BERUNIY ILMIY MEROSI RAQAMLI FORMATDA

O‘zbekiston Fanlar akademiyasi Sharqshunoslik instituti Abu Rayhon Beruniy nomi bilan atalgan bo‘lib, allomaning asarlari tarjimalar va nashrlar orqali izchil o‘rganib kelinmoqda. Zamonaviy talablarga mos ravishda Institutda Beruniy merosini raqamlashtirish va jahon ilmiy jamoatchiligi uchun ochiq elektron dasturini yaratish bo‘yicha amaliy loyiha amalga oshirildi.

Loyiha doirasida Buyuk Britaniya, Germaniya, Niderlandiya, Turkiya, Fransiya, Eron va Hindiston kabi mamlakatlarda saqlanayotgan qo‘lyozmalarning elektron nusxalari to‘planib, ularning ingliz tilidagi ilmiy tavsiflari bilan birga http://heritageof.beruni.uz/ saytiga joylashtirildi.

SPECIAL EDITION

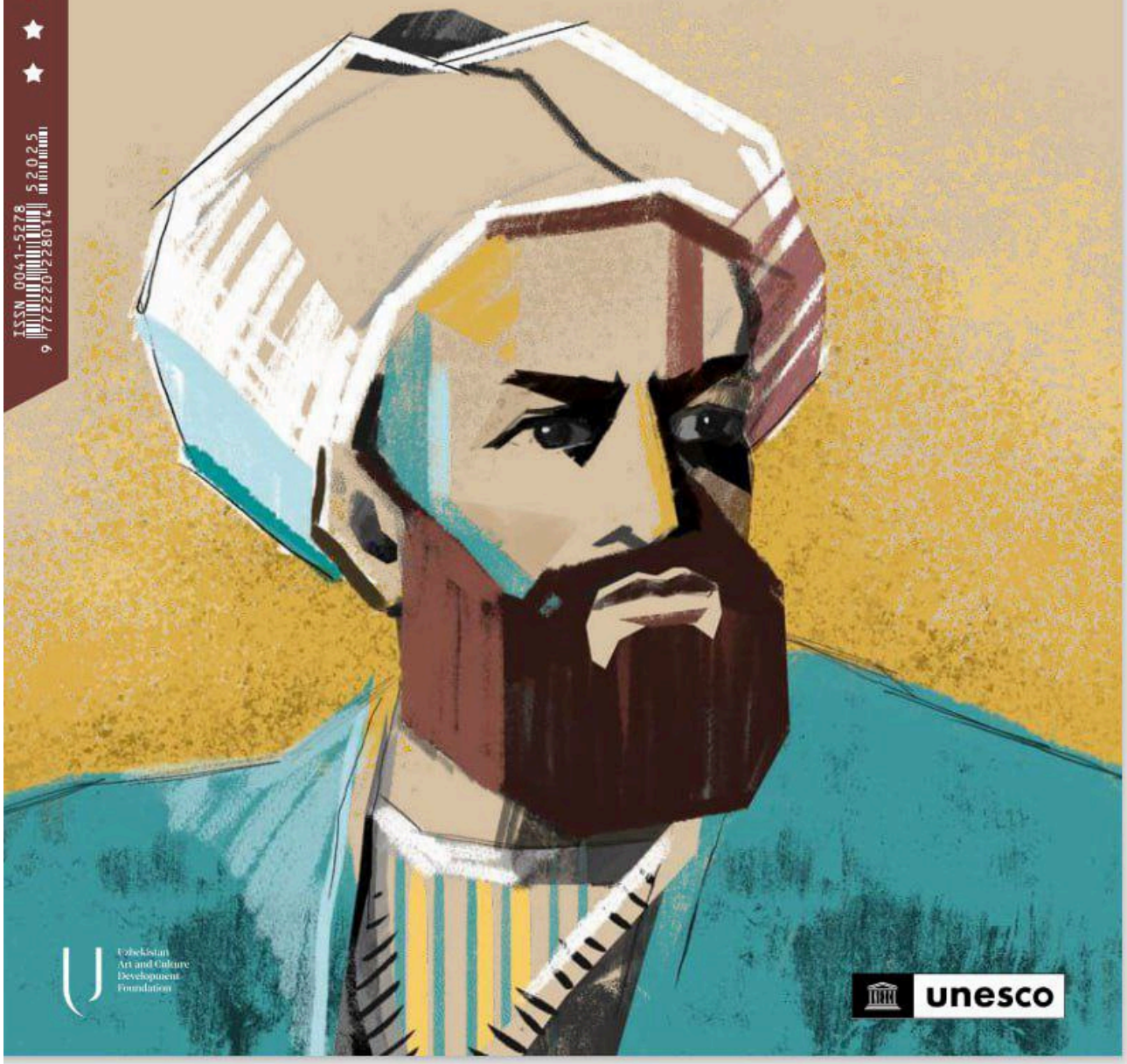
ISSN 0041-5278
9 772220 228014 52025

THE UNESCO

Courier

November 2025

Abu Rayhon Beruniy: a multi-faceted scholar



Uzbekistan Art and Culture Development Foundation

unesco

Scientific heritage in a digital format

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The scientific writings of Abu Rayhon Beruniy are a crucial part of global scientific history. Thanks to digitization, online catalogs, and international collaboration, modern technologies have significantly advanced the study of his legacy.

Abu Rayhon Beruniy authored about 150 scientific works in various fields, but only 33 of them have survived to the present day. To make his work accessible, electronic copies of his manuscripts have been gathered from archives and libraries around the world and made available online. International digital archives house manuscripts of the great scholar and make it possible to study his works.

> **He authored about 150 scientific works in various fields**

The Institute of Oriental Studies in Tashkent, part of the Academy of Sciences, was named after Beruniy and has a collection that contains 26,000 handwritten manuscripts, 39,000 lithographed and published books, and more than 5,000 historical documents in Arabic, Persian, and Turkish. The manuscripts cover subjects such as history, language and literature, Islamic sciences, and exact and natural sciences. Among these scientific works, there are more than 1,500 manuscripts by Muslim scholars from the 10th to the 19th