

# CURRICULUM VITAE

1. **Family name:** KARPAT
2. **First name:** Fatih
3. **Nationality:** Turkish
4. **Civilstatus:** Married
5. **Education:**

Institution [ Date from – Date to ]	Degree(s) or Diploma(s) obtained:
Uludag University, Bursa, Turkiye [2001-2005]	PhD in Mechanical Engineering
Uludag University, Bursa, Turkiye [1998-2001]	MSc in Mechanical Engineering
Uludag University, Bursa, Turkiye [1994-1998]	BSc, Mechanical Engineering

**6. Language skills:** Indicate competence on a scale of 1 to 5 (1–excellent; 5–basic)

Language	Reading	Speaking	Writing
Turkish	Mother tongue		
English	1	2	1

**7. Membership of professional bodies:**

Chamber of Turkish Mechanical Engineers  
American Society of Mechanical Engineering (ASME)  
European Society of Biomechanics

**8. Key qualifications:**

Innovative product development laboratory  
Head of Research Lab. (Innovative product development laboratory- IPL)  
Project Leader  
Faculty in Mechanical Engineering Department of Uludag University  
Institutional Coordinator in International Office  
Vice Chair in Department  
Experiences in industrial projects,  
Ph.D (2005) in gear design and dynamic analysis,  
Excellent personal communication skills,  
Associate researcher a wind turbine projects at Texas Tech University,  
Associate researcher in two industrial projects that supported by the Turkish Industry Ministry,  
Manager in a scientific research project at Bursa Uludag University

**9. Courses:**

Machine Elements I-II  
Sustainable Product Design  
Work Safety  
Numerical Analysis of Machine Elements (M.Sc)  
Sustainable Design (M.Sc)  
Technological Innovation Management (Ph.D)  
Decision Analysis of Engineering Design (Ph.D)

**10. Present positions and Research Society:**

Head of Orhangazi Asil Çelik Yeniköy Vocational School at Bursa Uludag University  
Academic Senator in Bursa Uludag University Senate  
Associate Professor in Mechanical Engineering Department of Uludag University (Since September 2014)  
Vice Chair of Mechanical Engineering Department, Uludag University (Since January 2011)  
Chairman in Bursa Railway Systems Cluster  
International Mevlana Exchange Programme Institutional Coordinator, Uludag University (Since January 2013)  
Vice Director of Material Research Center at Bursa Uludag University (November 2018-June 2019)  
Editorial Board Member of Journal of Advances in Mechanical Engineering (AIME) (SCI-Exp) (September 2019-)  
Member of European Society of Biomechanics (ESB) (March 2019-)

## 11. Abroad experience:

- 10 months at Texas Tech University in USA as a Visiting Post-Doc Scientist. (2006)
- 3 months at Texas Tech University in USA as a Visiting Researcher. (2010)
- 10 days at University of Central Oklahoma in USA as a Visiting Researcher. (2015)
- 1 month at University of Central Oklahoma in USA as a Visiting Professor. (2017)

## 12. Specific experience in the region:

Country	Date from – Date to
USA	2006
USA	2010
USA	2015
USA	2017

## 13. Professional experience

- 2019-**      **Defense Project with TUSAS Company**
- *As Project Manager*
  - *Reference Person: İstemihan Gökdağ*
  - *Bursa, Turkey*
- 2018-2019**      **Investigation of the Impact Strength of Symmetric and Asymmetric Gears**
- *As Project Manager*
  - *With TUBITAK*
  - *Bursa, Turkey*
- 2018-**      **Lightweight materials and forming**
- *As Vice Director*
  - *Bursa Uludag University Applied Materials Research Center*
  - *Reference Person: Prof. Dr. Atilla Aydınli (Director)*
  - *Bursa, Turkey*
- 2018-**      **Bursa Chamber of Commerce and Industry (BTSO)**
- *As Chairman*
  - **With** *Bursa Railway Systems Cluster*
  - **Reference Person:** *Dr. Mustafa Hatipoğlu*
  - *Bursa, Turkey*
- 2018-2020**      **Hypoid Gears**
- *As Adviser*
  - *Sponsor: TUBITAK*
  - **With** *Novosim Engineering*
  - **Reference Person:** *Dr. Mert Doğanlı*
  - *Bursa, Turkey*
- 2016-2017**      **Project Based Mevlana Exchange Program (Dental Implants)**
- *As Project Manager*
  - *With Prof. Dr. Morshed Khandaker from University of Central Oklahoma*
  - *Sponsor: The Council of Higher Education*
  - *Bursa, Turkey / Oklahoma, USA*

