



BIOGRAPHICAL SKETCH

Prof. Dr. Dr.-Ing. Dr. h. c. Jivka Ovtcharova // Karlsruhe Institute of Technology (KIT) // Institute for Information Management in Engineering (IMI)

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Jivka Ovtcharova is Full Professor, Head of the Institute for Information Management in Engineering (IMI) since October 2003 and founder of the Lifecycle Engineering Solutions Center (LESC) at the Karlsruhe Institute of Technology (KIT), established in June 2008. In addition, she is Director for Process and Data Management in Engineering (PDE) at the Research Center for Information Technology in Karlsruhe (FZI) since 2004. Before, she worked at the International Technical Development Center at Opel as a leader of a Process and Systems Integration Center of GM Europe, the SME Tecmath, the Fraunhofer Institute for Computer Graphics in Darmstadt, as well as the Bulgarian Academy of Sciences in Sofia. Key research topics are Virtual Engineering, Product Lifecycle Management and Collaborative Engineering. Jivka Ovtcharova has an Engineering degree in Heat-power process automation from the Moscow Power Institute, Russia, a Doctor degree in Mechanical Engineering from the Technical University of Sofia and a Doctor degree in Computer Science from the Technical University of Sofia. She is currently a member of the High-level Advisory Committee of the European Centre for Women and Technology.

EDUCATION

- 1975-1976 *Mechanical engineering,*
TU, Sofia, Bulgaria
- 1976-1982 *Heat-power process automation,*
Moscow Power Institute, Russia

1st Dissertation, doctor
"An Approach to the Form Feature-Based
Modelling in Mechanical Engineering"
Technical University, Sofia

2nd Dissertation, doctor engineer
"A Framework for Feature-Based Product
Design: Fundamental Principles, System
Concepts, Applications"
Technical University, Darmstadt, Germany

PROFESSIONAL CAREER

- 1982-1987 *Research fellow Mathematical*
modelling, Bulgarian Academy of
Sciences, Sofia
- 1987-1991 *Visiting scientist CAD models*
and system architectures,
Fraunhofer-IGD Darmstadt
- 1991-1996 *Project manager, Feature-based*
design, Fraunhofer-IGD, Darmstadt

- 1996-1998 *Project manager, Human*
modelling and individual,
Tecmath AG, Kaiserslautern
- 1998 – 2001 *Managing Director, Global*
Process and Systems
Integration, Adam Opel AG
- 2001 – 2003 *Managing Director, Integrated*
product / modelling& quality
management, Adam Opel AG,
Rüsselsheim
- 2003 *C4 Professor & Director,*
Information Management in
Engineering (IMI), KIT
- 2004 *Director, Process and Data*
Management Engineering (PDE)
Research Center for Information
Technologies in FZI
- 2006 – 2008 *Executive Research Center for*
Information Technologies (FZI)
- since 2007 *Member of the Science Council*
of the TU Sofia, Bulgaria
- since 2010 *Member of the High-level Adviso-*
ry Committee of the European
Centre for Women and Techno-
logy

TEN MOST RELEVANT PUBLICATIONS

Prof. Dr. Dr.-Ing. Jivka Ovtcharova // Institute for Information Management in Engineering
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- **1** J. Ovtcharova and S. Stanev
Lifecycle oriented information model to support the production driven product validation
6th International Conference on Digital Enterprise Technology (DET 09)
- **2** S. Stanev, M. Prieur, W. Walla, S. Pölz, J. Ovtcharova
Production-oriented Product Validation Method as Support for the Reuse of Production Lines in the Automotive Industry
(CARV 2009), München
- **3** J. Ovtcharova and S. Stanev
Efficient change management for the flexible production of the future
Journal of Manufacturing Technology Management
- **4** Mahl, A. Semenenko, J. Ovtcharova
An approach for building intercultural and cross-domain virtual organizations
(CARV 2007) Toronto, Canada
- **5** Semenenko, A. Mahl, J. Ovtcharova
Virtual organizations in cross-enterprise and cross-domain engineering
8th IFIP Working Conference on Virtual Enterprises, Guimaraes, Portugal, 2007
- **6** J. Herter, W. Schotte, J. Ovtcharova
Bridging VR and item-based PLM systems using an object oriented approach
5th International Conference on PLM, Seoul, Korea, 2008
- **7** M. Marinov, P. Schubert, J. Ovtcharova
Funktionsorientiertes Change Management, (Function based Change Management)
Gebiet PLM-Technologie 09/2008, pp 40, 2008
- **8** H. Krappe, S. Stanev, J. Ovtcharova
Integration of Flexible Manufacturing and Change Management Processes in a Service-Oriented Architecture
Advances in Systems, Computing Sciences and Software Engineering
Proceedings of SCSS 2006
- **9** J. Ovtcharova, D. Gutu, K. Krahtov, S. Rogalski
A generic Framework for Life-Cycle-Management of heterogenic Building Automation Systems
19th International Conference (FAIM 2009)
- **10** J. Ovtcharova, V. Schubert, S. Rogalski, K. Krahtov
A generic Framework for adaptive Configuration Management in Building Automation
ICCME'09 - International Conference on Collaborative Mechatronic Engineering

