

FARUK MERT

ASST. PROF.

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Çubuk/Ankara-TÜRKİYE

International Researcher IDs

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ORCID: 0000-0001-7298-6225

Publons / Web Of Science ResearcherID: P-1774-2014

ScopusID: 55212558300

Yoksis Researcher ID: 46784



Learning Knowledge

Undergraduate

2013 - 2015

Yozgat Bozok University, Faculty Of Engineering-Architecture, Turkey

Doctorate

2008 - 2013

Gazi University, Fen Bilimleri Enstitüsü, Makine Eğitimi (Dr), Turkey

Postgraduate

2004 - 2007

Gazi University, Fen Bilimleri Enstitüsü, Makine Eğitimi (YI) (Tezli), Turkey

Undergraduate

2000 - 2004

Gazi University, Teknik Eğitim Fakültesi, Makine Eğitimi Bölümü, Turkey

Foreign Languages

English, C1 Advanced

German, A1 Beginner

Dissertations

Doctorate, Investigation of microstructural and mechanical properties of AM50 magnesium alloy with addition Ce on die casting, Gazi University, Fen Bilimleri Enstitüsü, Makine Eğitimi (Dr), 2013

Postgraduate, Experimental study of the computer aided tool path generation for 3D machining of the mold core and cavity, Gazi University, Fen Bilimleri Enstitüsü, Makine Eğitimi (YI) (Tezli), 2007

Academic Titles / Tasks

Assistant Professor
2019 - Continues

Ankara Yıldırım Beyazıt University, Teknik Bilimler Meslek Yüksekokulu, Bilgisayar
Teknolojileri Bölümü

Research Assistant
2017 - 2019

Gazi University, Teknoloji Fakültesi, İmalat Mühendisliği Bölümü

Research Assistant
2009 - 2017

Gazi University, Teknik Eğitim Fakültesi, Makine Eğitimi Bölümü

Supported Projects

1. Ün A. E., Mert F., Yıldırım C., Utlu B. K., Şimşek K. Y., Kapıcıoğlu M. İ. S., Kaya H., Çetin S., Köseoğlu A. C., FP1 Project, Youth Equine Practitioners Training With innovative Methods, 2022 - 2025
2. MERT F., PALA E., AKSOY A., ORMAN A., AYHAN H., Project Supported by Higher Education Institutions, COVID-19 Pandemisi ile Mücadelede Sağlık Çalışanları İçin Yeni Bir Koruyucu Siperlik Tasarımı Geliştirilmesi Ve Kullanımının Etkilerinin Araştırılması, 2020 - 2021
3. MERT F., TUBITAK Project, Polimer Gövdeli Yüksek Performanslı Özgün Milli Tabanca Modelinin Geliştirilmesi, 2015 - 2017
4. MERT F., TUBITAK Project, Yüksek Frekanslı Yorulma Test Cihazı Tasarımı ve Prototip İmalatı, 2015 - 2015
5. MERT F., Project Supported by Higher Education Institutions, Akım ölçer ve akustik algılayıcı kullanarak torna tezgâhında kesici takımın durumunun anlık izlenmesi ve yapay sinir ağları ve bulanık mantık ile değerlendirilmesi, 2012 - 2014
6. MERT F., Project Supported by Higher Education Institutions, Plastik Profillerin Ekstrüzyon Yöntemiyle Üretimi Sırasında Yaşanılan Şişme Olayının Sayısal Analizi Ve Deneysel Doğrulanması, 2010 - 2014
7. MERT F., Project Supported by Higher Education Institutions, Magnezyum Alaşımları Basınçlı Döküm Parametrelerinin Mekanik Özelliklere Etkisinin Teorik ve Deneysel Olarak İncelenmesi, 2010 - 2013
8. MERT F., Project Supported by Higher Education Institutions, Plastik Enjeksiyon Kalıplarının 3 Boyutlu İşlenmesinde Bilgisayar Destekli Takımyolu Optimizasyonunun Deneysel Olarak İncelenmesi, 2005 - 2007

