Prof. Dr. Savas Dilibal

Phone: +1 (603) 277-0331 | E-mail: dilibalsavas@gmail.com
www.adaptronics.tech | linkedin.com/in/savasdilibal/
https://orcid.org/0000-0003-4777-7995

PROFESSIONAL SUMMARY

- Research and innovation in additive manufacturing focusing on **data-driven design methodologies** integrated with **advanced additive manufacturing** techniques such as Selective Laser Melting, Multi Jet Fusion, and Wire Arc Additive Manufacturing.
- Leadership in research projects as **Principal Investigator** in multiple national research projects collaborating with industry partners on advanced manufacturing techniques, including **robotic actuators and smart materials**.
- Specialized knowledge in the design and application of **shape memory alloy** (SMA)-based systems for smart mechatronics, **soft robotics**, materials engineering, biomedical devices, and aerospace applications, demonstrated through **7 patents** and **70+ publications** in international journals and conferences.
- Extensive experience in teaching and developing courses in **Mechatronics System Design, Robotics Welding Technologies**, and Hydraulics & Pneumatics Systems at Istanbul Gedik University.
- Supervised over **20 PhD and Master's students**, contributing to several publications in reputable journals. Taught courses across multiple universities, including Istanbul Gedik University & the University of Akron, USA. Reviewed **10+ papers** for internationally recognized peer-reviewed journals.
- Active member of professional organizations such as Turkish Additive Manufacturing Association (TAMA), **IEEE** Turkey with advisory roles in national and international conferences and associations, including the Turkish Robotics Conference (ToRK).
- Proficiency in **finite element analysis** tools (ABAQUS, SolidWorks), object-oriented programming (Python, C#), and data analysis software (MATLAB, Mathematica), supporting robust research and development capabilities.
- Successful interdisciplinary university-industry collaborations with organizations such as **NASA, TUBITAK, and ASELSAN,** contributing to significant technological advancements.

ACADEMIC BACKGROUND

Post-doctorate, Mechanical Science and Engineering
University of Illinois at Urbana-Champaign, Illinois, USA — Aug 2010

Doctor of Philosophy, Metallurgical and Materials Engineering
Yildiz Technical University, Istanbul, Turkey — Dec 2005

Master of Engineering, Mechanical Engineering
Istanbul Technical University, Istanbul, Turkey — June 2003

Master of Engineering, Industrial Engineering
Gazi University, Ankara, Turkey — Sept 1999

Bachelors of Engineering, System Engineering
Army Military Academy, Ankara, Turkey — Aug 1995

WORK EXPERIENCE

Istanbul Gedik University, Istanbul,

Professor, Mechatronics Engineering Department — July 2024 – Present
Assoc. Professor, Mechatronics Engineering Department — Jan 2019 – July 2024
Asst. Professor, Mechatronics Engineering Department — Jan 2015 – Jan 2019

- Developed and taught the following courses; *MCT410* Mechatronics System Design, *MCT212* Hydraulics & Pneumatics Systems, and *MCT416* Robotics Welding Technologies, *MCT101 Intro to Mechatronics Engineering*

- Supervised 20+ PhD and Master's students, leading to several publications in reputable journals.
- PI of two national research projects in advanced manufacturing techniques, collaborations with industry partners.

GeKa Robot Welding Company, Istanbul

IIW - Welding Engineer — June 2022 – Jan 2023

- Lead the university-industry cooperation-based WAAM project.
- Taught Robot Welding lectures for robot operators.

Industrial Consultant — Jan 2014 – Jun 2017

- Provided robotic GMAW-related technical consultancy for industrial robot welding projects.

Ersan Rubber Company, R&D center, Istanbul

Industrial Consultant — June 2020 – Jan 2022

- Specialized in providing consultancy for R&D projects aimed at advancing technology and optimizing product development processes.

