



BİLİM AKADEMİSİ
Science Academy, Türkiye

2025
Activity Report

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FROM THE PRESIDENT



Hakan S. Orer

PRESIDENT OF BİLİM AKADEMİSİ –
SCIENCE ACADEMY, TURKIYE

Dear members,

Dear friends of the Science Academy,

As we leave another year behind, I believe it is important to reflect not only on what we have accomplished, but also on the conditions under which – and the principles upon which – these accomplishments were achieved. Science Academy has firmly adopted as a founding principle the dissemination of the light of science within a framework of ethical and social responsibility. In this context, it ensures that scientific production is carried out in a free, critical, and public environment.

In line with the principles of freedom, merit, and integrity that we have embraced since our establishment, our work continued throughout 2025 as well. This year, we continued to prioritize supporting young researchers, monitoring academic freedoms, and ensuring that knowledge reaches society reliably and accessibly.

The BAGEP Award Program, Academy Science Day, our publications, and our popular science platform Sarkaç are

different yet complementary facets of this effort. You will find our activities related to these topics in the following pages.

For the Science Academy, another area as important as scientific production is the communication of knowledge to society in the right context and on solid grounds. At a time when scientific advances are accelerating and the spread of misinformation is increasing in parallel, the need for reliable scientific sources is more critical than ever. Sarkaç continues to respond to this need and to make scientific thinking a part of everyday life.

The year 2025 also represents an important threshold for the Science Academy with a view to the future. The work we have carried out within the framework of the International Year of Quantum Science and Technology, proclaimed by the United Nations, reminds us that science shapes not only today's problems but also tomorrow's world. Looking ahead, we see raising

FROM THE PRESIDENT

social awareness, fostering scientific thinking among younger generations, and strengthening the public value of science as core responsibilities.

The Science Academy views its independence not merely as a matter of principle, but as a practice that must be rebuilt every day. Such independence is sustained through labor, trust, and solidarity.

The sustainability of the Science Academy depends, in addition to its visible programs, on the survival of the institutional structure that makes these programs possible. At this point, the contributions of our members, membership dues, and general donations play a vital role. Every contribution -small or large, one-time or regular- enables the Academy to strengthen its human resources, sustain its publications, and dare to undertake new initiatives. The independence of Science Academy is secured in the most tangible way through this shared sense of ownership.

The Science Academy is also a community of memory. Over the past year, we lost several valued members, a loss we remember with deep sorrow. The contributions they made to science, the students they trained, and the intellectual legacy they left behind will continue to live on in the Academy's collective memory. This memory is necessary not only to commemorate the past, but also to build the future with responsibility.

In the years ahead, we will continue to champion science as the foundation of free thought, protect it as a public good, and stand in solidarity with young researchers. I extend my sincere thanks to all our members, supporters, and friends who make this shared effort possible, and I look ahead to the new year with a strengthened sense of solidarity.

CONTENTS

- 3 FROM THE PRESIDENT
- 6 SCIENCE ACADEMY, TURKIYE
- 8 NEWS FROM THE ACADEMY
- 11 BAGEP
- 12 BAGEP CEREMONY & ACADEMY SCIENCE DAY
- 18 DONATIONS & SUPPORT
- 22 OUR PUBLICATIONS
- 27 REPORT ON ACADEMIC FREEDOM
- 28 SARKAÇ
- 30 CONFERENCES & PANELS
- 32 SUMMER SCHOOLS
- 34 NEW MEMBERS
- 36 SCIENCE ACADEMY, TURKIYE MEMBERS
- 39 IN MEMORIAM

SCIENCE ACADEMY, TÜRKİYE

The Science Academy, Türkiye was founded in Istanbul on 25 November 2011 by 17 renowned scientists, with the mission of promoting, exemplifying, and upholding the principles of scientific merit, freedom, and integrity as an independent civil society organization.

Like all reputable academies around the world, the Science Academy selects its own members, makes decisions independently of governments' policies, and determines its areas of activity itself.

This bulletin you hold in your hands describes the main activities of the Science Academy, Türkiye in 2025.

The Science Academy, Türkiye is a member of All European Academies (ALLEA), the International Science Council (ISC), and the Coalition for Advancing Research Assessment (CoARA).



MERIT

Scientists have a responsibility to apply the scientific method with the utmost rigor; to conduct research to the highest standards, free from conscious bias; to ensure that evaluation and funding decisions are based solely on scientific merit; and, in doing so, to foster and protect inclusive working environments that respect human dignity.



FREEDOM

Scientists are free to communicate to their colleagues and to the public the results they have reached through sound scientific methods. In disseminating scientific results, scientists have a responsibility, guided by their conscience and independent judgment, to prevent foreseeable misuse and to ensure that these results serve the benefit of humanity as swiftly as possible. In sharing scientific ideas, they ensure that all stakeholders can freely convey their rights and views within the framework defined by scientific ethics. Scientific research must be conducted in accordance with ethical responsibilities and in full respect of human rights. Scientists also have a responsibility to ensure that the organizations they join or are invited to join uphold the principles of scientific merit, freedom, and integrity.



INTEGRITY

Scientists should publish their findings and methods with clarity and without distortion; provide attributions clearly and in full; indicate their own and others' contributions and responsibilities meticulously and fairly; and should not list as authors those who have not contributed to the work. These general principles apply not only to research articles, reviews, and academic publications, but also to textbooks, popular publications, original works or translations, and publications in all media – printed, oral, visual, on the internet, etc.

Within this framework, the Science Academy, Türkiye fully adopts and supports the value judgments and the determinations regarding good practice in research and dishonest conduct as stated in the “European Code of Conduct for Research Integrity,” published by the Federation of European Academies (ALLEA) in 2017.

** The European Code of Conduct for Research Integrity of the Federation of European Academies (ALLEA) has been updated with the revised 2023 edition.



