

Assoc. Prof. MUSTAFA PERÇİN

Personal Information

Office Phone: [+90 312 210 8228](tel:+903122108228)

Email: mpercin@metu.edu.tr

Web: <https://avesis.metu.edu.tr/mpercin>

International Researcher IDs

ScholarID: ZqljQEAAAAJ

ORCID: 0000-0002-7849-5141

Publons / Web Of Science ResearcherID: AAF-7401-2019

ScopusID: 55267531800

Yoksis Researcher ID: 270326

Education Information

Doctorate, Technische Universiteit Delft, Aerospace Engineering Faculty, Netherlands 2010 - 2015

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Uçak-Uzay Mühendisliği (YI), Turkey 2007 - 2009

Undergraduate, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 2002 - 2007

Dissertations

Postgraduate, Flow around a plunging airfoil in a uniform flow, İstanbul Teknik Üniversitesi, Uçak-Uzay Mühendisliği (YI), 2009

Doctorate, Aerodynamic Mechanisms of Flapping Flight, Technische Universiteit Delft, Aerospace Engineering Faculty, 2009

Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Aeronautical and Space Engineering, Aeronautical Engineering , Testing Techniques, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2017 - 2018

Research Assistant, Technische Universiteit Delft, Faculty Of Aerospace Engineering, 2010 - 2017

Academic and Administrative Experience

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Aerospace

Engineering, 2018 - 2019

Erasmus Coordinator, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2017 - 2018

Courses

AERODYNAMICS II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

FLUID MECHANICS, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2017 - 2018

AERODYNAMICS I, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

UNSTEADY AERODYNAMICS, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

EXPERIMENTAL AERODYNAMICS, Postgraduate, 2018 - 2019, 2017 - 2018

Advising Theses

Perçin M., On the effects of inflow conditions on the wake of wind turbine models and porous discs, Postgraduate, A.HISHAM(Student), 2023

Perçin M., The effect of flare geometry on the flow field generated by radial-radial swirlers, Postgraduate, A.BAY(Student), 2023

Perçin M., Design and experimental investigation of a wind tunnel gust generator, Postgraduate, İ.YIĞILI(Student), 2022

Perçin M., Experimental and numerical investigation of radial-radialswirlers under different confinement conditions, Postgraduate, F.KIYICI(Student), 2022

Perçin M., Design of a traverse system for the characterization of a large-scale wind tunnel, Postgraduate, T.ULU(Student), 2022

Perçin M., Experimental investigation of flow characteristics of flexible wings with different stiffener orientations in linear translating motion, Postgraduate, H.HALİL(Student), 2022

Perçin M., Uzol O., Effects of inflow boundary layer on the wake characteristics of a radially non-uniform porous disc, Doctorate, A.ABDULRAHİM(Student), 2022

Perçin M., Uzol O., Generation and experimental investigations of gusty flows in wind tunnels, Postgraduate, M.ALİ(Student), 2022

Perçin M., A study of turbulence characteristics of some turbulent flows using experimental data with application of quantic behavior of turbulence, Postgraduate, I.ÇOLAK(Student), 2022

Perçin M., Helicopter lobed nozzle optimization with differentialevolution method, Postgraduate, A.BAYAT(Student), 2021

Perçin M., Experimental and numerical investigation of a jet vane of thrust vector control system, Postgraduate, B.SÖĞÜTCÜ(Student), 2019

Uzol O., Perçin M., Experimental investigation of the helicopter blade tip shape effects on aerodynamic performance and tip vortex characteristics, Postgraduate, S.ULUOCAK(Student), 2019

Perçin M., Aeroelastic analyses and tests of a wing like structure with payload, Postgraduate, Ö.SERİN(Student), 2019

Perçin M., A COMPUTATIONAL ANALYSIS ON ROTOR-PROPELLER ARM INTERACTION IN HOVERING FLIGHT, Postgraduate, S.YENER(Student), 2019

Perçin M., Flow characteristics of translating flexible wings at low Reynolds numbers, Postgraduate, M.YAZDANPANA(H(Student), 2019

