#### Assoc. Prof. Mine USLU UYSAL

#### **Personal Information**

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## **Biography**

Mine Uslu Uysal was born in Eskişehir, Turkey, in 1983. She graduated in mechanical engineering in 2005 from the Pamukkale University where she also earned his master degree in 2010 at Department of Mechanical Engineering. In 2009, she joined the Department of Mechanical Engineering, Mechanics Division, Yıldız Technical University as a Research Assistant. She earned her doctorate degree in 2015 under the supervision of Prof. Dr. Uğur Güven at Department of Mechanical Engineering, Yıldız Technical University. Since 2009, she has published archival journals and conference articles about advanced materials behaviors and has also studied projects of The Scientific and Technological Research Council of Turkey (TUBITAK). She started postdoctoral research at University of Kentucky, College of Engineering, 2017

The research activities of Dr. Mine Uslu Uysal focus on functionally gradient materials and polymers, mechanical behavior of adhesively bonded joints and finite element models for engineering systems.

### **Education Information**

Post Doctorate, University of Kentucky, College Of Engineering, Department Of Mechanical Engineering, United States Of America 2017 - 2018

Doctorate, Yildiz Technical University, Faculty Of Mechanical Engineering, Makine Mühendisliği, Turkey 2011 - 2015 Postgraduate, Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey 2007 - 2010 Silesian University Of Technology, Mechanical Engineering, Mechanic, Turkey Continues

Undergraduate, Anadolu University, Faculty Of Business Administration, Department Of Business, Turkey 2003 - 2007 Undergraduate, Yildiz Technical University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 2001 - 2005

### Foreign Languages

English, B2 Upper Intermediate

## Research Areas

# **Academic Titles / Tasks**

Associate Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2019 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2019 - 2019

Research Assistant PhD, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2015 - 2019

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2009 - 2015

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

I. Mechanical characterization of lattice structure produced by additive manufacturing under torsion and compression

Akbay Ö. C., Özdemir B., BAHÇE E., Emir E., USLU UYSAL M.

Journal of Cellular Plastics, vol.60, no.1, pp.3-22, 2024 (SCI-Expanded)

II. Sustainability assessment and optimization for milling of compacted graphite iron using hybrid nanofluid assisted minimum quantity lubrication method

Demir U., Yapan Y. F., Uysal A., Uslu Uysal M.

SUSTAINABLE MATERIALS AND TECHNOLOGIES, vol.38, pp.1-16, 2023 (SCI-Expanded)

III. Orthogonal turning of AISI 310S austenitic stainless steel under hybrid nanofluid-assisted MQL and a sustainability optimization using NSGA-II and TOPSIS

Saatçi E., Yapan Y. F., Uslu Uysal M., Uysal A.

SUSTAINABLE MATERIALS AND TECHNOLOGIES, vol.36, pp.1-18, 2023 (SCI-Expanded)

IV. Virtual Crack Closure Technique on Delamination Fracture Toughness of Composite Materials Based on Epoxy Resin Filled with Micro-Scale Hard Coal

Uysal M.

ACTA PHYSICA POLONICA A, vol.131, no.1, pp.59-61, 2017 (SCI-Expanded)

V. Buckling behaviours of functionally graded polymeric thin-walled hemispherical shells Uysal M.

STEEL AND COMPOSITE STRUCTURES, vol.21, no.4, pp.849-862, 2016 (SCI-Expanded)

VI. Three-Dimensional Finite Element Analysis of Mixed Adhesive Bonded Joints under In-Plane Shear Loading

Uysal M.

ACTA PHYSICA POLONICA A, vol.129, no.4, pp.448-450, 2016 (SCI-Expanded)

VII. Joint Strength Optimization of Bi-Adhesively Bonded Composite-Aluminum Sandwich Structure
Uvsal M.

ACTA PHYSICA POLONICA A, vol.129, no.4, pp.445-447, 2016 (SCI-Expanded)

VIII. A Bonded Plate Having Orthotropic Inclusion in the Adhesive Layer under In-Plane Shear Loading Uysal M., Güven U.

JOURNAL OF ADHESION, vol.92, no.3, pp.214-235, 2016 (SCI-Expanded)

IX. Buckling Behaviour of Short Cylindrical Functionally Gradient Polymeric Materials Uysal M., KREMZER M.

ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1355-1357, 2015 (SCI-Expanded)

X. Buckling of functional graded polymeric sandwich panel under different load cases Uysal M., GÜVEN U.

COMPOSITE STRUCTURES, vol.121, pp.182-196, 2015 (SCI-Expanded)

XI. Strength estimation of adhesively bonded tongue and groove joint of thick composite sandwich structures using genetic algorithm approach

Canyurt O. E., Meran C., Uslu M.

INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, vol.30, no.5, pp.281-287, 2010 (SCI-Expanded)

### Articles Published in Other Journals

I. Delaminasyon İçeren Eğri Eksenli Kompozit Kirişlerin Titreşim Davranışlarının İncelenmesi USLU UYSAL M.

DUMF Mühendislik Dergisi, vol.9, no.2, pp.775-784, 2018 (Peer-Reviewed Journal)

II. Numerical Modeling of Functional Graded TiB coating in Nanoindentation on Determination of Mechanical Properties

USLU UYSAL M.

