

ISSN 2518-1467 (Online),  
ISSN 1991-3494 (Print)

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ  
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

# Х А Б А Р Ш Ы С Ы

---

---

## ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК  
РЕСПУБЛИКИ КАЗАХСТАН

## THE BULLETIN

OF THE NATIONAL ACADEMY OF SCIENCES  
OF THE REPUBLIC OF KAZAKHSTAN

1944 ЖЫЛДАН ШЫҒА БАСТАҒАН  
ИЗДАЕТСЯ С 1944 ГОДА  
PUBLISHED SINCE 1944

3

---

АЛМАТЫ  
АЛМАТЫ  
ALMATY

2018

МАҰ  
МАЙ  
МАМЫР

---

---

*NAS RK is pleased to announce that Bulletin of NAS RK scientific journal has been accepted for indexing in the Emerging Sources Citation Index, a new edition of Web of Science. Content in this index is under consideration by Clarivate Analytics to be accepted in the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index. The quality and depth of content Web of Science offers to researchers, authors, publishers, and institutions sets it apart from other research databases. The inclusion of Bulletin of NAS RK in the Emerging Sources Citation Index demonstrates our dedication to providing the most relevant and influential multidiscipline content to our community.*

*Қазақстан Республикасы Ұлттық ғылым академиясы "ҚР ҰҒА Хабаршысы" ғылыми журналының Web of Science-тің жаңаланған нұсқасы Emerging Sources Citation Index-те индекстелуге қабылданғанын хабарлайды. Бұл индекстелу барысында Clarivate Analytics компаниясы журналды одан әрі the Science Citation Index Expanded, the Social Sciences Citation Index және the Arts & Humanities Citation Index-ке қабылдау мәселесін қарастыруда. Web of Science зерттеушілер, авторлар, баспашылар мен мекемелерге контент тереңдігі мен сапасын ұсынады. ҚР ҰҒА Хабаршысының Emerging Sources Citation Index-ке енуі біздің қоғамдастық үшін ең өзекті және беделді мультидисциплинарлы контентке адалдығымызды білдіреді.*

*НАН РК сообщает, что научный журнал «Вестник НАН РК» был принят для индексирования в Emerging Sources Citation Index, обновленной версии Web of Science. Содержание в этом индексировании находится в стадии рассмотрения компанией Clarivate Analytics для дальнейшего принятия журнала в the Science Citation Index Expanded, the Social Sciences Citation Index и the Arts & Humanities Citation Index. Web of Science предлагает качество и глубину контента для исследователей, авторов, издателей и учреждений. Включение Вестника НАН РК в Emerging Sources Citation Index демонстрирует нашу приверженность к наиболее актуальному и влиятельному мультидисциплинарному контенту для нашего сообщества.*

Б а с р е д а к т о р ы

х. ғ. д., проф., ҚР ҰҒА академигі

**М. Ж. Жұрынов**

Р е д а к ц и я а л қ а с ы:

**Абиев Р.Ш.** проф. (Ресей)  
**Абишев М.Е.** проф., корр.-мүшесі (Қазақстан)  
**Аврамов К.В.** проф. (Украина)  
**Аппель Юрген** проф. (Германия)  
**Баймуқанов Д.А.** проф., корр.-мүшесі (Қазақстан)  
**Байпақов К.М.** проф., академик (Қазақстан)  
**Байтулин И.О.** проф., академик (Қазақстан)  
**Банас Иозеф** проф. (Польша)  
**Берсимбаев Р.И.** проф., академик (Қазақстан)  
**Велихов Е.П.** проф., РҒА академигі (Ресей)  
**Гашимзаде Ф.** проф., академик (Әзірбайжан)  
**Гончарук В.В.** проф., академик (Украина)  
**Давлетов А.Е.** проф., корр.-мүшесі (Қазақстан)  
**Джрбашян Р.Т.** проф., академик (Армения)  
**Қалимолдаев М.Н.** проф., академик (Қазақстан), бас ред. орынбасары  
**Лаверов Н.П.** проф., академик РАН (Россия)  
**Лупашку Ф.** проф., корр.-мүшесі (Молдова)  
**Мохд Хасан Селамат** проф. (Малайзия)  
**Мырхалықов Ж.У.** проф., академик (Қазақстан)  
**Новак Изабелла** проф. (Польша)  
**Огарь Н.П.** проф., корр.-мүшесі (Қазақстан)  
**Полещук О.Х.** проф. (Ресей)  
**Поняев А.И.** проф. (Ресей)  
**Сагиян А.С.** проф., академик (Армения)  
**Сатубалдин С.С.** проф., академик (Қазақстан)  
**Таткеева Г.Г.** проф., корр.-мүшесі (Қазақстан)  
**Умбетаев И.** проф., академик (Қазақстан)  
**Хрипунов Г.С.** проф. (Украина)  
**Юлдашбаев Ю.А.** проф., РҒА корр.-мүшесі (Ресей)  
**Якубова М.М.** проф., академик (Тәжікстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының Хабаршысы».

**ISSN 2518-1467 (Online),**

**ISSN 1991-3494 (Print)**

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы»РҚБ (Алматы қ.)

Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде  
01.06.2006 ж. берілген №5551-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 2000 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18,  
www: nauka-nanrk.kz, bulletin-science.kz

---

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2018

Типографияның мекенжайы: «Аруна» ЖК, Алматы қ., Муратбаева көш., 75.

