

## Prof. Halil ÖZER

### Personal Information

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### Research Areas

Mechanical Engineering, Mechanical, Solid Mechanics, Engineering and Technology

### Academic Titles / Tasks

Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2014 - Continues

### Academic and Administrative Experience

Head of Department, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2018 - Continues

Head of Department, Zonguldak Bülent Ecevit University, Faculty Of Engineering, 2010 - 2010

Head of Department, Zonguldak Bülent Ecevit University, Faculty Of Engineering, 2009 - 2010

Deputy Head of Department, Zonguldak Bülent Ecevit University, Faculty Of Engineering, 2001 - 2004

### Advising Theses

ÖZER H., Kendi-kendini Onaran Akıllı Yapıştırıcı Kırılma Tokluğunun Nümerik ve Deneysel Olarak Belirlenmesi, Doctorate, E.Erbayrak(Student), 2018

ÖZER H., Bünyesinde Çatlak Bulunan Levhanın Boron-Epoksi Yama ile Tamirinde İki Farklı Yapıştırıcıyı Birlikte (Hibrit) Kullanmanın Tek Bindirmeli Bağlantının Kayma Gerilmelerine Etkisinin İncelenmesi, Postgraduate, M.Çay(Student), 2016

ÖZER H., Reddy-Bickford Çatlaklı Kiriş Titreşiminin Teorik, Nümerik ve Deneysel Olarak İncelenmesi, Doctorate, M.A. (Student), 2016

ÖZER H., Yaşlandırma Isıl İşleminin AA 7075 Malzemeli Dikdörtgen Plağın Burkulma Yükü Üzerine Etkisi, Postgraduate, Ö.Öz(Student), 2016

ÖZER H., Yapıştırıcılar ve köşeleri Yuvarlatılmış Basamaklı Bindirme Yapıştırıcı Bağlantılarda Gerilme Analizi, Postgraduate, A.Çalık(Student), 2016

ÖZER H., Hibrit Yapıştırma Bağlantı Hasarının Nümerik ve Deneysel Olarak İncelenmesi, Doctorate, Ö.Öz(Student), 2016

ÖZER H., Enine Dikişli Kaynak Bağlantılarının Sonlu Elemanlar Metodu ile Gerilme Analizi, Postgraduate, S.Arı(Student), 2016

ÖZER H., Yassı Çelik Haddeme İşleminde Merdane Yük Parametrelerinin İncelenmesi ve Merdane Konumlandırma, Postgraduate, M.Süleyman(Student), 2016

ÖZER H., Araldite 2015 Epoksi Yapıştırıcı Mod 1 Kırılma Tokluk Değerinin Deney ve Sonlu Elemanlar Metodu ile Belirlenmesi, Postgraduate, E.Erbayrak(Student), 2016