Designed Lessons

Perçin M., Unsteady Aerodynamics, Postgraduate, 2019 - 2020

Taught Courses And Trainings

Söken H. E., Özgen S., Perçin M., Tulunay Y., Near Earth Space Education, 2021 - 2021

Uzol O., Çöker D., Kayran A., Sezer Uzol N., Oğuz E., Huvaj Sarihan N., Keysan O., Perçin M., Rüzgar Türbin Teknolojileri Temel Eğitimi , 2021 - 2021

Uzol O., Kayran A., Sezer Uzol N., Çöker D., Huvaj Sarihan N., Oğuz E., Keysan O., Perçin M., Rüzgar Enerjisi ve Rüzgar Türbini Teknolojileri Temel Eğitimi, 2019 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An integrated pipeline for building performance analysis: Daylighting, energy, natural ventilation, and airborne contaminant dispersion**
Abbas G. M., Gursel Dino I., Perçin M.
JOURNAL OF BUILDING ENGINEERING, vol.75, pp.1-30, 2023 (SCI-Expanded)
- II. **On the wake characteristics of a model wind turbine and a porous disc: Effects of freestream turbulence intensity**
ÖZTÜRK B., Hassanein A., Akpolat M. T., Abdulrahim A., PERÇİN M., UZOL O.
Renewable Energy, vol.212, pp.238-250, 2023 (SCI-Expanded)
- III. **Tip Vortex Meandering Characteristics of a Model Helicopter Rotor with Different Tip Shapes**
Uluocak S., PERÇİN M., UZOL O.
AIAA JOURNAL, vol.61, pp.2970-2981, 2023 (SCI-Expanded)
- IV. **Experimental investigation of tip anhedral effects on the aerodynamics of a model helicopter rotor in hover**
Uluocak S., PERÇİN M., UZOL O.
Aerospace Science and Technology, vol.113, 2021 (SCI-Expanded)
- V. **Effects of inflow boundary layer on the wake of a radially non-uniform porous disk**
Abdulrahim A., Akpolat M. T., Hassanein A., PERÇİN M., UZOL O.
Journal of Renewable and Sustainable Energy, vol.13, no.3, 2021 (SCI-Expanded)
- VI. **Asymmetric vortex shedding in the wake of an abruptly expanding annular jet**
Vanierschot M., PERÇİN M., van Oudheusden B. W.
Experiments in Fluids, vol.62, no.4, 2021 (SCI-Expanded)
- VII. **Single- and double-helix vortex breakdown as two dominant global modes in turbulent swirling jet flow**
Vanierschot M., Mueller J. S., Sieber M., PERÇİN M., van Oudheusden B. W., Oberleithner K.
JOURNAL OF FLUID MECHANICS, vol.883, 2020 (SCI-Expanded)
- VIII. **Accurate position control of a flapping-wing robot enabling free-flight flow visualisation in a wind tunnel**
Karasek M., PERÇİN M., Cunis T., van Oudheusden B. W., De Wagter C., Remes B. D. W., de Croon G. C. H. E.
INTERNATIONAL JOURNAL OF MICRO AIR VEHICLES, vol.11, 2019 (SCI-Expanded)
- IX. **Round-robin tests of porous disc models**
Aubrun S., Bastankhah M., Cal R., Conan B., Hearst R., Hoek D., Hölling M., Huang M., Hur C., Karlsen B., et al.
Journal of Physics: Conference Series, vol.1256, no.1, 2019 (SCI-Expanded)
- X. **Three-dimensional flow and load characteristics of flexible revolving wings**
van de Meerendonk R., PERÇİN M., van Oudheusden B. W.
EXPERIMENTS IN FLUIDS, vol.59, no.10, 2018 (SCI-Expanded)
- XI. **Numerical Simulation of a Flapping Micro Aerial Vehicle Through Wing Deformation Capture**
Tay W. B., de Baar J. H. S., PERÇİN M., Deng S., van Oudheusden B. W.
AIAA JOURNAL, vol.56, no.8, pp.3257-3270, 2018 (SCI-Expanded)
- XII. **Double helix vortex breakdown in a turbulent swirling annular jet flow**
Vanierschot M., Percin M., van Oudheusden B. W.

