

Prof. HASAN BAŞ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABB-7634-2020

ScopusID: 57214584224

Yoksis Researcher ID: 100478

Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makina, Turkey 1994 - 2001

Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 1990 - 1993

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 1986 - 1990

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

IT, Bilirkişilik Temel Eğitimi, Karadeniz Teknik Üniversitesi, 2017

Education Management and Planning, CNC Training, Ortadoğu Teknik Üniversitesi, 1999

Dissertations

Doctorate, Katkı maddeli yağların kam mekanizmalarındaki sürtünme davranışlarının incelenmesi, Karadeniz Technical University, Mühendislik Fakültesi, 2000

Postgraduate, Fındık kırma teknolojisinde tambur sisteminin geliştirilmesi, Karadeniz Technical University, Mühendislik Fakültesi, 1993

Research Areas

Mechanical Engineering, Construction and Manufacturing, Tribology, Machine Elements, Machine Design, Computer Aided Design and Manufacturing, Predictive and Preventive Maintenance, Non-traditional manufacturing methods, Machining Methods, Transport Technique, Mechanical, Yarn Technology (Spinning, weaving, knitting), Textile Machinery, Engineering and Technology

Academic Titles / Tasks

Professor, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, 2024 - Continues
Associate Professor, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, 2015 - 2023
Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, 2005 - 2015
Research Assistant PhD, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, 2001 - 2005
Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, 1992 - 2001

Academic and Administrative Experience

Head of Department, Karadeniz Technical University, 2012 - 2013

Courses

Postgraduate

Elektropnömatik Sistemlerin Tasarımı Ve Optimizasyonu, Postgraduate, 2021 - 2022

İleri Ölçme Teknikleri ve Uygulamaları, Postgraduate, 2021 - 2022

Undergraduate

Makina Elemanları - I, Undergraduate, 2022 - 2023

Bilgisayar Destekli Tasarım, Undergraduate, 2021 - 2022

Makina Elemanları - II, Undergraduate, 2021 - 2022

Bilgisayar Destekli Mühendislik Çizimi, Undergraduate, 2020 - 2021

Makina Tasarımı, Undergraduate, 2021 - 2022

Mühendislik Çizimi, Undergraduate, 2020 - 2021

Supervised Theses

Baş H., Nanoparçacık katkılı sıvı yağların tribolojik özelliklerinin incelenmesi, Postgraduate, M.ALİ(Student), 2023

Baş H., Bor katkılı yağların motor performansına etkisinin incelenmesi, Postgraduate, Y.EMRE(Student), 2013

Baş H., Çay fabrikalarında yaş çay taşımada kullanılacak olan vakumlu sistemin prototipinin tasarımları, imalatı ve performans özelliklerinin incelenmesi, Postgraduate, F.G.(Student), 2010

Jury Memberships

Doctoral Examination, Doctoral Examination, Bursa Teknik Üniversitesi, January, 2021

Academic Staff Examination, Academic Staff Examination, Karadeniz Teknik Üniversitesi, April, 2019

Academic Staff Examination, Academic Staff Examination, Karadeniz Teknik Üniversitesi, January, 2013

Academic Staff Examination, Academic Staff Examination, Karadeniz Teknik Üniversitesi, August, 2012

Academic Staff Examination, Academic Staff Examination, Artvin Çoruh Üniversitesi, April, 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of tribological properties of MoS₂ and CaF₂ particles as oil additives and their effects on surface contact**
BAŞ H., BEŞİRBEYOĞLU M. A., Oezen O.
LUBRICATION SCIENCE, vol.36, no.4, pp.314-329, 2024 (SCI-Expanded)
- II. **Prediction of friction coefficient and torque in self-lubricating polymer radial bearings produced by additive manufacturing: A machine learning approach**
BAŞ H., KARABACAK Y. E.

- PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART J-JOURNAL OF ENGINEERING TRIBOLOGY, vol.237, no.11, pp.2014-2038, 2023 (SCI-Expanded)
- III. Machine learning-based prediction of friction torque and friction coefficient in statically loaded radial journal bearings**
 BAŞ H., KARABACAK Y. E.
 TRIBOLOGY INTERNATIONAL, vol.186, 2023 (SCI-Expanded)
- IV. Triboinformatic modeling of the friction force and friction coefficient in a cam-follower contact using machine learning algorithms**
 BAŞ H., KARABACAK Y. E.
 Tribology International, vol.181, 2023 (SCI-Expanded)
- V. Experimental investigation of efficiency of worm gears and modeling of power loss through artificial neural networks**
 Karabacak Y. E., Baş H.
 Measurement: Journal of the International Measurement Confederation, vol.202, 2022 (SCI-Expanded)
- VI. Tribological properties of MoS₂ and CaF₂ particles as grease additives on the performance of block-on-ring surface contact**
 Baş H., Özen O., Beşirbeyoğlu M. A.
 Tribology International, vol.168, 2022 (SCI-Expanded)
- VII. Investigation of the Effects of Boron Additives on the Performance of Engine Oil**
 Baş H., Karabacak Y. E.
 TRIBOLOGY TRANSACTIONS, vol.57, no.4, pp.740-748, 2014 (SCI-Expanded)
- VIII. Modeling of Transverse Direction Thermal Conductivity in Micro-nano Fiber-reinforced Composites**
 Ascioglu B., Adanur S., Gümüşel L., Baş H.
 TEXTILE RESEARCH JOURNAL, vol.79, no.12, pp.1059-1066, 2009 (SCI-Expanded)
- IX. A new test apparatus and method for friction force measurement in journal bearings under dynamic loading: Part II**
 Biyiklioğlu A., Cuvalci H., Adatepe H., Baş H., Duman M. S.
 EXPERIMENTAL TECHNIQUES, vol.29, no.6, pp.33-36, 2005 (SCI-Expanded)
- X. A new test apparatus and method for friction force measurement in journal bearings under dynamic loading: Part I**
 Biyiklioglu A., Cuvalci H., Adatepe H., Bas H., Duman M.
 EXPERIMENTAL TECHNIQUES, vol.29, no.5, pp.22-24, 2005 (SCI-Expanded)
- XI. Investigation of the tribological properties of silicon containing zinc-aluminum based journal bearings**
 Cuvalci H., Baş H.
 TRIBOLOGY INTERNATIONAL, vol.37, no.6, pp.433-440, 2004 (SCI-Expanded)
- XII. A new test apparatus for the tribological behavior of cam mechanisms**
 Baş H., Biyiklioğlu A., Cuvalci H.
 EXPERIMENTAL TECHNIQUES, vol.27, no.5, pp.28-32, 2003 (SCI-Expanded)

Articles Published in Other Journals

- I. Hidrodinamik radyal kaymalla yataklarda yüzey pürüzlüğünün sürtünme davranışları üzerindeki etkilerinin incelenmesi
 Baş H.
 Gümüşhane Üniversitesi Fen Bilimleri Dergisi, vol.12, no.3, pp.877-887, 2022 (Peer-Reviewed Journal)
- II. Investigation of Tribological Properties of TiO₂, MoS₂ and CaF₂ Particles as Vegetable Oil Additives and Their Effects on Gearbox Performance
 Baş H., Karabacak Y. E.
 Journal of Bio- and Triboro-Corrosion, vol.8, no.2, 2022 (Scopus)

- III. Tribological properties of MoS₂ particles as lubricant additive on the performance of statically loaded radial journal bearings
Baş H.
Turkish Journal of Engineering, vol.7, no.1, pp.42-48, 2022 (Peer-Reviewed Journal)
- IV. Investigation of effects of surface roughness on the performance of cam mechanisms
Baş H.
International Journal of Automotive Engineering and Technologies, vol.10, no.1, pp.67-73, 2021 (Peer-Reviewed Journal)
- V. Investigation of effects of boron additives on performance of cam mechanisms
Baş H.
International Journal of Automotive Engineering and Technologies, vol.10, no.1, pp.60-66, 2021 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

- I. Makina Tasarımındaki Güncel Gelişmeler ve Gelecekteki Beklentiler
Karabacak Y. E., Baş H.
9. ULUSLARARASI MÜHENDİSLİK VE TEKNOLOJİ YÖNETİMİ KONGRESİ, İstanbul, Turkey, 29 April - 01 May 2023, pp.755-766
- II. Textile Machinery And Processes For Composite Preform Manufacturing
Adanur S., Aglan H., Gümüşel L., Baş H.
1st International Istanbul Textile And Textile Machinary Congress, İstanbul, Turkey, 1 - 02 June 2016
- III. Influence of Particle Size on the Mechanical Properties of A2024 Matrix B4C Particle Reinforced Composites
Çanakçı A., Arslan F., Baş H.
13th International Materials Symposium (IMSP'2010), Denizli, Turkey, 13 - 15 October 2010, pp.15-23
- IV. A Novel 3d Woven Knit Hybrid Fabric For Composites
Adanur S., Gümüşel L., BAŞ H.
Techtextil North America Symposium, 01 April 2008
- V. Investigation of Friction Behavior of Different Kinds of Engine Oils on Cam Mechanisms Used in Automotive Engines
Baş H., Bıyıklıoğlu A.
Icolt99, International Lubrication Techniques konferansı, İstanbul, Turkey, 27 - 28 April 1999, pp.87-103

