



TURKISH ACADEMY OF SCIENCES

# Newsletter

ISSUE 10  
DECEMBER 2021

Happy New Year 2022

## 2021 TÜBA and TÜBİTAK Science Awards Ceremony



2021 TÜBA International Academy, GEBİP and TESEP Awards were presented to their owners by President Recep Tayyip Erdoğan with a ceremony held at the Presidential Complex (Küllüye) on 28 December 2021 under the auspices of the Presidency.

Recep Tayyip Erdoğan, President of Türkiye; Mustafa Varank, Minister of Industry and Technology; Prof. Dr. Muzaffer Şeker, President of TÜBA; Prof. Dr. Hasan Mandal, President of TÜBİTAK and TÜBA Full member; TÜBA Council Members; and university rectors attended "TÜBA and TÜBİTAK Awards Ceremony" held at the Presidential Complex.

After the opening speeches of President Erdoğan, Mustafa Varank, Prof. Dr. Muzaffer Şeker, and Prof. Dr. Hasan Mandal, 2021 TÜBA Awards were presented to their owners. TÜBA 2021 International Academy, GEBİP and TESEP Award winners received their awards from President Recep Tayyip Erdoğan.

**2021 TÜBA International Academy Prize** Scientists deemed worthy of TÜBA Academy Prizes by the TÜBA Academy Council as a result of domestic and

foreign reviewers and evaluation of field committees; In Social Sciences and Humanities Prof. Dr. Jeffrey David Sachs from Columbia University; In Health and Life Sciences Prof. Dr. Nazmi Volkan Adsay from Koç University and Prof. Dr. Messoud Ashina from Copenhagen University have been awarded with 2021 TÜBA Academy Prizes.

### 2021 TÜBA-GEBİP Award

In the natural sciences, Dr. Ahmet Acar, Dr. Ogün Adebali, Assoc. Prof. Deniz Ceylan Tuncaboğlu, Assoc. Prof. Mehmet Özkan, Assoc. Prof. Eren Şahiner, Dr. Erkan Şenses, Assoc. Prof. Emre Yüce, Prof. Dr. Yunus Zorlu; in the field of engineering sciences, Assoc. Prof. Duygu Ağaoğulları, Dr. Pelin Angın, Prof. Dr. Erchan Aptoula, Dr. Emre Büküşoğlu, Assoc. Prof. Erdem Cüce, Assoc. Prof. Enes Dertli, Dr. Onur Ergen, Assoc. Prof. Ali Erçin Ersundu, Dr. Fatih İnci, Assoc. Prof. Tufan Kumbasar, Dr. Emir Salih Mağden, Assoc. Prof. Mohammedreza Nofar, Assoc. Prof. Akın Taşçıkaraoğlu, Dr. Muhammet Fatih Toy, Dr. Lütfi Taner Tunç, Assoc. Prof. Meltem Yanılmaz and Dr. Murat Kaya Yapıcı; in the field of in health sciences Assoc. Prof. Ahmet Eken, Dr. Gözde Korkmaz, Assoc. Prof. Cemal Georg Orhan and Assoc. Prof. Bilge Güvenç Tuna; in the field of social

sciences, Assoc. Prof. Dilek Altun, Prof. Dr. Yiğit Atılğan, Dr. Hayat Ayar Şentürk, Prof. Dr. Hasan Dinger, Assoc. Prof. Gizem Erdem Gürel, Assoc. Prof. Efe Can Gürcan ve Assoc. Prof. Murat Şentürk received their awards from President Erdoğan. In addition, Prof. Dr. İpek Süntar received Ahmet ve Nezahat Keleşoğlu TÜBA-GEBİP Pharmacy Special Award.

### Within the scope of 2021 TÜBA-TESEP Awards:

Assoc. Prof. Dr. Hümeysra Özturan from Marmara University, received the Scientific Authored Book Award in the field of Social Sciences for her book "Êthostan Ahlâka: The Transmission and Reception of Ancient Greek Moral Literature to the Islamic World",

Assoc. Prof. Ekrem Tak from Istanbul Medeniyet University received **Mehmet Genç Special Award** for his published book titled "XVI. – XVII. Century Üsküdar Court Records: A Study in Terms of Diplomatic Science"

Assoc. Prof. Vural Genç from Bitlis Eren University received the **Halil İnancık Special Award** for his book "Acem'den Rum'a Bir Bürokrat ve Tarihçi: İdris-i Bidlisi (1457-1520)"

Prof. Dr. Emine Dengeç from Kütahya Dumlupınar University received **Kemal Karpaz Special Award** for her book “Horse in the Ottoman Palace”.

Prof. Dr. Ömer Anayurt, from Ankara Hacı Bayram Veli University with his book “Constitutional Law General Part: Basic

Principles, Concepts and Institutions-3. Oppression”; Prof. Dr. İbrahim Ermenek from Ankara Hacı Bayram Veli University for his book “Protection of the Weak Side in the Mediation Process”; Prof. Dr. Bekir Kuzudişli from İstanbul University for his work “İrâdi-l Hadith in the Context of the Hadith”; Dr. Süleyman Güder for his

work “Liberation Theology and Return to Self: Christian and Islamic Perspectives”; Assoc. Prof. Elvin Yıldırım from İstanbul Aydın University for her book “The Birth of Turkish Steppe Culture: Andronovo Culture” received **Honorable Mention** in the field of social science.

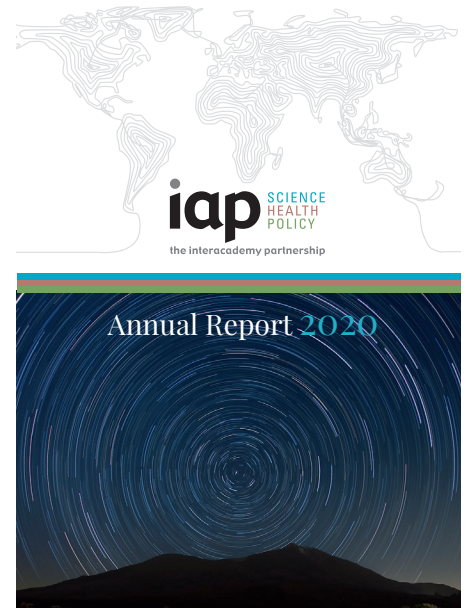
## IAP 2020 Annual Report Summary

The Interacademy Partnership (IAP) is a global scientific network that brings together many academies and scientists. Despite the difficulties posed by the COVID-19 Pandemic, IAP successfully maintained its activities in 2020 by adjusting to the new circumstances such as virtually-held organisations and meetings. Furthermore, IAP also achieved a noticeable amount of budget surplus in financial terms.

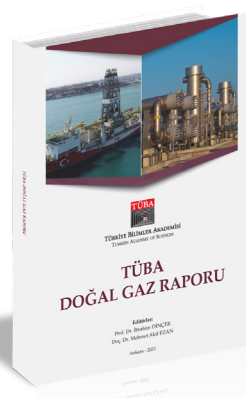
The performance of IAP in 2020 seems impressive as the IAP associates not only successfully managed the affairs under the pandemic but also developed new strategies to combat the spread of the virus. Moreover, IAP also struggled to increase the amount of vaccination by pointing out the advantages of the vaccines. In this sense, it seems that the organisational structure of IAP effectively contributed to the spread of knowledge and assistance of member communities. By renewing its website, IAP restructured and reframed its visibility as well.

IAP's activities were not restricted to pandemic-related developments. Its focus on the key issues such as climate change, combatting predatory journals and assisting early-career researchers did not lose momentum. As part of the globalising refugee crisis, IAP also paid a special attention to displaced researchers. Instead of regular meetings, the IAP associates managed to hold online meetings and conferences that rendered the spread of knowledge and conscious possible under the transportation threats of COVID-19. IAP continued its enlargement as well. Three new academies joined the IAP community in 2020, making the total number of associate organisations 143. In terms of finances, IAP achieved to attain a budget surplus as well.

Concerning the year of 2020, IAP seemed to adapt to the changing circumstances and continue its activities. Besides conforming with the transformations brought about by the



COVID-19 Pandemic, IAP maintained its priorities and even sustained its enlargement. Moreover, IAP also attained a budget surplus in 2020. Taking all challenges into account, the experience of IAP in 2020 seems quite impressive.





# TÜBA 58<sup>th</sup> General Assembly

TÜBA 58<sup>th</sup> General Assembly was held on 18 December 2021 in Ankara. At the General Assembly, which started with the opening and protocol speeches, membership certificates were presented to TÜBA members elected as members at the 57th General Assembly.

## Conference from Prof. Dr. Erik Jeppesen, 2020 TÜBA International Academy Award Winner.

After certificate ceremony, Prof. Dr. Erik Jeppesen, keynote speaker of the conference related to TÜBA 57th General Assembly and 2020 TÜBA International Academy Prize Laureate for his studies and contribution on "Studies on freshwater ecosystems, his work on the protection of these fragile ecosystems, lakes and rivers on a global basis, and the effects of global climate change on aquatic ecosystems" spoke about "Climate Change Effect on Aquatic Ecosystems: Lakes in Türkiye as an Example" to TÜBA members.

