

# ERTAN KÖSEDAĞ

## ASSOC. PROF.

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### International Researcher IDs

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### Learning Knowledge

Doctorate  
2017 - 2020

Erciyes University, Fen Bilimleri Enstitüsü, Turkey

Postgraduate  
2014 - 2017

Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü /  
Mekanik Anabilim Dalı, Turkey

Undergraduate  
2008 - 2013

Ataturk University, Mühendislik Mimarlık Fakültesi, Makina Mühendisliği Bölümü,  
Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Polimer - metal matrisli kompozitlerden oluşturulmuş sandviç yapıların balistik davranışları Ballistic behavior of sandwich structures constructed from polymer-metal matrix composites, Erciyes University, Fen Bilimleri Enstitüsü, 2020

Postgraduate, Pomza takviyeli magnezyum matrisli kompozit üretimi ve karakterizasyonu Manufacturing and characterization of pumice reinforced magnesium matrix composite, Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2017

### Academic Titles / Tasks

Assistant Professor  
2021 - Continues

Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü

Research Assistant PhD  
2020 - 2021

Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü

Research Assistant

2017 - 2020

Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği

Research Assistant

2014 - 2017

Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü

## Supported Projects

1. Köseadağ E., AKBAŞ N., Project Supported by Higher Education Institutions, Eklemeli İmalat Yöntemiyle Üretilmiş Dolgu Malzemesinin Çarpışma Kutularının Ezilme Davranışına Etkisi, 2024 - Continues
2. Köseadağ E., ARAZ Z., Project Supported by Higher Education Institutions, Kompozit Malzemeden İmal Edilmiş Çarpışma Kutularında Fiber Tipinin Enerji Soğurma Yetenekleri Üzerindeki Etkisi, 2023 - Continues
3. Köseadağ E., EKİCİ R., Project Supported by Higher Education Institutions, Al6061B4CSiC Hibrit Metal Matrisli Kompozitlerin Düşük Hızlı Darbe Davranışlarının İncelenmesi, 2023 - Continues
4. Köseadağ E., TAY M., Project Supported by Higher Education Institutions, Farklı Açılarla Sarılmış Cam Elyaf Takviyeli Polimer Matrisli Kompozitten Üretilen Silindirik Çarpışma Kutularının Enerji Sönümleyebilme Kabiliyetlerinin İncelenmesi, 2023 - 2024
5. Köseadağ E., Erkek B., ADİN H., Project Supported by Higher Education Institutions, GRAFEN KATKILI HİBRİT KOMPOZİT MALZEMELERDEN ÜRETİLMİŞ SİLİNDİRİK KUTULARIN EZİLME DAVRANIŞLARI, HASAR ANALİZLERİ VE YAŞLANMA ETKİSİNİN İNCELENMESİ, 2023 - 2024
6. Köseadağ E., Ekici R., Project Supported by Higher Education Institutions, Polimer - Metal Matrisli Kompozitlerden Oluşturulmuş Sandviç Yapıların Balistik Davranışları, 2018 - 2021
7. Ekici R., Köseadağ E., Çalışkan U., Project Supported by Higher Education Institutions, Partikül Dolgulu Fiber Takviyeli Polimer Matrisli Kompozit malzemelerin Darbe davranışları üzerine Yapay Yaşlandırmanın Etkisi, 2019 - 2020
8. Aydoğmuş T., Dikici B., Koç S., Yavuz H. İ., Bayram A., TUBITAK Project, Titanyum-Nikel (TiNi) ile Takviye Edilmiş Magnezyum Bazlı Kompozitlerin Geliştirilmesi, 2016 - 2019
9. Aydoğmuş T., Köseadağ E., Project Supported by Higher Education Institutions, Pomza Takviyeli Magnezyum Matrisli Kompozit Üretimi Ve Karakterizasyonu, 2016 - 2017
10. TUBITAK Project, Beta ()-Tipi Titanyum Alaşımlarının Vücut Entegrasyonunu Ve Biyouyumluluğunu İyileştirmek Amacıyla Sol-Jel Yüzey Modifikasyon İşlemleri İle Biyoaktif Hibrid Kaplamalar İle Kaplanması Ve Karakterizasyonu, 2014 - 2017
11. Dikici B., Topuz M., Köseadağ E., BEDİR F., Project Supported by Higher Education Institutions, Al-Cu Matrisli Kompozitlerin Mekanik ve Korozif Özellikleri Üzerine Yaşlandırma Isıl İşlemi ve Kuvvetlendirici Faz Hacim Oranının Birleşik Etkisinin Araştırılması, 2015 - 2016

