PERSONAL INFORMATION



℃ abu.lyazzat@gmail.com

Date of birth: 12/04/1962

PLACE OF WORK, Faculty of Chemistry, Department of Physical and Analytical Chemistry, professor POSITION SCIENTIFIC DEGREE, CSc. (PhD), Assoc. Prof. SCIENTIFIC TITLE (ACADEMIC DEGREE) WORK EXPERIENCE -1984 - 2002 - Senior laboratory assistant, Junior research associate, Research associate, Leading research associate, Institute of Organic Synthesis and Coal Chemistry Place and date of the Republic of Kazakhstan (National Academy of Sciences of the Republic of Kazakhstan); -2002 - 2017 - Associate professor on Department of Physical and Analytical Chemistry, Buketov State University (Buketov University); -2017-present - Professor on Department of physical and analytical chemistry, Buketov University. **EDUCATION AND PROFESSIONAL TRAINING** - 1979 - 1984 - Karaganda State University, Faculty of Chemistry, specialty «0107-Chemistry", qualification "Chemist. Chemistry teacher", diploma 30.06.1984 (Karaganda, KSSR (RK)); - 1992 - awarded the degree of Candidate of chemical sciences, diploma HAC of USSR 08.01.1992 (Moscow); Education 2013 - awarded an academic title of Associate professor, dip[loma CCES MES of RK 20.11.2013 (Astana, RK); -2014 – 2016 - Bachelor in Education Sciences in specialty "5B011900-Foreign

Language: Two Foreign Languages (English)", Foreign Languages department, Buketov State University, diploma 31.05.2016 (Karaganda, RK).

- 1985 - 1987 - long-time stay (training) on Zelinsky Institute of Organic Chemistry of RAS, Laboratory of spectral and quantum-mechanical investigation of catalytical reactions (head of lab. Corr. Member Kazansky V.B., Moscow); - 1987 - scientific trip (All-union conference "Chemical synthesis on the basis of carbon molecules", 30 Nov. - 3 Dec. 1987, Moscow): - 1988 - scientific trip (SibAS, Catalysis Institute, laboratory of quantum chemistry, head of lab. Prof. Zhidomirov G.M., Novosibirsk); - 1988 - scientific trip (All-union youth school-conference of Catalysis, March 1988, Alma-Ata, KSSR (RK)); - 1989 - scientific trip (AS of KSSR (NAS RK), Institute of Organic Catalysis and Electrochemistry, homogeneous catalysis laboratory, head of lab. Prof. Dorfman Ya. A., Alma-Ata, KSSR (RK)); - 1991 - scientific trips (AS of KSSR (NAS RK), Institute of Chemical Sciences, Alma-Ata, KSSR (RK)); Professional trainings, - 2001, 2002 - scientific trips (KazSU (KazNU), Department of Chemistry, Alma-Ata, RK); **Scientific trips** - 2008 - scientific trip (Gumilev ENU, Faculty of Natural Sciences, Astana, RK); - 2015 - scientific trip (15th International Congress of Quantum Chemistry ICQC 2015, June 2015, Beijing, China); - 2016 - scientific trip (XVIII International Symposium of Intermolecular Interactions and Conformations of Molecules SIICM 2016, June 2016, Yaroslavl, Russia); - 2017 - scientific trip (Zelinsky Institute of Organic Chemistry of RAS, Laboratory of radiospectral and optical methods of investigation of heterogeneous catalysis mechanism, head of lab. Acad. Kazansky V.B., Moscow); - 2018 - scientific trip (Charles University, Faculty of Sciences, Prague, Czech Republic); - 2018 - scientific trip (27th International Liquid Crystal Conference ILCC 2018, July 2018, Kvoto, Japan):

- 2018 - scientific trip (16th V.A. Fock Meeting on Quantum, Theoretical and Computational Chemistry, October 2018, Sochi, Russia);

- 2020 - scientific trip (National Academic library of RK, Nur-Sultan, RK).

SKILLS DEVELOPMENT INFORMATION

Skills development at the courses of the SDF at the KarSU named after E.A. Buketov: certificates:

- dated 12.11.2005 for the course "Innovative technologies in the educational process";
- dated 11/14/2009 for the course "Basic principles, features and methods of work on modern chromatographs and spectrometers";
- dated 05.06.2010 under the program "Professionally-oriented English";
- dated 26.06.2010. under the program "Quantum theory of molecular structure";
- dated 01/29/2011 under the program "Development and use of multimedia and interactive tools in the educational process and teaching methods in terms of credit and distance learning technology";
- dated May 28, 2011 under the program "Impulse technologies and production of nanostructured materials with desired properties. Theory and Modeling of Nanostructures ";
- dated 12.06.2012 on participation in the training seminar on the topic "Features of the preparation of educational and methodological complexes in the disciplines of natural science and humanities in English";
- dated 04.12.2012 participation in the Science Direct and Scopus training;
- dated 07.19.2013. on participation in a series of online seminars by Thomson Reuters Scientific & Scholarly Research;
- Skills development:
- at the courses of JSC "National Center for Advanced Studies" Orleu" (Almaty) under the advanced training program for teachers of pedagogical specialties of universities of the Republic of Kazakhstan; certificate dated 09.11.2013;
- at the British Council seminars, certificates dated 03/02/2016, 04/13/2016, 05/16/2016, 05/31/2016, 09/30/2016;
- at the faculty of additional education of KSU named after E.A. Buketov; certificate dated 04.03.2017 for the course "Modern trends in the development of chemistry and chemical

technology";

