## **Author information**



## 1. Surname, name:

Bizhanova Gulfairus.

# 2. Position, academic degree, title:

master of natural sciences, lecturer.

## 3. Education:

- Kazakh national technical university named after K.I. Satpaev, Institute of ecology and economics, specialty 170340 "Applied Ecology", diploma JB № 0053938, 2004;
- Kazakh national technical university named after K.I. Satpaev, specialty 6M060800 -"Ecology", master of natural sciences, diploma ZHOOK-M № 0032305, 2013.

# 4. Field and directions of research, including participation in scientific projects with a brief description of the research results:

Area and directions of research:

- ecology, environmental protection.

Participation in scientific projects:

- junior researcher of the project "Scientific evaluation of the effectiveness of environmental protection measures carried out by enterprises of the republic", carried out within the framework of the program "Scientific research in the field of environmental protection" for 2010-2013.

#### Results:

on the topic "Scientific evaluation of the effectiveness of environmental measures carried out by enterprises of the republic", a methodology for evaluating the effectiveness of environmental measures carried out by enterprises of the republic was created.

- Junior researcher of the project "Heterogeneous interactions in multicomponent silicate-containing systems in the processes of synthesis of new materials", carried out within the framework of Grant funding for scientific research for 2013-2015.

### Results:

- scientific novelty for the first time heterogeneous interactions in multicomponent systems under thermolytic high-temperature conditions were studied;
- difference from known data: the absence of analogues in world practice is due to the fact that source materials of similar material composition and properties are available only on the territory and technogenic raw materials of Kazakhstan. In addition, there is no analogue in the hardware design of synthesis a shaft furnace with a gas distribution grate for thermolytic processing of bulk material under the conditions of gas dynamics of the moving bed;
- practical significance: a data bank on new silicate-containing compounds, a method for calculating the energy constants of crystals.

# 5. Achievements in research, teaching activities (awards):

- Commendation sheet on behalf of the Institute of High Technologies and Sustainable Development "For the preparation of high-level students", 2014;
- A letter of thanks "For active participation in the traditional 49th KazNTU spring festival 2014", dedicated to the 80th anniversary of KazNTU named after K.I. Satbaev;
- Diploma of the 3rd degree of the university competition "Best Advisor 2014", held in the framework of the 80th anniversary of KazNTU named after K.I. Satpaev, 2014;
- A letter of thanks "For the highly professional and active fulfillment of the tasks set for organizing and implementing the admission of applicants for the 1st year of the 2017-2018 academic year of the Kazakh National Research Technical University named after K.I. Satbaev";
- Certificate of honor "For valiant work in the field of education and a great contribution to the training of highly qualified specialists and scientific personnel", 2017;
- A letter of thanks from the Rector of KazNITU named after K.I. Satpayev to the 30th anniversary of Independence of the Republic of Kazakhstan, 2021.

## 8. E-mail address, contact details (tel.: work (ext.), cell.):

E-mail: gulfairus82@mail.ru

Cell. tel.: 8-707-839-63-48.