Г л а в н ы й р е д а к т о р  
д. х. н., проф. академик НАН РК  
**М. Ж. Журинов**

Р е д а к ц и о н н а я к о л л е г и я:

**Абиев Р.Ш.** проф. (Россия)  
**Абишев М.Е.** проф., член-корр. (Казахстан)  
**Аврамов К.В.** проф. (Украина)  
**Апель Юрген** проф. (Германия)  
**Баймуканов Д.А.** проф., чл.-корр. (Казахстан)  
**Байпаков К.М.** проф., академик (Казахстан)  
**Байтулин И.О.** проф., академик (Казахстан)  
**Банас Иозеф** проф. (Польша)  
**Берсимбаев Р.И.** проф., академик (Казахстан)  
**Велихов Е.П.** проф., академик РАН (Россия)  
**Гашимзаде Ф.** проф., академик (Азербайджан)  
**Гончарук В.В.** проф., академик (Украина)  
**Давлетов А.Е.** проф., чл.-корр. (Казахстан)  
**Джрбашян Р.Т.** проф., академик (Армения)  
**Калимолдаев М.Н.** академик (Казахстан), зам. гл. ред.  
**Лаверов Н.П.** проф., академик РАН (Россия)  
**Лупашку Ф.** проф., чл.-корр. (Молдова)  
**Моход Хасан Селамат** проф. (Малайзия)  
**Мырхалыков Ж.У.** проф., академик (Казахстан)  
**Новак Изабелла** проф. (Польша)  
**Огарь Н.П.** проф., чл.-корр. (Казахстан)  
**Полещук О.Х.** проф. (Россия)  
**Поняев А.И.** проф. (Россия)  
**Сагиян А.С.** проф., академик (Армения)  
**Сатубалдин С.С.** проф., академик (Казахстан)  
**Таткеева Г.Г.** проф., чл.-корр. (Казахстан)  
**Умбетаев И.** проф., академик (Казахстан)  
**Хрипунов Г.С.** проф. (Украина)  
**Юлдашбаев Ю.А.** проф., член-корр. РАН (Россия)  
**Якубова М.М.** проф., академик (Таджикистан)

**«Вестник Национальной академии наук Республики Казахстан».**

**ISSN 2518-1467 (Online),**

**ISSN 1991-3494 (Print)**

Собственник: РОО «Национальная академия наук Республики Казахстан» (г. Алматы)

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан №5551-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год

Тираж: 2000 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219, 220, тел. 272-13-19, 272-13-18.

www: nauka-nanrk.kz, bulletin-science.kz

---

© Национальная академия наук Республики Казахстан, 2018

Адрес типографии: ИП «Аруна», г. Алматы, ул. Муратбаева, 75

E d i t o r i n c h i e f

doctor of chemistry, professor, academician of NAS RK

**M. Zh. Zhurinov**

E d i t o r i a l b o a r d:

**Abiyev R.Sh.** prof. (Russia)  
**Abishev M.Ye.** prof., corr. member. (Kazakhstan)  
**Avramov K.V.** prof. (Ukraine)  
**Appel Jurgen,** prof. (Germany)  
**Baimukanov D.A.** prof., corr. member. (Kazakhstan)  
**Baipakov K.M.** prof., academician (Kazakhstan)  
**Baitullin I.O.** prof., academician (Kazakhstan)  
**Joseph Banas,** prof. (Poland)  
**Bersimbayev R.I.** prof., academician (Kazakhstan)  
**Velikhov Ye.P.** prof., academician of RAS (Russia)  
**Gashimzade F.** prof., academician ( Azerbaijan)  
**Goncharuk V.V.** prof., academician (Ukraine)  
**Davletov A.Ye.** prof., corr. member. (Kazakhstan)  
**Dzhrbashian R.T.** prof., academician (Armenia)  
**Kalimoldayev M.N.** prof., academician (Kazakhstan), deputy editor in chief  
**Laverov N.P.** prof., academician of RAS (Russia)  
**Lupashku F.** prof., corr. member. (Moldova)  
**Mohd Hassan Selamat,** prof. (Malaysia)  
**Myrkhalykov Zh.U.** prof., academician (Kazakhstan)  
**Nowak Isabella,** prof. (Poland)  
**Ogar N.P.** prof., corr. member. (Kazakhstan)  
**Poleshchuk O.Kh.** prof. (Russia)  
**Ponyaev A.I.** prof. (Russia)  
**Sagiyani A.S.** prof., academician (Armenia)  
**Satubaldin S.S.** prof., academician (Kazakhstan)  
**Tatkeyeva G.G.** prof., corr. member. (Kazakhstan)  
**Umbetayev I.** prof., academician (Kazakhstan)  
**Khripunov G.S.** prof. (Ukraine)  
**Yuldashbayev Y.A.,** prof. corresponding member of RAS (Russia)  
**Yakubova M.M.** prof., academician (Tadjikistan)

**Bulletin of the National Academy of Sciences of the Republic of Kazakhstan.**

**ISSN 2518-1467 (Online),**

**ISSN 1991-3494 (Print)**

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)

The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 5551-Ж, issued 01.06.2006

Periodicity: 6 times a year

Circulation: 2000 copies

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,  
<http://nauka-nanrk.kz/>, <http://bulletin-science.kz>

---

© National Academy of Sciences of the Republic of Kazakhstan, 2018

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

**B. A. Baitanayev**

A. Kh. Margulan Institute of Archeology, Almaty, Kazakhstan.  
E-mail: baytyanaev@mail.ru

## **SETTLEMENT OF THE LATE BRONZE AGE IN KARZHANTAU FOOTHILL**

**Abstract.** The settlement of the Bronze Age – Burgulyuk is located 50 km to the south-east from Shymkent, near homonymic natural landmark of the north-west slopes of Karzhantau range in South Kazakhstan oblast.

According to the settlement excavation materials, there are fixed two large settling periods, matching by their chronological frames with the first stage of Tashkent oasis Burgulyuk culture – IX-VII centuries B.C., that is also synchronous with the monuments of Central Kazakhstan, Zailiysky Alatau and Semirechye of that time.

The peculiarity of the found ceramic material, its distinctive features from synchronous crops, lead to the idea that we are dealing with a new type of pottery of the late bronze age, which we propose to call Karzhantau.

The originality of the found ceramic material, its distinctive features from synchronous in time cultures, lead to the idea that we are dealing with a new type of pottery of the Late Bronze Age, which we propose to call Karzhantau.

**Keywords:** culture, chronology, ceramics, vessel, settlement, Bronze Age, excavations, stratigraphy.

In due time, V.M. Masson, studying the origins of the urban culture of Central Asia, wrote: “New materials with more and more persuasion show that the origins of the urbanization process in Central Asia, at least in its southern regions, should be searched in the monuments of the Bronze Age. From our viewpoint, we can speak about two epochs in the urbanization of Central Asia – the ancient oriental (the end of III – middle of I millennium BC) and antique (III century BC – IV century AD)”. [Masson V.M., 1974, p. 6].