Kazakh

- on a full-time intensive English course on the basis of the Czech school "Jipka" (Prague, Czech Republic), certificate dated 05.08.2017;
- at the British Council seminar, certificate dated 30.11.2017;
- implementation of the scientific program (Charles University, Faculty of Sciences, Prague, Czech Republic), certificate dated May 31, 2018;
- participation in the Eurasian Forum of Higher Education Leaders "Innovation of Higher Education in the Era of Breakthrough Technologies" (Nazarbayev University, Astana, Kazakhstan), certificate dated 08.06. 2018;
- courses in preparation for the international exam IELTS in the language school "InterPress IH Karaganda" (Karaganda, Kazakhstan), certificate dated 17.09.2018;
- advanced training at the faculty of additional education of KSU named after E.A. Buketov, distance course "Methodological support of the process of inclusive education", certificate dated 16.05.2018;
- advanced training at the faculty of additional education of KSU named after E.A. Buketov, "Methods of teaching chemical and biological disciplines in English", certificate dated 01/14/2019;
- advanced language proficiency on the Coursera platform on the topic "Speak English Professionally: In Person, Online & On the Phone" (Georgia Institute of Technology, USA), certificate dated 20.05.2020;
- participation in a webinar on the topic: "System "Antiplagiat" in the higher school of Kazakhstan: methodology for implementation and effective use", certificate dated 02.07.

PERSONNEL QUALITIES

Native language

0.0				
LANGUAGE	UNDERSTANDING		SPEAKING	WRITING
	Hearing	Reading	Oral speech	WITTING
Russian	C2	C2	C2	C2
English	A2	C1	A2	C1
French	basic	basic	basic	basic
Digital skills	PROFESSIONAL USER OF CHEMICAL EDITORS (CHEMBIOOFFICE, HYPERCHEM) AND QUANTUM CHEMICAL PROGRAMS (MOPAC, GAUSSIAN, GAUSSVIEW). ADVANCED USER OF EDITING PROGRAMS (WORD, EXCEL, POWER POINT, ADOBE ACROBAT DC).			
Other skills (hobbies)	Reading classical and modern literature in three languages, playing music (piano), solving crosswords, puzzles and Japanese puzzles.			

1. Abulyaissova L.K. DFT-based molecular conformatio-nal analysis of a diarylethylene cyano-derivative // Journal of Structural Chemistry. – 2019. -Vol. 60. - No. 2. - Р. 179-185. 2. Нуркенов О.А., Абуляисова Л.К., Жаксыбаева Г.Ш. Структурные и спектральные свойства хинолизидиновых алкалоидов: квантово-химические расчеты // Вестник КазНУ. – 2019. - № 3(94). – С. 28-36.

 Эбуләйісова Л.Қ. Молекулалар мен атомдар құрылысы, Қарағанды, 2018. – 126 с.
 Abulyaissova L.K. Computer Simulation of Short-Range Order in Schiff-Bases: a First-Principles Density Functional Approach // 27th International Liquid Crystal Conference (ILCC2018): Book Abstr. – Kyoto (Japan), 2018. – P4-C2-6.

5. Abulyaissova L.K., Kenzhetaeva S.O., Kasymova M.S. Conformational Space of 4,4'-Methoxypropylstilbene Molecule // Russian Journal of General Chemistry. – 2017. – Vol. 87. - No 6. – P. 1125-1131.

6. Abulyaissova L.K., Alimbayeva M. Relative Population of Conformers of Nematogenic 4-n-Alkyl-4'-Cyanobiphenyls: A DFT Study. // 26th International Liquid Crystal Conference: Book Abstr. – Kent (USA), 2016. – P. 371.

7. Abulyaissova L.K., Adekenov S.M. Quantum Chemical Analysis of the Molecular Structure and Vibrational Spectrum of Arglabin. // Journal of Structural Chemistry. – 2015. - Vol. 56. - No. 5. - P. 865-873.

8. Baikenov M.I., Amerkhanova Sh.K., Baikenova G. G., Abulyaisova L. K. et al. Simulation of the Destructive Hydrogenation of Coal Asphaltene // Solid Fuel Chemistry. – 2013. – Vol. 47. - № 4. – P. 234-236.

9. Абуляисова Л.К. Сопряжение и конформации молекул // Вестник Карагандинского университета. - Серия Химия. - 2012. - № 1(65). – С. 35-40.

