

Dosmagambetova Saule Sarkantaevna

Doctor of Chemical Sciences, Professor of the Department of Chemistry of the L.N.Gumilyov ENU

Contact details:

Email: saule_ds@mail.ru Mobile: 8-702-110-96-42

Professional experience:

From 1973 to 1976 - a junior researcher at the Institute of Chemical Sciences of the Academy of Sciences of the Republic of Kazakhstan, from 1976 to 1995 - a researcher, senior researcher at the Department of Analytical Chemistry and Chemistry of Rare Elements, from 1995 to 1997 Associate Professor of the Department of General Chemistry and Ecology of the Chemical Faculty of the Al-Farabi Kazakh National University. Since 1997, Associate Professor, since 2003 Department of Professor of the Chemistry of the L.N.Gumilyov Eurasian National University.

Awards:

State educational grant " Лучший преподаватель ВУЗа-2011".

Awarded the badge " Химия өнеркәсібінің үздік қызметкері " (2021)

Place and date of birth: Amangeldy village, Kostanay region, October 16, 1950.

Education, academic degree and title:

In 1968, graduated with honors from the secondary school named after S.M.Kirov in the village of Amangeldy, Kostanay region.

In 1973, successfully graduated from the Chemical Faculty of S.M.Kirov Kazakh State University (now Al-Farabi Kazakh National University). Specialty "Chemistry-organic chemistry", qualification - "Chemist. Chemistry teacher".

In 1983, she defended her dissertation for the degree of Candidate of Chemical Sciences in the specialty 02.00.02 - analytical chemistry. In 1984, by the decision of the Higher Attestation Commission under the Council of Ministers of the USSR awarded the degree of Candidate of Chemical Sciences, and in 1985 - the academic title of associate professor.

In 2002, defended dissertation for the degree of Doctor of Chemical Sciences in the specialty 02.00.02 - analytical chemistry. In 2003, the decision of the Higher Attestation Commission under the Cabinet of Ministers of the Republic of Kazakhstan awarded **the degree of Doctor of Chemical Sciences**, and in 2005 - **the academic title of professor.**

Courses taught: analytical chemistry, chemical quantitative analysis, modern problems of analytical chemistry, extraction of inorganic substances, organic reagents in inorganic analysis, chemistry of rare earth metals.

Monographs: «Твердофазная экстракция» (2001), «Твердофазная спектроскопия в экстракции легкоплавкими реагентами» (2013), «Экстракция ионов металлов высшими карбоновыми кислотами» (2014)

Training manuals: «Методы аналитической химии в качественном анализе»(2006), «Аналитикалық химия. І кітап. Сапалық анализ» (2011), «Химический количественный анализ» (2020), «Химиялық сандық анализ» (2020)

Research interests: analytical chemistry, extraction chemistry.

Scientific grants under the Basic Research program: scientific supervisor of 4 scientific grants under the fundamental research program: "Study of extraction processes of vanadium extraction by low-melting organic substances and development of highly sensitive analysis methods" (State Registration № 0100RK00402; 2005- 2007); Development of scientific foundations and method of obtaining comparison samples for solid-phase spectroscopy (2012-2014);Development and receiving of standard samples for chemical analysis of environmental objects (2012-2014); "Extraction methods of extraction of rare metals from industrial products and waste of metallurgical and chemical industries" (State registration № 0110RK00413; 2010);

- responsible executor of 3 scientific grants under the basic research program :

Medal «Лев Гумилев»

Medal " Еуразия университетіне 25жыл "

Scientific internship:

Chemnitz University of Technology (Federal Republic of Germany; 2011).

- "Physico-chemical bases of lead extraction from ores and products of their processing" (State Registration N_{\odot} . 0106RK01070; 2007 2009); "Investigation of the laws of selective extraction of silver (I) from aqueous solutions and development of combined extraction-spectral methods for its determination" (State registration N_{\odot} 0109RK00410; 2009-2011); "Development of chemical methods for obtaining and stabilizing metal nanoparticles of a number of transition metals" (State registration N_{\odot} 0112RK02369; 2012-2014);
- the responsible executor of the business agreement to perform research work: "Development of methods for selective separation and determination of platinum, palladium, and tellurium content in Dore alloy and refining cakes" (2015-2017);
- 8 scientific developments were implemented in enterprises of non-ferrous metallurgy of Russia, Kazakhstan, Tajikistan, and laboratory analytical services Astana received certificates of implementation.
- supervisor of 3 approved dissertations for the degree of Candidate of Chemical Sciences in the specialty 02.00.02 analytical chemistry;
- - scientific supervisor of the dissertation for the degree of Doctor of Philosophy PhD.