## Published journal articles indexed by SCI, SSCI, and AHCI

1. **Microstructure and Mechanical Behavior of Pumice Particle Reinforced Magnesium Matrix Composites**  
Aydogmus T., Köseadağ E.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, 2024 (SCI-Expanded)
2. **Low-Velocity Impact Behaviors of B4C/SiC Hybrid Ceramic Reinforced Al6061 Based Composites: An Experimental and Numerical Study**  
Köseadağ E., Ekici R.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.14, no.16, pp.1-30, 2024 (SCI-Expanded)

3. **Hybridization effect on energy absorption capacity of composite crash boxes**  
Erkek B., Köseadağ E., Adin H.  
Polymer Composites, vol.45, no.13, pp.12349-12361, 2024 (SCI-Expanded)
4. **The effect of halloysite nanotubes reinforced epoxy filler on the crushing behavior of aluminum tubes**  
Köseadağ E.  
Journal of Applied Polymer Science, vol.141, no.3, 2024 (SCI-Expanded)
5. **Effect of SiC and graphene nanoparticles on the mechanical properties of carbon fiber-reinforced epoxy composites**  
Köseadağ E., EKİCİ R., Yıldız N., ÇALIŞKAN U.  
Polymer Composites, vol.44, no.12, pp.8578-8588, 2023 (SCI-Expanded)
6. **Effect of artificial aging on 3-point bending behavior of glass fiber/epoxy composites**  
Köseadağ E.  
Journal of Reinforced Plastics and Composites, vol.42, no.21-22, pp.1147-1153, 2023 (SCI-Expanded)
7. **Low-velocity and ballistic impact resistances of particle reinforced metal-matrix composites: An experimental study**  
Köseadağ E., Ekici R.  
JOURNAL OF COMPOSITE MATERIALS, vol.56, no.7, pp.991-1002, 2022 (SCI-Expanded)
8. **Effect of stacking sequence and metal volume fraction on the ballistic impact behaviors of ARALL fiber-metal laminates: An experimental study**  
Köseadağ E., Aydın M., Ekici R.  
POLYMER COMPOSITES, vol.43, no.3, pp.1536-1545, 2022 (SCI-Expanded)
9. **The effect of artificial aging on the impact behavior of SiC nanoparticle-glass fiber-reinforced polymer matrix composites**  
Köseadağ E., Çalışkan U., Ekici R.  
POLYMER COMPOSITES, vol.43, no.2, pp.964-976, 2022 (SCI-Expanded)
10. **Repeated low-velocity impact responses of SiC particle reinforced Al metal-matrix composites**  
Ekici R., Köseadağ E., Demir M.  
CERAMICS INTERNATIONAL, vol.48, no.4, pp.5338-5351, 2022 (SCI-Expanded)
11. **Low-velocity impact performance of B4C particle-reinforced Al 6061 metal matrix composites**  
Kosedag E., Ekici R.  
MATERIALS RESEARCH EXPRESS, vol.6, no.12, 2019 (SCI-Expanded)

### Articles Published in Other Journals

1. **Response of trigger type to crash box energy absorption performance**  
KÖSEDAĞ E.  
ENGINEERING SCIENCES, vol.13, no.1, pp.123-130, 2024 (Peer-Reviewed Journal)
2. **Investigation of the Effect of Filling Ratio on Mechanical Properties of Pumice Filled Epoxy-Based Composites.**  
KÖSEDAĞ E.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.11, no.2, pp.431-438, 2023 (Peer-Reviewed Journal)
3. **Effect of Section Geometry and Material Type on Energy Absorption Capabilities of Crash Boxes**  
KÖSEDAĞ E., İŞLER D.  
Karaelmas Fen ve Mühendislik Dergisi, vol.13, no.1, pp.42-51, 2023 (Peer-Reviewed Journal)
4. **Impact Behavior of Aramid Reinforced Polymer Matrix Composites Produced By Hot Press-Prepreg Method**  
Köseadağ E., Ekici R.  
Avrupa Bilim ve Teknoloji Dergisi, vol.28, pp.84-90, 2021 (Peer-Reviewed Journal)