centuries. Their works include studies in astronomy, mathematics, chemistry, medicine, pharmacology, mineralogy, and geography. Studying these scientific works is a priority of the Institute. Among these scholars, Beruniy's works hold a special place, as he authored about 150 scientific works in various fields. According to modern researchers, only 33 of these works have survived to the present day, but these include Beruniy's fundamental works, which have been translated and studied in Uzbek and Russian by the Institute's researchers for many years.

Some of Beruniy's translated books include major works such as *Chronology, India, Geodesy, Mas'ud's Canon, Mineralogy, Pharmacognosy, and Kitab al-Tafhim*, as well as several smaller mathematical (On Chords) and astronomical treatises (On Shadows, The Solar Equation, The Crown of Astronomical Tables, The Passage of Illuminators, and Cartography). Uzbek scholars have used microfilms of manuscript copies stored in various global collections since, unfortunately, Uzbekistan only possesses a single 13th-century manuscript copy of Beruniy's *Kitab al-Tafhim*.

Beruniy online

In 2023, the 1,050th anniversary of Beruniy's birth was celebrated under the auspices of UNESCO with an international conference on the role of his scientific heritage in the development of world science. At the event it was decided to collect electronic copies of his manuscripts from world archives and libraries, and publish them on one website. As a result, digital copies of Beruniy's manuscripts were gathered from scientific and educational centres and libraries in the United Kingdom, Germany, the Netherlands, Turkey, France, Iran, and India, given English descriptions, and uploaded



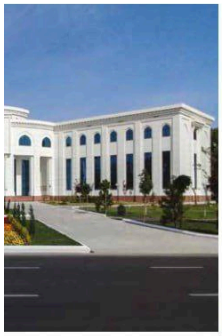
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to the new www.heritageofberuni.uz website in 2023 and 2024.

Until now, only a few library and encyclopedia websites have provided information about Beruniy's scientific heritage. For example, Russia's public library website contains Beruniy's biography and digital copies of his selected works translated into Russian, as well as electronic books of collected correspondence between Beruniy and Avicenna (980–1037).