After establishing council, the elections for academy membership and council membership were started in the General Assembly. According to Results of election; Prof. Dr. Jamil Ragep, 2019 TÜBA International Academy Prize Laureate, Dr. Wael B. Hallaq, Prof. Dr. Okyay Kaynak and Prof. Dr. Erik Jeppesen 2020 TÜBA International Academy Prize Laureate were elected as TÜBA Honorary Member, Prof. Dr. Fatih Mehmet Uçkun and Prof. Dr. Orhan Aydın as TÜBA were as TÜBA Full member. Prof. Dr. Ali Keleş, Prof. Dr.



Ali Özer, Prof. Dr. Ali Ekber Akgün, Prof. Dr. Bayram Zafer Erdoğan, Prof. Dr. Halit Yanikkaya, Prof. Dr. Sezgin Bakırdere, Prof. Dr. Abdülkadir Çevik, Prof. Dr. Seydi Doğan, Prof. Dr. Zafer Evis, Prof. Dr. Ali Adnan Hayaloğlu, Prof. Dr. Orhan İçelli, Prof. Dr. Taşkın Kavzoğlu, Prof. Dr. Filiz Kuralay, Doç. Dr. Önder Metin, Prof. Dr. Özcan Öztürk, Prof. Dr. Mustafa Şahmaran, Prof. Dr. Nusret Tan, Prof. Dr. Okan Zafer Yeşilel, Prof. Dr. Erkan Zergeroğlu were re-elected as TÜBA Associate Member. After member elections, TÜBA Academy Council Membership elections was started for expired memberships. Prof. Dr. Ahmet Cevat Acar, Prof. Dr. Feridun Emecen, Prof. Dr. Mustafa Cicek, Prof. Dr. Mustafa Ersöz and Prof. Dr. Kazım Şahin whose Membership expired was re-elected as TÜBA Academy Council Member. Prof. Dr. Muzaffer Elmas and Prof. Dr. Pınar Bilgin were elected as the new TÜBA Academy Council Member. The general assembly ended after presentation of Muzaffer Şeker with conveying opinions and wishes.



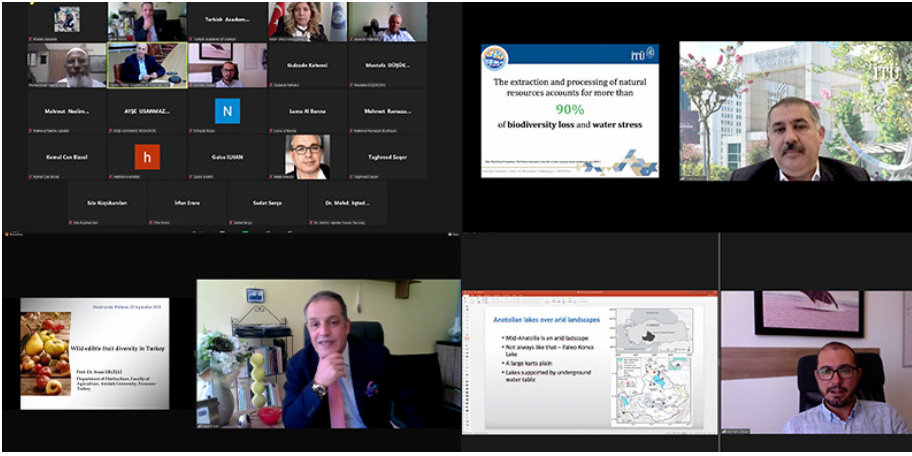
## TÜBA-GEBİP Annual Assessment Meeting



TÜBA-GEBİP Annual Assessment Meeting, which aims to present and evaluate the academic studies of outstanding young scientists awarded within the scope of the TÜBA Outstanding Young Scientists Award Program (TÜBA-GEBİP), and to improve the relationship and collaboration between scientists and their organizations was held in Ankara on 17 December 2021. The program was started with the opening speeches of Muzaffer Şeker, TÜBA President and Prof. Dr. Hasan Mandal, TÜBA principal member and TÜBİTAK President made a presentation titled "Co-Development and Co-Achievement in Multidisciplinary Research" to the scientists participating meeting. More than 100 TÜBA and TÜBA-Young Academy Members related with TÜBA-GEBİP award-winner (TÜBA Young Academy Community member) young scientists who attended the assessment meeting made presentations about their work they have carried out in the last year. After the presentation of participants, which were open to all scientists upon request, the program ended with the General Evaluation Meeting.



# IAS&TÜBA Biodiversity Conference



The Biodiversity Conference, organized in partnership with the Islamic World Academy of Sciences (IAS) and TÜBA, was held online via Zoom on September 25, 2021.

TÜBA President Prof. Şeker emphasized speake on the subject, that the cooperation with IAS is important for TÜBA and continued as follows: "The differences between living organisms from all kinds of sources, including land, sea, other aquatic ecosystems and all other living environments of which they are a part, are very important for our world to continue to breathe."

In the opening speech of the program, Prof. Abdullah Al Musa from IAS stated that it is a pleasure to work in cooperation with TÜBA and emphasized that the 15th conference of the IAS on

biodiversity is actually directly related to the existence of human beings, Prof. Musa said the economy is growing as a threat to biodiversity and that biodiversity is declining. For all these reasons, we attach great importance to this conference as one of the efforts to put an end to this trend."

The first presentation of the conference was held by Prof. İsmail Koyuncu, TÜBA Principal Member and ITU Rector about "The Importance of the Circular Economy for Biodiversity". He said; "Many disciplines are shifting towards technologies that enable resource recycling and circular economy. In the Environmental Engineering discipline, resource-generating processes such as water recovery, recovery of chemicals and rare elements, minimum energy consumption and maximum energy

production have gained importance and become indispensable in addition to traditional treatment methods. The importance of this situation will be felt much more in terms of biodiversity in the coming period. In this respect, it is very important to research, develop and implement technologies and new processes. Training programs should be revised accordingly."

Prof. Sezai Ercişli, Atatürk University Faculty of Agriculture Lecturer gave the information that Türkiye is accepted as one of the richest countries in terms of edible wild fruits in his speech titled "Wild Edible Fruit Biodiversity in Turkey" and that in recent years, wild edible fruits have high antioxidant content, vitamins and minerals, fiber, folic acid, etc. He said that due to its properties, its importance for health was once again confirmed.

Dr. Korhan Özkan, TÜBA Young Academy Member and Faculty Member of the Middle East Technical University, Marine Sciences Institute talked about "Anatolian Aquatic Biological Diversity in the Face of Climate Change and Intensifying Anthropogenic Pressures". He said that Anatolia is home to biodiversity that was largely shaped during the glacial cycles of the quaternary period.

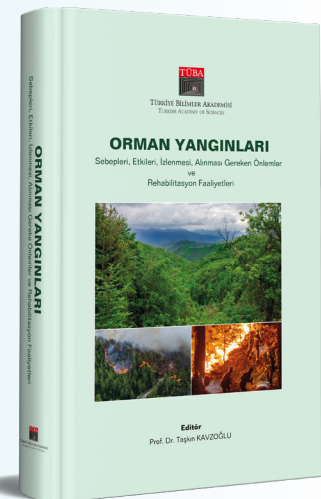
The conference ended after the speakers answered the questions.

## The Relationship Between Climate Change and Forest Fires in the TÜBA's Book

The book "Forest Fires: Causes, Effects, Monitoring, Precautions to be Taken and Rehabilitation Activities" prepared by TÜBA and edited by Prof. Dr. Taşkın Kavzoğlu, TÜBA Associate Member and Gebze Technical University Faculty Member, was published. The book deals with forest fires in all their dimensions and from the perspective of the modern world.

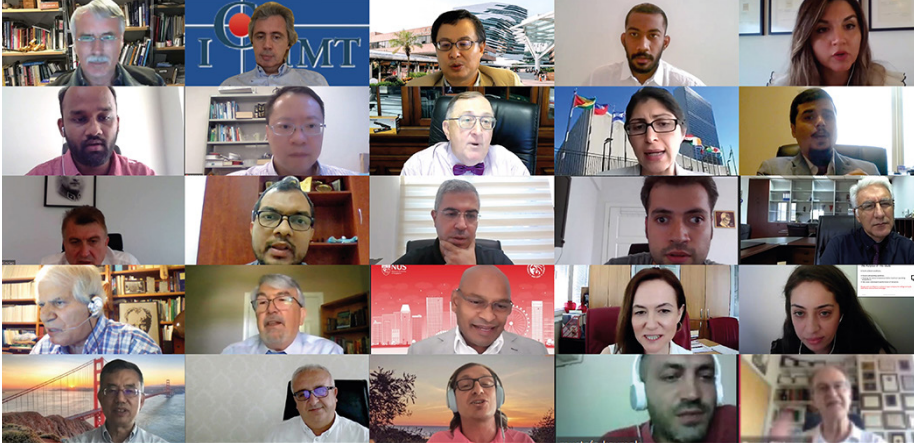
TÜBA aims making up to date and original book studies that provide comprehensive

scientific information in priority areas related to needs of Türkiye among its priority studies. In this context, TÜBA has published scientific works on sea mucilage, which emerged in the Marmara Sea and reached a serious threat over time. TÜBA has also carried out a comprehensive study, brought together scientists from different disciplines and published the work, which also includes solution suggestions.





