



OLCAY ERSEL CANYURT

PROF.

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Biography

Olcay Ersel Canyurt was born at Kahramankazan, ANKARA. He successfully completed his undergraduate education in the Department of Mechanical Engineering at Gazi University in 1992. He completed his Master's and Doctorate education in the United States. He completed his master's degree at Northeastern University, Boston, Massachusetts, with a GPA of 3.65/4.00, and his PhD Degree at Rensselaer Polytechnic Institute (RPI), Albany, New York, with a GPA of 4.00/4.00, and returned to Turkey in 2003.

During his doctoral studies, he worked as a researcher on cylinder bearing and ring surface coating and wear in the advanced engine design working with Ethanol 85 at General Motors (GM), Research and Development (R&D) Laboratory, Michigan. He worked on rocket warhead design, rocket analysis and simulation at Advanced Innovative Technology (AIT), New York.

He took part in Academic and Research and Development activities at Pamukkale University between 2003-2018. As a project coordinator in TÜBİTAK 1001 BAP projects, he carried out design and analysis studies on the development of mechanical properties of Glass, Carbon, Nano inclusion Composite materials. He was appointed as Associate Professor in 2007 and Full Professor in 2013. He served as the Field Editor of Pamukkale University Engineering Sciences Journal (PAJES) between 2011-2016 and as the Chief Editor of the PAJES between 2016-2018. He contributed to the PAJES being included in the TÜBİTAK ULAKBİM and WOS-ESCI indexing list.

In 2016, he was appointed as a member of the Machinery Manufacturing Technologies Group Advisory Board (DK) of the TUBITAK Technology and Innovation Support Programs Presidency (TEYDEB). He continued his duty as a member of this DK for 3 years.

He worked at Faculty of Technology, Department of Industrial Design Engineering, Gazi University in 2018-2019. He contributed to the R&D strategies of the University as the Vice Coordinator of Gazi University Research and Development Institution between 2019-2020. In 2019, he was appointed to Department of Mechanical Engineering, Faculty of Engineering, Gazi University. He is the Vice Director of Additive Manufacturing Technologies Application and Research Center (EKTAM). He is currently involved in Academic and Research and Development studies.

He works as a project manager of TUBITAK 2244 Project, as a researcher of TUBITAK 1004, Horizon 2020, European Union Cofund projects. In these projects, cooperation with Defense Industry Organizations and Universities continues their joint project studies.

CANYURT, who is married and has one child, has an excellent level of English.

Learning Knowledge

Doctorate 1996 - 2002	Rensselaer Polytechnic Institute, Engineering Faculty, Mechanical, Aerospace, and Nuclear Engineering, United States Of America
Postgraduate 1993 - 1995	Northeastern University, Engineering Faculty, Mechanical Engineering, United States Of America
Undergraduate 1988 - 1992	Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Cellular Models of Computation in Structural Analysis and Design” (Yapı Malzemelerinin Analiz ve Tasarımında Cellular Model tipi Hesaplama Yöntemi, Rensselaer Polytechnic Institute, Mühendislik Fakültesi, 2002
Postgraduate, Thermally stresses in the hybrid composites with crack bridging (Köprü kırılmalı hybrid composit malzemelerde ısıl gerilmeler), Northeastern University, Mühendislik Fakültesi, 1997

Academic Titles / Tasks

Professor 2020 - Continues	Gazi University, Mühendislik Fakültesi, Makina Mühendisliği
Professor 2019 - 2020	Gazi University, Teknoloji Fakültesi, Endüstriyel Tasarım Mühendisliği
Professor 2013 - 2018	Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering
Associate Professor 2007 - 2012	Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering
Assistant Professor 2003 - 2007	Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering

Research Assistant
1993 - 2003

Pamukkale University, Faculty Of Engineering, Department Of Mechanical
Engineering

