PIONEERS OF MODERN SCIENCE

EXHIBIT LIST

usturlab

ABOUT USTURLAB

At Usturlab, we share the notion that science plays a role as a building block in human societies. Usturlab collaborates with experts that adopt interactive communicative approaches in the fields of philosophy, art and technology.

The operational spectrum of Usturlab is vast. We mainly serve our partners by designing physical environments for training, art & technology centers of all which form crucial support to formal education system.

Turn-key exhibition design and consultancy for content creation are also in our repertoire.

WHAT WE DO

Education

Science Center

Digital Content Creation

Publishing

Production

Games

About Pioneers of Modern Science

The exhibition tells about the pioneering scientists of the Islamic civilization.

The exhibition presents the influence of the history of Islamic Science on the construction of modern science with an experience-based approach under 5 main sections: Discovery, Observation, Human, Art and Civilization.

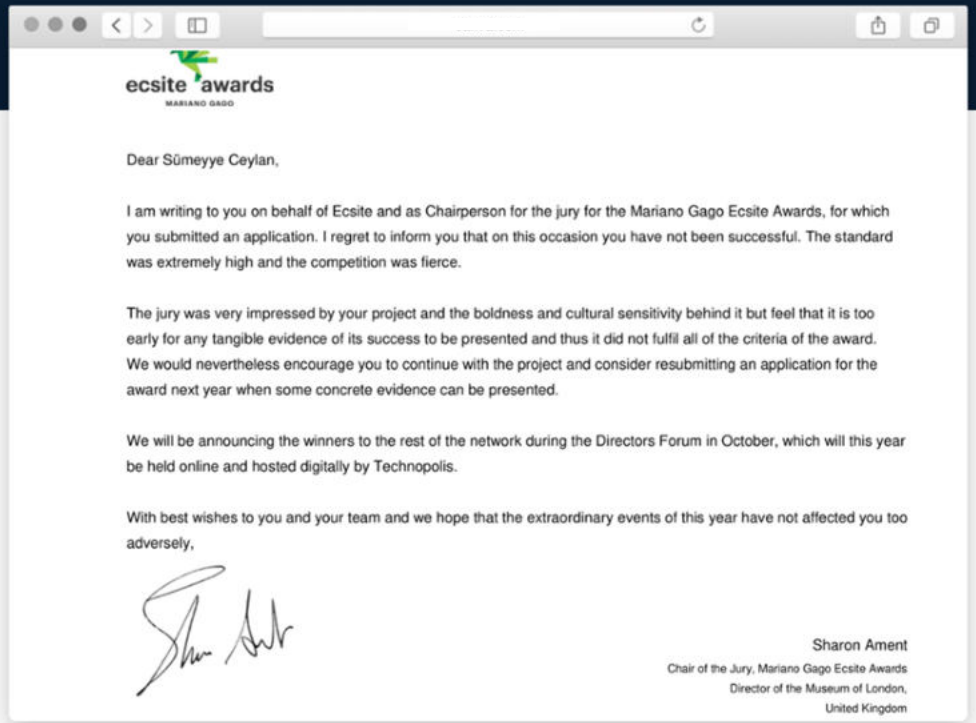
EXHIBITION CONTENT

Built on a 450 m² area, the exhibition caters to every age group and appeals to all 5 senses. Designed with a modern approach, exhibition tells about the history of science, translation movement, astronomy, physics, chemistry, biology, mechanics, mathematics, human geography, medicine, architecture, art, daily life and more to show how these created a splendid civilization with an interactive approach.

“The jury was very impressed by your project and the boldness and cultural sensitivity behind it...”

- Sharon Ament, Director of the Museum of London

The Pioneers of Modern Science has reached the finals in the "Sustainable Success" category at the Ecsite Mariano Gago Awards (European Science Centers and Museums Network), one of the most prestigious award in its field.



ecsite awards
MARIANO GAGO

Dear Sümeyye Ceylan,

I am writing to you on behalf of Ecsite and as Chairperson for the jury for the Mariano Gago Ecsite Awards, for which you submitted an application. I regret to inform you that on this occasion you have not been successful. The standard was extremely high and the competition was fierce.

The jury was very impressed by your project and the boldness and cultural sensitivity behind it but feel that it is too early for any tangible evidence of its success to be presented and thus it did not fulfil all of the criteria of the award. We would nevertheless encourage you to continue with the project and consider resubmitting an application for the award next year when some concrete evidence can be presented.

We will be announcing the winners to the rest of the network during the Directors Forum in October, which will this year be held online and hosted digitally by Technopolis.

With best wishes to you and your team and we hope that the extraordinary events of this year have not affected you too adversely,

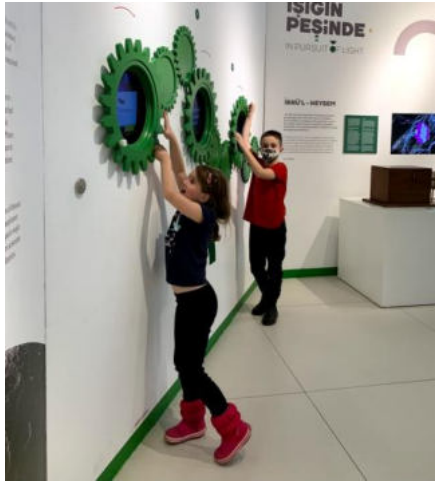
Sharon Ament
Chair of the Jury, Mariano Gago Ecsite Awards
Director of the Museum of London,
United Kingdom

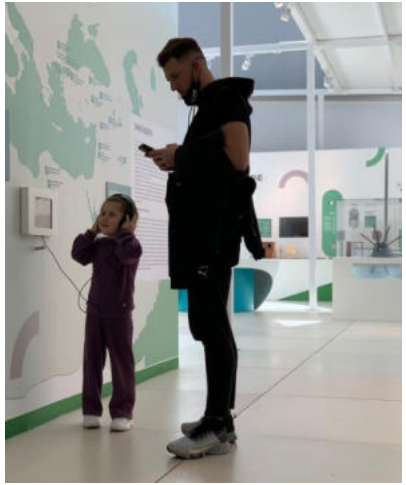
Usturlab is a proud member of Ecsite and TAD.

ecsite
EUROPEAN NETWORK
SCIENCE CENTRES & MUSEUMS

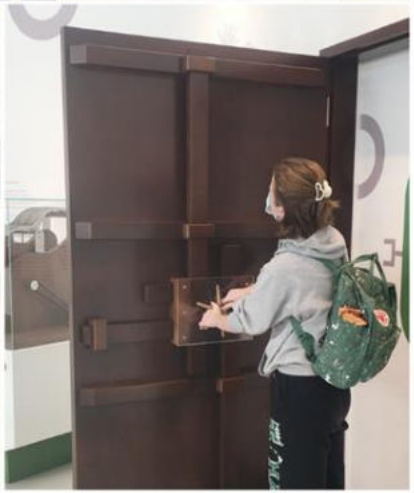
TAD
1954
TÜRK ASTRONOMİ DERNEĞİ
TURKISH ASTRONOMICAL SOCIETY

Our purpose is to facilitate intercultural dialogue and to spread appreciation of science, history and art altogether. The audience we serve comes from all around the world and all walks of life.



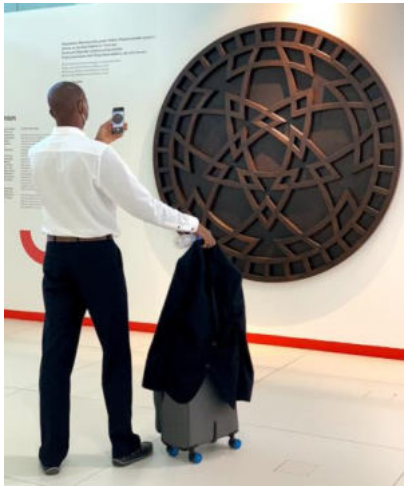


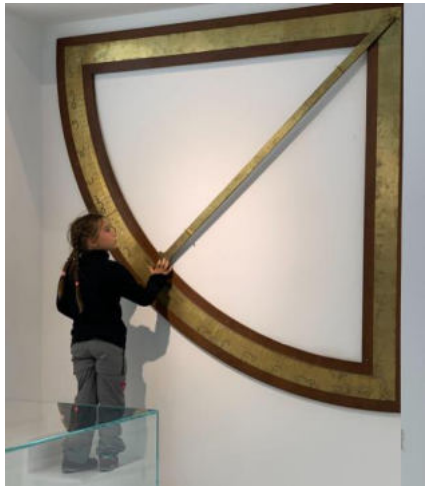
We attract many visitors from different backgrounds such as teachers, scientists, politicians, artists, business people, children and more.

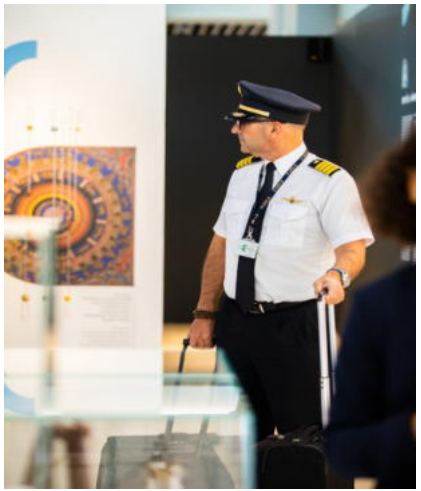


Visitors From All Over The World

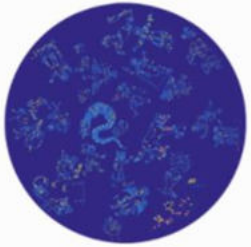
The exhibition attracts visitors from all corners of the world from Asia to Europe and Africa to South America.







