

**NASIR AL-DIN TUSI WAS A 13TH CENTURY PERSIAN SCIENTIST,
ASTRONOMER, MATHEMATICIAN AND PHILOSOPHER**

M.U.Asrorova

Senior Lecturer, Department of Uzbek and Foreign Languages,
Bukhara State Technical University

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Abstract. *this article details the life and work of Nasiriddin Tusi, a great scientist who lived in the Middle Ages, who made a great contribution to the development of Sciences. At the same time, the socio-political and moral views of Tusi's works are explained in detail, focusing also on general philosophical issues, studying various aspects of human nature, qualities, qualities that improve a person.*

Keywords: *spiritual wealth, King of the world of science, unique ability, Alamut fortress, Maroga Observatory, scientific discoveries, great mathematician, science of mathematics, science of Proverbs.*

Great philosopher, zabardast scientist-M. It is known to everyone that the life and work of the medieval eastern allomas took the main place in the scientific research of boltaev. In this scientific research, our teacher M. We aimed to study boltaev's views on Nasiriddin Tusi, one of the great scientists who made a great contribution to the development of the sciences of his time. According to historical sources, the middle and Middle East of the 9th-13th centuries were the center of advanced scientific thinking of its time. During this period, many scholars contributed to the development of subjects such as mathematics, philosophy, astronomy: Moses Khwarazmiy, Biruniy, Ibn Sina, Umar Hayyam and others are examples. Judging by the information that has come down to us, Nasiriddin Tusi is a great scientist who combines mathematics, astronomy, pedagogy, philosophy, logic, biology and other works. N. Tusi is an unparalleled spiritual wealth and treasure of our nation. The philosopher is a scientist who has earned the definition of "King of the world of science." Despite the fact that more than 8th century has passed since the death of the scientist, his invaluable works are still studied. Nasiriddin Tusi was born in Tus, Khorasan on 18 February 1201. He received his first education in the humanities and Exact Sciences from his father and uncle. Since Alloma was very well versed in Islam despite his young age when he was 21 years old, ustozi Muaddin Salim Misri had allowed him to read Hadith and those around him referred to him as Hoja as a sign of respect. Nasiriddin was a prominent follower of the Tusi Bakhmaniyar school. In 1235, the 34-year-old philosopher wrote his famous work known all over the world, "the Noble Nazarene". Only a person with a unique ability could write such a work. In this work, in addition to detailing his socio-political and moral views, Tusi also touched on general philosophical issues, studying various aspects of human nature, qualities, qualities that improve a person. Angered by Nasiriddin's Muhtashamerksevar, the ruler of the Ismailis of Kohistan captured him and imprisoned him in the mountain fortress of Alamut. The philosopher sat here in very bad conditions, like a person exiled for more than 20 years. But such an eclipse cannot quench the interest of Tusi, considered the owner of a strong will, in dealing with science. In 1253, Genghis Khan's grandson Hulagu Khan made a military march to the Middle East, conquering the

Fortress of Alamut and freeing Nasiriddin Tusi and other scholars imprisoned there. After Hulagu Khan captured Baghdad, he made Azerbaijan the center of his vast state in 1260. The five hundred years of Abbasid rule would thus end. Another important service of Nasiriddin Tusi is that he built the Maraga Observatory. The Observatory held 400,000 volumes and contained a school for the center's staff. At the same time, the madrasa, located near it, studied all areas of knowledge, Sciences and teachings. As a result of research and observations at the observatory, he created his work "astronomical tables of the Ilkhanids".

This work gives the main elements of the geocentric orbits of the planets, the average daily movement of which is quite accurately shown in time and even in contrast to astronomical observations of the 7th century. Bundantashqariasar also had mathematical, astronomical and geographical tables. It was with this work that Tusi was able to leave his name to the history of world astronomy as a whole.

The scientific discoveries and works of Nasiriddin Tusi played an important role in the development of geometry, trigonometry, not only in the East, but also in Europe. In particular, it can be noted that the philosopher's works have greatly established the work of the French mathematician Lejander, the English mathematician Wallis and the Italian scientist Saccher. Despite being the author of more than a hundred serious scientific works in mathematics, physics, medicine, philosophy, morality, logic, and astronomy, nasiridintusius, researchers consider alloma to be primarily a great mathematician. In 1594, "tahririri-Oglidis"(Euclid's beginning), which was translated and published in Arabic and later in Latin

Tusi's "Thadrid ul – faith " is also unhappy with the importance of the afterlife, noting that all human beings openly show the truth in the afterlife alone. Mathematics, the second form of the science of theoretical wisdom, shares the character traits of the habits, measures, celestial bodies and sounds of science. In this respect, Tusi divides theoretical science into four parts.

1. Geometry.
2. Science of habits.
3. The science of UFOs and life.
4. Tonality.

Geometry studies the character of measures and measures. Habits, on the other hand, explore habits and their characters. In UFO and life science, however, the relationship of celestial bodies with each other, their different and similar peculiarities are analyzed. Tusi incorporates the science of music into the study of tonality. This science speaks of musical sounds at the same time, the moods of these sounds.

Continuing his views on the classification of Sciences, Tusi notes that there are auxiliary sections of the science of mathematics. It seems that these assistants, jabr, muqabila mechanics, etc. Now some of these disciplines have become an independent field of science. Some were removed from mathematics and turned into the field of science.

Tusi was named nujum ahkom in its classification of Ilim. Astronomy shows science as a contributor to both mathematics and Natural Science. Tusi notes that, without introducing the science of logic into any science, " when it comes to the science of logic, it is necessary to know the mood of things and to put among themselves those who are despicable. So in the original

sense it is the science of education (the science of Sciences), a state to study other sciences, a level.

Tusi also gives a classification of the science of practical wisdom, after providing information on the sections of theoretical wisdom. The science of practical wisdom is associated with the practical activities of people. Practical wisdom is indirectly guided by the fact that the imagination of people is improved in a harmonious form for its purpose. Practical wisdom is divided into two parts. These are different and general. Common practical wisdom in turn splits into two.

1. Those who share a residence with a house and address.
2. Even more people were comrades, such as the city, the province and the country, where they gathered.
3. Tusi, who gave extensive information on practical wisdom in his work "ahlaki Naziri", divides this section of the science of wisdom into 3 parts:

1. The knowledge of Keeping Up With the moral Yahud ethics.
2. Family building.
3. The land is or is it a part of the city. Or not.

In the science of separation of ethics, ethics is interpreted by categories, with special attention being paid to two aspects in this area of science, whether it consists of beginnings and goals. The beginnings, or the foundations, provide information about the perfection and nonchalance of human desires and human desires.

In place of the conclusion, it can be said that today the spiritual children of the philosopher who study the scientific norm are tens of thousands, whom representatives of all nationalities respect, remember and love with great reverence. Because, the main focus of ham on the classification of the Tusi Sciences was on Naziriddin, trying to reveal the leprosy of Ilim precisely by classification. In the process of classification, Tusi classifies, as well as justifies, in its own right, all types of nouns, from natural to religious ones.

Tusius studied the classification of Sciences in harmony with his worldview in his time. Because the ability to study and analyze any given year can be formed only when it is necessary to consider and study the aspects of its recommendation and its relevance, dependence, before studying it.

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