

CURRICULUM VITAE
for Assoc. Prof. Dr. Yılmaz GÜR



Personal Particulars :

Full Name	Mr. Yılmaz GUR
Date of Birth and Place	12 July 1962, Balıkesir, Türkiye
Home Address	Atatürk Mah. Dereboyu 9057 Sok. No:3 Park Apt. K:1 D:1 - 10020, Balıkesir, Türkiye
University Address	University of Balıkesir Department of Mechanical Engineering Çağış Kampusu Balıkesir, Türkiye
Marital Status	Married with two children
Nationality	Turkish
E-mail	ygur@balikesir.edu.tr

Academic Qualifications :

Education in Turkey :

High School	College of Balıkesir, Balıkesir, Türkiye (1976-1979)
BSc.	Mechanical Engineering Department, Balıkesir Engineering Faculty of University of Uludağ , Bursa (1979-1983) Distinction
MSc.	I started to MSc. study in the department of Mechanical Engineering of İstanbul Technical University in 1983 and continued in the dept. of Mech. Eng. of University of Uludağ Science Institute . (1983-1986)
Military Service	Between the years 1986-1988, I did complete my Military Service in the Ministry of Defence in Ankara.
PhD study.	My Ph.D. study started in 1989 in Turkey. After the first-year Examination, I got a scholarship from the University of Balıkesir and went to the U.K. in April 1991.
Ph.D. Degree	Balıkesir University, Science Institute, 1998.

Education in the U.K. :

Leeds Uni. Language Unit months	I have attended for my Ph.D. preparation language course for 3 months
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in the University of Leeds Language Unit.
(Certificate in English)

Park Lane College
(Leeds)

From 1992 to 1995, I attended Park Lane College's English Language courses from the level 4 to the proficiency level.

Ph.D.

I started my Ph.D. in 1991 under the supervision of **Prof. Alan De Pennington** and **Dr. Tim David** at the University of Leeds in the Department of Mechanical Engineering. Ph.D. research area was the integration of the engineering analysis process into the engineering design. In 1996, I came back to Türkiye and I finished my PhD study at **Balikesir University** in 1998.

I have been in the U.K. several more times ranging from 1 month to 3 months during the period of my wife's EdD study, because, my wife had a scholarship from the World Bank to do her Education of Doctorate study in England, between the years 1996-1999.

Teaching Experience :

Teaching Tutor

From 1984 to 1986, from 1988 to 1991, and from 1996 to 1998 I did teach some courses in the mech. eng. dept. as a research assistant.

In 1998, I have appointed as an **Assistant Professor** in the department of Engineering faculty of Balikesir University. From May 1998 to 2010, below mentioned lectures has been taught to undergraduate and graduate students as an assistant professor.

Additive Manufacturing Technologies (MSc, Ph.D. lecture)
Technical Drawing and Descriptive Geometry
Computer-Aided Design (AutoCAD and Solidworks)
Principles of Distance Learning (HTML course)
Technical English
Computer-Aided Architectural Design
Supervising for MSc and PhD students
Term Projects
Final Year Projects

Visiting Professorship
(Prizren/KOSOVO)

Between the years 2010 -- 2012, total 6 semesters, I have been in Prizren /Kosovo as a visiting professor at Prizren University. I have not only supported the World's newest country's newly established university but also the Turkish society that lives in Prizren. I have taught numerous courses in the Mathematics-Informatics department such as Programming and Algorithms, Introduction to Informatics, Basic Computer Science, and Programming with HTML. Sponsored by the Republic of Turkey Prime Ministry Turkish Cooperation and Coordination Agency.

In May 2019, I got the title of **Associate Professor** which was provided by the Turkish Interuniversity Board.

Coordinatorship	Coordinator for foreign students in Engineering Faculty since 2012.
Directorship	Bigadiç Vocational High School Director (March 2015- January 2020)

Completed Projects :

1. ***“Computer Aided Modelling and Analysis of Diffusion Bonding Process in an inert gas environment”*** titled project still is completed. I was the project leader. The project aimed to model the diffusion bonding of Al-Cu material couple using a 3-D design and modeling software (Solidworks99) and thermal and stress analysis of the process using an analysis software (ANSYS Designspace5.04) to find out temperature and stress distribution.
2. In 2013, I have awarded a project titled ***“The Production of three-dimensional complex objects based on mathematical functions by Using Fused Deposition Modelling Method”*** by Balikesir University’s Scientific Research Center. The project aims to manufacture products based on the solution of mathematical functions, such as Algebraic surfaces, by using of fused deposition modeling method. The project started in August 2013 and was completed in December 2016.

