

## Res. Asst. ÖMER HÜKÜMDAR

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### International Researcher IDs

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### Research Areas

Mechanical Engineering, Metallurgical and Materials Engineering, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Cukurova University, Mühendislik Fakültesi, Otomotiv Mühendisliği, 2023 - Continues

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

- I. Effect of TMAB and ZrC concentration on mechanical and morphological properties of Ni-B/ZrC composite electrodeposition**  
Hükümdar Ö., Kumlu U., Keskin A., Akar M. A.  
MATERIALS TESTING, no.1, pp.1-19, 2024 (SCI-Expanded)

### Refereed Congress / Symposium Publications in Proceedings

- I. Synthesis and Mechanical Properties Investigation of Ni-P/Ni-B-Cr<sub>3</sub>C<sub>2</sub> Duplex Composite Coatings**  
AŞGAN S. M., HÜKÜMDAR Ö., KUMLU U., KESKİN A., AKAR M. A.  
11. INTERNATIONAL EUROPEAN CONGRESS ON ADVANCED STUDIES IN BASIC SCIENCES, ROMA, Italy, 11 November 2024, pp.128-141
- II. Effect of Pulse Frequency on Mechanical Properties of Electrodeposition Ni-W/Al<sub>2</sub>O<sub>3</sub> Nanocomposites on Copper Substrate**  
AYBACI Y., YALYANÇ F., HÜKÜMDAR Ö., KUMLU U., KESKİN A., AKAR M. A.  
CUKUROVA 13th INTERNATIONAL SCIENTIFIC RESEARCHES CONFERENCE, Adana, Turkey, 01 September 2024, pp.400-412
- III. Investigation of The Effect of Bath Temperature on Ni-W/Al<sub>2</sub>O<sub>3</sub> Nanocomposite Coatings Produced by Electrodeposition Method**  
AYBACI Y., YALYANÇ F., KOCABUĞA F. N., HÜKÜMDAR Ö., KUMLU U., KESKİN A., AKAR M. A.  
CUKUROVA 13th INTERNATIONAL SCIENTIFIC RESEARCHES CONFERENCE, Adana, Turkey, 01 September 2024, pp.272
- IV. A case study: Vibration analysis by finite element method in electric micro vehicle chassis**  
Karaçor B., Hükümdar Ö., Özcanlı M.  
9th International Black Sea Coastline Countries Scientific Research Conference, Ankara, Turkey, 10 - 11 August

2023, pp.412-426

- V. **Investigation of fatigue life using finite element method with the use of different materials in leaf spring design**  
Karaçor B., Hükümdar Ö., Özcanlı M.  
9th International Black Sea Coastline Countries Scientific Research Conference, Ankara, Turkey, 10 - 11 August 2023, pp.140-154
- VI. **Thermal analysis on brake disc structures of different geometric design shapes and material usage**  
Karaçor B., Hükümdar Ö., Özcanlı M.  
4th International Black Sea Modern Scientific Research Congress, Rize, Turkey, 06 June 2023, pp.1634-1648
- VII. **Effects of using different materials on the crankshaft in modal analysis**  
Karaçor B., Hükümdar Ö., Özcanlı M.  
4th International Black Sea Modern Scientific Research Congress, Rize, Turkey, 06 June 2023, pp.1611-1633
- VIII. **A case study: Fatigue analysis simulation using different materials on the front axle**  
Karaçor B., Özcanlı M., Hükümdar Ö.  
3th International Mediterranean Congress, Mersin, Turkey, 17 - 18 April 2023, pp.568-581
- IX. **Modal analysis and structural simulation of heavy commercial vehicle chassis**  
Karaçor B., Özcanlı M., Hükümdar Ö.  
3th International Mediterranean Congress, Mersin, Turkey, 17 - 18 April 2023, pp.582-602
- X. **Ballistic evaluation of armor plates at different angles**  
Kumlu U., Akar M. A., Başer D., Hükümdar Ö., Karaçor B.  
2nd International Congress on Multidisciplinary Natural Sciences, Ankara, Turkey, 01 December 2022, pp.230-240
- XI. **A case study: Weight reduction studies on an electric micro car using different materials**  
Karaçor B., Hükümdar Ö., Göktepe S., Tombuloğlu A. Ç., Özcanlı M.  
3th International Siirt Scientific Research Congress, Siirt, Turkey, 18 November 2022, pp.2835-2848
- XII. **Fatigue analysis and weight reduction studies in rear axle design using different materials**  
Karaçor B., Hükümdar Ö., Ekşi Ü., Divanoğlu A., Özcanlı M.  
7th International Mediterranean Science and Engineering Congress (IMSEC 2022), Antalya, Turkey, 24 October 2022, pp.255-262
- XIII. **Evaluation of ultra-high strength materials in heavy truck chassis**  
Karaçor B., Hükümdar Ö., Akdağcık D., Özcanlı M.  
6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Adana, Turkey, 25 - 27 October 2021, pp.585-589

## Supported Projects

AKAR M. A., YAŞAR A., HÜKÜMDAR Ö., TÜKEN T., SIĞIRCIK G., KUMLU U., Project Supported by Higher Education Institutions, İçten Yanmalı Motorlarda ve Aktarma Organlarında Kullanılan Alüminyum Alaşımların Elektrodepolama Yöntemiyle Yüksek Entropili Alaşımlı Kaplanarak Yüzey Özelliklerinin Geliştirilmesi, 2024 - Continues

## Congress and Symposium Activities

3. INTERNATIONAL MEDITERRANEAN CONGRESS, Attendee, Mersin, Turkey, 2023

2nd International Congress on Multidisciplinary Natural Sciences, Attendee, Ankara, Turkey, 2022

III. INTERNATIONAL SIIRT SCIENTIFIC RESEARCH CONGRESS, Attendee, Siirt, Turkey, 2022

7th International Mediterranean Science and Engineering Congress (IMSEC 2022), Attendee, Antalya, Turkey, 2022

6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Attendee, Antalya, Turkey, 2021