DISCOVERY



OBSERVATION

HUMAN

ART

CIVILIZATION

DISCOVERY

The Ones Thinking Beyond Time Movie

The Ones Thinking Beyond Time is a movie about the scientific adventures of humankind in the exhibition.

Video: 10 min. mp4
Language: TR\ENG\AR-IQ
**Can be translated into desired language*

Size Option 1: Videowall (3x2)
Size Option 2: 86 inch Screen

Click Here

Digital Exhibit

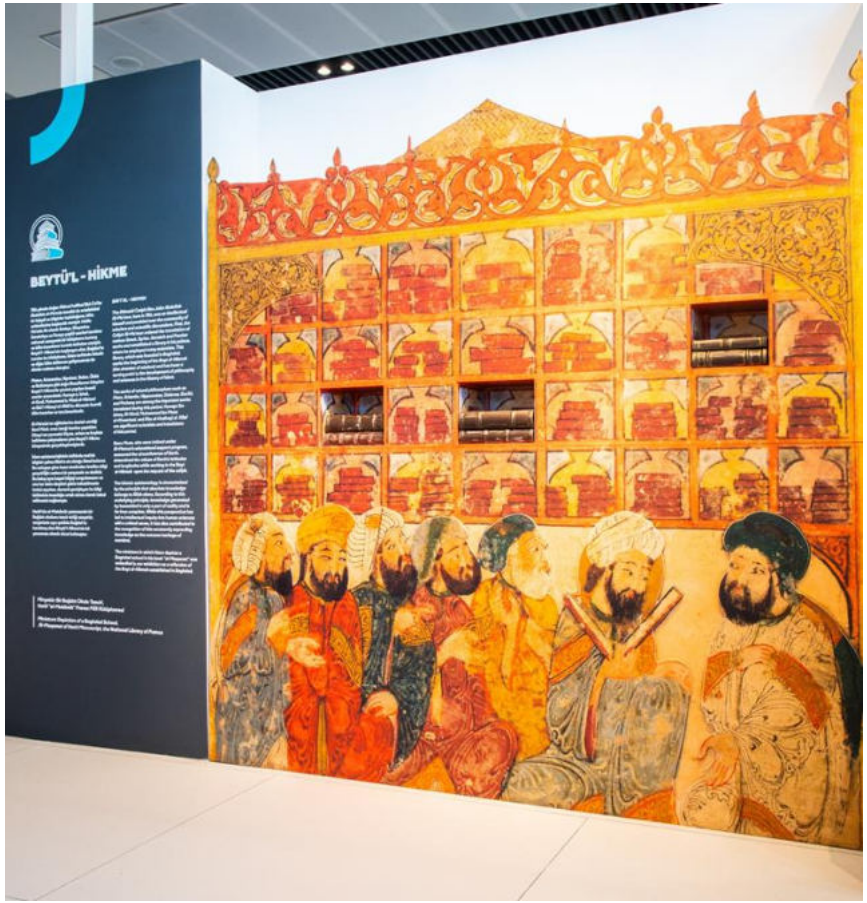
Bayt Al Hikmah

The miniature shown in the surface is from the Al-Maqamat of Hariri Manuscript and turned into a 2,5 meter long installation which is a depiction of a Baghdad School representing the Bayt al-Hikmah.

Manuscript Tag: *Al-Maqamat of Hariri Manuscript, the National Library of France*

Size: *250*40*280h cm*
Material: *Printed Plywood*

Static Installation



Digital Manuscript

In the 8th century, scholars of Islamic civilization started to translate Greek, Sanskrit and Persian works into Arabic.
The digital manuscript features works of the great thinkers and scientists of the ancient Greek period that shaped history.

*Size: 62*40*118h cm*
Material: Lacquered MDF and 24 inch touch screen

Manuscripts:

- *Elements (Ikhtisa ̄r lil-maqa ̄la ̄t min kita ̄b Uqli ̄dis)*
- *Almagest (al-Majasṭī)*
- *Kitab al-Nafs (Peri Psychēs: De Anima)*
- *Risalah fi'l-Musuli'l-Akliyyetī Eflatuniyye*
- *On Anatomical Procedures (fī ʿAmal al-tashrīḥ")*
- *Kitâb al-Hasâis Fi't-Tib*

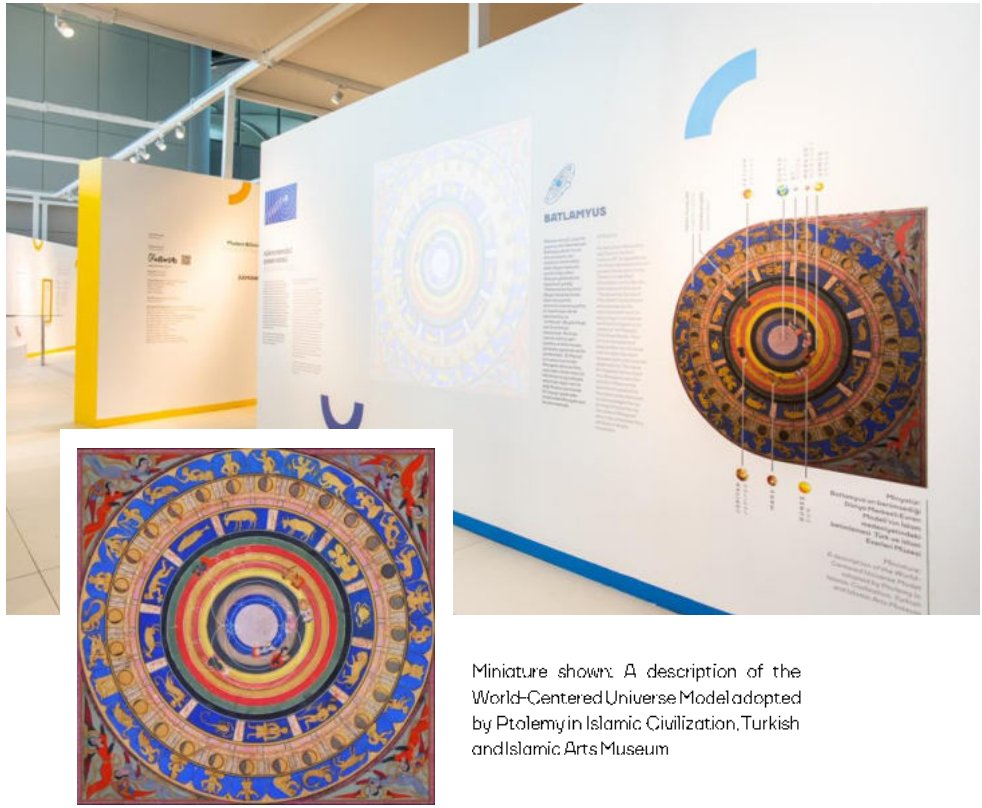
Digital Exhibit

Earth-Centered Universe Model

The digitized version of the World Centered Universe Model adopted by Ptolemy in Islamic Civilization exhibited as a video..

Manuscript Tag: Turkish and Islamic Arts Museum
Size: R:150 cm
Video: 5 min. (recurrent)

Click Here



Miniature shown: A description of the World-Centered Universe Model adopted by Ptolemy in Islamic Civilization, Turkish and Islamic Arts Museum

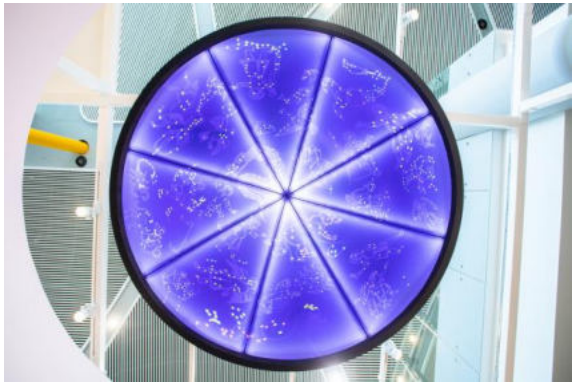
Digital Exhibit

OBSERVATION

Al Sufi's Constellations

The celestial sphere is an imaginary globe, concentric to Earth, on which projections of the constellations are found. The celestial sphere in the exhibit is inspired from the Al-Sufi's The Book of Fixed Stars which is the earliest illustrated astronomical manuscript known.

Size: R=200 cm
Material: Barrisol stretched ceiling



**This exhibit can be redesigned as a digital immersive experience.*

Digital Exhibit

The Zij of Ulugh Beg

This work, which is called Zij-i Sultani, contains many tables such as the catalogue of fixed stars, charts of planets, longitude and latitude charts of cities. The tables installed on the wall are "The Tables of the Determination of the Position of the Fixed Stars as Latitude and Longitude".

Manuscript Tag: *Zij-i Sultani, Ulugh Beg, 1438*
Topkapı Palace Museum Manuscript Library
Revan Collection
Size: *68*116 cm*
Material: *Cad cut printing*

Graphic Design

The Zij of Ulugh Beg

The Zij-i of Ulugh Beg pages can also be displayed as a digital manuscript.

Size: *62*40*118h cm*
Material: *MDF and 24 inch touch screen*

Digital Exhibit

Ruzname

Ruzname is type of a calendar intrinsic to the Ottomans. Exhibited ruzname was drawn and written by Na'ili Mehmed and covers the years 1804–1888. Its initial marginal notes explain briefly how to use the subsequent monthly and yearly charts.

