PERSONAL INFORMATION

Surname Name:	Özen Gülçin
e-mail:	gozen@pau.edu.tr
ORCID	0000-0002-5819-7016
Google Scholar	https://scholar.google.com/citations?user=H9ezXQMAAAAJ&hl=tr
ResearchGate	https://www.researchgate.net/profile/Guelcin-Oezen?ev=hdr_xprf

RESEARCH PROFILE

Researcher with a strong background in deployable and transformable structural systems, focusing on reciprocal frames, scissor-based structures, and performance-driven building components integrating structural design, analytical and numerical evaluation, experimental prototyping, and interdisciplinary collaboration between architecture and civil/structural/mechanical engineering.

RESEARCH INTERESTS

Deployable and Transformable Structures
Reciprocal Frame and Scissor-Based Structural Systems
Parametric Design and Computational Methods
Digital Fabrication and Experimental Prototyping

ACADEMIC POSITIONS

Pamukkale University. Department of Architecture. Assist Prof. Dr. (2022-…)

Izmir Institute of Technology. Department of Architecture. Research Assistant (2016-2022)

Yıldız Technical University. Department of Architecture. Research Assistant (2013-2016)

EDUCATION

Ph. D.	Izmir Institute of Technology. The Graduate School. Department of Architecture (2016-2022).
Thesis	Design and Analysis of Deployable Reciprocal Frames
M. Sc.	Yıldız Technical University. The Graduate of Science and Engineering, Computer Aided Architectural Design (2013-2016).
Thesis	Design Inspired by Nature: Biomimicry
B. Arch.	Izmir University of Economics. Faculty of Fine Arts and Design. Department of Architecture (2007-2012) Izmir University of Economics. Faculty of Fine Arts and Design. Department of Interior Architecture and Environmental Design (2008-2013) (Minor Programme)

PUBLICATIONS

Helvacı, İ., Korkmaz, K., Özen, G., & Kadak, T. (2026). Design of an Adaptive Single-DOF Reciprocal Structure. Journal of the International Association for Shell and Spatial Structures (J. IASS). https://doi.org/10.20898/j.iass.2026.026

Duran, M. İ., & Özen, G. (2026). "Smart, Human-Centered Urban Transformation: A Review of Psychological and Architectural Dimensions in the World and Türkiye". International Conference on Smart Cities & Applications (SCA'26). Karabük, Türkiye.

Özen, G., Korkmaz, K., and Kiper, G., (2024). Design of Rollable Reciprocal Frame Network. *Journal of the International Association for Shell and Spatial Structures: J. IASS*. 65(1). https://doi.org/10.20898/j.iass.2023.030

Özen, G. and Pekdoğan, T. (2023). Mimarlık Eğitiminde Yapı "Yapı Teknolojisi ve Bilimi I" Dersinin Analizi. *Bilecik Seyh Edabali University Journal of Science,* 20(2), 395-407., https://doi.org/10.35193/bseufbd.1249502.

Köse, Ş., Velibeyoğlu, K., and Özen, G. (2023). "The Influence of the Penta Helix Model in Strengthening Social Innovation in Izmir/Türkiye". In R. Hambleton, A. Jones, L. Long, & I. Vinci (Eds.), *European Urban Research Association Conference-The European City: A practice of resilience in the face of an uncertain future* (p. 61). Reykjavik.

Özen, G., Kiper, G., and Korkmaz, K. (2022). Design of Demountable Reciprocal Frames with New Geometric Properties. *Journal of the International Association for Shell and Spatial Structures: J. IASS*, *63*(3), 203–212. https://doi.org/10.20898/j.iass.2022.013.

Özen, G., and Korkmaz, K. (2022). Mobility Analysis of Reciprocal Frames. *International Journal of Digital Innovation in the Built Environment*, *11*(2). https://doi.org/10.4018/IJDIBE.301246.

Pekdoğan, T., Özen, G., Güçü, İ., and Gerçek, M. (2017). "An Empirical Investigation of the Housing Price Dynamics Across the Districts of Izmir". *International Congress on Political, Economic and Social Studies (ICPESS)*. Ankara.

Özen, G., and Çolakoğlu, M. B. (2016). "Transferring Natural Patterns to a Parametric Model". *International Conference on Natural Science and Engineering (ICNASE)*. Kilis.