Continuing Projects :

1. **Project Title: “Manufacturing a drop weight impact test device and crush testing and analysis of various engineering components.”** In this research project, a drop-weight impact test device will be produced to test engineering components against impact and shock tests in laboratory conditions. Through this experiment, various pieces will be tested for the effects of impact and collision. Based on displacement values obtained as a result of the experiments carried out under various loads load-displacement graphs will be prepared and the area sits under the graphics generated, will be calculated to find the energy absorption value to reveal how parts can absorb more energy to repeat the experiments until reaching maximum energy absorption value through modifications. Also, computer-aided numerical crash tests will be carried out by using computer analysis software ANSYS-Lsdyna and the validity of these numerical results obtained in digital format will be compared with experimental results.
Project No:4.100.2013.0036, Project Coordinator: Assist. Prof. Dr. Yılmaz GÜR,
Project Starting Date: April 2014 Project Ending: September 2015

2. **Project Title: “Optimisation of fabrication parameters of 3d printed continuous glass-fiber Reinforced polymer composites”** In this project, first, test samples will be produced with classical thermoplastic and carbon fiber filaments. Later, A commercial 3D printer will then be modified for the purpose. The printing head will be replaced and small-scale composite test sample will be produced with a thermoset resin and continuous glass fiber pair. With the nozzle and printing head to be modified, while extruding the resin impregnated (through the resin bath) glass fibers, simultaneously it will be rapidly cured with an ultraviolet (UV) light source. On the other hand, different pressing forces will be applied to the surfaces with the pressing wheel that will be mounted on the 3D print head at the same time. It will be studied for the curing of continuous glass fibers with different matrices along with some other process parameters in the additive manufacturing of composite samples with a 3D printer. The micro-macro structural properties and some physical and mechanical properties of the continuous glass-fiber reinforced composite end products obtained will be investigated. At the end of the study, the obtained data will be analyzed, and optimum values will be determined in terms of both the material pair and the parameters of the 3D printing process.

Project No: 2020/084

Approved total budget: 20,000.00 TL

Project Start time: July 2020 (Continue)

Project Coordinator: Assoc. Prof. Dr. Raif Sakin,

Researchers: Assoc. Prof. Dr. **Yılmaz GÜR**, Prof. Dr. Sare ÇELİK.

3. **Project Title: “Manufacturing of continuous carbon fiber reinforced thermoplastic composites with 3d printing and improving mechanical properties”** In this study, firstly, test samples will be printed with a 3D printer by using thermoplastic filaments that can be found easily on the market. Then, according to the purpose of the study, the printing head of the 3D printer will be changed and the printer will be modified. Demounted nozzle kit will be assembled to work with two filaments. Two filaments will go into the nozzle at the same time and one composite molten and mixed thermoplastic will go out from the nozzle. At this stage, composite test samples will be manufactured with thermoplastic filament and continuous carbon fibre pair using different process parameters. The curing rate in the samples will be monitored by controlling the build plate temperature. On the other hand, it is considered to apply slight pressure force onto the printing surface by mounting a pressure wheel behind the nozzle in the modified demounted kit. Some process parameters of composite samples that are produced with continuously reinforced carbon fibre and various thermoplastics filaments will be studied. Some physical and mechanical, and macroscopic and microscopic properties of the continuous fibre-reinforced final products will be investigated. At the end of the study, the obtained data will be analysed and optimum values will be defined for both material pairs and 3D printing process parameters.

Project No: 2020/039

Approved total budget: 20,000.00 TL

Project Start time: July 2020 (Continue)

Project Coordinator: Prof. Dr. Sare ÇELİK,

Researchers: Assoc. Prof. Dr. **Yılmaz GÜR**, Assoc. Prof. Dr. Raif SAKİN.