V.M. Masson determined the chronology of the initial stage of the urbanization, analyzing materials of the monuments of the Bronze Age of southern regions of Central Asia, such as, Namazga-Depe, Altyn-Depe, Yas-Depe, Sapallitepe, etc. and found their ancient oriental roots. Note that the question was about the territory of Amu-Darya basin.

In the studied area of the right bank of Syr-Darya, we have discovered a settlement of the Bronze Age, which, undoubtedly, is the first stage in the urbanization of Ispidzhab historical-cultural district of South Kazakhstan.

The settlement of the Bronze Age was discovered in the course of the exploration of Burgulyuk-2, the burial ground of the Early Iron Age, located 50 km to the south-east from Shymkent, near homonymic natural landmark of the north-west slopes of Karzhantau range in South Kazakhstan oblast. At that time, in 2002, during excavation of the mounds, as well as in the course of overtures in several burial mounds, we found fragments of ceramics characteristic of the Bronze Age. On this basis, we assumed that there was overlaying of the Early Iron Age burial mounds on the earlier one [Baitanayev B.A., 2002, p. 249-251]. However, later during the desk reviews we found out that the burial mounds were constructed on the territory of the Bronze Age settlement, soil taken from this settlement was also used for their mounds.

In 2003, 7 excavations were deliberately laid on the territory of Burgulyuk-2 burial ground to identify occupation layers of the Bronze Age settlement. In the course of the archeological works, we revealed remaining structures of the settlement. Also, an element of a dwelling of the Bronze Age with round planning was revealed on the western edge of the burial ground near 10<sup>th</sup> burial mound [Baitanayev B.A., et al., 2004].

The excavations conducted on the settlement showed that the southern part of the natural chain with the monument was settled very intensively.

Two large periods of the settlement functioning are clearly fixed. In the first stage, people erected their dwellings using traditional many years' building experience of their ancestors. At first, they excavated foundation pits of corresponding sizes, which walls were stoned in several rows. Then, apparently, walls of framed type, which were covered by roof, were erected.

In the course of the excavations, we defined the character of the blockwork, remained on some sections at a height of four stone rows (about 60 cm). They were lined with the observation of certain regularities. Thus, in the southern part, the blockwork looked as follows: the row of rolled stones (boulders) was on the underside, they were covered by large flattened stones. Then there was again the row of boulders, which, in its turn, covered the flattened stones.

Judging by remains of the walls, we revealed sizeable house, where outlined four rooms.

Second dwelling, revealed under the 10<sup>th</sup> burial mound, as against the described above, had round planning. In the course of the opening, we determined that the revealed sangar is spread by the north-south line and consists of 4 rows of large river boulders. The boulders from the sangar have various sizes. The overall length of the revealed wall remains is about 1.5 m, width – 0.5 m, height – 0.5 m. The last one is a part of the dwelling by 1.42 m width, however, the northern wall of the dwelling was lost. The floor level is lowered in the western direction. Near the wall, we cleared bones of animals and small fragments of ceramics. Also, a fragmented boat-shaped grain bruiser of a small size was found on the floor level. The floor surface was covered by separate accumulations of coals and globs of iron clay. Possibly one more dwelling was joint to this structure in the south.

Explorers of kulusay culture of the Late Bronze Age, separated on the territory of mountainous areas of Northern Tien Shan, note certain regularity in the selection of the habitation place, characterized by the arrangement of settlements on the verge of forest area and Alpine meadows [Mar'yashev A.N., Goryachev A.A., 2001, p. 121]. In this context, settling of piedmont slopes of Karzhantau with rich timber reserves in the Late Bronze Age is entirely regular. To a certain degree, selection of the habitation place for this settlement is similar to settlements of kulusay type.

