

## **Prof. Aydin Misirlioglu**

### **Personal Information**

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#### **International Researcher IDs**

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### **Education Information**

**Doctorate,** Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 1992 - 1998

**Postgraduate,** Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 1989 - 1992

**Undergraduate,** Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 1984 - 1988

### **Foreign Languages**

English

Spanish

### **Academic Titles / Tasks**

**Professor,** Istanbul Technical University, Uçak ve Uzay Bilimleri, Uzay Mühendisliği, 2007 - Continues

**Professor,** Ondokuz Mayis University, Faculty Of Aeronautics And Astronautics, Department Of Aircraft And Aerospace Engineering, 2014 - 2020

**Associate Professor,** Istanbul Technical University, Uçak ve Uzay Bilimleri, Uzay Mühendisliği, 2000 - 2007

**Assistant Professor,** Istanbul Technical University, Uçak ve Uzay Bilimleri, Uzay Mühendisliği, 1998 - 2000

**Research Assistant,** Istanbul Technical University, Uçak ve Uzay Bilimleri, Uçak Mühendisliği, 1989 - 1998

### **Academic and Administrative Experience**

**Head of Department,** Istanbul Technical University, Uçak ve Uzay Bilimleri, Uzay Mühendisliği, 2021 - Continues

**Dean,** Samsun University, Faculty Of Aeronautical And Space Sciences, Department Of Aircraft And Aerospace Engineering, 2018 - 2020

**Vice Rector,** Samsun University, Faculty Of Aeronautical And Space Sciences, Department Of Aircraft And Aerospace Engineering, 2018 - 2020

**Dean,** Ondokuz Mayis University, Faculty Of Aeronautics And Astronautics, 2014 - 2018

**İstanbul Teknik Üniversitesi,** Uçak Ve Uzay Bilimleri Fakültesi, 2011 - 2012

**İstanbul Teknik Üniversitesi,** Uçak Ve Uzay Bilimleri Fakültesi, 2007 - 2010

**İstanbul Teknik Üniversitesi,** Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, 2002 - 2007

## Courses

Optimization Techniques in Engineering, Postgraduate, 2013 - 2014

Advanced Problems in Compressible Flow, Doctorate, 2013 - 2014, 2012 - 2013, 2010 - 2011

Compressible Aerodynamics, Undergraduate, 2010 - 2011, 2009 - 2010, 2008 - 2009

Aerodinamik, Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008

Helikopter Teorisi, Undergraduate, 2008 - 2009, 2007 - 2008, 2006 - 2007

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. Thermally developing forced convection inside a parallel-plate channel filled with a non-Darcy porous medium  
Misirlioglu A.  
JOURNAL OF POROUS MEDIA, vol.10, no.3, pp.311-317, 2007 (SCI-Expanded)
- II. The effect of rotating cylinder on the heat transfer in a square cavity filled with porous medium  
Misirlioglu A.  
INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE, vol.44, pp.1173-1187, 2006 (SCI-Expanded)
- III. Natural Convection inside an Inclined Wavy Enclosure Filled with a Porous Medium  
Misırlioğlu A., BAYTAŞ A. C., POP I.  
TRANSPORT IN POROUS MEDIA, vol.1, no.64, pp.229-246, 2006 (SCI-Expanded)
- IV. Free convection in a wavy cavity filled with heat-generating porous media  
Misirlioglu A., BAYTAS A. C., POP I.  
JOURNAL OF POROUS MEDIA, vol.9, no.3, pp.207-222, 2006 (SCI-Expanded)
- V. Free convection in a wavy cavity filled with a porous medium  
Misirlioglu A., Baytas A. C., Pop I.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.48, no.9, pp.1840-1850, 2005 (SCI-Expanded)
- VI. Modified Displacement Ventilation of Rooms with Chilled Ceilings and Ceiling Mounted Devices  
Misırlioğlu A., GULCAT U.  
Int J Energy Research, vol.1, no.29, pp.767-779, 2005 (SCI-Expanded)
- VII. 3-D viscous flow solutions over bodies in relative motion  
Gulcat U., MISIRLIOGLU A., Aslan A. R.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS, vol.14, no.1, pp.1-19, 2000 (SCI-Expanded)
- VIII. 3 D Navier Stokes solutions with moving deforming finite elements  
GULCAT U., Misırlioğlu A., ASLAN A. R.  
COMMUNICATIONS IN NUMERICAL METHODS IN ENGINEERING, vol.1, no.13, pp.273-284, 1997 (SCI-Expanded)