- 2014**      **Defense Project with TAI Company**
- *As Project Manager*
  - **Reference Person:** *Hakan İşçi*
  - *Bursa, Turkey*
- 2014**      **Industrial Project with Rollmech Company**
- *As Project Manager*
  - **Reference Person:** *Caner Güven*
  - *Bursa, Turkey*
- 2014**      **Industrial Project with FIAT Company**
- *As Project Manager*
  - **Reference Person:** *Semih Sezer Bekar*
  - *Bursa, Turkey*
- 2014**      **Industrial Project with VALEO Company**
- *As Project Manager*
  - **Reference Person:** *Tuna Arıncı*
  - *Bursa, Turkey*
- 2014-**      **Uludag University Mechanical Engineering**
- *As Associate Professor*
  - **Reference Person:** *Prof. Dr. Recep Yamankaradeniz (Chair)*
  - *Bursa, Turkey*
- 2011-**      **Uludag University Mechanical Engineering**
- *As Vice Chair*
  - **Reference Person:** *Prof. Dr. Nurettin Yavuz (Chair)*
  - *Bursa, Turkey*
- 2011-**      **Uludag University Mechanical Engineering**
- *As Assistant Professor*
  - *Bursa, Turkey*
- 2010**      **Design of Gantry CNC Milling Machine**
- *As Researcher*
  - **With** *İğrek Makine*
  - **Reference Person:** *Fatih İğrek*
  - *Bursa, Turkey*
- 2008**      **Noiseless Product Design With FIAT, Renault and the firms in the region**
- *As Partner Researcher*
  - **With** *FCB R&D Co. Ltd.*
  - **Reference Person:** *Kadir Çavdar*
  - *Bursa, Turkey*
- 2008**      **Instructor in Mechanical Engineering**
- *As Lecturer*
  - *Uludag University*
  - **Reference Person:** *Prof. Dr. Fatih Babalık*
  - *Bursa, Turkey*

## 2006 and 2010 Experience in R&D Projects

- *As Visiting Researcher*
- *Texas Tech. University*
- **Reference Person:** Prof. Dr. Stephen Ekwaro-Osire
- *USA*

## 1998-2005 Experience in Lessons and Projects

- *As Research Assistant*
- **Lessons:** *Machine Elements, Ergonomics, Machine Design and Machine Acoustics*
- *Uludag University*
- **Reference Person:** Prof. Dr. Fatih Babalik
- *Bursa, Turkey*

