

LIST

scientific and methodological works of Takibayeva Altynaray Temirbekovna, for the period 2019-2022,
Candidate of Chemical Sciences, Head of the Department of Chemistry and Chemical Technologies

№ p/p	Name	Nature of work	Output	Volume, page	Co-authors
Научные и научно-методические работы					
1	Determination of metal content in coals of Central Kazakhstan (monograph)	printed	Warsaw, Poland: printed by "iScience" Sp.z o. o.-2019. – 61 p. ISBN 978-83-66216-12-9	61	Oralova A.T., Kasenov R.Z.
2	Synthesis, structure and anti-radical activity of 6-methyl-4-oxo-4H-chromen-3-acylhydrazone (article)	printed	News of the national academy of sciences of the republic of Kazakhstan Series Chemistry and Technology. Volume 4, Number 436 (2019), 25 – 31. https://doi.org/10.32014/2019.2518-1491.38	7	O. A. Nurkenov, M.K. Ibraev, T.M. Seilkhanov, Z.T. Shulgau, S.D. Fazylov
3	Synthesis, structure and antimicrobial activity of substituted chalcones and their derivatives (article)	printed	Bulletin of KarSU. Chemistry series, Karaganda: KarSU, 2019, No. 3(95), pp. 28-36. https://doi.org/10.31489/2019Ch3/28-36	9	M.K. Ibraev, S.B. Achmetova, M.B. Issabayeva, O.A. Nurkenov, O.T. Seilchanov
4	Synthesizing nitrile-containing glyconitrile (co) polymers (article) (S)	printed	News of The National Academy of Sciences of The Republic of Kazakhstan-Series Chemistry And Technology. 2019. № 6, P. 42-48 WOS:000503371400006 https://doi.org/10.32014/2019.2518-1491.72	4	Рахимберлинова Ж Б.; Мустафина Г.А.; Кулаков И., В; Искаков А.Р.; Назарова О.Г.
5	Synthesis of composite material based on coal mining waste using wave chemistry methods (article)	printed	Bulletin of KarSU. Chemistry series, Karaganda: KarSU, 2019, No. 3(95), pp. 28-36	9	Ibraev M.K., Achmetova S.B., Issabayeva M.B., Nurkenov O.A.,

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					Seilchanov O.T.
6	Selecting optimal modes of knotweed raw materials pressing out and developing technology for obtaining dry extract (article)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky", 2019. - No. 5 (437). - P.82-87. WOS:000490927500011 https://doi.org/10.32014/2019.2518-1491.57	6	I.V. Kulakov, D.M. Sydykova, A.S. Kapbassova, Zh.B. Rachimberlinova
7	Optimization of methods of quantitative determining flavanoids in knotweed raw material (article)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky, 2019. – № 5 (437). – P.88-91. WOS:000490927500012 https://doi.org/10.32014/2019.2518-1491.58	4	I.V. Kulakov, A.S. Kapbassova D.M. Sydykova, Zh.B. Rachimberlinova
8	Preparation of polymeric nanoparticles of albumin and immobilization of them with the anticancer drug “cyclophosphane” (article)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky, 2019. – № 6 (438). – C.36-41. WOS:000503371400005 https://doi.org/10.32014/2019.2518-1491.71	6	E.M. Tazhbayev, A.A. Bakibayev, T.S. Zhumagalieva, L.Zh. Zhapparova, A.A. Ardabek, N.Zh. Gazizova, O.E. Mukashev, A.M. Tazhibay
9	Chemical technology in production (monograph)	printed	Warsaw: iScienceSp.z o. o., -2020. – 145 p. ISBN 978-83-66216-28-0	145	G.N. Musina, M.K. Ibatov, Zh.B. Rakhimberlinova, M.I. Baikenov
10	Production of cyclodextrin nanocomplexes based on N'-((5-nitrofuran-2-yl)methylene)iso nicotinohydrazide and	printed	Bulletin of KarSU. Chemistry series, Karaganda: KarSU, 2020, No. 1 (97), P.52-59. WOS:000523428000006 https://doi.org/10.31489/2020CH1/52-59	8	O.A. Nurkenov, S.D. Fazylov , T.M. Seilkanov , A.Zh. Mukasheva