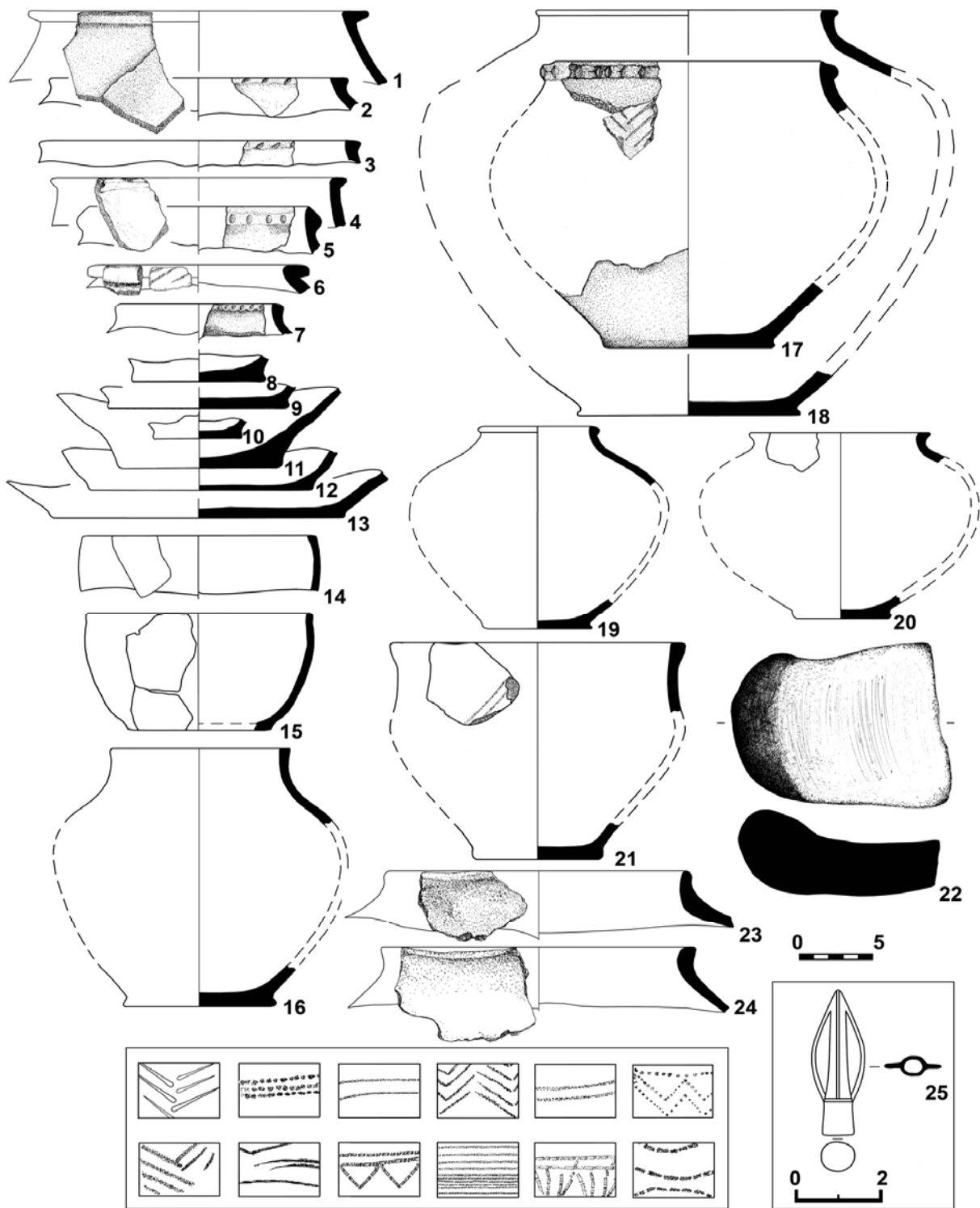
Our settlement is located so, that it is surrounded by mountain offshoots from three sides, protecting it from the northern-eastern winds prevailing in winter. Availability of water sources and heavy grass stand, allowing graze cattle from the middle of spring to the middle of autumn, made it convenient for cattle breeding, which apparently formed the basis of household. Cattle, judging by findings of bones, consisted of small and great cattle. However, crop farming also had specified value. Findings of the grain bruisers' pieces (figure 22) give evidence of cereal cropping, most likely, by boharic method. At the same time, only limited areas, irrigated at the expense of small canals, can be used under the crop farming. The crop farming, probably, had secondary character, but not general one. The settlers were also engaged in weaving and used for that spindle whorls, turned from walls of vessels.

Ceramics, obtained in the place of settlement, was found only in fragments. It was formed without use of a potter's wheel by the ribbon method or by clay extrusion, heap firing. The paste was well washed and mixed. Broken shell rock, gypsum, and sometimes fine sand, were used as a thinning agent. Collars of all kinds of vessels were often decorated by crossed riffling (nail ornament) or lines, and surface – by comb-shaped, linear and pressed ornament, covered on the water-logged paste in the form of herringbone, rarely – zigzag. Surface of the most vessels was carefully polished and expressly glossed. By available forms, all the crockery can be divided into the following types:

*Caldrons*: the surface is usually smoked. Judging by available fragments, vessels had spherical or close to it form. Collar of a simple configuration is marked by a round, sometimes pulled out. Sometimes, the upper base of collars has a flat surface. Neck is short, bottom is flat, with a characteristic ledge in the near-bottom part. Vessels greatly vary by sizes: edge diameters consist from 13-14 cm to 33 cm and more.

*Pots*: by the quality of manufacture, sizes and forms hardly differ from caldrons, only surface has no traces of smoke.

*Bowls*: least of all meeting type of crockery. Strongly vary by sizes from 16-18 cm to 30 cm and more. A form of the collar is simple, it is like a simple continuation of the vessel wall. The thickness of fragments of large bowls achieves 1.2 cm.



Complex of findings of Karzhantau foothills Burgulyuk settlement

*Spindle whorls*: prepared from the vessel walls. Found in the main settlement of place of the settlement, existed under the 10<sup>th</sup> burial mound. Small by size spindle whorl, carefully dressed and decorated by rim by vertical lines, is of interest. Center of the circle was only traced by some sharp instrument, however, the hole was not drilled. It is not improbable that in this case, there was a prepared button, but not the spindle whorl, it was widely used by the tribes of the Late Bronze Age.



Similar crockery was found during construction of Tashkent channel, where it is defined by the Early Iron Age [Drevnyaya i srednevekovaya kul'tura Chacha, 1979, p. 10-16]. Related forms, ornament motives and methods of its application refer to the kulusay culture and presented in settlements Assy and Turgen in Zailiysky Alatau [Mar'yashev A.N., Goryachev A.A., 2001, figures 5, 28, 29, 47]. Very close resemblance has ceramics of our settlement with ceramics of Fergana kairakum culture, found in its time by B.A. Litvinskiy [Litvinskiy B.A., et al., 1962].

Ornamentation technique of the vessels consists of plain and comb-shaped stamp, scribed lines and cavities. The most of the vessels are formed by a tablet, which traces observed on the surface of ceramics. Some forms has flat upper base of the collars.

Some pots have strongly blown body and pass to the body from the straight neck (Figures 11, 16, 18- 20). Vessels of similar form were also found among complexes Assy and Turgen in Zailiysky Alatau, where such structure is explained by scientists by influence of Central Asia complexes [Mar'yashev A.N., Goryachev A.A., 2001, p. 118]. At the same time, some forms and ornament motives of ceramics found by us (especially decoration of the collar's ledge) have similarity with ceramics from Terenkara settlement, found in the northern edge of Almaty city, where it is dated by IX-VIII centuries BC [Grigor'yev F.P. *Arkhologicheskiye pamyatniki v raione g. Alma-Ata*. 1989, p. 218; Grigor'yev F.P., 1998, p. 261, 268; Samashev Z., et al., 2005, p. 19, 30-35]. From all of these complexes, ceramics from our settlement by its external characteristics more closely corresponds to the ceramics of kairakum culture. This, to our opinion, is confirmed by similar forms of crockery and absence of rounds under the collars, that cannot be said about other analyzed complexes. However, kairakum culture has less ceramics with riffling, which can be met in burgulyuk culture everywhere, that cannot be said about ceramics from Terenkara settlement, where there are similar riffling along the collar.

