

## Welcome Messages



### Mustafa Varank

Republic of Turkey Minister of Industry and Technology

Dear Participants of IChO 2020,

It gives me great pleasure to welcome you all to the 52<sup>nd</sup> International Chemistry Olympiad (IChO) in Istanbul. I hope you will enjoy your stay in Turkey and take back nice memories with you. Chemistry as a science has been studied and applied for centuries in these lands; therefore, holding such an important event in Istanbul makes it even more meaningful.

You are all welcome in Istanbul, the beautiful city of two continents. As you all know, Istanbul is the only city in the world lying across continents, with one arm reaching out to Asia and the other to Europe. For more than 1500 years, it has been the capital of three Empires: Roman, Byzantine and the Ottoman Empires. Setting aside its magnificent historical heritage thanks to its glorious past, Istanbul is the international center of finance and economy offering services in banking, telecommunications, industry, technology, marketing, engineering and tourism. There are more than 60 universities in Istanbul and thousands of international students prefer to study in these universities.

In international competitions such as IChO, the contestants' achievements are striking in two respects. Firstly, it builds up our hopes for the future through their performance, demonstrating what mankind is capable of intellectually. Secondly, it is striking to witness that the universality of chemistry reasoning is reflected in the work of the students despite the wide cultural diversities prevailing among them. I consider it as the reaffirmation of the fact that chemistry reasoning is one of the highest and most universal values that the human intellect has created so far.

Needless to say, fostering and promoting friendly relations among

young chemists in the world would contribute to the establishment of multi-dimensional scientific cooperation, which we value very much as the Ministry of Industry and Technology of Turkey. I sincerely believe that IChO 2020 will serve as a platform where participants from all over the world could establish long-lasting friendships, which – in the end – will result in the creation of a more peaceful world as well as mutual understanding between our countries.

I am very honored by your presence in my country and wish you success in the Olympiads.



### Prof. Dr. Hasan Mandal

President of The Scientific and Technological Research Council of Turkey

It is a great honor for Turkey to host the 52<sup>nd</sup> International Chemistry Olympiad (IChO) in Istanbul Technical University (ITU). ITU is one of the oldest technical universities in the world. As ITU provides an international environment, it offers many opportunities for students to gain international experience. I am very happy to express that the Scientific and Technological Research Council of Turkey (TÜBİTAK) is coordinating the organization of this event. I would like to extend my warm welcome to all participants from every part of the world!

Chemistry is commonly referred to as the central science not only due to its connections with other scientific disciplines but also owing to its impact on our lives. The knowledge derived from chemistry allows us to appreciate the world we live in, as well as understand how to change and improve it. Therefore, it is very exciting to host the most talented young chemists who will take part in shaping the future of chemistry as well as our world. More than 300 IChO contestants from nearly 80 countries on five continents believing in "chemistry for a better tomorrow" will have ten days of magnificent experiences.

In addition to scientific experiences, our guests will also enjoy various activities and experience amazing opportunities in Istanbul, which is a city of fantastic history, culture, and beauty. Istanbul is the

financial center of Turkey and it retains its metropolitan status; the city's population is more than 14 million people, making it one of the largest cities in the world. The days you will spend in Istanbul will be unforgettable in all – scientific, cultural and educational terms. The city of Istanbul, where most activities will take place, will surely offer you fascinating perspectives and memorable experiences. So please enjoy your time here.

We look forward to welcoming all participants of the 52<sup>nd</sup> International Chemistry Olympiad to participate in this great scientific event. Let's meet in Istanbul where the continents and cultures "Bond".



### Prof. Dr. Aziz Sancar

Nobel Laureate in Chemistry

It is my great pleasure to greet you all at this special science summit in Istanbul, a beautiful city and a historical crossroads between continents and civilizations. This is also the city where I fell in love with chemistry and I received my fundamental chemistry education that many years later led to a Nobel Prize in Chemistry. You have come together from different backgrounds to spend time with one another and compete to earn one of the medals in recognition of your love for chemistry. I know you have worked very hard to achieve the honor of representing your home country at this Olympiad. However, you are not representing just your homeland but you are also representing the hope of humanity for a better world where science is supreme and is used to help build a just and prosperous world for all people regardless of national origin, ethnicity, or personal beliefs. If you choose to pursue this scientific journey, this will be just the beginning. You must continue to work hard as I believe strongly that hard work is the most important key to success. I also believe that the honor of being an Olympian, which all of you share, goes hand in hand with the responsibility of serving humanity. You are our hope for a better and a just future for mankind.