## 14. Publications:

### A. Papers in the SCI Index Journals:

- A1. Alp, N.B., Dogan, O., Yilmaz, T.G., Kalay, O.C., Khandaker, M.P., Karpat, F., Moussa, A.A., "Understanding the Causes Behind Coracoid Graft Osteolysis in Latarjet Procedure (Finite Element Analysis and Comparison of Three Fixation Methods), Orthopaedics & Traumatology: Surgery & Research, (Accepted).
- A2. Karpat F, Yuce C., and Dogan O., "Experimental Measurement and Numerical Validation of Single Tooth Stiffness for Involute Spur Gears", Measurement, 2019 doi: 10.1016/j.measurement.2019.107043 (online published).
- A3. Yılmaz T., G., Dogan O., Karpat F., "A comparative numerical study of forged bi-metal gears: Bending strength and dynamic response", Mechanism and Machine Theory, Vol. 141, 2019, pp. 117-135, ISSN 0094-114X.
- A4. Yuce C., Karpat F., Yavuz N., "Investigations on the microstructure and mechanical properties of laser welded dissimilar galvanized steel–aluminum joints", The International Journal of Advanced Manufacturing Technology, <https://doi.org/10.1007/s00170-019-04154-7>.
- A5. Dogan, O., Karpat F., "Crack detection for spur gears with asymmetric teeth based on the dynamic transmission error", Mechanism and Machine Theory, Vol. 133, 2019, pp. 417-431, ISSN 0094-114X.
- A6. Doğan, O., Yılmaz, T. G., Karpat, F. "Farklı Parametrelere Sahip Evolvent Düz Dişli Çarkların Sonlu Elemanlar Yöntemi ve Grafik Metot ile Gerilme Analizi", Gazi Üniversitesi Mühendislik – Mimarlık Fakültesi, Vol 6(4), 2018.
- A7. Karpat, F., Yuce, C., Dogan, O., Genc, M., O., Kaya, N. "Design and Development of Tractor Clutch Using Combined Field and Bench Tests", Transactions of the Canadian Society for Mechanical Engineering, Vol. 42 (2), pp. 136 – 146. 2018.
- A8. Yilmaz, T., G., Tufekci, M., Karpat, F. "Study of Lightweight Door Hinges of Commercial Vehicles Using Aluminum Instead of Steel for Sustainable Transportation", Sustainability, 2071-1050, pp. 9 – 10, 2017.
- A9. Karpat, F., Dogan, O., Yuce, C., Ekwaro-Osire S. "An Improved numerical Method for the Mesh Stiffness Calculation of Spur Gears with Asymmetric Teeth on Dynamic Load Analysis", Advances in Mechanical Engineering, Vol. 9 (8), pp 1 – 12, 2017.
- A10. Yuce, C., Tutar, M., Karpat, F., Yavuz, N., Tekin, G. "The Effect of Process Parameters on the Microstructure and Mechanical Performance-of Fiber Laser- Welded AA5182 Aluminium Alloys", Strojniški Vestnik – Journal of Mechanical Engineering, Vol. 63 (9), pp. 510 – 518, 2017.
- A11. Yuce, C.; Tutar, M.; Karpat, F.; Yavuz, N. "The Optimization of Process Parameters and Microstructural Characterization of Fiber Laser Welded Dissimilar HSLA and MART Steel Joints", Metals 2016, 6, 245.
- A12. Doğan O., Karpat F., Yüce C., Kaya N., Yavuz N., Sen H. "A Novel Design Procedure For Tractor Clutch Fingers By Using Optimization And Response Surface Methods", Journal Of Mechanical Science and Technology, 2615-2625, 30, 2016.
- A13. Yüce C., Karpat F., Yavuz N., Sendeniz G. "A Case Study: Designing for Sustainability and Reliability in an Automotive Seat Structure", Sustainability, 4608-4631, 6(7), 2014.
- A14. Karpat F., "A Virtual Tool for Minimum Cost Design of a Wind Turbine Tower with Ring Stiffeners", Energies (ISI) , 3822-3840 pp., 2013 , DOI: 10.3390/en6083822.
- A15. Karpat F., and S. Ekwaro-Osire, "Influence of Tip Relief Modification on the Wear of Spur Gears with Asymmetric Teeth", Tribology&Lubrication Technology, Vol. 66, No. 6, pp. 50–+, Jun 2010.
- A16. Karpat F., S. Ekwaro-Osire, K. Cavdar, and F.C. Babalik, "Dynamic Analysis of Involute Spur Gears with Asymmetric Teeth", International Journal of Mechanical Sciences, 50(12), 1598-1610, Dec 2008.
- A17. Karpat F., and Ekwaro-Osire S. "Influence of Tip Relief Modification on the Wear of Spur Gears with Asymmetric Teeth", Tribology Transactions, Volume 51, Issue5 , pages 581 – 588, September 2008.
- A18. Karpat F., Ekwaro-Osire S., and Khandaker M.P.H., "Probabilistic Analysis of MEMS Asymmetric Gear Tooth", Journal of Mechanical Design, Volume 130, Issue 4, April 2008.