Ceramics of Burgulyuk settlement in Karzhantau foothill is synchronous with monuments of Zailiysky Alatau, lower reaches of Syr-Darya, Khoresm of the Late Bronze age, where it is dated by XI-VIII centuries BC and presented by Kulusay, Terenkara, Tagisken, Tazabagyab, Amirabad, Suyargan, Kairakum complexes.

Meanwhile, ceramics of dongal type, found on the territory of Central Kazakhstan\* has amazing similarity with our ceramics. V.G. Loman, had studied it, noted similarity of this ceramics with materials of sargarinsky and alexeyevskaya culture and settlement of Obitochnaya 12 type. However, existing differences and specific characteristics of the dongal ceramics didn't allow the author refer it to the last one, this gave the researcher the opportunity to specify it as a separate culture [Loman V.G., 1987].

V.G. Loman dated the dongal ceramics as of VIII century BC, may be as the later one, relating with the transition time from the Late Bronze to the Early Iron Age. As the evidence, the author presented convincing conclusions, made on the basis of excavations of Kent settlement, where two dwellings with the dongal material, cut alexeyevsky-sergansky ash hole, were studied [Loman V.G., 1987, p.128].

Burgulyuk settlement ceramics studied by us, by its external characteristics is close to the dongal type ceramics, and at the same time has its own distinctive features, such as absence of diagraphic band in the bottom of neck, stuck horizontal and obliquely placed collar, pearly ornament. At that, in separate cases, collar of large vessels is pulled out, having the form of a triangle in section, which is almost always ornamented by cuts, lateral lines or nail pressing.

The dating, offered by V.G. Loman, on the dongal ceramics, in general matches with the dates of our settlement, by which we consider the time of its functioning IX-VIII centuries BC or IX-VII centuries BC. This proves, in our opinion, found under the 10<sup>th</sup> burial mound and stratigraphically connected with our settlement bronze arrow head (figure 23). The arrow head is solid, with a longitudinal joint on a nervure. It has flaring sleeving with hole, apparently from missing thorn (?).

Similar bronze arrow heads have analogues and wide geography among monuments of the Late Bronze Age. K.A. Akishev dates them as of IX-VIII centuries BC and connects with dandybay-begazinsky period [Akishev K.A., Kushayev G.A., 1963, p. 117-118]. B.A. Litvinskiy notes their spread in XII-VII centuries BC from Caspian Sea region to the borders of China and to the south to India including [Litvinskiy B.A., 1972, p. 91-92]. In more detail, similar arrow heads were studied by N.A. Avanesova.

---

\*Taking the opportunity, I express appreciation to V.G. Loman, consulted us by the question of chronology and classification of the dongal type ceramics.

Studying bronze arrow heads on a large factual material, the scientist refers solid sleeve arrow heads to the third group and fairly notes that this type differs by "... amazing variety of forms and sizes of sheet and filling". Comparing this type of the arrow head with accompanying items from bronze, dated by XII-VIII centuries BC, she notes that these arrow heads generally originate from monuments of the Late Bronze Age with roller ceramics [Avanesova N.A., 1991, p. 40-43]. At the same time, we should note that similar bronze arrow heads with long sleeving lived to see the Early Scythian Age. S.V. Kuz'minykh, for instance, studying metallurgy of Volga-Kama, noted them in complexes of VII-VI centuries BC [Kuz'minykh S.V., 1983, p. 104, 204]. In Central Kazakhstan, among materials of tasmolinsky culture, they are also dated by VII-VI centuries BC [Vishnevskaya O.A., 1992, p. 133-134, 402]. Similar arrow heads, dated by the Early Saka period, meet among complexes of South Tagisken, Uigarak [Itina M.A., 1992, p. 41, 354].

In our opinion, it is pertinent to note here about features of the roller ceramics of the Bronze Age, which was actively studied in other historical-cultural areas.

Ye.N. Chernykh separated integrated cultural-historical similarity of the roller ceramics. Its origins he sees in the cultures of "Thracian" area. This similarity, in his opinion, involves in the late stage Central Asian monuments Yaz-1, Tillya-tepe of Afganistan and Amirabad monuments of Aral Sea region [Itina M.A., 1998, p. 87].

M.A. Itina spoke out against this opinion. She thinks that in terms only of the roller presence, we cannot unite in the integrated similarity different cultures, which are not correlated in general by other features. In her opinion, rollers under collars were more developed in the cultures of developed bronze (XIII-XII centuries BC) and connected with the Fedorov component. In Amirabad complexes, it is transformed, merging with the collar and becoming the neckband [Itina M.A., 1998, p. 87].

In earlier works, M.A. Itina, analyzing materials of Amu-Darya lowers, spoke that the roller directly under the collar and the roller as a diagraphic band in the bottom of a vessel neck appeared out of step. She thinks that the diagraphic band in the bottom of a vessel neck appeared later, close to the end of the Bronze Age culture [Itina M.A., 1977, p. 143-144].

Summarizing her conclusions, M.A. Itina comes to the point that roller in ceramics, probably, is an epochal phenomenon, connected with "trend", but not with the integrated cultural-historical similarity [Itina M.A., 1998, p. 88].

Researchers of steppe zone monument think that activity of Andronovo tribes in the second half of II millennium BC generally passed in a dry xerothermic period [Sal'nikov K.V., 1967, p. 326-327]. This forced them to look for new forms of farm management and seizure of new territories.

As for this, M.A. Itina, studying culture of South Aral sea region steppe tribes, noted that infiltration process of Andronovo (Alakul) and cut down tribes from different habitation districts into the environment of Central Asian people happened daily during all second half of II millennium BC and reflected on their culture variously [Itina M.A., 1977, p. 232]. Namely Andronovo tribes, overlapping the local Central Asian cultures, transformed into tazabagyat culture.

By opinion of B.A. Litvinskiy, a part of the cut down-Andronovo tribes, moving in more eastern direction, reaching Tashkent oasis and Fergana, in close relation with south cultures of painted ceramics, mixing with tribes of chust culture in the late stages, composed kairakkum culture [Litvinskiy B.A., 1981, p. 157]. At that, Tashkent oasis was periphery of karakkum culture, after which in the East to Semirechye including, other grouping of the steppe bronze tribes begins [Litvinskiy B.A., et al., 1962].