# TÜBA World Conference on Energy Science and Technology



TÜBA World Conference on Energy Science and Technology (TUBA WCEST-2021) was held online between 8-12 August 2021.

The program started with the opening speeches of Mr. Mustafa Varank, Minister of Industry and Technology and Prof. Dr. Muzaffer Şeker, President of TÜBA. The Programme included three panels; environment and economy in the first, energy and education in the second, and photovoltaic systems in the third. Scientists and experts from energy and energy-related organizations from Italy to America, from England to Singapore, from Canada to the world's leading universities and institutions attended the conference in all five days morning and afternoon sessions. A total of 21 parallel sessions and panels were held

about traditional energy solutions, fossil resources, renewable energy, hydrogen energy technologies, smart buildings, green technology, etc. 122 presentations were made at the Conference, which included 28 key speakers and 28 invited speakers from 35 different countries, consisting of leading researchers, heads of international institutions, experts and editors in chief from different/number of journals, with the participation of approximately 1500 people in total. TUBA WCEST-2021 was carefully followed by the scientific community and the relevant people.

TUBA WCEST-2021, which was held over Zoom, was broadcast live on the Academy's YouTube channel <https://www.youtube.com/turkiyebilimlerakademisi> - for five days.

## Prof. Şaban Teoman Duralı and Prof. Emel Arınç TÜBA Honorary Members Passed Away



Prof. Şaban Teoman Duralı, TÜBA Honorary Member and Presidency Culture and Art Grand Prize laureate passed away in 74 years old, on Monday,

December 6, 2021. Prof. Dr. Emel Arınç, TÜBA Honorary Member and Middle East Technical University Retired Lecturer passed also away on Monday, December 27, 2021 at the age of 81.

We express our deep sorrow for the death of both professors who leaved very important traces behind with their academic background and personality and wish patience to their families and loved ones.



## Prof. Şeker met Prof. Sancar, Nobel Prize-laureate and TÜBA Member

Nobel Prize-laureate Prof. Sancar met at dinner with Prof. Şeker and TUBITAK President Prof. Dr. Hasan Mandal. They focused on academic developments and mutual cooperation in the world.

On the last day of TEKNOFEST, Prof. Dr. Aziz Sancar was invited for the breakfast held by Mr. Mustafa Varank, Minister of Industry and Technology. Mr. Varank thanked to Prof. Sancar his participation in TEKNOFEST and said that he would always be happy to host him and his contribution help greatly to the love of scientific work and science among young people.

Prof. Şeker, thanked to Prof. Sancar for his contribution and support to the self-confidence of future scientists. He talked to Prof. Sancar about TÜBA's publications, programs and support for scientists.



# TÜBA TEKNOFEST Doctorate Science Awards Found Their Owners

TÜBA TEKNOFEST Doctorate Science Awards were presented to a total of six scientists from the fields of Science and Engineering Sciences, Social and Human Sciences, Health and Life Sciences by Mr. Mustafa Varank, the Minister of Industry and Technology at the ceremony held at Istanbul Atatürk Airport as part of TEKNOFEST on 21 September 2021. President Recep Tayyip Erdoğan also presented the awards to the winners at the ceremony, where Prof. Dr. Aziz Sancar, Nobel Prize-laureate and TÜBA Honorary Member also took part; In the field of Science and Engineering Sciences; Dr. Turaç Farsadi won the first place with his 2018 thesis titled “Aeroelastic Analysis of Composite Aircraft Wing and

Wind Turbine Blades with Geometric Nonlinearity and Compressibility” at Middle East Technical University. Abdolali Khalili Sadaghiani is the second with his 2019 thesis “Micro/Nano Engineering Techniques for Heated Pool Resources Transfer” at Sabancı University, Dr. Halil Hakan Açikel won the third place at Erciyes University with his thesis titled “Control of Flow on the Wind Turbine Blade with Elasticity” dated 2018.

In the field of Social Sciences and Humanities; Dr. Yasemin Kahyaoğlu Erdoğan Anadolu University with her thesis dated 2020 “Examination of Educational Agents and Feedback Types in a Game-Based Learning Environment

in Terms of Academic Achievement, Flow Experience and Cognitive Load” in the first place.

In the field of Health and Life Sciences; Dr. Zihni Onur Uygun won the first place with his 2020 thesis “Development of a Specific Biosensor System for the Determination of Free Circulating DNA for Tumor Diagnosis and Monitoring” from Ege University. Gülşah Çongur was awarded the TÜBA TEKNOFEST Science Award in Doctorate for her thesis titled “Development of DNA Biosensors for Electrochemical Detection of Biomolecular Interaction” dated 2019 from Ege University.



# TÜBA Published “Genghis Khan and His Legacy”

TÜBA presented the work of “Genghis Khan and His Legacy” to the public as a new book in “the Think Science Series”, which was realised within the framework of science diplomacy with Mongolian Embassy in Ankara.

TÜBA Advisors Assoc. Prof. Dr. Cem Korkut and Dr. Mürsel Doğrul were the editor of the book, Prof. Dr. İsenbike Togan and Prof. Dr. Selçuk Esenbel, TÜBA Honorary Members and Prof. Dr. Feridun Emecen, TÜBA Full Member took part took part at the Advisory Board.

The science diplomacy process started with the visit of Mongolia’s Ambassador to Ankara, Mr. Bold Ravdan, continued with a joint scientific study program with the theme of Genghis Khan. In this direction, the online meeting and the

Genghis Khan and His Legacy Workshop, organized under the coordination of TÜBA, were held with the participation of



scientists and researchers from different universities and Topkapı Palace who have studies on Genghis Khan and Mongolia. In this process, existing documents and cultural artefacts on the history of Genghis Khan and Mongolia were listed and compiled. After the literature review, the Symposium titled Genghis Khan and His Legacy, in which prominent topics were discussed, was held in Alanya Alaaddin Keykubat University in September 2020.

At the end of all these scientific cooperation processes, the work was prepared with the texts of scientists and researchers who are experts in their fields, Genghis Khan and his legacy were discussed in a multidimensional and comprehensive manner in 17 chapters with a multidisciplinary approach.



# Interview with TWAS President on the Covid-19 Global Outbreak

## Prof. Dr. Mohamed Hassan

President of the World Academy of Sciences

President of the Sudanese National Academy of Sciences

Dr. Mürsel Doğrul / TÜBA Advisor

### Dear Professor, first of all, could you please introduce yourself?

I am Mohamed Hassan, the President of the World Academy of Sciences based in Trieste, Italy. And I am also the President of the Sudanese National Academy of Sciences.

### What kind of scientific collaboration would you recommend in the fight against the global crisis that the world is facing including the Covid-19 pandemic?

Well, the global challenges facing the world today are very interlinked and interrelated and they are all sort of summarized in what we now know as the sustainable development goals. There are 17 goals and they cover all major challenges including food security, nutrition security, energy, high education. There are so many of them and addressing these challenges is extremely important that all countries around the World. First of all invest in science technology and innovation and at the same time collaborate. In fact one of the goals of the sustainable development goals, goal number 17 deals with partnership and collaboration among countries to address all the sustainable development goals. However science and technology and innovation are really central to achieving these goals. For example, take the issue of energy, everybody now talks about green energy about sustainable energy. This can not be done without science and innovation, innovation in new systems of energy, solar energy, for example, wind energy where this country has been quite



active in manufacturing wind power, instruments and also in solar panels. So this is just one example. But there are several examples. I think the obvious answer to your question is that without science technology and innovation, these sustainable development goals will never be achieved that doesn't mean that science technology and innovation are the only elements that can solve the problems. And they cannot solve the problems alone. They have to involve the others as well, but they are the central science and innovation center to addressing the sustainable development goals and the challenges. And collaboration is really important because no country alone can solve these problems globally. Because they are all interlinked globally and they need collaboration.