HOW THE SCIENCE ACADEMY WAS FOUNDED
A Story of Civic Determination

NEWS FROM THE ACADEMY



The ALLEA General Assembly was held in Copenhagen in June 2025, bringing together representatives from academies of sciences and humanities across Europe; the Science Academy, Türkiye was represented by our Board Member Ömer İlday. At the symposium titled “Europe and the Arctic: Science and Diplomacy” discussions focused on the climate crisis, security, and science diplomacy. The General Assembly also examined how scientific research and researchers should be evaluated, emphasizing responsible, quality-based models that move beyond metric-driven systems.



Following a visit by a delegation from Academia Sinica to the Science Academy in June, Science Academy member Tamer Önder was invited to the Genomics Research Center at Academia Sinica from 24 to 27 November. The visit aimed to foster one-to-one academic and research

collaborations within the Taiwan International Graduate Program (TIGP-X). TIGP-X is a doctoral program that enables PhD students enrolled at universities abroad to conduct their thesis work with co-supervisors at Academia Sinica, and that encourages international co-supervision and research collaboration.



Bertil Emrah Oder, a member of the Science Academy Ethics Committee, attended the meeting of the International Human Rights Network of Academies and Scholarly Societies (IHRN), held in Oslo on 9–11 September. The meeting focused on the global decline in academic freedom, the protection of scholars at risk, and efforts by academies to develop a common stance against human rights violations.



Prof. Dr. Hakan S. Ozer, President of the Science Academy, was elected on 25 June 2025 to the Committee for Freedom and Responsibility in Science (CFRS) of the International Science Council (ISC). Following his election, he attended an ISC meeting held in Tashkent from 8 to 11 October at the Center for Scientific and Technological Information, under the auspices of the Government of Uzbekistan. Discussions at the meeting focused on strengthening scientific collaboration in Central Asia and the Transcaucasus, the contribution of academies to science policy, and the protection of scientific freedom.



Our member Erol Gelenbe was elected as a Foreign Member of the Indian National Science Academy (INSA, Delhi). Half of the 104 foreign members of this prestigious academy, founded in 1935, are recipients of the Nobel Prize and the Fields Medal.



Science Academy Member and President of Koç University Metin Sitti was elected as a full member of Academia Europaea, one of Europe’s most prestigious scientific institutions. Founded in 1988, Academia Europaea brings together leading researchers from across Europe in the natural sciences, the humanities, and the social sciences, admitting members by invitation on the basis of scientific merit and distinguished contributions.



Burcu Balçık received the Research and Academic Contributions Award at the 2025 Humanitarian Logistics Awards, presented by the American Logistics Aid Network (ALAN), in recognition of her pioneering research in humanitarian logistics. A faculty member at Özyeğin University, Balçık was honored for her work on data-driven decision-making across the preparedness, response, and recovery phases of humanitarian operations.

NEWS FROM THE ACADEMY



From the strategic planning meeting held on 19 April at the Science Academy office in Beşiktaş. (From left to right) Hakan S. Orer, M. Ali Alpar, Nebi Sümer, Lale Akarun, Serpil Sayın, Erdal Yıldırım, Cem Ersoy, Metin Arık, Önder Ergönül, Defne Üçer Şaylan, İlke Candar, Bülent Sankur, Murat Akova, Şevket Ruacan, Canan Atılgan.



Aslı Aydın Sancar (right), who has held the position of General Coordinator of the Science Academy for the past three years, and İlke Candar, Operations and Social Media Officer, stepped down from their positions this year to begin new chapters in their lives. Aslı is now continuing to work on her PhD dissertation, while İlke is pursuing her doctoral studies at Pennsylvania State University with a Fulbright scholarship.



Since October, we have been holding our monthly panel discussions and lectures at the ANAMED Conference Hall of the Research Center for Anatolian Civilizations (ANAMED), located in Merkez Han 181 on İstiklâl Avenue. These events are free and open to the public, and we welcome all science enthusiasts. For updates on upcoming programs, please follow our social media channels.

BAGEP SCIENCE ACADEMY YOUNG SCIENTIST AWARDS PROGRAM

13
YEARS

3074
APPLICATIONS

513
RESEARCHERS

42
SPONSORS

The Science Academy Young Scientists Award Program (BAGEP), is one of the most selective and most rigorous academic support programs for young researchers in Türkiye, conducted without interruption since 2013. BAGEP is not only a form of financial support; it is a process in which scientific merit, academic rigor, and a culture of collective evaluation are made concrete.

Supported by resources provided by corporate donors and individual supporters, the program announces its annual call at the end of each year, with applications remaining open for approximately six weeks. During this period, applicants prepare comprehensive dossiers presenting their publications, scientific background, and future research vision in an integrated and coherent manner.

The evaluation process begins with an initial technical and formal review by the Science Academy office, which typically takes about one week. During this stage, application files are standardized, missing documents are identified, and submissions are prepared for evaluation.

Following this review, a coordinator is appointed for each scientific field and evaluation committees are formed. The academic evaluation phase, conducted by these field committees, lasts approximately one month and is carried out in accordance

with the principles of the CoARA Agreement on Reforming Research Assessment.

Applications are examined in detail, with particular attention to candidates' scientific competence, the quality of their publications, and the originality of their proposed research programs. Where necessary, online interviews with candidates may also be conducted.

After the field committees complete their evaluations, the coordinators make their final assessments within a period of one week and submit the results to the Science Academy Board of Directors. The Board of Directors then reviews the files for about a week and makes its final decision. The process, which takes approximately four months, concludes with the announcement of the awardees.

The BAGEP Awards are presented to their recipients at a ceremony held in April. This ceremony is not merely a moment of award-giving; it is a finale in which months of meticulous, transparent, and collective academic labor become visible. This is precisely what makes BAGEP strong.

