



VALERI V. SOUCHKOV

April, 2013

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Date of Birth: August 1, 1966
Place of birth: Minsk, Belarus (USSR)
Nationality: Netherlands

SUMMARY OF TRIZ-RELATED ACTIVITIES

- Total number of TRIZ-related publications: 67
- Total number of TRIZ-assisted innovative projects: 56
- Total number of TRIZ development projects: 12
- Total number of TRIZ training courses performed: 168
- Total number of people trained in TRIZ: over 4000
- Total number of hours training: (excluding individual coaching): 3200
- Total number of customer organizations: 163.

EDUCATION

- **1983-1988:** *Diploma (~M.Sc) of Engineer in Design and Technology of Electronic Computational Systems* from Belarus State University of Informatics and Radioelectronics.
- **1992-2010:** participated in a number of training workshops on Artificial Intelligence, quality and innovation.

FORMAL TRIZ EDUCATION AND TRAINING

- **1989:** 80 hours, TRIZ training, Minsk, Belarus. Trainer: Nikolai Khomenko.
- **1991:** 192 hours, TRIZ training, Kishinev, Moldova. Trainers: Boris Zlotin, Alla Zusman, Len Kaplan, Zinovy Royzen. Diploma signed by G. Altshuller.
- **1991:** 120 hours, TRIZ training, Minsk, Belarus. Trainers: Simon Litvin, Vladimir Gerasimov.

WORK EXPERIENCE

2003-Current: *ICG Training & Consulting*, Enschede, The Netherlands.

Founder, Managing Director, Trainer, Consultant, Developer

- Development of TRIZ and xTRIZ tools and xTRIZ framework establishing a process of Systematic Innovation with TRIZ.
- Training and consulting customers on TRIZ and xTRIZ worldwide.
- Establishing and chairing the International TRIZ Training Centre.
- Publications related to TRIZ, innovation and creativity.
- Worldwide promotion of TRIZ.

2001-Current: *University of Twente*, Enschede, The Netherlands.

Invited Lecturer.

- Training all categories of students in TRIZ.
- Assisting students in performing M.Sc. projects with TRIZ.

2001-2003: *Inbitween BV*, Enschede, The Netherlands.

TRIZ Manager.

- Management of the development of TRIZ-based "Concept Composer" software.

- Training and consulting customers on TRIZ worldwide.
- Promotion of TRIZ.

1997-2001: *Insytec BV*, Hattem, The Netherlands.
Co-founder, Partner.

- Training and consulting customers on TRIZ worldwide.
- Managing TRIZ publications.

1993-1997: *University of Twente*, Enschede, The Netherlands.
Researcher in Education, grant by the Dutch Scientific Foundation (NWO).

- Research on using TRIZ, System Theory and Artificial Intelligence for developing knowledge-based support for innovative engineering design.
- Authoring courses for basic and advanced education in TRIZ.
- Lecturing of university students in TRIZ.

1989-1995: *Invention Machine Labs*, Minsk, Belarus.
Co-founder, Executive Board member, researcher, developer.

- Responsible for developing a module of Invention Machine software.
- Coordination of the development of Invention Machine software.
- Training Invention Machine customers.
- Participation in the Board meetings.
- Presenting company and its products at diverse events.

ASSOCIATIONS, MEMBERSHIPS AND CONFERENCES

- **2011 – Current:** member of the Global R&D Council of the **International TRIZ Association** (MATRIZ, www.matriz.org), head of the Group of TRIZ Research and Developments Coordination.
- **2008:** a co-organizer and co-chair of the "**TRIZ Future**" conference in Enschede, The Netherlands.
- **2006 – Current:** regularly conducting a roundtable for TRIZ enthusiasts and customers in the Netherlands and Belgium.
- **2000 – Current:** co-founded the **European TRIZ Association** (ETRIA, www.etrria.eu) and currently is a member of the Executive Board of ETRIA. Participates annually in the preparations of ETRIA Global Conference "**TRIZ Future**".
- **1995-1999:** organized **TRIZ European Research Network**. A number of European universities participated in the network which was conducting workshops twice a year.
- **1991 – Current:** regularly delivering keynotes and presentations on TRIZ, systematic innovation and creativity at different conferences and events worldwide.

