



# ACTUAL PROBLEMS OF MODERN SCIENCE, EDUCATION AND TRAINING

**KHOREZMSCIENCE.UZ**





## CONTENTS

<b>Section 1. MODERN PROBLEMS OF PEDOGOGY AND PSHYCHOLOGY.....</b>	<b>4</b>
SHERBEKOVA YULDUZ ZOKIR KIZI, GAZIEVA SHAKHNOZA ABDUVASIEVNA /// MIND MAPPING IN TEACHING ENGLISH AS A MEDIUM OF INSTRUCTION (EMI).....	4
RAKHMONOVA DILFUZA MAHMUDOVNA /// PSYCHOLOGICAL BASIS OF WORKING WITH TALENTED CHILDREN.....	7
QUTLIEVA MUXAYYO GULOMOVNA /// ACTUAL PROBLEMS OF EDUCATION AND TRAINING.....	12
FOMINA MAYDE ANATOLEVNA, SABINA MAXMUDOVA AVAZJONOVNA /// PEDAGOGY AS THE MAIN TOOL FOR THE FORMATION OF A WELL-BEHAVIORED PERSONALITY.....	16
BURIYEV DILMUROD, ESANOVA MAFTUNA /// NEW WAYS OF USING INNOVATIVE TECHNOLOGIES IN FOREIGN LANGUAGE TEACHING.....	20
DAMINOVA GULRUX BAXROMOVNA /// THE USE OF SCIENCE INTEGRATION IN THE TEACHING OF CHEMISTRY.....	24
ELENA ALEKSEEVNA ZOTOVA /// THE ROLE OF BRAIN FUNCTIONAL ASYMMETRY IN UNDERSTANDING OF THE PERSON INDIVIDUAL-PSYCHOLOGIC FEATURES ORGANIZATION.....	28
DAMINOVA BARNO ESANOVNA /// CRITERIA FOR EVALUATING THE EFFECTIVENESS OF THE EDUCATION SYSTEM.....	33
<b>Section 2. MODERN PROBLEMS OF PHILOLOGY AND LINGUISTICS.....</b>	<b>38</b>
AKHMEDOVA MEHRINIGOR BAHODIROVNA /// METHODOLOGY AND METHODS OF LINGUOMA'NAVIYATSHUNOSLIC AS A SUBJECT	38
AKHMADJONOVA BAXORA JARKINOVNA, NASREDDINOVA FARZONA SHUKHRATOVNA /// BORROWINGS FROM ENGLISH INTO RUSSIAN AND UZBEK IN THE USE OF MEDICAL TERMINOLOGY .....	42
IBRAGIMOVA DILBAR SADULLAEVNA, SAIDOVA KAMOLA ILKHOMJANOVNA /// SYNTACTICAL STRUCTURE OF BINARY TAUTOLOGISMS.....	46
ERGASHEVA SHAHNOZA OBIDJONOVNA, /// COMMONWEALTH AND SPECIFICITY - CHARACTERISTICS OF FICTION.....	50
IBRAGIMOVA MADINABONU KARIMOVNA /// DIFFERENT VIEWS ON THE CONCEPT OF THE ARTISTIC IMAGE.....	55
GANIEVA MADINA GANIBOY KIZI /// LINGUISTIC CULTUROLOGY IN MODERN LINGUISTICS.....	59