Bahcesehir University, Istanbul

Adjunct Professor, Mechatronics Engineering Department — Sept 2014 - Jan 2015

- Taught MCH2011 Static and Strength of Materials

University of Akron, Akron, OH, USA

Adjunct Professor, Mechanical Engineering Department — Jan 2014 - June 2014

- Taught *ME 4900- 420 Object-oriented Design & Material Selection*

Post-doctoral Research Associate — Jan 2013 - June 2014

- *Studied in a **NASA** funded project (**NASA`s Subsonic Fixed Wing Program – NNX11AI57A**) Experiment, modeling and applications of NiTi and NiTiHf shape memory alloys*
- *NiTi shape memory alloys-based actuators (Experimental investigation on bio-inspired robotics gripper mechanisms and controlling modes)*

Yeditepe University, Istanbul

Adjunct Professor, Mechanical Engineering Department — Sept 2007 – Sept 2009

- *Taught ME361 Engineering Materials, ME492 Senior Mechanical Eng. Design Project (SMA-based robotic actuator system)*

NATO Multi-national Headquarters

Logistics Officer — Aug 1995 - Dec 2012

- *As* a System Engineer, served in multi-national NATO-led Headquarters providing engineering-based technical solutions in Peace Support Programs.

PATENT ISSUED

1. **Dilibal S.,** Engeberg ED., Antagonistically actuated shape memory alloy manipulator, **USPTO 2017, 9744055 B2 USA**
2. **Dilibal S.,** Key and safe padlock system using nickel-titanium shape memory alloys, **TR 2008 02546 B**
3. Emeksiz C., **Dilibal S**., Prismatic wind turbine blade connection developed using superelastic nickel-titanium alloy, **TR 2014 11465B**
4. **Dilibal S.,** Candas C., Sahin H., Monoblock three-finger soft robotic gripper system with fluid pressure drive, **TR 2018 04748**
5. **Sener** A., Igci A., Sahin H., Kalaycı M.U., **Dilibal S.,** Oncul M.O., Gastric bypass tube for bariatric purposes **TR 2017 07156**
6. **Dilibal S.,** N. Geyik Degerli, Production of woven fabric using nickel-titanium/para-aramid filament **TR 2016 04097**
7. **Sorarlı** G., **Dilibal S.,** Sahin H., Underwater robotic cutter oriented for moored sea mine destruction, **TR 2019 15901**

PROJECTS

PI, Executive

- **Development of bimetallic components via robotic wire arc additive manufacturing system (WAAM) using metal-cored/solid wires**, supported by the Scientific and Technological Research Council of Turkiye (TUBITAK) under the scope of the University-Industry Cooperation Support Program with the project number of 5220023, June 2022 – Oct 2023
- University-Industry Cooperation project, **Istanbul Gedik University** – **ASELSAN**, Design of nickel-titanium shape memory alloy actuated underwater winglet system (IU0002-17I), Jan 2017 – July 2017

Researcher

- NASA Research Project, Modeling of nickel-titanium shape memory alloys based actuator (**NASA Glenn Research Center, Fundamental Aeronautics Program, Subsonic Fixed- Wing Project No.NNH10ZEA001N-SFW1, Grant No.: NNX11AI57A**) University of Akron - NASA GRC, Ohio Jan 2013- Jan 2014
-

CITATIONS

https://scholar.google.com.tr/citations?user=ZSCgNFIAAAAJ&hl=en
Citation indices: All Citations **765** h-index **17** i10-index **26**

ADMINISTRATIVE POSITIONS

- 2014- Present (Head of Mechatronics Engineering Department at Istanbul Gedik University)
- 2014- Present (Director of Robot Tech Research and Application Center at Istanbul Gedik University)
- 2014- 2018 (Vice Director of Institute of Science and Technology at Istanbul Gedik University)

APPENDIX

- International Journal Publications
- Conference Papers

APPENDIX

SCI-SCI EXPANDED JOURNAL PUBLICATIONS

1. Akpınar DE, **Dilibal S,** Gurol U, (2024) Experimental investigation on WAAM-based functional hard-facing bimetallic part, Journal of Mining and Metallurgy, Section B: Metallurgy, doi.org/10.2298/JMMB240505020A

2. Khabiyev, A., **Dilibal, S.** Mussulmanbekova, A. Kanapiya, M. Kerimkulov, D. (2024) Additively Manufactured Continuous Processing Reactor System for Producing Liquid-Based Pharmaceutical Substances. Appl. Sci., 14 doi.org/10.3390/app14166853