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	research of their structure by physical and chemical methods (article) (S)				G.Zh. Karipova, A.G.Tomabayeva
11	Getting humate in a coal oxidation process (article) (CA)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky, 2020. – № 3 (443). – P.22-29. WOS:000541849600003 https://doi.org/10.32014/2020.2518-1491.39	8	P.N. Naguman, A.A. Zhorabek, I.V. Kulakov, B.B. Akimbekova, V.A. Iskakova
12	Activation method of cleaning process gas (article) (CA)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky, 2020. – № 3 (441). – P.22-29. WOS:000541849600010 https://doi.org/10.32014/2020.2518-1491.46	8	Zh.B. Rakhimberlinova, O.G. Nazarova, A.R. Iskakov, G.N. Musina, I.V. Kulakov
13	Some directions in the modification of azoles (article)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky, 2020. – № 5 (441). – P.73-79. WOS:000604210600011 https://doi.org/10.32014/2020.2518-1491.84	7	M.K. Ibrayev , S.B. Akhmetova , S.D. Fazylov , Zh.B. Rachimberlinova, M.B. Issabayeva , A.A. Kelmyalene
14	Indicators of cell metabolism in vitro in researches of anti-inflammatory and cytotoxic effects of fulleropyrrolidines C60 and their initial substrates (article) (S)	printed	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of Chemistry and Technology, Almaty: JSC "Institute of Fuel, Catalysis and Electrochemistry named after D.V. Sokolsky, 2020. – № 5 (387). – P.25-33. WOS:000605724300003 https://doi.org/10.32014/2020.2518-1467.139	9	S.D. Fazylov , O.A. Nurkenov, A.E. Arinova, A.M. Gazaliev, R.E. Bakirova, M.K. Ibrayev, A.S. Fazylov

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15	Research on the development of technology for processing refractory gold ore (monograph)	printed	Warsaw: iScience Sp.z.o.o.- 2020. – 120 c. ISBN 978-83-66216-39-6	120	Amirkhan A.A., Akimbekova B.B., Zhorabek A.A., Kaiyrbaeva M.Zh., Alieva M.R.
16	Production of curd dessert "Milk Crusty"	printed	Collection of materials of the international scientific and practical conference "Innovative ways to solve urgent problems in the development of the food and petrochemical industry", held on November 12-14, 2020 at the Bukhara Institute of Engineering and Technology - Bukhoro, 2020, – P.132-135.	4	Derbush S.N., Kinayatov M.A.
17	Flavonoids of Populus Balsamifera plants and their biological activity	printed	Proceedings of the Republican student. scientific online conf. “The contribution of youth science to the implementation of the strategy “Kazakhstan-2050”, dedicated. 1150th anniversary of the scientist, philosopher Abu Nasr al-Farabi (April 16-17, 2020), Karaganda: KSTU, 2020. - P. 202-203	2	Kalkenova A.T., Atayeva A.
18	The effect of ultrasonic activation on the extraction process of sulfoguminic acid	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky readings No. 12, June 18-19, 2020), Karaganda: KSTU, 2020. – Ч. 2. – P. 890-892	3	Zhorabek A.A.
19	Extraction of concentrated extract from plant material of red ribbon using dilute carbon dioxide	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky readings No. 12, June 18-19, 2020), Karaganda: KSTU, 2020. – Ч. 2. – P. 884-886	3	Sydykova D.M.
20	Synthesis of N-methyl-2-(4-styrylphenyl)-3,4-fullerpyrrolidine	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky readings No. 12, June 18-19, 2020), Karaganda: KSTU, 2020. – P. 2. – P. 837-838	2	Nurkenov O.A., Ibraev M.K.
21	Populus Balsamifera flavonoids and their	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the	3	Kalkenova A.T.

