

Prof. Selin Aradağ Çelebiođlu

Personal Information

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International Researcher IDs

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ScopusID: 11440423900

Yoksis Researcher ID: 143685

Biography

Selin Aradag obtained her BS and MS degrees from the Department of Mechanical Engineering of Middle East Technical University in 2000 and 2002. She received her Ph.D. from the Mechanical and Aerospace Engineering Department of Rutgers University, USA in 2006. She worked for the United States Air Force Academy as a researcher for two years after completing her doctoral degree.

She worked as faculty member at TOBB University of Economics and Technology, Department of Mechanical Engineering from 2008 to 2019. She was appointed as Professor in 2017. She established TOBB ETU Hydro Turbine Design and Test Center (ETU Hydro) as the founding director with a ten million dollars funding from the Ministry of Development. Establishment and operation of a state of the art turbine test laboratory, a high performance computational facility, advanced manufacturing and quality control laboratory were performed with the funding under her direction. She also led several projects funded by Tübitak, Air Force Office of Scientific Research, Department of Defense, Ministry of Development, Ministry of Industry and other organizations with a total budget of twenty million dollars. She also worked as consultant for several companies. She was the principal investigator of MILHES project where the first hydro turbine of the country was designed, tested, manufactured and implemented at Kepez Hydroelectric Power Plant. Selin Aradag has more than 100 publications, a book, several book chapters and patents.

She is the recipient of Turkish Academy of Sciences Distinguished Young Scientist Award (TÜBA GEBİP) in 2010. She has best paper awards at several conferences and was selected as an Associate Fellow of American Institute of Aeronautics and Astronautics (AIAA) due to her contributions to Aeronautics in 2022. She served as advisory board member for Transportation, Defense, Energy and Textile Technologies Group which functions under the Technology and Innovation Funding Programs department of TÜBİTAK (The Scientific and Technological Research Council of Turkey) and she was the Editor in Chief of Journal of Thermal Sciences and Technology until 2023. She is currently Executive Board member of Society of Thermal Science and Technology. She is also Management Committee member of the European Union Cost Action on Digital and Sustainable Hydropower and acts as consultant for TOBB ETU Hydro which she founded.

She has served at several administrative positions such as Department Chair and Dean of Graduate School at TED University since she joined TEDÜ as a Professor in 2019. She is currently acting as the Dean of the Faculty of Engineering. Her areas of expertise and interest are computational, experimental and machine learning studies in Flow control, Fluid Mechanics, Heat Exchangers and Hydro Energy.

Education Information

Doctorate, Rutgers University, Mechanical and Aerospace Engineering, United States Of America 2002 - 2006

Postgraduate, Middle East Technical University, Mechanical Engineering, Turkey 2000 - 2002

Undergraduate, Middle East Technical University, Mechanical Engineering, Turkey 1996 - 2000

Foreign Languages

English

Certificates, Courses and Trainings

Effective Negotiation certificate, Karrass, 2006

Research Areas

Mechanical Engineering, Energy, Aeronautical and Space Engineering

Academic Titles / Tasks

Professor, TED University, Faculty Of Engineering, Department Of Mechanical Engineering, 2019 - Continues

Professor, TOBB University of Economics and Technology, Mechanical Engineering, 2017 - 2019

Associate Professor, TOBB University of Economics and Technology, Mechanical Engineering, 2012 - 2017

Assistant Professor, TOBB University of Economics and Technology, Mechanical Engineering, 2008 - 2012

Researcher, United States Air Force Academy, Aeronautics, 2006 - 2008

Research Assistant, Rutgers University, Mechanical and Aerospace Engineering, 2002 - 2006

Lecturer, Rutgers University, Mechanical and Aerospace Engineering, 2005 - 2005

Research Assistant, Middle East Technical University, Mechanical Engineering, 2000 - 2002

Academic and Administrative Experience

Dean, TED University, Faculty Of Engineering, 2023 - Continues

University Executive Board Member, TED University, Rectorate, 2023 - Continues

Faculty Management Board Member, TED University, Faculty Of Engineering, 2021 - Continues

Member of the Senate, TED University, Rectorate, 2019 - Continues

Fakülte Kurulu Üyesi, TED University, Faculty Of Engineering, 2019 - Continues

Dean, TED University, Graduate School, 2022 - 2023

Enstitü Yönetim Kurulu Üyesi, TED University, Graduate School, 2022 - 2023

Head of Department, TED University, Faculty Of Engineering, Department Of Mechanical Engineering, 2019 - 2023

Chairperson of Strategic Plan Theme Group, TED University, Rectorate, 2021 - 2022