- PHYSICAL REVIEW FLUIDS, vol.3, no.3, 2018 (SCI-Expanded)
- XIII. **Analysis of the pressure fields in a swirling annular jet flow**
Percin M., Vanierschot M., van Oudheusden B. W.
EXPERIMENTS IN FLUIDS, vol.58, no.12, 2017 (SCI-Expanded)
- XIV. **Numerical Simulation of a Flexible X-Wing Flapping-Wing Micro Air Vehicle**
Deng S., Percin M., van Oudheusden B. W., Bijl H., Remes B., Xiao T.
AIAA JOURNAL, vol.55, no.7, pp.2295-2306, 2017 (SCI-Expanded)
- XV. **Flow Structures Around a Flapping-Wing Micro Air Vehicle Performing a Clap-and-Peel Motion**
Percin M., van Oudheusden B., Remes B.
AIAA JOURNAL, vol.55, no.4, pp.1251-1264, 2017 (SCI-Expanded)
- XVI. **Deconvolution Kalman filtering for force measurements of revolving wings**
Vester R., Percin M., van Oudheusden B.
MEASUREMENT SCIENCE AND TECHNOLOGY, vol.27, no.9, 2016 (SCI-Expanded)
- XVII. **Force generation and wing deformation characteristics of a flapping-wing micro air vehicle 'DeFly II' in hovering flight**
Percin M., van Oudheusden B. W., de Croon G. C. H. E., Remes B.
BIOINSPIRATION & BIOMIMETICS, vol.11, no.3, 2016 (SCI-Expanded)
- XVIII. **Experimental Investigation of Aerodynamics of Flapping-Wing Micro-Air-Vehicle by Force and Flow-Field Measurements**
Deng S., Percin M., van Oudheusden B.
AIAA JOURNAL, vol.54, no.2, pp.588-602, 2016 (SCI-Expanded)
- XIX. **Error analysis and assessment of unsteady forces acting on a flapping wing micro air vehicle: free flight versus wind-tunnel experimental methods**
Caetano J. V., Percin M., van Oudheusden B. W., Remes B., de Wagter C., de Croon G. C. H. E., de Visser C. C.
BIOINSPIRATION & BIOMIMETICS, vol.10, no.5, 2015 (SCI-Expanded)
- XX. **Three-dimensional flow structures and unsteady forces on pitching and surging revolving flat plates**
Percin M., Van Oudheusden B. W.
EXPERIMENTS IN FLUIDS, vol.56, 2015 (SCI-Expanded)
- XXI. **Three-dimensional vortex wake structure of a flapping-wing micro aerial vehicle in forward flight configuration**
Percin M., van Oudheusden B. W., Eisma H. E., Remes B. D. W.
EXPERIMENTS IN FLUIDS, vol.55, no.9, 2014 (SCI-Expanded)
- XXII. **Experimental Investigation on the Aerodynamics of a Bio-inspired Flexible Flapping Wing Micro Air Vehicle**
Deng S., Percin M., van Oudheusden B., Remes B., Bijl H.
INTERNATIONAL JOURNAL OF MICRO AIR VEHICLES, vol.6, no.2, pp.105-115, 2014 (SCI-Expanded)
- XXIII. **Kriging regression of PIV data using a local error estimate**
de Baar J. H. S., Percin M., Dwight R. P., van Oudheusden B. W., Bijl H.
EXPERIMENTS IN FLUIDS, vol.55, no.1, 2014 (SCI-Expanded)
- XXIV. **Wing Flexibility Effects in Clap-and-Fling**
Percin M., Hu Y., van Oudheusden B. W., Remes B., Scarano F.
INTERNATIONAL JOURNAL OF MICRO AIR VEHICLES, vol.3, no.4, pp.217-227, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **Leading-Edge Vortex Characteristics of Surging-Translating Flexible Wings**
YAZDANPANA M., PERÇİN M.
Havacılık ve Uzay Teknolojileri Dergisi, vol.16, no.1, pp.64-79, 2023 (Peer-Reviewed Journal)
- II. **Numerical Investigation of Propeller-FrameArm Interaction in Hovering Flight**
Yener S., PERÇİN M.