- A19.** Ekwaro-Osire S. and Karpat F., “Experimental Studies on Galling Onset in OCTG Connections – A Review”, *Journal of Energy Resources Technology*, Volume 130, Issue 1, March 2008.
- A20.** Hashemi J., Chandrashekar N., Jang T., Karpat F., Oseto M., Ekwaro-Osire S. “An Alternative Mechanism of Non-contact Anterior Cruciate Ligament Injury During Jump-landing: In-vitro Simulation”, *Experimental Mechanics*, Volume 47, Number 3 /, p. 347-354, June, 2007.
- A21.** Cavdar K., Karpat F. And Babalik F.C., “Design and analysis of involute spur gears with asymmetric profile”, *ASME J. of Mechanical Design*, Vol. 127(3), 477-484, 2005.

#### **B. Proceedings:**

- B1.** Karpat, F., Doğan, O., Yılmaz, T.G., Yüce, C., Kalay, O.C., Karpat, E., Kopmaz, O., “Effects of Drive Side Pressure Angle on Gear Fatigue Crack Propagation Life for Spur Gears with Symmetric and Asymmetric Teeth”, *Proc. ASME, Modeling of the Fracture, Failure and Fatigue in Solids*, November 11 – 14, 2019.
- B2.** Karpat, F., Yılmaz, T., Doğan, O., Kalay, O.C., “Stress and Mesh Stiffness Evaluation of Bimaterial Spur Gears”, *Proc. ASME, Advanced Manufacturing*, November 11 – 14, 2019.
- B3.** Karpat, F., Yahsi, M., Akalp, M.K., “Numerical Analysis with Physical Test Correlation and Design Optimization of a Rollover Protective Structure (ROPS)”, *Proc. ASME, Safety Engineering, Risk and Reliability Analysis*, November 11 – 14, 2019.
- B4.** Yılmaz, T. G., Karpat, F., Kalay, O. C., “Bending Stress Comparison of Asymmetric and Asymmetric Trochoid Spur Gear”, *Alternative Energy Sources, Materials & Technologies*, Sofia, Bulgaria, p. 129 – 130, 2019.
- B5.** Doğan, O., Kalay, O. C., Karpat, F. “Crack Propagation Path Analysis of Spur Gears for Wind Turbines”, *Alternative Energy Sources, Materials & Technologies*, Sofia, Bulgaria, pp. 127 – 128, 2019
- B6.** Yılmaz, T., Karpat, F., “Influence of Root Geometry on Bending Stress for Involute Spur Gears”, *Proceedings of the 4<sup>th</sup> World Congress on Mechanical, Chemical, and Material Engineering*, Madrid, Spain, 2018.
- B7.** Yuce, C., Karpat, F., Yavuz, N., “Effects of Heat Input in Laser Welding of Dissimilar Galvanized Steel to Aluminium Alloy”, *Proceedings of the 4<sup>th</sup> World Congress on Mechanical, Chemical, and Material Engineering*, Madrid, Spain, 2018.
- B8.** Yılmaz, T. G., Karpat, F. “Stress Analysis of Internal Gear Pairs with Unequal Tooth Thickness”, *The 9th International Conference on Mechanical and Aerospace Engineering*, Budapest, Hungary, pp. 478 – 482, 2018.
- B9.** Doğan, O., Yüce, C., Karpat, F., Kalay, O. C. “Experimental Investigation of the Impact Resistance of Involute Spur Gears”, *The 9th International Conference on Mechanical and Aerospace Engineering*, Budapest, Hungary, pp. 608 – 612, 2018.
- B10.** Doğan, O., Kalay, O. C., Karpat, F. “Effects of Linear Short Tip Relief Modification on Dynamic Response of the Spur Gears”, *Alternative Energy Sources, Materials & Technologies*, Plovdiv, Bulgaria, 2018.
- B11.** Yılmaz, T. G., Kalay, O. C., Karpat, F. “Stress Analysis of Thin Rimmed Asymmetric Spur Gears”, *International Conference on Progresses in Automotive Technologies*, Istanbul, Turkey, pp. 48 – 55, 2018.
- B12.** Yılmaz, T. G., Karpat, F. “A Case Study: An Alternative Approach to Weight Reduction of Spur Gear Pair With Using Non-Standard Tooth Thickness”, *9th International Automotive Technologies Congress OTEKON 2018*, Bursa, Turkey, 2018.
- B13.** Kalay, O. C., Doğan, O., Karpat, F. “Improving Bending Load Capacity of Spur Gears with Increasing Root Radius”, *XI. International Conference for Young Researchers, Technical Sciences and Industrial Management*, Borovets, Bulgaria, 2018.
- B14.** Yılmaz, Y. G., Doğan, O., Yüce, C., Karpat, F. “Improvement of Loading Capacity of Internal Spur Gear With Using Asymmetric Trochoid Profile”, *Proc. ASME, Volume 11: Systems, Design and Complexity*, V011T15A018. November, 2017.
- B15.** Tummala S., Doğan, O., Karpat, F., Riahinezhad S., Khandaker, M. “Evaluation of Biomechanical Performances of Electrospun Fiber Anchored Silicone Disc As an Intervertebral Disc Implant”, *Proc. ASME, Volume 3: Biomedical and Biotechnology Engineering*, V003T04A069, November, 2017.
- B16.** Jamadagni, H. G., Karaman, H., Karpat, F., Williams, W., Dhanasekaran, L., Khandaker, M. “Effect of Micro-Grooving on the Stress Shielding of Titanium: Experimental and Numerical Investigations”, *Proc. ASME, Volume 3: Biomedical and Biotechnology Engineering*, V003T04A021, November. 2017.
- B17.** Yılmaz, T. G., Doğan, O., Karpat, F. “Stress Analysis of Thin Rimmed Spur Gear with Asymmetric Trochoid”, *The 3rd World Congress on Mechanical, Chemical, and Material Engineering*, Rome, Italy, 2017.
- B18.** Küçüköğlü, A., Karpat, F. “The Joining Techniques for Thermoplastics Materials in Automotive Industries: A Comprehensive Literature Review”, *Proc. ASME, Volume 12: Transportation Systems*, V012T16A009, November. 2016.
- B19.** Doğan, O., Karpat, F., Kaya, N., Yüce, C., Genç, M. O., Yavuz, N. “Optimum Design of Tractor Clutch PTO Finger by Using Topology and Shape Optimization”, *Proc. ASME, Volume 9: Mechanics of Solid, Structures and Fluids*, V009T12A016. November, 2015.