Research Infrastructure Information

Mert F., ANKARA YILDIRIM BEYAZIT ÜNİVERSİTESİ MERKEZ ARAŞTIRMA LABORATUVARI UYGULAMA VE ARAŞTIRMA MERKEZİ , October 2018

Designed Programs

Mert F., Associate Degree, SİLAH SANAYİ TEKNİKERLİĞİ, 2024 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Characterization of physical vapor deposited coating on acrylonitrile-butadiene-styrene and polycarbonate substrates** Charakterisierung von physikalisch aufgedampften Beschichtungen (PVD) auf Acrylnitril-Butadien-Styrol- und Polycarbonat-Substraten
Toroslu A., TEKİNER Z., MERT F.
Materialwissenschaft und Werkstofftechnik, vol.53, no.8, pp.867-875, 2022 (SCI-Expanded)

2. **The effects of punch angle in noise and force formation for sheet metal blanking process**
ÇAVUŞOĞLU O., GÜRÜN H., KAFKAS F., Efendioglu S., MERT F.
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, vol.236, no.4, pp.1477-1484, 2022 (SCI-Expanded)
3. **Wear behaviour of hot rolled AZ31B magnesium alloy as candidate for biodegradable implant material**
MERT F.
Transactions of Nonferrous Metals Society of China (English Edition), vol.27, no.12, pp.2598-2606, 2017 (SCI-Expanded)
4. **Dry sliding wear behaviour of as-cast AZ31B magnesium alloy**
Mert F.
Mechanika, vol.23, no.5, pp.728-734, 2017 (SCI-Expanded)
5. **A comparison of wear rate of direct and indirect resin composites: A two-body wear abrasion test**
Yildirim Bicer A. Z., Karakis D., Dogan A., Mert F.
Journal of Composite Materials, vol.49, no.21, pp.2599-2607, 2015 (SCI-Expanded)
6. **Characterisation and corrosion behaviour of plasma electrolytic oxidation coatings on high pressure die cast Mg-5Al-0.4Mn-xCe (x=0, 0.5, 1) alloys**
Muhaffel F., Mert F., Çimenoğlu H., Höche D., Zheludkevich M. L., Blawert C.
Surface and Coatings Technology, vol.269, no.1, pp.200-211, 2015 (SCI-Expanded)
7. **Influence of Ce addition on microstructure and mechanical properties of high pressure die cast AM50 magnesium alloy**
Mert F., Özdemir A., Kainer K. U., Hort N.
Transactions of Nonferrous Metals Society of China (English Edition), vol.23, no.1, pp.66-72, 2013 (SCI-Expanded)
8. **Influence of cerium additions on the corrosion behaviour of high pressure die cast AM50 alloy**
Mert F., Blawert C., Kainer K. U., Hort N.
Corrosion Science, vol.65, pp.145-151, 2012 (SCI-Expanded)

Articles Published in Other Journals

1. **Investigation of the Effect of Bonding Parameters on the Mechanical Strength of the Joint in the Adhesive Bonding of PLA Materials Produced by Additive Manufacturing**
MERT F., ANAÇ N., polat n.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, 2022 (Peer-Reviewed Journal)
2. **3D Printing Technology Applications in Polymeric Dressings**
MERT F., demiral a.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.10, no.2, pp.348-359, 2022 (Peer-Reviewed Journal)
3. **A COMPARISON OF THE DRY SLIDING WEAR BEHAVIOR OF AS-CAST AND HOT ROLLED AZ31B MAGNESIUM ALLOY**
MERT F.
Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.7, no.1, pp.417-426, 2018 (Peer-Reviewed Journal)
4. **Magnezyum Alaşımlarının Basıncılı Döküm Yöntemiyle Kalıplanabilirliğinin Değerlendirilmesi**
MERT F., ÖZDEMİR A., KARATAŞ Ç.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.13, no.3, pp.165-176, 2010 (Peer-Reviewed Journal)
5. **Takım Yolu Stratejilerinin Kalıp Çekirdeklerini İşleme Süresine Etkisinin Deneysel İncelenmesi**
MERT F., ULUER O., GÜLDAŞ A., ÖZDEMİR A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.11, no.3, pp.215-227, 2008 (Peer-Reviewed Journal)

Books & Book Chapters

- 1. 4D BASKI TEKNOLOJİSİ VE GELECEKTEKİ UYGULAMALAR**
MERT F., OLMUŞ Ö.
in: MALZEME TEKNOLOJİSİ VE TASARIM BİLİMLERİNE YENİ YAKLAŞIMLAR, ŞAHİN Yusuf , YALÇINKAYA Senai, Editor, Güven Plus Grup A.Ş. Yayınları, pp.221-248, 2021
- 2. Smart Manufacturing Method in Moulded White Cheese Production**
DOLGUN E. C., KARACA G., MAVUŞ R., MERT F.
in: CURRENT RESEARCH AND ASSESSMENTS FOR AGRICULTURAL SCIENCES, Prof. Dr. Birhan KUNTER, Assoc. Prof. Dr. Nurhan KESKİN, Editor, Cetinje, Montenegro, Ankara, pp.303-316, 2019

Refereed Congress / Symposium Publications in Proceedings

- 1. Simulation of Forward Extrusion Process for Aluminum Alloy to Investigate the Influence of Lubrication on Stress Generated**
ALAMER B., ALJAWAD H., MERT F., KARATAŞ Ç.
1st International Symposium On Automotive Science and Technology (ISASTECH 2019), Ankara, Turkey, 5 - 06 September 2019, pp.175-180
- 2. Investigation for Lubrication Effect on Stress Distribution during ECAP Process by Q Form Analysis to Improve Mechanical Properties for Aluminum Alloy**
ALJAWAD H., ALAMER B., MERT F., KARATAŞ Ç.
1st International Symposium On Automotive Science and Technology (ISASTECH 2019), Ankara, Turkey, 5 - 06 September 2019, pp.410-416
- 3. Gıda Sektöründe Kullanılan Endüstriyel Karıştırıcıların İncelenmesi**
EKİNCİ E., MERT F.
3rd INTERNATIONAL ENGINEERING RESEARCH SYMPOSIUM (INERS'xx19), Düzce, Turkey, 5 - 07 September 2019, pp.162-167
- 4. Q FORM SIMULATION OF TEMPERATURE INFLUENCE ON LOAD DURING COMBINED BACKWARD FORWARD EXTRUSION PROCESS OF CU**
ALAMER B., ALJAWAD H., MERT F., KARATAŞ Ç.
4. International Conference on Material Science and Technology in Kızılcahamam/ANKARA(IMSTEC), Ankara, Turkey, 18 - 20 October 2019, pp.476-480
- 5. THE INFLUENCE OF CURVATURE ANGLE OF ECAP PROCESS ON THE RESIDUAL STRESSES FOR THE COPPER**
ALJAWAD H., ALAMER B., MERT F., KARATAŞ Ç.
4. International Conference on Material Science and Technology in Kızılcahamam/ANKARA(IMSTEC), Ankara, Turkey, 18 October 2019, pp.481-484
- 6. EFFECTS OF ZINC CONTENTS AND VELOCITY ON LOAD DURING BACKWARD EXTRUSION PROCESS IN ALUMINUM ALLOYS**
ALAMER B., ALJAWAD H., MERT F., KARATAŞ Ç.
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in CAPPADOCIA/TURKEY (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019, pp.433-437
- 7. VELOCITY AND DIE ANGLE INFLUENCE ON STRESS DISTRIBUTION DURING ECAP PROCESS FOR ALUMINUM ALLOY**
ALJAWAD H., ALAMER B., MERT F., KARATAŞ Ç.
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in CAPPADOCIA/TURKEY (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019, pp.700-704
- 8. Smart Manufacturing Method in Moulded White Cheese Production**
MERT F., DOLGUN E. C., KARACA G., MAVUŞ R.
HASAT INTERNATIONAL AGRICULTURE AND FOREST CONGRESS, Ankara, Turkey, 21 - 23 June 2019, pp.178

9. **Investigation the Effect of lubrication and Friction Factor on load in Forward Extrusion Process For aluminum Alloy 7075 by Q Form**
ALAMER B., ALJAWAD H., KARATAŞ Ç., MERT F.
2nd International Congress on Engineering and Architecture (ENAR-2019), Muğla, Turkey, 22 - 24 April 2019, pp.1117-1122
10. **Investigation of the Effect of Velocity on Stress For ECAP process of Aluminum alloy 7075 by Q Form**
ALJAWAD H., ALAMER B., MERT F., KARATAŞ Ç.
2nd International Congress on Engineering and Architecture (ENAR-2019), Muğla, Turkey, 22 - 24 April 2019, pp.1185-1192
11. **Numerical Analysis to Investigate the Effect of Velocity on Stress For Backward Extrusion Process of Aluminum Alloy 6082**
ALAMER B., ALJAWAD H., MERT F., KARATAŞ Ç.
2nd International Congress on Engineering and Architecture (ENAR-2019), Muğla, Turkey, 22 - 24 April 2019, pp.1613-1618
12. **Numerical analysis to investigate the effect of friction factor and lubrication on load in ECAP process of Aluminum alloy 6061**
ALJAWAD H., ALAMER B., MERT F., KARATAŞ Ç.
2nd International Congress on Engineering and Architecture (ENAR-2019), Muğla, Turkey, 22 - 24 April 2019, pp.1199-1204
13. **EFFECT OF CURVATURE ANGLE ON ECAP PROCESS RESULTS FOR COPPER ALLOYS**
ALJAWAD H., KARATAŞ Ç., MERT F., ALAMER B.
3rd International Conference on Material Science and Technology in Cappadocia (IMSTEC'18), Nevşehir, Turkey, 17 - 19 September 2018
14. **STUDY THE EFFECT OF TEMPERATURE DURING HOT FORMING FOR COMBINED BACKWARD FORWARD EXTRUSION PROCESS FOR COPPER ALLOY**
ALAMER B., KARATAŞ Ç., MERT F., ALJAWAD H.
3rd International Conference on Material Science and Technology in Cappadocia (IMSTEC'18), Nevşehir, Turkey, 17 - 19 September 2018
15. **Effect of Lubrication and Friction Coefficient on Temperature Distribution for Combined Backward Forward Extrusion Process For Alloy Steel**
ALAMER B., KARATAŞ Ç., MERT F., ALJAWAD H.
6th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 9 - 11 November 2018
16. **Effect of Die Angle on Temperature Distribution For Al6061 in ECAP Process**
ALJAWAD H., KARATAŞ Ç., MERT F., ALAMER B.
6th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 9 - 11 November 2018
17. **Combined Backward Forward Extrusion Process of Aluminium Alloys**
ALAMER B., KARATAŞ Ç., MERT F., ALJAWAD H.
1st International Symposium on Light Alloys and Composite Materials, Karabük, Turkey, 22 - 24 March 2018
18. **Evaluation of ECAP Process of Magnesium Alloys for Biomedical Applications**
ALJAWAD H., KARATAŞ Ç., MERT F., ALAMER B.
1st International Symposium on Light Alloys and Composite Materials, Karabük, Turkey, 22 - 24 March 2018
19. **AISI 304 Çeliğinin Lazer İle Kesilmesinde Kesme Parametrelerinin Yüzey Pürüzlülüğüne Etkisinin İncelenmesi**
MERT F., TUNÇ M., SUR G.
5. Uluslararası Mühendislik Ve Bilim Alanında Yenilikçi Teknolojiler Sempozyumu (ISITES-2017), Baku, Azerbaijan, 29 September - 01 October 2017
20. **Ezerek Parlatma İşleminin AZ31B Magnezyum Alaşımı Parçalarda Yüzey Pürüzlülüğü Ve Silindirikliğe Etkisinin İncelenmesi**

MERT F.

Uluslararası Mühendislik Araştırmaları Sempozyum Programı (UMAS-2017), Düzce, Turkey, 11 - 13 September 2017

21. **OTOMOTIV ENDÜSTRISİNDE MAGNEZYUM ALAŞIMI UYGULAMLARI**

MERT F.

1. Uluslararası Malzeme Bilimi ve Teknolojisi Konferansı (IMSTEC-2016), Nevşehir, Turkey, 6 - 08 April 2016

22. **Characterization and wear behaviour of MAO on high pressure die cast AM50 magnesium alloy**

MERT F.

6th Symposium on Biodegradable Metals, Maratea, Italy, 24 - 29 August 2014

23. **Plastik Enjeksiyon Kalıplarında Maliyet Tahmini**

KARAAĞAÇ İ., ULUER O., GÜRÜN H., MERT F.

1. Uluslararası Plastik Kauçuk Teknolojileri Sempozyumu ve Ürün Sergisi, Ankara, Turkey, 29 - 31 May 2013, pp.29-40

24. **Kemik Tedavilerinde Kullanılan Biyobozunur İmplant Malzemeler**

MERT F., GÜRÜN H., KARAAĞAÇ İ., ULUER O.

1. Uluslararası Plastik Kauçuk Teknolojileri Sempozyumu ve Ürün Sergisi, Ankara, Turkey, 29 - 31 May 2013, pp.65-71

25. **MAGNEZYUM ALAŞIMLARININ İŞLENMESİ**

MERT F.