<b>JURAEVA ZARINAKHON BAKHODIR KIZI ///</b>	<b>THE SEMANTIC DESCRIPTION AND ANALYSIS OF THE SYSTEM OF ENGLISH TOURISTIC TERMS...</b>	<b>63</b>
<b>Section 3. MODERN PROBLEMS OF TOURISM AND ECONOMICS.....68</b>		
<b>MAMAYUNUSOVA DILOVARKHON BEGMATOVNA ///</b>	<b>FOREIGN EXPERIENCE OF DEVELOPMENT OF PUBLIC-PRIVATE PARTNERSHIP MECHANISMS.....</b>	<b>68</b>
<b>SHERNAYEV AKBAR AKMIRZAEVICH ///</b>	<b>TAX ANALYSIS IN MICRO-LEVEL TAX PLANNING.....</b>	<b>75</b>
<b>KALANDAROV ABDULLA BAXTIYOROVICH ///</b>	<b>LEGAL AND REGULATORY FRAMEWORK FOR THE RECOVERY OF PROBLEM LOANS IN BANKS.....</b>	<b>83</b>
<b>Section 4. MODERN PROBLEMS OF TECHNICAL SCIENCES.....88</b>		
<b>DAMINOVA BARNO ESANOVNA ///</b>	<b>APPROACHES OF REFLECTION OF KNOWLEDGE IN INFORMATION RESOURCES.....</b>	<b>88</b>
<b>Section 5. ACTUAL PROBLEMS OF HISTORY, PHILOSOPHY AND SOCIOLOGY.....93</b>		
<b>PARPIEVA NARGIZA TOKHIROVNA ///</b>	<b>THE PLACE AND MAIN FUNCTIONS OF SOCIAL PHILOSOPHY IN SOCIETY .....</b>	<b>93</b>
<b>Section 6. ACTUAL PROBLEMS IN MODERN ART AND ARCHITECTURE</b>		
<b>KHAKIMOVA GULNORA ABDUMALIKOVNA, KADIROVA NOZIMA ARIFOVNA ///</b>	<b>ISMAIL SOMONI MAUSOLEUM - THE HEART OF BUKHARA HISTORICAL MONUMENTS .....</b>	<b>97</b>



UDC: 91`373.2:871.782.143(299)

**ISMAIL SOMONI MAUSOLEUM - THE HEART OF BUKHARA  
HISTORICAL MONUMENTS**

**Khakimova Gulnora Abdumalikovna**  
**Senior Lecturer of**  
**Lecturer of**  
**Arts faculty**  
**Bukhara State University**

**Kadirova Nozima Arifovna**  
**Lecturer of**  
**Arts faculty**  
**Bukhara State University**  
**E-mail: [n.a.kadirova@buxdu](mailto:n.a.kadirova@buxdu)**

**Abstract** – The article provides information about the history of Bukhara, its historical monuments, the structure of historical monuments, the history of their construction. It also tells about the rulers who lived in the history of Bukhara, the changes that took place during their time and the buildings that were built. The article also details the history of the Samanid mausoleum and what was used in its construction.

**Key words:** history of Bukhara, historical monuments, mausoleum of Ismail Somoni, government, rulers, politics, historical works.

**Аннотация:** В статье представлена информация об истории Бухары, ее исторических памятниках, строении исторических памятников, истории их строительства. В нем также рассказывается о правителях, которые жили в истории Бухары, изменениях, произошедших в их время, и построенных зданиях. В статье также подробно рассказывается об истории мавзолея Саманидов и о том, что было использовано при его строительстве.

**Ключевые слова:** история Бухары, исторические памятники, мавзолей Исмаила Сомони, правительство, правители, политика, исторические труды.

**Annotatsiya** – Maqolada Buxoroning tarixi, unda joylashgan tarixiy yodgorliklar, tarixiy yodgorliklarning tuzilishi, bunyod etilishi tarixi haqida ma'lumotlar keltirilgan. Shu bilan birga Buxoro tarixida yashagan hukmdorlar, ular yashagan davrda yuz bergan o'zgarishlar va qurilgan inshootlar haqida yoritilgan. Maqolada Somoniylar maqbarasining tarixi, uning qurilishida nimalardan foydalanilgani haqida ham batafsil ma'lumotlar keltirilgan.

**Kalit so'zlar:** Buxoro tarixi, tarixiy yodgorliklar, Ismoil Somoniy maqbarasi, hokimiyat, hukmdorlar, siyosat, tarixiy asarlar.