**TWAS has research centers established for a more livable world and a sustainable environment. Could**

### you briefly tell us about the activities and works of these centers?

TWAS has a number of programs the most important programs that were run really deal with building capacities in science and technology in the countries that do not have the capacity that is desired. Essentially they focus their activities on the low and middle-income countries where we do not really have sufficient capacity, sufficient scientists, and technologies. So they deal with issues that relate to higher education. We give scholarships to students from these countries brilliant students based on the competition and merit and these awards are given to students to go and study at centers of excellence in other countries. Especially the countries where we have a big scientific capacity like China, India, and Brazil. Hopefully, we're going to include Türkiye soon. Because Türkiye in the Islamic World is really number

one in terms of capacities in science and technology. So this is important because these countries really need training. They need a new generation of thinkers of scientists of technologies and there are two ways of providing that the countries concerned send their students to advanced countries like the USA, Canada, Europe and so on... And if they do that over %80 of them will never come back. They will just stay there this is the experience that we have. But if you send them to centers of excellence in the developing world, more than %95 of them come back. They get good training at the same time they come home to help in the system. So this is one example of a TWAS activity that is very central to the operation. There are many other activities but I don't want to go into the details of those.

**Especially in the last few decades, the world has faced many problems such as climate change, refugees, pandemics, natural disasters. As a scientist which of these problems would you give priority?**

They are all important but they are all interrelated. But I think the most serious problem that the world is facing at the moment is climate change. Because if the world continues to emit Carbon Dioxide (CO2) into the atmosphere in big quantities like what we see now. The time will come and the time will come soon that we begin to lose a life on earth. So if it is not rescued right now, and the change is made straight away and the commitment is made by the big government and the big polluters, I think we are in a dangerous on a dangerous path. Hopefully, the forthcoming UN Climate Change Conference (COP26) which is going to deal with the climate will reach an agreement and the agreement will involve the implementation of the policies and the conclusions of the Paris Agreement in 2015. The good sign is that now the United States is on board. They have come back again

to the Paris Agreement after four years of delay and we really hope everybody. I think in the world hopes that things will be done in COP26 which is going to take place in November.

**As the President of the TWAS, how do you evaluate the publication of the Umbrella Organizations, how these kinds of scientific activities help in preventing spreading Covid-19 Outbreak?**

There is a global network of academics of science of which TWAS is also a member called Inter Academy Partnership (IAP). And they have over 140 academies of science

the world especially in the low income countries that the vaccine are not really implemented. And the whole issue is how we can actually help those countries. The big countries are producing large quantities of vaccines. This work is going on on this in this direction, but unfortunately it's very slow. And as the Secretary of United Nations said if one country does not have sufficient vaccines and Covid is eradicated in that country nobody will be safe. If all countries and all citizens are not vaccinated then no single citizen will be free from Covid-19. So either you eradicate it all or you just



as members now. This network has been very active on issues related to the Covid-19 and other issues related to pandemics in general. They have been active, they have been issuing statements to the entire world evidence based policy relevant statements about the pandemic and how international collaboration can actually assist in the eradication of pandemics. They are also very clearly supporting the democratization of the vaccines as we all know, some countries are doing very well in vaccinating their population. But there is a very large group of population in

lose the ambition of doing it. Because you cannot leave anybody behind. Because it will come back one way or another it will come back. The way that it came from China and spread all over the World. If one country is left with uncovered the vaccination, sooner or later it will just jump across the borders. And it will start all over again the mess. I think this is a key a key message that all have to be vaccinated. All citizens in the world have to be vaccinated, and they have to have sufficient powered antibodies in that case to fight the virus.



# TÜBA Conducts Science Diplomacy Representing Turkey At S20 and SSH20 Meetings

The studies of Science-20 (S20), which consists of the national science academies of the G20 countries, continue in 2021. This year G20 Summit hosted by Italy. TÜBA represents Turkey in these studies within the framework of science diplomacy activities. This year, S20 also carries out studies in the field of Social Sciences (SSH20). Prof. Dr. Muzaffer Şeker, President of TÜBA joined to the all meetings held online for the preparations of final declarations. Prof. Şeker thanked Italy's national academy of sciences hosting the event for the two final declarations prepared under the difficult conditions of the pandemic. Emphasizing that the G20 countries should take more responsibility in extraordinary and harmful events such as the pandemic that will be experienced in the next processes, Prof. Şeker said that G20 countries have a great responsibility to support especially less developed in every field.

## S20 Final Communique Published; "Academies for a Better World"

The 2021 final statements including scientific detections and advice to the G-20 leaders prepared at the Science-20 (S-20) meetings, Turkish Academy of Sciences (TÜBA) is also a partner, held as a sub-commission of the G-20 leaders' summit were published. 2021 G-20 meetings were hosted by Italy and the S-20 meetings were coordinated by the Accademia Nazionale dei Lincei. Academies from the G20 countries have signed two joint statements on pressing global issues to be addressed. The statements entitled Pandemic preparedness and the role of science and Crises: economy, society, law, and culture. Towards a less vulnerable humankind will be delivered to the G20 Heads of State and Government.

Since 2017, Science20 (S20) brings together the national academies of science of the G20 countries. In 2021 -



under the Italian G20 Presidency - the Accademia Nazionale dei Lincei host the S20 meeting and, for the first time, also hold a social sciences and humanities (SSH20) meeting and published a final communique. The two joint statements - S20 statement on Pandemic preparedness and the role of science and SSH20 statement on Crises: economy, society, law, and culture. Towards a less vulnerable humankind - have been developed by two Lincei working groups (respectively chaired by Prof. Giorgio Parisi and Prof. Roberto Antonelli) and all the partner academies.



The statement on Pandemic preparedness and the role of science addresses the following issues: lessons

from Covid-19 and previous pandemics; lessons on pandemic prevention and early detection; lessons on interventions; proposal of actions (general actions; specific actions to improve prevention and early detection; specific actions to improve the control of new pandemic diseases); the need for an International Agreement on Pandemic Preparedness and Management. The statement on Crises: economy, society, law, and culture. Towards a less vulnerable humankind addresses the following issues: global challenges and opportunities; fragilities and resilience: towards a less vulnerable humankind; action map: global coordination for systemic crises; education and research; cultural heritage; social policy and legal harmonization; economic actions.

## Final Meeting of S20+SSH20 Science Academies

Prof. Dr. Muzaffer Şeker, TÜBA President and TÜBA Advisor Assoc. Prof. Cem Korkut attended to The S20+SSH20 Meeting held on 22-23 September 2021 for representing Turkey. The meeting, in which the President of the Accademia Nazionale dei Lincei, Roberto Antonelli, gave the opening speech, was planned as two parallel sessions. At the S20+SSH20 meetings consisting of the science

academies of the member countries within the scope of the G20 leaders' summit, while the subject of the S20 statement was "Pandemic Preparedness and the Role of Science", the subject of the SSH20 statement was prepared specifically in the field of Social Sciences this year is "Crises: economy, society, law and culture towards a less vulnerable humankind". While Prof. Şeker, TÜBA President attended S20 meeting, Assoc. Prof. Korkut attended the simultaneous SSH20. Both of them presented their opinions on the final papers. The second half of the sessions was continued in the afternoon. After the end of the meetings, the final declarations were officially presented to the Ministers of Foreign Affairs, Economy and Finance, Education, Culture and Researches from



University of the Italian government in a special session. On the second day of the program; President of Italy

Sergio Mattarella hosted the heads of academies of the member countries at the Quirinal Palace.

## The Book "Clothing Norm and Attires of the Ottoman İlmiye Class" Published

TÜBA has published the book titled "Clothing Norm and Attires of the Ottoman İlmiye Class" regarding the Ottoman academy, which looks at the Ottoman Empire and the history of Ottoman education from a different perspective.

Prof. Dr. Muzaffer Şeker, President of TÜBA expressed that one of the points ensured the longevity of the Ottomans was the importance they attached to science and scientists. Prof. Şeker said, "As TÜBA, transferring our scientific heritage to the present is one of our priority areas of work. The scientific tradition of the Ottomans has a quality that affects the era and the following periods, and it offers us the opportunity to make evaluations in the determination of today's education policies. In this respect, I think it would be beneficial to approach the history of education and science in a multidimensional and interdisciplinary manner. Although many works have been written about the history of Ottoman science and education, the number of studies that directly touch the lives of Ottoman scholars has remained limited. In this context, I believe that the work titled "Clothing Norm and Attires of the

Ottoman İlmiye Class", written by Dr. Murat Çelik will provide a new perspective in dealing with the history of Ottoman education."