Another important source is the website of the Turkey Diyanet Foundation Islamic Encyclopedia (TDV İslâm Ansiklopedisi), updated in 2018 and made available at https.islamansiklopedisi.org.tr. This website provides information on Islam, Islamic history and civilization, Arabic language and literature, the history of science, medicine, and other fields.

Besides the sites mentioned above, there is also a website dedicated directly to Beruniy himself, www.albiruni.nl. It was created by the famous Dutch historian of science, Professor J.P. Hogendijk, and provides information about the 26 surviving manuscript works of Beruniy, research conducted on them, works written in dedication to Beruniy, and works attributed to him. This site is a great help to those engaged in the study of Beruniy's scientific heritage.



The Abu Rayhon Beruniy Institute of Oriental Studies in Tashkent, Uzbekistan houses a unique collection of Islamic manuscripts inscribed as part of the UNESCO Memory of the World Register.

Unlike previous sites, the website of the Institute of Oriental Studies is the only one to contain the biography I published of Beruniy (*The Place of Abu al-Rayhan al-Biruni's Scientific Heritage in the Development of World Science*), as well as 12 detailed scientific descriptions in English of the manuscripts of Beruniy's works preserved in foreign collections. So far, the website has provided scientific descriptions of 172 manuscripts of 43 works.

New discoveries

Turkish libraries house the oldest and most decorative copies of Beruniy's works, as well as copies with historical significance. For example, in the Fatih Collection of the Suleymaniye Library, there is a copy of *Geodesy* written in Ghazna in 1025-1026. The oldest surviving copy of Beruniy's famous astronomical encyclopedia *Al-Qanun al-Mas'udi* dates back to 1136-1137 and can be found in the same library.

The only ancient copy of Beruniy's pharmacological work *Kitab al-Saydana fi al-Tibb*, copied in 1279-1280, is preserved in Turkey at the Kursunlu Jami Library.

Most manuscripts of Beruniy's works in Iranian libraries contain the name of the copyist and the date of copying. Copies of the work *Kitab al-Tafhim* are especially numerous, with the oldest Persian version, dated 1143, kept at the Library, Museum, and Documentation Center of the Iranian Parliament.

In the Encyclopedia Organization of Iran, there is an old collection compiled in 1162, which includes four works by Beruniy, as well as a fragment from *Al-Qanun al-Mas'udi*. Most copies of *Al-Athar al-Baqiyah* in Iran were copied in the 19th century.

In the Bodleian Library in the United Kingdom, a copy of *al-Qanun al-Mas'udi* copied in 1082 and compared with the author's autograph is preserved. Another old copy, copied in 1108, is found in the National Library of France, which also houses a manuscript copy of *India*, copied from the author's original in 1149.

The ongoing development of all of these collections help ensure that the scientific legacy of Beruniy will continue to be recognized for its crucial role in world research. ■

UNESCO-Uzbekistan Beruniy Prize on the Ethics of AI

The legacy of the great polymath Abu Rayhon Beruniy — and his contributions to science and cultural exchange — have been evoked with a prize created in partnership with UNESCO and the government of Uzbekistan.

The UNESCO-Uzbekistan Beruniy Prize recognizes impactful contributions on the ethics of AI, and fosters scientific dialogue and international collaboration in this area.

It is awarded biennially to three laureates — individuals, institutions, or organizations, contributing to the implementation of the principles outlined in the Recommendation on the Ethics of Artificial Intelligence. The first edition of the Prize will take place in November 2025 in Samarkand, Uzbekistan, reinforcing UNESCO's mission to promote AI for the benefit of all humanity.

Portal 43 ta asarga oid 172 qo‘lyozmaning 12 bandlik ilmiy tasnifini, shuningdek Beruniy hayoti va sayt haqidagi ma’lumotlarni o‘z ichiga oladi.

Shu asosda Institut qo‘lyozmalar fondida maxsus raqamli Beruniy kolleksiyasi shakllantirildi. Kelgusida Rossiya va arab mamlakatlarida saqlanayotgan qo‘lyozmalarni ham qamrab olish rejalashtirilgan.