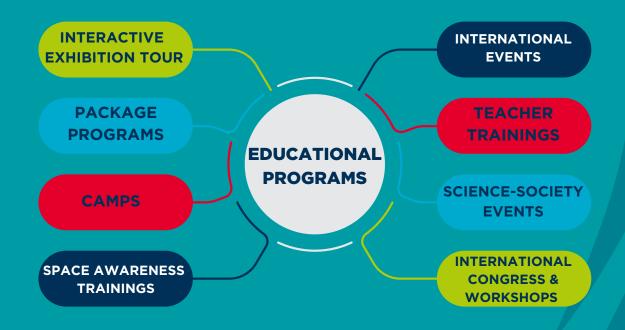
## GUHEM 2024 The Marks of **Education and** Inspiration



#### EDUCATIONAL PROGRAMS & ACTIVITIES



GUHEM, established under the leadership of the Bursa Chamber of Commerce and Industry, in collaboration with the Bursa Metropolitan Municipality and the Scientific and Technological Research Council of Turkey (TÜBİTAK), covers an area of approximately 13 000 square meters. It was founded with the aim of cultivating a new generation of young researchers in high-tech fields and enhancing our country's international competitiveness through domestic and national technologies.

The mission of GUHEM is to provide science enthusiasts of all ages with knowledge and experience in space, aviation, and technology, while raising awareness across society and inspiring younger generations.

GUHEM operates in collaboration with the Turkish Space Agency (TUA) in line with the 10 strategic goals outlined in Turkey's National Space Program. It offers an education and experience-focused approach through 154 interactive exhibits, the Aviation Academy, Innovation Laboratory, Chemistry and Biology Laboratories, Space Academy, and the Aerospace Workshop.

With its unique design, GUHEM stands as one of Bursa's landmark structures, being the largest science center in Europe and ranking among the most prominent science centers worldwide.



## EDUCATIONAL PROGRAMS



#### **INTERACTIVE EXHIBITION TOURS**



Through the Interactive Exhibition Tour program, open to participants aged 7+ and enjoyed by school groups, we introduced over 650,000 students to the magical world of aviation and space in 2024.

#### **PACKAGE PROGRAMS**

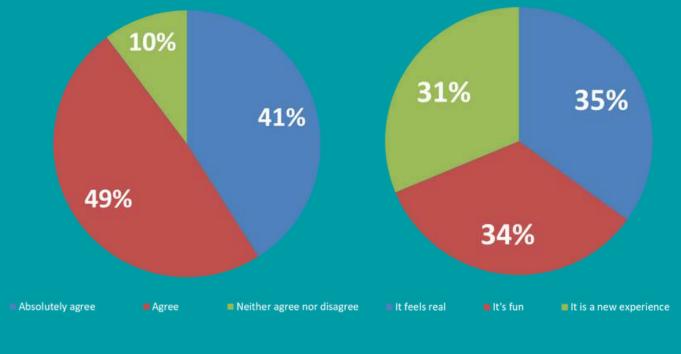
#### 170 000+ PEOPLE GROUP VISIT

Through our package programs, participants aged 7+ explored the fundamental principles of aviation and ventured into the depths of space. These programs featured hands-on experiences with the Cessna 172 Flight Simulator, Multi-Axis Simulator, and VR Moonwalk Simulator, as well as engaging workshops such as the Astrobiology Workshop, Paper Airplane and Wind Tunnel Workshop, Chemistry of Comets Science Show, and Plant Tropisms and Space Agriculture Workshop.

#### THE FEEDBACKS ON PACKAGE PROGRAMS

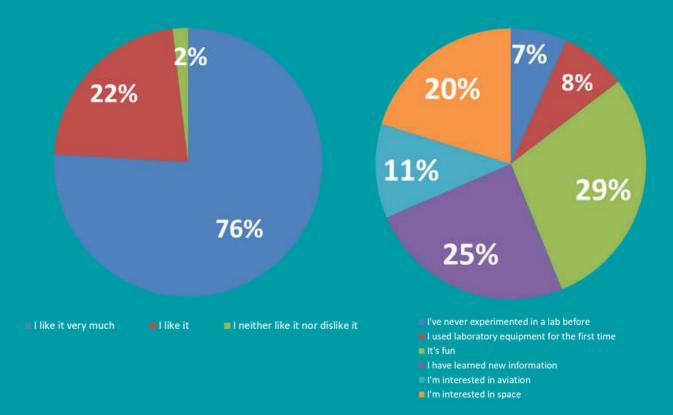
I have learnt different information through this program.