3. Gurol U., Turgut B., Kumek H., **Dilibal S.**, Kocak M. (2024) Fabrication and Characterization of Wire Arc Additively Manufactured Ferritic-Austenitic Bimetallic Structure, Metals and Materials International, 30, 1342–1355 doi.org/10.1007/s12540-023-01568-7

4. Gurol U., Kocaman E., **Dilibal S.,** Kocak M. (2023) A comparative study on the microstructure, mechanical properties, wear, and corrosion behaviors of SS 316 austenitic stainless steels manufactured by casting and WAAM technologies, CIRP Journal of Manufacturing Science and Technology 47, pp. 215-227 doi.org/10.1016/j.cirpj.2023.10.005

5. Gurol U., Tumer M., **Dilibal S.** (2023) Experimental Investigation of Wire Arc Additively Manufactured Inconel 625 Superalloy, Transactions of the Indian Institute of Metals 76 (5), 1371-1379 doi.org/10.1007/s12666-022-02797-x

6. Joula M., **Dilibal S**., Mafratoglu G., Owusu Danquah J., Alipour M (2022) Hybrid Battery Thermal Management System with NiTi SMA and Phase Change Material (PCM) for Li-ion Batteries, Energies 15(12) doi.org/10.3390/en15124403

7. Gurol U., **Dilibal S**., Turgut B., Koçak M (2022) Characterization of a low-alloy steel component produced with wire arc additive manufacturing process using metal-cored wire, Materials Testing 64 (6), 755-767 doi.org/10.1515/mt-2021-2155

8. Peduk G., **Dilibal S.,** Harrysson O., Ozbek S. (2021) Experimental Investigation on the EBM-Based Additively Manufactured Prismatic Nickel–Titanium SMA Components, Russian Journal of Non-Ferrous Metals 62 (3), 357–367, doi.org/10.3103/S1067821221030020

9. Gullu, A. Owusu Danquah, J. **Dilibal, S.** (2021) Characterization of energy dissipative cushions made of Ni-Ti shape memory alloy, Smart Materials and Structures, doi.org/10.1088/1361-665X/ac383d

10. Tanriver K., **Dilibal S.** Sahin H., Kentli A. (2021) A novel design on polymeric material recycling technology, Acta Scientiarum. Technology 43 doi.org/10.4025/actascitechnol. v43i1.56211

11. **Dilibal S.,** Sahin H., Owusu Danquah J., Choi, JW (2021) Additively Manufactured Custom Soft Gripper with Embedded Soft Force Sensors for an Industrial Robot, Additive Manufacturing, International Journal of Precision Engineering and Manufacturing 22 (4), 709-718 doi.org/10.1007/s12541-021-00479-0

12. Lin M., Vatani M., Choi J.W., **Dilibal S.**, Engeberg E.D. (2020) Compliant underwater manipulator with integrated tactile sensor for nonlinear force feedback control of an SMA actuation system, Sensors and Actuators A: Physical 315 doi.org/10.1016/j.sna.2020.112221

13. Ades C.J., **Dilibal S.,** Engeberg ED (2020) Shape memory alloy tube actuators inherently enable internal fluidic cooling for a robotic finger under force control, Smart Materials and Structures, 29 doi.org/10.1088/1361-665X/ab931f

14. **Dilibal S.** (2018). Stabilized actuation of a novel NiTi shape memory alloy actuated flexible structure under thermal loading. Materiali in Tehnologije, 52(5), 599-605, doi: 10.17222/mit.2018.042

15. **Dilibal S.**, Sahin H., Celik Y. (2018). Experimental and numerical analysis on the bending response of the geometrically gradient soft robotics actuator. Archives of Mechanics, 70(5), 391-404, doi: 10.24423/aom.2903

16. Peduk G., **Dilibal S.**, Harrysson O., Ozbek S., West H. (2018). Characterization of Ni–Ti alloy powders for use in additive manufacturing. Russian Journal of Non-Ferrous Metals, 59(4), 433-439, doi: 10.3103/S106782121804003X

17. **Dilibal Savas**, Hamilton Reginald F, Lanba Asheesh (2017). The effect of employed loading mode on the mechanical cyclic stabilization of NiTi shape memory alloys. Intermetallics, 89, 1-9, doi: 10.1016/j.intermet.2017.05.014