Chemistry defines the way a substance changes and reacts with other substances. Thus, learning chemistry helps you better to

contribute to the well-being of humanity and to a better world.

I wish you all good luck at the Istanbul Chemistry Olympiad.



### Mehmet Karaca

Rector of Istanbul Technical University

Dear Honorable Chair, Esteemed Delegates and Distinguished Guests,

As Istanbul Technical University, it gives us great pleasure to host such an important scientific event, International Chemistry Olympiad 2020.

As you know, Istanbul is geographically the only city linking two continents in the world. It is the cultural, industrial and financial capital of Turkey. With its approximately 15 million inhabitants, Istanbul is at the heart of Turkey's education scene. Istanbul hosts 61 out of Turkey's 207 universities, 762,503 students and 34,235 academicians today. This makes the city a center for academic studies.

Founded in 1773, the Istanbul Technical University is very much like the city of Istanbul itself: a diverse and multicultural community bridging a vast number of opportunities and resources. ITU, the fourth oldest technical university of Europe and the World is devoted to developing a community of scientists, engineers, architects and artists who can make a difference beyond borders. Like Istanbul, ITU acts as a hub bridging international cooperation with leading institutions, and creates the necessary environment for economic and technical growth.

We will be very pleased to be able to welcome you to The International Chemistry Olympiad 2020 in Istanbul.

Sincerely, with many thanks,



### Visa Information

To check the visa policy of Turkey please visit the following website: [www.ankara.gov.tr/en/](http://www.ankara.gov.tr/en/)

### Contact Address

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### Website

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### Follow Us



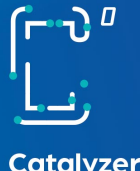
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01 October '19

# CHEMISTRY FOR A BETTER TOMORROW

52<sup>ND</sup> ICHO 2020 / 6-15 JULY 2020 ISTANBUL, TURKEY

[ICHO2020.TUBITAK.GOV.TR](http://icho2020.tubitak.gov.tr)

## Istanbul Airport Transportation Information

### Public transport

#### A. Istanbul Airport

Istanbul Airport is located on the European side, between Tayakadın, a neighborhood on the Black Sea coast, and Akpınar villages. Istanbul Airport is 35 km from the city center. Havaist buses go to many central, easy-to-reach spots, such as Taksim, Beşiktaş, Yenikapı, Bahçeşehir and Kozyatağı. For more information on schedules take a look at our Havaist page. You can also reach the city center from the airport with İETT buses. You can find more information on bus lines on our İETT page.

#### B. Sabiha Gökçen International Airport

Istanbul Sabiha Gökçen Airport is 46 km from the city center Sultanahmet, where you can find Havaist buses, metro, and tramway. By Havaist bus, it costs TRY 9 from Sabiha Gökçen Airport from Kadıköy and TRY 14 from Taksim. You can reach Kabataş via Taksim by taking the Kabataş funicular for TRY 2.40. It would take around 2.5 hours for you to reach Sabiha Gökçen Airport from Sultanahmet. You can then transfer from Kabataş with tram for TRY 1.45. Average time from airport: A: 120 minutes | B: 150 minutes  
Distance from airport: A: 35 km | B: 46 km

### Taxi

#### A. Istanbul Airport

It takes around 30 minutes to reach the city center from Istanbul Airport by taxi, and costs around TRY 100-110. There are taxis in front of the international and domestic terminals.

