#### Asst. Prof. MERT YILDIRIM

#### **Personal Information**

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#### **International Researcher IDs**

ScholarID: 4c2ubOUAAAAJ ORCID: 0000-0003-4605-607X

Publons / Web Of Science ResearcherID: AES-2671-2022

ScopusID: 57347422000

#### **Education Information**

Doctorate, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Forest Industry Engineering, Turkey 2019 - 2023

Postgraduate, Istanbul University, İşletme İktisadı Enstitüsü, MBA, Turkey 2018 - 2019

Postgraduate, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Forest Industry Engineering, Turkey 2016 - 2019

Undergraduate, İstanbul University-Cerrahpaşa, Faculty Of Forest, Department Of Forestry Industrial Engineering, Turkey 2011 - 2015

# Certificates, Courses and Trainings

Environment and Sustainability, Kurumsal Karbon Ayak İzi, İstanbul Sanayi Odası, 2023

## **Dissertations**

Doctorate, Doğal biyonanomalzemeler ile güçlendirilmiş akıllı kompozitlerin geliştirilmesi ve karakterizasyonu, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Forest Industry Engineering, 2023 Postgraduate, Nanoselüloz ve bor bileşiklerinin ahşap kompozit levhaların performans özelliklerine etkisi, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Forest Industry Engineering, 2019

### **Research Areas**

**Engineering and Technology** 

### **Academic Titles / Tasks**

Assistant Professor, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, INDUSTRIAL ENGINEERING<, 2023 - Continues

#### **Courses**

Havacılık Malzemeleri ve Üretim Yöntemleri, Postgraduate, 2024 - 2025

Ar-Ge ve İnovasyon, Undergraduate, 2024 - 2025

Kompozit Malzemeler, Undergraduate, 2023 - 2024

## Published journal articles indexed by SCI, SSCI, and AHCI

I. Preparation and Characterization of Transparent Advanced Smart Nanocomposites Reinforced by Nanofibrillated Cellulose/Poly(methyl methacrylate)/Methyl methacrylate/Benzoyl Peroxide

Yildirim M., Candan Z.

BioResources, vol.19, no.3, pp.5435-5449, 2024 (SCI-Expanded)

II. Development and characterization of smart composites reinforced with fibrillated cellulose and nickel-titanium alloy

Yildirim M., Mutlu İ., Candan Z.

International Journal of Biological Macromolecules, vol.267, 2024 (SCI-Expanded)

III. Thermal properties of cellulose nanofibrils and nickel-titanium alloy-reinforced sustainable smart composites

Yildirim M., Mutlu İ., Candan Z.

Wood Material Science and Engineering, vol.19, no.3, pp.557-563, 2024 (SCI-Expanded)

IV. PERFORMANCE CHARACTERIZATION OF PLYWOOD PANELS BONDED WITH MELAMINE-UREA-FORMALDEHYDE RESIN AND CELLULOSE NANOFIBRIL/BORAX AS AN ADDITIVE

Yildirim M., Candan Z., Akbulut T., Gardner D. J., Shaler S. M.

Maderas: Ciencia y Tecnologia, vol.26, 2024 (SCI-Expanded)

V. Performance properties of engineered wood composites reinforced by lignosulfonates Yildirim M., Candan Z., Aksoy B., Dündar T.

Green Materials, vol.11, no.2, pp.60-68, 2022 (SCI-Expanded)

VI. Chemical performance analysis of nanocellulose/boron-compound-reinforced hybrid UF resin Yildirim M., CANDAN Z., Gonultas O.

Green Materials, vol.10, no.2, pp.90-96, 2021 (SCI-Expanded)

VII. Performance Properties of Particleboard Panels Modified with Nanocellulose/Boric Acid Yildirim M., CANDAN Z.

BioResources, vol.16, no.1, pp.1875-1890, 2021 (SCI-Expanded)

VIII. Development and characterization of hybrid composites from sustainable green materials Yildirim M., Negawo T. A., Kılıç A., CANDAN Z.

Green Materials, vol.9, no.4, pp.182-191, 2020 (SCI-Expanded)

### **Books & Book Chapters**

I. 3 - Nanocellulose: Sustainable biomaterial for developing novel adhesives and composites CANDAN Z., TOZLUOĞLU A., GÖNÜLTAŞ O., YILDIRIM M., FİDAN H., ALMA M. H., SALAN T. in: Industrial Applications of Nanocellulose and Its Nanocomposites, Sapuan S.M., Norrrahim M.N.F., Ilyas R.A. Soutis Constantinos, Editor, Woodhead Publishing, pp.49-137, 2022

## Refereed Congress / Symposium Publications in Proceedings

I. An Insight into the Next-Generation Smart Membranes YILDIRIM M., CANDAN Z.

The 7th International Electronic Conference on Water Sciences, Basel, Switzerland, 15 - 30 March 2023, vol.25, pp.19

#### II. Advanced Renewable Nanomaterials for Sustainable Development

YILDIRIM M., CANDAN Z.

The 3rd International Electronic Conference on Applied Sciences, Basel, Switzerland, 1 - 15 December 2022, vol.31, pp.52

#### III. Renewable Energy: A Global Solution to Combating Climate Change

YILDIRIM M., CANDAN Z.