18. **Dilibal S.**, Sahin H., Dursun E., Engeberg E. D. (2017). Nickel–titanium shape memory alloy-actuated thermal overload relay system design. Electrical Engineering, 99(3), 923930, doi: 10.1007/s00202-016-0458-2

19. Engeberg E.D., **Dilibal S.**, Vatani M., Choi J.W., Lavery J. (2015). Anthropomorphic finger antagonistically actuated by SMA plates. Bioinspiration Biomimetics, 10(5), 1-15, doi: 10.1088/1748-3190/10/5/056002

20. Saleeb A., Dhakal B., **Dilibal S.**, Owusu-Danquah J., Padula II S. (2015). On the modeling of the thermo-mechanical responses of four different classes of NiTi-based shape memory materials using a general multi-mechanism framework. Mechanics of Materials, 80, 6786, doi: 10.1016/j.mechmat.2014.09.001

21. **Dilibal S.** (2013). Investigation of nucleation and growth of detwinning mechanism in martensitic single crystal NiTi using digital image correlation. Metallography, Microstructure, and Analysis, 2(4), 242-248, doi: 10.1007/s13632-013-0083-7

22. **Dilibal S.**, Sehitoglu H., Hamilton RF, Maier HJ, Chumlyakov Y. (2011). On the volume change in Co–Ni–Al during pseudoelasticity. Materials Science and Engineering: A, 528(6), 28752881, doi: 10.1016/j.msea.2010.12.056

23. Hamilton R.F., **Dilibal S.**, Sehitoglu H., Maier H.J. (2011). Underlying mechanism of dual hysteresis in NiMnGa single crystals. Materials Science and Engineering: A, 528(3), 1877-1881, doi: 10.1016/j.msea.2010.10.042

24. **Dilibal S.**, Tabanli R. M., Dikicioglu A. (2004). Development of shape memory actuated ITU Robot Hand and its mine clearance compatibility. Journal of Materials Processing Technology, 155156, 1390-1394, doi: 10.1016/j.jmatprotec.2004.04.221

25. **Dilibal S.**, Guner E., Akturk N. (2002). Three-finger SMA robot hand and its practical analysis. Robotica, 20(02), 175-180, doi: 10.1017/S0263574701003757

OTHER PUBLICATIONS

1. Ipek G., Dalkiran A., **Dilibal S.,** (2024) Development of Hybrid Actuator System for Recovery of the Model Rockets, International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Craiova, Romania, 2024, pp. 1-4, doi: 10.1109/INISTA62901.2024.10683867.

2. Akpinar D.E. Turgut B. Gurol U. **Dilibal S.** (2023) Characterization of wire arc additively manufactured wear-resıstant bımetallic component, International October Conference on Mining and Metallurgy (IOP-2023)

3. Gulnergiz E.T., **Dilibal S.**, Gormus B., Danquah J.O. and Emon O.F. (2023) Additively Manufactured Soft Pneumatic Gripper Integrated Remotely Operated Underwater Vehicle (ROV) for Grasping Archeological

Remains, 5th International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), pp. 01-05, doi: 10.1109/HORA58378.2023

4. Hazem Z.B., Ince R. and **Dilibal S.** (2022) Joint Control Implementation of 4-DOF Robotic Arm Using Robot Operating System, International Conference on Theoretical and Applied Computer Science and Engineering (ICTASCE), pp. 72-77, doi: 10.1109/ICTACSE50438.2022

5. Ayna T., **Dilibal S.** (2022) Experimental and numerical analysis for improving the suction capacity of the manufactured water jet ejectors, Journal of Vibroengineering 24 (7), 1364-1376 doi.org/10.21595/jve.2022.22518

6. Gulnergiz E.T. and **Dilibal S.** (2022) Experimental and Numerical Analysis of Additive Manufactured Pneumatic Artificial Muscle Hand Rehabilitation Orthosis, Innovations in Intelligent Systems and Applications Conference (ASYU) pp. 1-5, doi: 10.1109/ASYU56188.2022.9925499

7. Gurol U., **Dilibal S.,** Turgut B., Baykal H., Kumek H., Koçak M. (2022) Manufacturing and characterization of WAAM-based bimetallic cutting tool. International Journal of 3D Printing Technologies and Digital Industry 6(3) 548–555, doi: 10.46519/ij3dptdi.1210836

8. **Dilibal S.** et al. (2022) Grasping of Li-ion Batteries via Additively Manufactured Soft Gripper and Collaborative Robot, International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), pp. 1-5, doi: 10.1109/HORA55278.2022.9799902.