To learn about BAGEP 2026, which opened for applications on 15 December, and to follow the process, you can scan the QR code.

 bilimakademisi.org/bagep-2026-basvurulari-acildi/

BAGEP CEREMONY & ACADEMY SCIENCE DAY

BAGEP 2025

At the finale of the BAGEP process – where scientific merit, academic rigor, and a culture of collective evaluation are made concrete – 38 young scientists received their awards at a ceremony held at Özyeğin University.



BAGEP CEREMONY & ACADEMY SCIENCE DAY

BAGEP 2025 Awardees

Ahmet Alperen Günay
Mechanical Engineering
BILKENT UNIVERSITY

Alara Efsun Yazıcıoğlu
Faculty of Law
BILKENT UNIVERSITY

Aslı Aktan Erciyes
Psychology
KADIR HAS UNIVERSITY

Ata Can Bertay
Economy
SABANCI UNIVERSITY

Aykut Özdönmez
Astrophysics
ATATÜRK UNIVERSITY

Belgin Sever
Pharmacy
ANADOLU UNIVERSITY

Burak Başaranlar
History
KADIR HAS UNIVERSITY

C. Ceyhun Arslan
Literature
KOÇ UNIVERSITY

Cem Veziroğlu
Faculty of Law
KOÇ UNIVERSITY

Damla Eroğlu Pala
Chemical Engineering
BOĞAZIÇI UNIVERSITY

Duygu Ege
Materials Science and Engineering
BOĞAZIÇI UNIVERSITY

Emre Gürsoy
Computer Engineering
KOÇ UNIVERSITY

Erdal Sağ
Medicine
HACETTEPE UNIVERSITY

Erdinç Tatar
Electrical and Electronics Engineering
BILKENT UNIVERSITY

Erman Karakuş
Chemistry
TÜBİTAK NATIONAL METROLOGY INSTITUTE

Ezgi Elçi
Political Science
ÖZYEĞİN UNIVERSITY

Gülşah Karakaya
Business Administration
MIDDLE EAST TECHNICAL UNIVERSITY

H. Atakan Ekiz
Molecular Biology
IZMIR INSTITUTE OF TECHNOLOGY

Halis Sakız
Educational Sciences
MARDIN ARTUKLU UNIVERSITY

Haydar Göral
Mathematics
IZMIR INSTITUTE OF TECHNOLOGY

İdil Yet
Molecular Biology
HACETTEPE UNIVERSITY

James Kinkaid
Philosophy
BILKENT UNIVERSITY

Kristen Sarah Biehl
Anthropology
SABANCI UNIVERSITY

Mustafa Erden Yıldızdağ
Mechanical Engineering
ISTANBUL TECHNICAL UNIVERSITY

Nefize Ezgi Altınışik
Anthropology
HACETTEPE UNIVERSITY

Özlem Karsu
Industrial Engineering
BILKENT UNIVERSITY

Saniye Söylemez
Chemistry
NECMETTİN ERBAKAN UNIVERSITY

Sema Dumanlı
Electrical and Electronics Engineering
BOĞAZIÇI UNIVERSITY

Serap Aksu
Physics
KOÇ UNIVERSITY

S. Figen Öktem Seven
Electrical and Electronics Engineering
MIDDLE EAST TECHNICAL UNIVERSITY

Simge Çınar Aygün
Materials Science and Engineering
MIDDLE EAST TECHNICAL UNIVERSITY

Tuğçe Nihal Gevrek
Chemistry
GEBZE TECHNICAL UNIVERSITY

Ufuk Balaman
Educational Sciences
TED UNIVERSITY

Veysel Bay
Agricultural Engineering
EGE UNIVERSITY

Yaghoub Heydarzade
Physics
BILKENT UNIVERSITY

Yener Koç
History
KADIR HAS UNIVERSITY

Zeynep Oktay
Literature
BOĞAZIÇI UNIVERSITY

Zihni Onur Uygun
Medicine
KAFKAS UNIVERSITY

BAGEP CEREMONY & ACADEMY SCIENCE DAY

Science Day



Academy Science Day brings together members of the Science Academy and BAGEP awardees, creating a distinctive shared space that strengthens the ties within Türkiye's scientific community.

With the idea that administrative meetings could be structured around a scientific event, **Academy Science Day** – first held in 2022 and transformed into a “science day” that also brings young researchers together – features scientific presentations, the presentation of our academic freedoms report, and the **BAGEP award ceremony**. Today, the event serves as a distinctive scientific platform where Science Academy members, former BAGEP awardees, and new award recipients come together.

At the event held on 26 April 2025 at Özyeğin University, Elif Nur Fırat Karalar gave a presentation titled “Small Structures, Big Impact: The Roles of Overlooked Organelles in Diseases,” Sedat Gündoğdu presented “From the Anthropocene to the Plastocene: Plastic’s Invasion of Nature and the Human Body,” and Adil Sarıbay delivered a talk titled “Psychology and Behavioral Sciences: A Holistic Perspective in/on Psychology.” Our member Ersin Kalaycıoğlu presented our Academic Freedoms report, and the BAGEP award ceremony was held.



Science Academy Member Ersin Kalaycıoğlu presents the 2023–2024 Academic Freedoms Report.

Former Science Academy President (2021–2024) Canan Atılğan (left), Science Academy President Hakan Orer (right), and Science Academy Founding President Ali Alpar, at the 2025 Academy Science Day reception.



DONATIONS & SUPPORT

Donations

ekolvakfi



Ata Portföy

Since our founding, we have received – and continue to receive – support from many institutions and individuals who share our commitment to scientific merit and free thought. Despite this support, we sometimes face financial constraints that prevent us from bringing all our envisioned projects to life. More importantly, these limitations make it difficult to strengthen our small professional staff and to compensate contributions at the level we believe they deserve.

