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Personal Information

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International Researcher IDs

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Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği, Turkey 2013 - 2018

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği, Turkey 2011 - 2013

Undergraduate, Erciyes University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2005 - 2010

Research Areas

Technical Sciences, Mechanical Engineering, Energy, Wind power

Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği, 2018 - Continues

Research Assistant, Erciyes University, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği, 2012 - 2018

Academic and Administrative Experience

Courses

Türbülans ve Hesaplama Metotları, Doctorate, 2023 - 2024

Su Enerjisi ve Sistemleri, Undergraduate, 2022 - 2023, 2021 - 2022, 2019 - 2020

Jeotermal Enerji, Undergraduate, 2022 - 2023, 2020 - 2021

DeneySEL Akışkanlar Dinamiği, Undergraduate, 2023 - 2024, 2022 - 2023

Bilgisayar Destekli Teknik Resim-I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021

Mühendislik Mekaniği-II, Undergraduate, 2022 - 2023

Akışkanlar Mekaniği-I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Computer Aided Engineering Drawing-I, Undergraduate, 2023 - 2024

Hesaplamalı Akış, Din. ve Isı Transferi, Postgraduate, 2022 - 2023, 2020 - 2021

Mühendislik Mekaniği-I, Undergraduate, 2022 - 2023

Akışkanlar Mekaniği-II, Undergraduate, 2021 - 2022

İleri Akışkanlar Mekaniği, Postgraduate, 2020 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The effect of spoilers on flow around tandem circular cylinders**
İLKENTAPAR M., AKŞİT S., AÇIKEL H. H., ÖNER A. A.
Ocean Engineering, vol.272, 2023 (SCI-Expanded)
- II. **Evaluation of capacity of hybrid energy systems to decrease the environmental pollution**
AÇIKEL H. H., Bayir E.
FUEL, vol.328, 2022 (SCI-Expanded)
- III. **Effect of partial flexibility over both upper and lower surfaces to flow over wind turbine airfoil**
Genç M. S., Açikel H. H., Koca K.
Energy Conversion and Management, vol.219, 2020 (SCI-Expanded)
- IV. **Investigation of pre-stall flow control on wind turbine blade airfoil using roughness element**
Genç M. S., Koca K., Açikel H. H.
Energy, vol.176, pp.320-334, 2019 (SCI-Expanded)
- V. **Control of laminar separation bubble over wind turbine airfoil using partial flexibility on suction surface**
AÇIKEL H. H., GENÇ M. S.
ENERGY, vol.165, pp.176-190, 2018 (SCI-Expanded)
- VI. **Identification of flow phenomena over NACA 4412 wind turbine airfoil at low Reynolds numbers and role of laminar separation bubble on flow evolution**
KOCA K., GENÇ M. S., AÇIKEL H. H., ÇAĞDAŞ M., BODUR T. M.
ENERGY, vol.144, pp.750-764, 2018 (SCI-Expanded)
- VII. **Flow control with perpendicular acoustic forcing on NACA 2415 aerofoil at low Reynolds numbers**
AÇIKEL H. H., GENÇ M. S.
Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, vol.230, no.13, pp.2447-2462, 2016 (SCI-Expanded)
- VIII. **Acoustic Control of Flow over NACA 2415 Airfoil at Low Reynolds Numbers**
GENÇ M. S., AÇIKEL H. H., Akpolat M. T., ÖZKAN G., Karasu I.
Journal of Aerospace Engineering, vol.29, no.6, 2016 (SCI-Expanded)
- IX. **An experimental study on aerodynamics of NACA2415 aerofoil at low Re numbers**
GENÇ M. S., KARASU I., AÇIKEL H. H.
Experimental Thermal and Fluid Science, vol.39, pp.252-264, 2012 (SCI-Expanded)

Articles Published in Other Journals

- I. **Hydrogen Production using a Hybrid System Built with Renewable Energy Resources in Yenice**
BAYIR E., AÇIKEL H. H.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.11, no.4, pp.1244-1260, 2023 (Peer-Reviewed Journal)
- II. **Numerical Analysis of Wind Load Around Multiple Buildings at Different Wind Speeds**
Duran B., Açikel H. H.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.38, no.2, pp.314-323, 2022 (Peer-Reviewed Journal)
- III. **Effects of thickness and camber ratio on flow characteristics over airfoils**
Karasu I., AÇIKEL H. H., KOCA K., GENÇ M. S.
Journal of Thermal Engineering, vol.6, no.3, pp.242-252, 2020 (ESCI)
- IV. **Experimental Investigation of Surface Roughness Effect over Wind Turbine Airfoil**
Koca K., Genç M. S., Açikel H. H.
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.31, pp.127-133, 2016 (Peer-Reviewed Journal)
- V. **Numerical Study on Low Reynolds Number Flows over an aerofoil**
KARASU İ., GENÇ M. S., AÇIKEL H. H.

