

**CURRICULUM VITAE**  
**FELICJAN RYDZAK**

*International Institute for Applied System Analysis, Ecosystems Services and Management*  
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EDUCATION:

10/2003 – 07/2007 – Wroclaw University of Technology (Poland), Faculty of Mechanical Engineering,  
Institute of Production Engineering and Automation,  
**PhD in Production Organization** (*summa cum laude*)  
Thesis – *Dynamic Model Based Resilience Analysis in Production Systems*

08/2005 – 02/2006 – Agder University (Norway)  
**Research project:** ‘Experimental Explorations of Decision Making Focused  
on Resilience Analysis of Production Systems’

02/2003 – 06/2003 – Wroclaw University of Technology (Poland) & International Institute for Applied  
Systems Analysis (Austria),  
**Course:** Computer Modelling of Complex Systems

09/2001 – 06/2002 – The Nottingham Trent University (UK), Faculty of Engineering and Computing,  
**BSc (Hons) Industrial Management** (exchange programme)

10/1998 – 07/2003 – Wroclaw University of Technology (Poland), Faculty of Mechanical Engineering,  
**MSc Management and Manufacturing Engineering** (*summa cum laude*)  
Specialization of **Manufacturing Management**  
Thesis – *Business Process Modelling as a Technique Supporting Changes in  
Enterprise*

GRANTS, SCHOLARSHIPS:

11/2005 – 09/2007 – Polish Ministry of Education and Science research grant (4T07D01929)  
Research project: ‘*Development of dynamic simulation models of changes in  
production processes*’

10/2005 – 10/2005 – ‘EuroAcademy 2005’ organised by McKinsey&Company, Cape Sounio (Greece)

08/2005 – 02/2006 – The Research Council of Norway Scholarship within the confines of Cultural  
Agreement between Norway and Poland, Norwegian Government Scholarship  
2005/2006; Research project at Agder University (Norway);

09/2001 – 05/2002 – The European Union Exchange Programme Socrates/Erasmus Scholarship  
in academic year 2001/2002 and study at The Nottingham Trent University (UK)

#### AWARDS, HONOURS:

09/12/03 – Award ('The Gold Lion') for the best graduate at Faculty of Mechanical Engineering in 2002/2003 in recognition of outstanding results and achievements during study at Wroclaw University of Technology

01/10/03 – The Chancellor's Award in recognition of very good result during study at Faculty of Mechanical Engineering

01/10/99 – The Faculty of Mechanical Engineering Dean's Award in recognition of very good results in academic year 1998/1999

#### WORK EXPERIENCE:

20/05/13 – present – BP Global Operations Organization, Upstream  
Reliability and Maintenance Specialist  
– definition of processes, accountabilities, capabilities and assurance and setting the basis for standardised Inspection and Maintenance management system, including Work Management, Equipment Strategies, Defect Elimination, Turnaround, and Self-verification and Governance  
– integration of Inspection and Maintenance processes across GOO Operating Management System (including operations, integrity management, subsea, engineering services, material management, purchasing and supply chain management, activity planning) as well as Global Wells Organization and Global Projects Organization

01/01/08 – 20/05/13 – BP Exploration and Production, Alaska,  
OMS Learning Lead  
– development of employees' understanding of system dynamics, change management/integration, and knowledge management to support achievement of the organization's change leadership objectives

18/11/07 – present – International Institute for Applied Systems Analysis,  
Research Scholar  
– development of FeliX (Full of Economic-Environment Linkages and Integration  $dX/dt$ ) System Dynamics model to analyse impact of changes across societal benefits areas.  
– involved in a number of EU projects (e.g. GEO-BENE, EURO GEOSS)

06/12/06 – 31/07/07 – Wroclaw University of Technology,  
**Project:** *'LEADERSHIP – Leading European RTD to Sustained High Value Innovative Production for Manufuture'* (6th EU Framework Programme)  
– Support and coordination actions team member – work on a road map and development of National and Regional Technology Platforms associated with Manufuture across Europe

02/10/06 – 31/12/06 – Bombardier Transportaion,  
**Project:** *'Optimization of production process in Bogie Frames Division'*  
– Researcher and consultant - dynamic model based analysis of the current state of the production system, analysis of a new product production start and proposition of changes