One of the main reasons for these challenges is that much of the support we receive is earmarked for specific programs. Programs such as BAGEP, which support young researchers, are of vital importance. However, long-term sustainability depends not only on projects, but also on the administrative, editorial, and organizational infrastructure that makes such work possible. For this reason, general donations are indispensable, as they help secure the Academy's independence, flexibility, and continuity.

Recognizing this need, the Ekol Foundation has supported the Science Academy with a general donation over the past two years. The Foundation's founder, Ahmet Musul, describes his motivation as follows:

"I believe that the prerequisite for humans and all other living beings to live under fair and prosperous conditions is the ability to teach and conduct research in both the social sciences and the natural sciences in a fully free environment, supported by adequate resources. Unfortunately, in Türkiye, when we speak of 'free science,' only a very limited number of institutions come to mind. At the top of this short list stands the Science Academy. I am grateful that it exists."

We extend our sincere thanks to Ahmet Musul for his support, which provides essential breathing room for the Academy's core activities.

This year, our general donors also include Nesin Mathematics Village and Ata Yatırım. Regardless of size, each contribution plays a meaningful role in sustaining our work. In addition, the regular dues of our members – our greatest strength – form the backbone of the Academy. We are deeply grateful to all who stand in solidarity with us.

We invite those who wish to make a general donation, become a regular supporter, or explore other ways of contributing to visit the Donations and Support section of our website.



en.bilimakademisi.org/how-to-donate

BAGEP Sponsors

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Elginkan Vakfı

SABANCI VAKFI



Hüsnu Özyeğin Vakfı
1990

Eczacıbaşı

SEVİNÇ-ERDAL
İNÖNÜ FOUNDATION
In Memory of Erdal İnönü
BAGEP Physics Award

ÖZGÜL AND ARMAĞAN
ÇAĞLAYAN FOUNDATION
In Honor of Armağan Çağlayan,
M.Sc. in Civil Engineering
BAGEP Engineering Award

RONA SEROZAN
FOUNDATION FOR
COMPARATIVE LAW STUDIES
In Memory of Rona Serozan
BAGEP Social Sciences Award

BORUSAN
KOCABIYIK FOUNDATION
In Memory of Asım Kocabıyık
BAGEP Award

MEHVEŞ
DEMİREN
In Memory of Selim Demiren
BAGEP Mathematics Award

KAĞITÇIBAŞI
FAMILY
In Memory of Çiğdem Kağıtçıbaşı
BAGEP Social Psychology Award

Each year, a BAGEP laureate in the field of medicine is selected to receive the **ÇYDD Türkan Saylan Science Award.**

DONATIONS & SUPPORT

Istanbul Marathon

For the past two years, Science Academy has taken part in the Istanbul Marathon to support doctoral students under the slogan “You, too, run for science!” Through this initiative, we aim to cover congress registration and travel expenses for young researchers who are unable to attend international conferences due to financial constraints.

We run for doctoral students because the journey to becoming a scientist begins during the doctoral stage. Participation in international conferences – meeting peers in their fields, presenting their work, and building new collaborations through the exchange of ideas – is an essential part of this process and plays a vital role in the development of young researchers.

At the Istanbul Marathon on 2 November 2025, with the support of our members, friends, and families, we came very close to



Our member Berrak Yeğen (center) ran in memory of her young colleague Özlem Akbal Dağistan, a Research Assistant at Istanbul University's Faculty of Pharmacy, who passed away last year, and raised 141,000 TL.

431,403
TL DONATION

our target of 450,000 TL and raised a total of 431,403 TL from 121 donors. We will distribute this amount in 2026 among five doctoral students in the fields of natural and life sciences.

With the 272,000 TL in donations we raised at the 2024 marathon, we provided the necessary financial support of 70,000 TL for İrem Akdoğan, who works in neuroscience at Bilkent University, Berna Güler, who works in experimental psychology at Sabancı University, and Aslı Bayraktar Kavalcı from Gebze Technical University to be able to attend conferences abroad. Ceyda Köse, also from Gebze Technical University, received the support to use it a year later.

Defne Üçer Şaylan, Zeynep Güven, Cumhuriyet Yeğen, Berrak Yeğen, Ayça Yıldız Peköz, İlker Can Tokgöz, Seher Yeğen.



With the donations we raised from the Istanbul Marathon, we provide support to young researchers so that they can attend international congresses. İlker Can Tokgöz, who began working as a volunteer for the Science Academy in 2024, joined the professional staff this year.



OUR PUBLICATIONS

Earthquake Books

The book **Science Academy Earthquake Discussions: We Can Do Much Better!** draws on the discussions and experience gained from events organized by Science Academy with the support of BankABC since 6 February 2023. It aims to assess our current situation through a rational lens and to draw on scientific guidance to identify how disaster preparedness and response can be significantly improved. By examining the threats and opportunities shaping disaster management, the book highlights key concepts and offers insights that can strengthen societal resilience to all types of disasters.

Another publication, **Earthquake-Resilient Cities: A Roadmap**, edited by Naci Görür – one of the Science Academy’s founding members – and published with the support of the Vehbi Koç Foundation, presents a scientific and practical framework for reducing earthquake risk and building urban resilience. An earthquake-resilient city is defined as one in which all components – from governance and infrastructure to building stock, ecosystems, and the business community – are prepared and resilient. The roadmap addresses each of these components in depth, with contributions from relevant experts and clear, actionable recommendations.



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PROJECT COORDINATION & RESEARCH
Elif Canseza Kaplan
EDITORIAL DESIGN & INFORMATION DESIGN
Deniz Cem Öndügyü

Prepared with the aim of guiding and inspiring city administrations, these books were designed to be accessible and engaging for a broad audience. To this end, we made deliberate use of information design. Alongside selected quotations that underscore key messages, the books feature original infographics and maps that visualize data drawn from multiple sources.