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Effect of loading rate on cohesive parameters of the adhesive Araldite 2015**  
Erbayrak E., Özer H.  
MATERIALS TESTING, vol.62, pp.943-949, 2020 (Journal Indexed in SCI)
- II. **The effects of curing temperature on fracture energy and cohesive parameters for the adhesive Araldite 2015**  
ÖZER H., Erbayrak E.  
JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, vol.32, no.12, pp.1287-1312, 2018 (Journal Indexed in SCI)
- III. **The use of the exponential Drucker-Prager material model for defining the failure loads of the mono and bi-adhesive joints**  
ÖZER H., ÖZ Ö.  
INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, vol.76, pp.17-29, 2017 (Journal Indexed in SCI)
- IV. **An experimental investigation on the failure loads of the mono and bi-adhesive joints**  
ÖZ Ö., ÖZER H.  
JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, vol.31, pp.2251-2270, 2017 (Journal Indexed in SCI)
- V. **A Comparative Evaluation of Numerical and Analytical Solutions to the Biadhesive Single-Lap Joint**  
ÖZER H., ÖZ Ö.  
MATHEMATICAL PROBLEMS IN ENGINEERING, 2014 (Journal Indexed in SCI)
- VI. **Variational Principles for Bending and Vibration of Partially Composite Timoshenko Beams**  
Ozer H.  
MATHEMATICAL PROBLEMS IN ENGINEERING, 2014 (Journal Indexed in SCI)
- VII. **On the von Mises elastic stress evaluations in the bi-adhesive single-lap joint: a numerical and analytical study**  
ÖZ Ö., ÖZER H.  
JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, vol.28, no.21, pp.2133-2153, 2014 (Journal Indexed in SCI)
- VIII. **Three dimensional finite element analysis of bi-adhesively bonded double lap joint**  
ÖZER H., ÖZ Ö.  
INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, vol.37, pp.50-55, 2012 (Journal Indexed in SCI)
- IX. **Application of the variational iteration method to thin circular plates**  
Ozer H.  
INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION, vol.9, no.1, pp.25-30, 2008 (Journal Indexed in SCI)
- X. **A variational formulation and analysis of polar orthotropic circular plates using an energy principle, part II: Thick plates**  
Ozer H.  
SCIENCE AND ENGINEERING OF COMPOSITE MATERIALS, vol.15, no.1, pp.59-70, 2008 (Journal Indexed in SCI)
- XI. **A comparative analysis of Mindlin and Kirchhoff bending solutions for nonlinearly tapered annular plate with free edges**  
Ozer H.  
ARCHIVE OF APPLIED MECHANICS, vol.77, no.6, pp.393-405, 2007 (Journal Indexed in SCI)
- XII. **A Variational Formulation and Analysis of Polar Orthotropic Circular Plates Using an Energy Principle Part I Thin Plates**  
ÖZER H.  
Science and Engineering of Composite Materials, vol.14, pp.317-328, 2007 (Journal Indexed in SCI Expanded)
- XIII. **Application of the variational iteration method to the boundary value problems with jump discontinuities arising in solid mechanics**  
Ozer H.  
INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION, vol.8, no.4, pp.513-518, 2007 (Journal Indexed in SCI)
- XIV. **A computer software for simulating single-compartmental model of neurons**

## Articles Published in Other Journals

- I. **Recent Advances in Adhesively Bonded Lap Joints Having Bi-Adhesive and Modulus-Graded Bondlines: A Critical Review**  
ÖZ Ö., ÖZER H.  
REVIEWS OF ADHESION AND ADHESIVES, vol.6, no.1, pp.82-103, 2018 (Journal Indexed in ESCI)
- II. **EFFECT OF ADHESIVE TYPE ON FREE TRANSVERSE VIBRATION OF SINGLE LAP JOINT**  
ERBAYRAK E., ÖZER H., ERBAYRAK S., ÇEPER K., AĞIRKOL B., GÜNER E.  
INTERNATIONAL JOURNAL OF ADVANCES ON AUTOMOTIVE AND TECHNOLOGY, vol.2, pp.104-107, 2018  
(Refereed Journals of Other Institutions)
- III. **Hibrit Yapıştırma Düzeninin Bindirme Bağlantı Mukavemetine Etkileri**  
ÖZ Ö., ÖZER H.  
Mühendis ve Makina, vol.57, pp.63-72, 2016 (Other Refereed National Journals)
- IV. **The Effects of the Aging Heat Treatment on Buckling Load of 7075 Aluminum Alloy Rectangular Plate**  
ÖZ Ö., ÖZER H.  
e-Journal of New World Sciences Academy, vol.8, pp.263-271, 2009 (Other Refereed National Journals)
- V. **Aspects of the Gurson Model and its Applications**  
ÖZER H., Günay D.  
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.8, no.3, pp.327-334, 2003 (Other Refereed National Journals)
- VI. **Düz Dişlilerde Profil Kaydırma Faktörünün, Çatlak İlerleme Yolu Üzerindeki Etkisi (The Effect of Addendum Modification Coefficient on Crack Propagation Path at Addendum Modified Gears)**  
ÖZER H., Günay D.  
Makine Tasarımı ve İmalat Dergisi (Journal of Mechanical Design and Production), vol.4, no.2, pp.89-95, 2001  
(Other Refereed National Journals)
- VII. **Enine Dikişli Kaynak Bağlantılarında Gerilme Analizi (Stress Analysis in the Transverse Fillet Weld Joints)**  
Elmas M., Aydemir A., Çağlar N., ÖZER H.  
Mühendislik Bilimleri Dergisi (Journal of Engineering Sciences), vol.3, no.2, pp.323-329, 1997 (Other Refereed National Journals)
- VIII. **Düz Dişlilerde Jant Kalınlığının Diş Kökü Gerilmeleri Üzerindeki Etkisi (Effect of Rim Thickness on the Root Stresses of Spur Gear Tooth)**  
ÖZER H., Aydemir A.  
Mühendislik Bilimleri Dergisi (Journal of Engineering Sciences), vol.3, no.1, pp.299-303, 1997 (Other Refereed National Journals)
- IX. **The Effect of Addendum Modification Coefficient on Tooth Stresses of Spur Gear**  
ÖZER H., Aydemir A.  
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.1, no.1, pp.36-43, 1996 (Other Refereed National Journals)
- X. **Torsional Stresses in the Transverse Fillet Weld Tubular Joints**  
ÖZER H., Aydemir A.  
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.1, no.1, pp.29-35, 1996 (Other Refereed National Journals)

