**Kazan State Power-Engineering University**

**International youth scientific conference
Tinchurin reading – 2025**

**“Energy and Digital Transformation”**

**April, 23-25, 2025**

**DEAR STUDENTS, POSTGRADUATE AND YOUNG SCIENTISTS!**

On April 23–25, 2025, Kazan State Power Engineering University will host the International Youth Scientific Conference Tinchurin Readings – 2025 “Energy and Digital Transformation” supported by the Ministry of Science and Higher Education of the Russian Federation.

The conference will include:

• the exhibition and competition of scientific and technical developments by students, postgraduates and young scientists;

• master classes as part of the MIC tech show.

**REQUIREMENTS OF PARTICIPATION**

Participants may be schoolchildren\*, students of Russian and foreign universities, colleges, postgraduate students, young scientists and other specialists of education and energy organizations **aged no more than 35 years**.

Based on the results of the conference, it is planned to publish an electronic collection of materials of reports in the author's edition with the assignment of ISBN. On Scientific Committee decision the best reports will be published in journals of the Higher Attestation Commission list and Scopus.

In reports must be: the relevance of the problem under consideration, the novelty of the research conducted, the personal contribution of the author, practical value, and prospects for using the results obtained.

The organizing committee and the editorial group reserve the right not to include in the collection the reports:

1) in which the above positions are not presented (are not clear);

2) the reports do not meet the format requirements.

**For participations is needed:**

1) to register (each abstract is registered separately) on the Lomonosov web-site:

<https://lomonosov-msu.ru/rus/event/9557/>

2) Electronic version of the thesis (with growth .doc or .docx)

An author shall send no more **THREE reports**.

**\*Schoolchildren may participate ONLY ONLINE.**

**THE MAIN DATES**

|  |  |
| --- | --- |
| Registration, submission of abstracts of authors' reports | Before 21.02.2025  |
| Reviewing of submitted materials | Before 10.03.2025  |
| The results of the reviewing will appear on Personal Account of Lomonosov web-site | Before 10.03.2025 to 31.03.2025  |
| Sending out conference invitations | Before 14.04.2025  |
| **Conference Days April, 23–25, 2025** |

**SCIENTIFIC FIELDS AND SECTIONS:**

**SCIENTIFIC FIELD: ELECTRIC POWER ENGINEERING AND ELECTRONICS**

Section "Electric Power Systems, Reliability, Diagnostics"

Section "Power Supply"

Section "Industrial Electronics and Lighting. Electrical and Electronic Devices"

Section "Promising Directions of Development of Physics, Chemistry and Mathematics"

Section "Electrotechnical Complexes and Systems. Electric Vehicle Transport and Charging Infrastructure"

Section "Relay Protection and Automation of Electric Power Systems"

Section "Environmental Engineering Protection"

Section "Occupational Safety"

Section "Energy-Efficient and Environmentally Safe Technologies in Power Engineering and Oil and Gas Refining"

Section "Control, Automation and Diagnostics of Electrical Installations of Power Plants, Substations and Distributed Generation"

**SCIENTIFIC FIELD: HEAT POWER ENGINEERING**

Section "Nuclear, Thermal and Electrochemical Power Engineering"

Section "Industrial Thermal Power Engineering. Operation and Reliability of Power Plants and Heat Supply Systems"

Section "Power Engineering"

Section "Energy Supply of Enterprises, Construction of Buildings and Structures"

Section "Automation of Technological Processes and Production"

Section "Thermal Physics"

Section "Ecological Problems of Aquatic Bioresources"

Section "Advanced Materials"

**SCIENTIFIC FIELD: ECONOMICS AND INFORMATION TECHNOLOGIES**

Section "Digital technologies, artificial intelligence systems, computer modeling"

Section "Electric drive and automation. Instrumentation and mechatronics"

Section "Economics and management in energy"

Section "Communication, knowledge and education: challenges of the time"

Section "Learning foreign languages ​​in a technical university: linguistic and regional aspects"

Section "Legal, political and social aspects of society development"

Section "Biotechnical and medical devices, systems and complexes"

**SCIENTIFIC FIELD: NATURAL-SCIENCE (FOR SCHOOLCHILDREN)**

Section "First Steps into Science":