All of the Science Academy’s earthquake-related publications are available as open-access resources. Readers may download the books or promotional materials, or purchase printed copies, by scanning the QR code.

 sarkac.org/2025/05/bilim-akademisi-deprem-kitaplari



The poster we prepared with the support of Vkv to promote the Science Academy’s earthquake books was exhibited at the Marmara Urban Forum (MARUF’25) on 1–3 October 2025.

OUR PUBLICATIONS

In the Field: Science and Women in the Foundation of the Republic

Sahada: Cumhuriyetin Harcında Bilim ve Kadınlar (In the Field: Science and Women in the Making of the Republic) was realized in the centennial year of the Republic as a joint project of the Science Academy and the Ekol Foundation. The book brings together interviews with contemporary scientists and family members of twelve pioneering figures, alongside concise accounts of the history of scientific fields and the ways in which scientific knowledge is produced. It also explores the featured figures' fieldwork, their roles as educators, and – where possible – their personal lives. The following individuals are included in the volume:

Fahire Battalgazi, 1902–1948, Zoology
Leman Cevat Tomsu, 1913–1988, Architecture
Atife (Dacı) Dizer, 1916–2003, Paleontology
Halet Çambel, 1916–2014, Archaeology
Asuman (Berk) Baytop, 1920–2015, Botany
Saadet Ergene Bayramoğlu, 1915–1997, Zoology
Mübeccel (Belik) Kıray, 1923–2007, Sociology
Cazibe (Arıç) Sayar, 1926–2021, Geology, Paleontology
Behice Boran, 1910–1987, Sociology
Fatma (Taşkingöl) Başaran, 1921–2008, Social Psychology
Jale (Ogan) İnan, 1914–2001, Archaeology
Nuriye Pınar Erdem, 1914–2006, Geology



PREPARED FOR PUBLICATION BY
Müsemma Sabancıoğlu
PROJECT COORDINATION
Maral Yağyazan
ARCHIVE, RESEARCH
Seher YeğİN
DESIGN
BEK tasarım

“**Before reading this book, if someone had asked me how we might best grasp the dynamism and breakthroughs of the Republican era, my answer would probably not have been to look at the biographies of women scientists and their emergence in the field. Yet as I turned these pages, I came to see how powerfully this perspective opens new horizons for understanding the Republic.**

From the Afterword of *Sahada*
—Deniz Kandiyoti
MEMBER OF THE SCIENCE ACADEMY

1 October 2025: *Sahada* was discussed at the Library Talks held at the Haliç Congress Center as part of the Marmara Urban Forum (MARUF). In the session moderated by Cengiz Özdemir, Müsemma Sabancıoğlu, who prepared the book for publication, spoke about the importance of scientific fieldwork carried out by women since the Republic's founding years and the process of preparing the book for publication.



21 October 2025: At an event held on the evening of 21 October at Nostalji Kitap Kahve by the Pangaltı Evolution Workshop, Müsemma Sabancıoğlu introduced *Sahada* as a publishing project. Having selected leading figures from the scientific life of the Republican period, Sabancıoğlu signed the book for attendees at the end of her talk.

30 October 2025: In collaboration with the Istanbul Metropolitan Municipality Directorate of Civil Society Relations Branch, the Science Academy held an event focusing on *Sahada* at the Taksim Republic Museum. At the gathering organized on the occasion of the Republic's anniversary, Zeynep Çelik – one of the book's authors, a Science Academy Member, and an architectural historian – along with Canan Atılgan, the author of the foreword and the Science Academy's President for the 2021–2024 period, and Müsemma Sabancıoğlu, gave talks.





Academy Science Day 2025.

REPORT ON ACADEMIC FREEDOM

Since 2015, the Science Academy has systematically monitored violations of academic freedom and publishes its Report on Academic Freedom in the early months of each year. Prepared by the Academy's lawyer members, the report documents violations across Türkiye and offers an independent assessment of the state of academic freedom at universities.

“Universities are widely recognized as a litmus test for democracy. Alongside free elections and a free press, academic freedom is an essential pillar of a functioning democratic system. Universities are indispensable spaces where the knowledge produced by those in power can be examined, questioned, challenged, and refined. At the same time, they are among the institutions best equipped to develop responses to the major challenges facing humanity. Yet a common feature of increasingly authoritarian regimes is the suppression of critical inquiry at universities and the obstruction of independent scientific work.

2023-24 Report on Academic Freedom



To access the reports published to date, you can scan the QR code.



en.bilimakademisi.org/academic-freedom-and-human-rights/

The Science Academy's popular science platform **Sarka** (sarkac.org) has been publishing since 2017 and covers a broad range of scientific disciplines. Featuring articles and interviews that reflect researchers' perspectives and explore the many dimensions of scientific research, Sarka places strong emphasis on originality, scientific rigor, and accessibility for non-specialist readers.

HIGHLIGHTS

- Each year, we publish articles written by scientists for **university applicants** to help guide their choice of field. These pieces introduce the scope, subfields, and career opportunities associated with different academic departments.



- We regularly feature articles that present researchers' perspectives on **Nobel Prize**-winning work, following the announcement of the prizes each October.



- *Sarka*'s **History of Science** category spans a wide range of topics, from the lives of scientists to major discoveries and theoretical debates.



- In the **Research and Universities** category, we critically examine structural problems within the academic system and document the experiences of Science Academy members – researchers with long-standing involvement in scientific practice and education. Alongside our essay section, which allows researchers to reflect on their experiences, we also published in-depth interviews with the Academy members in 2025.



