EMRE KARADUMAN

ISTANBUL, emrkrdmn@gmail.com, +090 535 397 46 65

EDUCATION & TRAINING

Yıldız Technical University, Faculty of Chemistry & Metallurgy 2017-2024
Bioengineering (Ph.D.)
"Production and Characterization of Cobalt - Nickel Nanoalloys Produced by Chemical and Green Dynthesis and Investigation of Their Use As Cement Mortar Additives"

Yıldız Technical University, Faculty of Chemistry & Metallurgy 2014-2017
Bioengineering (M. Sc.)
"Synthesis and Investigation of Co-Ni Nanoparticles and Their Carbon Containing Nanocomposites"

Yıldız Technical University, Faculty of Chemistry & Metallurgy 2010-2014
Metallurgy and Material Science Engineering (B. Sc.)
"Biodegradable Magnesium Bioimplants"

KARDEMİR Iron Steel Industry Trade & Company Inc. 2012
Internship

ERDEMİR GROUP Eregli Iron & Steel Factories Inc. 2013
Internship

Erasmus+ Programme in Bulgaria 2016

YOK 100/2000 Doctoral Programme Grantee 2017-2021

PUBLISHMENT

Papers

1. Zahariev, I., Piskin, M.B., **Karaduman, E.,** I., Ivanova, D. Markova, and Fachikov, L., (2017). "FTIR Spectroscopy Method for Investigation of The Co-Ni Nanoparticle Nanosurface Phenomena", Journal of Chemical Technology and Metallurgy, 52(5): 916-928
2. Aslan A., **Karaduman E.,** Derun E. and Pişkin M.B., "Development and Characterization of Negative Air Ion Emitting Mica- and Sericite-Based Antimicrobial Pearlescent Pigments", Ceramic International, pp. 26421-26429, 2021.
3. Süzgün, C., Karaduman, E., Özarslan, A. C., Derun, E., & Pişkin, M. B., (2024). Synthesis of doped and non-doped TiO2 in different temperatures and investigation on the effect of TiO2 crystal structures and properties. MAIN GROUP CHEMISTRY , vol.1, 1-22.
4. Karaduman, E., & PİŞKİN, M. B., (2024). Investigation of the use of cobalt and nickel based nanoalloys as cement mortar additives. Materials Research Express , vol.11, no.6.

Conference Papers

1. **Karaduman, E.**, Zahariev I. and Markova, I., Synthesis And Investigation Of Intermetallic Co-Ni Nanoparticles And Their Carbon-Containing Nanocomposites, 18th *Workshop on Nanoscience and Nanotechnology*, 18-19 November 2016, UCTM- Sofia,
2. Piskin, M.B., Markova, I., **Karaduman**, **E.** and Zahariev, I. Graphite supported template synthesized intermetallic Co-Ni nanoparticles for biomedical applications, *TMS 2017 The World Comes Here* (146th Annual Meeting and Exhibition, 3d Pan American Material Congress, Energy Materials, A World Business Contact) 26 February- 2 March 2017, San Diego, California
3. Piskin, M.B., **Karaduman, E**., Derun E. M., Markova, I. (2017). "Synthesis of Cobalt Nıckel Nanopartıcles Wıth Carbon Coatıng", Internatıonal Conference on Energy and Thermal Engıneerıng, Istanbul -Turkey

Awards

1. *Certificate of Encouragement*, "Template Synthesis Through a Chemical Reduction and Investigation of Graphite Supported Co-Ni Nanoparticles", 18th *Workshop on Nanoscience and Nanotechnology*, 18-19 November 2016, UCTM-Sofia.

Projects

1. Production of Doped Semiconductor Alloys and Improvement of Properties, Yıldız Technical University, Scientific Research Project, FBA-2017-3055, 2017- 2020.
2. Derun E., Piskin M.B., Aslan A., **Karaduman, E** "Development of PLGA and Chitosan Based Nanoparticular Drug Delivery Systems Containing Black Currant (Ribes Nigrum) Extract, and Using in the Treatment of Vulvovaginal Candidiasis" YTU CAP, 2021-2023.
3. TUBİTAK, Turkish Astronaut and Science Mission (TABM) Project, 7T210900, Director: Ömer ATAŞ; ALGALSPACE (Sub-Project), Director: Didem Balkanlı, Scholarship, 17/07/2023-14/09/2024
4. TUBİTAK, 2218 National Postdoctoral Research Fellowship Program, 123C311, Activated Carbon Production from Bio-Waste: Search for Solutions to Environmental Problems with Horse Chestnut and Microwave Technology, 01.11.2025-cont.