**Introduction.** Ismail Somoni was a talented, energetic and extremely intelligent statesman of the Middle Ages. When he united Movarounnahr, he sought to establish a strong feudal state. He used all the subtleties of his sovereignty to ensure and strengthen lasting peace in his homeland. First, he gathered a large army and sent troops



to the nomadic steppe. In 893 he conquered the city of Taraz and dealt a severe blow to the steppes. This was the last major march against the nomads during the Samanid period. As a result, the continuous invasions of the steppe tribes into the Movarounnahr provinces ceased, and the settlers were now forced to work hundreds of kilometers around the oases to build defensive walls and countless fortresses and to repair them on a regular basis. From the same period, the usual annual hashar of the Kampirak wall, an ancient defensive structure that surrounded the Bukhara oasis for more than 300 km, was stopped and left unattended. According to Narshahi, Amir Ismail, referring to his powerful army, said, "As long as I live, I will be the wall of Bukhara region."

**Literature review.** The independence of the people of Movarounnahr and the rise of the Samanid state in this land undoubtedly frightened the Arab Caliphate, which was deprived of the great wealth that was constantly being extracted from the eastern provinces. Therefore, the Khilafah seeks to confront the Saffarids and the Samanids, weakening both states and regaining some influence in these rich provinces. The war between them, which began in 900, ended in Ishmael's victory. The whole of Khorasan fell to the Samanids. Out of desperation, the caliph was forced to recognize Ishmael's vast state and send him a certificate of authority. Thus, at the end of the ninth century, Movarounnahr was permanently freed from the tyranny of the Arab Caliphate. Ismail Somoni united the whole of Movarounnahr into a strong state under his rule. He abolished the Saffarid state in Khorasan and annexed it. As a result, the largest independent feudal state of its time, with its capital in Bukhara, was formed. The state was ruled by Samanid rulers until the end of the tenth century [1]. This historical monument, one of the rarest examples of Samanid architecture in Central Asia, was built by Ismail Somoni. As for Ismail Somoni, he is a major political figure who founded the Samanid state in Bukhara. Ismail Somoni was born in Bukhara in 848, was the viceroy of the Samanids in Bukhara in 874, and ruled the whole of Movarounnahr from 888. Ismail Somoni pursued a policy of strengthening the central government, gathering scholars, writers, craftsmen and artisans from various places in Bukhara. He made a great contribution to the development of culture. Following the example of the caliphs of Baghdad, he built a huge mausoleum for himself. In 893 he fortified the northern frontiers by marching on Taraz. In 900 he united Movarounnahr and Khorasan.

During the construction of the monument, local states independent of the Arab Caliphate began to form in Central Asia. The Tahirid state was established in Khorasan and the Samanid state in Movarounnahr. Indigenous states were united around a single center, and science flourished.

In 874, Ismail was appointed deputy of Bukhara. At that time, his brother Nasr was ruling in Movarounnahr. The relationship between Nasr and Ishmael broke down in 888, leading to war. After winning the war, Ishmael became the ruler of the whole of Movarounnahr. In 893 he marched on Taraz and fortified the Northern Frontiers.

**Analysis.** The mausoleum of Ismail Somoni was built during the Middle Ages (IX-X centuries), between 864-868, in the old part of present-day Bukhara. Because the building served as a tomb, its interior was a one-room square with three steps (four - four walls, eight - the passage from the wall to the roof and the dome - the roof). It is made of baked bricks, stone and wood. As for the design of the mausoleum, the quiet



brick ornaments are reminiscent of a barbed wire fence or reed, wicker fabric. Wall thickness - 1.8 m., History -  $10.80 \times 10.70$  m on the outside,  $7.20 \times 7.20$  m on the inside. The top is covered with a dome. The four corners are columnar, with 4 domes around the dome. At the top of the wall is a sunken window (40). Each window is framed. The canopy at the top of the porch is bordered by a pearl necklace [1].