Supported Projects

- BAŞ H., Project Supported by Higher Education Institutions, Atık NdFeB Miknatis Katkılı EPDM Esaslı Kompozit Malzeme Üretimi ve İnelastik Özelliklerinin Deneysel Olarak Belirlenmesi, 2013 - 2018
- BAŞ H., Project Supported by Higher Education Institutions, Borik Asitin Katkılı Motor Yağı Olarak Uullanılması Ve Motor Performansına Etkilerinin İncelenmesi, 2009 - 2018
- BAŞ H., Project Supported by Higher Education Institutions, Farklı Malzemelerden Yapılmış Tüpllerin Statik ve Dinamik Yükler Altında Enerji Sönümleme Karekteristiklerinin Deneysel ve Sayısal Olarak Belirlenmesi, 2009 - 2012
- Baş H., TUBITAK Project, Bina Dış Cephe Temizlik Robotu'nun Tasarımı Ve Performans Özelliklerinin İncelenmesi, 2008 - 2009
- Baş H., Industrial Thesis Project, Çay Fabrikalarında Yaş Çay Taşımada Kullanılacak Olan Vakumlu Sistemin Prototipinin Tasarımı, İmalatı ve Performans Özelliklerinin İncelenmesi, 2007 - 2009
- BAŞ H., Project Supported by Higher Education Institutions, Hidrojen Enerjili Araç Tasarımı ve İmalatı, 2008 - 2008
- Baş H., TÜBİTAK International Bilateral Joint Cooperation Program Project, Design and Processing Characteristics of Novel Three Dimensional Fibrous Preforms for Composite Reinforcement Project Code MISAG NSF 14 The Scientific and

Technical Research Council of Turkey TUBITAK National Science Foundation NSF 2004 2007 Karadeniz Technical University Department of Mechanical Engineering and Auburn University Department of Polymer and Fiber Engineering 115 Textile Building Auburn AL 36849 5327 U S A, 2004 - 2007

Activities in Scientific Journals

International Online Conferences on Engineering and Natural Science, Scientific Committee Membership, 2021 - 2021

Memberships / Tasks in Scientific Organizations

MMO, Member, 1990 - Continues, Turkey

Malzeme Bilimleri & Üretim Teknolojisi Uygulama ve Araştırma Merkezi , Board Member, 2006 - 2009, Turkey

Peer Reviews in Scientific Publications

TRIBOLOGY INTERNATIONAL, SCI Journal, October 2023

Jurnal Tribologi, Journal Indexed in SCI-E, August 2023

Jurnal Tribologi, Journal Indexed in SCI-E, August 2023

TRIBOLOGY INTERNATIONAL, SCI Journal, June 2023

Mühendis ve Makina, National Scientific Refreed Journal, September 2021

Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, March 2021

ENGINEERING SCIENCE AND TECHNOLOGY, AN INTERNATIONAL JOURNAL, SCI Journal, March 2020

Afyon Kocatepe Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, October 2010

Scientific Project Refereeing

TUBITAK Project, 1501 - Industry R & D Projects Support Program, June 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, January 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, March 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, January 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, April 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, February 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, February 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, February 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, July 2017

TUBITAK Project, 1501 - Industry R & D Projects Support Program, June 2017

TUBITAK Project, 1501 - Industry R & D Projects Support Program, May 2017

TUBITAK Project, 1501 - Industry R & D Projects Support Program, August 2016

TUBITAK Project, 1501 - Industry R & D Projects Support Program, June 2016

TUBITAK Project, 1501 - Industry R & D Projects Support Program, May 2016

TUBITAK Project, 1501 - Industry R & D Projects Support Program, February 2016

TUBITAK Project, 1501 - Industry R & D Projects Support Program, December 2015

TUBITAK Project, 1501 - Industry R & D Projects Support Program, November 2015

TUBITAK Project, 1501 - Industry R & D Projects Support Program, July 2015

TUBITAK Project, 1501 - Industry R & D Projects Support Program, July 2015

TUBITAK Project, 1501 - Industry R & D Projects Support Program, March 2015

TUBITAK Project, 1501 - Industry R & D Projects Support Program, October 2014

TUBITAK Project, 1501 - Industry R & D Projects Support Program, September 2014

TUBITAK Project, 1501 - Industry R & D Projects Support Program, July 2014
TUBITAK Project, 1501 - Industry R & D Projects Support Program, September 2013
TUBITAK Project, 1501 - Industry R & D Projects Support Program, January 2010
TUBITAK Project, 1501 - Industry R & D Projects Support Program, July 2008

Peer Reviews for Ethical Evaluations

9. Teknoloji Ödülleri ve Kongresi Sekreteryası (TÜBİTAK), TÜBİTAK, Turkey, August 2010

Metrics

Publication: 23
Citation (WoS): 133
Citation (Scopus): 177
H-Index (WoS): 6
H-Index (Scopus): 6

Congress and Symposium Activities

9 INTERNATIONAL CONGRESS ON ENGINEERING AND TECHNOLOGY MANAGEMENT, Attendee, İstanbul, Turkey, 2023

Non Academic Experience

University, Bahrain University, Mechanical Engineering, Proje Yürüttüsü
Bahrain University, Visiting Professor
Auburn University, Department of Polymer and Fiber Engineering, 115 Textile Building, Auburn, AL 36849-5327 U.S.A.,
Visiting Researcher
University, Auburn University NSF TÜBİTAK, Mühendislik Fakültesi/Makina Mühendisliği Bölümü, Araştırmacı