- B20.** Karpat, F., Ekwaro-Osire, S., Yılmaz, T. G., Doğan, O., Yüce, C. "Design and Analysis of Internal Gears with Different Rim Thickness and Shapes", Proc. ASME, Volume 9: Mechanics of Solid, Structures and Fluids, V009T12A017. November, 2015.
- B21.** Kaya, N., Kartal, S., Çakmak, T., Karpat, F., Karaduman, A. "Shape Optimization of Clutch Cushion Disc Using Differential Evolution Method", Proc. ASME, Volume 11: Systems, Design and Complexity, V011T14A031. November, 2015.
- B22.** Tüfekçi M. Karpat F., Yüce C., Doğan O., Yılmaz T.G., Kaya N., "Design Optimization of Aluminum Hinge Parts for Lightweight Vehicles: Performance, Durability and Manufacturability", International Journal of Mechanical And Production Engineering, 11-18, 3, 2015.
- B23.** Yüce C., Karpat F., Yavuz N., Doğan O., "A Review on Advanced Joining Techniques of Multi Material Part Manufacturing for Automotive Industry", Rome, Italy, pp. 51 – 56, 2015.
- B24.** Doğan S.; C. Guven; Karpat F.; T. G. Yilmaz; O. Dogan, "Experimental Verification and Finite Element Analysis of Automotive Door Hinge", Proc. ASME. 46606; Volume 11: Systems, Design, and Complexity, V011T14A034. November 14, 2014.
- B25.** Karpat F.; O. Dogan; C. Yuce; N. Kaya; G. Cengiz, "The Investigation of Stress Distribution on the Tractor Clutch Finger Mechanism by Using Finite Element Method", Proc. ASME. 46583; Volume 9: Mechanics of Solids, Structures and Fluids, V009T12A011. November 14, 2014.
- B26.** Karpat F.; O. Dogan; S. Ekwaro-Osire; C. Yuce, "A Novel Method for Calculation Gear Tooth Stiffness for Dynamic Analysis of Spur Gears With Asymmetric Teeth", Proc. ASME. 46476; Volume 4A: Dynamics, Vibration, and Control, V04AT04A058. November 14, 2014.
- B27.** Karpat, F., Engin, B., Dogan, O., Yuce, C., Yilmaz, T. G. "Effect of Rim Thickness on Tooth Root Stress and Mesh Stiffness of Internal Gears", Proc. ASME. Volume 11: Systems, Design, and Complexity, V011T14A004. November 14, 2014.
- B28.** Karpat, F., Ekwaro-Osire, S., Yüce, C., Karpat, E. "A Virtual Tool for Wear Simulation of Plastic Gear Pairs", Proc. ASME. Volume 9: Mechanics of Solids, Structures and Fluids, V009T10A108. November, 2013.
- B29.** M. Alemayehu F., Ekwaro-Osire S., Karpat F., International Conference on Gears konferansı dahilinde "VDI BERICHTE", "Gear-pair dynamics using a probabilistic approach", 427-438 pp., Munich, Germany, 7-9 October, 2013.
- B30.** Karpat F., Ekwaro-Osire S., Karpat E., IMECE 2012 ASME International Mechanical Engineering Congress & Exposition", Proceedings of the 2012 ASME International Mechanical Engineering Congress & Exposition, "A Virtual Tool for Wear Simulation of Standard and Non-Standard Spur Gears", 261-264 pp., Houston, Texas, USA, Nov 9–15, 2012.