Manuscript Tag: *Ruzname, Na'ili Mehmed, Kandilli Observatory Museum*
Calligraphy&Illumination Artist: *Sümeyra Dursun*
Size: *30*100 cm*
Material: *Pre-framed reproduction*

Reproduction

Observatories of the Islamic Civilization

The miniature represents Taqi ad-Din ibn Maruf working with other astronomers at Istanbul Observatory and brought into daylight with this installation.

Manuscript Tag: *Shehinshahname (Book of King of Kings) of Sultan Murad III, Istanbul University Library*
Size: *130*8*200h cm*
Material: *Lightbox*

Static Installation

Hourglass

It is a type of primitive stopwatch that has been utilized for different purposes for centuries. Hourglasses do not show the time; they are merely used for measuring time intervals. Ottoman astronomers also used hourglasses during their observation efforts. The hourglass shown in this model is designed to measure an interval of five minutes.

*Size: 10*10*20h cm*
Material: Glass, Brass

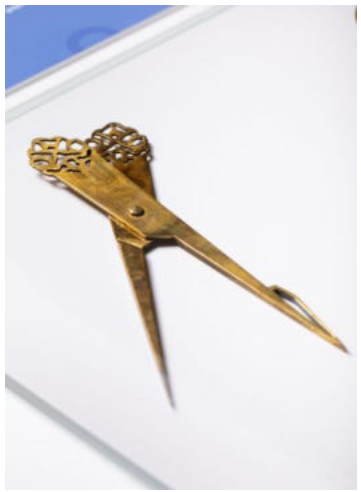
Reproduction

Caliper

The caliper is a device that is employed to draw circles. This has been designed in accordance with the miniature model depicting Ottoman astronomers.

*Size:10*10*20h cm*
Material: Brass

Reproduction



Tripod

It is a measuring device used by Ottoman astronomers as depicted in miniature paintings. The legs are movable, with a plumb bob in the middle.

*Size:30*30*20h cm*
Material: Brass, Wood

#Reproduction

Long Ruler

It is a ruler utilized by Ottoman astronomers as depicted in miniature drawings. Along with the purpose of measurement, it is also used to draw large circles like calipers.

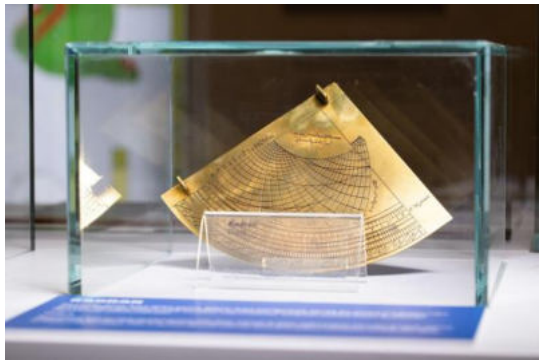
Size: 2*41,5 cm
Material: Brass and wood

Reproduction

Dial

The astrolabe over time evolved into the dial, which is also referred to as the rubu board, which means one fourth or quadrant. This dial shown here belongs to Muhammad b. Ahmad al-Mizzi (1326/726). The original device can be found at the Cairo Museum of Islamic Arts.

*Size:16*16*1.5 cm*
***Material:** Brass or Wood*



Reproduction

Goniometer

It is another tool used by Ottoman astronomers and depicted in miniature drawings. It is estimated to have been used in measuring and drawing any desired angle via its movable arm.

*Size: 70*70 cm*
Material: Brass

#Reproduction

Astrolabe

Exhibited astrolabe is a reproduction of Ottoman astrolabe for Sultan Bayezid. The astrolabes can be produced according to the latitude of a certain city and any requested model.

Size: R=19 cm
**Can be produced in desired size*
Material: Brass or Wood

The astrolabe shown in this model was probably manufactured in 1680 for Sultan b. A'zam b. Bayezid, a possible descendant of Sultan Bayezid II. This astrolabe houses four disks that show: 21° (Mecca), 30° (Cairo) 34°(Damascus), 36° (Aleppo), 41° (Istanbul) and 42° (Edirne). The inner part is empty. The backside has sinus and tangent dials.

Reproduction

Mural Quadrant

This mural quadrant is located in the Maragheh Observatory and is a diminished version of the original dial, which had a diameter of 2.5 meters. There is a movable angle ruler in the center of the dial. This fixed mural quadrant serves to determine the height of the Sun, the ecliptic inclination, and the latitude of the observation location.

*Size: 180*4*180 cm*
Material: Brass, wood

Static Installation

The Map of Observatories in Islamic World

The first modern observatories, in which scientific observations and measurements were conducted, were founded in Islamic World.

*Size: 351*280 cm*
Material: Wall Graphics

Graphic Design

Wooden Astrolabe on Biruni Wall

The wooden astrolabe exhibited was produced with regard to Istanbul's latitude and consists of one fixed and two movable layers. It can be produced for any requested latitude for any city in the world.

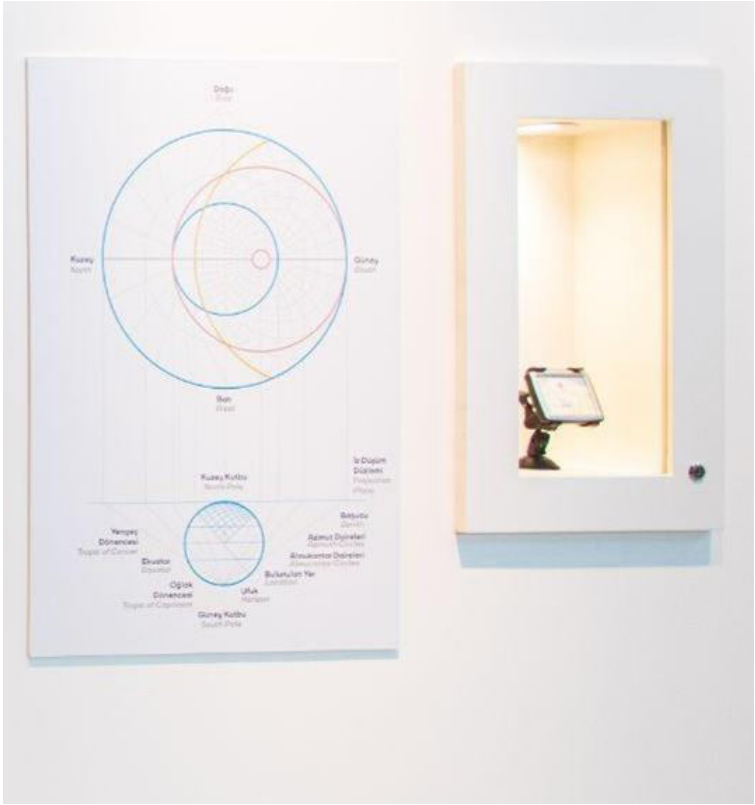
Size: R=150 cm
Material: Wood

Static Installation

GPS

The astrolabe is a mechanical positioning system, based on a projection of the spherical sky. It was utilized for determining one's current location on the Earth as well as measuring distance and height using a few observations and calculations. For this reason, it is considered to be the ancestor of GPS.

*Size: 28*35*25 cm (showcase)*
Material: GPS chip, navigation screen reproduction



Static Installation

Rotating Astrolabe

Muhammad Salih Tatawi reproduction astrolabe on a showcase.

Original astrolabe: Museum of the History of Science
Size: R=16 cm
Material: Brass, Lacquered MDF

Reproduction

Rotating Moon and Scientists

With this completely unique digital device that we designed, you will be able to identify the great scientists who have changed the course of the history and whose names are given to the craters of the Moon.

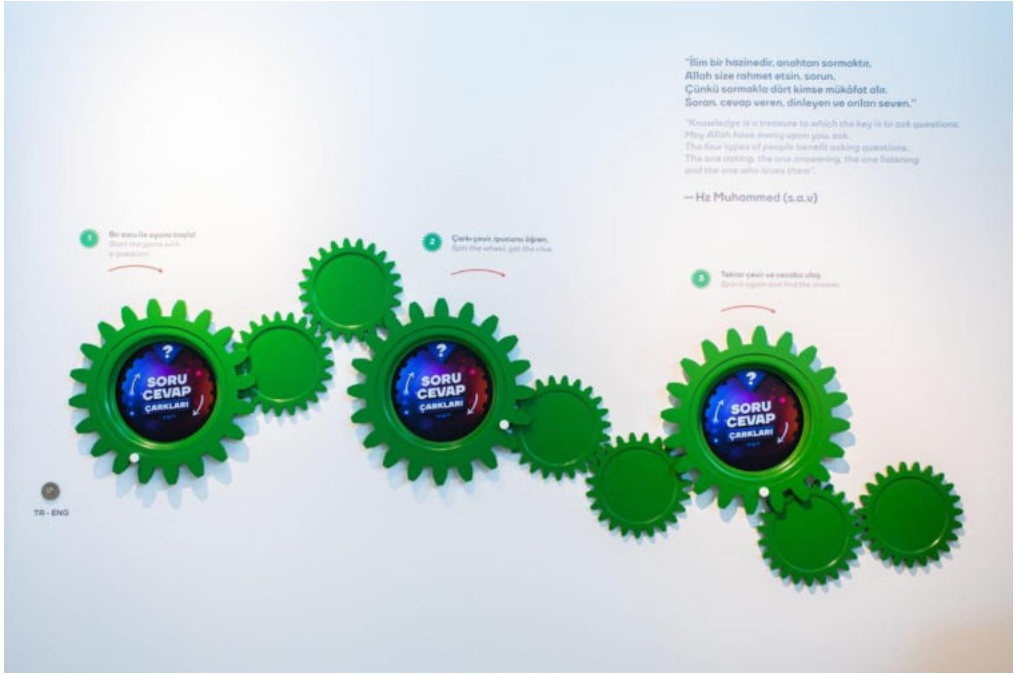
Size: R=200 H:265 cm
Material: Glass, Lacquered MDF, 15.6 inch screen, plexiglass