Main publications 10. Атомдар мен молекулалардың кванттық теориясы: оқу құралы. - Қарағанды: ҚарМУ баспасы, 2010. — 124 бет.

11. Манжугулова Қ.Қ., Әлімбаева М.Т., Текенова И.Ш., Конкалова Н.А., Әбуляисова Л.Қ. Фенилпропаргилоксибензолдардың квантты-химиялық конформациялық талдауы // Вестник КазНУ. Серия Химическая. – Алматы, 2009. - № 4. – С. 80-86. 12. Стереохимия. - Караганда, 2001. – 115 с.

13. К.Х. Джумакаев, Л.К. Абуляисова, А.А. Багатурьянц. Квантово-химическое исследование поверхностных интермедиатов гидратации нитрилов на анионитах // Ж. физ. хим. - М., 1993. - Т. 67. - № 5. - С. 700-703.

14. К.Х. Джумакаев, Абуляисова Л.К., М.Г. Финаева, К.А. Аяпбергенов, А.А. Багатурьянц. Квантово-химические модели аммониевых ионов на полимерных матрицах // Ж. физ. хим. - М., 1989. - Т.63. - № 9. - С. 2526-2529.

The number of published scientific and educational-methodical works - more than 115, of which:

- in journals on the Scopus database 7;
- in journals on the Clarivate Analytics database 10;
- in editions recommended by RK MES CQAES 33;
- in publications located in the RSCI database, including journals from the list of VAK 14;
 - teaching aids, electronic textbooks 5.

Scopus Hirsch Index - 1. Hirsch index based on Clarivate Analytics - 1. The Hirsch index according to the RSCI database - 1. Hirsch index based on Google Scholar - 2. Head of project "Investigation of intermolecular effects of self-association and solvation of molecules as property-forming factors in mesogenic nanosystems", republican program of MES RK "Grant financing of scientific and (or) scientific and technical projects for 2020-2021";

- head of project "Development of methods for the study of physical and chemical regularities of formation of mesomorphic properties of aromatic compounds", republican program of MES RK " Grant financing of scientific and (or) scientific and technical projects for 2015-2017";

- performer within the framework of the republican program of fundamental research F.0569 "Search for new natural compounds in plants. Isolation and identification of components, molecular structure and their biological activity" for 2011-2014 on topics: "New sesquiterpene lactones of plants in Kazakhstan, their chemical modification, structure and properties of molecules"; "New biologically active terpenoids of essential oils of plants of the flora of Kazakhstan";

- performer within the framework of the republican program of fundamental research of the Ministry of Education and Science of the Republic of Kazakhstan on the topic: "Selection of technological conditions for the hydrogenation of coals of Central Kazakhstan using preliminary chemical activation of the organic mass of coal" (state registration No. 0106RK00671), 2011-2014;

- performer within the framework of the republican program of fundamental research of the Ministry of Education and Science of the Republic of Kazakhstan on the topic: "Improvement of ion exchange processes to create effective technologies for the extraction of pure and highly pure non-ferrous, rare and rare earth metals" (priority "Intellectual potential of the country" for 2011-2014).

- Official reviewer of the journal "Bulletin of Karaganda University. Series Chemistry "(kaz., rus., eng.);

Membership in professional scientific organizations (

Participation in the

projects

implementation of scientific

- Scientific secretary of the doctoral dissertation council for chemical specialties (Karaganda, 2003-2005);
- Member of the World Association of Theoretical and Computational Chemists (WATOC);
- Member of the International Liquid Crystal Society (ILCS).

Winner 2017 of the title "The best teacher of the university".

Awards and titles

- 1. Quantum chemistry (kaz., rus., eng.).
- 2. Quantum mechanics and computational chemistry (kaz., rus.).
- 3. Applied quantum chemistry (kaz.).
- 4. Computational nanochemistry (kaz.).
- 5. Computational simulation of chemical reactions (kaz.).
- 6. Molecular modeling (kaz.).
- 7. Computer modeling of molecular systems (kaz.).
- 8. The structure of atoms and molecules (kaz., eng.).

Courses

- 9. The structure of molecules (kaz., eng.).
 - 10. The structure of substance (kaz., eng.).
 - 11. Physical chemistry (kaz., eng.).
 - 12. Scientific research methods (kaz.).
 - 13. Professionally oriented foreign language (eng.).
- 14. Analytical chemistry (kaz.).
- 15. Information technologies of fundamental chemistry (kaz.).

Professional and scientific interests

Quantum, theoretical and computational chemistry, physical organic chemistry;
structure of substance, conformational analysis;
physics and chemistry od liquid crystals;
homogeneous and heterogeneoud catalysis.

SCIENTIFIC DATABASES IDENTIFIERS

Researcher ID: <u>R-8057-2019</u> ORCID ID: <u>0000-0002-7530-3378</u> RSCI: 253787 Author ID Scopus: 55982001300