

Preface

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Abstract. Within the framework of the presented material, the results of the conducted VII International Conference on Actual Problems of the Energy Complex and Environmental Protection (APEC-VII-2024).

We are pleased to present a collection of materials VII International Conference on Actual Problems of the Energy Complex and Environmental Protection (APEC-VII-2024), which took place on January 22 - 24, 2024 in Karshi Engineering and Economic Institute (Karshi, Uzbekistan), Tajik Technical University named after academician M.S. Osimi (Dushanbe, Republic of Tajikistan), Russian New University (Moscow, Russia) and was dedicated to energy and ecology.

The conference was held with the aim of summarizing international experience in the development of the energy sector, namely:

- Activation of the scientific and practical industry in order to formulate proposals for the technological, technical, digital, innovative, organizational and economic development of the industry;
- Popularization of fundamental and applied research of the fuel and energy complex;
- The accelerated growth of technical and technological methods, aimed at improving efficiency, production, transition, sustainable development in the long term.

The topics of the conference were as follows:

- Issues of the Energy Complex;
- Ecology, Environmental Protection and Conservation of Biological Diversity
- General Earth Sciences and Energy Resources.

The conference was attended by representatives of research, government and commercial organizations, as well as scientists from near and far abroad, namely, scientists from Russia, the Republic of Uzbekistan, the Republic of Tajikistan, the Republic of Azerbaijan, the Republic of Kazakhstan, the Republic of Vietnam, China, Republic of Turkmenistan and Sri Lanka. During the conference, the participants discussed problems related to the electric power industry, the fuel and energy complex, renewable energy sources, ecology, biodiversity conservation and earth sciences. Thus, the conference made it possible to formulate new scientific directions and recommendations for ensuring

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sustainable development, which can be useful to state and regional authorities, international and supranational organizations, the scientific and professional community.

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VII International Conference on Actual Problems of the Energy Complex and Environmental Protection (APEC-VII-2024)

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4. **Palkin Evgeny** - PhD in Physical and Mathematical Sciences, Professor, ViceRector for Scientific Work of the Russian New University, Moscow, Russian Federation - Co-chairman of the International Programming Committee;
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9. **Magdalena Platikanova** - PhD, Assoc. prof., Trakia University, Stara Zagora, Stara Zagora, Bulgaria;
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11. **Rakhimov Ganisher** - Doctor of Philology, Associate Professor, Rector of the Denau Institute of Entrepreneurship and Pedagogy, Denau, Uzbekistan;
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