9. Joula M., **Dilibal S**., Owusu-Danquah J. (2021) Smart Adaptronic Thermal Management System Designs for the Li-ion Battery Packs, IEEE International Conference on Mechatronics (ICM2021) doi: 10.1109/ICM46511.2021.9385607

10. Sapmaz A.R., **Dilibal S.,** Ozbaran C. and Gercek M. (2021) Development of Bioinspired Robotic Pectoral Fin Structure Using Radial Scissor Mechanism," 2021 3rd International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), pp. 1-4, doi: 10.1109/HORA52670.2021.9461379.

11. Gurol U., Turgut B., Gulecyuz N., **Dilibal S.,** Kocak M. (2021) Development of Multi-Material Components Via Robotic Wire Arc Additive Manufacturing, International Journal of 3D Printing Technologies and Digital Industry 5(3) doi: 10.46519/ij3dptdi.1033374

12. Peduk G., **Dilibal S.,** Gurol U. (2021) Effect of Wire Electrical Discharge Machining on The Surface of Ebm-Additive Manufactured NiTi Alloys, International Journal of 3D Printing Technologies and Digital Industry 5(3) doi.org/10.46519/ij3dptdi.962015

13. Demiroz O.B. **Dilibal S.** (2021) Design and production of aluminum alloy heat sinks using the direct metal laser sintering manufacturing method for thermoelectric modules, Int. Journal of 3D Printing Technologies and Digital Industry 5 (1) doi.org/10.46519/ij3dptdi.860678

14. Ilter I.S., **Dilibal S.** and Zengin H. (2021) Piezoelectric Force Sensor-based Measurement System for Recoil Force Analysis, 5th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), pp. 596-601, doi: 10.1109/ISMSIT52890.2021.9604676

15. Ozbaran C., **Dilibal S.** (2020) Mechatronic system design of a smart mobile warehouse robot for automated storage/retrieval systems, IEEE Innovations in Intelligent Systems and Applications Conference, pp. 1-6, doi: 10.1109/ASYU50717.2020.9259882

16. Ozbaran C., **Dilibal S.** (2020) Parallel jaw robotic gripper design and production with additive manufacturing method by using horizontal and vertical rack and pinion gear mechanism, Int. J. of 3D Printing Tech. Dig. Ind., 4(2): 139-151, doi:10.46519/ij3dptdi.773133

17. Dilibal C., Hacimustafaoglu A.M. and **Dilibal. S.,** (2020) Development of IoMT Device for Mobile Eye Examination Via Cloud-based TeleOphthalmology, 21st International Conference on Research and Education in Mechatronics (REM), pp. 1-5, doi: 10.1109/REM49740.2020.9313903

18. Gaga L.A., **Dilibal S.** (2020) Investigation of the parameters affecting machining process properties of carbon prepreg composite materials used in the aerospace industry, Int. Journal of 3D Printing Technologies and Digital Industry 4 3 225–238, doi: 10.4651/ ij3dptdi.817343

19. Sapmaz A.R., **Dilibal S.** (2020) Design and additive manufacturing of two-degree of freedom wired radial scissor system using scissor-joint mechanism, Int. Journal of 3D Printing Technologies and Digital Industry 4 (3) doi.org/10.46519/ij3dptdi.832922

20. Gülnergiz, E.T., Yekdaneh, A., **Dilibal, S.,** Sahin, H. (2019) Multiple degrees of freedom pneumatic rehabilitation orthosis produced by additive manufacturing method, TORK Robotics Conference

21. Bozkurt B., **Dilibal S.,** Sahin M.Y. (2019) Investigation of the cooling performance of the thermoelectric modules for mobile cooling system, International Conference on Energy and Sustainable Built Environment, June 19-20

22. **Dilibal S**, Owusu-Danquah J. (2019) The effect of contact surface on the grasping capability of additively manufactured soft robotic gripper, 4th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry, 372-377, Antalya, ISBN: 978-975-96797-3-6