• Digital Systems, Robotics and Modeling

• Electronics and Complex Automation

• Power Engineering

• Biotechnology and Environmental Safety

• Economics, Management, Sociology and PR

**REQUIREMENTS FOR THE FORMAT OF THE THESIS**

**Important: authenticity of the report should be no less than 70%.**

The reports contain no more three pages in Microsoft Word Propgramme, font - Times New Roman, minimum line spacing - 18 pt; interval before and after paragraph - 0; margins: top - 2.5 cm; bottom - 2 cm, left - 3 cm, right - 2 cm (Page Layout tab, Margins, Custom Margins). Paragraph indentation 1.25. Auto-numbering is not allowed.

1. The title (**center alignment, capital letters bold, font size 14 pt, paragraph indent 0**).
2. Information about the authors and research advisor: last name, first name, patronymic, author(s) IN FULL, city, contact information (e-mail) of the author(s) (**font – 12 pt, paragraph indent 0, alignment – ​​centered**).
3. Abstract (**font – 12 pt, paragraph indent 1.25, alignment – ​​width**).
4. Key words, no more than 10, separated by commas (**font – 12 pt, paragraph indent 1.25, alignment – ​​by width**).
5. Text (**font – 14 pt, paragraph indent 1.25, alignment – ​​width**).
6. Cutlines (**font – 12 pt, paragraph indent 0, alignment – ​​centered**). If there is only one figure, then the cutline isn’t noticed “Fig.”. In this case, a reference to such a figure should be in the text: for example, “(see figure)”.
7. The title and the content of a table (**font – 12 pt**).
8. The word “Source” (**bold letters, font - 14 pt, paragraph indent 0, alignment - center**).
9. Sources (in original language only) (**font – 14 pt, paragraph indent 1.25, alignment – ​​by width**).

### Graphs, diagrams, pictures and other graphic objects should be in JPEG, JPG, PNG formats. Formulas are typed in MS Equation 3.0 or MathType. In formulas, as well as their explanations, the letters of the Latin alphabet (as in the main text) are typed in italics, and the letters of the Greek and Russian alphabets are typed in roman font. Math symbols “lim, lg, ln, arg, const, sin, cos, min, max”, etc. are typed in upright font. The symbol should not fade with the above-symbol term. All chemical elements are designated both in the table and outside it in non-italic font.

All reports should have the list of sources. The references to the literature should be put in the end of the report. The example is bellow.

**The references in the text are drawn up in square brackets [1].**

**THE EXAMPLE OF THESIS FORMAT**

**SIMULATION OF AN ASYNCHRONOUS ELECTRIC DRIVE BASED ON A MATRIX FREQUENCY CONVERTER**

*(line)*

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The article proposes a simulation model of an asynchronous electric drive based on a matrix frequency converter, which is a combination of a virtual active rectifier and a virtual autonomous voltage inverter with direct control by the method of space-vector modulation, performed in the Matlab/Simulink environment. The results of modeling an asynchronous electric drive with a power of 2 kW, made on the basis of a matrix frequency converter, are presented.

**Keywords:** model, asynchronous electric drive, recuperation, matrix frequency converter, energy efficiency.

*(line)*

Text…. [1]. Text…. [2]. Text…. [3]. Text…. [4].

*(line)*

; (1)

*(line)*



*(line)*

Pic. 1. Structure of asynchronous engine

 *(line)*

Table 1

Characteristics of an asynchronous electric drive

 *(line)*

|  |  |  |
| --- | --- | --- |
| № | Brand | Model |
| Brand | STAR SOLAR | SUNWALK |

*(line)*

**Sources**

*(line)*

1. Sagdatullin A.M., Emekeev A.A., Muraveva E.A. Intellectual control of oil and gas transportation system by multidimensional fuzzy controllers with precise terms // Applied Mechanics and Materials. 2015. Т. 756. С. 633–639.

2. Mass meter CORIMASS 10G+ MFM 4085 K/F [Digital resource]. http://cdn.krohne.com/dlc/MA\_CORIMASS\_G\_ ru\_72.pdf (access date: 12.03.15).

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