### A first among historical studies

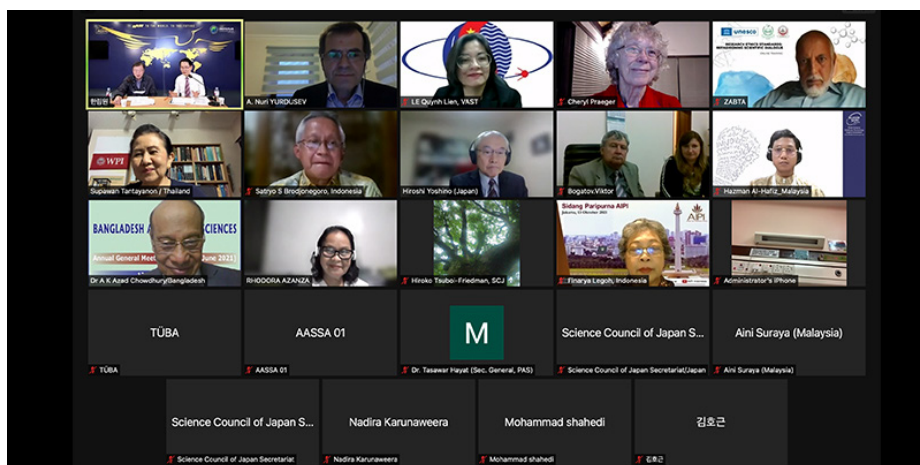
Prof. Şeker emphasizes: "while there are various researches, books, collections and album publications about Ottoman clothes and fabrics. Originality of the subject of the person who made the Book

special came from the new scientific suggestions, and visuals were obtained from manuscripts and sources in Turkish and foreign collections. This is the first time in a study involving the clothes of the İlmiye class.

Prof. Şeker continued as follows: "Clothing Norm and Attires of the Ottoman İlmiye Class covers Ottoman history in general, although it focuses specifically on the years 1450-1650; It sees the Ottoman İlmiye class as a whole, and deals with the madrasa as a higher education institution and those who graduated from it. The madrasa institution is at the center of the Shayhu'l-Islâm, Kadiasker, mufti, professor and suhte. In this context, the work examines all these in a holistic way without separating them; The roots of a practice in the 19th century can be traced back to the 15th century, and some clothes can be shaped and institutionalized over the centuries. We know that institutional traditions develop and settle over time, and that's why it was important to approach the subject holistically. This special publication prepared by Dr. Murat Çelik gives way to be handled the subject as a whole."



# Prof. Dr. A. Nuri Yurdusev Became as AASSA's Elected-President



The 5th General Assembly of The Association of Academies and Societies of Sciences in Asia-AASSA, of which TÜBA is a member, was held online on 15 October 2021. In the new Board of Directors elections held at the General Assembly, TÜBA Principal Member Prof. Dr. Ahmet Nuri Yurdusev became President-Elect of AASSA for the 2021-2024 period. For the 2021-2024 period, AASSA Elected-President Prof. Dr. Yurdusev will assume the Presidency of AASSA in the period 2024-2027.

Prof. Dr. Muzaffer Şeker, TÜBA President stated that he was happy with the result of election, because it is a fruitful result of TÜBA's science diplomacy studies and long-term efforts. He said; "I wish Prof. Ahmet Nuri Yurdusev success in his new position and congratulate him. I believe that we will undertake many collaborative works in the international arena, especially with AASSA. I would also like to thank Prof. Dr. Namık Kemal Aras, TÜBA Honorary Member for contributing to this process and all of our members for their contributions and support."

During the 5th General Assembly, AASSA management shared the details of AASSA's financial management with the members and gave information about the regional, national and international

studies, collaborations, publications and results that have been carried out since 2018.

New Board Member of AASSA's;

- President Prof. Dr. Khairul Anuar bin Abdullah - Malaysia,
- Elected-President Ahmet Nuri Yurdusev - Türkiye (2024-2027 period),
- Vice President Satriyo Soemantri Brodjonegoro - Indonesia,
- Prof. Dr. AK Azad Chowdhury - Bangladesh,
- Prof. Dr. Mooha Lee - South Korea,
- Prof. Dr. Supawan Tantayanon-Thailand,
- Prof. Dr. Tasawar Life - Pakistan,
- Prof. Dr. Viktor Bogatav, Russian Federation

AASSA's new-Elect-President Prof. Dr. Ahmet Nuri Yurdusev pointed out that TÜBA has been an active member of AASSA since its establishment and has always been represented in different management levels and committees, and stated that he is honoured to represent TÜBA and our country as the Elected-President of AASSA. He thanked to Prof. Dr. Muzaffer Şeker and the entire TÜBA family for their support.

## TÜBA Publishes the Extended Fourth Edition of "Organic Chemistry Reaction Mechanisms"

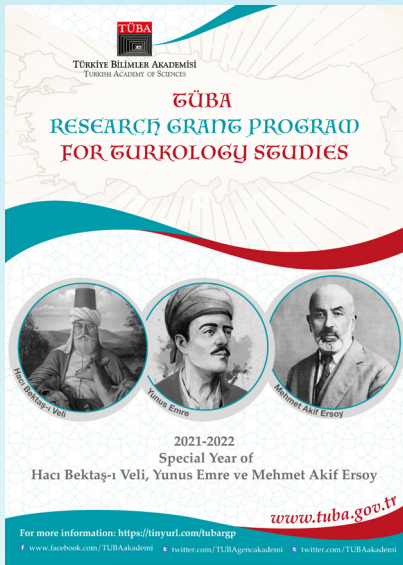
"Organic Chemistry Reaction Mechanisms" written by Prof. Dr. Metin Balci, TÜBA Honorary Member that was revised and updated fourth edition of prepared, has been published by TÜBA.

Prof. Balci as the Author of the book stated that the book has attracted a lot of attention since its first edition and said that while expanding the content, he also took care to preserve the easy to understand feature of the book.

Prof Balci has translated the book titled "Reaction Mechanism in Organic Chemistry" and tried to be published by John Wiley & Sons Publishing House in December 2021. Infrastructure work is being carried out by the Publishing House to translate it into German and Chinese.



## TÜBA Signed Protocol with Universities within the Scope of Research Grant Program for Turkology Studies



TÜBA started a scholarship program for non-Turkish citizen Turkologists working abroad related to the Yunus Emre, Hacı Bektaş-ı Veli and Mehmet Akif Ersoy special celebration year (2021-2022) from Turkish Presidency Office and signed a protocol with universities to cooperate within the scope of the program.

The Programme gives opportunity to the non-Turkish citizen Turkologists who are working on the fields of Turkish Language, Literature and Turkish, and Social Sciences, on the life, works and effects of Yunus Emre, Hacı Bektaş-ı Veli and Mehmet Akif Ersoy to work in Türkiye with the universities, which signed protocol with TÜBA.

For details: [www.tuba.gov.tr](http://www.tuba.gov.tr)

## TÜBA-Biomass Energy Workshop and Panel



Biomass Energy Workshop and Panel organised by TÜBA Energy Working Group was held online on 4-5 November 2021.

The Energy Working Group of TÜBA prepares programs in which up-to-date information is shared, current problems are discussed in detail, and roadmaps for the future are proposed, taking into account the resources and production technologies that have a high potential in Türkiye. Within the scope of TÜBA Energy Working Group Workshop brought together policy makers, public, university and industry stakeholders that can contribute to the development and development of the biomass energy sector.

**Four sessions and two panels were planned.**

Four sessions were held at the workshop, chaired by TÜBA-Energy Working Group Members; 19 titles from "Biogas Industry in Türkiye: Past, Present, Tomorrow to "Next Generation Biomass Combustion Technologies" were discussed with 30 scientists and experts in their fields.

In the program; two panels titled "Biomass Policies, Strategies and Technical Dimensions in the World and in Türkiye" and "Biomass Energy Investments, Future Projections and Suggestions" were held. The program ended after the participants' questions were answered.

## Prof. Hassan, TWAS President Visit to TÜBA

Prof. Dr. Mohamed Hassan, President of The World Academy of Sciences (TWAS) visited Prof. R. Muzaffer Şeker President of TÜBA on 11 October 2021.

During his visit to TÜBA, Prof. Hassan stated that he was pleased with this exchange of ideas with Prof. Şeker and expressed that he would be happy to carry out joint projects and cooperation between TÜBA and TWAS in the future.

Prof. Dr. Muhsin Kar, TÜBA Principal Member, Prof. Yusuf Baran, TÜBA



GEBİP Award winner and Rector of İzmir Institute of Technology (İYTE), Assoc. Prof. Dr. Cem Korkut and Dr. Mürsel Doğrul TÜBA President Advisors and Dr. Gülzade Kahveci TÜBA International Relations Officer also took part.



## Year of Basic Sciences for Sustainable Development 2022 - IYBSSD2022

Considering that more basic science is needed to achieve the 17 Sustainable Development Goals, with the decision numbered 76/A/L.12 taken unanimously at the meeting of the United Nations General Assembly dated on 2 December 2021, 2022 is announced as the International Year of Basic Sciences for Sustainable Development (IYBSSD2022).

The aims of this decision to emphasize the importance of basic sciences for sustainable development and to raise awareness on this issue, together with the UN members, UN institutions and other global, regional and sub-regional organizations, as well as academia, civil society, international and national non-governmental organizations.

The International Year of Basic Sciences for Sustainable Development

(IYBSSD2022) will officially launch with an inaugural conference to be held at the UNESCO headquarters in Paris from 30 June to 1 July 2022. In this context, events will be organized around the world until 30 June 2023.