- III. **Flow Visualization around a Flapping-Wing Micro Air Vehicle in Free Flight Using Large-Scale PIV**
Herrero A. d. E., PERÇİN M., Karasek M., van Oudheusden B.
AEROSPACE, vol.5, no.4, 2018 (ESCI)

Books & Book Chapters

- I. **The DelFly: Design, Aerodynamics, and Artificial intelligence of a Flapping Wing Robot**
de Croon G. C. H. E., PERÇİN M., Remes B. D. W., Ruijsink R., de Wagter C.
Springer, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **STABILITY OF THE CO- AND COUNTER-ROTATING SWIRLERS IN A LIQUID-FUELED CAN COMBUSTOR**
Kiyıcı F., Topal A., Hepkaya E., Ozogul H., Zayim A. K., Kaplan M., PERÇİN M.
ASME Turbo Expo 2023: Turbomachinery Technical Conference and Exposition, GT 2023, Massachusetts, United States Of America, 26 - 30 June 2023, vol.3B-2023
- II. **Proper Orthogonal Decomposition (POD) of the Wake Flow Field of a Model Wind Turbine and a Porous Disc under Different Freestream Turbulence Intensity Conditions**
ÖZTÜRK B., Hassanein A., Tuğrul Akpolat M., Abdulrahim A., PERÇİN M., UZOL O.
8th Wake Conference 2023, Visby, Sweden, 20 - 22 June 2023, vol.2505
- III. **Rüzgar tüneli sağanak akış üretici tasarımı, deneysel ve hesaplamalı incelemesi**
YİĞİLİ İ., ANDIRIN M. A., BAŞKAN PERÇİN Ö., PERÇİN M.
9. Ulusal Havacılık ve Uzay Konferansı (UHUK 2022), İzmir, Turkey, 14 - 16 September 2022
- IV. **Yönlendirici açısının ters dönüşlü radyal-radyal döndürücü performansına etkisi**
Bay A., Kiyıcı F., PERÇİN M.
9. Ulusal Havacılık ve Uzay Konferansı (UHUK 2022), İzmir, Turkey, 14 September 2022
- V. **Farklı yönlerde eğilme sertliğine sahip esnek kanatların doğrusal hareket boyunca akış karakteristiğinin deneysel olarak incelenmesi**
KARAKAŞ H. H., PERÇİN M.
9. Ulusal Havacılık ve Uzay Konferansı (UHUK 2022), İzmir, Turkey, 14 - 16 September 2022
- VI. **Rüzgar tüneli sağanak akış üretici tasarımı, deneysel ve hesaplamalı incelemesi**
Yiğili İ., Andırın M. A., Başkan Perçin Ö., Perçin M.
9. Ulusal Havacılık ve Uzay Konferansı, İzmir, Turkey, 14 - 16 September 2022, pp.170
- VII. **RÜZGEM Büyük Rüzgar Tüneli Karakterizasyon Sistem Tasarımı ve Ölçümleri**
ULU T., PERÇİN M.
9. Ulusal Havacılık ve Uzay Konferansı (UHUK 2022), İzmir, Turkey, 14 - 16 September 2022
- VIII. **FARKLI YÖNLERDE EĞİLME SERTLİĞİNE SAHİP ESNEK KANATLARIN DOĞRUSAL HAREKET BOYUNCA AKIŞ KARAKTERİSTİĞİNİN DENEYSEL OLARAK İNCELENMESİ**
Karakas H. H., Perçin M.
9. ULUSAL HAVACILIK ve UZAY KONFERANSI, İzmir, Turkey, 14 - 16 September 2022, pp.1-14
- IX. **Design of a gust generator and comparison of model wind turbine and porous disc wake flows in a transverse gust**
YİĞİLİ İ., ANDIRIN M. A., Akpolat M. T., BAŞKAN PERÇİN Ö., PERÇİN M., UZOL O.
The Science of Making Torque from Wind (TORQUE 2022), Delft, Netherlands, 1 - 03 June 2022
- X. **Effects of freestream turbulence on the wake growth rate of a model wind turbine and a porous disc**
Öztürk B., HASSANEIN A., Akpolat M. T., ABDULRAHİM A., PERÇİN M., UZOL O.
The Science of Making Torque from Wind (TORQUE 2022), Delft, Netherlands, 1 - 03 June 2022
- XI. **EFFECT OF FLARE GEOMETRY ON THE FLOW FIELD OF RADIAL-RADIAL SWIRLERS**

Bay A., Kiyici F., PERÇİN M.