EXPERIENCE IN SUPERVISING DOCTORAL RESEARCHERS

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Since her state doctorate in 1982, Prof. Ovtcharova is supervising doctoral candidates. Until today, nine candidates have graduated under her supervision. Stilian Stanev, who will graduate 2010 under the supervision of Prof. Ovtcharova, received a Best Paper Award at the “International Conference on Manufacturing Automation” in Singapur 2007.

Sven Rogalski finished his state doctorate 2009 in the group of Prof. Ovtcharova and is holding a head position in the department for the Process and Data Management in Engineering (PDE) at the Research Center for Information Technology in Karlsruhe (FZI) since the beginning 2009.

Eike Harms, who graduated 2008 under the supervision of Prof. Ovtcharova, is currently holding a Professor position a private school.

In her supervision of doctoral candidates Prof. Ovtcharova is organizing the following seminars and workshops together with her research assistants:

- The weekly Thursday Morning Meeting, where all doctoral candidates shortly report on their current activities, like open research questions, experimental studies, paper reading, paper reviewing, teaching and projects etc.
- The first German-Russian Workshop on “Engineering and Information Sciences: New Methods and Solutions for Emerging Technologies”, which took place on February 23-25, 2010 at the Lifecycle Engineering Solutions Center (LESC) in Karlsruhe. This event was part of the bilateral cooperation between Karlsruhe Institute of Technology (KIT) and Ufa State Aviation Technical University (USATU) and a follow-up of the Russian-German Workshop from July 2009 in Ufa.

The group of Prof. Ovtcharova hosts regularly international visitors and has close collaboration with researchers from other universities. Doctoral candidates spend usually some time in some other research groups. Prof. Ovtcharova encourages her doctoral candidates

- to participate in summer schools and workshops
- to publish at international workshops, conferences and in international journals
- to work with graduate students resp. Supervise student projects and diploma theses on related subtopics of their own research theme
- to participate in the teaching duties of the group

DOCTORAL THESES SUPERVISED WITHIN THE LAST FIVE YEARS (AS FIRST ADVISOR)

Alexander Mahl	Ein Beitrag zur wissensbasierten Unterstützung unternehmens- Übergreifender interkultureller Kooperationen auf der Grund- lage eines generischen Baukastensystems (2009)
Thomas Forchert	Prüfplanung – Ein neues Prozessmanagement für Fahrzeug- Prüfungen

Sven Rogalski	Entwicklung einer Methodik zur Flexibilitätsbewertung von Produktionssystemen (2009)
Eike Harms	Änderungs- und Konfigurationsmanagement unter Berücksichtigung von Verwendungsinstanzen (2008)
Hardy Krappe	Erweiterte virtuelle Umgebungen zur interaktiven, immersiven Verwendung von Funktionsmodellen (2008)
Markus Gloßner	Integrierte Planungsmethodik für die Presswerkneutypplanung in der Automobilindustrie (2007)
Michael Prieur	Functional Elements and Engineering Template-based Product Development Process - Application for the Support of Stamping Tool Design (2006)
Stefan Geis	Integrated Methodology for Production Related Risk Management of Vehicle Electronics (IMPROVE) (2006)
Michael Seidel	Methodische Produktplanung - Grundlagen Systematik und Anwendung im Produktentstehungsprozess (2005)