Books & Book Chapters

- I. **Traditional and New Types of Passive Flow Control Techniques to Pave the Way for High Maneuverability and Low Structural Weight for UAVs and MAVs**
GENÇ M. S., KOCA K., DEMİR H., AÇIKEL H. H.
in: Autonomous Vehicles, George Dekoulis, Editor, IntechOpen, Kayseri, pp.1-34, 2020
- II. **Acoustic Control of Flow over NACA2415 Aerofoil at Low Reynolds Numbers**
GENÇ M. S., KARASU İ., AÇIKEL H. H., AKPOLAT M. T., Özkan G.
in: Sustainable Aviation Energy and Environmental Issues, Karakoc, T.H., Ozerdem, M.B., Sogut, M.Z., Colpan, C.O., Altuntas, O., Açikkalp, E., Editor, Springer International Publishers, Zürich, pp.375-420, 2016
- III. **Low Reynolds Number Flows and Transition**
GENÇ M. S., KARASU İ., AÇIKEL H. H., AKPOLAT M. T.
in: Low Reynolds Number Aerodynamics and Transition, Mustafa Serdar GENÇ, Editor, Intech-Open Access Publishing, Rijeka, pp.3-28, 2012

Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Airfoil Thickness on Flow Over the Symmetric Airfoils: Part II-Numerical Analysis**
Sezer E. A., ŞAHİN R., Sincar M., AÇIKEL H. H., Özden M., GENÇ M. S.
3rd International World Energy Conference, Kayseri, Turkey, 04 December 2023
- II. **Effect of Airfoil Thickness on Flow Over the Symmetric Airfoils: Part I-Experimental Analysis**
Sahin R., Ayvazoglu M., KESKİN S., Ozden M., AÇIKEL H. H., GENÇ M. S.
10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023
- III. **Effect of Airfoil Thickness on Flow Over the Cambered Airfoils**
KESKİN S., Ayvazoglu M., Sincar M., Sezer E. A., AÇIKEL H. H., GENÇ M. S.
10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023
- IV. **RECOGNIZING FLOW EVALUATION ON SURFACE OF NACA0015 AIRFOIL AT VARIOUS ANGLES OF ATTACK**
Özden M., AÇIKEL H. H., GENÇ M. S., KOCA K.
INTERNATIONAL ASIAN CONGRESS ON CONTEMPORARY SCIENCES VII, Philippines, 09 December 2022
- V. **FLOW CHARACTERISTICS ON NACA2415 AIRFOIL AT LOW REYNOLDS NUMBER**
GENÇ M. S., Özden M., AÇIKEL H. H., KOCA K.
INTERNATIONAL ICONTECH CONFERENCE-6 on Innovative Surveys in Positive Sciences, Rijeka, Croatia, 04 December 2022
- VI. **EFFECT OF TIME-DEPENDENT LOADS ON THE MECHANICAL STRUCTURE OF THE UAV**
Açikel H. H.
InterInternational Symposium on Aircraft Technology, 2020, 22 - 24 September 2020, pp.115-118
- VII. **KAYSERİ İLİNİN RÜZGAR ENERJİSİ İLE HİDROJEN ÜRETİMPOTANSİYELİNİN ARAŞTIRILMASI**
GENÇ G., ÇELİK M., AÇIKEL H. H.
6 th INTERNATIONAL CONFERENCE ON ENGINEERING amp NATURAL SCIENCES, Şanlıurfa, Turkey, 24 - 26 January 2020, pp.49
- VIII. **Experimental Investigation on Effect of Partial Flexibility at Low Aspect Ratio Airfoil - Part II: Installation both on Suction and Pressure Surface**
KOCA K., GENÇ M. S., AÇIKEL H. H.
Experimental fluid mechanics 2019, 19 - 22 November 2019