ASME Turbo Expo 2022: Turbomachinery Technical Conference and Exposition, GT 2022, Rotterdam, Netherlands, 13 - 17 June 2022, vol.3-B

- XII. **Rüzgar tüneli testlerinde blokaj seviyesinin küçük ölçekli bir rüzgar türbininin performansı üzerindeki etkisi**
EROL B., Karabakla E., ABDULRAHİM A., PERÇİN M., UZOL O.
6. İzmir Rüzgar Sempozyumu, Turkey, 23 - 24 September 2021
- XIII. **Effects of vane numbers/types on the swirling flow field characteristics of a counter-rotating radial-radial swirler**
Gencer B., Kiyıcı F., PERÇİN M.
11th Ankara International Aerospace Conference (AIAC 2021), Ankara, Turkey, 8 - 10 September 2021
- XIV. **Design and experimental investigation of a wind tunnel gust generator**
YİĞİLİ İ., ANDIRIN M. A., Kurban E., BAŞKAN PERÇİN Ö., PERÇİN M.
11th Ankara International Aerospace Conference (AIAC 2021), Ankara, Turkey, 8 - 10 September 2021
- XV. **Experimental characterization of micro vortex generators in low-speed flows**
AKPOLAT M. T., ABDULRAHİM A., HASSANEIN A., UZOL O., PERÇİN M.
11th Ankara International Aerospace Conference (AIAC 2021), Ankara, Turkey, 8 - 10 September 2021
- XVI. **Comparison of analytical wake model predictions with experimental data for a non-uniform porous disc for uniform and non-uniform inflow**
ABDULRAHİM A., AKPOLAT M. T., PERÇİN M., UZOL O.
Wind Energy Science Conference (WESC 2021), Hannover, Germany, 25 - 28 May 2021
- XVII. **Effects of wind tunnel blockage and turbulence intensity on the performance of a small wind turbine: an in-house round robin study**
EROL B., ABDULRAHİM A., PERÇİN M., UZOL O.
Wind Energy Science Conference (WESC 2021), Hannover, Germany, 25 - 28 May 2021
- XVIII. **Experimental investigation of the confinement effects in radial-radial swirlers**
Kiyici F., PERÇİN M.
ASME Turbo Expo 2021: Turbomachinery Technical Conference and Exposition, GT 2021, Virtual, Online, 7 - 11 June 2021, vol.3A-2021
- XIX. **A Computational Study on Rotor-Propeller Arm Interaction in Hovering Flight**
Yener S., PERÇİN M.
10th Ankara International Aerospace Conference (AIAC 2019), Ankara, Turkey, 18 - 20 October 2019
- XX. **Flow field characteristics of translating and revolving flexible wings**
Yazdanpanah M., Hazaveh H. A., PERÇİN M., van de Meerendonk R., van Oudheusden B. W.
10th Ankara International Aerospace Conference (AIAC 2019), Ankara, Turkey, 18 - 20 October 2019
- XXI. **Flow Field Characteristics of Translating and Revolving Flexible Wings**
PERÇİN M., Yazdanpanah M., Amiri H., van de Meerendonk R., van Oudheusden B. W.
13th International Symposium on Particle Image Velocimetry, Munich, Germany, 22 - 24 July 2019
- XXII. **Round-robin tests of porous disc models**
Aubrun S., Bastankhah M., Cal R., Conan B., Hearst R., Hoek D., Hölling M., Huang M., Hur C., Karlsen B., et al.
Wake Conference 2019, Visby, Sweden, 22 - 24 May 2019, vol.1256
- XXIII. **Comparison of Wake Models with Porous Disc Wake Profile Measurements**
Hazaveh H. A., Bay A., Aysan M. S., Yanık T., Yazdanpanah M., Yiğili İ., Yağmur A. S., Perçin M., Uzol O.
Wind Energy Science Conference (WESC), Cork, Ireland, 17 - 20 June 2019
- XXIV. **Flow visualization around a flapping-wing micro air vehicle in free flight**
Del Estal Herrero A., Perçin M., Karasek M., Van Oudheusden B. W.
18th International Symposium on Flow Visualization, Zürich, Switzerland, 26 - 29 June 2018
- XXV. **Ejektör Sisteminde Kullanılan Loplu Lüle Geometrisinin "k- ω SST" Türbülans Modeli İle Çözümünün Doğrulanması Ve Lop Sayısının Performans Etkilerinin İncelenmesi**
Bayat A., Perçin M.
7. Ulusal Havacılık ve Uzay Konferansı, Samsun, Turkey, 12 - 14 September 2018

