Preface: V International Scientific and Technical Conference “Actual Issues of Power Supply Systems” (ICAIPSS2025)

V International Scientific and Technical Conference “Actual Issues of Power Supply Systems”, established at the Tashkent State Technical University.

Scientists, researchers, and specialists working in the field of electricity, young researchers, doctoral students, and master's and bachelor's students are invited to participate in the conference.

The conference was held on August 26 - 27, 2025, led by the Tashkent State Technical University.

The main objective of the symposium is to address the pressing issues in the power supply system, particularly its reliability and energy efficiency, optimal design, and ensuring the quality of electrical power. The event focuses on exchanging ideas and thoughts about scientific research conducted by local and international academic schools in this direction. It also involves analyzing the possibilities of transforming, intellectualizing, and digitalizing the power supply system, along with implementing innovative developments.

It can be said that the issue of power supply is more critical and significant today than ever before. The development of economic sectors and the improvement of the population's living standards pose numerous urgent tasks for specialists in the field, particularly in ensuring the continuity of the electricity supply system and providing consumers with quality electrical power. Currently, in our republic, practical work related to improving the power supply system is being carried out.

The industrial sectors are implementing the "green economy" system, increasing energy efficiency in the social sector, expanding the use of renewable energy sources, accelerating innovative development, and conducting extensive work on the wise use of natural resources. The scientific research conducted in this direction was extensively discussed at the symposium, involving specialists from higher education and production sectors, exploring the possibilities of applying these scientific research findings in practice.

The symposium discussed the current state and prospects of energy, energy efficiency, the application of digital technologies in energy, energy and resource conservation, thermal power engineering, electrical power engineering, and hydro-energy issues; nuclear energy; alternative and renewable energy sources; and the ecological problems of energy.

Scope of the conference:

1. Common problems of power supply: increase of system reliability and energy efficiency.

2. Optimal design and exploitation of power supply systems, and quality assurance of electricity.

3. Intellectualization, digitization, and transformation economic sectors.

4. Unconventional and renewable energy sources in the power supply system.

5. Issues in the training of engineering personnel.

6. Ecology and energy.

Prof. Ikromjon Rakhmonov

Convener & Contact Editor

ICAIPSS2025