V.I. Sarianidi thinks that origins of the chust culture of Fergana and culture of its neighboring districts throw back to the archeological complexes as Tillyatepe of Afganistan and Khorasan. He thinks that the southern Central Asian and northern Afghan monuments represent general culture unity, expressed both in material culture, and monumental art of building. The main range of the painted ceramics culture spread is defined by V.I. Sarianidi from the end of the Caspian Sea and Kopetdag foothill to Fergana valley including [Sarianidi V.I., 1989, p. 40-42].

Slightly differently this question is interpreted by Kh. Duke, studied burgulyuk culture of Tashkent oasis, which origins throw back into the similarity of cultures of round-bottomed dyed ceramics of the Bronze Age. To his opinion, change of the steppe civilization tribes to the sedentary life couldn't help implying the culture of local citizens, that resulted in transformation of the steppe tribes' culture and formation of burgulyuk culture [Duke Kh., 1982, p. 89].

Probably, we must admit this assertion, as in the following periods there is everywhere observed absence of materials obviously ponderable to the steppe bronze. This suggests the change in traditions of the ceramic production of the last in the whole.

The complication is also that in the studied district, as well as in Tashkent oasis, where burgulyuk culture was found, burial monuments of the Late and Final Bronze Age both of burgulyuk culture and steppe look have not been found up to this day. Emphasize: the Late and Final period.

Studied burial grounds of South Kazakhstan of the Bronze Age Tautary [Maksimova A.G., 1962.], Sherbay [Smagulov Ye.A., Baratov S.R. 2001, p. 322] are dated by the earlier Fedorov stage. This dating, according to the last calibrated radiocarbon determinations, refers to XVI-XIV centuries BC [Smagulov Ye.A., Baratov S.R., 2004, p. 81]. At the same time, the dating of synchronous monuments of Tien Shan foothill (Assy-1, Turgen-2) using natural scientific methods, determined their chronological scale as XI-VII centuries BC, XII-IX centuries BC [Mar'yashev A.N., Goryachev A.A., 2001, p. 121].

Probably, absence of burial grounds of this period both in Tashkent oasis and Ispidzhab historical-cultural district, is explained, first of all, by the mere burial ceremony of tribes of that epoch, which could significantly differ from the earlier period, having ways of cineration or setting of dead bodies. This was the time of formation of Zoroastrian cultic-ritual practice in Central Asia, when Turanians and Iranians of Avesta everywhere changed to setting of their deceased relatives and cleaning of their bones.

Settlements of Tashkent oasis burgulyuk culture are located in river valleys, lowers, fens, loessial cusps and along-shore. Three types of dwellings are characteristic for this culture: 1) hasty structures of shelter type; 2) oval or round mud huts of small size, to 22 square meters; 3) mud huts of large sizes with divisions with obvious signs of many rooms' house [Buryakov Yu.F., Koshelenko G.A., 1985]. Materials of Burgulyuk-II stage were noted by scientists in bottom layers of such monuments as Shashtepe, Kaunchitepe, Kulakchin tepe, etc.

Chronology of burgulyuk culture in due time was offered by A.I. Terenozhkin. He separated there two stages: first – Burgulyuk-1 of VI-IV centuries BC and second – Burgulyuk-2, overlapped by materials of kaunchi culture of III-II centuries BC [Buryakov Yu.F., 1982, p. 69].

Kh. Duke, studying tuyabuguz settlements of Tashkent oasis burgulyuk culture, using the large factual material, dated IX-VII centuries BC that undoubtedly indicates on neighboring staying of settlers of the studied by us settlement of the Late Bronze Age. The researcher at that noted that there is a chronological gap between burgulyuk and kauchi cultures [Duke Kh., 1982, p. 90-93].

Yu.F. Buryakov admits this chronological scale not completely. In general, sharing the opinion of A.I. Terenozhkin, he thinks that besides chust-eilat component, saka component played substantial role in formation of burgulyuk culture [Buryakov Yu.F., 1982, p. 69].

A.I. Terenozhkin admitted opinion of Yu.F. Buryakov [Drevnyaya i srednevekovaya kul'tura Chacha, 1979, s. 22, 23]. Taking into account all arguments, Yu.F. Buryakov divided Tashkent oasis burgulyuk culture into two stages: first – IX-VII centuries BC and second – VI-III centuries BC [Buryakov Yu.F., 1982, p. 70].

This is the chronology of Tashkent oasis burgulyuk culture from the moment of its origin in IX century BC to its outgrowth in III century BC into kauchin one.

Not accidentally, we quoted above the chronology of Tashkent oasis burgulyuk culture. Culture of the ancient Ispidzhab developed synchronously with the nearest neighboring historical-cultural district of Tashkent. Certainly, trade relations existed between these historical-cultural districts since the ancient time. The evidence of this is some collars (figures 23, 24) of the crockery from our settlement, which find direct analogues in Burgulyuk-1 complex. They, as well as tuyabuguz one, are coated by dark-brown, almost black color. All this is indicative of the fact that habitants of the Bronze Age settlement, studied by us, had long standing ethnic-cultural relations with the tribes of Tashkent oasis burgulyuk culture and existed with them synchronously\*. However, for the moment, settlements of Tashkent oasis burgulyuk

---

\*According to archeological materials, the ethnic-cultural relations between tribes of the steppe bronze and round-bottomed dyed ceramics are also observed in other districts of Tien Shan. For example, a complex of Terenkara settlement ceramics, found by F. Grigor'yev in the suburbs of Almaty, besides plane-bottomed pot-type form crockery, characteristic for the final period of the Bronze Age, also contained round-bottomed vessels with painting by red paint in the form of zigzags and triangles, having analogues in the materials of Central Asian painted ceramics. In more details, see: [Grigor'yev F.P. *Arkhelogicheskiye pamyatniki v raione g. Alma-Ata*, 1989, p. 218; Grigor'yev F.P., 1998, p. 261, 268; Samashev Z., et al., 2005, p. 19, 30-35].

culture have not been found on the territory of the studied district, though, such settlements, judging by presence of the material, should exist.