- XXVI. **Helikopter Pal Ucu Şekillerinin Aerodinamik Performansa ve Uç Girdabına Etkisinin Deneysel Olarak İncelenmesi**
Uluocak S., Hazaveh H. A., Perçin M., Akpolat M. T., Uzol O.
7. Ulusal Havacılık ve Uzay Konferansı, Samsun, Turkey, 12 - 14 September 2018
- XXVII. **Jet Kanadı Kullanılan İtki Vektör Sisteminin Sayısal ve Deneysel Analizi**
Söğütçü B., Perçin M., Karaca M.
7. Ulusal Havacılık ve Uzay Konferansı, Samsun, Turkey, 12 - 14 September 2018
- XXVIII. **Experimental investigation of the effects of helicopter rotor tip geometries on aerodynamic performance and tip vortex characteristics**
Uluocak S., Hazaveh H. A., PERÇİN M., Akpolat M. T., UZOL O.
44th European Rotorcraft Forum, 18 - 21 September 2018
- XXIX. **Determination of pressure and load characteristics for flexible revolving wings by means of tomographic PIV**
van de Meerendonk R., PERÇİN M., van Oudheusden B. W.
International Workshop on Non-Intrusive Optical Flow Diagnostics, Delft, Netherlands, 25 - 26 October 2016
- XXX. **Force measurement and load estimation studies at ITU for flexible flapping wings and maneuvering wings under gust**
Son O., Zaloglu B., PERÇİN M., ÇETİNER YILDIRIM N. L. O.
International Workshop on Non-Intrusive Optical Flow Diagnostics, Delft, Netherlands, 25 - 26 October 2016
- XXXI. **A novel phase-averaging method based on vortical structure correlation**
Vanierschot M., PERÇİN M., van Oudheusden B. W.
International Workshop on Non-Intrusive Optical Flow Diagnostics, Delft, Netherlands, 25 - 26 October 2016
- XXXII. **Unsteady flow through a sharp-edged single-hole orifice placed in a pipe**
Anantharaman V., Waterson N., Nakiboglu G., PERÇİN M., van Oudheusden B. W.
International Workshop on Non-Intrusive Optical Flow Diagnostics, Delft, Netherlands, 25 - 26 October 2016
- XXXIII. **Experimental investigation of turbulent flow through single-hole orifice placed in a pipe by means of time-resolved particle image velocimetry and unsteady pressure measurements**
Anantharaman V., Waterson N., Nakiboglu G., PERÇİN M., van Oudheusden B. W.
11th International Conference on Flow-Induced Vibrations, The Hague, Netherlands, 4 - 06 July 2016
- XXXIV. **Three-dimensional flow and load characteristics of flexible revolving wings at low Reynolds number**
van de Meerendonk R., PERÇİN M., van Oudheusden B. W.
18th International Symposium on Applications of Laser Techniques to Fluid Mechanics, Lisbon, Portugal, 4 - 07 July 2016
- XXXV. **Visualization of the structure of vortex breakdown in free swirling jet flow**
Vanierschot M., PERÇİN M., van Oudheusden B. W.
18th International Symposium on Applications of Laser Techniques to Fluid Mechanics, Lisboz, Portugal, 4 - 07 July 2016
- XXXVI. **Numerical simulation of a flapping wing MAV based on wing deformation capture analysis**
Tay W. B., de Baar J. H. S., PERÇİN M., Deng S., van Oudheusden B. W.
34th AIAA Applied Aerodynamics Conference, Washington, Kiribati, 13 - 17 June 2016
- XXXVII. **Leading Edge Vortex Evolution and Lift Production on Rotating Wings (Invited)**
Jones A. R., Manar F., Phillips N., Nakata T., Bomphrey R. J., Ringuette M., PERÇİN M., van Oudheusden B. W., Palmer J. L.
54th AIAA Aerospace Sciences Meeting, San Diego, California, USA, 4 - 08 January 2016
- XXXVIII. **Experimental investigation of three-dimensional flow structures in annular swirling jets**
PERÇİN M., Vanierschot M., van Oudheusden B. W.
Workshop on Non-Intrusive Measurements for Unsteady Flows and Aerodynamics (NIM2015), Poitiers, France, 27 - 29 October 2015
- XXXIX. **Force generation and wing deformation characteristics of the 'DelFly II' MAV in hovering flight conditions**
PERÇİN M., van Oudheusden B. W., Remes B.