- B31.** Karpat F., and S. Ekwaro-Osire, "Efficiency of the High Contact Ratio Involute Spur Gears with Asymmetric Teeth", Proceedings of the 2010 ASME International Mechanical Engineering Congress & Exposition, Vancouver, British Columbia, Canada, Nov 12–18, 2010.
- B32.** Karpat F., Cavdar K., Babalik F.C., "Influence Of Some Gear Design Parameters On Asymmetric Gear Tooth Strength", The 3th International Conference Power Transmissions'09, Kallithea, Greece, 1-2 October 2009.
- B33.** Ekwaro-Osire S., Karpat F., I. Durukan, F.M. Alemayehu, and J.F. Cárdenas-García, "An Inverse Problem Technique for Spur Gears with Asymmetric Teeth," Proceedings of the 2009 SEM Annual Conference & Exposition, Albuquerque, New Mexico, Jun 1–3, 2009.
- B34.** Dhorje M., Ekwaro-Osire S., Khandaker M.P.H., and Karpat F., "A Weibull Failure Theory for Contact Loading In Gears with Asymmetric Teeth," Proceedings of the 2008 ASME International Mechanical Engineering Congress & Exposition, Boston, Massachusetts, Oct 31– Nov 6, 2008.
- B35.** Karpat F. And Ekwaro-Osire S., "Dynamic Analysis of High-Contact-Ratio Spur Gears with Asymmetric Teeth," Proceedings of the 2008 ASME International Mechanical Engineering Congress & Exposition, Boston, Massachusetts, Oct 31– Nov 6, 2008.
- B36.** Karpat F. And Ekwaro-Osire S., "Wear of Involute Spur Gears with Asymmetric Teeth under Dynamic Loading", ASME International Mechanical Engineering Congress & Exposition, Chicago, Illinois, USA, Nov 5–10, 2006.
- B37.** Karpat F., Ekwaro-Osire S., and Khandaker M.P.H., "Probabilistic Analysis of MEMS Asymmetric Gear Tooth", ASME International Mechanical Engineering Congress & Exposition, Chicago, Illinois, USA Nov 5–10, 2006.
- B38.** Ekwaro-Osire S. and Karpat F., "Experimental Studies on Galling Onset in OCTG Connections—A Review", ASME International Mechanical Engineering Congress & Exposition, Chicago, Illinois, USA, Nov 5–10, 2006.
- B39.** Karpat F., Cavdar K., Babalik F.C., "An Investigation on Dynamic Analysis of Involute Spur Gears With Asymmetric Teeth: Dynamic Load And Transmission Errors", The 2nd International Conference Power Transmissions'06, Novi-Sad, Serbia, April 2006.
- B40.** Karpat F. And Ekwaro-Osire S., "Influence Of Tip Relief Modification On The Wear Of Spur Gears With Asymmetric Teeth", Society of Tribologists and Lubrication Engineers (STLE)'s 2007 Annual Meeting & Exhibition, Philadelphia, USA, May 6-10, 2007.
- B41.** Hashemi J., Chandrashekar N., Jang T., Karpat F., Oseto M. And Ekwaro-Osire S., "Conditions Favorable For Non-Contact ACL Injury During Jump-Landing: An In-Vitro Simulation", 53rd Orthopedic Research Society Annual Meeting, San Diego, USA, February 2007.
- B42.** Karpat F., Ekwaro-Osire S., Chapman J., and Swift A., "Wind Power Test Bed", the WINDPOWER 2007 Conference and Exhibition, Los Angeles, USA, June 3-6, 2007.