What are the reasons you like the simulators?



Did you enjoy the workshops you participated during the program?

What are the reasons you like the workshops?



#### CAMPS

#### AVIATION SPACE TECHNOLOGIES ASTRONOMY

In our 3-day, 2-night accommodation-based camp program, offered in both Turkish and English, we organized an unforgettable experience for our participants by providing interactive experiences, workshops, and simulators in the fields of Aviation, Space Technologies, and Astronomy.

#### **SPACE AWARENESS TRAININGS**

08 @

#### 12 000+ PEOPL SCHOOL VISIT

Thanks to the collaboration protocol signed between BTSO, TEKNOSAB, and the Bursa Provincial Directorate of National Education, the space awareness trainings conducted to thousands of secondary school students to introduce them the world of space.





# EVENTS & TRAININGS



#### **INTERNATIONAL EVENTS**

**EXPLORERS** 

ACADEM

**TURKIC SPACE** 

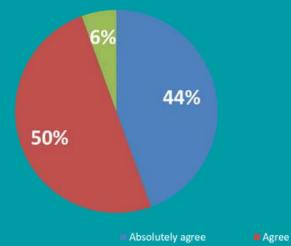
In collaboration with the Turkic States Organization (TDT) and the Turkish Space Agency (TUA), GUHEM hosted the second edition of a 6-day English camp program this year, with students from Turkic Republics. During this program, students had the unique experience of becoming astronaut candidates.

The program, which is a concentrated example of real astronaut training, allowed participants to familiarize themselves with the microgravity environment, experience space simulators, conduct experiments conducted on the International Space Station, and receive basic life training for space missions.

There is nothing more inspiring than astronaut training, where a select group of individuals around the world test their limits, experience challenging conditions, and gain a space perspective!

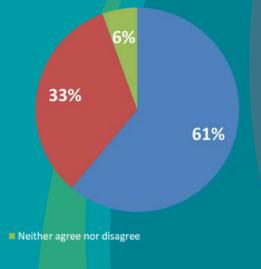
#### THE FEEDBACKS ON THE PROGRAM

Thanks to the training program, my interest in space has increased.



I would recommend the training program to my friends and family.

URKIC



#### **TEACHER TRAININGS**

#### GUHEM TEACHERS NETWORK

As part of GUHEM's preparations for World Space Week, the "GUHEM Teachers Network" gathering of volunteer teachers dedicated to inspiring future generations and enhancing students' interest and motivation in space through innovative approaches, was established last year. This year, the number of members of the network exceeded 2000.

Tuğçe Birol

MEHMET YÜCEL

As part of this year's World Space Week preparations, 5 meetings were held for the teachers in this network, covering various topics such as Space Research, Climate Change and Satellites, and Science Communication, with presentations of distinguished experts of these fields. Additionally, GUHEM published a World Space Week Event Handbook to serve as a guide for teachers.



As the National Coordinator for World Space Week 2024, GUHEM continued its promotional activities this year. Under the World Space Week events, we facilitated over 300 events across various schools and institutions throughout Turkey. More than 300 000 participants took part in both online and in-person activities.

#### **TEACHER TRAININGS**

#### IAU OAE TTP

In the Teacher Training Program supported by the International Astronomical Union (IAU) Office of Astronomy for Education (OAE), GUHEM organized a two-day astronomy training for 20 teachers selected from the GUHEM Teacher Network.



In collaboration with the Experiential Training Center Association, the Experiential Learning Methods Fair brought together the leading actors of experiential learning field to share the latest methods. 250 participants from various provinces of Turkey attended the event in which workshops, panels, and networking activities held at GUHEM.