Supported Projects

1. Canyurt O. E. , TUBITAK Project, Havacılık Ve Uzay Sektörüne Yönelik Yenilikçi Metal Eklemeli İmalat Teknolojileri, Tasarım, Analiz Ve Test Yöntemlerinin Geliştirilmesi, 2020 - 2027
2. Canyurt O. E. , Salamcı M., H2020 Project, Advanced Materials and Advanced Manufacturing Technologies, 2021 - 2026
3. Canyurt O. E. , Project Supported by Higher Education Institutions, Tabakalı Karbon Elyaf Kompozit Malzemelerde Nanopartikül Katkısının Mekanik Özelliklere Etkisi, 2017 - 2018
4. Canyurt O. E. , Project Supported by Higher Education Institutions, Nanopartikül Katkısının Tabakalı Cam Elyaf Kompozit Malzemelerin Mekanik Özelliklerine Etkisi, 2017 - 2018
5. Canyurt O. E. , Project Supported by Higher Education Institutions, Kalın Dokuma Tip Kompozit Malzemelerin D&O Tekniği ile Yapıştırmasında Geometrinin Yorulma Dayanımına etkilerinin İncelenmesiBAP Projesi 2014FBE039 Mali boyut 28 500 TL, 2014 - 2016
6. Canyurt O. E. , Meran C., TUBITAK Project, Paslanmaz Çeliklerin Sürtünme Karıştırma Kaynak Yapılabilirliği ve Kaynak Yapılabilirliği Etkileyen Parametrelerin İncelenmesi, 2007 - 2009
7. Canyurt O. E. , 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
8. Canyurt O. E. , CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, DPT Projesi Enerji planlaması ve projeksiyonun oluşturulması Genetik algoritma tipi hesaplama tekniği kullanarak enerji sektörünü etkileyen parametrelerin tespiti analizi enerji planlaması ve projeksiyonun oluşturulması, 2006 - 2007

Published journal articles indexed by SCI, SSCI, and AHCI

1. **THE EFFECT OF PENTAGONAL AND OCTAGONAL JOINT DESIGN ON THE FATIGUE STRENGTH OF POLYMER-MATRIX COMPOSITE MATERIALS**
ERSAN Ç., CANYURT O. E.
MATERIALI IN TEHNOLOGIJE, vol.54, no.1, pp.143-148, 2020 (Journal Indexed in SCI)
2. **The Effect of Nanoparticle Additive on the Mechanical Properties of Glass Fiber Composite Materials**
Tuncer C., Canyurt O. E.
ACTA PHYSICA POLONICA A, vol.135, no.4, pp.752-755, 2019 (Journal Indexed in SCI)
3. **A new approach for calculating the stiffness of bolted connections**
Canyurt O. E. , Sekercioglu T.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS, vol.230, no.2, pp.426-435, 2016 (Journal Indexed in SCI)
4. **Optimization of strength of friction stir welded joints for AISI 430 ferritic stainless steels by genetic algorithm**
Bilgin M. B. , Meran C., Canyurt O. E.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.77, pp.2221-2233, 2015 (Journal Indexed in SCI)
5. **Development of the positive mean stress diagrams using genetic algorithm approach**
Sekercioglu T., Canyurt O. E.
FATIGUE & FRACTURE OF ENGINEERING MATERIALS & STRUCTURES, vol.37, no.3, pp.306-313, 2014 (Journal Indexed in SCI)
6. **Joint strength of friction stir welded AISI 304 austenitic stainless steels**

Meran C., Canyurt O. E.

INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, vol.104, no.12, pp.1197-1204, 2013 (Journal Indexed in SCI)

