



Name	Roman Trishch
Position, Department/Faculty	Head of Department, Department of Mechatronics and Electrical Engineering/Faculty of Aircraft Control Systems
Academic Degree, Academic Title	Doctor Technical Sciences, Professor
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Scopus Author ID:	[57192820621]
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Google Scholar:	https://scholar.google.com.ua/citations?user=h8L87yoAAAAJ&hl
ResearchGate:	https://www.researchgate.net/profile/Roman-Trishch

EDUCATION:

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

Ukrainian Engineering and Pedagogical Academy, Kharkiv, Ukraine

MsD Professional education. Technology and Equipment of Mechanical Assembly Production, 1996

Postgraduate/Doctoral studies:

Ukrainian Engineering Pedagogics Academy, Kharkiv, Ukraine
Department of Labor Protection, Standardization and Certification
Professor, 2010

Kyiv National University of Technologies and Design, Kyiv, Ukraine
Doctor Technical Sciences, Standardization, certification and metrological support, 2007

National Technical University «Kharkiv Polytechnic Institute», Kharkiv, Ukraine
PhD Technical Sciences, Mechanical Engineering Technology, 2001

Additional training, certification programs:

Advanced training at the Kharkov Aviation Institute (180 hours), 2025.
Certificate PK 02066769/001115-25

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

From 2021 to the present, Head of the Department of Mechatronics and Electrical Engineering at the National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine.

June 2023 - April 2024 - chief researcher at Public Governance and Business Faculty, Mykolas Romeris University, Vilnius, Lithuania.





2007 - 2021 - Head of the Department of Labor Protection, Standardization and Certification of the Ukrainian Engineering and Pedagogical Academy, Kharkiv, Ukraine.

Experience in International or National Projects:

International project «Creation of Centres of Excellence at Mykolas Romeris University».

RESEARCH ACTIVITIES:

Main Research Areas:

qualimetry; metrology; statistical methods of quality control; risk assessment of products, processes, systems; international standards for quality management systems; artificial intelligence.

Number of Publications (Scopus, WoS, others):

more than 200 of which: Scopus – 39, WoS – 21.

Monographs, Textbooks:

1. Scientific and research foundations of standardization: textbook for higher education seekers, Doctor of Philosophy degree, full-time, evening, and part-time forms of education, specialty 152 Metrology and Information and Measurement Technology / H. S. Hrinchenko, R. M. Trishch, Yu. A. Danilenko; Ukrainian Academy of Engineering and Pedagogy. – Kharkiv: Ukrainian Academy of Engineering and Pedagogy, 2022. – 253 p.
2. Quality management in the technical regulation system: textbook for higher education seekers ONS "Doctor of Philosophy" full-time, evening, and part-time forms of education, specialty 152 Metrology and Information and Measurement Technology / R. M. Trishch, H. S. Hrinchenko, V. M. Burdeina, S. M. Artiukh; Ukrainian Academy of Engineering and Education. – Kharkiv: 2022. – 219 p.
3. Certification and confirmation of conformity: textbook for higher education students, specialty: 152 Metrology and Information and Measurement Technology/ R.M. Trishch, H.S. Hrinchenko; Ukrainian Academy of Engineering and Pedagogy. – Kharkiv: Madrid Printing House, 2021. – 227 p.
4. Cherniak O. M., Trishch R. M. Improvement of qualimetric methods for assessing occupational safety and health in production facilities: monograph. / O. M. Cherniak, R. M. Trishch; Ukrainian Academy of Engineering Education. – Kharkiv, 2020. – 153 p. ISBN 978-617-7920-00-6

Participation in Scientific Conferences:

Romualdas Ginevidius, Max Hogeferster, Vladislavas Petraskevidius, Roman Trishch, Promoting the Work Based Learning (WBL) Module in Small and Medium Enterprises (SMES) based on Communication Technologies. VII International conference on High Technology for Sustainable Development "HiTech 2025" (Sozopol, Bulgaria 26-06-2025 to 28-06-2025).