Publications

Papers published per reviewed Science Citation Indexed Journals

1. N. İLTEN, M. GÜNEŞ, Y. GÜR, “Observations, Data Analysis and Modelling Studies on Air Pollution in Turkey”, 6th International Conference on Air Pollution GENOA, ITALY, SEP 29-30, AIR POLLUTION VI Book Series: ADVANCES IN AIR POLLUTION SERIES Volume: 6 Pages: 207-218 Published: 1998. Transactions on Ecology and the Environment vol 21, © 1998 WIT Press, www.witpress.com, ISSN 1743-3541 (Accession Number: WOS:000079127400021) (**Science Citation Index Expanded**)
2. İ. EREN, Y. GÜR, Z. AKSOY, “Collapse Analysis Of Front Side Rails With New Types Of Crush Initiators By Finite Element Method” International Journal of Automotive Technology, Vol. 10, Number 4, 2009, pp. 451-457, DOI 10.1007/s12239-009-0051-z. (**Science Citation Index Expanded**)
3. Z. AKSOY, Y. GÜR, İ. EREN, “*High-speed milling strategies in mould manufacturing*” International Journal of Materials Research (formerly Z. Metallkd.), Vol. 101, 2010, Carl Hanser Verlag GmbH & Co. KG, ISSN 1862-5282, pp. 431-438, DOI 10.3139/146.110292 (**Science Citation Index**)
4. Y. GÜR, “*Designing of a Diffusion Bonding Device by using Solidworks 3-D Design Software*”, Technics Technologies Education Management – TTEM, Vol. 7, No:1, 2012, pp. 328-331, ISSN: 1840-1503 (**Science Citation Index Expanded**)
5. Y. GÜR, “*Additive Manufacturing of Anatomical Models from Computed Tomography Scan Data*”, Molecular and Cellular Biomechanics, MCB, vol.11, no.4, pp.249-258, 2014, ISSN: 1556-5297 / E_ISSN: 1556-5300 (**Science Citation Index Expanded**)
6. GÜR YILMAZ, “*Digital Fabrication of Mathematical Models via Low-Cost 3D FDM Desktop Printer*”, ACTA PHYSICA POLONICA A, 128(2-B), 100-102., Doi: 10.12693/APhysPolA.128.B-100, 2015. (Yayın No: 1565588) (**Science Citation Index Expanded**)

Papers published per reviewed Indexed Journals

1. İ. EREN, Y. GÜR, Z. AKSOY, “A new bicycle frame design via stress and structural weight analysis with finite element method”, Technics Technologies Education Management – TTEM, Vol.9, No:1, 2014, pp. 25-29, ISSN: 1840-1503 (**Scopus Index**)
2. GÜR, YILMAZ, “Manufacturing of a Hand Bone Structure From CT Scan Data by Using 3D FDM Desktop Printer”, European Journal of Science and Technology Vol. 3, No. 6, pp. 3-5, December 2015. <https://search.trdizin.gov.tr/yayin/detay/208194/manufacturing-of-a-hand-bone-structure-from-ctscan-data-by-using-3d-fdm-desktop-printer> (**TRDizin Index**)
3. GÜR, YILMAZ, “Digital fabrication of a real object from a mathematical model by using 3D desktop printer”, J. BAUN Inst. Sci. Technol., 19(2), 237-245, (2017) <https://doi.org/10.25092/baunfbed.342365> (**TRDizin Index**)
4. GÜR, YILMAZ, “Manufacturing of new type curvilinear tooth profiled involute gears using 3D printing”, J. BAUN Inst. Sci. Technol., 20(1), 278-286, (2018) <https://doi.org/10.25092/baunfbed.398462> (**TRDizin Index**)
5. ÇELİK, SARE, GÜR, YILMAZ, “3 boyutlu yazıcı ile üretilen ABS ve karbon fiber takviyeli ABS kompozitlerde üretim parametrelerinin mekanik özelliklere etkisi”, J. BAUN Inst. Sci. Technol., 23(1), 200-209, 2021. <https://doi.org/10.25092/baunfbed.847864> (**TRDizin Index**)
6. GÜR, YILMAZ, “Bilgisayarlı Tomografi Verilerinden Anatomik Ayak Kemik Yapısının Ultraviyole Ledli 3 Boyutlu Yazıcı İle Üretimi”, European Journal of Science and Technology, Special Issue 22, pp. 128-133, 2021. <https://doi.org/10.31590/ejosat.847767> (**TRDizin Index**) (**Index Copernicus**)