International Micro Air Vehicles Conference and Flight Competition, Aachen, Germany, 15 - 18 September 2015

- XL. **Flow Visualization and Force Measurements on Accelerated Revolving Flat Plates at Low Reynolds Numbers**
PERÇİN M., van Oudheusden B. W.
45th AIAA Fluid Dynamics Conference, Dallas, TX, 22 - 26 June 2015
- XLI. **Numerical simulation of an X-wing flapping wing MAV by means of a deforming overset grid method**
Deng S., PERÇİN M., van Oudheusden B. W., Bijl H., Remes B., Xiao T.
22nd AIAA Computational Fluid Dynamics Conference, Dallas, TX, 22 - 26 June 2015
- XLII. **Aerodynamic characterization of 'DelFly Micro' in forward flight configuration by force measurements and flow field visualization**
Deng S., Percin M., van Oudheusden B.
Asia-Pacific International Symposium on Aerospace Technology (APISAT), Shanghai, China, 24 - 26 September 2014, vol.99, pp.925-929
- XLIII. **Three-dimensional flow fields and forces on revolving flat plates**
PERÇİN M., van Oudheusden B. W.
67th Annual Meeting of the APS Division of Fluid Dynamics, San-Francisco, Costa Rica, 23 - 25 November 2014
- XLIV. **Vortex Formation and Force Generation Mechanisms of the DelFly II in Hovering Flight**
Tenaglia A., PERÇİN M., van Oudheusden B. W., Deng S., Remes B.
International Micro Air Vehicle Conference and Flight Competition (IMAV2014), Delft, Netherlands, 12 - 15 August 2014
- XLV. **Flow around a suddenly accelerated rotating plate at low Reynoldsnumber**
PERÇİN M., Ziegler L., van Oudheusden B. W.
17th International Symposium on Applications of Laser Techniques to Fluid Mechanics, Lisbon, Portugal, 7 - 10 July 2014
- XLVI. **Force and flowfield measurements of a bio-inspired flapping MAV 'Delfly Micro'**
Deng S., PERÇİN M., van Oudheusden B. W., Remes B., Tenaglia A.
32nd AIAA Applied Aerodynamics Conference, Atlanta, GA, 16 - 20 June 2014
- XLVII. **Tethered vs. Free Flight Force Determination of the DelFly II Flapping Wing Micro Air Vehicle**
Caetano J. V., Percin M., de Visser C. C., van Oudheusden B., de Croon G. C. H. E., de Wagter C., Remes B., Mulder M.
International Conference on Unmanned Aircraft Systems (ICUAS), Florida, United States Of America, 27 - 30 May 2014, pp.942-948
- XLVIII. **Experimental investigation of the flapping performance on 'DelFly Micro'**
Deng S., van Oudheusden B. W., Remes B., PERÇİN M., Bijl H., Ruijsink R.
International Micro Air Vehicle Conference and Flight Competition (IMAV2013), Toulouse, France, 17 - 20 September 2013
- XLIX. **Three-dimensional wake reconstruction of a flapping-wing MAV using a Kriging regression technique**
PERÇİN M., de Baar J. H. S., van Oudheusden B. W., Dwight R. P.
10th International Symposium on Particle Image Velocimetry (PIV13), Delft, Netherlands, 1 - 03 July 2013
- L. **Numerical and experimental analysis of tandem flapping flight**
Tay W. B., PERÇİN M., van Oudheusden B. W., Bijl H., ÇETİNER YILDIRIM N. L. O., ÜNAL M. F.
43rd Fluid Dynamics Conference, San Diego, CA, 24 - 27 June 2013
- LI. **Overview of activities in stochastic data assimilation for applications in aerodynamics**
Dwight R. P., de Baar J. H. S., Sciacchitano A., PERÇİN M., Bijl H., Scarano F.
5th Symposium on Integrating CFD and Experiments in Aerodynamics (Integration 2012), Tokyo, Japan, 3 - 05 October 2012
- LII. **Flow Visualization in the Wake of the Flapping-Wing MAV 'DelFly II' in Forward Flight**
PERÇİN M., Eisma H. E., van Oudheusden B. W., Remes B., Ruijsink R., de Wagter C.
30th AIAA Applied Aerodynamics Conference, New Orleans, Louisiana, 25 - 28 June 2012
- LIII. **Wake reconstruction of flapping-wing MAV DelFly II in forward flight**
PERÇİN M., Eisma H. E., de Baar J. H. S., van Oudheusden B. W., Remes B., Ruijsink R., de Wagter C.