Academic ethics, lack of oversight, loss of quality: Is writing a thesis really this easy?
Ersin Yurtsever, Nebi Smer

Rethinking the university: Academic freedom, culture, and corporatization
Canan Atılgan, Sami Glgz

Doctoral education in law and health sciences: Differences in approach, goals, recommendations
Yeřim Atamer, Hakan S. Orer

- In our **Meraklısına Bilim** interview series, researchers discuss how scientific knowledge is produced in their fields, the fundamental questions they pursue, how research unfolds in practice, and their own work. New episodes are available on our YouTube channel, and the series can also be followed as a podcast on Spotify and Apple Podcasts.



Meraklısına Bilim series
"A Apaık Radyo Science Talks

- 5 JAN "A **Amateur Astronomy and its contribution to Science Education** – Alp Akođlu
- 21 JAN  **The Structure and Functioning of a Microplastics Research Group** – Sedat Gndođdu
- 30 JAN "A **The A.I. Revolution: Strategies for Societal & Institutional Adaptation** – Aykut Erdem, Erkut Erdem
- 12 FEB "A **Earthquake Preparedness: Replacing Post-Disaster Regret with Proactive Readiness** – Nuray Karancı
- 27 FEB "A **The International Year of Quantum Science 2025: Foundations of Quantum Theory up to 1925** – Ali Alpar
- 5 MAR  **Anthropology: Scientific Approaches to Understanding Human Beings** – Bařak Can
- 28 MAR "A **The International Year of Quantum Science 2025: Wave Function, Probability, and Uncertainty** – Ali Alpar
- 9 APR "A **Psychological Mechanisms of Social Mobility** – Sinan Alper
- 16 APR  **Methodological Approaches to Studying Behavior and Attitudes on Social Media** – zen Bař
- 24 APR "A **Infectious Diseases in Turkey: Current Epidemiological Assessment** – nder Ergnl
- 8 MAY "A **Media, Scientific Literacy, and Disaster Awareness: An Integrative Perspective** – Ali Alpar
- 21 MAY "A **Mitigating Political Polarization: Mechanisms and Policy Approaches** – řebnem Gmřc
- 3 JUN  **The Architecture of Peace: Dynamics of Conflict Resolution Processes** – Ayře Betl
- 2 JUL  **Collective Memory and the Recollection of Major Social Events** – Sezin ner, Ceren Dnerkayalı
- 22 JUL  **Linguistics: Scientific Analysis of Sounds, Signs, and Whistled Communication** – Aslı Grer
- 3 SEP  **Cognitive Frameworks for Resilience in an Era of Global Crises** – Onurcan Yılmaz
- 4 OCT  **Ancient DNA evidence from Neolithic Anatolia** – Mehmet Somel, Fsun zer
- 13 OCT  **Scientific Analysis and Modeling of Supply Chain Systems** – Melek Ateř
- 12 NOV  **Peer Bullying in Schools: Psychological and Institutional Dimensions** – Seil Gnltař
- 7 DEC  **Volcanology: Evidence, Methods, and the Scientific Understanding of Volcanoes** – Ziyadin akır

CONFERENCES & PANELS

20 DEC 2025



**An Optimistic Look at A.I.:
Human-Artificial Intelligence Systems**



SPEAKER
Selim Balcısoy

19 NOV 2025



**In Pursuit of Microbes: Infectious
Disease Data and Priorities in Türkiye**



SPEAKER
Önder Ergönül

19 OCT 2025



**Reducing Earthquake Risk:
Science, Planning, and Implementation**



MODERATOR
Sibel Salman



PANELISTS
Burcu Balçık, Raha Akhavan-Tabatabaei

21 MAY 2025



**Quantum Science and Computers in the
100th Year of the Quantum Revolution**



MODERATOR
Zafer Gedik



PANELISTS
Özlem Salehi Köken, Göktuğ Karpaz

16 APR 2025



**The A.I. Revolution: A Look at the Past,
Present, and Tomorrow**



SPEAKERS
Aykut Erdem, Erkut Erdem

15 JAN 2025

SCIENCE ACADEMY CONFERENCE OF THE YEAR 2025

**The Imagination of Physics:
The Concept of Emergence Expands
the Boundaries of Science**



SPEAKER
Mete Atatüre

The history of physics is a continuous journey of exploration in humanity's effort to understand the universe. Spanning scales from the smallest particles to distant exoplanets, progress in physics often comes from uncovering patterns already present in nature. Yet another force is equally central to this progress: emergence – the appearance of unexpected, hard-to-predict behaviors arising from complex systems.

Condensed matter physics, one of the fields where emergence is most vividly observed, brings imagination and quantum physics together. Materials that appear ordinary can give rise to entirely new concepts and theoretical frameworks. In this gathering, we will explore how creativity guides research in condensed matter physics, drawing inspiration from nature's remarkable diversity, and how complex systems give rise to fundamentally new phenomena. We will also reflect on a provocative question: Can physics ever be fully mapped, or does each step forward open onto an ever-expanding landscape of new possibilities?

F İ Z İ Ğ İ N
H A Y A L
G Ü C Ü

Belirim (Emergence) kavramı
bilimin sınırlarını genişletiyor

SUMMER SCHOOLS

As the only official supporter in Türkiye of the 2025 International Year of Quantum Science and Technologies, the Science Academy shared fundamental and advanced-level knowledge in the field with students through four separate summer schools.

Science Academy & Bilkent University COMMUNICATION SUMMER SCHOOL 2025 6G AND SEMANTIC COMMUNICATION

The three-day program, organized by the Department of Electrical and Electronics Engineering at Bilkent University as part of the Science Academy's efforts to strengthen Türkiye's research ecosystem, was held from July 2 to 4.

The program featured lectures by Science Academy members Elza Erkip, Orhan Arıkan, and Tolga Duman, as well as other distinguished academics. It refreshed the foundational knowledge required for research in the field, presented recent developments in key research areas, and explored potential thesis and project topics. The event brought together industry representatives and graduate students.