As a stakeholder of the project and a member of the International Advisory Board, Turkish Academy of Sciences (TÜBA) participated in the Advisory Board meeting on October 4, 2021 in this context. For the International Year of Basic Sciences for Sustainable Development, TÜBA aims to organize scientific programs that will contribute to this awareness raising effort of the United Nations, with the Ministry of National Education, YÖK Presidency and TUBITAK as well as all other relevant stakeholders in Türkiye.



## Agreement for Academic Cooperation Between TÜBA and Uzbekistan Academy of Sciences

Prof. Dr. Muzaffer Şeker, met Abdurakhmonov Ibrokhim Yulchiyevic, the Minister of Innovative Development of the Republic of Uzbekistan on 9 December 2021.

Roadmaps for scientific cooperation were evaluated and a mutual goodwill agreement was signed between TÜBA and the Republic of Uzbekistan Academy of Sciences in order to develop scientific cooperation, initiate the exchange of doctoral students and academicians, and create joint project activities and scientific publications. Prof. Dr. Muzaffer Şeker, President of TÜBA President stated that our country is expanding its stakeholder network in terms of science diplomacy. He emphasized the importance of scientific collaborations in the times of the global epidemic that we are still experiencing. Expressing his views on increasing scientific relations with the brotherly country of Uzbekistan, his ancestral homeland, Şeker stated that they support the Minister's suggestions for concrete steps to be taken on these issues.

### International advisory committee

The International Advisory Committee gathers national and regional learned societies and scientific organizations who want to contribute to IYBSSD 2022 within their area of influence. They make proposals on the IYBSSD 2022 international program and they implement IYBSSD 2022 activities by taking into account needs and characteristics of the different countries and regions. Especially they are at the core of national IYBSSD 2022 committees.

► READ MORE



## General Assembly of the Union Académique Internationale

Prof. Dr. Aydın Gülan, TÜBA Principal Member joined General Assembly meeting of The Union Académique Internationale - UAI heml on 11-17 November 2021 for representing TÜBA.

The last day of the General Assembly meeting was election for UIA president, vice president and board member. Prof. Dr. Klaus Herber from Germany was elected president, while Shoichi Sato from Japan and Claudia Rapp from Austria were unanimously elected as vice presidents.



Elzbieta Witkowska-Zaremba from Poland, Carmen Cardelle de Hartmann from Switzerland, Almut Hintze from England and José Remesal Rodriguez from Spain, Jens Braarvig from Norway and Paul Dostert from Luxembourg became members of the General Assembly of UAI.

# On the Occasion of the 80<sup>th</sup> Birthday of Prof. Dr. Murat Zhurinov

## Prof. Dr. Ahmet Cevat Acar

President of the TUBA 2012-2019  
Member of the Education and Training  
Policies Board of the Presidency of the  
Republic of Türkiye,  
Istanbul University.

I met Prof. Dr. Murat Zhurinov, one of the distinguished personalities of the Turkish academic world, on 29 June 2015 in Astana, at the meeting organized with the participation of the academies of sciences from Turkic World, hosted by the International Turkic Academy operating under the Turkic Council (Keneshi). First of all, I would like to briefly mention the meeting, (I think has historical importance for the Turkish scientific world) where I also enabled us to meet Professor Zhurinov. The aim of this meeting, which was held after the preliminary discussions and preparatory work with participation of TÜBA and coordination Prof. Dr. Darkhan Kydrali, President of the International Turkic Academy, was to develop cooperation and create a unity between our science academies in the Turkic World. The presidents or vice presidents of the national Science academies from Azerbaijan, Kazakhstan, Kyrgyzstan, Tatarstan and Bashkortostan, The Turkish Academy of Sciences (TÜBA) and the International Turkic Academy attended to the meeting. Takyr Balykbayev, Deputy Minister of Education and Science of Kazakhstan, Prof. Dr. Hikmet Koçak, President of Union of Turkic World Universities, Yerlan Sydykov, President of Kazakhstan University Rectors Council, Adil Akhmetov, Turkic Council Member of White Beards Committee and Z. Sukhee, Mongolian Ambassador also attended the meeting.

“The Union of National Academies of Sciences of The Turkic World” was established in the meeting and the first General Assembly held on 29 June 2015 with the attendance Azerbaijan National Academy of Science, National Academy of Sciences of the Republic of Kazakhstan, National Academy of Sciences of the



Kyrgyzstan, the Turkish Academy of Sciences (TUBA), Academy of Sciences of the Republic Bashkortostan, Academy of Sciences of the Republic Tatarstan and International Turkic Academy (UTA) that were also first members of the “The Union of National Academies of Sciences of The Turkic World”. In this first general assembly, the charter of the Union was approved. It was decided that the secretariat services would be carried out by the International Turkic Academy, and the term presidency would be carried out alternately by the four national academies. In this context, it has been decided that Prof. Dr. Murat Zhurinov, President of the Kazakh National Academy of Sciences, will assume the presidency of the Union of Science Academies of the Turkic World for the 2015-16 term, and that I would be the President of TÜBA for the 2016-17 term.

In this meeting, to which I attended as the President of TÜBA, Prof. Dr. Murat Zhurinov was represented Kazakhstan National Academy of Sciences as President. Prof. Zhurinov was the most senior academician and chairman at the meeting. We had the opportunity to meet with Prof. Zhurinov at some scientific meetings later. His quite vigorous and healthy look despite his age, his dignified stance and not speaking much, his performance on speaking Türkiye

Turkish were the features attracting my attention.

Prof. Dr. Murat Zhurinov has many scientific studies and publications in electrochemistry and related fields. He is a distinguished scientist in the academic world with his works in the fields of science, technology and education. He has been awarded with various prizes in Kazakhstan and other countries. In addition to presidency of the Kazakhstan National Academy of Sciences, Prof. Dr. Zhurinov has also undertaken many managerial duties such as ministry, rector, and chairman in universities, scientific organizations and state institutions. He also served as the rector of the Kazakh-Turkish (Ahmet Yesevi) University, which is one of the important examples of cooperation between Kazakhstan and Türkiye.

On behalf of myself and TÜBA, I would like to thank Prof. Dr. Murat Zhurinov, who is among the “white beards of the Turkish academic world” for his valuable contributions to Kazakhstan, the Turkish World and the world humanity in the fields of science, technology, education and management. I congratulate Prof. Zhurinov on his 80th birthday and wish him a healthy and happy year with his family.



## TÜBA&FSMVÜ's Local Perspectives on the War of Independence Symposium

In the scope of project titled "Local History of the War of Independence" from TÜBA and Fatih Sultan Mehmet Foundation University (FSMVÜ) "Local Views on the War of Independence Symposium" was held at Panorama 25 December Museum between 22-24 October hosted by Gaziantep Metropolitan Municipality and Gaziantep University. The two-day scientific program was carried out with more than 40 scientists; including 29 different universities, institutions and independent researchers,



Project aims to map the historiography of the National Struggle with all its dimensions and actors, and to bring the local factors in this process to the scientific literature more emphatically. It deserves; The local dynamics of the "National Struggle" period, which has

been studied in the literature under the titles of the National Struggle, the War of Independence, the War of Independence, the War of National Independence will be discussed in a more comprehensive way and eventually the scientific texts will

be compiled into a book and become an index. The Local History of the National Struggle Project, which will be completed in 2023, the 100th anniversary of the Republic, will continue with scientific programs to be held on specific dates in other parts of the National Struggle.

## TÜBA Published the Book Titled "Marmara Sea and Turkish Straits System in the Light of Scientific Data"

The book titled "Marmara Sea and Turkish Straits System", which is an original source work supported by hydrodynamic

modelling outputs based on current scientific data, written by Prof. Dr. İzzet Baysal, has been published by TÜBA.

Prof. Dr. Muzaffer Şeker, President of TÜBA underlined that the Academy, together with its distinguished members, provides science-based consultancy services for determining scientific priorities and developing policies in many fields and drew attention to the fact that the importance of scientific studies on the environment, climate and health after the climate change and the COVID-19 global epidemic, which has recently been on the agenda in Türkiye and around the world, has been understood once again.