23. **Dilibal S.,** Owusu-Danquah J. (2019) The effect of contact surface on the grasping capability of additively manufactured soft robotic gripper, 4th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry, 372-377 ISBN: 978-975-96797-3-6

24. Peduk G., **Dilibal S.**, Harrysson O. and Ozbek S. (2019) Investigation of microstructural behavior of nickel-titanium alloy produced via additive manufacturing, 4th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry, 1139-1143, ISBN: 978-975-96797-3-6

25. Yuguran E., **Dilibal S.,** Icli D., Cetinkaya F., Macit U., Sonmez E., Karakaya E., Lale B. (2019) Mechatronic system design of semi-autonomous unmanned underwater robot system, National Robotic Conference, June 26-28, 2019, ISBN: 978605625160.

26. Peduk G., **Dilibal S.**, Ozbek S. and Harrysson O. (2018) Evaluation of the structural differences between additive manufacturing and traditional manufacturing for production of nickel-titanium alloys. 3rd International Congress on 3D Printing Technologies, 370-371, ISBN: 978-975-96797-2-9

27. **Dilibal S.**, Sahin H. Candas C. (2018) Flexible wing design and additive manufacturing for new generation bioinspired unmanned aerial vehicles. 3rd International Congress on 3D Printing Technologies, 36-37 ISBN: 978-975-96797-2-9

28. Elbaba O., Sezer S., Sahin H., **Dilibal S.** (2018) Analysis of the basic parameters of additively manufactured elastomeric materials, International Journal of 3D Printing Technologies and Digital Industry 2:1 69-75.

29. **Dilibal S**., Sahin H., (2018) Collaborative industrial robots and digital industries, International Journal of 3d Printing Technologies and Digital Industry 2:1 86-95.

30. Peduk G., **Dilibal S.,** Ozbek S., Harrysson O. (2017) Comparison of the production processes of nickel-titanium shape memory alloy through additive manufacturing. International Symposium on 3D Printing Technologies 3D-PTS2017, 391-399.

31. **Dilibal S. (2017)** The effect of heat treatment on the superelastic behavior of nickel-titanium shape memory alloys. Polytechnic Journal, 20(3), 623-627. Doi: 10.2339/politeknik.339387.

32. **Dilibal S. (2016)** The effect of long-term heat treatment on the thermomechanical behavior of NiTi shape memory alloys in defense and aerospace applications. Defense Science Journal, 15(2), 1-23.

33. Ades, C., **Dilibal S.,** Engeberg ED. (2016) Exoskeleton for Tubular Shape Memory Alloy Finger with Internal Cooling and A Superelastic SMA Spring Return, ASME Florida Conference on Recent Advances in Robotics, Miami, Florida, USA

34. Tepeyurt S., **Dilibal S.**, Sahin H. (2016) Design of industrial robot gripper using additive manufacturing technique and manipulation by operator joint movements. Robot Science Conference (ToRK-2016), 135-137.

35. Altug G., Ozistek TD., **Dilibal S.**, Ozbek S. (2015) Transparent armour systems and general applications, MSI May,3.

36. Akkus T., **Dilibal S.** (2015) The use of image processing technique on the touchless volume and dimension measurements of passengers lagguage and cargo, Automation.

37. **Dilibal S.**, Tansug D., Kocak M. (2015) Operator training on robot, mechanized and orbital welding, IXth National Welding Congress, Ankara.

38. **Dilibal S.**, Engeberg E.D. (2015) Finger-like manipulator driven by antagonistic NiTi shape memory alloy actuators, IEEE Int. Conference on Advanced Robotics, Istanbul

39. Yurtsever O., **Dilibal S.** (2014) Material characterization of nickel-titanium root canal files used in endodontic treatment. IV. Workshop on Advanced Technologies (ITC-2014)

40. Aktas G., Atapek H., Polat S., **Dilibal S.** (2014) Physical metallurgical approaches for shape memory alloys used in earthquake engineering. Workshop on Advanced Technologies (ITC-2014)

41. **Dilibal S.**, Kazancı M. (2014) Bioengineering applications of metallic and polymeric smart materials. Workshop on Advanced Technologies (ITC-2014)