Head of Department, TED University, Graduate School, Mechanical Engineering, 2020 - 2022

Fakülte Yönetim Kurulu Üyesi, TOBB University of Economics and Technology, Faculty Of Engineering, 2017 - 2019

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, TOBB University of Economics and Technology, Energy Research Center, 2016 - 2019

Member of the Commission, TOBB University of Economics and Technology, Rectorate, 2013 - 2019

Research Institute Director, TOBB University of Economics and Technology, Rectorate, 2011 - 2019

Rektörlük Stratejik Plan Komisyonu Üyesi, TOBB University of Economics and Technology, Rectorate, 2010 - 2019

Fakülte Kurulu Üyesi, TOBB University of Economics and Technology, Faculty Of Engineering, 2016 - 2017
Deputy Head of Department, TOBB University of Economics and Technology, Faculty Of Engineering, Department Of Mechanical Engineering, 2008 - 2013

Courses

Summer Practice I, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Experimental Engineering, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
Advanced Fluid Mechanics, Postgraduate, 2021 - 2022
Thermodynamics, Undergraduate, 2022 - 2023
Master's Thesis I, Postgraduate, 2022 - 2023, 2021 - 2022
Applied Thermal Systems, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Master's Thesis II, Postgraduate, 2022 - 2023
Summer Practice II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Pre-thesis Seminar, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
Fluid Mechanics, Undergraduate, 2020 - 2021
Senior Project, Undergraduate, 2020 - 2021
Physics II, Undergraduate, 2019 - 2020

Advising Theses

Aradağ Çelebioğlu S., Baş O., Digital twins for heat transfer applications, Postgraduate, K.Abhary(Student), Continues
Başkaya Ş., Aradağ Çelebioğlu S., -, Doctorate, O.Ulucak(Student), Continues
Aradağ Çelebioğlu S., Taşcıoğlu Y., -, Postgraduate, İ.Doğan(Student), Continues
Aradağ Çelebioğlu S., Celebioglu K., MACHINE LEARNING BASED PERFORMANCE PREDICTION OF VARIABLE SPEED HYDRAULIC TURBINES, Postgraduate, G.ŞAHİN(Student), 2024
Aradağ Çelebioğlu S., Celebioglu T. K., Conventional and future prediction methods for turbine design parameters in drinking water and irrigation pipelines, Postgraduate, A.BERİL(Student), 2023
Görgülürslan R. M., Aradağ Çelebioğlu S., Uçak kanadı tasarımının uygun dikgen ayrıklaştırma ve tümevarımsal tasarım araştırma yöntemi kullanılarak belirsizlik altında disiplinlerarası optimizasyonu, Doctorate, G.DEMİR(Student), 2023
Aradağ Çelebioğlu S., Aylı E., Numerical and experimental investigation of wavy leading edge modifications on NACA0012 airfoil performance, Postgraduate, K.GÜZEY(Student), 2022
Aradağ Çelebioğlu S., Bayer Ö., Investigation of Marangoni-induced flows in vertical microchannels, Postgraduate, A.UĞUR(Student), 2022
Aradağ Çelebioğlu S., Uslu S., Helikopter motor yağ soğutucusu olarak kullanılan plaka ve kanatçık tipi bir ısı değiştirgeci için test düzeneği tasarımı ve kurulumu, Postgraduate, O.ÖZER(Student), 2020
Aradağ Çelebioğlu S., Celebioglu K., Bir francis türbin performansının, hesaplamalı akışkanlar dinamiği ve saha verimlilik ölçümleriyle incelenmesi, Postgraduate, Y.TUĞBA(Student), 2020
Aradağ Çelebioğlu S., Uçak kanadı üzerindeki akışın aerodinamik performans analizi ve kontrolü, Postgraduate, M.CAN(Student), 2019
Aradağ Çelebioğlu S., Süpersonik kavite akışının aktif ve pasif yöntemlerle kontrolü, Postgraduate, K.ASENA(Student), 2019
Aradağ Çelebioğlu S., Celebioglu K., Francis tipi türbin modelinin performans testlerinin gerçekleştirilmesi ve sayısal sonuçların test sonuçlarıyla doğrulanması, Postgraduate, F.BESNİ(Student), 2018
Aradağ Çelebioğlu S., Bayer Ö., Benzer özellikli çift ve tek kompresörlü ev tipi buzdolaplarının enerji indeksine göre deneysel karakterizasyonu, Postgraduate, A.AKDEMİR(Student), 2018
Aradağ Çelebioğlu S., Mach 1.5 süpersonik kavite akışının açık kaynak yazılımla hesaplamalı akışkanlar dinamiği analizleri ve sonuçların ticari yazılım simülasyonları ile karşılaştırılması, Postgraduate, E.CEREN(Student), 2018
Aradağ Çelebioğlu S., Kakaç S., Isı değiştirgeçlerinde nanoakışkan kullanımının termal ve hidrolik etkilerinin deneysel