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	biological activity		Plan of the Nation" (Saginovsky readings No. 12, June 18-19, 2020), Karaganda: KSTU, 2020. – P. 2. – P. 767-769		
22	New sorption materials for cleaning wastewater from petroleum products	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky readings №12, June 18-19, 2020.), Karaganda: KSTU, 2020. – P. 2. – P. 274-276	3	Bulkaiyrova A.R.
23	Heterocyclic compounds (pyrazole, thiazole) (monograph)	printed	Publishing house LLP "SANAT - Polygraphy". - .- 2021. – 120 c. ISBN 978-83-66216-39-6	120	Nurkenov O.A., Ibraev M.K., Kulakov I.V.,
24	Some derivatives of vinyl ether monoethanolamine (monograph)	printed	Publishing house LLP "SANAT - Polygraphy". - 2021. – 126 p. ISBN 978-9965-38-460-8	126	
25	Derivebetulinfrom Kyrgyz Birch Bark(betulakirghisorum) through alkaline hydrolysis and microwave radiation methods (article)	printed	Reports of the National Academy of Sciences of the Republic of Kazakhstan, Almaty: JSC «D.V. Sokolsky institute of fuel, catalysis and electrochemistry», 2021.– Vol. 4, Number 338. – P. 87-92. https://doi.org/10.32014/2021.2518-1483.63	6	Kasenov R.Z., Demets O.V., Zhumadilov S.S., Bakibaev A.A.
26	Isolation of betulin from birch bark (betula kirghisorum) by the ultrasonic activation method (article)	printed	Reports of the National Academy of Sciences of the Republic of Kazakhstan, Almaty: JSC «D.V. Sokolsky institute of fuel, catalysis and electrochemistry», 2021. – Vol. 5, Number 339. – P. 182-188. https://doi.org/10.32014/2021.2518-1483.98	7	Kasenov R.Z., Demets O.V., Alieva M.R., Bakibaev A.A.
27	Isolation of Betulin from Kyrgyz Birch Bark (Betula Kirghisorum) by Microwave Activation and Study of Its Quantitative Yield	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky Readings No. 13, June 17-18, 2021). Ministry of Education and Science of the Republic of Kazakhstan, KarTU. - Karaganda: KSTU, 2021. - P. 1901-1903	3	Demets O.V., Kasenov R.Z.
28	Combined methods for	printed	Proceedings of the International scientific-practical. conf. "Integration of	3	Naguman P.N.,

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	processing oxidized copper ores		science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky Readings No. 13, June 17-18, 2021). Ministry of Education and Science of the Republic of Kazakhstan, KarTU. - Karaganda: KSTU, 2021. – P. 1870-1872		Jakina A.Kh.
29	Isolation of artemisetin from vegetable raw materials of Ayania shrubs (ajania fruticulosa (ledeb.) poljak)	printed	Proceedings of the International scientific-practical. conf. "Integration of science, education and production - the basis for the implementation of the Plan of the Nation" (Saginovsky Readings No. 13, June 17-18, 2021). Ministry of Education and Science of the Republic of Kazakhstan, KarTU. - Karaganda: KSTU, 2021. – P. 1898-1900	3	Syzdykova D.
30	Methods for the preparation, purification and identification of betulin and related compounds (monograph)	printed	Publishing house LLP "SANAT - Polygraphy". - 2021. – 179 p. ISBN 978-9965-38-465-3	179	A.A. Bakibaev, M.V. Lyapunov, E.A. Mamaeva, O.V. Demets, M.R. Alieva, V.S. Malkov
31	Synthesis and structure of new 4-(4-bromo-3,5-dimethylpyrazolyl) benzaldehyde under conditions of convection heating and microwave irradiation (article)	printed	Colloquium-journal. Wydawca «Interdruk» Poland, Warszawa Annopol 4, 03-236. - Colloquium -journal №15 (138), 2022. – 62-64 pp. https://doi.org/10.24412/2520-6990-2022-15138-62-64 https://cloud.mail.ru/attaches/16541518381403726625%3B0%3B1?folder-id=0&x-email=altynarai81%40mail.ru&cvq=f	8	Ibraev M. K., Nurkenov O.A., Rakhimberlinova Zh.B., Isabayeva M.B.
32	Methods of Betulin Extraction from Birch Bark (article)	printed	Molecules 2022, 27 (11), 3621. https://doi.org/10.3390/molecules27113621	21	Demets, O.V.; Kassenov, R.Z.; Aliyeva, M.R.
33	Synthesis, Structure and Molecular Docking of New 4,5-Dihydrothiazole Derivatives Based on 3,5-Dimethylpyrazole and	printed	Molecules 2022, 27, 7598. https://doi.org/10.3390/molecules27217598	16	Ibrayev, M.K.; Nurkenov, O.A.; Rakhimberlinova, Z.B.; Palamarchuk,

