

## PERSONAL INFORMATION



## KUTZHANOVA KAMSHAT ZHAMBYLOVNA

📍 Republic of Kazakhstan, Karaganda, Universitetskaya st., 28,  
Karaganda University named after academician E.A. Buketov



✉ [kutzhanova78@gmail.com](mailto:kutzhanova78@gmail.com)



🔗 <https://orcid.org/0000-0001-8265-155X>



|Date of Birth: 08/20/1978

## PLACE OF WORK, POSITION

Karaganda University named after academician E.A. Buketov, Associate Professor of the Physical and Analytical Chemistry Department

## ACADEMIC DEGREE, ACADEMIC TITLE (ACADEMIC TITLE)

Candidate of Chemical Sciences

## WORK EXPERIENCE

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### Place and date

- 1999-2004 - JSC MNPH "Phytochemistry", engineer;
- 2001-2003 - Master's degree at Academician E.A. Buketov KarSU;
- 2003-2005 - Postgraduate course at Academician E.A. Buketov KarSU;
- 2005 - KarSU named after Academician E.A. Buketova: since 2005 as a teacher, since 2010 as a senior teacher, since 2011 as an associate professor at the Physical and Analytical Chemistry Department.

## EDUCATION AND TRAINING

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### Education

- 1995-1999 - Karaganda State University named after academician E.A. Buketov, Faculty of Chemistry, specialty - 0107-Chemistry, qualification - Chemist. Teacher;
- 2001-2003 - Master's degree. Karaganda State University named after academician E.A. Buketov... Specialty: 02.00.04-physical chemistry;
- 2003-2005 - Postgraduate studies. Karaganda State University named after academician E.A. Buketov... Specialty: 02.00.04-physical chemistry

### Internships, scientific trips

- International training course "Regional geology and technology for the development of mineral resources in Central Asia" certificate No. 172310 dated 08/18/2017, Urumqi, Xinjiang, PRC

## INTELLIGENCE ABOUT TRAINING

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- "Impulse technologies and production of nanostructured materials with desired properties. Theory and modeling of nanostructures "certificate No. 207011 dated 28.05.2011. KarSU named after E.A. Buketova;
- Teaching methodology for distance learning technology ", certificate No. 277012 dated 04.04.2012, KarSU named after E.A. Buketova;
- Quantum theory of nanoparticles and nanomaterials certificate No. 596012 dated June 16, 2012, KSU named after E.A. Buketova;
- "Advanced training course for teachers of the Republic of Kazakhstan under the program" Advanced training of teachers of pedagogical specialties of universities of the Republic of Kazakhstan (240 hours), the language of instruction is Russian ", certificate No. 0130842 dated June 7, 2014, JSC" National Center for Advanced Studies "Orleu"
- "Modern trends in the development of chemistry and chemical technology" certificate No. 538014 dated 03/04/2017 KarSU im. E.A. Buketova;
- "Development of electronic teaching aids" certificate No. 941018 dated 03/20/2018. KarSU named after E.A. Buketova;
- "Globalization of education: sosio-economic and historical aspects", dated 3.04.2018, Czech Republic, Prague;
- "Quantum technologies of intelligent nanomaterials" from 22.10.2018, KarSU named after E.A. Buketova.

## PERSONAL QUALITIES

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### Knowledge of languages Native language

**Kazakh**

Language name	UNDERSTANDING		SPEAKING		LETTER
	Hearing	Reading	Oral speech	Written speech	
English language	A1	A1	A1	A1	A1

### Computer skills

Advanced user: Microsoft Office (Word, Excel, Power Point); graphic editors (CorelDraw, Adobe Photoshop, Paint), quantum chemical calculations programs (Gaussian, HyperChem, ChemOffice), Zoom video conferencing. Knowledge of operating systems: Windows and Android.

### Other skills (hobbies)

reading, amateur photography, travel

## ADDITIONAL INFORMATION

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## Main publications

1. Kutzhanova K.Zh., Pustolaikina IA, Kurmanova A.F. Quantum-chemical study of aminoacetic acid cyclic dimers // Bulletin of Karaganda University. - Chemistry series. - 2016. - No. 4 (84). - S.33-38
2. Kutzhanova K.Zh., Pustolaikina I.A. Kurmanova A.F. The exchange of protons of the oxymethyl radical with acids and bases: a semi-empirical quantum-chemical study // Bulletin of KazNU. Chemical series. - 2016. - No. 3-4 (83). - P.22-32.
3. Kutzhanova K.Zh., Pustolaikina IA, Kurmanova A.F. Proton exchange in ammonia, water and formic acid dimers: quantum-chemical calculation // Bulletin of Karaganda University. - Chemistry series. - 2018. - No. 2 (90). - S.64-71.
4. Kutzhanova K.Zh., Pustolaikina IA, Kurmanova A.F. Nonempirical modeling of protolytic processes in dimeric molecules of amino acids // Bulletin of Karaganda University. - Chemistry series. - 2018. - No. 2 (90). - P.58-64.

### **The number of published scientific and educational-methodical works - more than 120, of which:**

- in logs on the Clarivate Analytics database - 11;
- in editions recommended by KOKSON MES RK - 23;
- in publications located in the RSCI database - 9;
- textbooks, teaching aids, electronic textbooks (co-authored) - 2.

Clarivate Analytics Hirsch Index - 1.

The Hirsch index according to the RSCI database is 1.

Google Scholar Hirsch Index - one.

## Participation in the implementation of scientific projects

- Performer on the initiative topic "Spin probing of the kinetics and mechanisms of acid-base reactions of fast proton transfer and exchange in the liquid phase" in the laboratory of quantum chemistry and EPR spectroscopy;

## Membership in professional scientific organizations

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## Awards and titles

- Rector's certificate of honor for the contribution to the development of E.A. Buketov KarSU;
- certificate of honor of the Akim of the city of Karaganda for personal contribution to the socio-economic development of the city, active labor and social activities (2019).

### **Courses taught**

1. Physical research methods
2. Chemical physics
3. Theory of chemical reactions
4. Chemical radiospectroscopy
5. Molecular spectroscopy
6. Analytical chemistry
7. Theory and problems of physical chemistry
8. Metrology, standardization and certification

### **Sphere of professional and scientific interests**

- Instrumental studies of the physical and chemical properties of solutions of amino acids and their derivatives
- quantum chemistry of protolytic processes;

### **IDENTIFIERS OF SCIENTOMETRIC DATABASE**

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**RSCI identifier:** 5717-4995