Digital Exhibit

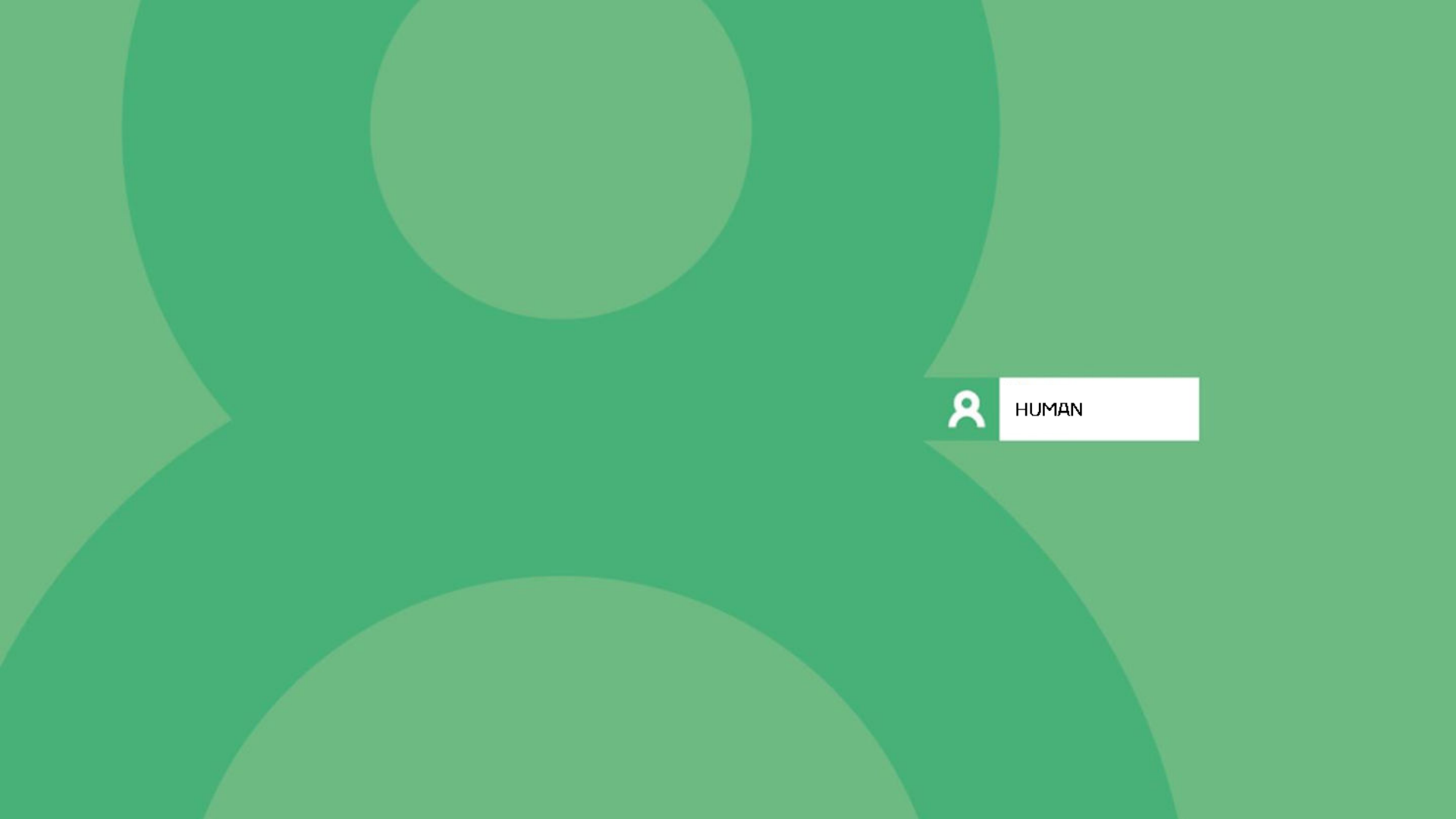
Question&Answer Game on the Wall

The system shown is an interactive quiz mechanism containing entertaining questions and clues about the history of science and can be adjusted for varied themes as well.

*Size: 300*270 cm (area covered)*
Material: Screen, wood



Digital Exhibit

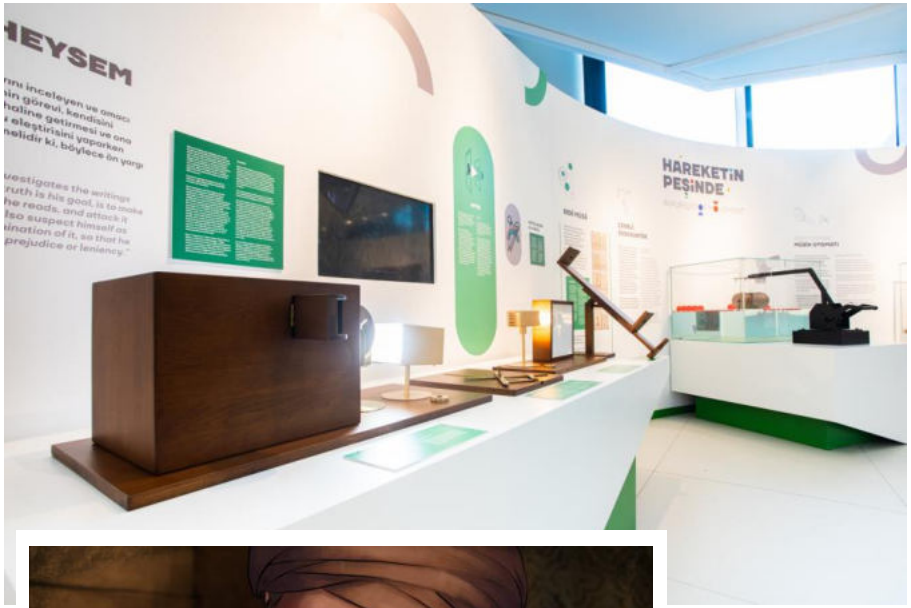

HUMAN

Alhazen Movie

An animated short film about the life of the first scientist, Ibn al-Haytham.

Video: 2D & 2 min.
Size: 32 inch screen

Click Here



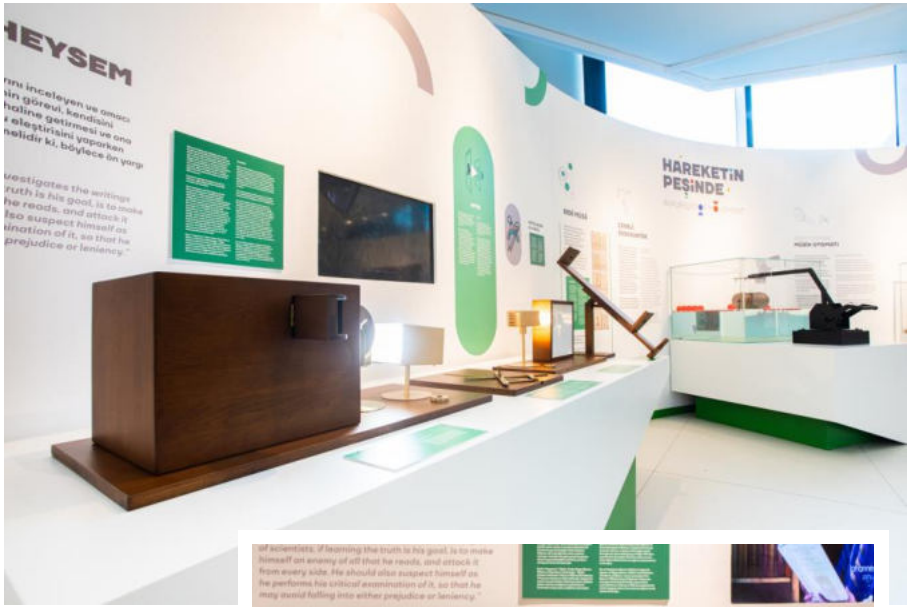
Digital Exhibit

Physics

Camera Obscura (The Dark Room)

The name of the experiment by which Ibn al-Haytham (Alhazen) proved the linearity of light. As the light from any object passes through a pinhole, its image reverses. This experiment is the most basic explanation of the operating principle of the camera and the vision, transformed into an experienceable copy in the exhibition.

*Size: 40*91*40 cm*
Material: Brass, wood



Mechanical Exhibit

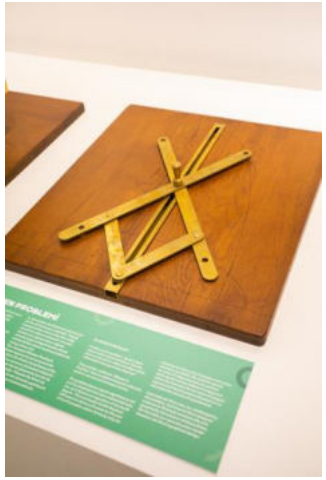
Physics

Alhazen's Problem

"Given a light source and a spherical mirror, find the point on the mirror where the light will be reflected to the eye of the observer."