- IX. **Numerical investigation on NACA0012 airfoil with tubercular structure**
AÇIKEL H. H., Tosun M., GENÇ M. S., KOCA K.
Experimental fluid mechanics 2019, 19 - 22 November 2019
- X. **Experimental Investigation on Effect of Partial Flexibility at Low Aspect Ratio Airfoil – Part I: Installation on Suction Surface**
GENÇ M. S., AÇIKEL H. H., KOCA K.
Experimental Fluid Mechanics 2019, 19 - 22 November 2019
- XI. **Effect of propeller design at axial fans on aerodynamic performance**
GENÇ G., AÇIKEL H. H., GENÇ M. S., Özden M., KARAKAYA B., Akça U.
1.International Scientific and Vocational Studies Congress (BILMES 2017), Nevşehir, Turkey, 5 - 08 October 2017
- XII. **Optimization of Length of Support Rods in Vertical Axis Wind Turbine**
DEMİR H., KOCA K., ÖZKAN R., AÇIKEL H. H., KARAKAYA B., GENÇ M. S.
First International Conference on Energy Systems Engineering, Karabük, Turkey, 2 - 04 November 2017, pp.5-10
- XIII. **Kanat Profili Aeroelastik Davranışının Sayısal İncelenmesi**
GENÇ G., DEMİR H., AÇIKEL H. H., Özden M., KOCA K., GENÇ M. S.
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), Adana, Turkey, 25 - 27 October 2017
- XIV. **Numerical Investigation of Aeroelastic Behavior of Airfoil**
GENÇ G., DEMİR H., AÇIKEL H. H., ÖZDEN M., KOCA K., GENÇ M. S.
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), Adana, Turkey, 25 - 27 October 2017, pp.1-9
- XV. **The Investigation of Various Airfoil Models on Effect of Aerodynamic Performance at Savonius Wind Turbines**
KOCA K., AKÇA U., AÇIKEL H. H., ÖZDEN M., GENÇ M. S., ÖZKAN R.
1.International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 October 2017, pp.5-11
- XVI. **Effect of blade design on aerodynamic performance of axial fan**
GENÇ G., AÇIKEL H. H., GENÇ M. S., ÖZDEN M., KARAKAYA B., AKÇA U.
1.International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 October 2017, pp.12-18
- XVII. **Optimization of Twist Angle in Vertical Axis Wind Turbine Airfoils**
AÇIKEL H. H., DEMİR H., ÖZDEN M., GENÇ M. S., ÖZKAN R., KARAKAYA B.
1.International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 October 2017, pp.1-4
- XVIII. **THE IDENTIFICATION OF LAMINAR SEPARATION BUBBLE AND TRANSITION ONSET ON WIND TURBINE BLADE AT LOW REYNOLDS NUMBER**
DEMİR H., KARASU İ., AÇIKEL H. H., ÖZDEN M., KOCA K., GENÇ M. S.
2nd INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE, ICAS 2017, İstanbul, Turkey, 13 - 15 September 2017, pp.1-5
- XIX. **Experimental Investigation of Surface Roughness Effect over Wind Turbine Airfoil**
KOCA K., GENÇ M. S., AÇIKEL H. H.
1th International Mediterranean Science and Engineering Congress, Adana, Turkey, 26 - 28 October 2016, vol.1, no.1, pp.1908-1912
- XX. **Laminar Separation Bubble and Tip Vortex Interaction over Rigid Wing with Low Aspect Ratio**
ÖZDEN M., GENÇ M. S., AÇIKEL H. H.
The International Symposium on Sustainable Aviation (ISSA-2016), İstanbul, Turkey, 29 May - 01 June 2016, vol.1, no.1, pp.198-201
- XXI. **Time Dependent Laminar Separation Bubble Formation And Deformation Over Flexible Membrane Wing**
GENÇ M. S., DEMİR H., AÇIKEL H. H.
The International Symposium on Sustainable Aviation (ISSA-2016), İstanbul, Turkey, 29 May - 01 June 2016, vol.1, no.1, pp.193-197
- XXII. **Experimental And Numerical Investigations Of Fluid-Structure Interaction On Wind Turbine Blade At Different Reynolds Number**

ÖZDEN M., ÇELİK B., AÇIKEL H. H., GENÇ M. S.

The International Symposium on Sustainable Aviation (ISSA-2016), İstanbul, Turkey, 29 May - 01 June 2016, pp.266-269

XXIII. Roughness Effect on Flow over Wind Turbine Airfoil

KOCA K., GENÇ M. S., AÇIKEL H. H.

The International Symposium on Sustainable Aviation (ISSA-2016), İstanbul, Turkey, 29 May - 01 June 2016, vol.1, no.1, pp.231-234

XXIV. Unsteady flow over flexible wings at different low Reynolds numbers

GENÇ M. S., Özden M., AÇIKEL H. H., Demir H., Isabekov I.

10th International Conference on Experimental Fluid Mechanics, EFM 2015, Prague, Czech Republic, 17 - 20 November 2015, vol.114, no.1

XXV. Effect of tip vortices on membrane vibration of flexible wings with different aspect ratios

GENÇ M. S., AÇIKEL H. H., Demir H., Özden M., Çağdaş M., Isabekov I.