## Books & Book Chapters

- I. **Recent Advances in Adhesively Bonded Lap Joints Having Bi-Adhesive and Modulus-Graded Bondlines: A Critical Review**  
ÖZ Ö., ÖZER H.  
in: Progress in Adhesion and Adhesives, K.L. Mittal, Editor, Scrivener Publishing LLC, pp.77-97, 2019
- II. **Introductory Chapter: Structural Adhesive Bonded Joints**  
ÖZER H.  
in: Applied Adhesive Bonding in Science and Technology, Özer H., Editor, Intech, Rijeka, pp.3-10, 2018
- III. **Introductory Chapter: Structural Adhesive Bonded Joints**  
ÖZER H.  
in: Applied Adhesive Bonding in Science and Technology, Halil Özer, Editor, IntechOpen, Londrina, pp.3-10, 2018
- IV. **Experimental Investigation on the Self-Healing Efficiency of Araldite 2011 Adhesive Reinforced with Thermoplastic Microparticles**  
ÖZER H., ERBAYRAK E.  
in: ADHESIVES APPLICATIONS AND PROPERTIES, Rudawska A., Editor, Intech, Rijeka, pp.169-185, 2016

### Refereed Congress / Symposium Publications in Proceedings

- I. **Variational Approach for Solving Nonlinear Differential Equations Arising in Functionally Graded Adhesive Joints**  
ÖZER H.  
Euro Asia 4. International Congress on Applied Sciences, KIEV, Ukraine, 27 - 29 September 2019, pp.30
- II. **NUMERICAL INVESTIGATION OF DYNAMIC BEHAVIOR OF COMPOSITE BEAMS CONNECTED WITH SINGLE-LAP JOINT**  
USAL M. M. A. , ÖZER H.  
International Natural Science, Engineering and Materials Technology Conference, 9 - 10 September 2019
- III. **Study on the Self-Healing Efficiency of Araldite Av138M Adhesive**  
ERBAYRAK E., ÖZER H.  
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019
- IV. **Çekmeye Maruz Köşeleri Yuvarlatılmış Basamaklı Bindirme Bağlantısının Gerilme Analizi**  
ÇALIK A., ÖZER H.  
3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 October 2018, vol.1, pp.1634-1635
- V. **Sultan II. Abdülhamid Döneminde Osmanlıda Teknoloji**  
Koyun A., Özer H., Şahin İ., Kiyak M.  
Vefatının 100. Yılında Sultan II. Abdülhamid ve Dönemi Uluslararası Kongresi, İstanbul, Turkey, 22 - 24 October 2018, pp.390-391
- VI. **Sultan II. Abdülhamid Döneminde Osmanlıda Tarihi**  
KOYUN A., ÖZER H., ŞAHİN İ., KIYAK M.  
Vefatının 100. Yılında Sultan II. Abdülhamid ve Dönemi Uluslararası Kongresi, İstanbul, Turkey, 22 October 2018, pp.390-391
- VII. **EFFECT OF ADHESIVE TYPE ON FREE TRANSVERSE VIBRATION OF SINGLE LAP JOINT**  
ERBAYRAK E., ÖZER H., ERBAYRAK S., ÇEPEK K., AĞIRKOL B., GÜNER E.  
3rd INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING ISTANBUL 2017-19-21 December 2017, Yıldız Technical University, Istanbul, Turkey, 19 - 21 December 2017
- VIII. **Evaluating the Repair Performance of the Cracked Plate Using Adhesive Shear Stresses**  
ÖZER H., ÇAY M.  
5th International Symposium on Innovative Technologies in Engineering and Science, Baku, Azerbaijan, 29 - 30 September 2017, pp.1746-1752
- IX. **ADHESIVE-RECESSING EFFECT ON SHEAR STRESSES ARISING IN SINGLE LAP JOINT**  
ÖZ Ö., ÇEVİK ELEN N., ÖZER H.