olarak incelenmesi, Postgraduate, U.KAYABAŞI(Student), 2018

Aradağ Çelebioğlu S., Uçak kanadı ve muharip uçak aerodinamik simülasyonlarında açık kaynak kod kullanımı ve sonuçların ticari yazılım sonuçları ile karşılaştırılması, Postgraduate, A.KARADAŞLI(Student), 2018

Aradağ Çelebioğlu S., Celebioglu K., Su türbinlerinde kavitasyon karakteristiklerinin sayısal olarak incelenmesi, Postgraduate, B.ALTINTAŞ(Student), 2017

Aradağ Çelebioğlu S., Acar E., Francis tipi hidrotürbin ayar kanadı ve çarkının hesaplamalı akışkanlar dinamiği bazı eniyilenmesi, Postgraduate, A.ELİKALFA(Student), 2017

Aradağ Çelebioğlu S., Acar E., Su türbinleri için dirsek tipi emme borusunun HAD tabanlı tasarımı ve eniyilemesi, Postgraduate, G.DEMİREL(Student), 2016

Aradağ Çelebioğlu S., Celebioglu K., Francis tipi türbinlerin sayısal yöntemler ile tasarımı, parametre optimizasyonu ve model testlerinin sayısal alt yapısının geliştirilmesi, Doctorate, Ü.ECE(Student), 2016

Aradağ Çelebioğlu S., Taşcıoğlu Y., Boru içerisinde Francis tipi türbin tasarımı, Postgraduate, H.ÇETİNTÜRK(Student), 2016

Aradağ Çelebioğlu S., Celebioglu K., Francis tipi türbin çarkının tersine mühendislik ile tasarımı ve rehabilitasyonu, Postgraduate, A.KAPLAN(Student), 2016

Aradağ Çelebioğlu S., Yenilikçi soğutma kulesi tasarımına yönelik hesaplamalı akışkanlar dinamiği çalışmaları, Postgraduate, B.BURAK(Student), 2015

Aradağ Çelebioğlu S., Celebioglu K., Su türbini testleri için deney düzeneği tasarımı, Postgraduate, B.ÇAĞRI(Student), 2015

Aradağ Çelebioğlu S., Kakaç S., Plakalı ısı değiştirgeçlerinde plakaya bağımlı ısı transferi modellemesi, Postgraduate, E.ÖZKAYA(Student), 2014

Aradağ Çelebioğlu S., Celebioglu K., Su türbini ayar kanadı tasarım sistemi geliştirilmesi ve çeşitli francis tipi türbinler için uygulanması, Postgraduate, F.ZEYNEP(Student), 2014

Aradağ Çelebioğlu S., Plakalı ısı değiştirgeçlerinin had simülasyonlarının yapılması ve deneysel verilerle doğrulanması, Postgraduate, Y.GENÇ(Student), 2014

Aradağ Çelebioğlu S., Celebioglu K., Su türbini tasarımı amaçlı sayısal yöntemler geliştirilmesi ve uygulanması, Postgraduate, H.AKIN(Student), 2014

Aradağ Çelebioğlu S., Acar E., Hesaplamalı akışkanlar dinamiği yardımıyla su türbini çarkı tasarımı ve eniyilemesi, Postgraduate, F.AYANCIK(Student), 2014

Aradağ Çelebioğlu S., Lazer enerjisinin sesüstü kavite akışına etkilerinin düşük dereceli modelleme yardımı ile sayısal analizi, Postgraduate, İ.YILMAZ(Student), 2013

Aradağ Çelebioğlu S., Yapay sinir ağları yardımıyla ısı değiştirgeci modellemesi, Postgraduate, C.TÜRK(Student), 2013

Aradağ Çelebioğlu S., Kakaç S., Chevron tipi contalı-plakalı ısı değiştirgeçlerinin ısı ve hidrolik karakteristiklerinin belirlenmesi ve düzgün olmayan akış dağılımının incelenmesi, Postgraduate, Ç.GÜLENOĞLU(Student), 2013

Aradağ Çelebioğlu S., Süpersonik kavitelerdeki akışın sayısal analizi, Postgraduate, Ü.ECE(Student), 2012