7. **Effect of Tool Angle on Friction Stir Weldability of AISI 430**
Bilgin M. B. , Meran C., Canyurt O. E.
WELDING JOURNAL, vol.92, no.1, pp.42-46, 2013 (Journal Indexed in SCI)
8. **Fatigue strength estimation of adhesively bonded tongue and groove joint of thick woven composite sandwich structures using genetic algorithm approach**
Canyurt O. E. , Meran C.
INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, vol.33, pp.80-88, 2012 (Journal Indexed in SCI)
9. **The effects of tool rotation speed and traverse speed on friction stir welding of AISI 304 austenitic stainless steel**
Meran C., Canyurt O. E.
INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, vol.102, no.4, pp.420-428, 2011 (Journal Indexed in SCI)
10. **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 (Journal Indexed in SCI)
11. **Cellular genetic algorithm technique for the multicriterion design optimization**
Canyurt O. E. , Hajela P.
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.40, pp.201-214, 2010 (Journal Indexed in SCI)
12. **Modeling and prediction of Turkey's electricity consumption using Artificial Neural Networks**
Kavaklioglu K., Ceylan H., Ozturk H. K. , Canyurt C. E.
ENERGY CONVERSION AND MANAGEMENT, vol.50, no.11, pp.2719-2727, 2009 (Journal Indexed in SCI)
13. **Estimation of laser hybrid welded joint strength by using genetic algorithm approach**
Canyurt O. E. , Kim H. R. , Lee K. Y.
MECHANICS OF MATERIALS, vol.40, no.10, pp.825-831, 2008 (Journal Indexed in SCI)
14. **Application of genetic algorithm (GA) technique on demand estimation of fossil fuels in Turkey**
Canyurt C. E. , Ozturk H. K.
ENERGY POLICY, vol.36, no.7, pp.2562-2569, 2008 (Journal Indexed in SCI)
15. **Fatigue strength estimation of butt welded joints in magnesium AZ31 alloy using the genetic algorithm**
Karakas O., Canyurt O. E. , Gulsoz A.
MATERIALWISSENSCHAFT UND WERKSTOFFTECHNIK, vol.39, no.3, pp.234-240, 2008 (Journal Indexed in SCI)
16. **A SAND approach based on cellular computation models for analysis and optimization**
Canyurt O. E. , Hajela P.
ENGINEERING OPTIMIZATION, vol.39, no.4, pp.381-396, 2007 (Journal Indexed in SCI)
17. **Modeling and application of genetic algorithm (GA) approach to estimating the future total energy input values**
Canyurt O. E. , Ozturk H. K. , Hepbasli A., Utlu Z.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.29, no.10, pp.861-871, 2007 (Journal Indexed in SCI)
18. **Genetic algorithm (GA) approaches for the transport energy demand estimation: Model development and application**
Canyurt O. E. , Ozturk H. K. , Hepbasli A., Utlu Z.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.28, no.15, pp.1405-1413, 2006 (Journal Indexed in SCI)
19. **Three different applications of genetic algorithm (GA) search techniques on oil demand estimation**
Canyurt C. E. , Ozturk H. K.
ENERGY CONVERSION AND MANAGEMENT, vol.47, pp.3138-3148, 2006 (Journal Indexed in SCI)

20. **An application of genetic algorithm search techniques to the future total exergy input/output estimation**
Ozturk H., Canyurt O. E., Hepbasli A., Utlü Z.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.28, no.8, pp.715-725, 2006 (Journal Indexed in SCI)
21. **Pre-stressed adhesive strap joints for thick composite sandwich structures**
Canyurt O. E., Zhang J.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.48, no.4, pp.389-399, 2006 (Journal Indexed in SCI)
22. **Estimation of welded joint strength using genetic algorithm approach**
Canyurt C.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.47, no.8, pp.1249-1261, 2005 (Journal Indexed in SCI)
23. **Electricity estimation using genetic algorithm approach: a case study of Turkey**
Ozturk H., Ceylan H., Canyurt O. E., Hepbasli A.
ENERGY, vol.30, no.7, pp.1003-1012, 2005 (Journal Indexed in SCI)
24. **Estimating the Turkish residential-commercial energy output based on genetic algorithm (GA) approaches**
Canyurt O. E., Ozturk H., Hepbasli A., Utlü Z.
ENERGY POLICY, vol.33, no.8, pp.1011-1019, 2005 (Journal Indexed in SCI)
25. **A cellular framework for structural analysis and optimization**
Canyurt O. E., Hajela P.
COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, vol.194, pp.3516-3534, 2005 (Journal Indexed in SCI)
26. **Energy demand estimation based on two-different genetic algorithm approaches**
Canyurt O. E., Ceylan H., Ozturk H., Hepbasli A.
ENERGY SOURCES, vol.26, no.14, pp.1313-1320, 2004 (Journal Indexed in SCI)
27. **Three different genetic algorithm approaches to the estimation of residential exergy input/output values**
Ozturk H., Canyurt O. E., Hepbasli A., Utlü Z.
BUILDING AND ENVIRONMENT, vol.39, no.7, pp.807-816, 2004 (Journal Indexed in SCI)
28. **Fatigue strength estimation of adhesively bonded tubular joint using genetic algorithm approach**
Canyurt C.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.46, no.3, pp.359-370, 2004 (Journal Indexed in SCI)
29. **Residential-commercial energy input estimation based on genetic algorithm (GA) approaches: an application of Turkey**
Ozturk H., Canyurt O. E., Hepbasli A., Utlü Z.
ENERGY AND BUILDINGS, vol.36, no.2, pp.175-183, 2004 (Journal Indexed in SCI)
30. **Adhesive tongue-and-groove joints for thick composite laminates**
Dvorak G., Zhang J., Canyurt O. E.
COMPOSITES SCIENCE AND TECHNOLOGY, vol.61, no.8, pp.1123-1142, 2001 (Journal Indexed in SCI)