Book Chapters

Gür, Y. (2020) “Mathematical Modelling and Additive Manufacturing of a Gyroid” In Machado, J., Özdemir, N., Baleanu, D. (eds) Mathematical Modelling and Optimization of Engineering Problems, Nonlinear Systems and Complexity, vol 30. Springer, Cham. https://doi.org/10.1007/978-3-030-37062-6_10

Papers presented and published in International Conferences and symposiums

1. Yılmaz GÜR, Sare ÇELİK, “A 3D-printed Gyroid from a mathematical equation and its application” Quality Education and Interdisciplinary Approach: Problems, Solutions, and Cooperation, International Scientific and Practical Conference, 25-26 May 2023, Guliston, Uzbekistan

2. Yılmaz GÜR, “Using 3D Printing to Enhance STEM Teaching and Learning”, International Experiences in Primary Education: New Generation Textbooks, National Program and Integration of Digital Technologies, May 19, 2023, Bukhara, Uzbekistan.
3. Yılmaz GÜR, Gökhan CEN, “Stress Analysis of a Front Axle Housing by Using Finite Element Method” 2nd International Conference on Engineering and Applied Natural Sciences, ICEANS 2022, October 15-18, 2022, Konya/TURKEY.
4. Yılmaz GÜR, “Digital Fabrication of a Foot Bone Structure from CT Scan Data”, International Conferences on Science and Technology Engineering Science and Technology ICONST EST 2019, August 26-30, 2019, Prizren, KOSOVO
5. GÜR YILMAZ, “Solid Modelling and 3D Printing of an Object-Based on Koch’s Snowflake Fractal”, Conference: International Conference on Applied Mathematics in Engineering (ICAME)2018, Balikesir/TURKEY, July 2018.
6. GÜR YILMAZ, “Modelling and 3D Printing of a Complex IPMS Gyroid”, Conference: International Conference on Applied Mathematics in Engineering (ICAME)2018, Balikesir/TURKEY, July 2018.
7. GÜR YILMAZ, OKUCU EMRE (2016). “Production Of A Human Brain Via Fused Deposition Modeling Using Magnetic Resonance Imaging (Mri) Scan Data”, 3b Baski Teknolojileri Uluslararası Sempozyumu (3B-BTS2016), 1, 57-64. (Tam metin bildiri), (Kontrol No: 2813088)
8. UZUN MAHİR, GÜR YILMAZ, USCA ÜSAME ALİ (2016), “Manufacturing Of A New Type Curvilinear Tooth Profile Gears By Using A Different Method”, International Conference on Material Science and Technology in Cappadocia (IMSTEC’16), 1 (Tam metin bildiri), (Kontrol No: 2899375)
9. GÜR, Y., GÜR, H., “From Mathematical Expressions to Real Life Objects by Using 3D FDM Printing Technology” III. Uluslararası Avrasya Matematik Bilimleri Ve Uygulamaları Konferansı, IECMSA-2014, 25-28 Ağustos 2014, Viyana-Avusturya.
10. GÜR, Y., “Manufacturing of a Hand Bone Structure from CT Scan Data by Using 3D FDM Desktop Printer” International Conference On Computational And Experimental Science And Engineering (ICCESEN2014), 25-29 October 2014, Antalya-Turkey, p.299.
11. GÜR, Y., “Fabrication of Mathematical Models via Low-Cost 3D FDM Desktop Printer” International Conference On Computational And Experimental Science And Engineering (ICCESEN2014), 25-29 October 2014, Antalya-Turkey, p. 300.
12. GÜR, Y., “3D Printing Of An Injection Mould Prototype” 2nd International Iron and Steel Symposium (IISS’15), April 1-3, 2015, Karabuk, Turkey, pp. 830-834.

13. Yılmaz GÜR, “*Production of 3D Complex Objects by Using Fused Deposition Modelling Method*”, East of West West of East International Balkans Conference, 5-6-7-8 June 2013, p. 66, Prizren-Kosovo.
14. Y. GÜR, H. GÜR, “*Misunderstanding Of Variables And Graphics By Students In Internal Combustion Engines Course-I*” V. International Education Technologies Conference, 21-23 Sept. 2005, Sakarya, S.439-442.
15. R. YAMAN, Y. GÜR, G. CELIK (YAMAN), “*Virtual Facilities for Real Manufacturing*” The 29th International Conference Computers and Industrial Engineering, 1-3 Nov. 2001 Montréal, Canada, S. 129-134.
16. Y. GÜR, S. CELIK, A.N.OTMANBÖLÜK, “*Cu-Al Malzeme Çiftinin Difüzyon Kaynağının Bilgisayar Destekli Termal ve Gerilme Analizi*” 9. Denizli Malzeme Sempozyumu, Mayıs 8-9-10, 2002 Denizli, S. 145-151.
17. Y. GÜR, “*Diesel Motorları İçin Yeni Bir Alternatif Yakıt : Biodiesel*” IV. Mühendislik Mimarlık Sempozyumu, Eylül 11-13, 2002 Balıkesir, S. 419-426.
18. Y. GÜR, “*Production of Oxygen and Nitrogen by liquidification of atmospheric air under high pressure*” Unpublished Master of Science Thesis, June 1986, Science Institute, University of Uludag, Turkey.
19. Y. GÜR, “*Activity and Information Modelling of Computational Fluid Dynamics (CFD) Analysis to Integrate with the Engineering Design*”, Unpublished Ph.D. Thesis, May 1998, University of Balıkesir, Balıkesir, Turkey.
20. Y. GÜR, Z. AKSOY, R. YAMAN, “*An Activity Model for Computational Fluid Dynamics (CFD) Analysis Developed Using the SADT Technique*” 8th International Machine Design and Production Conference, September 9-11, 1998 Ankara, Turkey, pp. 565-573.
21. R. YAMAN, A. ORAL, Y. GÜR, “*A Heuristic Algorithm for Increasing Effective Area During Sheet Metal Cutting Processes*” 8th International Machine Design and Production Conference, September 9-11, 1998 Ankara, Turkey, pp. 241-250.
22. N. İlten, M. GÜNEŞ, Y. GÜR, “*Observations, Data Analysis and Modelling Studies on Air Pollution in Turkey*”, Air Pollution VI, Editors: C.A.Brebbia, C.F. Ratto, H. Power, WIT Press, Computational Mechanics Publications, 1998, pp. 207-218.
23. M. GÜNEŞ, Y. GÜR, “*A Simple Description of Finite Element Method for the solution of 2-D Heat Transfer problems*”, Harran University GAP. II, Engineering Congress, 1998, pp. 262-270.
24. Yılmaz GÜR, “*Engineering Design Process*”, Journal of Engineering-Architectural Faculty of University of Balıkesir, March 1999, Vol. 1, Number 1, ISS66N 1302-2733, pp.125-132.

Erasmus Teaching Staff Mobility

Yılmaz GÜR, Lifelong Learning Programme **LLP/Erasmus Teaching Staff Mobility Program** , 7-11 June 2010, Fachhochschule Regensburg-Germany.

Social Activities :

Member of Balikesir Tennis Club (1998-)

Auditor of College of Balikesir Alumni Association (1997-)

Founder Member of Balikesir Art Photographers Association (BASAF) 1999

Academic advisor of Cinema and Photography Group of Balikesir Univ. (SİFOT) 2012-

Founder Member of Prizren University Turkish Society Art Photography Club (PAFEK) 2011.

Photography Seminars in Prizren and Pristine Yunus Emre Turkish Cultural Centers. 2011

5 Photography Expositions in Prizren and Prishtina (Gazi Mehmet Pasha Hamamı (twice), Xhemajli Berisha Cultural House, Yunus Emre Turkish Cultural Centres in Prizren and Prishtina) 2010,2011, 2012

**NAMES, POSITIONS, AFFILIATIONS, AND E-MAIL ADDRESSES
OF THREE SENIOR RESEARCH LEADERS AVAILABLE FOR
PROVIDING RECOMMENDATION LETTERS**

1. Prof.Dr. Mehmet Eroglu, Gazi University Mech. Eng. Dept.
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2. Prof.Dr. Ramazan YAMAN, Gelisim University, Mechatronic Eng.
ryaman@gelisim.edu.tr, <http://mmf.gelisim.edu.tr/Altmenu-1-1-akademikkadro-.html>