3.Ulusal Talaşlı İmalat Sempozyumu (UTIS-2012), Ankara, Turkey, 4 - 05 October 2012, pp.282-288

26. **AM50 MAGNEZYUM ALAŞIMININ BASINÇLI DÖKÜMÜNDE CİDAR KALINLIĞININ MİKROYAPI ÜZERİNE ETKİSİ**

MERT F.

14. Uluslararası Malzeme Sempozyumu (IMSP'2012), Denizli, Turkey, 10 - 12 October 2012, pp.138-143

27. **Corrosion Behaviour of High Pressure Die Cast Mg-5Al-0.4Mn-xCe(x=0, 0.5, 1) Alloys**

MERT F., BLAWERT C., KAINER K. U., HORT N.

9th International Conference on Magnesium Alloys and Their Applications (Mg2012), Vancouver, Canada, 8 - 12 July 2012, pp.203-208

28. **Microstructure and mechanical properties of high pressure die cast AM50 magnesium alloy containing Ce**

Mert F., Özdemir A., Kainer K. U., Hort N.

Magnesium Technology 2012 - TMS 2012 Annual Meeting and Exhibition, Orlando, FL, United States Of America, 11 - 15 March 2012, pp.149-154

29. **Magnezyum Alaşımlarının Basınçlı Dökümü ve Otomotivdeki Uygulamaları**

MERT F., ÖZDEMİR A.

6. Uluslararası İleri Teknolojiler Sempozyumu (IATS-2011), Elazığ, Turkey, 16 - 18 May 2011, pp.50-55

30. **Takım Yolu Stratejilerinin Kalıp Çekirdeklerini İşleme Süresine Etkisinin Deneysel İncelenmesi**

ÖZDEMİR A., MERT F.

11. OTOMOTİV SEMPOZYUMU-KALIPÇILIK VE TASARIM, Turkey, 8 - 09 May 2009, pp.320-327

Academic and Administrative Experience

2021 - Continues	Deputy Director of the Center	Ankara Yıldırım Beyazıt University
2023 - 2026	Head of Department	Ankara Yıldırım Beyazıt University, Teknik Bilimler Meslek Yüksekokulu, Bilgisayar Teknolojileri Bölümü
2020 - 2020	Head of Department	Ankara Yıldırım Beyazıt University, Teknik Bilimler Meslek Yüksekokulu, Ulaştırma Hizmetleri

Advising Theses

Anaç N., Mert F., PLA VE ABS MALZEMELERİNDEN EKLEMELİ İMALATLA ÜRETİLEN PARÇALARIN YAPIŞTIRILMASI İŞLEMİNDE YAPIŞTIRMA PARAMETRELERİNİN BAĞLANTININ MEKANİK DAYANIMINA ETKİSİNİN İNCELENMESİ, Postgraduate, N.POLAT(Student), 2022

Mert F., The effect of pressure intensity and duration on the residual stresses induced by backward-forward extrusion of polygonal rods and tubes, Doctorate, B.BAKIR(Student), 2021

Mert F., The influence of process parameters on microstructures and mechanical properties of magnesium alloy by ecap process, Doctorate, H.HASHEM(Student), 2021

Patent

Mert F., Yeni nesil iş güvenliği gözlüğü, Patent, CHAPTER A Human Needs, The Invention Registration Number: 2016 20386 , Standard Registration, 2019

MERT F., Motor ve şanzıman yağı soğutucusu, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, 2017

Metrics

Publication: 45

Citation (Scopus): 109

H-Index (Scopus): 4

Research Areas

Modelling and Analysis of Production Systems, Technology and Innovation Management, Tribology, Machine Design, Computer Aided Design and Manufacturing, Casting Methods, Non-traditional manufacturing methods, Material, Plastic Forming Methods, Machining Methods, Biomechanics, Mechanical Testing, Testing and Control of Materials, Mechanical Properties, Corrosion and Corrosion Protection, Composites, Polymeric Materials, Biomaterials, Thermal Treatment, Material Characterization, Metallic Materials, Surface Finishing Processes, Principles of Foundry Technology, Metallic Materials, Non Metallic Materials Materials

Non Academic Experience

Other, Helmholtz-Zentrum Geesthacht, Magnesium Innovation Centre (MagIC)