Of the 150 registered participants, 63 were students, 26 were academics, and 29 were employees from industry and the public sector, along with staff and guests from the sponsor companies Karel and Türk Telekom.



1 Science Academy & Çakılları Mathematics Village 2025 INTERNATIONAL YEAR OF QUANTUM FEZA GÜRSEY SUMMER SCHOOL High School, Undergraduate

Science Academy Founding President Ali Alpar gave physics lectures for high school- and university-level participants at the Çakılları Mathematics Village in Eskişehir. In the total 20-hour program held from July 7 to 11, all participants except one university-level participant consisted of TEVİTÖL (TEV İnanç Türkeş Private High School) students. Evening classes were held outdoors.



Ali Alpar (left), students from TEVİTÖL, Müge Kanuni Er (right), and Şahin Koçak (second from the right), founder of the Çakılları Mathematics Village.

2 Science Academy & Nesin Mathematics Village 2025 INTERNATIONAL YEAR OF QUANTUM FEZA GÜRSEY SUMMER CAMPS: INTRODUCTION TO QUANTUM PHYSICS High School, Undergraduate

In the summer school organized to introduce the basic concepts of quantum physics to first- and second-year university students and high school students, our Founding President Ali Alpar served as an instructor. In the program held between 11–16 August, the crisis of classical physics, blackbody radiation, the photoelectric effect, the Planck Hypothesis, the Bohr atomic model, wave-particle duality, atoms and musical instruments, wave pack-



ets, probability, the uncertainty principle, the Schrödinger Equation, the mathematical structure of quantum mechanics, wave functions of identical particles, fermions: the Pauli principle and the periodic table, bosons, lasers, superconductivity, and superfluidity were covered.



3 Science Academy & Nesin Mathematics Village 2025 INTERNATIONAL YEAR OF QUANTUM FEZA GÜRSEY SUMMER CAMPS: ADVANCED PHYSICS Graduate

The summer school, which offers advanced foundational physics and specialized courses for master's and doctoral students, was held for the second time this year. In the program held



between 11–23 August, Onur Pusuluk, Alhun Aydın, and Hande Toffoli delivered intensive and advanced-level lectures in quantum mechanics, quantum transport, and statistical mechanics. The summer school offered young researchers a strong theoretical foundation and an environment for thinking and producing together.

4 Science Academy & Nesin Mathematics Village & Arkhé 2025 INTERNATIONAL YEAR OF QUANTUM FEZA GÜRSEY SUMMER CAMPS: AN UNCONVENTIONAL INTRODUCTION TO QUANTUM MECHANICS Undergraduate, Graduate

The English-language program, taught by Onur Pusuluk, Sina Zeytinoğlu, and Özgür Müstecaplıoğlu, was for undergraduate and graduate students in physics and other basic sciences, as well as engineering. In the classes held between 18 and 24 August, the modeling and control of quantum devices, an introduction to quantum entanglement, and quantum algorithms and signal processing were covered.

NEW MEMBERS



Arzucan Özgür

COMPUTER SCIENCES
BOĞAZIÇI UNIVERSITY



Ercan Engin Kuruoğlu

ELECTRICAL & ELECTRONICS ENGINEERING
TSINGHUA UNIVERSITY



Gül Günaydın

PSYCHOLOGY
SABANCI UNIVERSITY



Nazlı Baydar

PSYCHOLOGY
KOÇ UNIVERSITY



Bülent Turan

PSYCHOLOGY
KOÇ UNIVERSITY



Erdem Yörük

SOCIOLOGY
KOÇ UNIVERSITY



Haluk Sucuoğlu

CIVIL ENGINEERING
MIDDLE EAST TECHNICAL UNIVERSITY



Seda Kızılel

MATERIALS SCIENCE AND ENGINEERING
KOÇ UNIVERSITY



Burak Özbağcı

MATHEMATICS
KOÇ UNIVERSITY



Feyza Çorapçı

PSYCHOLOGY
KOÇ UNIVERSITY



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ELECTRICAL & ELECTRONICS ENGINEERING
BILKENT UNIVERSITY



Şennur Ulukuş

ELECTRICS & COMPUTER SCIENCE ENGINEERING
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Fuat Kalyoncu

MEDICINE
HACETTEPE UNIVERSITY



Murat Saraçlar

ELECTRICAL & ELECTRONICS ENGINEERING
BOĞAZIÇI UNIVERSITY



Tilbe Göksun

PSYCHOLOGY
KOÇ UNIVERSITY

SCIENCE ACADEMY, TURKIYE MEMBERS

FULL MEMBERS

Daron Acemođlu
İnanç Adagideli
Özgür Barış Akan
Lale Akarun
Ufuk Akçiğit
Okan Akhan
Engin Umut Akkaya
Murat Akova
İlhan Aksay
Ayhan Aksu Koç
Aydın Alatan
Ahmet Alkan
Ercan Alp
M. Ali Alpar – FOUNDER
Ethem Alpaydın
Yeşim Arat
Moshe Arditi
Mustafa Arıcı
Metin Arık
Orhan Arıkan
Sevtao Arıkan Akdađlı
İdil Arslan Alaton
Ergin Atalar
Yeşim Atamer
Mete Atatüre
Canan Atılğan
Viktorya Aviyente
Zeynep Aycan
İvet Bahar
Baha Balantekin
Burcu Balçık
Çağatay Başdođan
Hüsnü Can Başer
Altan Baykal
Alpan Bek
Meral Beksaç
İzak Benbasat