International Micro Air Vehicle Conference and Flight Competition (IMAV2012), Braunschweig, Germany, 3 - 06 June 2012

LIV. Wing flexibility effects in clap-and-fling

PERÇİN M., Hu Y., van Oudheusden B. W., Scarano F.

International Micro Air Vehicle Conference and Flight Competition, Nunspeet, Netherlands, 12 - 15 September 2011

LV. Flow Around and Forces Acting on a Plunging Airfoil in a Uniform Flow

PERÇİN M., MISIRLIOĞLU A., ÜNAL M. F.

International Congress on Vortex Flow and Vortex Methods, Caserta, Italy, 7 - 10 November 2010

LVI. Flow around a plunging airfoil in a uniform flow

PERÇİN M., MISIRLIOĞLU A., ÜNAL M. F.

5th Ankara International Aerospace Conference (AIAC), Ankara, Turkey, 17 - 19 August 2009

LVII. Effect of transpassing jet flow with spanwise periodicity on the near-wake of cylinders

PERÇİN M., Aydın B. T., ÇETİNER YILDIRIM N. L. O., ÜNAL M. F.

4th Ankara International Aerospace Conference (AIAC), Ankara, Turkey, 10 - 12 September 2007

LVIII. Control of self-induced pitching vibrations of of an airfoil: downstream cylinder

PERÇİN M., Tinar E., ÇETİNER YILDIRIM N. L. O., ÜNAL M. F.

12th International Symposium on Flow Visualization, Göttingen, Germany, 10 - 14 September 2006

Supported Projects

PERÇİN M., YIĞILI İ., Project Supported by Higher Education Institutions, Pressure and load reconstruction from PIV data around thin flexible wings in unsteady flows, 2021 - Continues

Perçin M., Project Supported by Other Private Institutions, Turboşaft Motor Geliştirme Projesi Döndürücü Geometrisi Aerodinamik Karakterizasyonu Araştırma ve Geliştirme Projesi, 2020 - 2021

Scientific Consultations

Turkish Aerospace, Scientific Consultancy, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, Turkey, 2019 - 2020

Tasks In Event Organizations

Tuncer İ. H., Yaman Y., Kayran A., Uzol O., Gürses E., Perçin M., 10th Ankara International Aerospace Conference (AIAC2019), Scientific Congress, Ankara, Turkey, Eylül 2019

Tekinalp O., Perçin M., Kutay A. T., METU VTOL Aircraft Competetion 2, Social Activities, Ankara, Turkey, Ekim 2018

Metrics

Publication: 88

Citation (WoS): 370

Citation (Scopus): 488

H-Index (WoS): 12

H-Index (Scopus): 15