5. **Free Vibration Analysis of Foam-Core Sandwich Structures**  
Kösedağ E., Ekici R.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.24, no.1, pp.69-74, 2021 (ESCI)
6. **PARTİKÜL TAKVİYELİ METAL MATRİSLİ KOMPOZİTLERİNDARBE DAVRANIŞLARI ÜZERİNE BİR DERLEME**  
Kösedağ E., Ekici R.  
ENGINEERING SCIENCES, vol.8, no.1, pp.384-393, 2019 (Peer-Reviewed Journal)
7. **Comparison of the low-velocity impact behaviors of SiC and Pumice particle-reinforced metal matrix composites**  
Ekici R., Kösedağ E.  
International Journal of Mechanical and Production Engineering, vol.5, no.10, pp.101-105, 2017 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

1. **LONG-TERM WATER ABSORPTION RESISTANCE AND EPOXY STABILIZATION OF WOOD-EPOXY COMPOSITES**  
KÖSEDAĞ E.  
EL RUHA 11. INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCH, Şanlıurfa, Turkey, 7 - 09 February 2024, pp.227-233
2. **EXPERIMENTAL INVESTIGATION ON THE COMPRESSIVE STRENGTH OF EPOXY COMPOSITES REINFORCED WITH GRAPHENE NANOTUBES**  
KÖSEDAĞ E.  
1. BİLSEL INTERNATIONAL KORYKOS SCIENTIFIC RESEARCHES AND INNOVATION CONGRESS, 27-28 JANUARY,2024, Mersin, Turkey, 27 - 28 January 2024, pp.596
3. **INVESTIGATION OF ENERGY ABSORPTION CAPABILITIES OF CYLINDRICAL CRASH BOXES MADE OF GLASS FIBER REINFORCED POLYMER MATRIX COMPOSITE WRAPPED AT DIFFERENT ANGLES**  
KÖSEDAĞ E., TAY M.  
EGE 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES December 22-24, Izmir, İzmir, Turkey, 22 December 2023, pp.508
4. **MECHANICAL PROPERTIES OF WASTE WOOD POWDER REINFORCED POLYMER MATRIX COMPOSITES**  
KÖSEDAĞ E.  
2. BİLSEL INTERNATIONAL TRUVA SCIENTIFIC RESEARCHES AND INNOVATION CONGRESS, Çanakkale, Turkey, 16 - 17 December 2023, pp.191-200
5. **THE EFFECT OF FIBRE TYPE ON WATER ABSORPTION IN FIBRE REINFORCED POLYMER MATRIX COMPOSITE CRASH BOXES**  
ERKEK B., KÖSEDAĞ E., ADİN H.  
5TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS, Rize, Turkey, 8 - 10 November 2023, pp.36-37
6. **CHARACTERIZATION OF SOME PHYSICAL PROPERTIES OF FILLED EPOXY COMPOSITES**  
KÖSEDAĞ E.  
3rd INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY STUDIES, UMMAN, 28 June 2023
7. **EFFECT OF FIBER ANGLE ON ENERGY ABSORPTION IN CFRP CRASH BOXES: A NUMERICAL STUDY**  
KÖSEDAĞ E.  
3rd INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY STUDIES, UMMAN, 28 June 2023
8. **Impact Behavior of Aramid Reinforced Polymer Matrix Composites Produced By Hot Press-Prepreg Method**  
KÖSEDAĞ E., EKİCİ R.  
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.108