- B43.** Karpat F., Ekwaro-Osire S., and Cárdenas-García J. F., "Photoelastic Analysis of an Asymmetric Gear Tooth", 2007 Society of Experimental and Applied Mechanics-SEM Annual Conference and Exposition, Springfield, USA, June 3-6, 2007.
- B44.** Karpat F., Çavdar K., Babalık F.C., "Computer Aided Analysis of Involute Spur Gears with Asymmetric Teeth, VDI-EKV International Conference On Gears", VDI Berichte Nr. 1904, pp. 145-163, Munich, 2005.

#### **C. National Journal Papers:**

- C1.** Çavdar K., Karpat F., Babalık F.C., "Asimetrik Evolvent Profilli Düz Dişlilerin Boyutlandırılması ve Geometrik Modellerinin Oluşturulması", Uludağ Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, Cilt 9, Sayı 1, s. 111-122, 2004.
- C2.** Karpat F., Çavdar K., Babalık F.C., "Asimetrik Evolvent Düz Dişlilerin Bilgisayar Destekli Analizi", Uludağ Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, Cilt 9, Sayı 1, s. 123-132, 2004.
- C3.** Karpat F., Çavdar K., Babalık F.C., "Bilgisayar Yardımıyla Düz, Helisel, Konik ve Sonsuz Vida Dişli Mekanizmalarının Boyutlandırılması ve Analizi", TMMOB Mühendis Makine, Sayı:510, Temmuz 2002, s. 26-32.
- C4.** Karpat F., Çavdar K., Babalık F.C., "Asimetrik Evolvent Profilli Düz Dişli Çarkların Geometri ve Gerilme Analizi", TMMOB Mühendis Makine Dergisi, Cilt 45, Sayı 528, Ocak 2004, s. 40-49.