Leonardo da Vinci was, too, challenged by this problem, and thus da Vinci designed a device to illustrate mechanically and graphically the solution of this problem. On the table is a reconstruction model based on da Vinci's graphical design.

*Size: 40*45 cm*
Material: Brass, wood



Mechanical Exhibit

Physics

Theory of Rainbow

It is a simple mechanism that shows the refraction of light and formation of rainbows in a global environment. Water droplets, too, form spherical breaking points in the sky. White light hitting spherical surface with a certain angle is split into colors.

*Size: 30*30*70h cm*
Material: Brass, wood, glass

Mechanical Exhibit

Physics

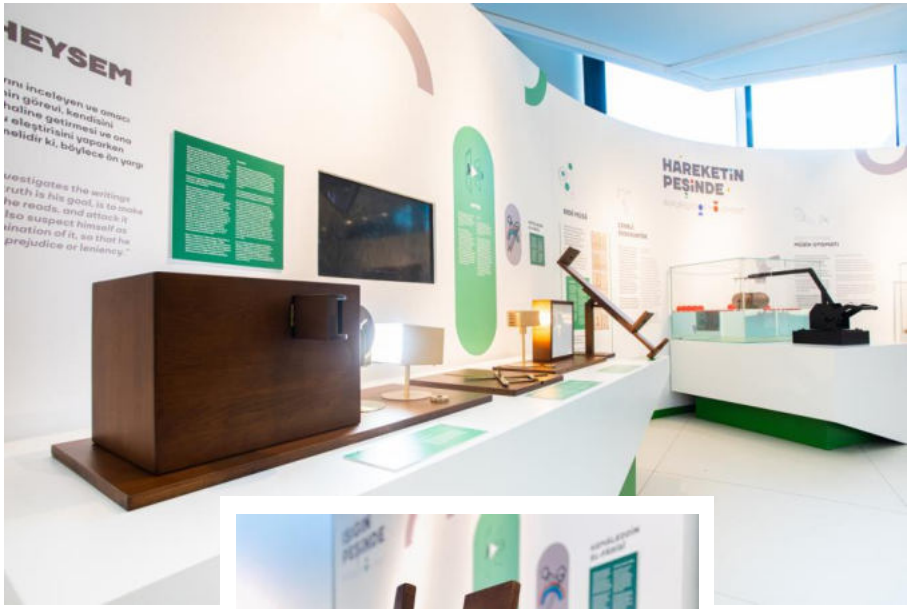
Kamal Al-Din Al-Farisi and The Moonlight Observation Device

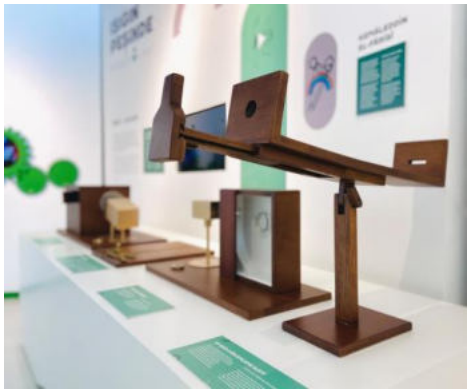
It refers to the experiment device that al-Haytham wrote on his treatise on the Moon light. He explained thoroughly how this device worked. According to al-Haytham the best way to monitor the Moon is to observe with a naked eye, from a small observation spot.

*Size: 50*50*70h cm*
Material: Wood

Mechanical Exhibit

Physics





Banu Musa Clamshell Excavator

In their principle book Kitab al-Hiyal (Book of Ingenious Devices), Banu Musa described the clamshell excavator, the last invention in their book. This mechanism is used to extract ore from the sea or to remove objects that have fallen into a well or water. When the downwardly suspended cylinder comes into contact with water, the clamp opens. When the desired object is caught, the middle rope is pulled and the cylinder closes and is drawn upward.

*Size: 104*142*150h cm*
Material: Brass, metal, glass, water, Lacquered MDF

Mechanical Exhibit

● Mechanics

Banu Musa's Music Box

Banu Musa developed the oldest programmable, mechanical musical instrument known, which could produce sounds and music. The original version of this automaton was run by hydropower, and therefore, was described as the self-operating automaton. This invention has been regarded as the first music box and music automaton. Being the first programmable machine, it may also be viewed as a primitive version of the computer.

*Size: 82*82*150h cm*
Material: Wood, metal, Lacquered MDF

Mechanical Exhibit

● Mechanics

Taqi Al-Din's Six Cylinder Pump

The camshaft starts to rotate with the rotation of the water wheel built on the river. The circular motion turns into linear motion and the pistons move up and down. This movement creates a vacuum in the vacuum chamber and lifts the water up. Similar piston systems are currently used in car
engines.

*Size: 162*165*156 cm*
Material: Metal, brass, water, Lacquered MDF

Mechanical Exhibit

Mechanics

Al Jazari's Ingenious Devices

Originally coming from a tradition of artisans, he seemed more interested in the craftsmanship necessary to construct the devices than the technology which lay behind them and constructed weightdriven water clocks, candle clocks, robots, water-raising machines and lock mechanisms. Many parts employed in these machines continue to be utilized actively in today's machines.

Video: 1.16 min
Size: 43 inch screen

Click Here

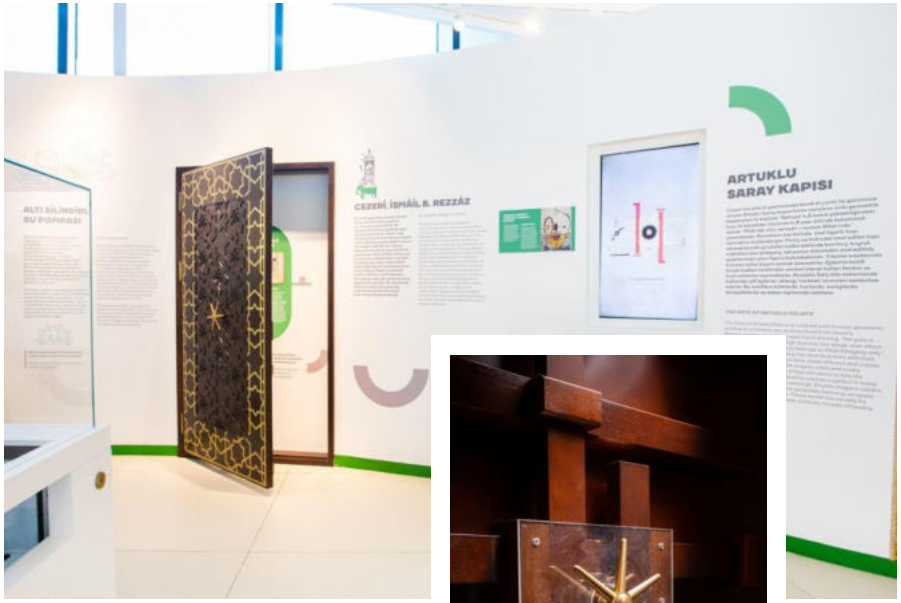
Digital Exhibit

Mechanics

Al Jazari's Four Bolt Lock

Al-Jazari, considered the founder of robotics and cybernetics, described the mechanism of his four bolt lock in his book "Kitab fi ma'rifat al-hiyal al-handasiya". These bolts designed in four directions are built to prevent the entry of any intruders or thieves. The bolts locked with the key cannot be opened by manually moving them, thus the lock is unlocked only with a key. This latch system is unique to Al-Jazari, who designed it with a completely new approach. In this model door, a fixed door knocker is employed, instead of a key. The movement which is turning the door knocker left and right, opens and closes the door.

Size: *115*200*25 cm*
Material: *Wood, brass*



Kitab fi ma'rifat al-hiyal al-handasiya
(Book in knowledge of engineering tricks)

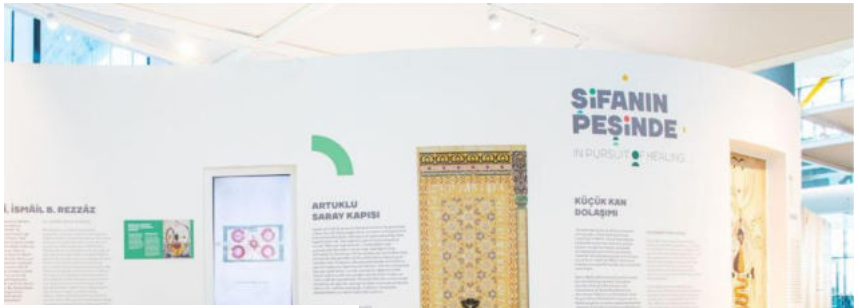
Mechanical Exhibit

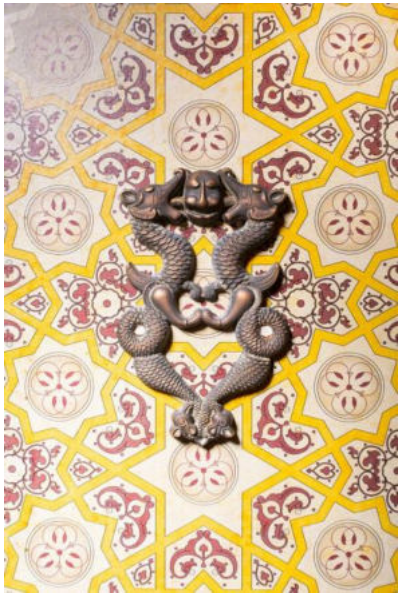
● Mechanics

Al Jazari's Gate of Artuklu Palace

The Gate of Artuklu Palace is covered with famous geometric ornaments of Islamic art, as described in al-Jazari's famous manuscript with his own hand drawing. The gate is approximately 4,5 meters high and has two wings, over which an inscription says: "Property belongs to Allah Almighty only" in Kufa calligraphy.