## Articles Published in Other Journals

- I. Separate Treatment of Momentum and Heat Flows in a Parallel Computational Environment  
MISIRLIOĞLU A., GULCAT U.  
Lecture Notes in Computational Science and Engineering, pp.261-266, 2009 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. Bir Çırpan Kanat Etrafında Meydana Gelen Girdap Mekanizmasının İncelenmesi  
DURNA A. S., ÇELİK B., MISIRLIOĞLU A.  
IV. Ulusal Havacılık ve Uzay Konferansı, İstanbul, Turkey, 12 - 14 September 2012, pp.145
- II. Vortex wake formation and its effects on thrust and propulsive efficiency for an oscillating airfoil

- DURNA A. S., ÇELİK B., MISIRLIOĞLU A.  
ICCFD 2012: International Conference on Computational Fluid Dynamics, 22 - 23 August 2012
- III. **Vortex Wake Formation and Its Effects on Thrust and Propulsive Efficiency of an Oscillating Airfoil**  
DURNA A. S., ÇELİK B., MISIRLIOĞLU A.  
International Conference on Computational Fluid Dynamics, Paris, France, 22 - 23 August 2012
- IV. **Determination the Design Parameters and Optimum Variables of a Low Reynolds Number Quad Rotor Propeller**  
YILMAZ M. H., DURNA A. S., MISIRLIOĞLU A.  
6. Ankara International Aerospace Conference, METU, Ankara TURKEY, 14 - 16 September 2011
- V. **Flow Around and Forces Acting on a Plunging Airfoil in a Uniform Flow**  
PERÇİN M., MISIRLIOĞLU A., ÜNAL M. F.  
The 5th International Conference of Vortex Flows and Vortex Models, Caserta, Italy, 9 - 11 November 2010
- VI. **Flow Around A Plunging Airfoil In A Uniform Flow**  
OĞUZ C., MISIRLIOĞLU A.  
5th Ankara International Aerospace Conference, Turkey, 7 - 09 September 2009
- VII. **Finite Element Approach To Plunging Airfoil Aerodynamics**  
PERÇİN M., MISIRLIOĞLU A., ÜNAL M. F.  
5th Ankara International Aerospace Conference, Turkey, 7 - 09 September 2009
- VIII. **Flow Around A Pitching Airfoil In A Uniform Flow**  
KARADENİZ E., MISIRLIOĞLU A.  
5th Ankara International Aerospace Conference, Turkey, 7 - 09 September 2009
- IX. **Aeroacoustic Noise Prediction of an Axial Fan in a Circular Duct with LES**  
ÇAVUŞ M., ASLAN E., SORGÜVEN ÖNER E., MISIRLIOĞLU A.  
Ankara International Aerospace Conference, METU, Ankara, Turkey, 22 - 25 August 2005
- X. **Numerical Investigation On Natural Convection Inside A Vertical Wavy Enclosure Filled With A Porous Medium**  
MISIRLIOĞLU A., BAYTAŞ A. C., POP I.  
Fourth International Conference on Computational Heat and Mass Transfer, France, Paris-Cachan, 17 - 20 May 2005
- XI. **Modified Displacement Ventilation Of Rooms With Chilled Ceilings and Ceiling Mounted Devices**  
MISIRLIOĞLU A., GULCAT U.  
Fourth International Conference on Computational Heat and Mass Transfer, France, Paris-Cachan, 17 - 20 May 2005
- XII. **Şekil değiştiren bir ağ üzerinde CBS sonlu elemanlar metodu kullanılarak sentetik mikro jet akışı analizi**  
ÇELİK B., EDİS F. O., MISIRLIOĞLU A.  
XIII. Ulusal Mekanik Kongresi, Gaziantep, Turkey, 08 September 2003 - 12 September 2013, pp.311-319
- XIII. **Analysis of micro synthetic jets using CBS finite element method on moving deforming grid**  
ÇELİK B., EDİS F. O., MISIRLIOĞLU A.  
International Symposium on Transient Convective Heat and Mass Transfer, İzmir, Turkey, 17 - 22 August 2003, pp.417-425
- XIV. **Low Energy Cooling Of Rooms With Displacement Ventilation**  
MISIRLIOĞLU A., GULCAT U.  
International Symposium on Transient Convective Heat and Mass Transfer in Single and Two Phase Flows, Çeşme, Turkey, 17 - 22 August 2003
- XV. **Analysis Of Synthetic Micro Jets Using CBS Finite Element Method On Moving Deforming Grids**  
ÇELİK B., EDİS F. O., MISIRLIOĞLU A.  
International Symposium on Transient Convective Heat and Mass Transfer in Single and Two Phase Flows, Çeşme, Turkey, 17 - 22 August 2003
- XVI. **Moving deforming grid solutions for flows about the bodies in relative motion**  
MISIRLIOĞLU A., GULCAT U.