Uluslararası Mühendislik Araştırmaları Sempozyumu, Düzce, Turkey, 11 - 13 September 2017

- X. **Numerical and Analytical Investigations on The Stress Distributions in Single Lap Joints**  
ÖZ Ö., ÖZER H.  
4th International Symposium on Innovative Technologies in Engineering and Science (ISITES2016), Antalya, Turkey, 3 - 05 November 2016, pp.625-634
- XI. **Experimental Determination of Mode I Fracture Toughness of Araldite AV138M Adhesive**  
ERBAYRAK E., Özer H., Erbayrak S.  
5th International Conference on Fracture and Damage Mechanics, 01 September 2016
- XII. **EXPERIMENTAL AND NUMERICAL STUDY ON DETERMINATION OF CRITICAL BUCKLING LOAD FOR SINGLE LAP JOINT**  
ERBAYRAK E., Özer H., Özertuğ B., Özbek T., Özdemir Y.  
INTERNATIONAL CONFERENCE ON ENERGY SYSTEMS, 01 December 2015
- XIII. **Effect of Loading Rate on Fracture Energy and Cohesive Parameters of Araldite 2015**  
ÖZER H.  
01 July 2015
- XIV. **Effect of Loading Rate on Fracture Energy and Cohesive Parameters of Araldite 2015. 3rd International Conference on Structural Adhesive Bonding**  
Özer H.  
3rd International Conference on Structural Adhesive Bonding, 01 July 2015
- XV. **Stiffness Prediction for Bi adhesive Single Lap joints**  
ÖZ Ö., ÖZER H.  
1st International Conference on Engineering and Natural Sciences (ICENS), Skopje, Macedonia, 15 - 19 May 2015
- XVI. **Effects of the Mono and Bi adhesive Bondlines on the Shear Stresses in a Cracked Plate Repaired by the Boron epoxy Patch**  
ÖZER H., Çay M.  
International Conference on Advances in Mechanical Engineering (ICAME'15), İstanbul, Turkey, 13 - 15 May 2015
- XVII. **Vakum Ortamında Karıştırma İşleminin Araldite 2015 Epoksi Yapıştırıcının Hasar Yükü Üzerine Etkisi**  
ÖZ Ö., ÖZER H.  
15th International Materials Symposium (IMSP'2014), Denizli, Turkey, 15 - 17 October 2014, pp.1-8
- XVIII. **Determination of Mode I Fracture Toughness for Araldite 2015 Epoxy A Comparative Study**  
ERBAYRAK E., ÖZER H.  
31st Danubia-Adria Symposium on Advances in Experimental Mechanics, Kempten, Germany, 24 September - 27 April 2014, pp.19-20
- XIX. **Comparative Analysis of the Beam Length Effect on Free Vibration of Cracked Beams**  
ÖZER H., Ornek M. A.  
01 July 2012
- XX. **Joint Stress Optimization by the Hybrid Adhesive Lap Joint**  
ÖZER H., ÖZ Ö.  
14th International Conference on Advances in Materials and Processing Technologies (AMPT), İstanbul, Turkey, 13 - 16 July 2011, vol.445, pp.1000-1001
- XXI. **Free Vibration Analysis of Beam with Multiple Cracks**  
ÖZER H., Ornek M.  
01 August 2011
- XXII. **Three Dimensional Finite Element Analysis of Bi Adhesively Bonded Double Lap Joint**  
ÖZER H., ÖZ Ö.  
International Conference on Structural on Adhesive Bonding (AB 2011), Porto, Portugal, 7 - 08 July 2011
- XXIII. **Mühendis ve Mühendisliğin Konumu**  
GÜNAY D., ÖZER H.  
IV. Ulusal Makina Mühendisliği ve Eğitimi Sempozyumu, İstanbul, Turkey, 1 - 03 November 2001, pp.83-94
- XXIV. **Düz Dişlilerde Çatlak Probleminin Sonlu Elemanlar Metodu ile İncelenmesi (An investigating of Crack Problem at Spur Gears by the Finite Element Method)**