Aradağ Çelebioğlu S., Kasnakoğlu C., Yapay sinir ağları ile akış kontrolü için sayısal yöntemlerin geliştirilmesi, Postgraduate, A.PAKSOY(Student), 2011

Aradağ Çelebioğlu S., Kakaç S., Contalı levha tipi levhalı ısı değiştirgeçlerinin tasarımı için muhtelif çalışma şartlarına uygun bir bilgisayar programı geliştirilip deneylerle doğrulanması, Postgraduate, G.GÜLBEN(Student), 2011

Aradağ Çelebioğlu S., Silindir üzerindeki laminar ve türbülanslı akışın kontrolsüz ve kontrollü had analizleri, Postgraduate, B.APAÇOĞLU(Student), 2010

Jury Memberships

Post Graduate, Post Graduate, Çankaya Üniversitesi, November, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Orta Doğu Teknik Üniversitesi, November, 2022

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, September, 2022

Award, ODTÜ Mustafa Parlar, TED Üniversitesi, September, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Orta

Doğu Teknik Üniversitesi, September, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Gazi Üniversitesi, August, 2022

Associate Professor Exam, Associate Professor Exam, TED University, May, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, February, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2022

January, 2021

December, 2020

October, 2020

September, 2020

June, 2020

February, 2020

February, 2020

January, 2020

December, 2019

December, 2019

December, 2019

November, 2019

October, 2019

July, 2019

March, 2019

January, 2019

January, 2018

January, 2018

December, 2017

November, 2017

January, 2016

January, 2015

January, 2014

June, 2013

January, 2013

January, 2013

June, 2009

Published journal articles indexed by SCI, SSCI, and AHCI

I. Investigation of aerodynamic and aeroacoustic behavior of bio-inspired airfoils with numerical and experimental methods

Güzey K., Aylı U. E., Kocak E., Aradağ Çelebioğlu S.

Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.238, no.5, pp.1265-1279, 2024 (SCI-Expanded)

II. Exploring the potential of artificial intelligence tools in enhancing the performance of an inline pipe turbine

Celebioğlu K., Aylı E., Cetintürk H., Taşcıoğlu Y., Aradağ Çelebioğlu S.

Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2024 (SCI-Expanded)

III. Design of the ONERA M6 wing by shape optimization under uncertainty ONERA M6 kanadının belirsizlik altında şekil optimizasyonu ile tasarımı

Demir G., Görgülüarslan R. M., Aradağ Çelebioğlu S.

Journal of the Faculty of Engineering and Architecture of Gazi University, vol.39, no.2, pp.771-784, 2024 (SCI-Expanded)

- IV. **Robust shape optimization under model uncertainty of an aircraft wing using proper orthogonal decomposition and inductive design exploration method**
Demir G., Gorguluarslan R. M., Aradağ Çelebioğlu S.
Structural and Multidisciplinary Optimization, vol.66, no.4, 2023 (SCI-Expanded)
- V. **Critical decision making for rehabilitation of hydroelectric power plants**
Celebioglu K., Ayli E., Ulucak O., Aradağ Çelebioğlu S., Westerman J.
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.4, pp.10073-10106, 2023 (SCI-Expanded)
- VI. **Investigation of double-layered wavy microchannel heatsinks utilizing porous ribs with artificial neural networks**
Bayer Ö., Baghaei Oskouei S., Aradağ Çelebioğlu S.
International Communications in Heat and Mass Transfer, vol.134, 2022 (SCI-Expanded)
- VII. **CFD based design of a 4.3MW Francis turbine for improved performance at design and off-design conditions**
Aradağ Çelebioğlu S., Akin H., Celebioglu K.
Journal of Mechanical Science and Technology, vol.31, no.10, pp.5041-5049, 2017 (SCI-Expanded)
- VIII. **CFD-driven surrogate-based multi-objective shape optimization of an elbow type draft tube**
Demirel G., Acar E., Celebioglu K., Aradağ Çelebioğlu S.
International Journal of Hydrogen Energy, vol.42, no.28, pp.17601-17610, 2017 (SCI-Expanded)
- IX. **Numerical research of cavitation on Francis turbine runners**
Celebioglu K., Altintas B., Aradağ Çelebioğlu S., Taşcıoğlu Y.
International Journal of Hydrogen Energy, vol.42, no.28, pp.17771-17781, 2017 (SCI-Expanded)
- X. **Simulation-based design and optimization of Francis turbine runners by using multiple types of metamodels**
Ayancik F., Acar E., Celebioglu K., Aradağ Çelebioğlu S.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.231, no.8, pp.1427-1444, 2017 (SCI-Expanded)
- XI. **Model Testing of Francis-Type Hydraulic Turbines**
Kavurmaci B., Celebioglu K., Aradağ Çelebioğlu S., Taşcıoğlu Y.
Measurement and Control (United Kingdom), vol.50, no.3, pp.70-73, 2017 (SCI-Expanded)
- XII. **Effects of active and passive control techniques on Mach 1.5 cavity flow dynamics**
Aradağ Çelebioğlu S., Gelisli K. A., Yaldir E. C.
International Journal of Aerospace Engineering, vol.2017, 2017 (SCI-Expanded)
- XIII. **Comparative gasketed plate heat exchanger performance prediction with computations, experiments, correlations and artificial neural network estimations**
Aradağ Çelebioğlu S., Genc Y., Turk C.
Engineering Applications of Computational Fluid Mechanics, vol.11, no.1, pp.467-482, 2017 (SCI-Expanded)
- XIV. **Experimental analysis of a mixed-plate gasketed plate heat exchanger and artificial neural network estimations of the performance as an alternative to classical correlations**
Turk C., Aradağ Çelebioğlu S., Kakac S.
International Journal of Thermal Sciences, vol.109, pp.263-269, 2016 (SCI-Expanded)
- XV. **Experimental investigation and CFD analysis of rectangular profile FINS in a square channel for forced convection regimes**
Ayli E., BAYER Ö., Aradağ Çelebioğlu S.
International Journal of Thermal Sciences, vol.109, pp.279-290, 2016 (SCI-Expanded)
- XVI. **Determination and generalization of the effects of design parameters on Francis turbine runner performance**
Ayli E., Celebioglu K., Aradağ Çelebioğlu S.
Engineering Applications of Computational Fluid Mechanics, vol.10, no.1, pp.545-564, 2016 (SCI-Expanded)