Manuscript Tag: *Topkapı Palace Museum Library, Ahmet III's Collection*
Geometric Patterns: *Zeynep Iqbal Kayani*
Calligraphy: *Kenan Yüksel*
Illumination: *Ayten Tiryaki*
Coloring: *Hasan Aktaş*
Size: *115*200*25 cm*





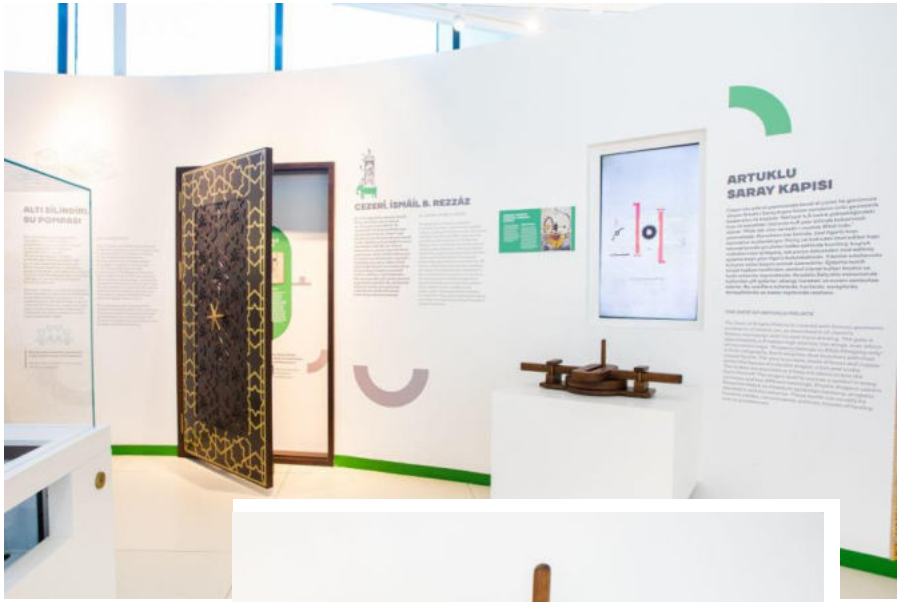
Static Installation

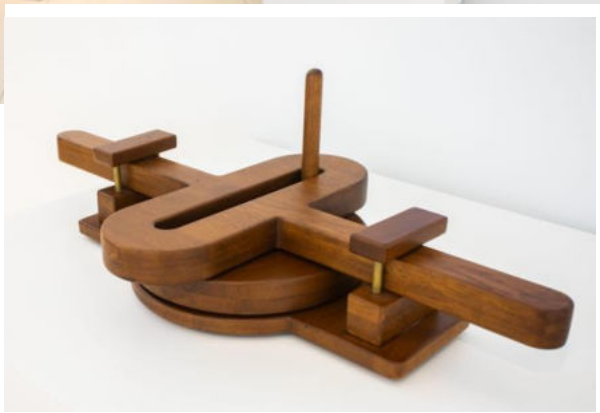
● Mechanics

Exhibit on Converting Circular Motion Into Linear Motion

During his engineering work, Al-Jazari was the first to use what we today call the crankshaft, a mechanism that consisted of a wheel setting several crank pins into motion, with the wheel's circular motion and the pins moving back and forth in a straight line. The crankshaft shown, as described by al Jazari, transforms continuous rotary motion into a linear reciprocating motion, which was quite central to the Industrial Revolution and one the most notable inventions of all times.

*Size: 40*80*25 cm*
Material: Wood





Mechanical Exhibit

- Mechanics

Ibn Al-Nafis and Pulmonary Circulation

Ibn al-Nafis was mostly famous for being the first to describe the pulmonary circulation of the blood. This mechanism presents the small blood circulation movement to the visitor with light.

*Size: 70*8*160h cm*
Material: Lightbox

Digital Installation

Medicine

Animation About Avicenna, Biruni, Farabi

Avicenna lived at the same time as other great scientists such as Bîrûnî and Fârâbî. The lives of these three great scientists have been spent traveling especially because of their pursuit of science. The important recorded events of their travels are listed in the animation you watch.

Video: 4.39 min.
Size: 32 inch screen

Click Here

Digital Exhibit

Medicine

Works From Ibn Sina (Avicenna)

Al-Qanun fi't Tibb (The Canon of Medicine) and Kitab al Shifa (The Book of Healing) are among the most remarkable works of medicine and philosophy. These extensive volumes of books are still being translated into different languages and continue to have an impact on our lives. The exhibited books are to emphasize the volume and the importance of the books.

Material: Paper, cloth
*Size: 80*28 cm*

Static Installation

Medicine

Therapeutic Music Modes

There is a significant number of works written by Muslim scientists that explored and described the therapeutic effect of music on human psychology. You can listen to these spiritually and physically healing music modes (makam) by using our digital application in the exhibition or our via your smart phones.

Material: *Ipad, Headphone*
Size: *2 piece/13 inch screen*

Digital Exhibit

● Medicine

The Map of Hospitals In The Islamic World

Efforts of institutionalization in medicine had reached its peak in the Islamic World. Muslims assigned big significance to the medicinal education and provision of care and thus established several health care institutions. Important medical centers in Islamic civilization are marked on this map.

Material: Wall Graphics
*Size: 351*280h*

Graphic Design

Medicine

Al Zahrawi and The Bag of a Surgeon

Most notable medical physicians such as al-Razi, al-Zahrawi and Ibn Sina (Avicenna) who all followed the Hippocratic axiom, "All should be in particular order and easy accessibility", produced their own personal medical bags to carry the required tools with them. The doctor's bag is inspired by the bags used in the 16th century. Along with it, medicinal plants used in the medical studies of the period, surgical instruments and prescription samples are exhibited.

Material: Brass
*Size: 25*15*20h*

Static Installation

● Medicine

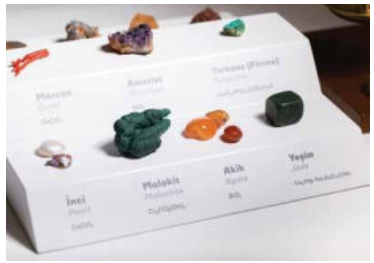
Biruni's Experiment Picnometre

As a prolific scientist, al-Biruni conducted numerous experiments and employed various methods for measuring substances' specific weights. He obtained the most consistent results from an experiment for measuring water volume. A model of this experimental setup is presented to the visitor.

Material: Glass, Semi-precious stones, metals, brass scale, metal weights, Lacquered MDF
*Size: 60*100*50h cm*

Static Installation

● Chemistry



Ar Razi's Alembic

In his book, al-Razi describes the alembic. The alembic, with its spout and distillation dish, is very useful in distilling water. This is the oldest description of distillation through condensation. A model of the described alembic is presented to the visitor.

Material: Glass, copper, clay, metal
*Size: 30*25*65h cm*

Static Installation

Chemistry

Jabir B. Hayyan and Jewelry Kiln

The oldest known recipe on the production of nitric acid belongs to Jabir b. Hayyan. He also offered formulations on the production of steel and purification of metals. An example of a furnace used for the manufacture of artificial jewelery is on display.

Material: Clay
*Size: 30*25*65h cm*

Static Installation

Chemistry

Do You Want To Smell A Thousand Year Old Perfumes?

Much of our knowledge of fragrance production in early Islamic civilization comes from Yakub al-Kindi's (AD 803-870) fragrance recipes book. "Kitâb fî kimyâ'i'l-'ıtr ve't-tasîdât" (Book of Perfume Chemistry and Distillation)". The exhibit shown is appeals to smelling sense and the five described scents in the book can be experienced.

Material: Wood, brass, 5 fragrances
*Size: 170*8*34h cm*

Static Installation

● Chemistry

Al-Khwarizmi and Algebra

The number "0" is first seen in Indian manuscripts. However, it took centuries for it to be accepted mathematically and included in the process. The number zero, which previously had philosophical meanings such as void and absence rather than mathematical expressions, was included in the mathematical operations by Khwarizm. It is the translation of the text with numbers on the screen into the binary coding system.

Video: 2.38 min.
Size: 43 inch screen

Click Here

Digital Exhibit

● Mathematics

Trigonometry

In the Middle Ages, trigonometry studies were carried out by Muslim mathematicians such as al-Kharizm, Abu al-Wafa, al-Buzjani and Nasir al-Din al-Tusi. Islamic mathematicians were using all six trigonometric functions. Translations of the Arabic and Greek manuscripts led to the West's adoption of trigonometry as a discipline through Regiomontanus. The transformation in the knowledge of trigonometry is emphasize with an exhibit where the phenomenon known as rose curves in trigonometry can be experienced.

