

Full name: Krutous Sergey Fedorovich**Education:**

- Period: Higher education.
1970-1978: Pavlodar Industrial Institute of the Faculty of Energy, specialty "Power supply of industrial enterprises and cities", electrical engineer, Pavlodar.
- Period: Academic degree - Candidate of Technical Sciences.
1986-1989: Moscow Power Engineering Institute, Moscow.
- Period: Professional qualifications:
1978-2007: Senior lecturer, Associate Professor of the Department of "Theoretical Foundations of Electrical Engineering" of S. Toraigyrov Pavlodar State University, Pavlodar;
2007-2009: Chief Power Engineer, Nairan-Service LLP, Pavlodar;
2009-2025: Associate Professor of the Department of "Energy" at the Academician K. YITI. Satpayeva, Ekibastuz.

Work experience:Academic:*Work in this organization*

- 2009- Until now: Candidate of Technical Sciences, Associate Professor of the Department of "Power Engineering" at the Academician K. Satpayeva.
2009- Until now: List of subjects taught: Power supply of industrial enterprises and cities, Reliability and emergency situations in the Power Industry, Computer modeling of power schemes, Automation of Power Systems, Electrical part of stations and substations, Automation of power supply systems.
2009-2020: Full-time.

Previous jobs in educational organizations:

- 1978 - 2007: Senior lecturer, Associate Professor of the Department of "Theoretical Foundations of Electrical Engineering" of S. Toraigyrov Pavlodar State University, Pavlodar.
1978 - 2007: Перечень преподаваемых дисциплин: Theoretical foundations of electrical engineering.
1978 - 2007: Full-time.

Non-academic:

- 2007-2009: Chief Power Engineer, Nairan-Service LLP, Pavlodar.
2007-2009: Installation and commissioning of new electrical equipment.
2007-2009: Part-time work

Professional development:

- 09.08.2021-21.08.2021: Certificate of completion of the advanced training course on the topic "Electromechanics and electronics (Electromechanics and electrical equipment, Electronics, Industrial electronics)", Non-governmental Quality Assessment Center, Nur-Sultan;
05.07.2021-17.07.2021: Certificate of completion of the advanced training course on "Relay protection and automation (Relay protection, Relay protection and automation, Automation of power supply systems, Automation of energy systems)", Non-governmental Quality Assessment Center, Nur-Sultan;
05.07.2021-23.07.2021: Certificate of completion of the advanced training course on the topic "Networks, systems in the electric power industry (Electric networks and systems, Electrical part of stations and substations, Electric power industry)", Non-governmental Quality Assessment Center, Nur-Sultan;
02.08.2021 - 14.08.2021: Certificate of completion of the advanced training course on the topic "Modeling and reading of electrical circuits (Computer modeling of electrical

- circuits, Electrical circuit reading technique)", Non-governmental Quality Assessment Center, Nur-Sultan;
- 19.07.2021-31.07.2021 - Certificate of completion of the advanced training course on "Operating modes and power supply (Power supply to industrial enterprises and cities, Operating modes of the main equipment of electric power plants)", Non-governmental Quality Assessment Center, Nur-Sultan;
- 01.08.2022-12.08.2022 - Certificate of completion of the advanced training course on the topic "Electrical engineering and fundamentals of electronics. Theory of electrical circuits. Theoretical Foundations of Electrical Engineering", Non-Governmental Quality Assessment Center, Almaty;
- 04.07.2022-15.07.2022 - Certificate of completion of the advanced training course on "Transients and reliability in the electric power industry", Non-Governmental Quality Assessment Center, Almaty;
- 05.09.2022-16.09.2022 - Certificate of completion of the advanced training course on the topic "Electric machines. Electric drive and power supply of mining enterprises", Non-Governmental Quality Assessment Center, Almaty;
- 15.08.2022-26.08.2022 - Certificate of completion of the advanced training course on the topic "Metrology and measurement. Information and measurement technology. Electricity Accounting and Control", Non-Governmental Quality Assessment Center, Almaty;
- 31.07.2023-11.08.2023 - Certificate of completion of the advanced training course on the topic "Information and measuring technology. Computer simulation of electrical circuits. The application of computer technology to solving energy problems. Technology, calculations and modeling of renewable energy sources" in Ekibastuz, the Center for Training and Retraining of personnel of the Thermal Energy complex;
- 31.07.2023-11.08.2023 - Certificate of completion of the advanced training course on the topic "Fundamentals of scientific research" in Ekibastuz, the Center for Training and Retraining of personnel of the thermal Power complex;
- 03.07.2023-14.07.2023 - Certificate of completion of the advanced training course on "Relay protection and automation (Relay protection. Relay protection and automation. Theory of automated electric drive. Automation of power supply systems. Automation of energy systems. Automation of standard technological processes)" in Ekibastuz, the Center for training and retraining of personnel of the thermal power complex;
- 17.07.2023-28.07.2023 - Certificate of completion of the advanced training course on the topic "Networks, systems in the electric power industry (Electric networks and systems. Transmission of energy by alternating and direct current. Smart power supply networks. The electrical part of stations and substations. Electrical equipment of enterprises and technological complexes. Digital substations. Electric power industry. Global Electric Power Industry)" in Ekibastuz, the Center for Training and retraining of personnel of the thermal power complex;