- XVII. **Aerodynamic Analysis of a vertically landing lifting body**
Aradağ Çelebioğlu S., Seidel J., Cummings R. M., Cook L.
ISI BİLİMİ VE TEKNİĞİ DERGİSİ/ JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.35, no.1, pp.35-42, 2015 (SCI-Expanded)
- XVIII. **Experimental investigation and performance analysis of gasketed plate heat exchangers**
Akturk F., Sezer-Uzol N., Aradağ Çelebioğlu S., Kakac S.
ISI BİLİMİ VE TEKNİĞİ DERGİSİ/ JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.35, no.1, pp.43-52, 2015 (SCI-Expanded)
- XIX. **Artificial Neural Network based prediction of time-dependent behavior for lid-driven cavity flows**
Paksoy A., Aradağ Çelebioğlu S.
Isi Bilimi Ve Teknigi Dergisi/ Journal of Thermal Science and Technology, vol.35, no.2, pp.1-18, 2015 (SCI-Expanded)
- XX. **Experimental comparison of performances of three different plates for gasketed plate heat exchangers**
Gulenoglu C., Akturk F., Aradağ Çelebioğlu S., SEZER UZOL N., Kakac S.
International Journal of Thermal Sciences, vol.75, pp.249-256, 2014 (SCI-Expanded)
- XXI. **Numerical laser energy deposition on supersonic cavity flow and sensor placement strategies to control the flow**
Yilmaz I., Aradağ Çelebioğlu S.
The Scientific World Journal, vol.2013, 2013 (SCI-Expanded)
- XXII. **Investigation of the effects of length to depth ratio on open supersonic cavities using CFD and proper orthogonal decomposition**
Yilmaz I., Ayli E., Aradağ Çelebioğlu S.
The Scientific World Journal, vol.2013, 2013 (SCI-Expanded)
- XXIII. **CFD simulations and reduced order modeling of a refrigerator compartment including radiation effects**
BAYER Ö., Oskay R., Paksoy A., Aradağ Çelebioğlu S.
Energy Conversion and Management, vol.69, pp.68-76, 2013 (SCI-Expanded)
- XXIV. **Effects of air blowing on turbulent flow over a circular cylinder**
Apacoglu B., Paksoy A., Aradağ Çelebioğlu S.
Isi Bilimi Ve Teknigi Dergisi/ Journal of Thermal Science and Technology, vol.32, no.2, pp.107-119, 2012 (SCI-Expanded)
- XXV. **CFD analysis of cooling of electronic equipment as an undergraduate design project**
Aradağ Çelebioğlu S., Olgun U., Aktürk F., Başbüyük B.
Computer Applications in Engineering Education, vol.20, no.1, pp.103-113, 2012 (SCI-Expanded)
- XXVI. **Nonlinear estimation of transient flow field low dimensional states using artificial neural nets**
Cohen K., Siegel S., Seidel J., Aradağ Çelebioğlu S., McLaughlin T.
Expert Systems with Applications, vol.39, no.1, pp.1264-1272, 2012 (SCI-Expanded)
- XXVII. **Filtered POD-based low-dimensional modeling of the 3D turbulent flow behind a circular cylinder**
Aradağ Çelebioğlu S., Siegel S., Seidel J., Cohen K., McLaughlin T.
International Journal for Numerical Methods in Fluids, vol.66, no.1, pp.1-16, 2011 (SCI-Expanded)
- XXVIII. **Hybrid ventilation system simulation for several cities in Turkey**
Aradağ Çelebioğlu S., BAYER Ö., Karatas C., Poyraz U., Kalkan O., Haciahmetoglu F., Efe Y., Kahvecioglu M., Goncu A.
International Journal of Ventilation, vol.9, no.4, pp.351-357, 2011 (SCI-Expanded)
- XXIX. **CFD analysis and reduced order modeling of uncontrolled and controlled laminar flow over a circular cylinder**
Apacoglu B., Paksoy A., Aradağ Çelebioğlu S.
Engineering Applications of Computational Fluid Mechanics, vol.5, no.1, pp.67-82, 2011 (SCI-Expanded)
- XXX. **Integration of computations and experiments for flow control research with undergraduate students**
Aradağ Çelebioğlu S., Cohen K., Seaver C. A., McLaughlin T.
Computer Applications in Engineering Education, vol.18, no.4, pp.727-735, 2010 (SCI-Expanded)

