# Curriculum vitae

Name: Hamit TEKİN

Date of Birth: 22.09.1980

Academic Position: Assoc. Prof., Mechanical Engineering Department,

University of Turkish Aeronautical Association, Ankara, Turkey.

Email: htanabi@thk.edu.tr

https://orcid.org/0000-0002-0911-6849



#### Ph.D. Thesis Title:

Design and manufacturing of electrically conductive composites via microvascular channels, Middle East Technical University, Mechanical Engineering department,2017.

#### **PUBLICATIONS:**

- H. Tanabi "Investigation of the shear properties of 3D-printed short carbon fiber reinforced thermoplastic composites" Journal of Thermoplastic Composite Materials, 2022.
- H. Tanabi "Machinability of alloy ductile iron and forged 16MnCr5 steel", Materials Testing, 2022.
- H.Tanabi, A.G. Atasoy, M. Demiral, B. Sabuncuoglu, "Stress Analysis of Vascularized Glass Fiber Composites exposed to Bending Loading Advanced Composite Materials" Journal of composite structure, 2022.
- H. Tanabi "Investigation of the temperature effect on the mechanical properties of 3D printed composites" International Advanced Researches and Engineering Journal, 2021.
- B. Sabuncuoglu, J. Soete, H. Tanabi, S.V. Lomov," Micro-CT analysis of deviations in fiber orientation and composite stiffness near the microvascular channels embedded in glass-fiber reinforced composites" Journal of composite structure, 2020.
- M. Demiral, H. Tanabi, B. Sabuncuoğlu," Experimental and Numerical Investigation of Transverse Shear Behavior of Glass-Fibre Composites with Embedded Vascular Channels", Journal of composite structure, 2020.
- H Tanabi, M Rafighi, Turning machinability of alloyed ductile iron compared to forged EN 1.7131 steel, Materials Testing, 2020.
- H. Tanabi, M. Erdal "The effect of shear mixing process parameters on electrical, mechanical and electromechanical properties of CNT/epoxy nanocomposites", Results in Physic Journal, 2019.
- H. Tanabi, M. Erdal "Development of strain monitoring system for glass fiber reinforced composites via embedded electrically conductive pathways", Journal of Advanced Composite Materials, 2019.
- A.Shawk, H. Tanabi, B. Sabuncuoglu "Investigation of stress distributions in the resin-rich region and failure behavior in glass fiber composites with microvascular channels under tensile loading", Journal of composite structure, 2018.
- H. Tanabi, A.Shawk, B. Sabuncuoglu "Stress Concentrations in Composites with Microvascular Channels" Structural Integrity Procedia, 2017.
- K. Poorghasemi, F Ommi, V. Esfahanian, and H. Tanabi " Investigation of the Soot and NO Emission Reduction Mechanism in DI Diesel Engines by Means of Split Injection Strategy." Journal of Fuel and Combustion,,pp 91-103,2011.

- H. Tanabi, N. Babaei, A. Babaei " Real-time tool wear monitoring based on feed motor current in chuck- center mounting condition" Advanced Materials Research Vols. 341-342 (2012) pp 307-312
- N. Babaei, A. Babaei, H. Tanabi "Investigation of Grinding Surface Temperature: Experimental Measurements and Numerical Modeling" Advanced Materials Research Vols. 341-342 (2012) pp 147-151

#### **CONFERENCES:**

- H. Tanabi, Flexural Properties of Glass Fiber Reinforced Laminates with Embedded Vasculature, The 9th International Scientific Research Congress, Turkey, 2020.
- H. Tanabi, Evaluation of machinability of alloy ductile iron in terms of thrust drilling force, 8th International Symposium on Innovative Technologies in Engineering and Science, Turkey, 2020.
- H. Tanabi, B.Sabuncuoglu, J. Soete and S. V. Lomov "Micro-CT measurement of fiber disturbance and composite stiffness: Application to in glass-fiber reinforced composites with embedded microvascular channels "Euromech Colloquium 602Lyon, France, 2019.
- H. Tanabi, M. Erdal "Design and manufacturing of electrically conductive composites via microvascular channels" 4th International Conference on Mechanics of Composites, Madrid, Spain, 2018.
- A.Shawk, H. Tanabi, B. Sabuncuoglu "The effect of manufacturing parameters on the stress concentrations in composites with micro-vascular channels under transverse loading"4th International Conference on Mechanics of Composites, Madrid, Spain, 2018.
- H. Tanabi, A.Shawk, B. Sabuncuoglu "Stress Concentrations in Composites with Microvascular Channels" XXVII Int. Conf. on Mathematical and Computer Simulations in Mechanics of Solids and Structures, Sent Petersburg, Russia, 2017.
- T. Aydil, H. Tanabi, M. Erdal," Particle Deposition In Resin Transfer Molding Of Advanced Composites", 16th International Conference on Machine Design and Production (UMTIK 2014), Izmir, Turkey, 2014.
- T. Aydil, H. Tanabi, M. Erdal," Resin Transfer Molding Of Particle-Filled, Continuous-Fiber Reinforced Composites", American Society for Composites 29th Technical Conference,16th USJapan Conference on Composite Materials, ASTM-D30 Meeting, California, USA, 2014.
- T. Aydil, H. Tanabi, M. Erdal," Modeling of Compression Resin Transfer Molding for Manufacturing Particle-Filled Advanced Composites", 28th American Society for Composites, Pennsylvania, USA, 2013.
- V. Poormostagimi and H. Tanabi " Investigation of the Effect of Tool Wear on Chip Radii by using of the Neural Networks" ICME 2010 Conf., Tabriz, Iran,2010
- H. Tanabi, N. Babaei, D. Khanlari "Evaluation of Machinability Rating of ADI in Comparison with Forged Steels" ICME 2010 Conf., Tabriz, Iran,2010
- N. Babaei, A. Babaei, H. Tanabi "Evaluation of process parameters effect on hardness of HPT disks and hardness prediction using fuzzy logic and regression" ICME 2010 Conf., Tabriz, Iran,2010
- H. Tanabi, N. Babaei, D. Khanlari " Evaluation of Mechanical Properties and Machinability Rating of ADI in Comparison with Casting Steels "National Mechanical Engineering Conference, Marvdasht, Iran,2011