SELECTED ACTIVITIES:

19/09/10 – 02/10/10 – Centre for Systems Solutions (Poland)

**Summer School:** ‘*Dynamics of Sustainable Development*’

– lecturer – application of system dynamics for changes in organizations

15/01/07 – 02/07/07 – Tokyo Institute of Technology (Japan), International Institute for Applied Systems Analysis (Austria), Wroclaw University of Technology (Poland)

**Research project:** ‘*Analysis of Dynamism among Technological Diversification, Learning and Functionality Development – System Dynamics Approach*’

– System Dynamics modeller – data extraction, system structure analysis, conceptual and simulation models building, results analysis

05/09/05 – 09/09/05 – Agder University College (Norway), University at Albany (USA), SINTEF, The Norwegian Oil Industry Association

**Group Model Building workshop within the confines of AMBASEC project** (RCN grant number 164384/V30)

– participation in modelling process

22/04/05 – 02/06/12 – Chairman of Association ‘**Centre for Systems Solutions**’, (Wroclaw, Poland)

01/11/04 – 30/06/05 – Agder University College (Norway), Centre for Advanced Manufacturing Technologies (Poland)

**‘Development of an interactive simulation-based environment for learning management of production processes’**

– System Dynamics modelling and simulation, work on Graphical User Interface

21/05/04 – 13/07/04 – Wroclaw University of Technology, Green Culture Association, The Sendzimir Foundation

**‘Dynamics of Sustainable Development. How to protect the environment supporting local economy?’**

– field study, participating simulation, System Dynamics modelling and simulation of economic, social and ecological dynamics of the region

12/03/04 – 04/04/04 – Wroclaw University of Technology, International Institute for Applied Systems Analysis, Laxenburg, (Austria), The Manus Foundation, The Sendzimir Foundation

**‘Computer Modelling of Complex Systems’** (course)

– Co-organizer and Instructor – qualitative modelling System Thinking, modelling and simulation System Dynamics

21/11/03 – 23/11/03 – Centre for Advanced Manufacturing Technologies, Wroclaw University of Technology, IBM Business Consulting Services, The Sendzimir Foundation, The Manus Foundation

**‘Dynamic Balanced Scorecard’** (course)

– Co-organizer and Instructor – enterprise management flight simulator, game analysis, System Dynamics modelling

18/11/03 – 13/12/03 – Wroclaw University of Technology, Green Culture Association, The Sendzimir Foundation, Lower Silesia Teachers Excellence Centre

**‘Dynamics of Sustainable Development. Karkonosze Mountains and Odra Valley’** (course)

– Instructor – System Thinking – Causal Loop and Stock and Flow Diagrams

29/11/02 – 01/12/02 – The Sendzimir Foundation and Department of Applied Informatics at Technical University of Gdansk  
**‘Computer Modelling of Ecological Systems’** (course)  
– Instructor – management game, game analysis, System Dynamics modelling

JOURNAL REVIEWER:

- Technovation - The International Journal of Technological Innovation, Entrepreneurship and Technology Management
- International Journal of Information Technologies and the Systems Approach

PUBLICATIONS AND SELECTED PRESENTATIONS:

Rydzak, F., McCallum, I., Fritz, S., 2012. Impact of Global Earth Observation – Systemic view across societal benefit areas. Presentation at EuroGEOSS conference 2012: "Advancing the vision for GEOSS", January 25-27, Madrid.

Obersteiner, M., Rydzak, F., McCallum, I., Fritz, S., 2010. Valuing the potential impacts of GEOSS: A Systems Dynamics Approach. The Center for Disease Dynamics, Economics & Policy (awaiting publication)

McCallum, I., Fritz, S., Khabarov, N., Fuss, S., Szolgayova, J., Rydzak, F., Havlik, P., Kraxner, F., Obersteiner, M., Aoki, K., Schill, C., Quinten, M., Heumesser, C., Bouma, J., Reyers, B., Schneider, U., Pignatelli, F., Pavanello, L., Borzacchiello, M.T., Craglia, M., 2010. Identifying and Quantifying the Benefits of GEOSS. *Earth Observation, Economy, Featured Article, GEOSS/ICEO News*. Available at: <http://www.earthzine.org/2010/07/12/identifying-and-quantifying-the-benefits-of-geoss/>. Accessed: July 12th, 2010.