10th Global Conference on Global Warming (GCGW-2022), Sharjah, United Arab Emirates, 7 - 10 November 2022, pp.15

#### IV. Nanotechnology in the furniture industry: applications and future perspectives

YILDIRIM M., CANDAN Z.

30th International Conference Research for Furniture Industry, Poznan, Poland, 22 - 23 September 2022, pp.133-135

#### V. Recent developments and trends in furniture coatings

YILDIRIM M., CANDAN Z.

30th International Conference Research for Furniture Industry, Poznan, Poland, 22 - 23 September 2022, pp.112-115

#### VI. Cellulose Nanomaterials for Water Purification in Membrane Technology: A Review

Yıldırım M., Candan Z.

18th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI 2022), Kaunas, Lithuania, 24 - 27 May 2022, pp.463-466

#### VII. Sürdürülebilir ve Yeşil Lignoselülozik Biyonanomalzemelere Genel Bir Bakış

Yıldırım M., Candan Z.

IV. Ulusal Karadeniz Ormancılık Kongresi, Trabzon, Turkey, 6 - 09 December 2021

### VIII. Nanocellulose in Energy Applications: Current Status and Future Prospect

YILDIRIM M., CANDAN Z.

TÜBA World Conference on Energy Science and Technology (TÜBA WCEST-2021), Turkey, 8 - 12 August 2021, pp.131-132

### IX. Usage Potential of Lignocellulosic Nanomaterials in Eco-Friendly Applications

YILDIRIM M., CANDAN Z.

10th International Ecology Symposium, Bursa, Turkey, 26 - 28 November 2020, pp.1-11

#### X. Effect of Nanocellulose and Borax on Formaldehyde Emission of Plywood Panels

Yıldırım M., Candan Z.

International Forest Products Congress (ORENKO 2020), Trabzon, Turkey, 23 - 26 September 2020, pp.24

# XI. Developing Innovative, Environmentally Friendly and High Performance Composites

Yıldırım M., Candan Z.

1st International Symposium on Graduate Research in Science Focus on Entrepreneurship and Innovation (ISGRS 2018), İstanbul, Turkey, 4 - 06 October 2018, pp.111

### **Supported Projects**

Yıldırım M., TUBITAK Project, Yüksek Performanslı Mobilyalar İçin Hibrit Biyokompozitlerin Geliştirilmesi, 2017 - 2018

### Memberships / Tasks in Scientific Organizations

Technical Association of the Pulp and Paper Industry (TAPPI), Member, 2020 - Continues, United States Of America International Society of Wood Science and Technology (SWST), Member, 2017 - Continues, United States Of America

### Metrics

Publication: 20

Citation (Scopus): 80 H-Index (Scopus): 4

## **Congress and Symposium Activities**

The 13th International Conference on Key Engineering Materials (ICKEM 2023), Attendee, İstanbul, Turkey, 2023 10th Global Conference on Global Warming (GCGW-2022), Attendee, Sharjah, United Arab Emirates, 2022 30th International Conference Research for Furniture Industry, Attendee, Poznan, Poland, 2022 18th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI 2022), Attendee, Kaunas, Lithuania, 2022

TUBA World Conference on Energy Science and Technology, Attendee, Ankara, Turkey, 2021 10th International Ecology Symposium, Attendee, Bursa, Turkey, 2020

SWST - 63th International Convention of Society of Wood Science and Technology, Attendee, Piran, Slovenia, 2020 6th MEMTEK International Symposium on Membrane Technologies and Applications, Attendee, İstanbul, Turkey, 2019 COST Action FP1407 Final Conference, Attendee, Belgrade, Serbia, 2018

1st International Symposium on Graduate Research in Science Focus on Entrepreneurship and Innovation (ISGRS 2018), Attendee, İstanbul, Turkey, 2018

COST Action FP1407 3rd Conference, Attendee, Salzburg, Austria, 2017

Birliği), Türkiye Bilimsel Ve Teknolojik Araştırma Kurumu (Tübitak), November 2017

#### **Awards**

Yıldırım M., TET Proje Pazarı 12, T.C. Ticaret Bakanlığı, Türkiye İhracatçılar Meclisi, İstanbul Maden Ve Metaller İhracatçı Birlikleri, Elektrik Ve Elektronik İhracatçıları Birliği , February 2024

Yıldırım M., TÜBİTAK - 2238 Üniversite Girişimcilik ve Yenilikçilik Yarışması, Tübitak, November 2017 Yıldırım M., 7. Kimya Ar-Ge Proje Pazarı, T.C. Ekonomi Bakanlığı, Tim (Türkiye İhracatçılar Meclisi), İkmib (İstanbul Kimyevi Maddeler Ve Mamulleri İhracatçıları Birliği), Akmib (Akdeniz Kimyevi Maddeler Ve Mamulleri İhracatçıları

Yıldırım M., 3. Mobilya Ar-Ge Proje Pazarı, T.C. Ekonomi Bakanlığı, Tim (Türkiye İhracatçılar Meclisi), İkmib (İstanbul Kimyevi Maddeler Ve Mamulleri İhracatçıları Birliği), Akmib (Akdeniz Kimyevi Maddeler Ve Mamulleri İhracatçıları Birliği), Türkiye Bilimsel Ve Teknolojik Araştırma Kurumu (Tübitak), November 2015