Main scientific works:

More than 270 scientific papers have been published in the most important academic publications of Russia and Kazakhstan and materials of international, Union, republican scientific conferences. A number of works have been published in foreign publications with an impact factor, many works are included in the Web of Science and Scopus databases:

- 1. S.S.Dosmagambetova, A.K.Tashenov. Thermal analysis of palmitates of a number of rare-earth elements and barium. Izv. MO and NAN RK. Ser. chemical., 1996. № 6, pp.3-7.
- 2.S.S.Dosmagambetova. Complex formation of lead and dmetals with 8-hydroxyquinoline. Izvestiya MO and NAN RK. chemistry series, 2000. №. 4. pp. 7-10
- 3. S.S.Dosmagambetova. Spectrophotometric study of palmitates of a number of p-, d-, f-metals. Izvestiya MO and AN RK. Chemistry series, 2000. № 6. pp.86-88
- 4. S.S.Dosmagambetova. General patterns of extraction of a number of metals by molten palmitic acid. Izvestiya MO and NAN RK. chemistry series, 2000. №.6. pp.82-85
- 5.K.S.Tosmaganbetova, A.K.Tashenov, S.S.Dosmagambetova. The effect of related elements on the spectroscopic determination of silver with thiosemicarbazide in the melt of stearic acid Izvestiya. Tomsk: TPU, 2012. -Vol.320. №. 3.-pp.70-72. (IF- 0,5).
- 6. K.S.Tosmaganbetova, A.K.Tashenov, S.S.Dosmagambetova. The effect of related elements on the extraction of silver by thiosemicarbamide in a stearic acid melt.- News. Tomsk: TPU, 2012. -Vol.320.№. 3.- pp.67-69. (IF- 0,5).
- 7.A.B. Yeszhanov, I.V. Korolkov, S.S. Dosmagambetova,

- M.V.Zdorovets, Güven O. "Recent progress in the membrane distillation and impact of track-etched membranes", *Polymers*. 2021; 13(15), 2520. (**IF-4.329, Q1**)
- 8.I.V.Korolkov, **A.B.Yeszhanov**, M.V.Zdorovets, S.S.Dosmagambetova "Modification of PET ion track membranes for membrane distillation of low-level liquid radioactive wastes and salt solutions", *Sep. Purif. Technol.* 227(2019) (**IF-5,107, Q1**)
- 9.M.V.Zdorovets, **A.B.Yeszhanov**, I.V.Korolkov, S.S.Dosmagambetova "Liquid low-level radioactive wastes treatment by using hydrophobized track-etched membrane", *Prog. Nucl. Energy* 118(2020) (**IF-1.569**, **Q2**)
- 10.**A.B.Yeszhanov,**I.V.Korolkov,
- S.S.Dosmagambetova "Membrane distillation of pesticide solutions using hydrophobic track-etched membranes". *Chem. Pap.* 74, 3445–3453 (2020) (**IF-1,680, Q3**)
- 11.I.V.Korolkov, A.Kuandykova, **A.B.Yeszhanov**, O.Güven, Y.G.Gorin, M.V.Zdorovets Modification of PET Ion-Track Membranes by Silica Nanoparticles for Direct Contact Membrane Distillation of Salt Solutions, Membranes. 2020; 10(11):322. (**IF-3.094, Q2**).

Author of a number of patents and author's certificate:

- 1. Innovation Patent of the Republic of Kazakhstan № 26777 //Method of extraction of copper(II).Publ. 15.10.2012, Byul. № 10– 3 p.
- 2. Pre-patent of the Republic of Kazakhstan Nº 15606. //A method for extracting vanadium. Published on 15.04.2005,.byul. Nº 4.- 4 p.
- 3. A.s. USSR. № 1413975. 1988 Method of extraction of metals from oxides
- 4. A.s. USSR. № 1194902. The materials cannot be published in the open press (1985)
- 5.A.s. USSR N_{2} 977508. A method for separating bismuth and lead. Publ. 30.11.82.
- 6. A.s. USSR № 875864 Method of separation of bismuth and lead. The materials cannot be published in the open press (1981)