#### B. Sabiha Gökçen International Airport

There is a 24/7 taxi service from Istanbul Sabiha Gökçen Airport to Sultanahmet. It takes about 1 hour, and costs around TRY 100

### Transportation to İTÜ Ayazaga Campus

İTÜ Ayazaga metro station is located in front of the Ayazaga İTÜ campus in Ayazaga. (Metro Station is signed on Transportation Lines Map)



#### Metro Network

[www.metro.istanbul/YolcuHizmetleri/AgHantlari](http://www.metro.istanbul/YolcuHizmetleri/AgHantlari)



#### Location

@41.1084793, 29.0178551

## Organizers



### Ministry of Industry and Technology

Ministry of Industry and Technology is a government ministry office of the Republic of Turkey, responsible for industrial and technological affairs in Turkey. Minister of Industry And Technology is Mustafa VARANK.



### The Scientific and Technological Research Council of Turkey

TÜBİTAK, The Scientific and Technological Research Council of Turkey is a national agency of Turkey whose stated aim is to develop science, technology and innovation, to support and conduct research and development, and to "play a leading role in the creation of a science and technology culture" in the country. President of The Scientific And Technological Research Council Of Turkey is Prof. Dr. Hasan MANDAL.



### Istanbul Technical University

Istanbul Technical University (ITU) is one of the oldest technical university dedicated to engineering sciences as well as social sciences recently, and is one of the most prominent educational institutions in Turkey.

[www.sanayi.gov.tr/?lang=en](http://www.sanayi.gov.tr/?lang=en)

[www.tubitak.gov.tr/en](http://www.tubitak.gov.tr/en)

[global.itu.edu.tr](http://global.itu.edu.tr)



## Turkey

Turkey, officially known as the Republic of Turkey, is a transcontinental Eurasian country located mainly in Western Asia, with a smaller portion on the Balkan Peninsula in Southeast Europe. Istanbul is the largest city, but more central Ankara is the capital. Turkey is a vast peninsula, covering an area of 780,000 sq km and linking Asia to Europe through the Sea of Marmara and the Straits of Istanbul and Çanakkale.

Turkey's economy and diplomatic initiatives led to its recognition as a regional power while its location has given it geopolitical and strategic importance throughout history. Turkey is also one of the world's top ten destination countries.

The total population of Turkey is 82 million people as per 2018 estimate.

As of 2019, there are 207 universities in Turkey. Turkey is a member of the European Higher Education Area and actively participates in the Bologna Process. According to the Times Higher Education World University Rankings, the top universities in Turkey are Bogaziçi University, Middle East Technical University, Bilkent University, Koç University, Istanbul Technical University, Sabancı University.

Turkish Lira is official currency in Turkey.

Surrounded by seas on three sides, it is placed in the temperate climate zone. The climate varies considerably from region to region, however: a temperate climate in the Black Sea region, a Mediterranean climate on the southern coast and the Aegean, a continental and arid climate on the central plateau, and a harsh mountain climate in eastern Turkey. Because of these variations in climate, the fauna and flora are some of the richest in the world.

The official language of Turkey is Turkish.



## Let's meet in the city of two continents!

Istanbul, built on two continents where is a bridge between Europe and Asia. Thus, trances of modern western cities combined with a traditional eastern cities may be observed clearly. Furthermore, many civilizations come together that forms a "melting pot" in Istanbul.

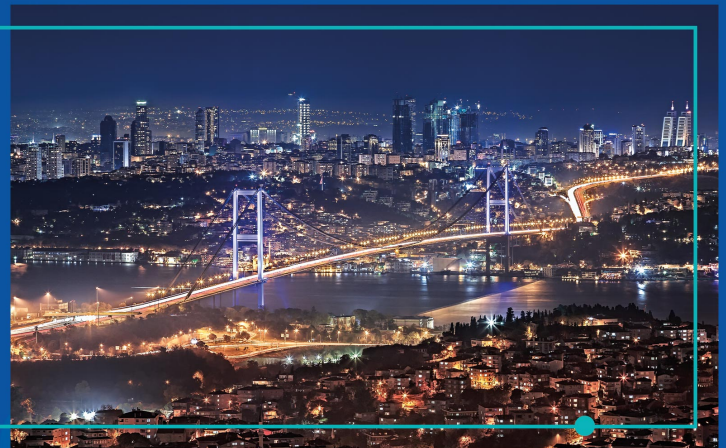
Istanbul is a prominent multicultural city as it hosted many civilizations such as Byzantines and Ottomans for many years. Istanbul is very rich in architectural monuments reflecting its past splendour. The numerous museums, churches, palaces, grand mosques, bazaars and sites of natural beauty

mesmerize visitors. As both modern and traditional values are exhibited together, Istanbul is truly one of the most glorious cities in the world. Indeed, glorious treasures that remind the cultural heritage of past civilizations and especially the Bosphorus during sunset are an experience of a lifetime.