- XXXI. **Two and Three Dimensional Simulations of Supersonic Cavity Configurations**
Aradağ Çelebioğlu S., Kim H. J., D. Knight D.
ENGINEERING APPLICATIONS OF COMPUTATIONAL FLUID MECHANICS, vol.4, no.4, pp.612-621, 2010 (SCI-Expanded)
- XXXII. **Unsteady turbulent vortex structure downstream of a three dimensional cylinder**
Aradağ Çelebioğlu S.
Isi Bilimi Ve Teknigi Dergisi/ Journal of Thermal Science and Technology, vol.29, no.1, pp.91-98, 2009 (SCI-Expanded)
- XXXIII. **The effects of laser energy deposition on supersonic cavity flow**
Aradağ Çelebioğlu S., Yan H., Knight D.
Isi Bilimi Ve Teknigi Dergisi/ Journal of Thermal Science and Technology, vol.29, no.2, pp.67-73, 2009 (SCI-Expanded)
- XXXIV. **Quiet-flow ludwig tube for hypersonic transition research**
Juliano T. J., Schneider S. P., Aradağ Çelebioğlu S., Knight D.
AIAA Journal, vol.46, no.7, pp.1757-1763, 2008 (SCI-Expanded)
- XXXV. **Bleed lip geometry effects on the flow in a hypersonic wind tunnel**
Aradağ Çelebioğlu S., Knight D. D., Schneider S. P.
AIAA Journal, vol.44, no.9, pp.2133-2136, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Experimental Investigation of Thermal and Hydraulic Performance of a Plate Heat Exchanger Using Nanofluids**
Kayabaşı U., Kakaç S., Aradağ Çelebioğlu S., Pramuanjaroenkij A.
Journal of Engineering Physics and Thermophysics, vol.92, no.3, pp.783-796, 2019 (ESCI)
- II. **Rehabilitation of Francis Turbines of Power Plants with Computational Methods**
Celebioğlu K., Aradağ Çelebioğlu S., Altuntas B., Ayli E.
Hittite Journal of Science and Engineering, vol.5, no.1, pp.37-48, 2018
- III. **Experimental Investigation of Thermal and Hydraulic Performances of Gasketed Plate Heat Exchangers**
Aradağ Çelebioğlu S., Kakac S., Gulenoglu C.
Mühendis ve Makina (Engineer And Machinery), 2013
- IV. **Experimental Investigation of Cooling of Electronic Equipment**
Ayli E., Turk C., Aradağ Çelebioğlu S.
International Journal of Materials, Mechanics and Manufacturing, pp.153-157, 2013
- V. **Hydroturbine Runner Design and Manufacturing**
Ayancik F., Aradag U., Ozkaya E., Celebioğlu K., Unver O., Aradağ Çelebioğlu S.
International Journal of Materials, Mechanics and Manufacturing, pp.162-165, 2013
- VI. **An Assessment of the Effects of Laser Energy Deposition for Cavity Flows**
Yilmaz I., Aradağ Çelebioğlu S.
International Journal of Materials, Mechanics and Manufacturing, pp.158-161, 2013
- VII. **A Review of Control Methods for Cavity Flows and Feasibility of Laser Energy Deposition as an Actuator**
Yilmaz I., Ayli E., Aradağ Çelebioğlu S.
INTERNATIONAL JOURNAL OF FLOW CONTROL, vol.4, no.1-2, pp.29-46, 2012
- VIII. **Hybrid Ventilation System Simulation for Several Cities in Turkey**
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LXXXIX. **Contalı Plakalı Isı Değiştirgeci Tasarımı**