Membership in professional organizations:

Awards and prizes:

Service sector activities:

Publications and presentations:

- october 2025 - Investigation of signal transmission along a 10-kilometer line. Proceedings of the XIII International Scientific and Practical Conference "Innovative Technologies and Engineering", dedicated to the 80th anniversary of

- Temirtau, October 15, 2025, p.279. Kolesnichenko N.Yu., Kuzmenko V.S.,Kotegova E.P.
- May 2025 Electric arc intermittent earth faults in 10 kV cable lines. Proceedings of the International Scientific and Practical Conference "Improving the quality of education, modern innovations in science and production" Ekibastuz: KuzSTU branch in Prokopyevsk, May 16, 2025, p.327. Kolesnichenko N.Yu., Fedoryakin I.A.
- May 2025 Methods for improving reliable measurement of electric power. Proceedings of the International Scientific and Practical Conference "Improving the quality of education, modern innovations in science and production" Ekibastuz: KuzSTU branch in Prokopyevsk, May 16, 2025, p.323. Kolesnichenko N.Yu., Rakhpanov A.N.
- october 2024 Investigation of a linear DC electrical circuit. II International Scientific and Practical Conference "INTERNATIONAL FORUM OF YOUNG RESEARCHERS – 2024", October 24, 2024, Petrozavodsk, p.17. Kolesnichenko N.Yu., Rakhimov E.R., Rechkina O.Yu.
- May 2024 Monitoring the functioning of the cable network. Proceedings of the International Scientific and practical Conference "Improving the quality of education, modern innovations in science and production" Ekibastuz: KuzSTU branch in Prokopyevsk, May 16, 2024, p.254. Kolesnichenko N.Yu., Romanchuk K.S.
- May 2024 Investigation of inertial and inertia-free nonlinear elements. Proceedings of the International Scientific and Practical Conference "Improving the quality of education, modern innovations in science and production" Ekibastuz: KuzSTU branch in Prokopyevsk, May 16, 2024, p.175. Kolesnichenko N.Yu., Bukhantseva V.V.
- september 2023 Investigation of the phenomenon of ferroresonance. Scientific journal: Bulletin of the University of Toraigyrov, Energy series, No. 3, 2023, Pavlodar, pp.152-162. Kolesnichenko N.Yu.
- February 2023 Investigation of a nonlinear DC circuit. III International Scientific and Practical Conference "THE SCIENCE OF THE YOUNG — THE SCIENCE OF THE FUTURE", part 2, 2023, Petrozavodsk, p.44. Kolesnichenko N.Y., Aigozin A.E., Aigozin R.E.
- May 2022 A bridge method for measuring electrical circuit parameters. International scientific and practical conference: "Improving the quality of education, modern innovations in science and production" dedicated to the founder of the EITI named after Academician Satpayev, PhD, Academician of the Academy of National Sciences of Kazakhstan Mardenov, MD.In accordance with the paragraph and the 65th anniversary of the city of Ekibastuz, within the framework of the XXI Satpayev readings, on May 16, 2022, according to S. N.477. Kolesnichenko N.Yu., Shaporenko A. accordance with paragraph
- May 2021 Prospects for the development of the SMART GRID concept in Kakhakhstan. Proceedings of the International Scientific and Practical Conference "Improving the quality of education, modern innovations in science and production" part 2, Ekibastuz: KuzSTU branch in Prokopyevsk, May 14, 2021, p.245. Kolesnichenko N.Yu., Lupashko A.Yu., Ilambek R.M.
- april 2021 Kazakhstan's entry into a new level of energy policy. Collection of materials of the international scientific and practical online conference "Youth and Science–2021", 4, Petropavlovsk: M. N. Kozybaev Moscow State University, April 9, 2021, St.341. Potyaga L.A., Leonova A.A., Shaizhanova K.
- april 2021 Analysis of solar panels on the modern market Collection of materials of the international scientific and practical online conference "Youth and Science-

- 2021", 4, Petropavlovsk: Kozybaev Moscow State University, April 9, 2021, St.336. Potyaga L.A., Leonova A.A., Kolpakov A.S.
- april 2021 Design features of modern wind turbines Collection of materials of the international scientific and practical online conference "Youth and Science–2021", 4, Petropavlovsk: M. N. Kozybaev Moscow State University, April 9, 2021, St.331. Potyaga L.A., Leonova A.A., Kirichek S.
- april 2021 The use of solar panels on the territory of Kazakhstan Collection of materials of the international scientific and practical online conference "Youth and Science-2021", vol. 2.4, Petropavlovsk: M. N. Kozybaev Moscow State University, April 9, 2021, p. 329. Kolesnichenko N.Yu., Ilambek R.M.

New scientific developments:

Additional information: