

## Prof. NURETTİN YAVUZ

### Personal Information

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### Education Information

Doctorate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Makine Mühendisliği (Dr), Turkey 1983 - 1987

Postgraduate, İstanbul Devlet Mühendislik Ve Mimarlık Akademisi, İstanbul Devlet Mühendislik Ve Mimarlık Akademisi, Makine (YI), Turkey 1979 - 1981

Postgraduate, Yildiz Technical University, Faculty Of Mechanical Engineering, Makine Mühendisliği Bölümü, Turkey 1979 - 1981

Undergraduate, Sakarya Devlet Mühendislik Ve Mimarlık Akademisi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 1975 - 1979

### Academic Titles / Tasks

Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 2004 - Continues

Associate Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 1998 - 2004

Assistant Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 1990 - 1998

Lecturer PhD, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 1989 - 1990

Research Assistant, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 1981 - 1989

### Advising Theses

YAVUZ N., Investigation of the effects of laser welding seam forms on welding properties in sheet metal joints, Postgraduate, D.Ergin(Student), 2021

YAVUZ N., Verification of the production of vehicle sliding door track by stretch bending process using finite element method, Postgraduate, H.Yelek(Student), 2019

YAVUZ N., The investigate of effect welding parameter aisi 304 type stainless steel with tig welding, Postgraduate, B.Baran(Student), 2019

YAVUZ N., Investigation of the effects of welding parameters on laser welded joints of dissimilar high strength steel and aluminum alloys, Doctorate, C.Yüce(Student), 2018

YAVUZ N., Modelling of hyper-elastic and visco-elastic of rubber door stopper and analysing with finite element method, Postgraduate, S.Erkek(Student), 2016

YAVUZ N., Lightweight passenger seat design and prototype production for next generation commercial vehicles, Postgraduate, C.Yüce(Student), 2013

YAVUZ N., Analysis of welded parts by finite element method, Postgraduate, A.Yıldız(Student), 2011

YAVUZ N., Investigation of submerged arc welding application parameter at vertical position on steel material and modelling of application, Postgraduate, R.Soncu(Student), 2009

YAVUZ N., Optimization of brake pad materials and analysis of the manufacturing parameters, Doctorate, R.Ertan(Student), 2008

YAVUZ N., Analysis of the effects of plastic deformation on fatigue property for the surfaces, obtained by the electrical

decharge technique, Postgraduate, F.Alper(Student), 2007

YAVUZ N., The research for the fatigue properties affects of the surface which is obtained with the electrical discharge method, Postgraduate, İ.Mesut(Student), 2006

YAVUZ N., Research of factors effecting welding joint geometryin MIG-MAG welding, Postgraduate, Ö.Cihan(Student), 2005

YAVUZ N., Computer aided strength anylises of weldments, Postgraduate, F.Gökhan(Student), 2003

YAVUZ N., Increasing brake performance, Postgraduate, R.Güner(Student), 2002

YAVUZ N., The research of cutting area structure and the properties in cutting of steel material with laser, Postgraduate, M.Ahmet(Student), 2001

YAVUZ N., Determination of electric resistance welding of parts obtained from iron based powder metal material and improving welding joint properties, Postgraduate, E.Balamur(Student), 1999

YAVUZ N., Quality assurance and achivening productivity in steering and suspension parts manufacturing company, Postgraduate, A.Bölükbaşı(Student), 1997

YAVUZ N., Zinc (Zn) powder production and investigation of properties, Postgraduate, E.Çiftçi(Student), 1994

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

- I. **Multi-Objective Optimization of Fiber Laser Cutting of Stainless-Steel Plates Using Taguchi-Based Grey Relational Analysis**  
TÜRKKAN Y. A., Aslan M., Tarkan A., Aslan Ö., YÜCE C., YAVUZ N.  
Metals, vol.13, no.1, 2023 (SCI-Expanded)
- II. **Investigations on the microstructure and mechanical properties of laser welded dissimilar galvanized steel-aluminum joints**  
Yuce C., KARPAT F., YAVUZ N.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.104, no.5-8, pp.2693-2704, 2019 (SCI-Expanded)
- III. **The Effect of Process Parameters on the Microstructure and Mechanical Performance of Fiber Laser-Welded AA5182 Aluminium Alloys**  
Yuce C., Tutar M., KARPAT F., YAVUZ N., Tekin G.  
STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, vol.63, no.9, pp.510-518, 2017 (SCI-Expanded)
- IV. **The Optimization of Process Parameters and Microstructural Characterization of Fiber Laser Welded Dissimilar HSLA and MART Steel Joints**  
Yuce C., Tutar M., KARPAT F., YAVUZ N.  
METALS, vol.6, no.10, 2016 (SCI-Expanded)
- V. **A novel design procedure for tractor clutch fingers by using optimization and response surface methods**  
DOĞAN O., KARPAT F., Yuce C., KAYA N., YAVUZ N., Sen H.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.30, no.6, pp.2615-2625, 2016 (SCI-Expanded)
- VI. **The optimisation of process parameters for friction stir spot-welded AA3003-H12 aluminium alloy using a Taguchi orthogonal array**  
Tutar M., AYDIN H., Yuce C., YAVUZ N., BAYRAM A.  
MATERIALS & DESIGN, vol.63, pp.789-797, 2014 (SCI-Expanded)
- VII. **A Case Study: Designing for Sustainability and Reliability in an Automotive Seat Structure**  
Yuce C., KARPAT F., YAVUZ N., Sendeniz G.  
SUSTAINABILITY, vol.6, no.7, pp.4608-4631, 2014 (SCI-Expanded)
- VIII. **Effect of Rotational Speed and Dwell Time on Mechanical Properties of Dissimilar AA1050-AA3105 Friction Stir Spot Welded Joints**  
AYDIN H., Tuncel O., Yuce C., Tutar M., YAVUZ N., BAYRAM A.  
MATERIALS TESTING, vol.56, no.10, pp.818-825, 2014 (SCI-Expanded)
- IX. **Effect of Plasma Nitriding Parameters on the Wear Behaviour of AISI D6 Tool Steel**

Korkmaz E. E., Bayram A., ERTAN R., YAVUZ N.

MATERIALS TESTING, vol.55, no.6, pp.455-461, 2013 (SCI-Expanded)

- X. **The effects of graphite, coke and ZnS on the tribological and surface characteristics of automotive brake friction materials**  
ERTAN R., YAVUZ N.  
INDUSTRIAL LUBRICATION AND TRIBOLOGY, vol.63, no.4, pp.245-253, 2011 (SCI-Expanded)
- XI. **An experimental study on the effects of manufacturing parameters on the tribological properties of brake lining materials**  
ERTAN R., YAVUZ N.  
WEAR, vol.268, pp.1524-1532, 2010 (SCI-Expanded)
- XII. **Optimisation of brake friction material on tribological characteristics and cost using constrained mixture design method**  
ERTAN R., YAVUZ N.  
INTERNATIONAL JOURNAL OF MATERIALS & PRODUCT TECHNOLOGY, vol.39, pp.271-290, 2010 (SCI-Expanded)

### Articles Published in Other Journals

- I. **The Optimization of Process Parameters for Laser Welded Galvanized Automobile Steel Sheets Using A Taguchi Method**  
Yüce C., Karpaz F., Yavuz N., Tekin G., Çapar N.  
International Journal of Mechanical And Production Engineering, vol.5, no.9, pp.83-87, 2017 (Peer-Reviewed Journal)
- II. **A Review On Advanced Joining Techniques Of Multi Material Part Manufacturing For Automotive Industry**  
Yüce C., Karpaz F., Yavuz N.  
International Journal of Mechanical and Production Engineering, vol.3, no.5, pp.63-68, 2015 (Peer-Reviewed Journal)
- III. **BALATA MALZEMELERİNDE KULLANILAN YAPISALLARIN BALATANIN TRİBOLOJİK VE FİZİKSEL ÖZELLİKLERİNE ETKİSİ**  
ERTAN R., YAVUZ N.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.15, no.1, pp.169-177, 2010 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Effects of Heat Input in Laser Welding of Dissimilar Galvanized Steel to Aluminium Alloy**  
Yüce C., Karpaz F., Yavuz N.  
Proceedings of the 4th World Congress on Mechanical, Chemical, and Material Engineering (MCM'xx18), Madrid, Spain, 16 - 18 August 2018
- II. **Investigation on the Effects of the Process Parameters on Laser Cutting Different Materials**  
YÜCE C., KÖRÜSTAN C., YAVUZ N.  
9th International Automotive Technologies Congress - OTEKON 2018, Bursa, Turkey, 7 - 08 May 2018, pp.1535-1542
- III. **Development of Special Improvement and Maintenance Model for Conveyor Lines**  
Yüce C., Doğan O., Semih Sezer B., Karpaz F., Yavuz N.  
9th International Automotive Technologies Congress - OTEKON 2018, Bursa, Turkey, 7 - 08 May 2018, pp.1601-1608
- IV. **INFLUENCE OF HEAT INPUT ON MECHANICAL PROPERTIES AND MICROSTRUCTURE OF LASER WELDED DISSIMILAR GALVANIZED STEEL-ALUMINUM JOINTS**  
Yuce C., KARPAT F., YAVUZ N.

13th ASME International Manufacturing Science and Engineering Conference, Texas, United States Of America, 18 - 22 June 2018

- V. **Prototype Conveyor Line Monitoring System**  
Yüce C., Yılmaz T. G., Karpat F., Yavuz N.  
ISERD, 218th International Conference on Recent Innovations in Engineering and Technology (ICRIET), Florence, Italy, 21 - 22 July 2017
- VI. **The Optimization of Process Parameters for Laser Welded Galvanized Automobile Steel Sheets Using A Taguchi Method**  
Yüce C., Karpat F., Yavuz N., Tekin G., Çapar N.  
International Conference on Engineering, Technology and Innovations (IACETI), Paris, France, 13 - 14 July 2017, pp.52-56
- VII. **Effect of fiber laser welding parameters on the penetration depth and weld bead geometry**  
Yüce C., Karpat F., Yavuz N., Tekin G., Çapan N.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Adana, Turkey, 26 - 28 October 2016
- VIII. **Optimum Design of Tractor Clutch PTO Finger Using Topology and Shape Optimization**  
Doğan O., Karpat F., Kaya N., Yüce C., Yavuz N., Genç M. O.  
ASME IMECE 2015, Texas, United States Of America, 13 - 19 November 2015
- IX. **A Review on advanced joining techniques of multi material part manufacturing for automotive industry**  
YÜCE C., KARPAT F., YAVUZ N., DOĞAN O.  
Proceedings of Eighteenth The IIER International Conference, ROMA, Italy, 28 - 29 March 2015, pp.51-56
- X. **Influence of Welding Parameters on Mechanical Properties And Microstructure of Friction Stir Spot Welded AA5754 Aluminium Alloys**  
TUTAR M., AYDIN H., YÜCE C., TUNÇEL O., YAVUZ N., BAYRAM A.  
15th International Materials Symposium, IMSP 2014, 15 - 17 October 2014
- XI. **Influence of welding parameters on mechanical properties and microstructure of friction stir spot welded AA5754 Aluminium alloys**  
TUTAR M., AYDIN H., YÜCE C., TUNÇEL O., YAVUZ N., BAYRAM A.  
15. International Materials Symposium, Denizli, Turkey, 15 October 2014
- XII. **Traktör Debriyajı Parmak Mekanizmasının Analizi**  
Karpat F., Doğan O., Yüce C., Kaya N., Yavuz N., Cengiz G.  
7. Otomotiv Teknolojileri Kongresi OTEKON 2014, Bursa, Turkey, 26 - 27 May 2014
- XIII. **Effect of rotational speed and dwell time on mechanical properties of dissimilar AA1050-AA3105 joints produced by friction stir spot welding**  
AYDIN H., TUNÇEL O., YÜCE C., TUTAR M., YAVUZ N., BAYRAM A.  
3rd International Conference on Welding Technologies and Exhibition, 21 - 23 May 2014
- XIV. **Effect of rotational speed and dwell time on mechanical properties of dissimilar AA1050-AA3105 joints produced by friction stir spot welding**  
AYDIN H., TUNÇEL O., YÜCE C., TUTAR M., YAVUZ N., BAYRAM A.  
3. International Conference on Welding Technologies and Exhibition (ICWET 2014), Manisa, Turkey, 21 May 2014
- XV. **Yolcu Koltuğunda Hafifletme Üzerine Bir Çalışma**  
Yüce C., Yavuz N., Karpat F., Sendeniz G., Aksoy M.  
Makine İmalat Teknolojileri Sempozyumu ve Sergisi (MATİT 2013), Bursa, Turkey, 6 - 07 December 2013, pp.151-157

## Metrics

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