

**AT THE VIII CONFERENCE "PHYSICS AND
LYRICS" ON
"MATHEMATICAL-ASTRONOMICAL VIEW IN
NIZAMI GANJAVI'S WORKS "
AT THE SHAMAKHY ASTROPHYSICAL
OBSERVATORY NAMED AFTER NASRADDIN TUSI**

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Dear teacher Isa! Dear participants of the event!

On behalf of Azerbaijani astronomers, I greet you with deep respect. The relations between the Institute of Literature named after Nizami Ganjavi of ANAS and Shamakhy Astrophysics Observatory named after Nasreddin Tusi are expanding. The main reason for this is a series of events called "Physics and Lyrics", which was held on the direct initiative and idea of academician Isa Habibbayli.

Unfortunately, events have been suspended for some time due to the Covid-19 coronavirus pandemic, which is raging around the world. Before the pandemic, with this initiative, we visited the famous Center for Nuclear Research in Dubna, Russia. Today, the reunion of the two scientific institutions at the conference "Mathematical and astronomical views in the works of Nizami Ganjavi" from the series "Physics and Lyrics" is both a delightful and a significant event.

The announcement of the current year by the President of the Republic of Azerbaijan, Mr. Ilham Aliyev, as the "Year of Nizami Ganjavi" is considered as a call to mobilize Azerbaijani intellectuals and researchers to study the work of the world-famous writer in more depth. Each work of the poet, whose creativity is an inexhaustible treasure, is rich in scientific knowledge. For this reason, experts call him a scientist-poet, thinker and philosopher. As the sultan of the art of speech, he skillfully achieved the description of scientific knowledge in poetry and opened a new bright page in the history of world poetry

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Nizami's work, which had a significant impact on the development of Azerbaijani and world literature, occupies a worthy place among the unique pearls of world literature, even after centuries. The literature of the peoples of the Caucasus and the Middle East has long been influenced by the artistic heritage of this great poet, and prominent writers have benefited from Nizami's "Khamsa", which stands at the pinnacle of world poetic and philosophical thought, and have learned the art of poetry. The poet-thinker laid the foundation of a large literary school consisting of many followers. His works, which adorn the most famous libraries and museums, gave an important impetus to the development of Oriental miniature art.

It is an undeniable fact that a master with a deep encyclopedic knowledge finds a synthesis of different sciences in the works of the poet. From this point of view, Nizami, distinguished by his humanism and humanity, is of great value in the world. He is one of the rare figures in the history of civilization, whose appreciation and respect for his work knows no national, racial, religious or geographical boundaries.

It is no coincidence that Nizami Ganjavi is also considered a "poet of all times and peoples." His knowledge of many languages, his careful reading and study of the works of world-famous scientists, led him to perpetuate his scientific knowledge in the fields of history, astronomy, geometry, physics, chemistry, logic, philosophy, theology and other fields through the language of poetry.

The fact that Nizami Ganjavi's poetry is rich in information, mainly in mathematics and astronomy, testifies to his wide philosophical views and deep knowledge of the structure of the surrounding world. The scientific facts mentioned in the works of the poet, who has a perfect understanding of the Qur'an, resonate today, and the vast majority of them have been confirmed in surface and space experiments. There is a great need for fundamental research of Nizami's works not only by literary critics, historians and linguists, but also by specialists in the exact sciences. One of the important issues is the translation and publication of national and foreign legal materials, which reveal the exact facts about the life and work of the great master of words, in foreign languages. By properly fulfilling these tasks facing our scientists, we can prevent the spread of false claims about the life and work of the poet, and present Nizami to the world scientific community as he is.

Although very important achievements have been made since the beginning of the last century in the study of Nizami's legacy, especially in the formation of Nizami as an important branch of oriental studies, there are certain problems. Foreign media and separate publications still make baseless allegations about the nationality of the great Azerbaijani poet Nizami Ganjavi and his place of birth. Some authors make various absurd claims about the poet's biography, environ-

ment and creativity, without relying on the original source or interpreting the sources as they wish. These biased researchers are still repeating unsubstantiated assumptions based on no facts that were refuted by influential national and foreign scholars in the 1940s.

I would also like to note that in Nizami's works it is possible to find perfect ideas on astronomy and physics, such as natural sciences, mathematics, philosophy, geometry, theology, medicine, ethics and others. Some of them are given more space and embody the author's level of knowledge in this area. From this point of view, the fact that in the works of the great poet the knowledge of astrophysics, which was called "almşūnas-naturalist?" at that time, was given a wider place, is also an indication of his sympathy for this field. Nizami calls all celestial bodies "revolving domes". Unlike in modern times, it was impossible to obtain any accurate information about celestial bodies because of the lack of electronic devices at that time. Nevertheless, the master of the art of speech was able to determine by visual observations that they were spherical rotating objects. In his works, the poet skillfully uses astronomical tables to determine the motion of celestial bodies and their time-dependent position, and angular measuring devices to determine coordinates, often using various astronomical expressions to express his thoughts or describe the images he creates.

In his works, Nizami, like other different fields, amazes the reader by mastering his deep knowledge of the subtleties of astronomy. He instills the issues of astronomy with his fascinating verses, created with high artistic taste. As a scientist-poet, the genius master skillfully speaks about the greatness of the universe and the order and harmony of these wonders in it. Nizami's love for the stars and the sky is evident in his work. The poet's special interest in astrophysics is more evident in his "Iskandername". The protagonist is interested in the essence, creation, origin and development of the material world and the whole universe. In order to achieve scientific truth in this field, Alexander organized a scientific meeting with the participation of seven philosophers, whom he trusted. The meeting discusses the concept of central gravity, the circular motion of celestial bodies, and other such issues.

Dear conference participants! Much has been done in our country at various times to study and promote Nizami's art, which has always been the focus of world oriental studies, especially after the restoration of our independence, and his books have been republished in the Azerbaijani alphabet. However, as we have noted, the life and work of the great Nizami, who enriched the Eastern artistic thought with scientific and philosophical ideas, must be studied in depth and appreciated. The study and promotion of the legacy of the genius master of words, one of the rare personalities who has opened a new page in the annals of human artistic thought, is one of the main tasks facing our scientists and specialists. It

is also important to pass on the works of the great poet, scientific monographs in this field, as well as all the valuable information about Nizami to future generations. I wish each of you success in fulfilling these honorable tasks. Thank you for your attention!