## Professor Katarzyna Chruzik

WSB University

Researchgate Google scholar

The scientific fields of interests: Safety management in transport, The human factor in difficult professions - studies of psychotechnical possibilities of transport operators, Transport events, Unmanned Aircraft in safety management, Electromobility

Academic teacher, lecturer in safety and risk management, author of 120 scientific publications.

As part of research and service works, since 2007, together with a team, she has built and implemented a model of a system approach to safety management (and from 2012 maintenance) along with a methodology for risk management and monitoring of railway vehicle maintenance (validated and implemented

in railway undertakings, and in the scope of supervision by the national safety authority). Contractor of expert opinions and studies commissioned by public authorities and entities performing public tasks:

- -The concept of railway infrastructure development for Katowice and the region in the domestic and international aspect, 2019
- -Strategy for the development of industry and rail transport based on innovation and scientific research in Poland until 2030 (2014) co-contractor, Polish Technology Platform of Rail Transport
- -Strategy for development and improvement of Koleje Śląskie sp.z o.o. (year 2014) co-contractor
- -Technological foresight of the development of the public services sector in the Upper Silesian Metropolitan Area (FORGOM) (2008-2011) participant in the TRANSPORT Panel
- -implementation Document until 2015, ordering the implementation of the Master Plan for rail transport in Poland by 2030 (2009) performance in the field of rail transport safety

## The research project contribution:

- I. Grants / Scientific research projects
  - a) Project WND-RPSL.01.02.00-24-035A / 18-005 We do IT with Energy 2019-2020
  - b) Government Project "Integrated transport security management system for Poland", No. PBZ-MEiN-7/2/2006 ZEUS (2006-2009) coordinator of the working group dealing with the concept of the integrated risk management method in transport substantive and organizational secretary in the area rail transport.
  - c) Research project no: PBU-11 / RT4 / 2011 "Optimization of the rail vehicle braking system design including mechanical, thermal and aerodynamic coupling" coordinator of the working group involved in the risk assessment of the proposed solutions;
- II. Grants / Foreign scientific research projects
  - a) European Center of Excellence TRANSMEC coordinator of the working group dealing with standardization and legal requirements
  - b) EURNEX European Research Network of Excellence coordinator of the working group dealing with standardization and legal requirements

## III. Scientific and service projects

- a) Manager and contractor of projects for the construction and implementation of a Safety Management System or 51 companies related to rail transport
- b) Manager and contractor of construction and implementation projects for the Maintenance Management System for 32 companies related to rail transport
- c) Project manager and contractor in assessing the significance of the change in accordance with Regulation EC 402/2013 (10 projects)

## **Publications affiliated to AWSB:**

Piechoczek E, Chruzik K: Valuation of Imminience Analysis in Civil Aircraft Operations. Springer Netherlands, NATO Science for Peace and Security Series C: Environmental Security, s. 501-524, ISBN: 978-94-024-1122-5

M. Sitarz, K. Chruzik, M. Graboń-Chałupczak: Factor Analysis as a Means of Filtering Rams Indicators for Railway Vehicles. Logistics and Transport No 4(36)/2017, ISSN 1734-2015, s. 105-111

Chruzik K., Sitarz M.: Integration of management systems in rail transport. TTS Tech. Transp. Szyn. 3/2018, s. 38-40, p-ISSN: 1232-3829

Wachnik R., Chruzik K.: Practical application of the process of assessing the significance of change and risk management. TTS Tech. Transp. Szyn. 5/2018, s. 36-43, p-ISSN: 1232-3829

Chruzik K., Korchut A.: A new method of psychotechnical testing of transport operators. MATEC Web of Conferences 231, 05001 (2018), https://doi.org/10.1051/matecconf/201823105001

Chruzik K., Wachnik R.: Practical application of the process of evaluating the significance of a change and risk management. Globalization and its socio-economic consequences, Part II. – Behavioural Economics, ISBN 978-80-8154-249-7, s. 561-569

Chruzik K., Mindur L.: Integration of management systems in railway transport. Logistics and Transport No 4(40)/2018, ISSN 1734-2015, DOI: 10.26411/83-1734-2015-4-40-1-18, s. 5-10

Chruzik K.: Predictive risk management model in transport. Przedsiębiorczość i Zarządzanie, ISSN 1733-2486, tom XIX, zeszyt 5, część III, s. 297-311

K. Chruzik, M. Sitarz: A systemic approach to European railway transport risk monitoring – theory and practice, ISSN 1648-4142 / eISSN 1648-3480, 2019 Volume 34 Issue 2: 163–174, https://doi.org/10.3846/transport.2019.8528, s 163-174

Sitarz M., Chruzik K., Graboń-Chałupczak M.: 4th railway package requirements for safety management systems. Wymagania IV pakietu kolejowego wobec systemów zarządzania bezpieczeństwem. TTS Tech. Transp. Szyn. 5/2019, s. 16-20, p-ISSN: 1232-3829

Chruzik K.: Risk management in crisis. Journal of Konbin, Safety and Reliability Systems, w trakcie publikacji, ISSN 1895-8281

Chruzik K. Graboń-Chałupczak M.: Requirements of the 4th railway package towards safety management systems. Journal of Konbin, Safety and Reliability Systems, w trakcie publikacji, ISSN 1895-8281 Chruzik K.: Integration Model of Management Systems in Sea Transport. w trakcie publikacji, The International Journal on Marine Navigation and Safety of Sea Transportation ISSN 2083-6473