10th International Conference on Experimental Fluid Mechanics, EFM 2015, Prague, Czech Republic, 17 - 20 November 2015, vol.114, no.1

XXVI. Effect of tip vortices on flow over NACA4412 aerofoil with different aspect ratios

GENÇ M. S., Özkan G., AÇIKEL H. H., Kiriş M. S., Yildiz R.

10th International Conference on Experimental Fluid Mechanics, EFM 2015, Prague, Czech Republic, 17 - 20 November 2015, vol.114, no.1

XXVII. Flow characteristics over NACA4412 airfoil at low Reynolds number

GENÇ M. S., KOCA K., AÇIKEL H. H., Özkan G., Kiriş M. S., Yildiz R.

10th International Conference on Experimental Fluid Mechanics, EFM 2015, Prague, Czech Republic, 17 - 20 November 2015, vol.114, no.1

XXVIII. Rüzgar türbini kanadında akış kaynaklı deformasyonlarının sayısal ve deneysel incelenmesi

ÖZDEN M., ÇELİK B., AÇIKEL H. H., GENÇ M. S.

3. İzmir Rüzgâr Sempozyumu, İzmir, Turkey, 8 - 10 October 2015, vol.1, no.1, pp.1-8

XXIX. AN INVESTIGATION OF FLOW OVER NACA2415 AEROFOIL USING PIV

AÇIKEL H. H., GENÇ M. S., ÖZKAN G., KOŞAR O., KARASU İ.

8th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 10 - 12 September 2015, pp.1-10

XXX. Acoustic Control of Separated Flow over NACA2415 Aerofoil at Low Re Numbers

GENÇ M. S., AÇIKEL H. H., AKPOLAT M. T., ÖZKAN G.

International Symposium on Sustainable Aviation, İstanbul, Turkey, 31 May - 03 June 2015, vol.1, no.1, pp.1

XXXI. Numerical and Experimental Study on Low Reynolds Number Flows over NACA2415 aerofoil

KARASU İ., GENÇ M. S., AÇIKEL H. H.

International Conference and Exhibition on Mechanical and Aerospace Engineering, San Antonio, United States Of America, 30 September - 02 October 2013, pp.1-13

XXXII. AN EXPERIMENTAL STUDY OF PERPENDICULAR ACOUSTIC DISTURBANCES EFFECT ON FLOW OVER AN AEROFOIL AT LOW REYNOLDS NUMBERS

GENÇ M. S., AKPOLAT M. T., AÇIKEL H. H., Karasu İ.

ASME International Mechanical Engineering Congress and Exposition, Texas, United States Of America, 9 - 15 November 2012, pp.1249-1258

XXXIII. An experimental study on laminar separation bubble and transition on an aerofoil at low Reynolds number

KARASU İ., GENÇ M. S., AÇIKEL H. H., AKPOLAT M. T.

30th AIAA Applied Aerodynamics Conference, United States Of America, 1 - 04 June 2012, no.834, pp.1-10

XXXIV. An experimental study on laminar separation bubble and transition over an aerofoil at low Reynolds number

Karasu İ., GENÇ M. S., AÇIKEL H. H., Akpolat M. T.

30th AIAA Applied Aerodynamics Conference 2012, New Orleans, LA, United States Of America, 25 - 28 June 2012, pp.1584-1592

XXXV. DÜŞÜK RE SAYILI AKIŞTA NACA2415 KANAT PROFİLİ ÜZERİNDE OLUŞANLAMİNER AYRILMA

KABARCIĞINA AKIŞA PARALEL SES DALGALARININ ETKİSİ

AÇIKEL H. H., AKPOLAT M. T., GENÇ M. S., KARASU İ.

IV. ULUSAL HAVACILIK VE UZAY KONFERANSI, İstanbul, Turkey, 12 September - 14 October 2012

Supported Projects

AÇIKEL H. H., SEZER E. A., Project Supported by Higher Education Institutions, Farklı kanat profilleri üzerinde oluşan laminer ayrılma kabarcığına kamburluk ve kalınlık etkisinin incelenmesi, 2024 - Continues

AÇIKEL H. H., AYVAZOĞLU M., Project Supported by Higher Education Institutions, Düşük Reynolds sayılı akışlarda farklı kambur kanat profilleri üzerindeki laminer ayrılma kabarcığının oluşumuna kanat profili kalınlığının etkisinin incelenmesi, 2023 - Continues

Genç M. S., Açikel H. H., Özden M., Kaynak Ü., Karasu İ., TÜBİTAK Project, Düşük Reynolds sayılı akışlarda kanat profilleri üzerindeki laminer ayrılma kabarcığının karakterizasyonu için matematiksel denklemlerin elde edilmesi, 2022 - 2025