Material: Wood, metal
*Size: 134*4*80h cm*

Mechanical Exhibit

- Mathematics

Trigonometry

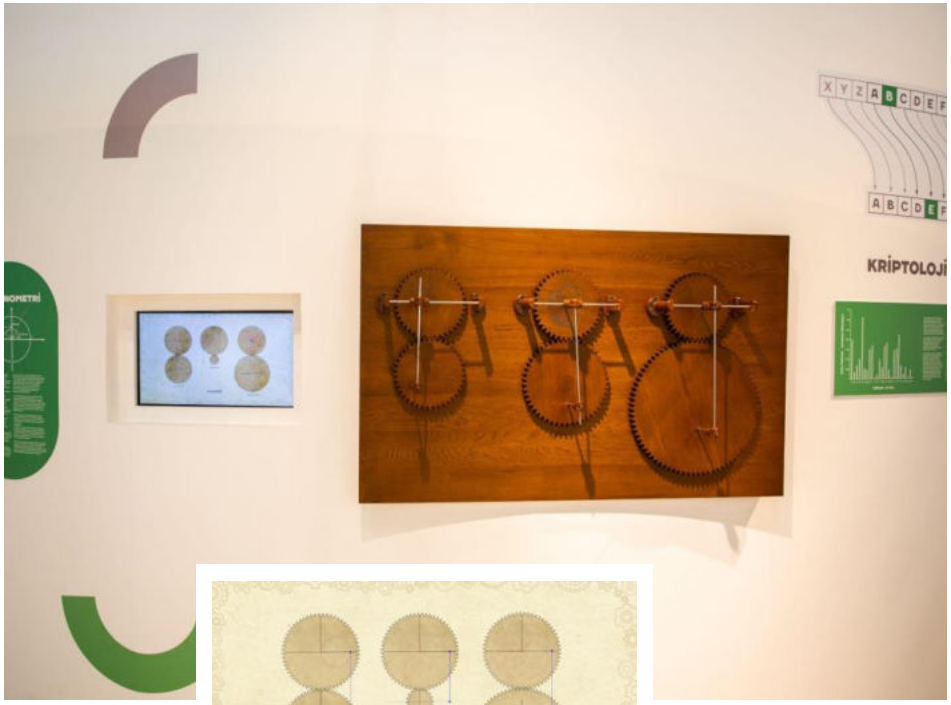
This video designed in common with previous exhibit. In this video you see a sinusoid, plotted in a polar coordinate system called rose or rhodonea curve. These curves are utilized in optical problems, designs of satellite and engines.

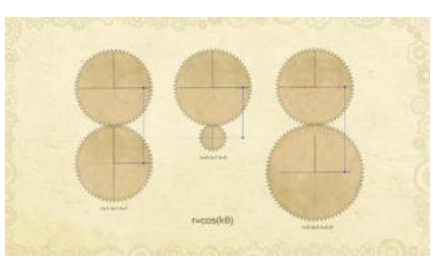
Video: 1.36 min.
Size: 24 inch screen

Click Here

Digital Exhibit

- Mathematics





Digital Cryptography Game

Al-Kindi discovered the frequency analysis, in other words, he broke the cipher by comparing the most frequently used letter. This method is still known as frequency analysis. The development of the method of breaking the Caesar code has revolutionized the field of cryptology and has led to the development of new encryption methods.
The game starts with a secret text written with the Caesar cipher which must be solved in order to save the country.

Size: 43 inch screen, Lacquered MDF

Digital Exhibit

● Mathematics

Evolution of Numbers

People have been using numbers since prehistoric times. The mathematical symbols we use today have emerged through an evolution of about 22,000 years. In this design, the evolution of numbers throughout history is visualized.

Material: Wall Graphics
*Size: 463*280h cm*

Graphic Design

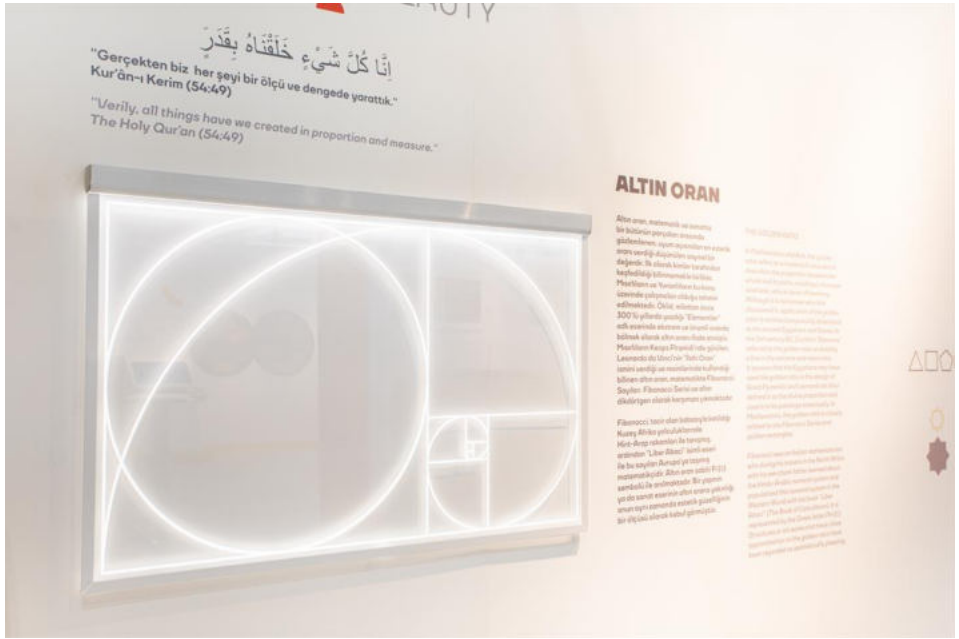
Mathematics

ART

The Golden Ratio

Structures or art works that have close approximation to the golden ratio have been regarded as aesthetically pleasing. This installation informs the visitors about the journey of Hindu-Arabic numeral system into the Western world through Fibonacci.

Material: Plexiglass, led light
*Size: 100*65h cm*



Static Installation

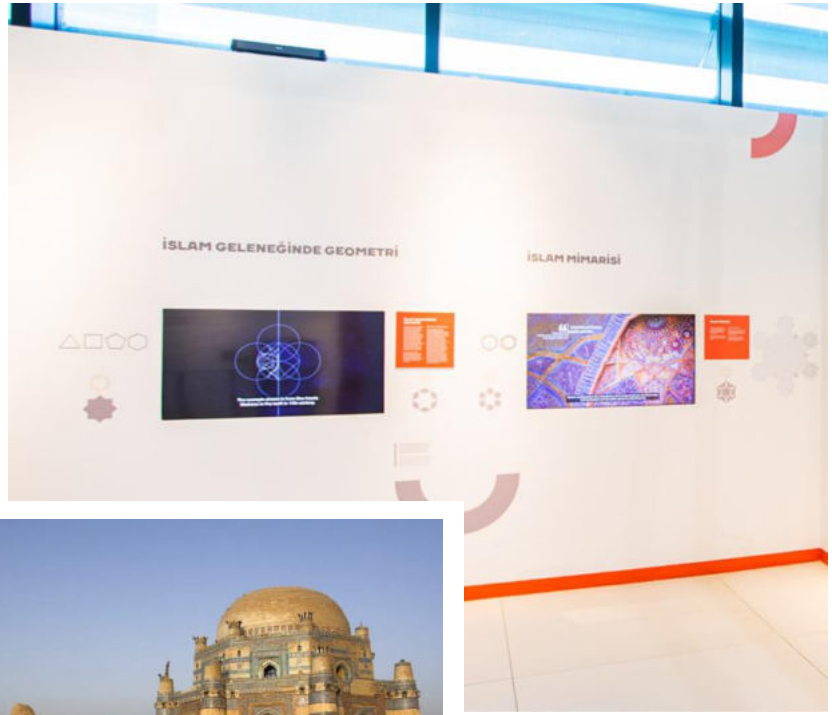
- Mathematics/Art

Islamic Architecture

Displayed video contains information about the architectural structures, which still continue to amaze people, are the end result of the collaboration between mathematicians and artisans in Islamic Architecture.

Video: 3.13 min.
Size: 43 inch screen

Click Here



Digital Exhibit

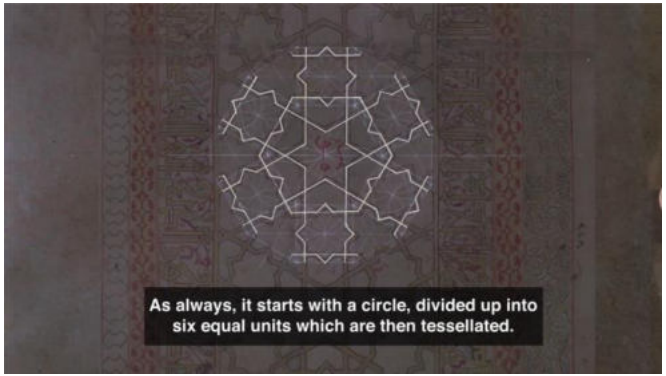
Geometry in Islamic Tradition

The visuals in the video are made by architect and artist Zeynep Iqbal Kayani with compass, pencil and drawn using paper and tells the story of geometry in architecture.

Video: 6.34 min
Size: 43 inch screen

Click Here

Digital Exhibit



Omar Khayyam and the Dance of Venus

The model exhibited here is inspired by the Northern Dome of Isfahan Mosque, which was mathematically modeled by Omar Khayyam. The pattern inside the dome indicates the trajectory of Venus from the geocentric perspective. The octagonal cycle of Venus occurs every 8 solar years when Venus completes her long travel around the sun and returns to the same point in the sky where the cycle began. That phenomenon aroused much curiosity in ancient civilizations. It is known as the Dance of Venus today.

Material: Wood
Size: R=200 cm

Static Installation

Alhambra and Inspiration fr
the East

Al-Hambra, one of the most significant works of Islamic architecture, still inspires its visitors as a World Cultural Heritage Site. This section dedicated to the architecture of the Alhambra.
Since the beginning of the 1900s, the attention of Western artists in their search for individual art styles shifted to Eastern art and utilized them as a source in their works. This design describes these representations with the examples such as Henri Matisse and his painting called The Dessert: Harmony in Red" dated 1908.