There are small brick chords on both sides. The interior of the building is inextricably linked to the building outside and is similar in style. The inner wall is supported by columns on top of each other at the base of the dome. The arches form the base of an 8-sided dome. At the corners of the edges there are columns supporting the dome. During archeological excavations (1927) it was discovered that there were 2 wooden sagas on the stage of the room. The mausoleum of Ismail Somoni is in the form of a four-sided chordara, the structure of which is a great architectural masterpiece, which preserves the traditions of ancient Sogdian architecture [2].

The mausoleum of Ismail Somoni is a unique work of the world's schools of architecture and construction. Architects and builders are proud of this unique architectural monument, historians' study its creation and artists love to depict its images on various objects.

The mausoleum of Ismail Somoni shows the rise and development of architecture and construction techniques in Bukhara in the IX century. Since that time, high-quality baked bricks and albastar mixtures have been used in construction [3].

Prior to the restoration of this unique monument, mathematical knowledge, especially geometry, was well developed in Bukhara.

It is no coincidence that Professor M. Bulatov wrote his doctoral dissertation based on the study of the rules and laws of handasa used in its construction. There are still many unexplored aspects of the structure, laws, rules, and methods of construction [4].

It is no secret that this highly professionally built historical monument equipped the most experienced builders of that time, the most talented architects, with design and construction methods, and greatly enhanced their knowledge and skills [5].

The mausoleum of Ismail Somoni is a centralized structure, the main volume of which consists of a cube and a space dome, which are slightly inclined as the four walls rise. One of the features of the structure is the structure that connects the dome with the wall squares [6]. All the facades of the mausoleum are done in the same way. The walls are decorated on the inside and outside with high-quality baked bricks, and carvings are used in the construction [7].

**Discussion.** The collection of decorative bricks gave the building a sense of relief. The entrance door openings are made in the form of an arched arch. These solutions, especially arched arches and domed roof constructions, have been widely used in recent times not only in the architecture of Bukhara, but also in the architecture of Central Asia as a whole [8].

There are many benefits to using dome coverings when needed. One of them is that at that time, there were almost no reinforced concrete-like objects and structures that worked well even in the bending parts of long-lasting structures [9]. That's why the roof is made in such a way that any structure built on it is mainly compressed. As



a result, the projections of the buildings are made of brick in the form of arches, and the roofs are made of bricks in the form of domes [10].

On the other hand, in arid and hot climates, a domed solution is effective in conditions where large amounts of solar radiation fall to the ground. Sunlight falls vertically on only a part of the domed roof and heats up only that part; at this time the radiation does not fall vertically on the rest of the dome and the roof does not heat up much [11]. The third aspect of the domed roof is that the heat dissipates quickly from such a surface and the roof cools quickly. When the wind blows, the process intensifies.

The architectural monument of Ismail Somoni has been well preserved for more than XI century. It is also known as the "Architectural Pearl of the Orient", a masterpiece of world architecture [12]. Although the monument is based on pre-Arab traditions, it marked the further development of a new style, new form and new solutions not only in Bukhara, but also in Central Asian architecture.

In the middle of the dome of the building there is a drum structure covered with a dome for light and hot air, and on its sides there are arched openings [13]. The outer corners of the walls are made of patterned columns, and the backs of the walls and entrance doors are skillfully made of decorative, polished bricks. A closer look at the interior of a domed building reveals that the art of creating it dates back to ancient times and has become a tradition [14]. An architectural analysis of the monument shows that it is genetically related to the architecture of Iran, Mesopotamia.

There is no denying that several tectonic solutions have been developed in this structure as a whole [15]. The confident use of the foundations of housing and cultural architecture in the example of this building shows that the Bukhara School of Architecture was highly developed at that time.