- ECCOMAS CFD 2001, Swansea, Wales, 4 - 07 September 2001
- XVII. **Domain decomposition implementations for parallel solutions of 3-D Navier-Stokes equations**  
 Aslan A. R., Gulcat U., Misirlioğlu A., Edis F. O.  
 11th International Conference on Parallel Computational Fluid Dynamics (Parallel CFD 99), Virginia, United States Of America, 23 - 26 May 1999, pp.105-113
- XVIII. **Fast and accurate parallel N S solutions with pseudo second order finite elements**  
 ASLAN A. R., GULCAT U., EDİS F. O., MISIRLIOĞLU A.  
 Parallel CFD Workshop, Experiences in Implementation, İstanbul, 3 - 05 May 1999
- XIX. **Accurate incompressible N S solution on cluster of work stations**  
 ASLAN A. R., EDİS F. O., GULCAT U., MISIRLIOĞLU A.  
 Parallel CFD98, Hsinchu, Taiwan, 11 - 14 May 1998
- XX. **A PCG E B E iteration for higher order and fast solution of 3 D Navier Stokes equations**  
 GULCAT U., ASLAN A. R., MISIRLIOĞLU A.  
 AGARD FDP on Progress and Challenges in CFD Methods and Algorithms, Seville, Spain, 4 - 06 September 1995
- XXI. **Aerodynamics of fuselage and store carriage interaction using CFD**  
 GULCAT U., ASLAN A. R., MISIRLIOĞLU A.  
 AGARD FDP on Aerodynamics of Store Integration and Separation, April, Ankara,Turkey, 6 - 08 April 1992
- XXII. **Passive control of wake from a circular cylinder with a splitter plate**  
 MISIRLIOĞLU A., ÜNAL M. F., BEARMAN P.  
 Proceedings of IUTAM Symposium on Bluff Body Wakes, Dynamics and Instabilities, 7 - 11 September 1992, pp.77-80
- XXIII. **Effect of base bleed on the wake behind a flat plate with blunt trailing end Viscous Discrete Vortex Method**  
 YILMAZ A., ÜNAL M. F., MISIRLIOĞLU A.  
 Symposium of 10th Anniversary of Aeronautical Engineering Department, METU, 6 - 09 September 1992, pp.26-34

## Supported Projects

- Misirlioğlu A., Project Supported by Higher Education Institutions, Karmaşık Geometriler Etrafında Hassas Türbülanslı Akış Analizi Grafik İşlemciler Üzerinde Yazılım Geliştirme, 2013 - 2015
- Misirlioğlu A., Project Supported by Higher Education Institutions, Flap Hareketi Yapan Bir profiliin Etrafindaki Akışın Kontrolü, 2010 - 2012
- Misirlioğlu A., Project Supported by Higher Education Institutions, Çok düşük Reynolds Sayılarında Profil Davranışının Hesaplama Analizi, 2010 - 2011
- Misirlioğlu A., Project Supported by Higher Education Institutions, Sayısal Ağların Otomatik Deformasyonunda Kafes Çubuk sistem Yaklaşımı İle sonlu Elemanlar Çözümü, 2001 - 2001

## Metrics

- Publication: 34  
 Citation (WoS): 109  
 Citation (Scopus): 131  
 H-Index (WoS): 3  
 H-Index (Scopus): 4

## Non Academic Experience

TÜBİTAK