Materials Today Proceedings, vol.2, no.1, pp.217-223, 2015 (Peer-Reviewed Journal)

III. Investigation of Thermal and Mechanical Loading on Functional Graded Material Plates.

USLU UYSAL M.

International Journal of Mechanical, Aerospace, Industrial and Mechatronics Engineering, vol.7, no.11, pp.1219-1225, 2013 (Peer-Reviewed Journal)

IV. Finite Element Analysis of Stresses on Substrates Coated with Single-Layered and Multi-Layered USLU UYSAL M.

Academic Journal of Science, vol.1, no.3, pp.1-6, 2012 (Peer-Reviewed Journal)

V. Characteristics of Graphite Distributions in Polymeric Functionally Gradient Materials FGMs Manufactured by the Centrifugal Casting Method.

USLU UYSAL M., Kremzer M.

Journal of Arts & Sciences, vol.4, no.2, pp.1-9, 2011 (Peer-Reviewed Journal)

VI. The Effect of Design on Adhesive Joints of Thick Composite Sandwich Structures USLU UYSAL M., CANYURT O. E., MERAM C.

Journal of Achievements in Materials and Manufacturing Engineering, vol.31, no.2, pp.301-305, 2008 (Scopus)

#### Refereed Congress / Symposium Publications in Proceedings

I. Investigation of Design Parameters in Tensile Loads of the Diamond Joints in Composite Structures with a Finite Element Approach

USLU UYSAL M.

3rd International Conference on Basic Sciences, Engineering and Technology, ICBASET 2023, Marmaris, Turkey, 27 - 30 April 2023, vol.22, pp.339-347

II. The Effect of Nano Graphene Reinforcement on Pin and Adhesively Bonded Sandwich Composite Structures

USLU UYSAL M.

3rd International Conference on Basic Sciences, Engineering and Technology, ICBASET 2023, Marmaris, Turkey, 27 - 30 April 2023, vol.22, pp.227-236

III. The Stress Behaviors of Functional Graded Polymeric Materials (FGPMs) Single Lap Joints Subjected to Tensile Load Environments

USLU UYSAL M.

5th International Conference on Advances in Mechanical Engineering: ICAME 2019, İstanbul, Turkey, 17 - 19 December 2019, pp.633-638

IV. Creep Behavior Prediction of Aluminum-Titanium Diboride (Al-TiB2) Metal Matrix Composite using Finite Element Simulation

USLU UYSAL M.

International Science and Technology Conference (ISTEC 2017), Berlin, Germany, 17 July 2017, pp.72

V. Research on Thermal Buckling Behaviour of the Adhesively Bonded Scarf Joints for Glass Connections

USLU UYSAL M.

European Advanced Materials Congress, Stockholm, Sweden, 23 - 25 August 2016

VI. Buckling of Anisotropic/Isotropic Sandwich Plate Assemblies under Shear Loading.
USLU UYSAL M.

International Conference on Computing, Mechanical and Electronics Engineering (ICCMEE'2015), 01 July 2015

VII. Finite Element Analysis of Adhesively Bonded Tongue and Groove Geometry of Thick Composite Structures

USLU UYSAL M.

 $International \ Symposium \ on \ Models \ and \ Modeling \ Methodologies \ in \ Science \ and \ Engineering: MMMse \ 2011., \ 01$   $July \ 2011$ 

## **Supported Projects**

UYSAL A., YAPAN Y. F., USLU UYSAL M., Project Supported by Higher Education Institutions, Hibrit Nanoakışkan Kullanılan Minimum Miktarda Yağlama Yöntemiyle Sürdürülebilir Ezerek Parlatma Prosesinin İncelenmesi, 2023 - Continues

UYSAL A., USLU UYSAL M., YAPAN Y. F., Project Supported by Higher Education Institutions, Ti6Al7Nb Alaşımının Ultrasonik Titreşim Destekli MMY Yöntemiyle Tornalama Performansının İncelenmesi, 2023 - 2024 USLU UYSAL M., BAYER İ., Project Supported by Higher Education Institutions, Nano Grafen Takviyeli Yapıştırıcıların Performansının Deneysel ve Nümerik İncelenmesi, 2022 - 2023

UYSAL A., USLU UYSAL M., Project Supported by Higher Education Institutions, Nano Grafen ve Çok Duvarlı Karbon Nanotüp Katkılı Epoksi Bazlı Yapıştırıcıların Geliştirilmesi ve Kesici Takımlarda Kullanılması, 2015 - 2018 USLU UYSAL M., TUBITAK Project, Kırılma ve çatlak ilerleme analiz sistemi (Fcpas) Aşama 1, 2011 - 2011 USLU UYSAL M., TUBITAK Project, Statik ve Dinamik yüklemeye maruz kalın kompozit laminalarda dil ve oluk birleştirme tekniği ile yapıştırma, parametrelerin incelenmesi ve genetik algoritma yöntemi ile optimum tasarım parametrelerinin bulunması., 2007 - 2009

#### **Metrics**

Publication: 24 Citation (WoS): 64 Citation (Scopus): 145 H-Index (WoS): 5 H-Index (Scopus): 6

#### **Awards**

USLU UYSAL M., IAAM Scientist Medal of year 2016, International Association of Advanced Materials at European Advanced Materials Congress, August 2016

# Non Academic Experience

University of Kentucky