#### **D. National Proceedings:**

- D1.** Çavdar K., Karpat F., "Dişli Çark Mekanizmalarının Bilgisayar Yardımıyla Boyutlandırılması", Makine İmalat Teknolojileri Sempozyumu ve Sergisi, Konya, s.60-67, 1999.
- D2.** Çavdar K., Karpat F., Güngören Y., "Asansörler için Paraşüt Fren Sistemi Tasarımı", TMMOB Makine Müh. Odası II. İletim Teknolojileri Kongre ve Sergisi, İstanbul, 27-28 Mayıs 2005.
- D3.** Karpat F., Çavdar K., Babalık F.C., Asansör Kabin Taşıyıcıların Sonlu Elemanlar Yöntemi Yardımıyla Analizi, TMMOB Makine Müh. Odası II. İletim Teknolojileri Kongre ve Sergisi, İstanbul, 27-28 Mayıs 2005.
- D4.** Karpat F., Çavdar K., Babalık F.C., Asimetrik Evolvent Dişe Sahip Düz Dişli Çarkların Bilgisayar Destekli Parametrik Analizi, Balıkesir Üniversitesi TİMAK Tasarım İmalat Analiz Kongresi, s. 65-76, Balıkesir, 26-28 Nisan 2006.
- D5.** Karpat F., Çavdar K., "Rüzgar Türbini Test Yatağı Tasarımı", Balıkesir Üniversitesi TİMAK Tasarım İmalat Analiz Kongresi, Balıkesir, 11-12 Kasım 2010.
- D6.** Yuçe, C., Yavuz, N., Karpat, F., Şendeniz, G., Aksoy, M. 2013. "Yolcu Koltuğunda Hafifletme Üzerine Bir Çalışma", Makine İmalat Teknolojileri Kongresi, BURSA.
- D7.** Yuçe, C., Karpat, F., Yavuz, N., Erbil, S., Dolaylar, E. 2014. "Yolcu Koltukları İçin Kompozit Oturak Bağlantı Parçasının Geliştirilmesi" 7. Otomotiv Teknolojileri Kongresi, BURSA.
- D8.** Karpat, F., Dogan, O., Yuçe, C., Kaya, N., Yavuz, N., Cengiz, G. 2014. "Traktör Debriyajı Parmak Mekanizmasının Analizi", 7. Otomotiv Teknolojileri Kongresi, BURSA.
- D9.** Tufekci, M., Yılmaz, T.G., Yuçe, C., Dogan, O., Karpat, F. "Otomobil Kapı Menteşesinin Bilgisayar Destekli Tasarımı, Analizi ve Doğrulanması", OTOSEM 2015 XIII. Otomotiv ve Yan Sanayi Sempozyumu ve Sergisi, 13-14 Kasım 2015, İstanbul/Türkiye.

#### **E. International Journals:**

- E1.** Yılmaz, T. G., Kalay, O. C., Karpat, F. "Stress Analysis of Thin Rimmed Asymmetric Spur Gears", International Journal of Advances on Automotive and Technology, Istanbul, Turkey, pp. 143-150, 2018.
- E2.** Karaman H., Yuçe C., Karpat F., Dhanasekaran L., Khandaker M., "Structural Analysis of Dental Implants with Various Micro Groove Profiles", International Research Journal of Advanced Engineering and Science, Volume 3, Issue 1, pp. 101-104, 2018.
- E3.** Karpat F., Kucukoglu A., "A Review of the Mechanical Joining Techniques for Thermoplastics", JOJ Material Science, Vol. 3(1), 2017.
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