Material: Wall Graphics
*Size: 301*280h cm*

Graphic Design

CIVILIZATION

Diploma

Diploma In the Islamic world, the first icazetname (diploma) emerged as a permission to narrate oral/written hadiths from one person to another; it then evolved into use as a diploma in madrasas. Exhibited diploma is a reproduction of Murad Molla's Diploma dated 1869.

Manuscript tag: *Murad Molla's Diploma, 186*
Süleymaniye Manuscript Library
Calligrapy: *Kenan Yüksel*
Illumination: *Zeynep Yüksel*
Size: *57*109h cm*

#Reproduction

The Greatest Explorer of All Times

It is an animated film showing the routes followed by the greatest travelers.

Video: 1 min.
Size: 43 inch screen

Click Here

Digital Exhibit

Jihannuma
The View of the World

"Jihannuma" which can be translated into English as the "The View of the World" is an atlas that is considered to be one of the milestones in the history of geography. This design contains the attempts to depict the earth on a two-dimensional plan, starting from the Babylonians and ancient Egyptians.

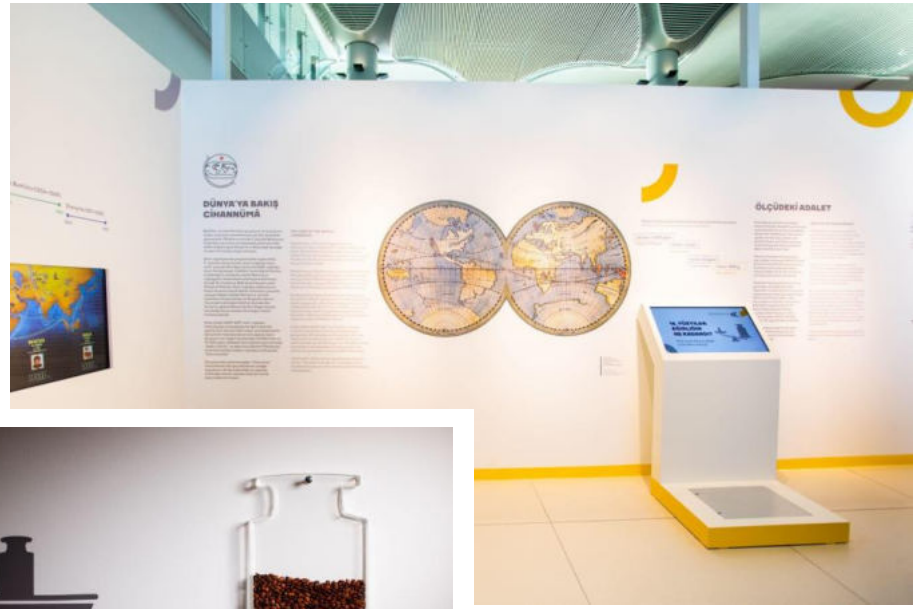
Manuscript tag: *Jihannuma,*
Katip Çelebi, 1648 Süleymaniye Manuscript Library,
Nuruosmaniye Collection
Size: *180-95 cm*

Graphic Design

Two Dirhams One Seed Just Measurement in Islam

Carob kernel is the only seed in nature that has a constant weight. 4 carob kernels make a dirham. For this reason, Arabs, Seljuks and Ottomans used it as a measure of weight. "Two Dirhams One Seed" is an idiom used in Turkish that means "Dressed Up To The Nines." This section explains how a folk etymology developed with an example such as an idiom.

Material: *Graphic painting, carob kernel, plexiglass,*
Size: *180-95 cm*



Static Installation

How Much Did You Weigh in the 16th Century?

It is a digital scale application that displays the visitor's data on the screen with various weight units used in the 16th century.

Material: 43 inch screen, digital scale, Lacquered MDF
*Size: 78*103*118h cm*

Digital Exhibit

The Map of Interaction

Have you ever wondered where the birthplace of these objects are? They have survived to the present day by transcending time and civilizations. In this design, the history of these objects combined in a map.

Material: Wall Graphics
*Size: 498*280h cm*

Graphic Design

The Map of Islamic Cities

The urban spatial elements in important Islamic cities such as Mecca, Madina, Istanbul, Baghdad and many more are addressed in this graphic design.

Material: Wall Graphics
*Size: 463*280h cm*

Graphic Design

Visitor Feedback Stand

A memory book stand where visitors write their ideas and suggestions about the exhibition.

Material: Lacquered MDF
*Size: 55*40*110h cm*

Static Installation

Digital Visitor Feedback Kiosk

A digital memory book where visitors write their ideas and suggestions about the exhibition.

Material: *Wood, touch screen, Lacquered MDF*
Size: *60*40*118h cm*

Static Installation

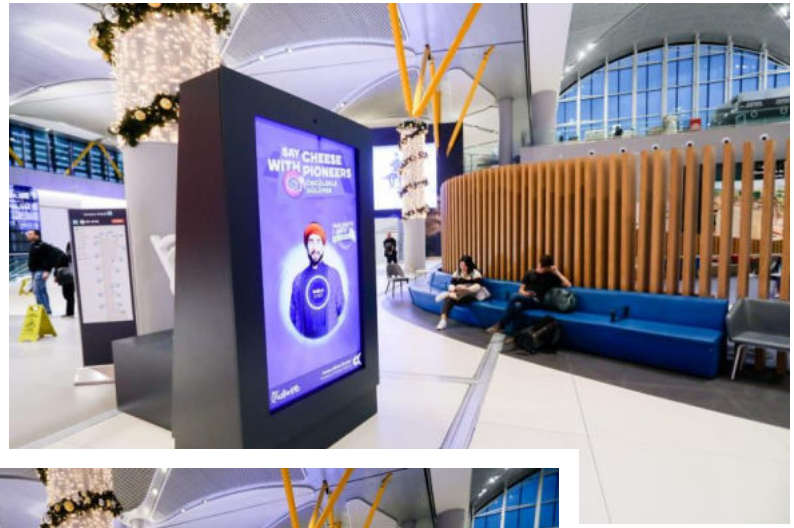
Say Cheese With Pioneers

It is an interactive digital exhibition where the visitor can take and share pictures in a virtual environment with scientists who have accomplished important studies in Islamic civilization.

***Material**: Wood, touch screen, knekt*
***Size**: 130*69.7*202h cm*

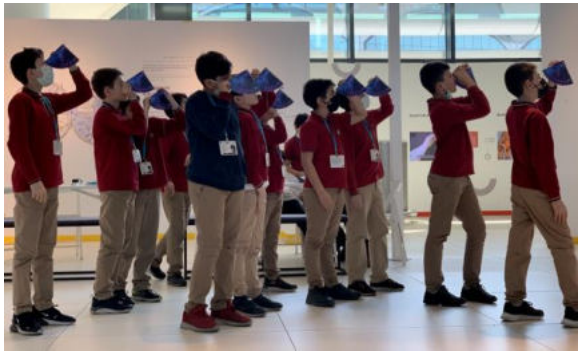
**Not a part of the exhibition, the application can be used as publicity.*

Digital Kiosk

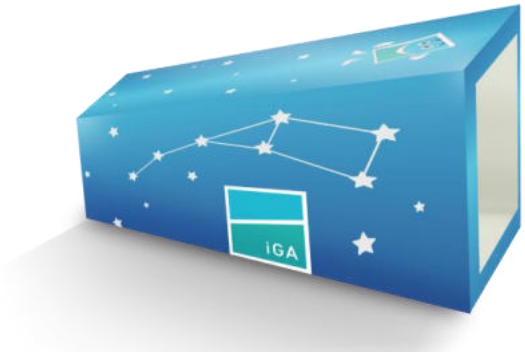


Exhibition Workshops

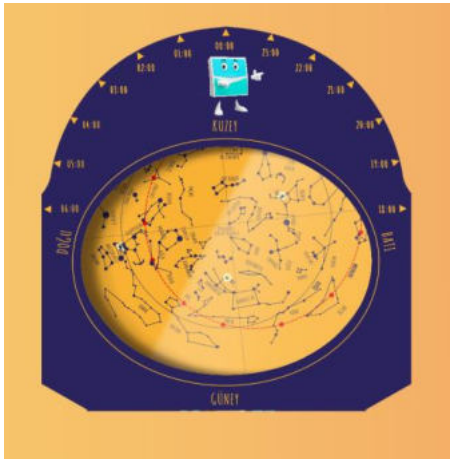
- Catch the Stars
- Ptolemy's Universe (Earth and Star Centered Universe Models)
- Sky Atlas
- Constellation Binocle
- Alhazen's Camera Obscura
- Islamic Geometric Patterns



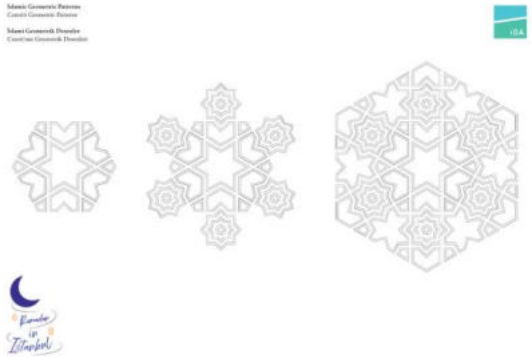
Education Materials



Constellation Binocle



Sky Atlas



Islamic Geometric Patterns

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