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Naiman H., Knight D., Aradağ Çelebioğlu S., Juliano T., Schneider S.
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44th AIAA Aerospace Sciences Meeting 2006, Reno, NV, United States Of America, 9 - 12 January 2006, vol.23, pp.17261-17281
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Collection of Technical Papers - 22nd AIAA Applied Aerodynamics Conference, Providence, RI, United States Of America, 16 - 19 August 2004, vol.1, pp.479-487
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Supported Projects

Aradağ Çelebioğlu (Management Committee) S., Doujak E., TÜBİTAK - AB COST Project, Pan-European Network for Sustainable Hydropower (PEN@Hydropower), 2022 - 2026

Şahin S. M. A., Taşcıoğlu Y., Akkaya S. M., Çöllü S. Ö., Özer M. B., Durlu N., ARADAĞ ÇELEBİOĞLU S., TUBITAK Project, "Yüksek Performanslı alüminyum ve magnezyum alaşımlarının özelliklerinin ultrasonik Döküm İşlemleri ile Geliştirilmesi", 2017 - 2021

Aradağ Çelebioğlu S., Taşcıoğlu Y., TUBITAK Project, "MİLHES - Hidroelektrik santral bileşenlerinin yerli olarak tasarımı ve üretimi", 2015 - 2021

Aradağ Çelebioğlu S., Taşcıoğlu Y., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, "Su Türbini Tasarım ve Testleri Alt yapısı", 2011 - 2016

Aradağ Çelebioğlu S., TUBITAK Project, "Deneysel çalışmalar, hesaplamalı akışkanlar dinamiği ve yapay sinir ağları ile plakalı ısı değiştirgeci tasarımı", 2012 - 2014

ARADAĞ ÇELEBİOĞLU S., TUBITAK Project, "Sesüstü Kaviterlerde Lazer Enerjisi Yardımıyla Akış Modellemesi ve Kontrolü", 2011 - 2013

ARADAĞ ÇELEBİOĞLU S., TÜBA Project, "Akış Modellemesi ve Kontrolü", 2010 - 2013

ARADAĞ ÇELEBİOĞLU S., Industrial Thesis Project, "Plakalı Isı Değiştiricilerinde Plakaya Bağımlı Isı Transferinin Deneysel ve Sayısal olarak incelenmesi", 2009 - 2011

ARADAĞ ÇELEBİOĞLU S., TUBITAK Project, "Hesaplamalı Akışkanlar Dinamiği, Düşük boyutlu modelleme ve Yapay Sinir Ağları Yardımıyla Akış Kontrolü", 2009 - 2011

ARADAĞ ÇELEBİOĞLU S., "Computational Methods for Feedback Controllers for Aerodynamics Flow Applications", 2006 - 2008

Patent

Aradağ Çelebioğlu S., Taşcıoğlu Y., Çelebioğlu K., Çetintürk H., Bir enerji dönüştürücüsü, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2016 20391 , Standard Registration, 2020

Aradağ Çelebioğlu S., Yılmaz İ., Doğan B. B., Ural A. T., Polat Ö., Uludağ Y., Sarıoğlu R., Düşük su tüketimli döner lüle sistemine sahip su soğutma kulesi, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2014 04314 , Standard Registration, 2016

Activities in Scientific Journals

ISI BILIMI VE TEKNIGI DERGISI/ JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, First Editor, 2021 - Continues

Memberships / Tasks in Scientific Organizations

Isı Bilimi ve Tekniği Derneği, Member, 2021 - Continues

Member, Member, 2008 - Continues

Society of Women Engineers, Member, 2003 - Continues

TMMOB Makina Mühendisleri Odası, 2000 - Continues

AIAA, Member, 2006 - 2010, United States Of America

Scientific Refereeing

JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, March 2021

JOURNAL OF APPLIED FLUID MECHANICS, January 2020

INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, January 2020

JOURNAL OF THERMOPHYSICS AND HEAT TRANSFER, January 2020

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART F: JOURNAL OF RAIL AND RAPID TRANSIT, January 2020

