# PROF. DR. HAB. KRZYSZTOF KOŁOWROCKI, TITULAR PROFESSOR

#### THE FIFTIETH JUBILEE OF SCIENTIFIC AND RESEARCH WORK



With the Gdynia Maritime University (GMU) since 1<sup>st</sup> Septmeber 1971. The Head of Mathematics Department at GMU in years 1978–2020, with a year break for working as Associate Professor at the Statistics Department of Sebha University in Libya in years 1988–1989. The Cofounder and the President of Polish Safety and Reliability Association (PSRA) in years 2007–2022 and the Vice-President in years 1998–2006. The creator of the internationally well known School of Safety and Reliability

Mathematical Modelling of Complex Systems and Processes. The superviser and consultant of MSc and PhD theses and the reviewer and consultant of DSc (habilitation) dissertations. The author of over 20 books and monographs and over 400 scientific articles and papers published internationally.

#### Scientific titles and degrees

- Professor title in *automatics and robotics*, 2005, from System Research Institute of Polish Academy of Science in Warsaw, Poland, nominated by the President of Poland.
- DSc (habilitation) in *automatics and robotics*, 2001, from System Research Institute of Polish Academy of Science in Warsaw, Poland.
- PhD in *mathematics*, 1978, from Mathematics Institute of Technology University in Poznań, Poland.
- MSc in *mathematics*, 1971, from the Mathematics, Physics and Chemistry Institute of Nicolaus Copernicus University in Toruń, Poland.

#### **International research and scientific activities**

- SSARS: Summer Safety and Reliability Seminars, 2007–2021, General Chair.
- Monograph: Safety and Reliability of Systems and Processes Summer Safety and Reliability Seminars, 2020–2021, Co-Editor.

- JPSRA: Journal of Polish Safety and Reliability Association, 2007–2019, Co-Editor in Chief.
- HAZARD: Mitigating the Effects of Emergencies in Baltic Sea Region Ports, Interreg Baltic Sea Region Programme 2014–2019, PSRA Coordinator.
- EU-CIRCLE: A pan-European framework for strengthening Critical Infrastructure resilience to climate change, European Research Program Horizon 2015–2018, GMU Coordinator.
- P-SJRP: Safety and Reliability of Complex Industrial Systems and Processes, Poland Singapore Joint Research Project, 2007–2010, GMU Coordinator.
- SAFERELNET: Safety and Reliability of Industrial Products, Systems and Structures, Research Project in the scope of 5<sup>th</sup> European Union Framework Program 2001–2006, Poland's Partners and GMU Coordinator.
- ESREL 2005: European Safety and Reliability Conference, 27–30 June 2005, Tri City, Poland, Chairman.





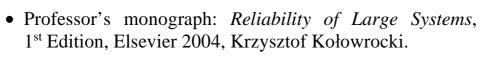
# Scientific publications

- Around 20 publications in journals cited in *Journal Citation Reports*.
- Over 200 publications cited at the list of *Ministry of Science and Higher Education* and at *Web of Science*, in the scope of reliability and safety of complex systems.
- 2 issues of monograph: Safety and Reliability of Systems and Processes Summer Safety and Reliability Seminars, 2020–2021, Krzysztof Kołowrocki, Magdalena Bogalecka, Ewa Dąbrowska, Mateusz Torbicki (Eds).
- 11 issues of *Journal of Polish Safety and Reliability Association, Summer Safety and Reliability Seminars*, 2009–2019, Krzysztof Kołowrocki, Joanna Soszyńska-Budny (Eds.).
- 2 issues of proceedings: *Summer Safety and Reliability Seminars*, 2007–2008, Krzysztof Kołowrocki, Joanna Soszyńska-Budny (Eds.).
- Monograph: Reliability and Safety of Complex Technical Systems and Processes, 2<sup>nd</sup> Chinese Edition, Springer China Chapter 2015, Krzysztof Kołowrocki, Joanna Soszyńska-Budny.
- Monograph: *Reliability of Large and Complex Systems*, Elsevier, 2<sup>nd</sup> Edition, 2014, Krzysztof Kołowrocki.
- Monograph: Reliability and Safety of Complex Technical Systems and Processes: Modelling Identification Prediction Optimization. Springer, 1<sup>st</sup> English Edition, 2011, Krzysztof Kołowrocki, Joanna Soszyńska-Budny.