42. **S. Dilibal**, A. F. Saleeb, B. Dhakal, A.E. Hurley, J. S. Owusu-Danquah, S. A. Padula II, R. D. Noebe and G.S. Bigelow (2013) Characterization Capabilities of a 3D Multi-mechanism Material Model for the Prediction of the Thermo-mechanical Behavior of Different Classes of Shape Memory Materials, ASME 2013 Conference on Smart Materials, Adaptive Structures and Intelligent Systems, September 16-18, 2013 in Snowbird, Utah, USA (Symposium 2 on Mechanics and Behavior of Active Materials)

43. J.S. Owusu-Danquah, A. F. Saleeb, B. Dhakal, A.E. Hurley , **S. Dilibal**, S. A. Padula II, R. D. Noebe, and G.S. Bigelow (2013) Large-scale Simulation of a Torque-Tube Actuator Using a 3D Multi-mechanism Material Model: A Comparative Study with $Ni_{49.9}Ti_{50.1}$ and $Ni_{50.3}Ti_{29.7}Hf_{20}$ Shape Memory Alloys, ASME 2013 Conference on Smart Materials, Adaptive Structures and Intelligent Systems, September 16-18, 2013 in Snowbird, Utah, USA (Symposium 2 on Mechanics and Behavior of Active Materials).

44. A.E. Hurley, A. F. Saleeb, **S. Dilibal**, B. Dhakal, J.S. Owusu-Danquah, and S. A. Padula II (2013) Finite Element Modeling of NiTi Shape Memory Alloy Stents and Bone Staples for Biomedical Applications, ASME 2013 Conference on Smart Materials, Adaptive Structures and Intelligent Systems, September 16-18, 2013 in Snowbird, Utah, USA (Symposium 2 on Mechanics and Behavior of Active Materials).

45. **S. Dilibal**, H. Sehitoglu, R. Hamilton, H.J.Maier, Y. Chumlyakov **(2010)** "Detwinning on NiTi SMAs" June 20-24, 2010, Special Workshop on Shape Memory Alloy, Koc University, Istanbul.

46. **S. Dilibal**, N. Cansever **(2008)** "Material characterization of the manufactured NiTi SMAs", The International Conference for Shape Memory and Superelastic Technologies (SMST), 21-25 Sept., Stresa, Italy.

47. **Dilibal S.**, Sonmez N, Dilibal H. **(2003)** Nickel-titanium shape memory alloys and their technological usage, 3rd International Advanced Technology Symposium, 18-20 August, Ankara.

48. **Dilibal S.**, Tabanli M, Dikicioglu A. (2003) Development of shape memory actuated ITU Robot Hand and its mine clearence compatibility, Proceeding of AMPT03 Dublin, Ireland.

49. **Dilibal S.**, Dilibal H. **(2002)** ITUHand Robotic Hand and its mine clearance compatibility, pp.31-37, Defense Technology Congress, METU.

50. **Dilibal S**, Guner E. **(2000)** Design of three-finger shape memory alloy actuated SMA robot hand and application analysis. DokuzEylül University Engineering Faculty, Engineering Journal, 2(1), 159-173.

51. **Dilibal S.**, Guner E., **(1999)** Three fingered SMA robotic hand, XXth National Operations Research and Industrial Engineering Congress, Army Military Academy, Ankara, June 8-9, pp.98-99.

INTERNATIONAL/NATIONAL BOOKS OR CHAPTERS IN BOOKS

Book Chapter: Dilibal S., Nohut S., Kurtoglu C., Owusu-Danquah J. (2021) "Data-Driven Generative Design Integrated with Hybrid Additive Subtractive Manufacturing (HASM) for Smart Cities" C. Chakraborty et al. (eds.) Data-Driven Mining, Learning and Analytics for Secured Smart Cities: Trends and Advances, **Springer.**

Book Chapter: Dilibal, S., Sahin H. (2019) "Industry 4.0 and Additive Manufacturing with Robotic Arc Welding", "Industry 4.0 Technological Fields and Applications", Pegem Akademi, Istanbul.

Editor: Dilibal S., Sahin E., Sahin H., Kalkan S., Sarıel S. (2017). Turkish Robotics Conference (ToRK-2016) Proceedings Book. Istanbul Gedik University, ISBN: 9786058557215.