Prof. Şeker stated that environmental problems and climate change topics are prioritized by TÜBA in Türkiye. In this context, TÜBA published reports and

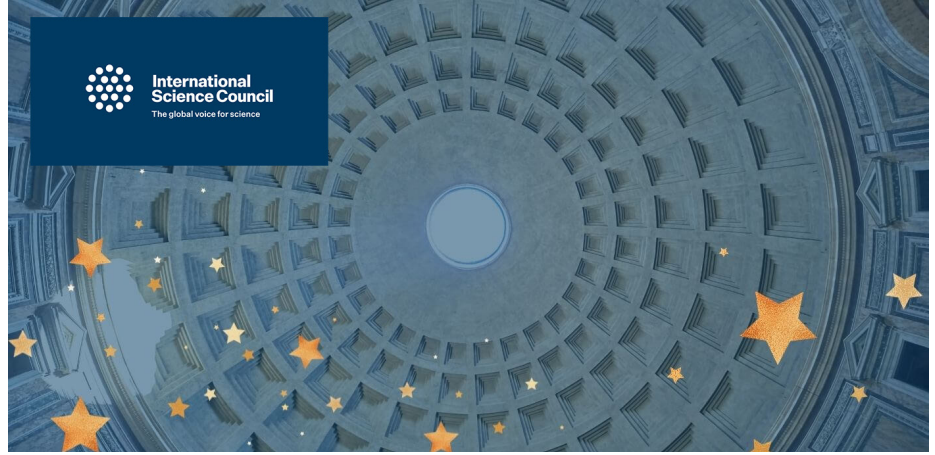
books; "COVID-19 Evaluation Report", "Climate Change and Public Health Reports", "Ecology of the Marmara Sea", which is one of the first in the world, in June 2021 by examining the sea saliva (mucilage) issue from different aspects based on scientific data and methods. He reminded that the book "Sea Slob Formation, Interactions and Solution Proposals" was presented to the public by the Academy. In the work, which consists of 7 chapters in total, many books, technical reports, projects, scientific articles and papers related to the subject were examined and compared with the results obtained with the 3D Hydrodynamic Modelling study specific to the book. Finally, scientific and accurate data on the Turkish Straits System were analysed in the light of current developments and presented to the knowledge of public and benefit.



## 2<sup>nd</sup> General Assembly of International Science Council

2nd General Assembly of International Science Council (ISC) was held on 11-15 October with the participation of TÜBA.

While there are information activities and member forums within the framework of the titles determined/suggested by ISC members on the first day of agenda, on the second day, after the opening of the General Assembly, where only the members will take part, the annual work was conveyed to the members and the questions were answered by the members of the general assembly. The report of the Selection Committee of ISC Board was read and a brief introduction of the candidates was made. Then the action plan for the next year was discussed. On the third day of the Program, which is open to everyone; "COVID-19 Scenarios Result Project: The importance of developing the existing structure of the system and global cooperation, long-term consequences of global emergencies" was presented, and then a panel including questions and answers from ISC users was held. In the continuation of the General Assembly, the ISC Awards were announced. On 14 October, in addition to the voting of officials in different positions for the



work of the Board of Directors, board membership elections were also held.

At the 2nd ISC General Assembly, ISC Members elected 4 Board Members and 10 Regular Members with the participation of Peter Gluckman, who will take over the ISC presidency at the end of this General Assembly. Motoko Kotani has been awarded the "President-Elect" to assume the Presidency at the next General Assembly in 2024. Anne Husebekk was elected as the Vice President for "Freedom and Responsibility in Science", Salim Abdool Karim as the Vice President for "Social Assistance and Inclusion" and

Sawako Shirahase as the Vice President for "Finance" of the Council.

TÜBA nominated the Prof. Dr. Ahmet Nuri Yurdusev, TÜBA Principal Member and METU Faculty Member for the "Ordinary Members of the ISC Board of Directors". He presented as candidate after the pre-selection processes of the Selection Committee. Finally, following scientists have been elected; Karina Batthyany; Françoise Baylis; Geoffrey Boulton; Melody Burkins; Mei Hung Chiu; Pamela Matson; Helena Nader; Walter Oyawa; Maria Paradiso; Martin Visbeck.

## "Marine Mucilage in All Its Dimensions" was Analyzed by TÜBA

The book "Ecology of the Marmara Sea: Sea Slob Formation, Interactions and Solution Proposals" edited by TÜBA President Prof. Dr. Muzaffer Şeker and TÜBA Honorary Member Prof. Dr. İzzet Öztürk not only discusses mucilage in a multidisciplinary manner, but also explains the solution proposals in detail.

Intensely observed in the Marmara Sea lately; Sea saliva, which is on the agenda of the public due to its negative effects on visual, ecological and commercial aspects, poses a danger not only for today but also for our future. In this context, the Presidency of the Turkish

Academy of Sciences has the feature of being the most comprehensive book prepared on the subject, as well as a guide with solution suggestions, thanks to the intensive studies carried out in a very short period of time after the Workshop organized by expert scientists to evaluate this environmental problem. The book, which is presented to the benefit of the public and presents the roadmap to be followed in the fight against mucilage; it contains the current studies of competent scientists from different science disciplines on the subject and solution suggestions for the problem and consists of approximately 300 pages.





# ALLEA Leads New SAPEA Project on Strategic Crisis Management in the EU

ALLEA is taking the lead on a new SAPEA project on the topic “Strategic Crisis Management in the EU”, to address a question raised by European Commissioners to the Scientific Advice Mechanism: *Based on a broad and multidisciplinary understanding, how can the EU improve its strategic crisis management?*

The project will deliver an Evidence Review Report, informing policy advice to be given by the Group of Chief Scientific Advisors to the Commission in response to this question.

In the Scoping Paper that defines the project, it is observed that, after the shock of the Covid-19 pandemic, the EU and European societies need to prepare themselves better for future natural or

human-made shocks: “Improving EU crisis management has thus become an essential issue for protecting and enhancing the present and future wellbeing of EU citizens”, according to the Scoping Paper.

“Supporting that policy ambition with evidence-based advice implies an urgent need to investigate – based on the best available cross-disciplinary expertise – improvements to the overarching EU crisis management framework. Such a framework must be able effectively to anticipate various major threats, risks and crises, help to prevent them by addressing their root causes which make the EU and citizens vulnerable to emergencies, respond to them effectively when they do occur, as well as



to absorb and recover from major shocks, based on robust, future-proof policies. The framework must be able to integrate Commission-internal and external crisis management actions effectively.”

The Scientific Opinion is expected to be delivered by the end of second quarter of 2022.

Source: <https://allea.org/allea-leads-new-sapea-project-on-strategic-crisis-management-in-the-eu/>

## What Europeans Think About Science and Technology?

*“What are the overall attitudes of European citizens towards science & technology? How do Europeans view the role of science in their own lives and in society at large?”* are in the latest Eurobarometer survey on ‘European citizens’ knowledge and attitudes towards science and technology’ to find data-driven answers to these questions.

### Europeans rank science positively, but they do not feel well informed

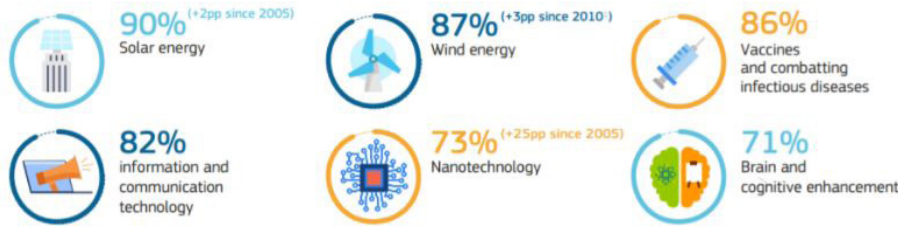
The survey shows a generally optimistic outlook, stating that 9 in 10 EU citizens (86%) think that the overall influence of science and technology is positive, which represents an increase of 9 percentage points since a similar survey conducted in 2013. In many areas, EU citizens’ interest in, expectations of, and engagement with science and technology have grown in recent years. Overall, there is a high level of interest in science and technology

(82%) and a desire amongst citizens to learn more about it in places like town halls, museums and libraries (54%).

However, while citizens have high levels of interest in science and technology, they do not feel quite so well informed: only 21% of respondents say they are very informed about environmental problems including climate change and 61% say they are moderately informed. When

it comes to new medical discoveries, only 13% say they are very informed and 54% moderately well informed. Additionally, while 54% agree that they would like to learn more about scientific developments, 46% of respondents agree that science is so complicated that they do not understand much about it (28% disagree) and 33% agree that in their daily life it is not important to know about science (46% disagree).





## Views on the benefits of science

Most Europeans expect a range of technologies currently under development to have a positive effect on our way of life in the next 20 years, including solar energy (92%), wind energy (87%), vaccines and combatting infectious diseases (86%), and information and communication technology (82%). Respondents also think that that health and medical care (47%) and the fight against climate change (40%) are the areas where science and technology can make the most difference. Only a minority (25%) agree that science and technology do not really benefit people like them.

However, while more than half (57%) agree that science and technology could improve everyone's lives, they also think that they mostly improve the lives of people who are already better off. Moreover, 7 in 10 (70%) respondents agree that science and technology could improve living conditions in less developed countries, but they mostly improve living conditions in already well-off countries.

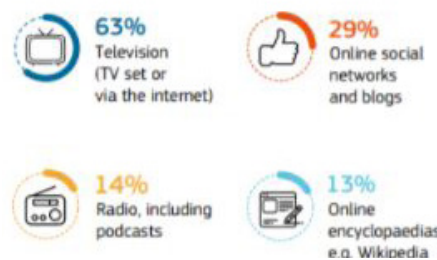
## Engagement with science and technology

Respondents were also asked how they engaged with science and technology. Most EU citizens get their information about science and technology from television (63%), followed by online social networks and blogs (29%) and online or in-print newspapers (24%). Respondents also cited watching documentaries (59%), talking about science and technology issues with family or friends

(55%), visiting science and technology museums (33%), and studying science and technology-related issues in their free time (22%) the most frequently. Asked why they may sometimes find it difficult to engage with science and technology, respondents most frequently mention lack of time (41%), lack of knowledge in the field of science and technology (39%), and lack of interest (34%).