- Chapter in monograph: *Safety and Risk Modelling and Its Applications*, Springer, 2011, *Reliability modelling of complex systems*. Chapter I, 3–54, in Pham H. eds., Krzysztof Kołowrocki.
- Section in encyclopedia: *Reliability of Large Systems*. *Encyclopedia of Quantitative Risk Analysis and Assessment*. John Wiley & Sons. 2008, Vol. 4, 1466–1471, Krzysztof Kołowrocki.
- Conference proceedings: *Advances in Safety and Reliability ESREL 2005*, Vol. 1–2, 2122 pages, Balkema, Taylor & Francis Group,

London, ISBN 0415383404, Editor, Krzysztof Kołowrocki.

• Monograph: Asymptotic Approach to Reliability Analysis of Complex Systems, Two-State Systems (in Polish), Gdynia Maritime University Press, 2005, Krzysztof Kołowrocki et al.



- Habilitation monograph 2: Asymptotic Approach to System Reliability Analysis (in Polish), System Research Institute of Polish Academy of Science in Warsaw, 2001, Krzysztof Kołowrocki.
- Habilitation monograph 1 (the best completely original research work positively evaluated by 3 reviewers, not digested by scientific mediocrities in the topic): On a Class of Limit Reliability Functions for Series-Parallel and Parallel Systems, Gdynia Maritime University Press, 1993, Krzysztof Kołowrocki.

## **Teaching manuals (in Polish)**

- Mathematics, Differential Equations. Lectures, Gdynia Maritime University Press, 2021, Ewa Dąbrowska, Krzysztof Kołowrocki.
- Backgrounds for Reliability and Safety Evaluation of Technical Systems, Lectures, Gdynia Maritime University Press, 2020, Krzysztof Kołowrocki, Ewa Dąbrowska.
- Backgrounds for Reliability and Safety Evaluation of Technical Systems, Set of Exercise Tasks, Gdynia Maritime University Press, 2020, Krzysztof Kołowrocki, Ewa Dąbrowska.
- *Mathematics, Lectures, Parts 2, Probability Theory*, Foundation of Gdynia Maritime University Development, 2002, Krzysztof Kołowrocki.
- *Mathematics, Lectures, Part 1, Basic Course*, Foundation of Gdynia Maritime University Development, 2002, Krzysztof Kołowrocki.



• *Colloquia, Exams, Exercise Tasks*, Foundation of Gdynia Maritime University Development, 2000, Krzysztof Kołowrocki, Anna Kryzel.

- Set of Tasks on Probability Calculus and Mathematical Statistics, Gdynia Maritime University Press, 1995, Krzysztof Kołowrocki, Krzysztof Piskórz.
- Probability Calculus and Mathematical Statistics, Foundation of Gdynia Maritime University Development, 1995, Krzysztof Kołowrocki, Dorota Kurowicka.
- Numerical and Functional Series, Foundation of Gdynia Maritime University Development, 1995, Krzysztof Kołowrocki, Dorota Kurowicka.
- Selected Lectures on Probability Calculus and Mathematical Statistics. Gdynia Maritime University Press, 1993, Krzysztof Kołowrocki.

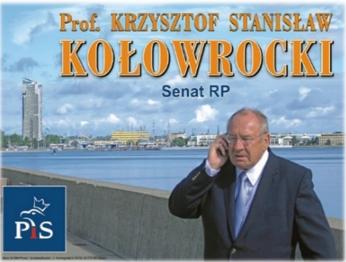


# Portrait by MSc Students, 2019

### **Political activity**

- Chairman of the Secret Works Commission of the NSZZ "Solidarność" at the Higher Maritime School in Gdynia, after the introduction of the war state in Poland on 13<sup>th</sup> December 1981 and the detention and imprisonment of the Chairmen of the NSZZ "Solidarność" Works Commission (prison sentences: 10 years for Ewa Kubasiewicz, 9 years for Jerzy Kowalczyk).
- Co-Publisher of the Information Bulletin "Our Voice" of the Works Commission of the NSZZ "Solidarność" at the Higher Maritime School in Gdynia.
- The Law and Justice Party non-partisan candidate for the Polish Senate in the 2011 elections (about 24 thousand votes).





#### **Evil attack**

- On 4<sup>th</sup> June 2020 an organised crime group launches drastically illegal action against Prof. Krzysztof Kołowrocki at GMU.
- On 1<sup>st</sup> September 2020 during the change of authorities of GMU, Prof. Krzysztof Kołowrocki was dismissed from the position of the head of the Department of Mathematics, after 42 years of this function performing.
- On 9<sup>th</sup> September 2020 a financial crime to the detriment of the PSRA was committed by an organised crime group and an image offence was committed personally against Prof. Krzysztof Kołowrocki as the President of PSRA.
- The crime was organised and directed by a person (primitive grandfathering) with mentality of continually stealing crumbs from someone else's table.

