

London exhibition titled 1001 Inventions: Discover the Muslim Heritage in Our World

The debt European scholars owe their Muslim counterparts – everything from water pumps and theories of blood circulation to engineering and map-making – was unveiled in a London exhibition titled 1001 Inventions: Discover the Muslim Heritage in Our World' on January 21. At the London's Science Museum. The exhibition will be open till April 25.

The organizers hope to illuminate 1,000 years of neglected science from North Africa to China, thereby providing a bridge between Classical and Renaissance scholarship.

In doing so, organizers expressed hope that the show would help improve understanding between the Muslim world and the West.

"If you neglect the contributions of other cultures [to contemporary civilization], then it gives you a sense of having cultural superiority, which is dangerous," observed Professor Salim T. S. al-Hassani, who masterminded the exhibition.

"As we move into a new global world," he opined, "we need to respect and recognize the contributions of all other races and cultures into what we have today. This exhibition demonstrates that."



The exhibits span from about 700-1700 AD, which Science Museum director Professor Chris Rapley described as a time of "exceptional scientific and technological advancement in China, India, Persia, Africa and the Arab world."

It aims to highlight the Muslim scholars who built on existing knowledge to develop new ideas about astronomy and mathematics, architecture, medicine and engineering – but which have been largely ignored in European history.

At the 13th-century observatory in Maragha, in Iran, the exhibition notes, star-gazers developed new models for understanding the universe, which helped pave the way for Copernicus' ideas of a sun-centered solar system in 1543.

Abbas ibn Firnas, an Arab-Berber scholar in ninth-century Andalusia, performed one of the first recorded human flights when he leapt from the minaret of the Grand Mosque in Cordoba using a glider stiffened with wooden struts.

Ibn al-Nafis, a Syrian-born Cairo physician (among other things) is also said to be the first to have accurately described the part of the cardiovascular system involving the heart and lungs, paving the way for William Harvey's full description of circulation in 1628.

The exhibit also examines 12th-century engineer Al-Jazari, who invented the double-action suction pump, and his contemporary Al-Idrisi, who drew up a world map centuries before Columbus and Marco Polo set off exploring.

It was not just Muslim scholars busily creating knowledge, however. They worked with Jewish and Christian scientists and elaborated upon ideas from scientists working as far afield as China, ancient Babylonia, Egypt, Greece and Persia and India.

This multicultural message is highlighted in al-Jazari's "Elephant Clock," which featured an Indian elephant, Chinese dragons, a Greek water mechanism, an Egyptian phoenix and wooden robots wearing traditional Arabian attire.

"Science throughout its history has claimed a hugely important role in diffusing through, or simply sidestepping, cultural or political barriers," Rapley said, "... and through that sparking innovation, new ideas and advance."

The exhibition is based on hundreds of manuscripts from the period, and the claims of discoveries have been verified by experts at the Science Museum.