## **RESEARCH PROJECTS:**

- Project Code: PR-366-1416, Project title: "Design and manufacturing of a Self-sealing composite fuel tank", Funded by The Scientific and Technological Research Council of Turkey (TÜBİTAK) 1501 R & D project. –2023-cont.
- Project Code: --, Project title: "Hassas tarımda akıllı uçus sistemlerine sahip insansız hava aracı (IHA) ve IHA üzerine takılabilecek çalkalanma önleyicili depo ile degisken oranlı püskürtme ve en az sürüklenme (DRIFT) etkisine sahip ilaçlama pülverizatörü gelistirilmesi, TAGEM- 2023- cont.
- Project Code: --, Project title: "Investigation of the mechanical properties of FDMprinted carbon fiber-reinforced thermoplastic composites under static and dynamic loadings", THK-BAP-2023- cont.
- Project Code: TBTK-0122-0130, Project title: "Tünel Açma Makinelerinde Değişken Zemine Uygun Hafriyat Ayırma Sistem Tasarımı" Funded by The Scientific and Technological Research Council of Turkey (TÜBİTAK) 2209-B, 2022.
- Project Code: BAP-03-02-2015-005, Project title: "Design and manufacturing of electrically conductive composites via microvascular channels", Funded by The Scientific and Technological Research Council of Turkey (TÜBİTAK) 1001 R & D project. – Research fellow 2015-2017.
- Project Code: 2170630, Project title: "BUYAN- Self-sealing composite coating", Funded by The Scientific and Technological Research Council of Turkey (TÜBİTAK) 1512 R & D project. –2018-2019.
- "Design and manufacturing of high performance 3 axis gimbal for multicolor UAVs", HUMA Aviation Company- 2017-2019.
- "Hybrid ballistic resistant composite material", Burkut Technology Company- R&D 2016-2019.
- "Üç boyutlu baskı yöntemiyle üretilen kırpılmış cam elyaf kompozitlerin Micro-CT analizi ile iç yapısının incelenerek mekanik davranışının belirlenmesi" Hacettepe University, 2020-2021.
- Project Code: 7200115, Project title: "Self-sealing ballistic Hybrid coating", Funded by The Scientific and Technological Research Council of Turkey (TÜBİTAK) 1507 project. 2020-2021.
- KOSGEB- R&D and Innovation Support Program Grand Project title: "Self-sealing ballistic composite coating". 2020-2021.

## GRADUATE THESIS SUPERVISED:

- Investigation of stress distribution in glass fiber-reinforced composite materials with microvascular channels under transverse bending loading, Dep. of Mechanical Eng. Hacettepe Uni., 2019, Co-supervisor.
- Investigation of ballistic performance of ceramic armors with tests and analysis which contains multilayer ceramic tiles, Dep. of Mechanical Eng. Hacettepe Uni., 2023, Co-supervisor.

#### AWARDS & SCHOLARSHIPS:

- 2017 Champion of "Yeni Fikirler Yeni İşler (YFYI 2017)" which is Turkey's first and biggest acceleration program.
- Awarded in "Tech Ankara Proje Pazarı 2017" competition with two projects
- Funded as one of 32 top worldwide projects in ISDB Transformers 2018, Cambridge, United Kingdom, Project title "Self-repairing advanced coating for water reservoirs, channels, and pipelines aiming to prevent water waste, leakage, and supply efficient irrigation"
- Awarded in ROBOIK 2019 unmanned ground vehicle competition, selected by the Turkish Presidency of Defense Industries, 2019.

## **PATENTS:**

- Reference No: P17/1282, File No: 2017/15146, Turkish patent, "Self-repairing ballistic coating- BUYAN"
- Reference No: P17/1295, File No: 2017/15209, Turkish patent, "Hybrid Armor"

#### Licenses:

- UAV (up to 150 kg) pilot issued by the Directorate General of Civil Aviation
- UAV Instructor authorized by Turkey Directorate General of Civil Aviation

Position	Department	Year
Associate Dean	Faculty of Engineering	November 2022- Continued
Head of the graduate school of Mechanical and Aeronautical Engineering	THK University, Ankara	November 2021- Continued
Head of Lifelong Learning Center	THK University, Ankara	November 2020- June 2022
Assistant Professor	Mechanical Engineering Department, THK University, Ankara	June 2018- Continued
Lecturer	Mechanical Engineering Department, THK University, Ankara	August 2014– 2018
TULPAR R&D, and Engineering Technology Company	R&D Director	January 2018-Continued

## **EXPERIENCES:**

## AREA OF INTERESTS:

- Composite materials
- Manufacturing techniques
- Additive manufacturing