RESEARCH AND DEVELOPMENT ACTIVITIES AND RESULTS

- **1988-1991:** Development of **Invention Machine - Standards** module. Research on applicability of knowledge representation techniques to modeling TRIZ knowledge. Research on modeling semantic knowledge to support analogy-based reasoning to search for innovative solutions.
- **1992-1998:** Research and development of **INDES**: a sharable ontology of physical knowledge to be represented in a unified way and used in combination with TRIZ tools for automatic generation of physically viable innovative design concepts on the basis of System Theory and Artificial Intelligence knowledge-based techniques.
- **1999-2013:** Research, authoring and development of the following methods and techniques:
 - **Root Conflict Analysis (RCA+):** Top-down cause-effect analysis of inventive problems and situations to identify, extract, and visualize

- contradictions.
 - **Value-Conflict Mapping (VCM):** Building a tree of system's contradictions with respect to customer demands and market trends to identify innovation opportunities.
 - **Demand-Trend Matrix:** Assisting generation of new ideas by linking customer and market requirements with TRIZ Trends of Technical Systems Evolution on the basis of systematic approach.
 - **Multi-Screen Analysis (MSA):** Applying multi-screen analysis (System Operator) to identify the current state of the art in the development of a system and formulate strategies for further system's evolution based on extracted evolutionary contradictions and functional inefficiencies.
 - **Ideas Landscaping:** Presentation of generated and evaluated ideas in visual form.
 - **Trend of Functionality Evolution:** exploring how the functionality of different systems evolves over the time.
- **2003-current:** Development of **xTRIZ**: further extension of TRIZ, which introduces a structured approach to systematic front-end of innovation, integrates different methodologies, and introduces a process of systematic inventive problem solving, new idea generation, and solution strategies evaluation.
 - **2003-current:** Research and adaptation of TRIZ methods and tools to be used in non-technological areas, primarily in business and management areas.
 - **2009-current:** Development of a method and a process for **TRIZ-Based Business Model Innovation** based on combination of Business Model Canvas and TRIZ.

TRAINING ACTIVITIES

- Total number of TRIZ training courses performed: 168.
- Total number of people trained: over 4000.
- Total number of hours training: (excluding individual coaching): 3200.
- Levels of training: from introductory to advanced, train-the-trainer.
- Developed 80-hour university course in TRIZ and xTRIZ in Technology and Engineering for B.Sc and M.Sc. students.
- Developed training courses on TRIZ in Technology and Engineering.
- Developed training courses for TRIZ and Systematic Innovation in Business and Management.
- Established the TRIZ Training International Centre in 2009 (<http://www.xtriz.com/Training/ttic.htm>).
- Regularly delivers introductory TRIZ courses in a number of universities worldwide.
- TRIZ and xTRIZ-related courses are licensed and provided in a number of countries.

CONSULTING ACTIVITIES

Assistance 56 projects on innovative problem solving and new product development as well as coaching management of a number of organizations.

PUBLICATIONS

- Total number of publications: 75, of which 67 are TRIZ-related:
 - Books: 2
 - Edited books: 1
 - Course manuals: 4
 - Chapters in books and scientific reports: 8
 - Conference and journal papers: 38

- White papers: 24
- In **2010**, co-authored the book "*Systematische Innovation: TRIZ-Anwendung in der Produkt- und Prozessentwicklung*" (ISBN 978-3446421325) published by Hanser Verlag, Germany.
- In **1999** edited, adapted and published the book "*TRIZ: The Right Solution at The Right Time*" (ISBN 90-80468010) by Yuri Salamatov, Ph.D which has been considered one of the bestselling books on TRIZ worldwide, and was translated to Japanese by Mitsubishi Research Institute.
- In **1998** authored the monograph "*Knowledge Based Support for Innovative Engineering Design*" which summarized the results of the research project on modeling sharable physical knowledge for innovation.

CUSTOMERS

- Total number of customer organizations served personally (private and public companies, NGO, government agencies) in 1998-2012: 163.
- Total number of countries of customers' residence, since 1998-2012: 28.

PERSONAL

- Interests: Modern arts, music, literature, photography, history of civilizations, travel.
- Sports: Master of fencing.