

THE LIFE OF ABU RAYHAN BERUNIY, THE GREATEST SCIENTIST IN ASIA

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Annotation: Abu Rayhan Muhammad ibn Ahmad al-Biruni was an encyclopedist of the medieval East. He was the first in the Middle East to say that the Earth can revolve around the Sun and determine the size of the Earth's circumference. Little is known about Beruni's early life, only that he was an orphan. Ma'mun was a scientist of the Muslim East who lived in 1035-1036 and wrote more than 160 works. Beruni conducted observations and experiments on rare metals and precious stones for several years, and later, based on these studies.

Keywords: Al Beruni, philosophers, Ghazni, Mineralogy, Mahmud Ghaznavi,
Indian people.

Аннотация: Абу Райхан Мухаммад ибн Ахмад аль-Бируни был энциклопедистом средневекового Востока. Он был первым на Ближнем Востоке, кто сказал, что Земля может вращаться вокруг Солнца, и определил размер окружности Земли. Мало что известно о молодости Беруни, только то, что он был сиротой. Мамун был ученым мусульманского Востока, жившим в 1035-1036 годах и написавшим более 160 работ. Беруни проводил наблюдения и эксперименты над редкими металлами и драгоценными камнями в течение нескольких лет, а позже на основе этих исследований.

Ключевые слова: Аль-Беруни, философы, Газни, минералогия, Махмуд Газнави, Индийский народ.

Annotatsiya: Abu Rayhon Muhammad ibn Ahmad al-Beruniy o'rta asr Sharqining qomusiy olimi bo'lgan. U Yaqin Sharqda birinchi bo'lib Yer Quyosh atrofida aylanishi mumkinligini aytdi va Yer aylanasining o'lchamini aniqladi. Beruniyning erta hayoti haqida juda kam narsa ma'lum, faqat u yetim qolgan. Ma'mun 1035-1036 yillarda yashagan musulmon Sharqining olimi bo'lib, 160 dan ortiq asar yozgan. Beruniy nodir metallar va qimmatbaho toshlar ustida bir necha yillar, keyinroq esa shu tadqiqotlar asosida kuzatish va tajribalar olib bordi.

Kalit so'zlar: Al Beruniy, faylasuflar, G'azniy, Mineralogiya, Mahmud G'aznaviy, Hind xalqi.

Al Beruni is a great scholar of Khorezm, the author of encyclopedic works on history, geography, philology, astronomy, mathematics, geodesy, mineralogy, pharmacology, geology, and many other subjects. Beruni was the first in the

Middle East to say that the Earth can revolve around the Sun and determined the size of the Earth's circumference. It would not be an exaggeration to say that Beruni was a true encyclopedist of the medieval East.

How he influenced science.

His full name is Abu Rayhan Muhammad ibn Ahmad al-Biruni. He was born on September 4, 973 in Kot, the ancient capital of Khorezm. Little is known about Beruni's early life, only that he was an orphan. At that time, the problems before the science of astronomy consisted of perfecting the chronicle and determining the location of the Earth through the stars in the sky. It was important to be able to determine the exact positions of the Sun and the Moon in the sky and to measure astronomical constants such as the inclination of the ecliptic to the equator, the length of the solar and sidereal years, and others. This, in turn, required the development of mathematical science, in a particular plane and spherical trigonometry on the one hand, and tools to more precisely define on the other. Beruni's achievements in these fields served as an unparalleled achievements for several centuries. Beruni determined the radius of the Earth almost precisely based on its circular shape. Beruni accepted the progressive ideas of ancient Greek and ancient Indian philosophers based on some astronomical problems and improved them: he approved the same fiery nature of the Sun and stars, unlike the dark bodies, that is, the planets; determined the movement of the stars and determined their gigantic size in relation to the Earth; He studied the gravity of the earth. Beruni affirmed that the Earth revolves around the Earth, not the Sun, putting an end to all doubts about Ptolemy's approval of the geocentric world system. He died on December 13th, 1048 in Ghazni, Afghanistan.

Works of Al-Beruniy

During Ma'mun's time, a scientific center named "Ma'mun Academy" was established in Urganch, where great scientists of the Muslim East worked. A list of works written by Beruni himself in 1035-1036 was compiled and names 113 works in this list. 70 of these works are on astronomy, 20 on mathematics, 12 on geography and geodesy, 3 on mineralogy, and 4 for related to cartography. If the scientist lived after that He added more than 50 works written in 13 years their total number exceeds 160. In some sources, There is also information that Beruni wrote more than 200 works occurs. Each work written by Beruni is a kind of encyclopedia

Beruni conducted observations and experiments on rare metals and precious stones for several years, and later, based on these studies, he created the work "Mineralogy". continues his creativity with difficulties. Beruni created here his "Famous people of Khorezm", "Tahdid nihayot al-amokin li tashih masofat al masokin", ("Determining the final boundaries of places to check the distance between residences"), that is, "Giodesia". In addition to geography and astronomy,

the results of paleontological observations are described in the work. Another important work of Beruni is "Basic Concepts of the Art of Astrology". In this work, he also gave preliminary concepts and information on several subjects. It is known that Mahmud Ghaznavi led wars of aggression against India. Beruni also accompanied Mahmud Ghaznavi in one of these marches. Because he knew Sanskrit (the ancient Indian language), he had the opportunity to get to know the culture, literature, and art of the Indian people, and as a result of his work, in 1030, he published his famous work "India", which was widely recognized in the East and the West. The full title of the book is "Kitabu fi taghiqi molil Hind min maqulatin fil aqli av marzulatin", - "The Book of Determining the Reasonable and Unreasonable Doctrines of the Hindus". It is called "Tahqiqi mo mil hind" ("Studies about India" or "India").

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