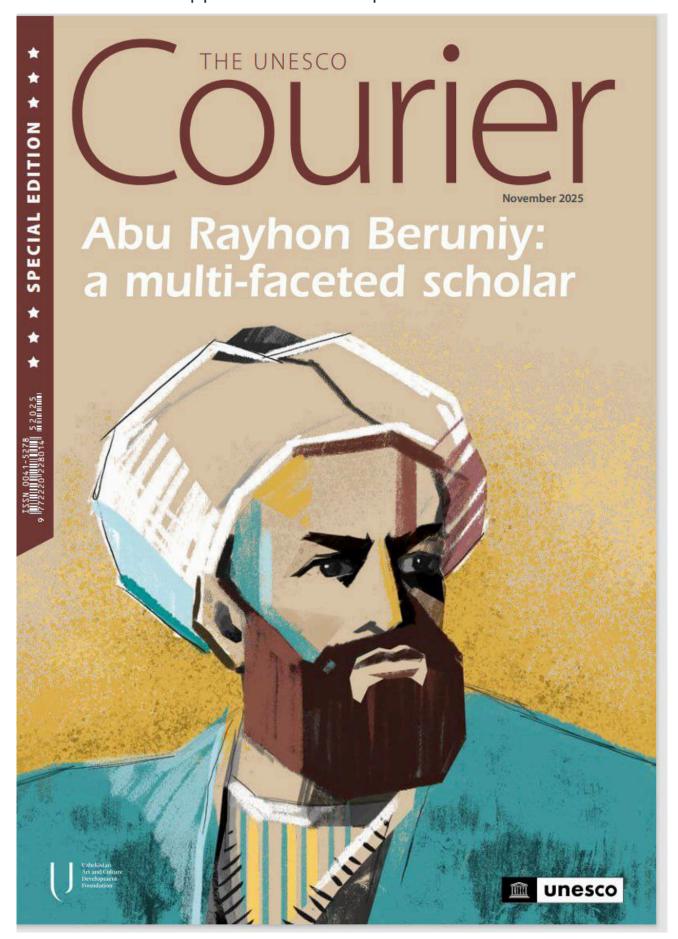
# НАУЧНОЕ НАСЛЕДИЕ БЕРУНИ В ЦИФРОВОМ ФОРМАТЕ



# Scientific heritage in a digital format

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.

bu Rayhon Beruniy authored about 150 scientific works in various fields, but only 33 of 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 arthest house manuscripts of the present archives house manuscripts of the great scholar and make it possible to study his works.

66 He authored about 150 scientific works in various

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a collection that contains 26,000 handwritten manuscripts, 39,000 lithographed and published books, and more than 5,000 historical documents in Arabic, Persian, and Turkish.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 10° to the 19° centures. Their works include studies in astronomy, mathematics, chemistry, medicine, pharmacology, mineracology, and geography. Studying these scientific works is a priority of the Institute. Among whors is a priority of the Institute. Among those scholars, Beruniy's works hold a special place, as he authored about 150 scientific works in various fields. According to modern reesachers, only 33 of these works have survived to the present day, but these include Beruniy's frundamistation and the studies of the Seruniy's translated 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 Seruniy's translated books include major works such as Chronology, India, Geodery, Marcia Carnonomical Treaties (10° Chords) and astronomical treaties (10° Chords) and astronomical treaties (10° Shadows of Astronomical Tables, The Passage of Illuminators, and Cartography). Uzbek scholars have used microfilms of Astronomical Treaties (10° Chords) and astronomical Treaties (10° Chords) and astronomical Treaties (10° Shadows of Shadows of Shadows of Shadows of Shadows of Shadows of Shadows o

#### 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 on the role of his scientific heritage in the development of void science. Afthe event it was decided to collect electronic copies of his manuscripts from world activities and libraries, and publish them on one website. As a result, digital copies of Benuriy's manuscripts were gathered from scientific and educational centres and libraries in the United Kingdom, Germany, the Netherlands, Turkey, France, Iean, and India, leven Entitlish descriptions, and sulpoaded



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 citetific heritage. For example, Russiá's public library website contains Reruniji's blography and digital copies of his selected work translated into Russia's selected work translated into Russia's as well as electronic books of collected

selected works translated into Russian, as well as electronic books of collected correspondence between Beruniy and Avicenna (1980–1037).

Another important source is the website of the Lurkey Diyaner Foundation Islamic Encyclopedia (TDV Islam Ansklopedis) updated in 2018 and fande available at https: Islamanskilopedis updated in 2018 and and available at https: Islamanskilopedis updated in 2018 and and available at https: Islamanskilopedis updated in 2018 and and available at https: Islamanskilopedis updated in 2018 and and available at https: Islamanskilopedis updated in 2018 and and available at https: Islamanskilopedis updated in 2018 and available and islamanskilopedis updated in 18 and available in 18 and a state of the 2018 and provides information about the 26 surviving manuscript works of Beruniy, and provides information about the 26 surviving manuscript works of Beruniy and provides information about the 26 surviving manuscript works of Beruniy and provides information about the 26 surviving manuscript works of Beruniy and provides information about the 26 surviving manuscript works of Beruniy and provides information about the 26 surviving manuscript works of Beruniy's scientific heritage.



## 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  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}$ 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.

Unlike previous sites, the website of the institute of Oriental Studies is the only one to contain the biography published of Beruniy (The Place of Abu al-Royhan al-Bruni'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 historial significance. For example, in the Falth Collection of the Suleymanipe Library, there is a copy of Geodery written in Ghazani in 1225-1058. The oldest surviye famous astronomical encyclopedia. Af Qumun al-Mass uid estaback to 1136-1137 and can be found in the same library.

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

The only ancient copy of Beruniy's pharmacological work Kitab ai-Saydana fi al-Tibb, copied in 1279-1280, is preserved in Turkey at the Kursunul 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 ai-Tarhim 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

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-Marsulal. Most copies of Al-Athar al-Bogiph in Iran were copied in the 19th century.

In the Bodleian Library in the United Kingdom, a copy of al-Qanun al-Marsulal copied in 1082 and compared with the author's autograph is preserved. Another old copy, copied in 1088, 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.

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