

## Res. Asst. SEDAT ALPEREN TUNÇ

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: HTQ-7353-2023

ScopusID: 58126432700

Yoksis Researcher ID: 336360

### Education Information

Doctorate, Karadeniz Technical University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, Turkey 2024 - Continues

Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, Turkey 2020 - 2024

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, Turkey 2015 - 2020

### Foreign Languages

English, B2 Upper Intermediate

German, A1 Beginner

### Dissertations

Postgraduate, Toz metalurjisi yöntemiyle üretilen AA2024 - B4C kompozitlerinin özelliklerinde PCA katkısının incelenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, 2024

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Composites, Material Characterization, Production Metallurgy, Powder Metallurgy, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2021 - Continues

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

- I. **Effect of AlCrCuFeNi high entropy alloy reinforcements with and without B4C on powder characteristic, mechanical and wear properties of AA5083 metal-metal composites**  
KARABACAK A. H., ÇANAKÇI A., ÖZKAYA S., TUNÇ S. A., GÜLER O., ÇELEBİ M.  
Journal of Alloys and Compounds, vol.1008, 2024 (SCI-Expanded)
- II. **Effect of different PCA types on morphology, physical, thermal and mechanical properties of AA2024-B4C composites**  
TUNÇ S. A., ÇANAKÇI A., KARABACAK A. H., ÇELEBİ M., Turkmen M.  
POWDER TECHNOLOGY, vol.434, 2024 (SCI-Expanded)
- III. **The effects of different types and ratios of reinforcement, and machining processes on the machinability of Al2024 alloy nanocomposites**  
Karabacak A. H., Çanakçı A., Özkaya S., Tunç S. A., Çevik Z. A., Yalçın E. D.  
JOURNAL OF COMPOSITE MATERIALS, vol.57, no.18, pp.2811-2827, 2023 (SCI-Expanded)
- IV. **Production of Al2024/h-BN nanocomposites with improved corrosion, wear and mechanical properties**  
Karabacak A. H., Çanakçı A., Çelebi M., Güler O., Tunç S. A., Arpacı K. A.  
Materials Chemistry and Physics, vol.300, 2023 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **EFFECT OF H-BN CONTENT ON MORPHOLOGY, PARTICLE SIZE, AND MICROHARDNESS OF Al2024/B4C/h-BN HYBRID NANOCOMPOSITE POWDERS**  
Çelebi M., Karabacak A. H., Özkaya S., Tunç S. A.  
5TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS, Rize, Turkey, 8 - 10 November 2023, pp.1357-1364
- II. **The Effect of Different PCA Types on the Properties of AA2024-B4C Composites**  
Tunç S. A., Çanakçı A., Karabacak A. H., Çelebi M.  
2. BİLSEL International World Science and Research Congress, İstanbul, Turkey, 16 - 17 September 2023, pp.417-425
- III. **FABRICATION AND PROPERTIES OF FENICUCRAL HIGH ENTROPY ALLOYS BY POWDER METALLURGY**  
Karabacak A. H., Çelebi M., Özkaya S., Tunç S. A.  
2. BİLSEL INTERNATIONAL WORLD SCIENCE AND RESEARCH CONGRESS, İstanbul, Turkey, 16 - 17 September 2023, pp.335-345
- IV. **Investigation of the Effect of TiH<sub>2</sub> Amount on Foaming in AA2024 Based Metallic Foams Produced by Powder Metallurgy**  
Tunç S. A., Çanakçı A., Karabacak A. H., Özkaya S.  
2. BİLSEL International World Science and Research Congress, İstanbul, Turkey, 16 - 17 September 2023, pp.410-416
- V. **Investigation of Mechanical Properties of Cu-316L Metal-Metal Composites Produced by Powder Metallurgy Method**  
Tunç S. A., Çanakçı A., Karabacak A. H.  
3RD INTERNATIONAL CONFERENCE ON APPLIED ENGINEERING AND NATURAL SCIENCES, Konya, Turkey, 20 - 23 July 2022, pp.2034-2039
- VI. **Production and Microstructure Investigations of 316L Stainless Steel Reinforced Copper Matrix Composites**  
Tunç S. A., Çanakçı A., Karabacak A. H.  
3RD INTERNATIONAL CONFERENCE ON APPLIED ENGINEERING AND NATURAL SCIENCES, Konya, Turkey, 20 - 23 July 2022, pp.1051-1055
- VII. **Machining of Al2024-SiC Nanocomposites by WEDM Method**  
Karabacak A. H., Tunç S. A.

1st International Conference on Engineering and Applied Natural Sciences, Konya, Turkey, 10 - 13 May 2022, pp.865-868

VIII. **Investigation of the Effect of Temperature and Foaming Time on AA2024 Based Metal Foam Production**

Tunç S. A., Çanakçı A., Karabacak A. H., Özkaya S.

1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 November - 03 December 2021, pp.494-497

IX. **Production and Characterization of AA2024 Based Foam Layered Functionally Graded Composites**

Tunç S. A., Çanakçı A., Karabacak A. H.

1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.498-501

X. **The Effect of The Amount of Reinforcement on The Machining of Al2024-B4C/SiC Hybrid Nanocomposites by AWJ Method**

Karabacak A. H., Çanakçı A., Tunç S. A.

1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.507-511

XI. **Machining of Metal Matrix Hybrid Nanocomposites with WEDM Method**

Karabacak A. H., Çanakçı A., Tunç S. A., Özkaya S.

1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.502-506

## Supported Projects

Çanakçı A., Çuvalcı H., Varol T., Alver Ü., Erdemir F., Aslan M., Sezer R., Karabacak A. H., Güler O., Yalçın E. D., et al., Project Supported by Higher Education Institutions, AA2024 CuNiCr Takviyeli Metal Matrisli Kompozitlerin Üretimi ve Özelliklerinin İncelenmesi , 2023 - 2025

Çanakçı A., Çuvalcı H., Gedikli H., Yılmaz A. H., Varol T., Erdemir F., Karabacak A. H., Tunç S. A., Başkan T., Meriç D., et al., Project Supported by Higher Education Institutions, Production and Characterization of New Generation Functional Composite Armor Plates with High Ballistic Resistance and Radiation Absorption Properties, 2022 - 2025

## Metrics

Publication: 15

Citation (WoS): 19

Citation (Scopus): 23

H-Index (WoS): 2

H-Index (Scopus): 3