The Late Bronze Age settlement, studied by us in the natural landmark Burgulyuk of Karzhantau foothills, coincides by its chronological frames with the first stage of Tashkent oasis burgulyuk culture. According to the chronological scale of Kh. Duke – IX-VII centuries BC, it is also synchronous with the monuments of dongal type of Central Kazakhstan, kulusay culture and Terenkara settlement of Zailiysky Alatau, etc.

The distinctiveness of the found ceramic material, its differential peculiarities from the synchronous by the time of cultures, result in the fact that we deal with the new type of the Late Bronze Age ceramics, which we offer to name as Karzhantau one.

Continuing thoughts of V.G. Loman that possibly the monuments of obitochensky type in the west and dongal one in the east outlined the boundary of the cultures' similarity of the transition period from the bronze of the iron age [Loman V.G., 1987, p. 128], note the possibility of expansion of these boundaries to the south to Tien Shan including. In our opinion, this is convincingly demonstrated by materials of the studied by us settlement. At that, the question on specific ways of contacting and interaction of cultures of people of Karzhantau foothills with the neighboring districts of the Late Bronze Age, with carriers of the round-bottomed painted ceramics, which similar fragments noted in the complex of ceramics of Ispidzhab's Burgulyuk settlement, remains actual.

The similarity of this relation, population density scales at the northern-western slopes of Tien Shan in the Late Bronze Age, shall be shown by the following research, which shall determine the accuracy of our conclusions.

Archeological research of Karzhantau type ceramics' carriers continues...

#### REFERENCES

- [1] Akishev K.A., Kushayev G.A. *Drevnyaya kul'tura sakov i usuney doliny reki Ili*. Alma-Ata, 1963. 299 p.
- [2] Avanesova N.A. *Kul'tura pastusheskikh plemen epokhi bronzy aziatskoy chasti SSSR*. Tashkent: Fan, 1991. 200 p.
- [3] Baitanayev B.A. *Issledovaniye pamyatnika bronzovogo i rannezhelznogo veka predgor'ya Karzhantau: Predvaritel'nyye rezul'taty arkhеologicheskoy ekspeditsii YUKGU im. M. Auyezova 2002 goda // Arkheologicheskoye issledovaniye v Kazakhstane: trudy nauchno-prakticheskoy konferentsii «Margulanovskiyе chteniya-14»*. Shymkent; Almaty, 2002. P. 249-251.
- [4] Baitanayev B.A., Gritsina A.A., Bogomolov G.I. *Pervoye poseleniye epokhi bronzy Yuzhnogo Kazakhstana: Itogi arkhеologicheskikh rabot YUKGU im. M. O. Auyezova 2003 g. // Arkheologiya i istoriya Tsentral'noy Azii: Sbornik nauchnykh trudov, posvyashchenny 70-letiyu akademika Yu. F. Buryakova*. Samarkand, 2004. P. 45-53.
- [5] Buryakov Yu.F. *Genezis i etapy razvitiya gorodskoy kul'tury Tashkentskogo oazisa*. Tashkent: Fan, 1982. 212 p.
- [6] Buryakov Yu.F., Koshelenko G.A. *Tashkentskiy oazis. Burgulyukskaya kul'tura // Drevniye gosudarstva Kavkaza i Sredney Azii*. M.: Nauka, 1985. P. 198-201.
- [7] Vishnevskaya O.A. *Tsentral'nyy Kazakhstan // Arkheologiya SSSR: Stepnaya polosa Aziatskoy chasti SSSR v skifo-sarmatskoye vremya*. M.: Nauka, 1992. P. 130-140.
- [8] Grigor'yev F.P. *Arkheologicheskiye pamyatniki v rayone g. Alma-Aty // Margulanovskiyе chteniya: sbornik materialov konferentsii*. Alma-Ata, 1989. P. 217-220.
- [9] Grigor'yev F.P. *Drevnyaya istoriya Almaty // Problemy izucheniya i sokhraneniya istoricheskogo naslediya: materialy mezhdunarodnoy arkhеologicheskoy konferentsii*. Almaty, 1998. P. 260-270.
- [10] *Drevnyaya i srednevekovaya kul'tura Chacha*. Tashkent: Fan, 1979. 183 p.
- [11] *Duke Kh. Tuyabuguzskiyе poseleniya burgulyukskoy kul'tury*. Tashkent: Fan, 1982. 95 p.
- [12] Itina M.A. *Istoriya stepnykh plemen Yuzhnogo Priaral'ya (II – nachalo I tysyacheletiya do n.e.)*. M.: Nauka, 1977. 239 p.
- [13] Itina M.A. *Ranniye saki Priaral'ya // Arkheologiya SSSR: Stepnaya polosa Aziatskoy chasti SSSR v skifo-sarmatskoye vremya*. M.: Nauka, 1992. P. 31-47.
- [14] Itina M.A. *K istorii izucheniya bronzovogo Yuzhnogo Priaral'ya // Priaral'ye v drevnosti i srednevekov'ye: K 60-letiyu Khorezmskoy arkhеologo-etnograficheskoy ekspeditsii*. M.: Vostochnaya literatura, 1998. P. 78-90.
- [15] Kuz'minykh S.V. *Metallurgiya Volgo-Kam'ya. (Med' i bronza)*. M.: Nauka, 1983. 257 p.
- [16] Litvinskiy B.A., Okladnikov A.P., Ranov V.A. *Drevnosti Kayrak-kumov: (Drevneyshaya istoriya Severnogo Tadzhikistana) // Trudy Instituta istorii im. A. Donisha Akademii nauk Tadzhikskoy SSR*. Vol. XXXIII. Dushanbe, 1962. 403 p.
- [17] Litvinskiy B.A. *Drevniye kochevniki «Kryshi mira»*. – M.: Nauka, 1972. – 270 s.
- [18] Litvinskiy B.A. *Problemy etnicheskoy istorii Sredney Azii vo II tysyacheletii do n.e. (Sredneaziatskiy aspekt ariyskoy problemy) // Etnicheskiye problemy istorii Tsentral'noy Azii v drevnosti (II tysyacheletiyе do n.e.)*. M.: Nauka, 1981. P. 154-166.
- [19] Loman V.G. *Dongal'skiy tip keramiki // Voprosy periodizatsii arkhеologicheskikh pamyatnikov Tsentral'nogo Kazakhstana*. Karaganda, 1987. P. 115-129.
- [20] Maksimova A.G. *Mogil'nik epokhi bronzy v urochishche Tau-tary // Trudy Instituta istorii, arkhеologii i etnografii Akademii nauk KazSSR: Arkheologicheskiye issledovaniya na severnykh sklonakh Karatau*. Alma-Ata: Nauka, 1962. Vol. XIV. P. 37-56.