## Views of scientists and their role in society

Respondents also have a mostly positive view of scientists, with 89% saying that the term "intelligent" best describes scientists, followed by "reliable" (68%), "collaborative" (66%), and "honest" (58%). Asked what qualities they want to see most in scientists, respondents mentioned "intelligence" (50%), "honesty" (43%), "reliability" (39%), and



"morality" (34%).

Respondents tend to agree that scientists should intervene in political debate to ensure that decisions take into account scientific evidence (68%), with fewer agreeing with the opposite statement that scientists should not intervene in

political debate when decisions ignore scientific evidence (39%).

On the other hand, 50% of respondents agree that people can no longer trust scientists to tell the truth about controversial scientific and technological issues because they depend more and more on money from industry (21% disagree with this). Moreover, most respondents (51%) agree that scientists don't spend sufficient time meeting people like them to explain their work (23% disagree).

## About the Eurobarometer survey

The Eurobarometer survey, commissioned by the European Commission's Directorate-General for Research and Innovation and published on 23 September 2021, is the largest one to date on science and technology in terms of number of participants. Some 26,827 respondents in the 27 EU Member States were interviewed in their mother tongue and the data was weighted to be socio-demographically representative at country level. The survey was also conducted in 11 other countries or territories, where a total of 10,276 respondents were interviewed in their mother tongue: five candidate countries (Albania, Montenegro, North Macedonia, Serbia and Turkey), as well as Bosnia and Herzegovina, Iceland, Kosovo, Norway, Switzerland and the United Kingdom. In total, 37,103 respondents from EU and non-EU countries and territories took part in the survey, conducted between 13 April and 10 May 2021 primarily through face-to-face interviews.

The engagement of citizens, local communities and civil society will be at the core of the new European Research Area to achieve greater societal impact and increased trust in science.

Source: <https://allea.org/what-europeans-think-about-science-and-technology/>



### TÜBA Honorary Membership Certificate Presented to Prof. Dr. Bold Luvsandorj

Prof. Dr. Bold Luvsandorj was elected as a TÜBA Honorary Member in 2019. The TÜBA Honorary Membership Certificate was conferred by Mr. Zafer Ateş, the Mongolian Ambassador to Ulanbator, at a ceremony held at the Embassy on 6 September 2021.

Prof. Bold stated that he is very proud to be Honorary Member of TÜBA and his research activities on Turkish and Mongolian languages for many years have been crowned with TÜBA Honorary Membership. He expressed his gratitude towards Türkiye and TÜBA for the support they have provided.



### Presidential Culture and Art Grand Award to Prof. Durali, TÜBA Member



Prof. Dr. Saban Teoman Durali TÜBA Honorary Member and Ibn Haldun University Philosophy Department Lecturer was awarded

with Presidential Culture and Art Grand Award

### Honorary Doctorate Title from Uzbekistan Silk Road International Tourism University given to Prof. Dr. Aziz Sancar,

Prof. Dr. Aziz Sancar, TÜBA Honorary Member was awarded an Honorary Doctorate by Uzbekistan Silk Road International Tourism University.



During the meeting, Rector Aziz Abduhakimov, who is also the Deputy Prime Minister of Uzbekistan and the Minister of Tourism and Sports, stated that university scientific committee decided to confer an honorary doctorate title to Prof. Sancar and he presented his title. Prof. Sancar gave a speech on "Science and national development in the Turkish world" and then answered the questions of the students.

### Prof. K. Arzum Erdem Gürsan, TÜBA Member elected as Editor for International Publications

Prof. K. Arzum Erdem Gürsan, TÜBA Principal Member and TÜBA Council member from Ege University Faculty of Pharmacy was elected as editor among the 22 scientists invited as associate editors to the "Biosensors and Bioelectronics" Journals, published by the international publishing house Elsevier, in the Q1 category and with an impact factor of 10,618. She was also one of the two scientists invited as an editor to the open access journal "Biosensors and Bioelectronics: X".



### "2021 Dissemination of Knowledge Awards" to TÜBA Members



Prof. Dr. Zekai Şen was awarded "Grand Prize" related with the "2021 İlim Yayma Award", Assoc. Prof. Dr. Hümeysra Özturan, who received the 2021 TÜBA TESEP before, taken "Social Sciences" award, Prof. Dr. Mustafa Soylak, TÜBA Principal Member received the award in the field of "Engineering, Natural and Health Sciences".

### TÜBA Full Member Prof. Dr. Ismail Koyuncu was assigned as ITU Rector

Istanbul Technical University (ITU) Faculty Member Prof. Dr. Ismail Koyuncu was continuing his work as a TÜBA Associate Member and the Director of the National Membrane Technologies (MEMTEK) Application and Research Center since 2014. Prof. Koyuncu has appointed as the Rector of ITU as of 14 August 2020.



### "METU Prof. Dr. Mustafa N. Parlar Education and Research Foundation Award" to TÜBA Members



Prof. Dr. Ali Koşar, TÜBA Associate Member and TÜBA-GEBİP Award winners; Prof. Dr. Seda Keskin Avcı, Prof. Dr. Elif Çadırcı, Assoc. Prof. Nurettin Mengeş, Assoc. Prof. Sedat Nizamoğlu, Assoc. Prof. Mustafa Tuğrul Yılmaz and Dr. Umut Aydemir received "METU Prof. Dr. Mustafa N. Parlar Education and Research Foundation Award"

"METU Prof. Dr. Mustafa N. Parlar Education and Research Foundation Award" is given to scientists who have made an important contribution to science at an international level with their scientific studies and research, or who have made a significant contribution to the development of the country with their scientific findings. Prof. Dr. Ali Koşar, TÜBA Associate Member from Prof. Sabancı University, and Prof. Dr. Seda Keskin Avcı, TÜBA-GEBİP Award winner from Koç University. Became the award.

The Research Encouragement Award, given to young researchers under the age of 40 who contribute to the development of one of the fields of science with their research or help solve the country's problems in this field; Prof. Dr. Elif Çadircı from Atatürk University, Doç. Dr. Nurettin Mengeş from Van Yüzüncü Yıl University, Assoc. Prof. Nurettin Mengeş from Koç University, Assoc. Prof. Sedat Nizamoğlu from METU, Assoc. Prof. Mustafa Tuğrul Yılmaz and Dr. Öğr. Üyesi Umut Aydemir from Koç University's were deemed worthy to take the award.

## Prof. Bakırdere, TÜBA Associate Member elected as Editor of Open Chemistry

Prof. Dr. Sezgin Bakırdere, TÜBA Associate Member and Yıldız Technical University was elected as Editor of Open Chemistry.



## 2021 Science Awards from TÜBİTAK to TÜBA GEBİP Members



The winners of the 2021 "TÜBİTAK Science, Special Service and Incentive Awards" have been announced. TÜBA GEBİP Members won 8 of a total of 17 awards this year, including 3 Science Awards and 14 Incentive Awards.

Prof. Dr. İdil Arslan Alaton, from Istanbul Technical University TÜBA GEBİP Member took 2021 TÜBİTAK Science Award in the field of engineering sciences

Incentive Awards are: Dr. Mehmet Selim Hanay from Bilkent University in the field of basic sciences; Prof. Dr. Elif Sertel from Istanbul Technical University and Dr. Selçuk Yerci in the field of engineering sciences; Dr. Elif Sertel and Middle East Technical University; Assoc. Prof. Dr. Elif Nur Fırat Karalae and Assoc. Prof. Dr. Nurcan Tunçbağ from Koç University in Health Sciences; Assoc. Prof. Dr. Muhammed Talha Çiçek from Medeniyet University and Assoc. Prof. Dr. Tilbe Göksun from Yörük from Koç University in Social Sciences and Humanities received the award.

## "Dr. Nejat F. Eczacıbaşı Medicine Award" to Prof. Çadircı, TÜBA-GEBİP Award Winner

Prof. Dr. Elif Cadircı, TÜBA - GEBİP award winner and Atatürk University Faculty of Medicine Department of Medical Pharmacology Lecturer, received the 2021 Medical Incentive Award given within the scope of Eczacıbaşı Medicine Awards.



The recipient of the Medical Encouragement Award in 2021 is given to scientists who have shown a promising future with their studies and are under the age of 40. Prof. Dr. Elif Çadircı was deemed worthy of the Incentive Award for her international contribution to autacoid pharmacology with her research on the effects of reactive molecules involved in inflammatory events.



TURKISH ACADEMY OF SCIENCES

### Newsletter

ISSN: 2757-6183

### Owner

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Ece Yavuz

### Redaction

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### September 2021-Issue 9

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