Fedin S. S., Romaniuk O. O., Trishch R. M. Application of artificial neural networks for forecasting the quality of technological processes. P. 154-156. Scientific papers of the Second International Scientific and Practical Conference 'Artificial Intelligence and Information Technologies' (AIIT-2025), 3–4 June 2025 (Kyiv, Ukraine). Kyiv: National University of Food Technologies, 2025.



Roman Trishch, Natalia Sorokolat. Application of the error function to obtain quality indicator assessments for qualimetry objects. II International Scientific and Practical Conference 'Information and Measurement Technologies IBT-2024': abstracts of reports, 13–14 November 2024. Electronic edition. – Lviv: Lviv Polytechnic Publishing House, 2024. – pp. 24–25.

Trishch R.M., Zabolotnyi O.V., Khomiak E.A., Nikitin A.O. Modelling the optimal process of servicing aviation equipment using the decomposition of the component architecture of a complex product. Abstracts of the VII International Scientific and Practical Conference 'Information Technologies in Education, Science and Technology' (ITONT-2024), (Cherkasy, 23-24 May 2024): Cherkasy State Technological University, 2024. Pp. 47–49.

Trishch R. M., Cherniak O. M. Quality assessment of the occupational safety management system processes according to the requirements of the iso 45001:2018 international standard. Quality, standardization, control: theory and practice: Materials of the 23rd International Scientific and Practical Conference, September 27–28, 2023. – Kyiv: ATM Ukraine, 2023. – P. 97–100.

TEACHING ACTIVITIES:

Courses Taught:

Quality management in the technical regulation system, Information methods for quality assessment
Optimal control of technological processes, Master's research work, Quality assessment systems for objects of different nature

Author Courses, Academic Programs:

Author Courses «Risk management as the basis for effective organisation»

Author Courses «System analysis of QMS upon implementation of DSTU EN ISO 9001:2018 Quality management systems. Requirements»

«Quality and information and measurement systems» (PhD educational and research programme)

GRANTS AND PROJECTS:

Participation in International and National Projects:

International project «Creation of Centres of Excellence at Mykolas Romeris University». (2024-2026)

Grants, Scholarships, Academic Mobility Programs:

Academic Mobility Programs «China-Ukraine Scientific and Technical Forum» (Yibin, China, 01.10.2019-10.10.2019)

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Distinctions, Awards, Prizes:

A Letter of Gratitude from the Kharkiv Regional Council on the occasion of the 95th anniversary of the National Aerospace University. (2025)

A Letter of Gratitude and a Badge from the Kharkiv Regional Council on the Occasion of the Independence Day of Ukraine (2023)

Diploma of Honour from the Minister of Education and Science of Ukraine for personal contribution to the development of national education and science (2012).

Scholarship holder of the Cabinet of Ministers of Ukraine for young scientists (2007–2009).

Membership in Professional Associations:

1. Full member of the Academy of Metrology of Ukraine (Decision of the Presidium dated 28 March 2013, Protocol No. 5)
2. External expert of the National Accreditation Agency of Ukraine
3. Academician, full member of the National Academy of Higher Education Sciences of Ukraine, Department of Energy and Resource Conservation.

INTERNATIONAL ACTIVITIES:

Internships:

Internship at Vilnius Gediminas Technical University (20.02.2020-20.03.2020)

Cooperation with Foreign Universities:

Lublin University of Technology (Poland).
University of Life Sciences in Lublin (Poland).
Vilnius Gediminas Technical University
Mykolas Romeris University (Vilnius, Lithuania)