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	Cytisine and Salsoline Alkaloids (article)				I.V.; Turdybekov, D.M.; Kelmyalene, A.A.; Kulakov, I.V.
34	Synthesis and antiradical activity of substituted chalcones and their derivatives (article)	printed	News of the National Academy of Sciences of the Republic of Kazakhstan Series Chemistry and Technology, Almaty: JSC «D.V. Sokolsky institute of fuel, catalysis and electrochemistry», 2022. - Volume 3, Number 452. – P. 97-110 https://doi.org/10.32014/2518-1491.121	0,9	M. Ibrayev, O. Nurkenov, Zh. Rakhimberlinova, Z. Shulgau, M. Issabayeva, A. Kelmyalene
35	Synthesis of pyrazoles based on α , β -unsaturated ketones (article)	printed	Colloquium-journal. Wydawca «Interdruk» Poland, Warszawa Annopol 4, 03-236. - Colloquium -journal №15 (138), 2022. – 65-69 pp. https://doi.org/10.24412/2520-6990-2022-15138-65-6 https://cloud.mail.ru/attaches/16692037050390086075%3B0%3B2	0,3	Ibraev M. K., Nurkenov O.A., Rakhimberlinova Zh.B., Isabayeva M.B.
Copyright certificates, patents					
1	Computer methods in chemistry		Certificate of entry into the state register of registration of rights to objects protected by copyright №1783 от 15.02.2019		Tuktybaeva A.E., Zhunisova M.S.
2	Technology of raw hydrocarbon processing		Certificate of entry into the state register of registration of rights to objects protected by copyright №1831 от 19.02.2019		Zhunisova M.S., Ibraev M.K.
3	Some derivatives of monoethanolamine vinyl ether		Certificate of entry into the state register of registration of rights to objects protected by copyright №1834 от 19.02.2019		
4	Modern analytical chemistry		Certificate of entry into the state register of registration of rights to objects protected by copyright №1880 от 20.02.2019		Dudkina A.A.
5	Method for enrichment of		Innovation patent № 33122 РК на изобретение. 24.09.2018, бюл. №36		Naguman P.N.,

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	oxidized copper-containing raw materials				Tokaeva Z.M., Nagumanova S.B.
6	Electromagnetic device for preventing salt deposits in heat exchange equipment		Utility model patent № 3955 PK , 08.01.2019, бҮЛ. №19		Mekhtiyev A.D., Alkina A.D., Kaliaskarov N.B., Danियarova A.T., Tajibayeva A.A., Amirov A.Zh., Yugay V.V., Esenzholov U.S.
7	Biogrowth stimulant for young cattle		Invention Patent № 33451 PK , 15.02.2019, бҮЛ. №7		Ibraev M.K., Davletzhanova Zh.T., Malibekova A.A..
8	4-(5-(4-Methoxyphenyl)-1-Npyrazol-3-yl)benzene-1,3-diol with antioxidant (antiradical) action		Invention Patent № 33049 PK , 03.09.2018, бҮЛ. №33		Gazaliev A.M., Nurkenov O.A., Arinova A.E., Shulgau Z.T., Oralova A.T., Kasenov R.Z., Akzholtay A.N.
9	Determination of metal content in coals of Central Kazakhstan		Certificate of entry into the state register of registration of rights to objects protected by copyright №6092 от 28.10.2019		Oralova A.T., Kasenov R.Z., Akzholtay A.N.
10	3-(((pyridine)-2-yl-methyl)imino)methyl)-4H-chromen-4-one, which has an antimicrobial (antibacterial)		Invention Patent №34914 PK , 22.10.2019г.		Ibraev M.K., Nurkenov O.A., Shulgau Z. T., Nurmaganbetov

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	effect				Zh.S., Akimbekova B., Oralova A.T., Zhorabek A.A.
11	3-(((pyridine)-2-yl- methyl)imino)methyl)-4H- chromen-4-one with antibacterial and antimycotic activity		Invention Patent № 34914 от 23.04.2021 г.		Ibraev M.K., Nurkenov O.A., Shulgau Z.T., Nurmaganbetov Zh.S., Akimbekova B.B. Zhorabek A.A.
12	3-((4S,5S) 3,4-dimethyl-5- phenyloxazolidin-2-yl)- 4H- chromen-4-one with antimicrobial (antibacterial) activity		Invention Patent №34916 PK, 21.10.2019г.		Ibraev M.K., Isabayeva M.B., Nurkenov O.A., Nurmaganbetov Zh.S., Shulgau Z.T., Rakhimberlinova Zh.B., Alieva M.R.
13	Trends in the method of determining non-ferrous metals in Karaganda basin coal		Certificate of entry into the state register of registration of rights to objects protected by copyright №6103 от 28.10.2019		Malybaeva M.K., Alieva M.R.
14	3-(2,4-Dihydroxyphenyl)-5- (4-methoxyphenyl)-N- phenyl-4,5-dihydroxy-1H- pyrazole-1carbothioamide with antioxidant (antiradical)		Invention Patent №34267 PK, 06.05.2020, БЮЛ. 18		Shulgau Z.T., Nurkenov O.A., Isabaeva M.B., Ibraev M.K.