# Istanbul, Turkey

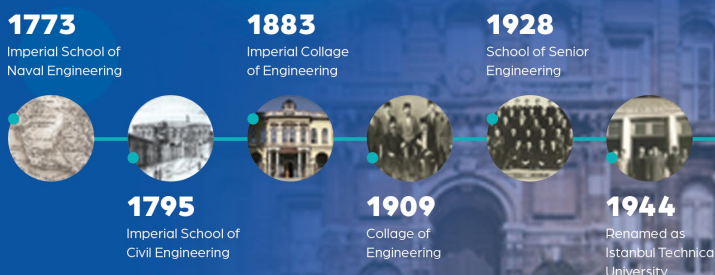
*"Istanbul, built on two continents where is a bridge between Europe and Asia. Thus, trances of modern western cities combined with a traditional eastern cities may be observed clearly. Furthermore, many civilizations come together that forms a 'melting pot' in Istanbul."*



## Istanbul Technical University

Istanbul Technical University (ITU) is one of the oldest technical universities. Istanbul Technical University is a prominent and pioneering university of engineering and architecture with many innovative studies in science, technology, research and development. ITU, as a university mainly composed of graduate engineering schools and research laboratories, works in close collaboration with enterprises and other economic and social partners. Our university facilitates the knowledge and technology transfer to industries, management centers, briefly to all society. ITU has created many Techno-Science parks, incubation centers, entrepreneurship and innovation center and technology transfer office to make this happen.

### History of ITU



## Tentative Program

| Date         |           | Student                          | Mentor & Observer                        | Guest                     |
|--------------|-----------|----------------------------------|--|---------------------------|
| Mon, July 6  | Whole day | Arrivals and Registration        | Arrivals and Registration                | Arrivals and Registration |
| Tue, July 7  | Morning   | Opening Ceremony                 | Opening Ceremony                         | Opening Ceremony          |
|              | Afternoon | Recreation/Excursion             | Lab Inspection                           | Excursion                 |
|              | Evening   | Free Time                        | 1 <sup>st</sup> Jury Meeting             | Excursion                 |
| Wed, July 8  | Whole day | Excursion/Lab Safety Instruction | Translation of Practical Exam            | Excursion                 |
| Thu, July 9  | Morning   | Practical Exam                   | Excursion                                | Excursion                 |
|              | Afternoon |                                  |  |                           |
|              | Evening   | Free Time                        | 2 <sup>nd</sup> Jury Meeting             |                           |
| Fri, July 10 | Whole day | Excursion                        | Translation of Theoretical Exam          | Excursion                 |
| Sat, July 11 | Morning   | Theoretical Exam                 | Excursion                                | Excursion                 |
|              | Afternoon |                                  |  |                           |
|              | Evening   | Reunion Party                    | Reunion Party                            | Reunion Party             |
| Sun, July 12 | Morning   | Free Time                        | Grading the Exam                         | Excursion                 |
|              | Afternoon |                                  |  |                           |
|              | Evening   |                                  | 3 <sup>rd</sup> Jury Meeting             | Free Time                 |
| Mon, July 13 | Whole day | Free Time                        | Arbitration/4 <sup>th</sup> Jury Meeting | Free Time                 |
| Tue, July 14 | Morning   | Free Time                        | Free Time                                | Free Time                 |
|              | Afternoon | Closing Ceremony                 | Closing Ceremony                         | Closing Ceremony          |
|              | Evening   | Farewell Party                   | Farewell Party                           | Farewell Party            |
| Wed, July 15 | Whole day | Departures                       | Departures                               | Departures                |