9. **Thermal Performance of Functional Graded Composite Material**  
Gökaslan M. Y., Topuz M., Köseadağ E.  
3rd International Eurasian Conference on Science, Engineering and Technology, Ankara, Turkey, 15 - 17 December 2021, pp.75
10. **Development of pumice reinforced magnesium based composites**  
Sevin D., Köseadağ E., Kelen F., Aydoğmuş T.  
International Pumice and Perlite Symposium, Bitlis, Turkey, 4 - 06 November 2021, pp.12-13
11. **Mechanical Behavior of AL6061-Pumice Functionally Graded Composite Materials**  
Köseadağ E., Topuz M., Gökaslan M. Y.  
International Pumice and Perlite Symposium, Bitlis, Turkey, 4 - 06 November 2021, pp.27
12. **Production and characterization of pumice reinforced Al6061 matrix functional graded composite materials**  
Topuz M., Köseadağ E., Gökaslan M. Y.  
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.656
13. **EFFECT OF ARTIFICIAL AGING ON IMPACT RESISTANCE OF GLASS FIBER REINFORCED POLYMER MATRIX COMPOSITES**  
Köseadağ E., Ekici R.  
6th INTERNATIONAL APPLIED SCIENCES CONGRESS, Van, Turkey, 21 - 23 May 2021, pp.34
14. **Numerical Analysis Of Impact Behavior Of SiC / Al6061 Metal Matrix Composites**  
Köseadağ E., Ekici R.  
ANATOLIAN CONGRESSES, 6th INTERNATIONAL APPLIED SCIENCE CONGRESS MAY , Van, Turkey, 21 - 23 May 2021, pp.35-36
15. **THE EFFECT OF PARTICLE FILLING ON IMPACT BEHAVIOR IN GLASS FIBER REINFORCED POLYMER MATRIX COMPOSITES**  
Köseadağ E., Çalışkan U., Ekici R.  
9th INTERNATIONAL EUROPEAN CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL MEDICAL SCIENCES, Bursa, Turkey, 8 - 10 November 2019, pp.32-41
16. **DÜŞÜK HIZLI DARBENİN METAL MATRİSLİ KOMPOZİTLERİN SERTLİKLERİ ÜZERİNDEKİ ETKİSİ**  
Güçlü E., Köseadağ E., Ekici R., Apalak Z. G.  
2. ULUSLARARASI ERCİYES BİLİMSEL ARAŞTIRMALAR KONGRESİ, Kayseri, Turkey, 27 - 29 September 2019, pp.35
17. **High Temperature Mechanical Properties of Magnesium/Pumice Composites Produced by Powder Metallurgy**  
Köseadağ E., Aydoğmuş T.  
3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 October 2018, pp.798
18. **Processing and Characterization of Pumice Reinforced Magnesium Matrix Composites**  
Köseadağ E., Aydoğmuş T.  
3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 October 2018, pp.797
19. **Free Vibration Analysis of Foam-Core Sandwich Structures**  
KÖSEDAĞ E., EKİCİ R.  
1st International Symposium on Light Alloys and Composite Materials (ISLAC'18) March 22-24, 2018 Karabük, Turkey, Karabük, Turkey, 22 - 24 March 2018, pp.72-73
20. **Effect of Fibre Orientation Angle on The Free Vibration of Composite Sandwich Beams with Foam-Core**  
Ekici R., Köseadağ E.  
1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), Karabük, Turkey, 22 - 24 March 2018, pp.173-175
21. **The Unusual Reinforcement Materials Used in Production of Magnesium Matrix in-situ Composites and Usability of Pumice**

Kösedağ E., Aydoğmuş T.

8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.1037-1045

22. **Microhardness Behavior of in-situ Magnesium / Pumice Composites with Different Reinforcement Contents**

Kösedağ E., Aydoğmuş T.

8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.2923-2930

23. **The Effect of Ceramic and Metallic Reinforcement Materials on the Mechanical Properties of Magnesium Matrix Composites**

Kösedağ E., Aydoğmuş T.

International Conference on Materials Science and Technology in Cappadocia, Nevşehir, Turkey, 6 - 08 April 2016, pp.842-848

## Academic and Administrative Experience

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2022 - Continues **Head of Department**

Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü

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## Patent

Kösedağ E., Ekici R., BALİSTİK DİRENÇ SAĞLAMAK ÜZERE, METAL MATRİSLİ KOMPOZİT (MMK) VE POLİMER MATRİSLİ KOMPOZİT (PMK) TABAKALARDAN ÜRETİLMİŞ YENİ BİR ÇEŞİT SANDVIÇ YAPI, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: No: TR 2022 014485 B , Standard Registration, 2024

## Research Areas

Mechanical Engineering, Solid Mechanics, Fracture Mechanics, Finite Element Methods, Biomechanics, Mechanical Testing, Testing and Control of Materials, Mechanical Properties, Composites, Polymeric Materials, Material Characterization, Powder Metallurgy