EXPERIMENTAL HEAT TRANSFER, January 2020
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, January 2020
ENVIRONMENTAL PROGRESS AND SUSTAINABLE ENERGY, January 2020
ASME Journal of Thermal Science and Engineering Applications, January 2019
ISI BILIMI VE TEKNIGI DERGISI/ JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, January 2019
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, January 2019
ENERGY CONVERSION AND MANAGEMENT, January 2019
INTERNATIONAL JOURNAL OF AEROSPACE ENGINEERING, January 2019
GAZI UNIVERSITY JOURNAL OF SCIENCE, January 2019
INTERNATIONAL JOURNAL OF HEAT AND FLUID FLOW, January 2019

Scientific Consultations

TOBB ETU Hydro, Tobb University Of Economics And Technology, Engineering, Turkey, 2021 - Continues
AFS, Tobb University Of Economics And Technology, TOBB ETU Hydro Energy Research Center, Turkey, 2014 - 2015
MD2 Mühendislik, Tobb University Of Economics And Technology, TOBB ETU Hydro Energy Research Center, Turkey, 2012 - 2014

Tasks In Event Organizations

Aradağ Çelebioğlu S., Uluslararası katılımlı 24. ısı bilimi ve tekniği kongresi, Scientific Congress, Ankara, Turkey, Eylül 2023
Aradağ Çelebioğlu S., 5th International Conference on Mechatronics and Control Systems, Scientific Congress, China, Mart 2022
Aradağ Çelebioğlu S., The 5th International Conference on Mechatronics Systems and Control Engineering (ICMSCE 2022), Scientific Congress, Turkey, Mart 2022
ARADAĞ ÇELEBIOĞLU S., 23. Isı Bilimi ve Tekniği Kongresi, Eylül 2021
ARADAĞ ÇELEBIOĞLU S., 5th Anatolian Energy Symposium, Mart 2021
ARADAĞ ÇELEBIOĞLU S., 4th International Conference on Mechatronics Systems and Control Engineering, Rome, Italy, Mart 2021
ARADAĞ ÇELEBIOĞLU S., 3rd International Conference on Mechatronics Systems and Control Engineering, Şubat 2019
ARADAĞ ÇELEBIOĞLU S., TÜBA – TOBB ETÜ 3. Enerji Konferansı 2018, Ekim 2018
ARADAĞ ÇELEBIOĞLU S., Anadolu Energy Symposium, Nisan 2018
ARADAĞ ÇELEBIOĞLU S., 2nd International Conference on Mechatronics Systems and Control Engineering, Şubat 2018
ARADAĞ ÇELEBIOĞLU S., ASME Engineering Systems Design and Analysis 2010, Temmuz 2010
ARADAĞ ÇELEBIOĞLU S., 48th AIAA Aerospace Sciences Meeting 2010, Ocak 2010
ARADAĞ ÇELEBIOĞLU S., NATO Advanced Study Institute on Microfluidics based Microsystems Fundamentals and Applications, İzmir, Turkey, Eylül 2009
ARADAĞ ÇELEBIOĞLU S., 47th AIAA Aerospace Sciences Meeting 2009, Ocak 2009
ARADAĞ ÇELEBIOĞLU S., Integrating CFD and Experiments in Aerodynamics Conference, Haziran 2007

Scientific Research / Working Group Memberships

302 dersi iki şube olarak verildi., 2021 - 2021
Collaboration with TOBB ETU and TAI, joint MS student, 2021 - 2021
Research and teaching collaboration with TOBB ETU Hydro, joint MS student, 2021 - 2021
Joint MS student with Çankaya university, 2021 - 2021

Joint MS student with METU, 2021 - 2021

Awards

Aradağ Çelebioğlu S., Associate Fellow, American Institute Of Aeronautics And Astronautics (Aiaa), November 2022

ARADAĞ ÇELEBIOĞLU S., Best paper, 3rd International Conference on Mechatronics and Control Engineering, February 2019

ARADAĞ ÇELEBIOĞLU S., Best paper, X. Minsk International Seminar: Heat Pipes, Heat Pumps, Refrigerators, Power Sources, September 2018

ARADAĞ ÇELEBIOĞLU S., Who is Who in the World, Marquis, January 2011

ARADAĞ ÇELEBIOĞLU S., TÜBA GEBİP, Turkish Academy of Sciences, June 2010

ARADAĞ ÇELEBIOĞLU S., Fellowship, Rutgers University, September 2005

ARADAĞ ÇELEBIOĞLU S., Fellowship, School of Engineering Fellowship, September 2002