TÜRKİYE'S Istikbal Göklerdedir HUMAN SPACE

MISSION

We organized scientific community activities during the launch and mission of Türkiye's first astronaut, Alper Gezeravcı, with physical events and live broadcasts. Hosted and organized by GUHEM, with the participation of Minister of Industry and Technology Mehmet Fatih Kacır and other attendees, we established a live connection with the International Space Station to follow Alper Gezeravcı's work. Upon astronaut Alper Gezeravcı's return to Earth, we also organized special live broadcasts and events. Additionally, we held awareness activities at GUHEM before, during, and after the mission of Turkey's second astronaut, Tuva Cihangir Atasever.

The total number of people who physically participated in these events, as well as those who watched the live broadcasts and recordings, exceeded 10 million!



NOCTURNE

**GUHEM** 

We spend one night each month at GUHEM! The program, featuring specially prepared orienteering activities, various scientific games, and science shows like MarsLab and Stardust, has been attended by over 1500 people so far. The Nocturne GUHEM program, which takes place with special themes, has been organized under various titles such as August 30 Victory Day, World Space Week, Mid-Term Break, and the December 21 Winter Solstice, and will continue to be held!



The 26th edition of the TÜBİTAK Sky Observation Event took place this year with the collaboration of the Ministry of Industry and Technology, Bursa Governorship, TÜBİTAK, TUA, and GUHEM. Throughout the event, various workshops, telescope observations, competitions, experiments, and astronomy-related activities were held. GUHEM was present in all areas at Türkiye's largest observation festival!



The 11th edition of "Turkey Innovation Week," organized with the support of the Ministry of Trade and hosted by the Turkish Exporters Assembly, took place this year from October 10-12 at the Halic Congress Center. With three different simulators and booth activities, GUHEM created the most attention-grabbing and awareness-raising initiative at the event! Additionally, a panel titled "Out of the World: Innovation Beyond the Limits" was organized, moderated by GUHEM's General Manager Halit Mirahmetoğlu, with participation from Turkey's first astronaut Alper Gezeravcı, Umut Yıldız, and Güler Koçak.



At GUHEM's workshop area, we organized aviation, space, and astronomythemed activities throughout the event, carrying out awareness and educational initiatives in these fields.

#### GOVERNMENT INCENTIVES INFORMATION DAYS

In the project organized by the Presidency's Directorate of Communications, GUHEM's activities were shared with visitors. Additionally, experience areas consisting of GUHEM simulators were set up, and events were held to raise awareness of space and aviation among the visitors.

C' GUHEM





## INTERNATIONAL CONGRESS & WORKSHOPS



At the 2024 Ecsite Conference organized to increase science education and awareness, we came together with science-community professionals to foster collaborations and exchange knowledge.



At the conference organized this year by the North Africa and Middle East Science Centers Network (NAMES) in Konya, we participated with two verbal presentations and two workshops conducted by our science communication team.

## INTERNATIONAL CONGRESS & WORKSHOPS



We participated to The Communicating Astronomy with the Public (CAP) 2024 Conference as a stakeholder, focusing on astronomy communication. We explored collaboration opportunities within a wide range of participants, from science communication professionals, planetariums, and science centers to professional and amateur astronomers, as well as journalists.



Since 2021, as a member of the International Astronautical Federation (IAF), we had the opportunity to present our space efforts at the International Astronautical Congress on a global stage. As a result of our efforts, we were elected to the Museum and Science Centers Administrative Committees. As GUHEM, we continue to support the promotional activities for the 2026 IAC in Antalya.

## INTERNATIONAL CONGRESS & WORKSHOPS

#### **ASPAC 2024**

We participated in the Asia-Pacific Science and Technology Centers Network (ASPAC) Congress, which aims to promote collaboration and knowledge exchange among science centers and science-community professionals to enhance science education and awareness. We presented both a verbal presentation and a poster at the event.



At the workshop organized by the International Astronomical Union Office of Astronomy for Education (IAU OAE), which brought together National Astronomy Education Coordinators (NAECs) and experts working on astronomy education in the Mediterranean region, we shared experiences and exchanged ideas on future projects while conducting activity implementations and designs.



Altınova Mh. Fuar Cd. No:23 A Blok GUHEM Osmangazi / BURSA +90 224 211 30 04 (Pbx) +90 224 211 30 05 info@guhem.org.tr