Rydzak, F., Obersteiner, M., Kraxner, F., 2010. Impact of Global Earth Observation – Systemic view across GEOSS Societal Benefit Areas. *International Journal of Spatial Data Infrastructures Research*, 2010 (5), 216-243.

Rydzak F., Ledet, W., Monus P., *Sustainable Organizational Change - Can you make the change happen with Large Teams alone?* 27th International Conference of the System Dynamics Society, July 26-30, 2009, Albuquerque, New Mexico, USA.

Rydzak F., Obersteiner, M., *System Dynamics Model for Analyzing and Measuring the Benefits of Global Earth Observation*. 33rd International Symposium on Remote Sensing of Environment, May 4-8, 2009, Stresa, Lago Maggiore, Italy.

Rydzak, F., Monus, P. ‘*Building Understanding of Organizational Change*’. 26th International Conference of the System Dynamics Society, 20-24.07.2008, Athens, Greece.

Rydzak, F., Chlebus, E. ‘*Application of Resilience Analysis in Production Systems – Bombardier Transportation Case Study*’. 25th International Conference of the System Dynamics Society, 29.07-02.08 2007, Massachusetts Institute of Technology, Cambridge, USA.

Sawicka, A., Rydzak, F. ‘*Incorporating Delays in the Decision-Making Interface: An Experimental Study*’. 25th International Conference of the System Dynamics Society, 29.07-02.08 2007, Massachusetts Institute of Technology, Cambridge, USA.

Martin, L., Magnuszewski, P., Sendzimir, J., Rydzak, F., et al. 2007. ‘*Gaming with a Microworld of a local product chain in the Oder river basin, Lower Silesia, Poland*’. *Simulation & Gaming*, 38 (2), 211-232.

Rydzak, F., Chlebus, E., Gajewski, E. 2007. '*Optimization of production process in Bogie Frames Division, Bombardier Transportation, Wroclaw*'. Report 01/2007, Institute of Production Engineering and Automation, Wroclaw University of Technology.

Rydzak, F., Magnuszewski, P., Sendzimir, J., Chlebus, E. '*A Concept of Resilience in Production Systems*'. 24th International Conference of the System Dynamics Society, 23-27 July 2006, Nijmegen, The Netherlands

Rydzak, F., Breistrand, L., Sveen, F. O., Qian, Y., Gonzalez, J. J. 2006 '*Exploring Resilience Towards Risks in eOperations in the Oil and Gas Industry*'. 25th International Conference on Computer Safety, Security and Reliability 26-29 September 2006, Gdansk, Poland (SAFECOMP2006). In Computer Safety, Reliability, and Security (Lecture Notes in Computer Science 4166), edited by J. Górski. Heidelberg: Springer.

Rydzak, F., Sawicka, A. '*Experimental exploration of decision making in production-inventory system*'. Advanced Production Management Systems Conference 2006 of the IFIP Working Group 5.7, 18-20 September 2006, Wroclaw, Poland

Rydzak F., Chlebus, E. '*Analysis and Management of Resilience in Production Systems*'. PhD Colloquium during 23rd International Conference of The System Dynamics Society, 17-21 July 2005, Massachusetts Institute of Technology, Cambridge, USA.

Rydzak F., Magnuszewski P., Pietruszewski P., Sendzimir J., Chlebus E. '*Teaching the Dynamic Balanced Scorecard*'. The 22nd International Conference of The System Dynamics Society, 25-29 July 2004, Keble College, University of Oxford, Oxford, UK.

Chlebus E. Rydzak F. '*Business Process Modelling for an enterprise productivity analysis*'. The 4th Wroclaw Conference on Production Automation, 2003. Institute of Production Engineering and Automation, Wroclaw University of Technology, Poland.

#### BOOKS:

Rydzak F., Chlebus E. 2008. '*Dynamic model based Resilience Analysis in production systems*'. Wrocław: Oficyna Wydawnicza PWR.