**Conclusion.** Thus, the size of the mausoleum of Ismail Somoni - the celestial and structural structure - determined the development of the domed buildings built after him. Architectural patterns, beautiful silent decorative elements, and extremely beautiful and elegant artistic expressions testify to the flourishing of the art of bricklaying at that time. The brickwork in the mausoleum is made with a high degree of artistic taste, which makes it one of the masterpieces of world architecture.

#### References:

- [1]. [http://www.samarkandtour.com/attractions/dostoprimechatelnosti\\_buharyi/mavzoley\\_samanidov.html](http://www.samarkandtour.com/attractions/dostoprimechatelnosti_buharyi/mavzoley_samanidov.html)
- [2]. Bulatov M. S, Geometricheskaya garmonizatsiya v arxitekture Sredney Azii IX—XV vv., M., 1978.
- [3]. Abu Bakr Muhammad ibn Ja'far an-Narshaxiy, Buxoro tarixi [fors tilidan A. Rasulev tarjimasi], T., 1991;
- [4.] Bosvort K. E., Musulmanskiye dinastii, M., 1971;
- [5]. Kamaliddinov Sh. S, Istoricheskaya geografiya Yujnogo Sogda i Toharistana po araboyazichnim istochnikam IX — nachala XIII vv., T., 1996;
- [6]. Negmatov N. N., Gosudarstvo Samanidov (Maverannaxr i Xorasan v IX — X vv.), Dushanbe, 1977;
- [7]. Karayev O., Istoriya Karaxanidskogo kaganata X — nachalo XIII vv., Frunze, 1983.



- [8]. Akhmedova, M. B. (2019) "ANALYSIS OF —SPIRITUALITY|| CATEGORY AND ITS STRUCTURE IN THE ENGLISH LANGUAGE," Central Asian Problems of Modern Science and Education: Vol. 4 : Iss. 2 , Article 136.
- [9]. M.B. Ahmedova. Genetic and Structural Specifications of tge Spirituality Nominative Units in the Uzbek Language. -Theoretical and Applied Science, 10 issue. 2018.- pp.331-333
- [10]. Nilufar Ulmasovna Ochilova, Mehrinigor Bahodirovna Ahmedova. Reflections on Horse in Uzbek Prose.- Theoretical and Applied Science, 10 issue, 2019. - pp. 86-88.
- [11]. M.B. Akhmedova. GENETIC AND STRUCTURAL SPECIFICATIONS OF THE SPIRITUALITY NOMINATIVE UNITS IN THE UZBEK LANGUAGE. Theoretical & Applied Science, Vol.10, 2018. - Pp.331-333
- [12]. Nasirov A.A. The role and importance of proverbial phraseologies in the sphere of national languages phraseologisms. IJHEPS: International Research Journal of Humanities, Engineering, Pharmaceutical Sciences. – Delhi, 2016. Vol-2/ Issue -11/ Year-6 / June / 2016. –Pp. 58-66
- [13]. Nasirov A.A.The semantic area of proverbial phraseological units. Oxford Review of Education and Science. “Oxford University Press”, –The University of Oxford, 2016, № 1(11).–Pp. 555-565.
- [14]. Norova M.B. Narziyeva I.Z. Terms and terminology in the Uzbek and English languages. International Journal on integrated education. e-ISSN:20203502 p-ISSN:26153785 Impact factor. Pp.173-176
- [15]. Norova M.B. Vosiyeva Sh.I. Various approaches to terminology. International Journal of Psychosocial Rehabilitation, Vol.24, Issue 09, 2020. ISSN:1475-7192 Scopus. 394-397 pp.
- [16]. Kadirova N. A. UZBEK NATIONAL CHILDRENS CLOTHING AND ITS EVOLUTION //Theoretical & Applied Science. – 2020. – №. 6. – C. 155-157.
- [17]. Arifovna K. N., Ilhomovna I. S. CHARACTERISTICS OF UZBEK EMBROIDERY //European Journal of Research and Reflection in Educational Sciences Vol. – 2019. – T. 7. – №. 12.