

## Assoc. Prof. NİLAY SEZER UZOL

### Personal Information

Email: nuzol@metu.edu.tr

### Education Information

Doctorate, Pennsylvania State University, College Of Engineering/Department Of Aerospace Engineering, United States Of America 2001 - 2006

Post Graduate, Pennsylvania State University, College Of Engineering/Department Of Aerospace Engineering, United States Of America 1998 - 2001

Under Graduate, Middle East Technical University, Turkey 1993 - 1998

### Dissertations

Doctorate, Unsteady Flow Simulations around Complex Geometries Using Stationary or Rotating Unstructured Grids, Pennsylvania State University, College Of Engineering/Department Of Aerospace Engineering, 2006

Post Graduate, High-Accuracy Wake and Vortex Simulations Using a Hybrid Euler/Discrete Vortex Method, Pennsylvania State University, College Of Engineering/Department Of Aerospace Engineering, 2001

### 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, 2015 - 2018

Assistant Professor, Tobb Ekonomi Ve Teknoloji Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2008 - 2015

Lecturer, Tobb Ekonomi Ve Teknoloji Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2007 - 2008

### Professional Experience

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2015 - Continues

### Advising Theses

Kurtuluş D. F. , Sezer Uzol N., Aerodynamic Investigation of a Model Scale Helicopter Rotor in Ground Effect, Post Graduate, M.Şahbaz(Student), 2017

UZOL O., SEZER UZOL N., Computational fluid dynamics simulations of ship airwake with a hovering helicopter rotor, Post Graduate, E.ORBAY(Student), 2016

SEZER UZOL N., Approximate factorization using ACDI method on hybrid grids and parallelization of the scheme, Post Graduate, O.KAAN(Student), 2013

SEZER UZOL N., Silindirik kanallarda nanoakışkanlarla laminar zorlanmış taşınımın ısı transferinin sayısal analizi, Post

Graduate, İ.OZAN(Student), 2012

UZOL O., SEZER UZOL N., Three-dimensional flow solutions for non-lifting flows using fast multipole boundary element method, Post Graduate, U.KARBAN(Student), 2012

SEZER UZOL N., Yüksek binalar etrafındaki akışın sayısal ve deneysel incelemesi, Post Graduate, S.YILMAZTÜRK(Student), 2011

SEZER UZOL N., Contalı levha tipi plakalı ısı değıştirgeçlerinin deneysel performans analizi, Post Graduate, F.AKTÜRK(Student), 2011

SEZER UZOL N., Horizontal axis wind turbine rotor blade: winglet and twist aerodynamic design and optimization using CFD, Doctorate, M.ELFARRA(Student), 2011

SEZER UZOL N., TUNCER İ. H. , Genetic algorithm based aerodynamic shape optimization of wind turbine rotor blades using a 2-d panel method with a boundary layer solver, Post Graduate, Ö.POLAT(Student), 2011

UZOL O., SEZER UZOL N., Site specific design optimization of a horizontal axis wind turbine based on minimum cost of energy, Post Graduate, E.SAĞOL(Student), 2010

SEZER UZOL N., U-borulu gövde-boru tipi bir ısı değıştirgecinin deneysel olarak incelenmesi, Post Graduate, İ.DEVECİ(Student), 2009

UZOL O., SEZER UZOL N., Investigation of rotor wake interactions in helicopters using 3D unsteady free vortex wake methodology, Post Graduate, Ö.YEMENİCİ(Student), 2009

SEZER UZOL N., Aerodynamic design and optimization of horizontal axis wind turbines by using BEM theory and genetic algorithm, Post Graduate, Ö.CEYHAN(Student), 2008

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Implementation Studies of Robot Swarm Navigation Using Potential Functions and Panel Methods**  
Merheb A., GAZİ V., SEZER UZOL N.  
IEEE-ASME TRANSACTIONS ON MECHATRONICS, vol.21, pp.2556-2567, 2016 (Journal Indexed in SCI)

## Refereed Congress / Symposium Publications in Proceedings

- **Numerical and Experimental Investigation of Rotor Aerodynamics In Ground Effect with Inclined Planes**  
şahbaz m., SEZER UZOL N., KURTULUŞ D. F.  
8th Asian/Australian Rotorcraft Forum (ARF 2019), Ankara, Turkey, 30 October - 02 November 2019
- **Investigation of Aerodynamic and Structural Features of Twisted Tall Buildings**  
Bilgen S., Ay B. Ö. , Sezer Uzol N., Orbay Akcengiz E.  
13th Advances in Civil Engineering Congress, İzmir, Turkey, 12 - 14 September 2018, pp.1-8
- **Computational Analysis of a Model Scale Helicopter Rotor in Ground Effect**  
ŞAHBAZ m., SEZER UZOL N., KURTULUŞ D. F.  
Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- **Numerical and Experimental Investigation of Aerodynamic Loads for Tall Buildings with Prismatic and Twisted Forms**  
Orbay Akcengiz E., Sezer Uzol N., Bilgen S., Ay B. Ö. , Ostovan Y.  
The International Conference on Wind Energy Harvesting, Coimbra, Portugal, 20 - 21 April 2017
- **Optimization of horizontal axis wind turbines by using BEM theory and genetic algorithm**  
Ceyhan Ö., SEZER UZOL N., TUNCER İ. H.  
5th AIAC, 17 - 19 August 2009

## Supported Projects

AY B. Ö., ORBAY E., BİLGEN S., SEZER UZOL N., Project Supported by Higher Education Institutions, Burgulu Yüksek Binaların Taşıyıcı Sistem ve Aerodinamik Özelliklerinin İncelenmesi, 2016 - 2019

## Citations

Total Citations (WOS):10

h-index (WOS):1