ÖZER H., Günay D.

01 September 2001

- XXV. **Düz Dişlilerde Dişkökü Gerilmelerinin Sonlu Elemanlar Yöntemiyle Analizi (An Analysis of Root Stresses of Spur Gear Tooth by the Finite Element Method)**  
ÖZER H., Aydemir A.  
01 September 1996
- XXVI. **Stress Analysis in Cylindrical Adhesive Lap Joints of Pressure Vessels**  
Aydemir A., ÖZER H.
- XXVII. **The Effect of Overload on Fatigue Life in Riveted Parts**  
ÖZER H., Ekmekci N.
- XXVIII. **Evaluation of Crack Propagation in the Profile Shifted Spur Gear**  
ÖZER H., Günay D.
- XXIX. **Determination of Mode 1 Fracture Toughness for Araldite 2015 Epoxy: A Comparative Study. 31st Danubia Adria Symposium on Advances in Experimental Mechanics**  
ERBAYRAK E., Özer H.  
31st Danubia Adria Symposium on Advances in Experimental Mechanics
- XXX. **Linear Free Vibrations of Curved Beam having Variable Cross Section and Concentrated Mass at Free End**  
Altan F., ÖZER H.
- XXXI. **Stress Analysis of Human Tibia under Torsional Loading**  
ÖZER H., Ornek M., Nazlım A., Gündoğdu S.
- XXXII. **Variational Iteration Method for Solving Boundary Value Problems with Jump Discontinuities**  
ÖZER H.
- XXXIII. **Stress Analysis of Human Tibia under Compressive Loading**  
ÖZER H., Nazlım A., Örnek M., Gündoğdu S.
- XXXIV. **Vibration Analysis of Euler-Bernoulli Beam Based on the Variational Iteration Method**  
ÖZER H.
- XXXV. **Artificial Neural Network Approach to Buckling Coefficients of Laminated Orthotropic Rectangular Plates with a Centrally Rectangular Hole**  
Özyiğit H., ÖZER H.
- XXXVI. **Research on Computer Modelling of a Crack and Crack Propagation in the Gear Tooth Fillet**  
ÖZER H., Günay D.
- XXXVII. **Düz Dişlilerde Çatlak İlerleme Yolunun Lineer Elastik Kırılma Mekaniği Yaklaşımı ile Belirlenmesi**  
ÖZER H., Günay D.
- XXXVIII. **The Fuzzy Finite Element Stress Analysis of Spur Gears**  
ÖZER H., Günay D.
- XXXIX. **Tooth Stresses in Addendum Modified Spur Gears**  
ÖZER H., Aydemir A.
- XL. **Vibration Analysis of Cracked Beams**  
ÖZER H., Özyiğit H., Altan F.