

### **Report on the work of the dissertation council**

Dissertation Council 6D071800 - "Power Engineering" at NAO "KazNRTU named after K.I. Satpayev" in the specialty 6D071800 - "Electric power industry" for 2021.

#### **The report contains the following information:**

1. Data on the number of defense meetings held:  
1 meeting was held:
  - a meeting on the defense of a doctoral dissertation for the degree of Doctor of Philosophy (PhD) by Berik Islambekovich Mirzabaev on the topic "Kenistikte qoralystagy zhelkendi zhymys organs of the bar of the autonomy of the railway station of the synnyn parametlerin zertteu zhane taldau" was held on 27.05.2022;
2. There are no members of the dissertation council who attended less than half of the meetings.
3. List of doctoral students indicating the organization of training. Mirzabaev Berik Islambekovich Karaganda Technical University 2018-2021
4. In the reporting year, the dissertation of Mirzabaev Berik Islambekovich was considered on the topic "Kenistikte kozgalystary zhelkendi zhymys bodies of the bar of the autonomy zhel elektr stantsiyasyn parametlerin zertteu zhane taldau":
  - 1) The dissertation work of Mirzabaev Berik Islambekovich is devoted to the topical issue of renewable energy sources - a sailing wind power plant with a new spatially moving sailing working body, the cross-sectional profile of which is similar to the profile of an airplane wing and has a toroidal shape.
  - 2) The topics of dissertations are included in the state and regional scientific and scientific and technical programs, which are formed by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan in accordance with paragraph 3 of Article 18 of the Law "On Science" and (or) state programs;
  - 3) The dissertation was completed within the framework of the grant funding project IRN AR09562116 "Development of the design of the nodes of a prototype of a small wind power plant with a swinging sail working body" (2021). The dissertation corresponds to the priority direction of science development, approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan "Energy and Mechanical Engineering", a specialized scientific direction "Alternative Energy and Technologies: Renewable Energy Sources, Nuclear and Hydrogen Energy, Other Energy Sources". The reliability of the results of using the Autodesk Flow Design software packages was verified by calculating the aerodynamic characteristics of airfoils known from the literature. The conclusions obtained by analytical methods for studying nonlinear systems are verified by conducting full-scale experiments. The validity of the main provisions of the dissertation follows from the positive conclusion on the article "Expansibility Of Electric Power Production By Sail Wind Power Stations" reviewers of the journal "International Journal of Mechanics and Control". It is used in peasant farms, and livestock farms, which are located away from the mains. In general, they are used in regions of vast territories with an average wind speed of 3 m / s.
5. The official reviewers elaborated on all the important points of the dissertation and recommended the work for defense.
6. There are no proposals for further improvement of the system of training scientific personnel.
7. The number of dissertations for the degree of Doctor of Philosophy (PhD), Doctor in profile by specialty (training areas):
  - 1) dissertations accepted for defense (including doctoral students from other universities)
    - yes;

2) dissertations withdrawn from consideration (including doctoral students from other universities) - no;

3) dissertations for which negative reviews were received from reviewers (including doctoral students from other universities) - no;

4) dissertations with a negative decision based on the results of the defense (including doctoral students from other universities) - no.

**Chairman of the dissertation council**



**A. Bekbaev**

**Scientific Secretary of the Dissertation Council**

**Assel A. Zhumatova**

Seal date "09" january 2023