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	action				
15	N-cinnamoylanabazine, which has antimicrobial (antibacterial) activity		Utility model patent № 5850 PK		Nurkenov O.A., Nurmaganbetov Zh.S., Seidakhmetova R.B., Kaiyrbaeva M.Zh., Amirkhan A.A., Alieva M.R.
16	N-lipoylanabasine, which has an antimicrobial (antibacterial) effect		Utility model patent № 5852 PK		Ibraev M.K, Nurkenov O.A., Seidakhmetova R.B., Nurmaganbetov Zh.S., Isabayeva M.B., Malybaeva M.K., Amanzholova A.S.
17	Dessert curd product		Utility model patent № 5897 PK, 26.02.2021, бюл. №8		
18	Chemometrics and metrological support of chemical analysis		Certificate of entry into the state register of registration of rights to objects protected by copyright №9662 от 06.04.2020		Sultanmakhmut A., Olzhabaeva A.S.
19	Production of polymer materials		Certificate of entry into the state register of registration of rights to objects protected by copyright №9203 от 09.04.2020		Rakhimberlinova Zh.B., Nurzhanova K.O.
20	Theoretical foundations of delicate organic synthesis		Certificate of entry into the state register of registration of rights to objects protected by copyright №9652 от 05.05.2020		Isabayeva M.B., Ibraev M.K.
21	Synthesis of biologically		Certificate of entry into the state register of registration of rights to objects		Malybaeva M.K.,

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	active substances		protected by copyright №9702 от 06.05.2020		Zhorabek A.A., Aimakova T.B.
22	Research methods of physico-chemical properties of the structure of organic compounds		Certificate of entry into the state register of registration of rights to objects protected by copyright №9506 от 29.04.2020		Fazylov S.D., Bakirova R.E., Malybaeva M.K., Zhorabek A.A., Bulkaiyrova A.R.
23	Study of organic compounds by physico-chemical method		Certificate of entry into the state register of registration of rights to objects protected by copyright №9632 от 05.05.2020		Sultanmakhmud A., Olzhabaeva A.S., Amanzholova A.S.
24	Research on the development of technology for processing refractory gold ore		Certificate of entry into the state register of registration of rights to objects protected by copyright №16577 от 13.04.2021		Amirkhan A.A., Akimbekova B.B., Zhorabek A.A., Alieva M.R., Kaiyrbaeva M.Zh.
25	Method for isolating betulin from birch bark <i>Betula Kirghisorum</i>		Utility model patent № 6483 PK, 08.10.2021 , бюл. №40		Kasenov R.Z., Ibraev M.K., Demets O.V., Alieva M.R.
26	Method for obtaining betulin under microwave activation conditions		Utility model patent № 7334 PK, от 12.08.2022 г.		Kasenov R.Z., Ibraev M.K., Demets O.V., Alieva M.R.
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Basic educational and methodological work (for the period of scientific and methodological work)					
1	Study of organic compounds	printed	Karaganda: LLP Sanat-Polygraphy, 2019, 60 б.,	60	Sultanova L.M.,

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	by physico-chemical method (textbook)		ISBN 978-9965-38-411-0		Akimbekova B.B., Sultanmakhamut A., Sakimbay A.D.
2	Modern problems of quality control of chemical products (textbook)	printed	Karaganda: LLP Sanat-Polygraphy, 2019, 61 c., ISBN 978-9965-38-412-7	61	Sultanova L.M., Akimbekova B.B., Sultanmakhamut A., Sakimbay A.D.
3	Theoretical foundations of delicate organic synthesis (textbook)	printed	Karaganda: KarTU publishing house, 2020, 57 б., ISBN 978-601-320-196-2	57	Ibraev M.K., Isabayeva M.B.,
4	Modern methods of organic synthesis (textbook)	printed	Karaganda: KarTU publishing house, 2021, 73 б., ISBN 978-601-320-392-8	73	Amanzholova A.S., Tusupova A.
5	Scientific basis of organic synthesis (textbook)	printed	Karaganda: KarTU publishing house, 2022, 93 б. ISBN 978-601-320-633-2	93	Ibraev M.K., Nurkenov O.A., Zhorabek A.A.
6	Obtaining biologically active substances from natural raw materials (textbook)	printed	Karaganda: Publishing house of NPJSC "Karaganda Technical University named after Abilkas Saginov", 2022№ - 69 б. ISBN 978-601-320-710-0	69	A.T. Oralova, M.R. Alieva

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