

## PERSONAL INFORMATION



## KUTUM BAYAN BAYSULTANKYZY

📍 Republic of Kazakhstan, Karaganda city, Universitetskaya str., 28 a, Buketov

☎ University - 📱

✉ kuttykadam@mail.ru



💬 What's App: -

| Date of birth: 20/07/1983.

### PLACE OF WORK, POSITION

Buketov University, senior lecturer of Engineering thermophysics named after Professor Zh.S. Akylbaev

### SCIENTIFIC DEGREE, SCIENTIFIC TITLE (ACADEMIC DEGREE)

Master of Physics

### WORK EXPERIENCE

#### Place and date

- 2011-2013 Office registrator of the Physics Faculty, Buketov University;
- 2013-2017 senior lecturer of Engineering thermophysics named after Professor Zh.S. Akylbaev, Buketov University:
  1. 2014-2015 – deputy Dean for Educational Work of the Physical technical faculty;
  2. 2015-2017 – responsible executor of a scientific project.
- from September 2020 to the present time senior lecturer of Engineering thermophysics named after Professor Zh.S. Akylbaev, Buketov University.

### EDUCATION AND PROFESSIONAL TRAINING

#### Education

- 2001-2006 Buketov University, Physics Faculty, Department of General and theoretical physics, qualification - Physicist. Teacher (with Honours);
- 2006-2008 Buketov University, Physics Faculty, Department of General and theoretical physics, qualification – Master of Physics (with Honours);
- 2017-2020 Eurasian national university, Department of General and theoretical physics, qualification – Physics, doctoral studies.

#### Professional trainings, Scientific trips

- November 2019 - February 2020 - Scientific internship at the California State University, (Fresno, USA).

### SKILLS DEVELOPMENT INFORMATION

- «The use of interactive tools and the technology of developing multimedia materials in the educational process», 01.04.10 (E.A.Buketov KarSU);
- «Pulsed technologies and the production of nanostructured materials with specified properties. Theory and modeling of nanostructures», 05.06.10 (E.A.Buketov KarSU);
- «Methods of teaching on distance learning technology», 30.03.12 (E.A.Buketov KarSU);
- «Energy for our future: GREEN ENERGY». Karaganda, 15.12.2014.
- Training course for trainers of the CPM, 2016 (NISH CPM, Astana);
- English for university teachers, English language proficiency level «INTERMEDIATE», 2016 (Al-Farabi KNU);

- «Improving the teaching of disciplines in the field of technical science and technology», 09.12.2016 (E.A.Buketov KarSU);
- Special seminar «X Anniversary Summer Physical School», 18.07.2017 (S. Toraighyrov PSU);
- Improving the teaching of disciplines in the field of technical science and technology, from 10.06.2017 (E.A.Buketov KarSU);
- The seminar will be dedicated to «EXPO-2017», 2017 (Karaganda);
- Certificate of completion on the Coursera platform on the topic: "Electric Power Systems" (Buffalo State College, graduation date and certificate issue - November 21, 2020);
- Certificate of completion of the course on the Coursera platform on the topic: "Safety in the Utility Industry" (Buffalo State College, the date of completion and issuance of the certificate - November 22, 2020);
- Certificate of completion on the Coursera platform on the topic: "Introduction to Thermodynamics: Transferring Energy from Here to There" (University of Michigan, graduation and certification date - November 30, 2020).

## PERSONNEL QUALITIES

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**Native language** **Kazakh**

LANGUAGE	UNDERSTANDING		SPEAKING		WRITING
	Hearing	Reading	Oral speech		
<b>Russian</b>	C1	C1	C1	C1	C1
<b>English</b>	A2	A2	A2	A2	A2

**Digital skills**

ADVANCED USER: MICROSOFT OFFICE (WORD, EXCEL, POWER POINT). USER: MAPLE, MATHCAD, MATHEMATICA, LATEX. KNOWLEDGE OF OPERATING SYSTEMS: WINDOWS AND ANDROID

**Other skills (hobbies)**

reading, drawing, sudoku, felinology.

**ADDITIONAL INFORMATION**

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1. Kutum B.B., Yesmakhanova K.R., Shaikhova G.N. *The differential-q-difference 2D Toda equation: bilinear form and soliton solutions* //Journal of Physics: Conference Series 1391, 012122 (2019).

2. Kutum B.B., Shaikhova G.N. Q-soliton solution for two-dimensional q-Toda lattice // Вестник КарГУ им. Е.А. Букетова -№3 (95), -С. 22-26, 2019.

3. Shaikhova G.N., Kutum B.B., Altaybaeva A.B., Rakhimzhanov B.K. *Exact solutions for the (3+1)-dimensional Kudryashov-Sinelshchikov equation* //Journal of Physics: Conference Series 1416, 012030 (2019).

4. Shaikhova G.N., Kutum B.B. Traveling wave solutions of two-dimensional nonlinear Schrodinger equation via sine-cosine method// Eurasian Physical Technical Journal- Vol 17, №1(33), - P. 169-174, 2020.

#### Main publications

5. Кусаиынов К., Шаймерденова К.М., Кутум Б.Б. Воздействие электрических разрядов на структуру и свойства электродной системы при гидроимпульсной обработке воды //Вестник Карагандинского университета. – 2015. – №3(79). P. 49-54.

6. Shaimerdenova K.M., Aitpaeva Z.K., Khassenov A.K., Kutum B.B., Bulkairova G.A. Structural changes in electrodes and their failure on electric pulse treatment of water //Eurasian Physical Technical Journal. – 2017. – №1(27). P. 103-108.

7. Кусаиынов К., Шаймерденова К.М., Кутум Б.Б. Электрогидроимпульсное устройство для обеззараживания проточной воды // Патент РК на полезную модель № 1794 от 13.05.2016 г.;

8. К.М.Шаймерденова, Ботпаев Н.К., Хасенов А.К., Кутум Б.Б. Устройство для обеззараживания проточной воды // Евразийский патент № 034112 от 27.12.2019 г.

Clarivate Analytics Hirsch Index – 1.

Scopus Hirsch Index – 1.

#### Participation in the implementation of scientific projects

«Исследование некоторых проблем астрофизики и космологии в рамках эйнштейновской и неэйнштейновской теорий гравитации» (customer - MES RK, 2018-2020, position - junior researcher);

- «Методика восполнения водных ресурсов электроразрядной технологии очистки и активации с положительным эффектом для жизнедеятельности растений и живых организмов», (customer - MES RK, 2015-2017, position - responsible executor ).

#### Membership in professional scientific organizations

No

#### Awards and titles

No

#### Courses

1. Общая теория конструкции теплоэнергетических установок
2. Жылуэнергетикалық қондырғылар құрылымының жалпы теориясы
3. Газдарды тазалау үрдістері мен аппараттары
4. Спецвопросы сжигания топлива
5. Отын жағудың арнаулы сұрақтары
6. Процессы и аппараты очистки газов.

#### Professional and scientific interests

- alternative energy, thermal power plants, energy saving systems, fuel energy  
- electrohydraulic effect, physical mathematics, soliton theory, integrable systems

#### SCIENTIFIC DATABASES IDENTIFIERS

Researcher ID: [AAR-7327-2020](#)

ORCID ID: [0000-0002-6410-4111](#)

RSCI: -

Author ID Scopus: [57213520178](#)

Researcher ID in Publons: [AAR-7327-2020](#)