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

- 1) R. Trishch, O. Cherniak, O. Kupriyanov, V. Luniachek, Tsykhanovska I. Methodology for multi-criteria assessment of working conditions as an object of qualimetry. Engineering management in production and Services, 2021, 13(2). <https://www.empas.pb.edu.pl/Journal-Issues/Volume-13-2021/7JxZIpyPXkOvuBLp85j1bw/EMPAS-13-2-2021>
- 2) R. Trishch, Nechuiviter O., Dyadyura K., Vasilevskyi O., Tsykhanovska I., Yakovlev M. Qualimetric method of assessing risks of low quality products. MM Science Journal. October 2021. P. 4769-4774. <https://www.mmscience.eu/journal/issues/october-2021/articles/qualimetric-method-of-assessing-risks-of-low-quality-products>
- 3) Ginevicius, R. Trishch, R. Remeikiene, R. Gaspareniene, L. Complex evaluation of the negative variations in the development of lithuanian municipalities. Transformations in Business and Economics. 2021. Vol. 20. No 2A (53A). P. 635-653. <http://www.transformations.knf.vu.lt/53a/article/comp>
- 4) Kupriyanov O., Trishch R., Dichev D., Bondarenko T. (2021) Mathematic Model of the General Approach to Tolerance Control in Quality Assessment. Advanced Manufacturing Processes III. InterPartner 2021. Lecture Notes in Mechanical Engineering. Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-91327-4_41

- 5) Ginevičius, R., Trišč, R., Remeikienė, R., Zielińska, A., Strikaitė-Latušinskaja, G. Evaluation of the condition of social processes based on qualimetric methods: The COVID-19 case. *Journal of International Studiethis*, 2022, 15(1), pp. 230–249. <https://wir.ue.wroc.pl/info/article/UEWRa10e6be81c49431e88a96586c1621d6f/>
- 6) Ginevičius, R., Trishch, R., Bilan, Y., Lis, M., Pencik, J. Assessment of the Economic Efficiency of Energy Development in the Industrial Sector of the European Union Area Countries. *Energiethis*, 2022, 15(9), 3322. <https://www.mdpi.com/1996-1073/15/9/3322>
- 7) Kupriyanov, O., Trishch, R., Dichev, D., Kupriianova, K. A General Approach for Tolerance Control in Quality Assessment for Technology Quality Analysis. *Lecture Notes in Mechanical Engineering* this link is disabled, 2023, стр. 330–339. https://link.springer.com/chapter/10.1007/978-3-031-16651-8_31
- 8) Trishch R., Sichinava A., Bartoš V., Stasiukynas A., Schieg M. Comparative assessment of economic development in the countries of the european union. *Journal of Business Economics and Management*. 2023. № 24(1). P. 20–36. <https://journals.vilniustech.lt/index.php/JBEM/article/view/18320>
- 9) H. Hrinchenko, R. Trishch, V. Mykolaiko, O. Kovtun, Qualimetric approaches to assessing sustainable development indicators. *E3S Web Conf.*, 408 (2023) 01013. https://www.e3s-conferences.org/articles/e3sconf/pdf/2023/45/e3sconf_iscmee2023_01013.pdf
- 10) Roman Trishch , Olesia Nechuiviter , Hanna Hrinchenko , Tetiana Bubela , Mykola Riabchykov , Iveta Pandova. Assessment of safety risks using qualimetric methods. *MM Science Journal*, October 2023. P. 6668 -6674. <https://www.mmscience.eu/journal/issues/october-2023/articles/assessment-of-safety-risks-using-qualimetric-methods>
- 11) Cherniak, O., Trishch, R., Ginevičius, R., Nechuiviter, O., Burdeina, V. Methodology for Assessing the Processes of the Occupational Safety Management System Using Functional Dependencies. *Integrated Computer Technologies in Mechanical Engineering - 2023. ICTM 2023. Lecture Notes in Networks and Systems*, Springer, Cham. 2024. vol 996. pp. 3-13. https://link.springer.com/chapter/10.1007/978-3-031-60549-9_1
- 12) Trishch, R., Cherniak, O., Zdenek, D., & Petraskevicius, V. (2024). Assessment of the occupational health and safety management system by qualimetric methods. *Engineering Management in Production and Services*, 16(2), 118-127. doi: 10.2478/emj-2024-0017. <https://ojspb.edu.pl/empas/issue/view/10/43>
- 13) Khomiak, E., Trishch, R., Zabolotnyi, O., Cherniak, O., Lutai, L., Katrich, O. (2024). Automated Mode of Improvement of the Quality Control System for Nuclear Reactor Fuel Element Shell Tightness. In: Faure, E., et al. *Information Technology for Education, Science, and Technics. ITEST 2024. Lecture Notes on Data Engineering and Communications Technologies*, vol 221. P. 79-91. Springer, Cham. https://doi.org/10.1007/978-3-031-71801-4_7
- 14) Khomiak, E.; Trishch, R.; Nazarko, J.; Novotný, M.; Petraškevičius, V. Method of Quality Control of Nuclear Reactor Element Tightness to Improve Environmental Safety. *Energies* 2025, 18, 2172. <https://doi.org/10.3390/en18092172>
- 15) Hovorov, P., Trishch, R., Ginevičius, R., Petraškevičius, V., & Šuhajda, K. (2025). Assessment of Risks of Voltage Quality Decline in Load Nodes of Power Systems. *Energies*, 18(7), 1579. <https://doi.org/10.3390/en18071579>
- 16) O. Vasilevskyi, R. Trishch, V. Sarana, M. Yakovlev, E. Popovici, Experimental analysis of blood