- [21] Masson V.M. Problemy drevnego goroda i arkheologicheskiye pamyatniki Severnoy Baktirii (perspektivy issledovaniya) // Drevnyaya Baktiriya. L.: Nauka, 1974. P. 3-13.
- [22] Mar'yashev A.N., Goryachev A.A. Poseleniye epokhi bronzy v verkhov'yakh ushel'ya Turgen' i na plato Asy // Istoriya i arkheologiya Semirech'ya. Almaty, 2001. Vyp. 2. P. 112-122.
- [23] Sal'nikov K.V. Ocherki drevney istorii Yuzhnogo Urala. M.: Nauka, 1967. 408 p.
- [24] Samashev Z., Grigor'yev F., Zhumabekova G. Drevnosti Almaty. Almaty, 2005. 184 p.
- [25] Sarianidi V.I. Khram i nekropol' Tillyatepe. M.: Nauka, 1989. 240 p.
- [26] Smagulov Ye.A., Baratov S.R. Predvaritel'nyye itogi arkheologicheskikh issledovaniy na mogil'nikе epokhi bronzy Sherbay // Izvestiya Ministerstva obrazovaniya i nauki Respubliki Kazakhstan, Natsional'noy Akademii nauk Respubliki Kazakhstan. Seriya obshchestvennykh nauk. 2001. N 1. P. 136-149.
- [27] Smagulov Ye.A., Baratov S.R. Nekropol' epokhi bronzy v okrestnostyakh g. Turkestan (Arkheologicheskiye raboty v 2000 godu na mogil'nikе Sherbay) // Otan tarikh. 2004. N 3-4. P. 75-88.

### Б. Ә. Байтанаев

Ә. Х. Марғұлан атындағы Археология институты, Алматы, Қазақстан

### ҚАРЖАНТАУ БӨКТЕРІНДЕГІ КЕЙІНГІ ҚОЛА ДӘУІРІНДЕГІ ҚОНЫС

**Аннотация.** Қола дәуірінің қонысы – Бүргелік Шымкент қаласынан 50 км. оңтүстік-шығыста, Оңтүстік Қазақстан облысына қарасты Қаржантау жотасының солтүстік-батыс баурайындағы Бүргелік деп аталатын шатқалда орналасқан.

Қонысқа жүргізілген қазба жұмыстарынан табылған материалдар бойынша өмір сүруінің екі ірі кезеңі анықталды. Өзінің хронологиялық шеңбері бойынша Ташкент алқабындағы бүргелік мәдениетінің бірінші кезеңі – б.з.д. IX–VII ғ.ғ., сонымен бірге осы уақытқа жататын Орталық Қазақстан, Іле Алатауы мен Жетісу ескерткіштеріне сәйкес келеді.

Табылған қыш бұйымдар, оның сол уақыттағы басқа да мәдениеттерден өзіндік ерекшеліктері кейінгі қола ғасыры керамикасының жаңа түрі, қаржантаулық деп ұсынуға болатын пікірге алып келді.

**Түйін сөздер:** мәдениет, хронология, керамика, ыдыс, қоныс, қола ғасыры, қазба, стратиграфия.

### Б. А. Байтанаев

Институт археологии им. А. Х. Маргулана. Алматы, Казахстан

### ПОСЕЛЕНИЕ ЭПОХИ ПОЗДНЕЙ БРОНЗЫ ПРЕДГОРЬЕВ КАРЖАНТАУ

**Аннотация.** Поселение эпохи бронзы – Бургулюк расположено в 50 км к юго-востоку от Шымкента у одноименного урочища северо-западных склонов хребта Каржантау Южно-Казахстанской области.

По материалом раскопок поселения, фиксируются два крупных периода обживания, совпадающих по своим хронологическим рамкам с первым этапом бургулюкской культуры Ташкентского оазиса – IX-VII вв. до н.э., что также синхронно с памятниками Центрального Казахстана, Зайлийского Алатау и Семиречья этого времени.

Своеобразие найденного керамического материала, его отличительные особенности от синхронных по времени культур приводят к мысли, что мы имеем дело с новым типом керамики позднебронзового века, который предлагаем назвать каржантауским.

**Ключевые слова:** культура, хронология, керамика, сосуд, поселение, бронзовый век, раскопки, стратиграфия.

### Information about authors:

Director of A. Kh. Margulan Institute of Archeology, Academician of the National Academy of Sciences of the Republic of Kazakhstan, Doctor of Historical Sciences.

---

## **Publication Ethics and Publication Malpractice in the journals of the National Academy of Sciences of the Republic of Kazakhstan**

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the described work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct ([http://publicationethics.org/files/u2/New\\_Code.pdf](http://publicationethics.org/files/u2/New_Code.pdf)). To verify originality, your article may be checked by the Cross Check originality detection service <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of Sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of Sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

[www.nauka-nanrk.kz](http://www.nauka-nanrk.kz)

**ISSN 2518-1467 (Online), ISSN 1991-3494 (Print)**

<http://www.bulletin-science.kz/index.php/ru/>

Редакторы *М. С. Ахметова, Т. М. Апендиев, Д. С. Аленов*  
Верстка на компьютере *Д. Н. Калкабековой*

Подписано в печать 08.06.2018.  
Формат 60x881/8. Бумага офсетная. Печать – ризограф.  
20,4 п.л. Тираж 500. Заказ 3.