Articles Published in Other Journals

1. **Friction Stir Welding of Austenitic Stainless Steels**
MERAN C., CANYURT O. E.
Journal of Achievements in Materials and Manufacturing Engineering, vol.43, no.1, pp.432-439, 2010 (Refereed Journals of Other Institutions)
2. **The Effect Of Design On Adhesive Joints Of Thick Composite Sandwich Structures**
CANYURT O. E., MERAN C., USLU UYSAL M.
Journal of Achievements in Materials and Manufacturing Engineering, vol.31, no.2, pp.301-305, 2008 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- 1. Failure Behaviour of A SiCf SiC Composite Tube Under Biaxial Loading**
CANYURT O. E.
16th International Materials Symposium, Denizli, Turkey, 12 - 14 October 2016, pp.744-748
- 2. Dil Oluk Tekniği ile Birleştirilen Tabakalı Kumaş 0 90 Cam Elyaf Kompozit Malzemelerin Yorulma Dayanımı**
CANYURT O. E.
16th International Materials Symposium (IMSP), Denizli, Turkey, 12 - 14 October 2016, pp.546-552
- 3. FATIGUE STRENGTH OF GLASS COMPOSITE WOVEN 0 90 MATERIALS JOINED BY TONGUE AND GROOVE TECHNIQUE**
CANYURT O. E.
16th International Materials Symposium IMSP'2016, Denizli, Turkey, 12 - 14 October 2016
- 4. Application of genetic algorithm (GA) technique on demand estimation of fossil fuels in Turkey**
Canyurt O. E., Ozturk H. K.
ASME Energy Sustainability Conference, California, United States Of America, 27 - 30 June 2007, pp.193-201

Academic and Administrative Experience

2018 - Continues	Assistant Manager of Research and Application Center	Gazi University, Mühendislik Fakültesi, Makina Mühendisliği
2018 - Continues	Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi	Gazi University, Mühendislik Fakültesi, Makina Mühendisliği
2018 - 2020	Assistant Coordinator	Gazi University, Rektörlük, Gazi Üniversitesi
2016 - 2018	Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi	Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering
2009 - 2018	University Executive Board Member	Pamukkale University, Malzeme Araştırma Ve Uygulama Merkezi

Courses

Dynamics, Undergraduate, 2019 - 2020, 2020 - 2021, 2021 - 2022

Mechanical System Design, Undergraduate, 2019 - 2020, 2020 - 2021, 2021 - 2022

Statics, Undergraduate, 2020 - 2021

Advising Theses

CANYURT O. E. , Kompozit malzemelerin dil ve oluk tekniği ile yapıştırmasında dil geometrisinin yorulma dayanımına etkisi, Doctorate, Ç.ERSAN(Student), 2020

CANYURT O. E. , Cam elyaf takviyeli kalın örgü tip dokuma kompozit malzemelerin birleştirilmesinde farklı uç geometrilerinin yapıştırma dayanımına etkisi, Postgraduate, O.AVAN(Student), 2019

CANYURT O. E. , CaCO₃, SiO₂ ve grafen nano partikül katkısının tabakalı cam elyaf kompozit malzemelerin mekanik

özelliklerine etkisi, Postgraduate, C.TUNCER(Student), 2018

CANYURT O. E. , Tabakalı karbon elyaf kompozit malzemelerde nano boyutta SiC, NiO, kil ve karbon tüp partikül katkılarının mekanik özelliklere etkisi, Postgraduate, Y.MUSA(Student), 2018

CANYURT O. E. , Hibrit kompozit malzemelerde tabakalı ve geliştirilmiş tabakalı kayma modeli ile mikro modelleme, Postgraduate, M.ALPER(Student), 2017

CANYURT O. E. , Örgü tip dokuma kompozit malzemelerin birleştirilmesinde farklı uç geometrilerinin yapıştırma dayanımına etkisi, Postgraduate, A.NADİR(Student), 2013

CANYURT O. E. , Kalın woven kompozit laminelerde dil ve oluk birleştirme tekniği ile yapıştırma ve dayanımı etkileyen parametrelerin incelenmesi, Postgraduate, M.USLU(Student), 2010

Research Areas

Mechanical Engineering, Machine Design, Computer Aided Design and Manufacturing, NDT Engineering, Non-traditional manufacturing methods, Welding Methods, Material, Mechanical, Solid Mechanics, Finite Element Methods, Mechanical Testing, Ground Tests - Structural Tests (Deformation, Stress, Vibration, Acoustics, etc.)