Erdin Bozkurt
Ayşe Buğra Kavala
Nejat Bulut
Alp Can
Namık Çağatay
Tahir Çağın
Ziyadin Çakır
İsmail Çakmak
Başak Çalı
İhsan Çalış
Ali Çarkoglu
Zeynep Çelik
Enis Çetin
Attila Çiner
Ömer Dağ
Turgay Dalkara
Can Fuat Delale
Alper Demir
Hilmi Demiray
Levent Demirel
Adil Denizli
Tekin Dereli
Kübra Dođan Yenisey
Tolga Mete Duman
Edhem Eldem
Yalçın Elerman
Şinasi Ellialtıođlu
Hüsnü Ata Erbay
Mehmet Erbudak
Ali Erdemir
Önder Ergönül
Can Erkey
Elza Erkip
Nesim Erkip
Cem Ersoy
Seda Ertaç
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Ayşe Erzan – FOUNDER
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Gürol İrzık
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Ramazan İdilman
Ömer İlday
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Ayşe İmrohorođlu
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Ayşe Nuray Karancı
Reşat Kasaba
Ayhan Kaya
Hülya Kayserili
Özlem Keskin
Seda Keskin Avcı
Pınar Keskinocak
Çağlar Keyder
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Refik Kortan
Murat Köksalan
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Aydođan Özcan
Asuman Özdağlar

Mehmet Özdođan
Feryal Özel
Haluk Özen
Seza Özen
Nevzat Özgüven
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Metin Sitti
Aksel Siva
Halil Mete Soner
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Nebi Sümer
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Pekcan Ungan
Murat Uysal
Ali Ülger
Selim Ünlü
M. Utku Ünver
Hakan Ürey
Ergün Yalçın
Hasan Yazıcı
Berrak Yeğen
Erinç Yeldan
Ashihan Yener
Aylin Yener
Orhan Yenigün
Cem Yalçın Yıldırım
Okan Bülent Yıldız
Kamil Yılmaz
Yücel Yılmaz – FOUNDER
Ersin Yurtsever – FOUNDER

SCIENCE ACADEMY, TURKIYE MEMBERS

HONORARY MEMBERS

H. Erdal Akalın
Takhmasib Aliev
Orhan Altan
Philip W. Anderson
Yoshinori Asakawa
Itzhak Bars
Jocelyn Bell Burnell
Şeyla Benhabib
Edouard Brezin
Martin Chalfie
Ayşe Çağlar
Peter A. Diamond
Üstün Ergüder
Suraiya Faroqhi
Dagfinn Follesdal
Dimitri Gutas
Avedis Hacınliyan
Philip Kitcher
İoanna Kuçuradi
Timur Kuran
Robert P. Langlands

Joel Lebowitz
Dan P. McKenzie
Sanjit K. Mitra
Cumhur Öner
David Pines
John Polanyi
Atta-ur Rahman
Martin Rees
Adam Roberts
Hikmet Sari
İskender Sayek
Zehra Sayers
İzzettin Silier
Christopher Llewellyn Smith
Günter Stock
Alessandro Vespignani
Hellen Wallace
Edward Witten
Erdal Yıldırım
Ayla Zırh Gürsoy

THOSE WE HAVE LOST

İsmail Hakkı Duru (1946–2025)
Umut Gürsoy (1975–2025)
Teo Grünberg (1927–2025)
Miral Dizdaroğlu (1945–2024)
Fuat Keyman (1956–2024)
Durmuş Ali Demir (1967–2024)
Zafer Toprak (1946–2023)
Ayhan Ulubelen (1931–2020)
Hamit Fişek (1941–2020)
Philip W. Anderson (1923–2020)
Rahmi Güven (1948–2019)
David Pines (1924–2018)
Güven Arsebük (1936–2017)
Çiğdem Kağıtçıbaşı (1940–2017)
Yücel Kanpolat (1941–2016)
Tosun Terzioğlu (1942–2016)
Namık Kemal Pak (1947–2015)

IN MEMORIAM



İSMAIL HAKKI DURU (1946–2025)

After completing his undergraduate studies at Ankara University's Faculty of Science, he received his PhD degree in 1972 at the University of Colorado in the United States. He became an associate professor at Ankara University in 1977 and at Dicle University in 1981, and worked as a senior researcher at TÜBİTAK between 1981 and 1990.

Duru served as Head of the Department of Mathematics, Dean of the Faculty of Science, and Director of the Institute at Trakya University, and continued his research at the Feza Gürsey Institute in 2002–2005. Between 2005 and 2013, he held a position at İzmir Institute of Technology and continued his profession after his retirement as well.

İsmail Hakkı Duru donated his body to a medical faculty.



UMUT GÜRSOY (1975–2025)

Umut Gürsoy, a faculty member at Utrecht University, passed away on 24 April 2025 following a

sudden heart attack.

An internationally renowned theoretical physicist, Gürsoy studied electrical engineering at Istanbul Technical University and later pursued a double major in physics, driven by his growing interest in theoretical physics. He completed his master's degree at the Weizmann Institute of Science and

earned his PhD at the Massachusetts Institute of Technology.

Despite his untimely passing, Gürsoy made remarkable contributions to his field. His book *Holography and Magnetically Induced Phenomena in QCD* attracted wide recognition, he mentored dozens of graduate students, and in 2014 he was honored as "Best Faculty Member of the Year" at Utrecht University.

Umut Gürsoy had been a member of the Science Academy since 2019.

TEO GRÜNBERG (1927–2025)

Teo Grünberg, the internationally renowned logician and philosopher, passed away on 14 April 2025 at the age of 98.

Grünberg began teaching logic at Istanbul University in 1960 and earned his PhD there in 1964 with a dissertation titled *An Essay on the Concept of Meaning*. In 1966, he joined Middle East Technical University (METU), where he served as Head of the Department of Sociology and later became the founding Head of the Department of Philosophy.

After his retirement in 1994, Grünberg continued to teach at METU, Bilkent University, and Ankara University. In recognition of his contributions, he received the Turkish Academy of Sciences Service Award in 1998. He was a full member of the Philosophical Society of Turkey, the Turkish Philosophical Association, and the European Society for Analytic Philosophy, and an Honorary Member of the Science Academy.



