



Name	Tetiana Rybalchenko
Position, Department/Faculty	Assistant, Department of Mechatronics and Electrical Engineering, Faculty of Aircraft Control Systems
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EDUCATION:

Basic education (university, major, year of graduation):

Ukrainian Engineering Pedagogics Academy

- Master's degree in Metrology and Information-Measuring Technology (September 2018 – December 2019)
- Bachelor's degree in Vocational Education (Occupational Safety) (September 2014 – June 2018)

Postgraduate/Doctoral studies:

National Aerospace University "Kharkiv Aviation Institute"

- PhD studies in Information and Measuring Technologies (September 2023 – present)

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Senior Laboratory Assistant, Department of Mechatronics and Electrical Engineering (November 2022 – August 2023)

Teaching Experience:

Assistant, Department of Mechatronics and Electrical Engineering (October 2023 – present)

RESEARCH ACTIVITIES:

Main Research Areas:

Qualimetry, quantitative assessment, risk analysis, risk evaluation, risk management, occupational safety, quality management, sustainable development, Industry 4.0

Participation in Scientific Conferences:

1. Rybalchenko T.P., Cherniak K.M. Use of an Automated System for Monitoring and Regulating Occupational Safety in Production. "Scientific Spring" 2025: Proceedings of the 15th International Scientific and Technical Conference of Postgraduates and Young Scientists, Dnipro, March 26–28, 2025 / National Technical University "Dnipro Polytechnic". – Dnipro: NTU "DP", 2025. pp. 142–143.
2. Rybalchenko T.P., Cherniak O.M. Occupational Safety as a Key Aspect of the Inclusive Economy and Corporate Social Responsibility. Management of Economic Environment Development under Global Transformations: Proceedings of the 3rd International Scientific and Practical Conference (Kharkiv, February 6–7, 2025) [Electronic resource]. – Kharkiv: V.N. Karazin Kharkiv National University, 2025. pp. 305–306.

3. Cherniak O., Rybalchenko T., Bosenko D., Bosenko Y., Hurtovyi I. Application of Information Technologies for Quantitative Assessment of Occupational Safety at the Enterprise. 2nd International Scientific and Practical Conference "Information and Measuring Technologies IVT-2024": Proceedings, November 13–14, 2024 [Electronic resource]. – Lviv: Lviv Polytechnic Publishing House, 2024. pp. 164–165.
4. Rybalchenko T., Lutai L. Problems and Prospects of Risk Assessment in the Occupational Safety Management System. Problems and Prospects of the Development of the Life Safety System: Proceedings of the 19th International Scientific and Practical Conference of Young Scientists, Cadets and Students. – Lviv: Lviv State University of Life Safety, 2024. pp. 713–715.
5. Rybalchenko T.P., Skora N.A. Application of an Automated System for Controlling Harmful Factors in Production. Scientific Research and Innovation: Proceedings of the 3rd International Scientific and Practical Internet Conference, April 18–19, 2024. – Dnipro, Ukraine: FOP Marenichenko V.V., 2024. pp. 25–26.
6. Bahaiev I.O., Rybalchenko T.P. Application of Functionally Dependent Statistics for Quality Assessment of Qualimetric Objects of Different Nature. Scientific Research of Youth on the Problems of European Integration: Proceedings of the 13th International Scientific and Practical Conference of Young Scientists and Students dedicated to the 80th anniversary of the founding of the Banking Institute (April 5, 2024, Kharkiv, Ukraine). – Kharkiv: V.N. Karazin Kharkiv National University, 2024. pp. 324–327.
7. Cherniak O.M., Fatieieva L.Y., Rybalchenko T.P. Risk Assessment in Production Using Qualimetric Methods. Management of Socio-Economic Systems Development: Proceedings of the 8th International Scientific and Practical Conference (Kharkiv, March 21–22, 2024). – Kharkiv: DBTU, Part 2, 2024. pp. 270–273.

TEACHING ACTIVITIES:

Courses Taught:

Introduction to the Specialty, Introductory Practice, Electrical Engineering, Interfaces and Communication Tools, Industrial Controllers and Regulators, Microprocessor Devices, Computer-Aided Design Technologies (SolidWorks, MathCAD, AutoCAD), Theoretical Foundations of Electrical Engineering, Electrical Materials Science.

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Distinctions, Awards, Prizes:

Certificate of Appreciation from the Kharkiv Regional Council (2024) for many years of work and personal contribution to the development of the material-technical and scientific-educational base of the National Aerospace University "Kharkiv Aviation Institute" on the occasion of World Aviation and Cosmonautics Day and the anniversary of the founding of KhAI.

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Lomanov K.O., Rybalchenko T.P. Application of Order Statistics for Determining the Optimal

Number of Periods in the Evaluation of Socio-Economic Systems. Open Information and Computer Integrated Technologies, 2025, No. 104, pp. 243–257.
<https://doi.org/10.32620/oikit.2025.104.16>

2. Cherniak O.M., Fatieieva L.Y., Rybalchenko T.P., Yakovlev M.Y., Zas D.S., Kuznietsov V.D. Evaluation of the Quality of the Occupational Safety Management System in Accordance with the Requirements of ISO 45001:2018 at the Operational Stage. Modern State of Scientific Researches and Technologies in Industry, 2024, No. 1 (27), pp. 226–235.

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian – Fluent

English – Intermediate (B1)

IT Skills:

Proficient in using digital educational platforms (Moodle, Google Classroom).

Development of educational materials with Microsoft Office, Google Docs, Canva, Genially, Prezi, Kahoot!, Quizizz, AI tools and others.