GENÇ M. S., ÖZDEN M., AÇIKEL H. H., Project Supported by Higher Education Institutions, Rüzgar Türbini Kanatlarında Aerodinamik Performansın Yenilikçi Çözümler ile Geliştirilmesinin Açık Kaynak Kodlu HAD Yazılımı İle Sayısal olarak İncelenmesi, 2022 - 2024

GENÇ M. S., AÇIKEL H. H., DEMİR H., Project Supported by Higher Education Institutions, ESNEK KANATLARIN DÜŞÜK REYNOLDS SAYILARINDA KARARSIZ AERODİNAMİĞİNİN İNCELENMESİ, 2015 - 2018

GENÇ M. S., AÇIKEL H. H., DEMİR H., Project Supported by Higher Education Institutions, RÜZGAR TÜRBİNİ KANADI ÜZERİNDEKİ AKIŞIN ESNEKLİK İLE KONTROLÜ, 2015 - 2018

GENÇ M. S., AÇIKEL H. H., DEMİR H., KOCA K., Project Supported by Higher Education Institutions, ESNEK KANATLARIN ANLIK DEĞİŞİMLERİNİN ÜÇ BOYUTLU İNCELENMESİ, 2014 - 2017

GENÇ M. S., ÖZKAN G., AÇIKEL H. H., DEMİR H., Project Supported by Higher Education Institutions, DÜŞÜK REYNOLDS SAYILI AKIŞLARDA KANAT ÜZERİNDE KARARSIZ AERODİNAMİĞİNİN İNCELENMESİ, 2014 - 2016

GENÇ M. S., AÇIKEL H. H., DEMİR H., ÖZKAN G., TÜBİTAK - AB COST Project, ESNEK KANATLARIN DÜŞÜK REYNOLDS SAYILARINDA KARARSIZ (UNSTEADY) AERODİNAMİĞİNİN DENEYSEL İNCELENMESİ, 2014 - 2016

GENÇ M. S., BEKMEZEKMEK S., AÇIKEL H. H., Project Supported by Higher Education Institutions, Rüzgar santralı kurulum ve fizibilite çalışmaları üzerine uygulama, 2012 - 2016

Patent

Özden M., Genç M. S., Açikel H. H., Balina yüzgeci formuna sahip esnek girdap üreticili kanat profili, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Recourse Number: 2023/003782 , Standard Registration, 2023

Genç M. S., Açikel H. H., AERODİNAMİK PERFORMANSI ESNEKLİKLE ARTIRILMIŞ KANAT PROFİLİ-İncelemeli Patent, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2016/20123 , Standard Registration, 2020

Scientific Refereeing

Measurement, SCI Journal, December 2017

Metrics

Publication: 52

Citation (WoS): 423

Citation (Scopus): 506

H-Index (WoS): 9

H-Index (Scopus): 10

Congress and Symposium Activities

2nd Training School on "Advances in Wind Energy Technology II" Technical University of Crete, Chania, Greece, 4-8 April 2016, Attendee, Haniá, Greece, 2016

International Conference of Experimental Fluid Mechanics, Prag, CEK CUM., 17-20 Kasım 2015, Attendee, Praha, Czech Republic, 2015

8th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, ANKARA, TÜRKİYE, 10-12 Eylül 2015, Attendee, Ankara, Turkey, 2015

International Conference and Exhibition on Mechanical and Aerospace Engineering, San Antonio, A.B.D., 30 Eylül - 2 Ekim 2013, Attendee, Texas, United States Of America, 2013

ASME International Mechanical Engineering Congress and Exposition, Houston, Texas, A.B.D., 9-15 Kasım 2012, Attendee, Texas, United States Of America, 2012

IV. Ulusal Havacılık ve Uzay Konferansı, İSTANBUL, TÜRKİYE, 12-14 Eylül 2012, Attendee, İstanbul, Turkey, 2012

30th AIAA Applied Aerodynamics Conference, New Orleans, Louisiana, ABD, 25-28 Haziran 2012, Attendee, Louisiana, United States Of America, 2012

Scholarships

TÜBİTAK 2214-A Doktora sırası yurtdışı araştırma bursu, TUBITAK, 2016 - 2018

TÜBİTAK 2211/C Yurt İçi Öncelikli Alanlara Doktora Burs Programı, TUBITAK, 2015 - 2018

Awards

Açıkkel H. H., Genç M. S., TÜBA TEKNOFEST DOKTORA BİLİM ÖDÜLÜ, Türkiye Bilimler Akademisi, September 2021