the impact of systems design parameters on the human operators has not been sufficiently analyzed. In general, human factors (perceptual, mental, physical and psychosocial) determine the performance of industrial and logistic systems to a large extent if human operators are employed. This aspect becomes more challenging in light of demographic changes such as the aging workforce and international differences amongst system operators in a global supply chain environment. These trends will put human factors-related issues in logistics – such as the risk of developing musculoskeletal disorders in labor-intensive work environments - on top of the agendas in many companies. In addition, the consequences of using innovative technical solutions to support the design of high reliability industrial and logistics processes is not yet fully understood in light of human performance and errors.

This special issue aims to publish innovative approaches for the integration of human factors into industrial and logistic systems design. Submissions should develop and analyze analytical models, present case studies on the integration of human factors into decision support models, or apply simulation approaches for designing and coordinating industrial and logistic systems to gain insights into the interaction of human factors and logistic systems design.

Topics may include, but are not limited to:

- Human Factors in operations and logistics management
- Ergonomics methods for industrial systems design
- Quantitative assessment of injury risks in material handling operations
- The impact of demographic changes on industrial and logistic systems

- Human performance and error reduction in industrial systems design and management
- New technologies for increasing human performance and reducing human errors
- Social sustainability aspects in operations and logistics management

The editors of the special issue intend to publish a range of different topics and reserve the right to limit the number of papers included in any one topic.

### Submission

Manuscripts should be submitted via Elsevier Editorial System http://ees.elsevier.com/caie/.

Please indicate in the Article Type "SI: Human Factors". Manuscripts should not have been previously published nor be currently under consideration for publication elsewhere. For Guide for Authors, please refer to the webpage:

http://www.elsevier.com/wps/find/journaldescription.cws \_home/399/authorinstructions.

### Deadline

The submission deadline is February 29, 2016. The Special Issue is scheduled for publication in early 2017.

### **Special Issue Editors:**

Prof. Christoph H. Glock, TU Darmstadt, Germany. Managing Guest Editor Prof. W. Patrick Neumann, Ryerson University, Canada

Prof. Fabio Sgarbossa, University of Padua, Italy Dr. Eric Grosse, TU Darmstadt, Germany

### **ISIR** membership

If you wish to continue your membership in ISIR you are kindly requested to fill the <u>membership renewal form</u>, state which membership category you belong to and move on to the payment of your dues.

Please note that the membership year runs from 01 September to 31 August!



# BOOKSHELF

### LOGISTICS AND SUPPLY CHAIN INNOVATION

by Henk Zijm



During a special dinner meeting on September 8, 2015, joined by more than 200 German companies in Dortmund, prof. dr. Henk Zijm (BETA/UT) launched the book "Logistics and Supply Chain Innovation – Bridging the Gap between Theory and Practice".

The meeting was part of the Zukunftscongress Logistik – Dortmunder Gespräche, which is held annually. The book discusses a large number of innovative projects which were carried out by the Dutch Institute for Advanced Logistics, DINALOG, of which Zijm served as scientific director until October 2014, and the Effizienzcluster LogistikRuhr, which is governed by the Fraunhofer Institut für Materialfluss und Logistik (Fraunhofer IML). The book is one of the results of a cooperation agreement signed between Dinalog and the Effizienzcluster/Fraunhofer IML in June 2014.

The book discusses in detail the need for sustainability in the logistics sector. A number of papers highlight each of five themes: Logistics and Sustainability, Urban Logistics, IT-developments, Value Chain management and Knowledge management. It is directed to both academic researchers and logistics and supply chain professionals. The editorial team responsible for the realization of the book was led by prof. dr. Henk Zijm and included prof. dr. Matthias Klumpp (University of Duisburg-Essen), prof. dr. Michael ten Hompel (Chairman of the Board of Fraunhofer IML) and prof. dr. Uwe Clausen (Member of the Board of Fraunhofer IML).

The book is available as hardcover and as e-book by Springer Publishing Company, Berlin. Further information can be retrieved via <a href="http://www.springer.com/de/book/9783319222875">http://www.springer.com/de/book/9783319222875</a>

### **New papers**

### Interest Rates and the Market for New Light Vehicles

by Adam Copeland / Federal Reserve Bank of New York George Hall / Brandeis University Louis Maccini / Johns Hopkins University

### Abstract

We study the impact of interest rates changes on both the demand and supply of new light vehicles in an environment where consumers and manufacturers face their own interest rates. Through the estimation of a dynamic stochastic market equilibrium model, we find evidence that rate changes impact the economy through both households and manufacturers. Furthermore, manufacturers' inventories play an important role amplifying and propagating the interest rate effects over time. A temporary 100 basis-point increase in both interest rates causes vehicle production to fall 12 percent and sales to fall 3.25 percent at an annual rate in the short run.

Keywords: interest rates, automobiles, inventories, Bayesian maximum likelihood. JEL classification numbers: E44, G31.

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2669834



## Contribute to the ISIR Newsletter

If you wish to share news with the ISIR community about yourself, your research, your department, a conference you consider worth attending, a new publication, or job vacancies, please do not hesitate send it to the <u>isir@isir.hu</u>.



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