pressure estimation using electrocardiography and photoplethysmography signals from fingertip measurements, Acta IMEKO, vol. 14 (2025) no. 2, pp. 1-9. DOI: 10.21014/actaimeko.v14i2.2096.

17) P. Hovorov, A. Kindinova, R. Trishch, E. Khomiak, O. Cherniak and K. Oleh, "Management of Power Grid Modes in Conditions of High Heterogeneity," 2024 IEEE 5th KhPI Week on Advanced Technology (KhPIWeek), Kharkiv, Ukraine, 2024, pp. 1-5, doi: 10.1109/KhPIWeek61434.2024.10878032.

18) P. Hovorov, R. Trishch, V. Hovorov, E. Khomiak, O. Vasilevskyi and V. Kukharchuk, "Peculiarities of Voltage Quality Control in Power Supply and Lighting Systems of Cities," 2024 IEEE 5th KhPI Week on Advanced Technology (KhPIWeek), Kharkiv, Ukraine, 2024, pp. 1-6, doi: 10.1109/KhPIWeek61434.2024.10877979.

19) P. Hovorov, V. Hovorov, M. Khvorost, A. Kindinova and R. Trishch, "Comprehensive Solution of Issues of Voltage Regulation and Compensation of Reactive Power in Power Supply and Lighting Systems of Cities," 2024 IEEE 5th KhPI Week on Advanced Technology (KhPIWeek), Kharkiv, Ukraine, 2024, pp. 1-6, doi: 10.1109/KhPIWeek61434.2024.10877952.

20) Kochuk, S., Trishch, R., Nikitin, A., Zhezhera, I., Cherniak, O., Khomiak, E. (2025). Algorithmic Provision of Contours Guidance of Unmanned Systems. In: Lytvynov, O., Pavlikov, V., Krytskyi, D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2024. ICTM 2024. Lecture Notes in Networks and Systems, vol 1473. Springer, Cham. pp 16–29. https://doi.org/10.1007/978-3-031-94845-9_2

Books, Chapters in Collective Monographs:

P. Hovorov, R. Trishch, V. Burdeyna, I. Ivankova, A. Kindinova. Peculiarities of technical education in the context of today's global challenges. Education and science: theory & praxis: collective monograph/ Compiled by V. Shpak; Chairman of the Editorial Board S. Tabachnikov. Sherman Oaks, California: GS Publishing Services, 2025. P. 98-126. DOI: 10.51587/9798-9917-51919-2025-022-98-126

Links to Citation Database Profiles:

[Scopus](#)

[Web of Science](#)

[Google Scholar](#)

[ORCID](#)

[Research Gate](#)

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian C2, German

IT Skills:

Microsoft Office / Google tools / AI

