

Curriculum Vitae

Mert Yildirim, Assistant Professor

meryildirim@gelisim.edu.tr



1. Education – degree, discipline, institution, year:

- a. **BSc:** Istanbul University, Forest Industrial Engineering, Thesis: Investigation of Mechanical Properties of Hybrid Biocomposites Produced from Wood Chips and Glass Fiber, 2015.
- b. **MSc:** Istanbul University, Forest Industrial Engineering, Thesis: The Effect of Nanocellulose and Boron Compounds on the Performance Properties of Wood Composite Panels, 2019.
- c. **MBA:** Istanbul University, Business Administration, 2019.
- d. **PhD:** Istanbul University-Cerrahpasa, Forest Industrial Engineering, Thesis: Development and Characterization of Smart Composites Reinforced with Natural Bionanomaterials, 2023.

2. Academic and Professional Experience – institution/entity, rank, years, full / part time:

- a. **Assistant Professor:** Istanbul Gelisim University, Faculty of Engineering and Architecture, Department of Industrial Engineering, 2023-Present, Full Time.

3. Non-Academic and Professional Experience - entity, rank, years:

- a. **Founder:** Biogreen Research & Development Consulting Ltd, 2017-2019, Full Time.

4. Professional Credentials, Certifications, or Licensing - In addition to Item 1:

- a. **Membership:** Technical Association of the Pulp and Paper Industry (TAPPI), 2020-Present.
- b. **Membership:** International Society of Wood Science & Technology (SWST), 2017-Present.

5. Honors and Awards:

- a. **TET Project Market 12 Competition, 2nd Prize**, by the Turkish Electro Technology Exporters' Association, 2023
- b. **7th Chemistry R&D Project Competition, 1st Prize**, by the Istanbul Chemicals and Chemical Products Exporters' Association, 2017.
- c. **Entrepreneurship and Innovation Project Competition, 1st Prize**, by the Scientific and Technological Research Council of Türkiye (TÜBİTAK), 2017.
- d. **3rd Furniture R&D Project Competition, 1st Prize**, by the Mediterranean Exporter Associations, 2015.

6. Professional Development Activities: Belowe all are Professional Development Activities

- a. **Education and Theses:** Covered in Item 1.
- b. **Academic and Professional Experience:** Covered in Item 2 and 3.
- c. **Professional Credentials, Certifications, or Licensing:** Covered in Item 4.
- d. **Contributions to Discipline:** Covered in Item 7.

7. Contributions to Discipline (Publications, Presentations):

Some of Book Publications:

- a. Candan, Z., Tozluoglu, A., Gonultas, O., **Yildirim, M.**, Fidan, H., Alma, M.H., Salan, T. (2022). Nanocellulose: sustainable biomaterial for developing novel adhesives and composites. *Industrial Applications of Nanocellulose and Its Nanocomposites*, Woodhead Publishing Series in Composites Science and Engineering, 49-137. Eds: Sapuan, S.M., Norrrahim, M.N.F., Ilyas, R.A. Soutis, C. ISBN: 978-0-323-89909-3.

Some Articles published in international peer-reviewed journals:

- a. **Yildirim, M.**, Mutlu, I., Candan, Z., (2024). "Development and characterization of smart composites reinforced with fibrillated cellulose and nickel-titanium alloy", *International Journal of Biological Macromolecules*, Volume 267, Issue 1, p. 131189.
- b. **Yildirim, M.**, Candan, Z., Akbulut, T., Gardner, D.J., Shaler, S.M. (2024). "Performance characterization of plywood panels bonded with melamine-urea-formaldehyde resin and cellulose nanofibril/borax as an additive", *Maderas-Cienc Tecnol*, Volume 26, Issue 23, p. 1-12.
- c. **Yildirim, M.**, Mutlu, I. Candan, Z. (2023). "Thermal properties of cellulose nanofibrils and nickel-titanium alloy-reinforced sustainable smart composites", *Wood Material Science & Engineering*, In Press.
- d. **Yildirim, M.**, and Candan, Z. (2023). "Smart materials: The next generation in science and engineering", *Materials Today: Proceedings*, In Press.
- e. **Yildirim, M.**, Candan, Z., Aksoy, B., Dundar, T. (2023). "Performance properties of engineered wood composites reinforced by lignosulfonates", *Green Materials*, Volume 11, Issue 2, p. 60-68.
- f. **Yildirim, M.**, Candan, Z., Gonultas O. (2022). "Chemical performance analysis of nanocellulose/boron compounds reinforced hybrid UF resin", *Green Materials*, Volume 10, Issue 2, p. 90-96.
- g. **Yildirim, M.**, and Candan, Z. (2021). "Performance Properties of Particleboard Panels Modified with Nanocellulose/Boric Acid", *BioResources*, Volume 16, Issue 1, p. 1875-1890.
- h. **Yildirim, M.**, Negawo, T. A., Kilic, A., Candan, Z. (2021). "Developing and characterization of hybrid composites from sustainable green materials", *Green Materials*, Volume 9, Issue 4, p. 182-191.

Some Papers Presented at International/National Scientific Meetings:

- a. **Yildirim, M.**, and Candan, Z. (2023). "An Insight into the Next-Generation Smart Membranes", The 7th International Electronic Conference on Water Sciences, 15–30 March, Basel, Switzerland.
- b. **Yildirim, M.**, and Candan, Z. (2022). "Advanced Renewable Nanomaterials for Sustainable Development", the 3rd International Electronic Conference on Applied Sciences, 1–15 December, Basel, Switzerland.
- c. **Yildirim, M.**, and Candan, Z. (2022). "Renewable Energy: A Global Solution to Combating Climate Change", 10th Global Conference on Global Warming (GCGW-2022), 7–10 November, Sharjah, United Arab Emirates.
- d. **Yildirim, M.**, and Candan, Z. (2022). "Recent developments and trends in furniture coatings", 30th International Conference Research for Furniture Industry, 22–23 September, Poznan, Poland
- e. **Yildirim, M.**, and Candan, Z. (2022). "Nanotechnology in the furniture industry: applications and future perspectives", 30th International Conference Research for Furniture Industry, 22–23 September, Poznan, Poland.
- f. **Yildirim, M.**, and Candan, Z. (2022). "Cellulose Nanomaterials for Water Purification in Membrane Technology: A Review", 8th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI 2022), 24–27 May, Kaunas, Lithuania.

- g. Yildirim, M., and Candan, Z. (2021).** “Nanocellulose in Energy Applications: Current Status and Future Prospect”, TÜBA World Conference on Energy Science and Technology (TÜBA WCEST - 2021), 8–12 August, Ankara, Türkiye.
- h. Yildirim, M., and Candan, Z. (2020).** “Usage Potential of Lignocellulosic Nanomaterials in Eco-Friendly Applications”, 10th International Ecology Symposium, 26–28 November, Bursa, Türkiye.
- i. Yildirim, M., and Candan, Z. (2019).** “Using Possibilities of Renewable Nanocellulose in Membrane Technology”, 6th MEMTEK International Symposium on Membrane Technologies and Applications (MEMTEK 2019), 18-20 November, Istanbul, Türkiye.
- j. Yildirim, M., and Candan, Z. (2018).** “Developing Innovative, Environmentally Friendly and High Performance Composites”, 1st International Symposium on Graduate Research in Science Focus on Entrepreneurship and Innovation (ISGRS 2018), 4–6 October 2018, Istanbul, Türkiye.