RESEARCH PROJECTS

TÜBİTAK 1002-A, "Design of Transformable Structures Based on a New Assembly Method with Angulated Scissor Units", Principal Investigator, 1 October 2026.

PATENTS

Helvacı, İ., Korkmaz, K. and Özen, G. (2025). *Biçim Değiştirebilir Bir Karşılıklı Çerçeve Yapılanması (Transformable Reciprocal Frame System),* National Application (Patent Application No. 2025/022391), (under evaluation).

Özen, G. and Korkmaz, K. (2025). *Rollable Framework,* International Application (Patent Application No. PCT/TR2023/050935), (under evaluation).

Özen, G. and Korkmaz, K. (2025). *Hareketli Sarmal Kafes Mekanizması,* National Application (Patent Application No. 2022/014695).

GRADUATE SUPERVISION

Dursun, M. İ., "Design of a Reconfigurable Structure Through a New Assembly Method Using Angular Scissor Units", MSc Thesis, Ongoing, Supervisor.

Helvacı, İ., "Design of a Transformable Reciprocal Frame Structure", MSc Thesis, 2025, Co-supervisor.

ACADEMIC WORKSHOPS

From Pattern to Structure: Reciprocal Frame Systems, Workshop Coordinator, Pamukkale University, 04.10.2026 (National).

Kinetic Architecture, Workshop Coordinator, Pamukkale University, 06.10.2024 (National).

Robotic Earthcrafts II, 14-20.09.2024, Istanbul Bilgi University (International).

Adaptive Kinetic Façade, Online, 25-27.07.2024, Digital Futures (International).

Design of Temporary Shelter Units after Disaster - Design with Rigid Origami - Workshop Coordinator, Kayseri Erciyes University, Workshop, 12.06.2023 -13.06.2023 (National).

Design Strategies for Temporary Cultural Facilities in Kadikoy Istanbul, Collaborative Project 2013-2014: Kadikoy Waterfront Transformation, Arhitektonski Fakultet Sarajevo, 23.04.2014 - 30.04.2014 (International).

AI Driven Design Practice, *Approaches for architects to incorporate artificial intelligence tools into their design processes and methods for integrating and guiding AI into different stages of the design workflow*, Online, 21.01.2024 (International).

How to Use AI for Publishing, *Methods of using Artificial Intelligence for publishing and applications that can be used*, Online, 19.09.2023 (International).

NZEB Basics- *Training of Trainers, Design and construction of nearly zero energy buildings, passive house basis, thermal insulation including U values and materials demo, thermal bridging, passive house windows and doors, U value calculation, mechanical ventilation systems and retrofitting, renewable energy source in Passive Houses, construction and energy performance-case study retrofits*, İzmir, 20.07.2017 (International).

EXHIBITIONS

Robotic Earthcrafts II, selected for upcoming exhibition at the *Venice Architecture Biennale 2025*. Created as part of the International Workshop hosted by Istanbul Bilgi University, September 14–20, 2024.

MEMBERSHIPS

TMMOB Denizli Chamber of Architects

MecArt Kinetic Designs in Architecture

Undergraduate Courses Assisted and Instructed

Pamukkale University:

Course Code-Name	Semester	Credit
MIM 113- Architectural Communication Techniques	Fall	6
MIM 103- Basic Design Studio	Fall	6
MIM 104- Introduction to Architectural Design	Spring	8
MIM 204- Architectural Design II	Spring	12
MIM 211- Computer Aided Design I	Spring	4
MIM 307- Architectural Design III	Fall	14
MIM 360- Design for Experience	Fall	4
MIM 455- Advanced Construction Techniques	Fall	4

Graduate Courses Instructed

Course Code-Name	Semester	Credit
MIM 511 Kinetic Structural Systems in Architecture	Spring	7,5

VOLUNTEER PROJECTS AND TRAININGS

DEKAMER (Deniz Kaplumbağaları Araştırma, Kurtarma ve Rehabilitasyon Merkezi) (Sea Turtle Research, Rescue and Rehabilitation Center), August 2023.

Fire Department, Working at the Height, July 2023.

Fire Department, Basic Firefighting and Search and Rescue Training, July 2023.

Disaster and Emergency Management Presidency, Light Search and Rescue Training, June 2023.