Prof. METİN AKKÖK

Personal Information

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International Researcher IDs ORCID: 0000-0003-3111-6033 Publons / Web Of Science ResearcherID: 0-5755-2018 ScopusID: 6701509609 Yoksis Researcher ID: 7976

Education Information

Doctorate, Imperial College of Science, Technology and Medicine, Makina Mühendisliği, United Kingdom 1976 - 1980 Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (YI) (Tezli), Turkey 1973 - 1976

Undergraduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1968 - 1973

Research Areas

Technical Sciences, Mechanical Engineering, Construction and Manufacturing, Tribology, Machine Elements, Machine Design, Computer Aided Design and Manufacturing

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1993 - Continues Professor, Rensselaer Polytechnic Institute, Faculty Of Engineering, Department Of Mechanical Engineering, Aeronautical Engineering And Mechanics, 1992 - 1993

Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1989 - 1992 Associate Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1986 - 1989 Associate Professor, Rensselaer Polytechnic Institute, Faculty Of Engineering, Department Of Mechanical Engineering, Aeronautical Engineering And Mechanics , 1985 - 1986

Associate Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1983 - 1985 Assistant Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1980 - 1983 Research Assistant, Imperial College of Science, Technology and Medicine, Mechanical Engineering Department, 1976 -1980

Research Assistant, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1973 - 1976

Advising Theses

AKKÖK M., Gear tooth optimization for nonstandard cylindirical internal and external aerospace gear pairs, Postgraduate, O.Nuri(Student), 2019

AKKÖK M., Development of load distribution model and micro-geometry optimization of four-point contact ball bearings,

Postgraduate, S.YILMAZ(Student), 2018

AKKÖK M., INVESTIGATING THE EFFECTS OF MAN-PORTABLE LAUNCHER ON THE OPERATOR WITH THE USE OF ANTHROPOMORPHIC TEST DEVICE, Postgraduate, T.TÜRK(Student), 2018

AKKÖK M., Investigation of asymmetric gear tooth bending stress formulation, Postgraduate, M.GÖKHAN(Student), 2018 AKKÖK M., Determination of rough surface contact stiffness coefficient, Postgraduate, E.GÜLŞAH(Student), 2017

AKKÖK M., Energy consumption modeling of turn-mill systems and related machining processes, Postgraduate, M.Moradnazhad(Student), 2015

AKKÖK M., Design and development of an ontology based multi-agent virtual enterprise system /, Doctorate, B.LOTFI(Student), 2015

AKKÖK M., Development of partner selection algorithms in forming virtual enterprise consortiums, Postgraduate, S.NİKGHADAM(Student), 2015

AKKÖK M., An investigation into the implementation of multi objective optimization in sustainable manufacturing: A case study from household goods industry, Postgraduate, G.GÖK(Student), 2015

ÇALIŞKAN M., AKKÖK M., Experimental and analytical determination of friction torque of a double row roller slewing bearing, Postgraduate, A.Dindar(Student), 2015

AKKÖK M., Experimental determination of tool wear in routing and trimming of CFRP composites, Postgraduate, Z.PEKER(Student), 2015

AKKÖK M., Experimental and analytical determintaion of friction torque of a double row roller slewing bearing, Postgraduate, A.DİNDAR(Student), 2015

AKKÖK M., Modeling and simulation of coefficient of friction on gear teeth contacts, Postgraduate, Y.OKŞAYAN(Student), 2014

AKKÖK M., Analytical modeling for load distribution of four-point contact slewing bearings, Postgraduate, G.ECE(Student), 2014

AKKÖK M., Thermo-mechanical finite element analysis and design of tail section for a ballistic missile, Postgraduate, T.KEMAL(Student), 2012

AKKÖK M., Experimental analysis and modelling of wear in rocket rail launchers, Postgraduate, E.AÇMAZ(Student), 2011

AKKÖK M., Modelling and simulation of friction in deep drawing, Postgraduate, M.BAŞPINAR(Student), 2011

AKKÖK M., Modeling and simulation of oil leakage in radial lip seals, Postgraduate, M.YILDIZ(Student), 2010 AKKÖK M., SÖYLEMEZ E., Design and construction of boundary lubricated bearing test rig and wear analysis in earthmoving machinery, Postgraduate, K.SERDAR(Student), 2010

AKKÖK M., Development and analysis of grasshopper-like jumping mechanism in biomimetic approach, Postgraduate, A.KONEZ(Student), 2007

AKKÖK M., A study on the reliability analysis during preliminary design : a rocket motor example, Postgraduate, K.BOZKAYA(Student), 2006

AKKÖK M., Developing a computer program for evaluating uncertainty of some typical dimensional measuring and gauging devices, Postgraduate, H.EMRAH(Student), 2005

Gökler M. I., Akkök M., Wear analysis of hot forging dies, Postgraduate, S.ABACHİ (Student), 2004

DARENDELİLER H., AKKÖK M., Friction analysis in cold forging, Postgraduate, Ö.NECATİ (Student), 2004

AKKÖK M., Design and analysis of automotive clutch systems., Postgraduate, A.TİBET(Student), 2002

AKKÖK M., Design analysis of automobile brake systems., Postgraduate, H.ZAFER(Student), 2002

AKKÖK M., Determination of surface temperature rise on spur gears, Postgraduate, M.TABURDAĞITAN(Student), 2001 AKKÖK M., Experimental investigation of surface finish improvement in faceturning, Postgraduate, F.ÇALIK(Student), 1998

AKKÖK M., Development of a knowledge-based system to select bearings, Postgraduate, İ.ENDER(Student), 1997 DARENDELİLER H., AKKÖK M., Analysis of the effect of friction in sheet metal drawing, Postgraduate, C.Ali(Student), 1997

AKKÖK M., An Investigation into effects of oil filled bolster on textile spindle dynamics, Postgraduate, U.DEĞİRMENCİ(Student), 1990

AKKÖK M., ÇALIŞKAN M., An investigation into rolling element bearing diagnostics via digital signal processing, Postgraduate, M.Cem(Student), 1989

AKKÖK M., An Investigation into friction induced noise, Postgraduate, M.KAVAL(Student), 1989

Published journal articles indexed by SCI, SSCI, and AHCI

I. Experimental Determination and Analytical Model of Friction Torque of a Double Row Roller Slewing Bearing Dindar A., AKKÖK M., Caliskan M. JOURNAL OF TRIBOLOGY-TRANSACTIONS OF THE ASME, vol.139, no.2, 2017 (SCI-Expanded) II. Modeling and Simulation of Friction in Deep Drawing Baspinar M., AKKÖK M. JOURNAL OF TRIBOLOGY-TRANSACTIONS OF THE ASME, vol.138, no.2, 2016 (SCI-Expanded) III. Experimental analysis and wear modeling for mechanical components of a typical rail launcher AKKÖK M., Acar B., Acmaz E. WEAR, vol.306, pp.1-9, 2013 (SCI-Expanded) IV. Wear analysis of hot forging dies Abachi S., AKKÖK M., GÖKLER M. İ. TRIBOLOGY INTERNATIONAL, vol.43, pp.467-473, 2010 (SCI-Expanded) V. Reliability Improvement of a Solid Rocket Motor in Early Design Phases Bozkaya K., AKKÖK M., Esin A. JOURNAL OF SPACECRAFT AND ROCKETS, vol.46, no.4, pp.914-922, 2009 (SCI-Expanded) VI. Modelling of variable friction in cold forging Cora O. N., AKKÖK M., DARENDELİLER H. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF ENGINEERING TRIBOLOGY, vol.222, pp.899-908, 2008 (SCI-Expanded) VII. Determination of surface temperature rise with thermo-elastic analysis of spur gears Taburdagitan M., Akkok M. WEAR, vol.261, pp.656-665, 2006 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. An investigation into power and energy requirements for the auxiliary components of a CNC lathe ULUER M. U., ÜNVER H. Ö., AKKÖK M., KILIÇ S. E. The 17th International Conference on Machine Design and Production, Bursa, Turkey, 12 - 15 July 2016, vol.2, pp.611-628
- II. Sınır Yağlama Koşullarında Çalışan Kaymalı Yataklar İçin Test Düzeneği Tasarımı ve Üretimi AKKÖK M., Koray Serdar T.
- Uluslararası Katılımlı 17. Makine Teorisi Sempozyumu, İzmir, Turkey, 14 17 June 2015, pp.145-148 III. Dizel Partikül Filtre Rejenerasyonu ve Motor Yağının Seyrelmesi

AKKÖK M., Balkan T., Konukseven İ. Otomotiv Teknolojileri Kongresi, Bursa, Turkey, 26 - 27 May 2014

IV. Determination of the Load Share and Coefficient of Friction in Mixed Lubrication Regime AKKÖK M.

15th International Conference on Machine Design and Production, Denizli, Turkey, 19 - 22 June 2012, pp.1025-1035

Activities in Scientific Journals

Mühendis ve makina, Publication Committee Member, 2007 - Continues

Publication: 11 Citation (WoS): 97 Citation (Scopus): 118 H-Index (WoS): 3 H-Index (Scopus): 4

Non Academic Experience

METU Rensselaer Polythecnic Institute METU Rensselaer Polytechnic Institute METU METU METU METU