EZGİ BÜTEV ÖCAL (M.Sc)

Department of Materials Science and Engineering,
Çankaya University NC-09, 06810, Ankara, Turkey
Mobile Phone: +90 505 962 36 13
E-mail: butevezgi@gmail.com

Place and Date of Birth: Ankara, 1989
Marital Status: Married
Nationality: Turkish
Driving License: Class B
Interests: Basketball, Pilates, Travelling

EDUCATION

Ph.D. (2015-on going)	Middle East Technical University (METU) Ankara, Turkey Department of Metallurgical and Materials Engineering - **CGPA: 3.93 / 4.00**
M.Sc. (2012-2015)	Middle East Technical University (METU) Ankara, Turkey Department of Metallurgical and Materials Engineering - **CGPA: 3.43 / 4.00**
B.S. (2007-2012)	Middle East Technical University (METU) Ankara, Turkey Department of Metallurgical and Materials Engineering - **CGPA: 2.66 / 4.00**
High School (2002-2006)	Gazi Anatolian High School, Ankara, Turkey

WORK EXPERIENCE

Specialist **(2013 March-on going)**	Çankaya University, Ankara, Turkey Department of Materials Science and Engineering
Project Assistant **(2012 November-2015 May)**	TUBİTAK 112M341 Project Title: "Surface Activation of Porous Ti6Al7Nb Implant Alloys by Hydrothermal Methods for Biomedical Applications and Their Characterization"

RESEARCH AREAS

Titanium, Ti6Al4V and Ti6Al7Nb alloys, heat treatment of titanium and titanium alloys, powder metallurgy, porous materials, mechanical behavior of foam materials, biomaterials, surface activation of biomedical bulk and porous titanium alloys, surface characterization, simulated body fluid.

HONORS & AWARDS

2016	METU, Thesis Graduate Award, "Production and Characterization of Surface Treated Biomedical Ti6Al7Nb Alloy Foams"
2011-2012, Spring	Honor Student
2009-2010, Fall	Honor Student

PUBLICATIONS

- **THESIS**

1) Production and Characterization of Surface Treated Biomedical Ti6Al7Nb Alloy Foams. Middle East Technical University (METU), 2015 February. Supervisor: Prof. Dr. Şakir Bor, Co-Supervisor: Assoc. Prof. Dr. Ziya Esen.

- **JOURNAL ARTICLES (SCI)**

1) Ziya Esen, **Ezgi Bütev Öcal**. Surface Characteristic and in-vitro behavior of hydrothermally treated bulk Ti6Al7Nb alloys. Surface and Coatings Technology, 309 (2017) 829-839.

2) Ziya Esen, **Ezgi Bütev**, M.Serdar Karakaş. A comparative study on biodegradation and mechanical properties of pressureless infiltrated Ti/Ti6Al4V-Mg composites. Journal of the Mechanical Behavior of Biomedical Materials 63 (2016) 273-286.

3) **Ezgi Bütev**, Ziya Esen, Şakir Bor. Characterization of Ti6Al7Nb alloy foams surface treated in aqueous NaOH and $CaCl_2$ solutions. Journal of the Mechanical Behaviour of Biomedical Materials, 60 (2016) 127-138.

4) **Ezgi Bütev**, Ziya Esen, Şakir Bor. In vitro bioactivity investigation of alkali treated Ti6Al7Nb alloy foams. Applied Surface Science, 327 (2015) 437–443.

- **CONGRESS AND PROCEEDINGS**

1) **Ezgi Bütev,** Aydın Albayrak, Hande Bircan, Merve Nur Doğu, Pelin Gündoğmuş, Buse Kahyaoğlu, Ziya Esen. Structural and Functional Characterization of Surface Treated Biomedical Ti6Al7Nb Alloy Foams PPM 2015, International Porous & Powder Materials, 15-18 September 2015, Çeşme, İzmir, TURKEY.

2) **Ezgi Bütev**, Ziya Esen, Şakir Bor. In Vitro Studies of Surface Modified Highly Porous Ti6Al7Nb Alloys. TMS 2015 144th Annual Meeting & Exhibition, 15-19 March 2015, Orlando, FL, USA.

3) Ziya Esen, **Ezgi Bütev,** Emre Yılmaz. Production and Characterization of Magnesium based Composites. TMS 2015 144th Annual Meeting & Exhibition, 15-19 March 2015, Orlando, FL, USA.

4) **Ezgi Bütev,** Elif Eda Yeni, Emre Yılmaz, Ziya Esen, Şakir Bor. Characterization of apatite formation ability of alkali treated bulk Ti6Al7Nb alloy by in vitro studies". IMMC

2014, 17th International Metallurgy and Materials Congress, 11-13 September 2014, Istanbul, TURKEY.

5) Elif Eda Yeni, **Ezgi Bütev**, Emre Yılmaz, Ziya Esen, Servet Turan, ‘’Surface Treatment and Characterization of the Ti6Al4V Alloy Powders for Biomedical Applications. IMMC 2014, 17th International Metallurgy and Materials Congress, 11-13 September 2014, Istanbul, TURKEY.

6) **Ezgi Bütev,** Ziya Esen, Şakir Bor “Surface Activation of Ti6Al7Nb scaffolds”, THERMEC 2013, International Conference on Processing and Manufacturing of Advanced Materials, 02-06 December 2013, Las Vegas, Nevada, USA.

- **CONGRESS AND PRESENTED POSTERS**

1) **Ezgi Bütev,** Elif Eda Yeni, Emre Yılmaz, Ziya Esen, Şakir Bor. Effect of alkali treatment parameters on surface structure and mechanical properties of porous Ti6Al7Nb scaffolds. IMMC 2014 17th International Metallurgy and Materials Congress, 11-13 September 2014, Istanbul, TURKEY.

2) **Ezgi Bütev**, Ziya Esen. Manufacturing and Characterization of Titanium, Ti6Al4V and Ti6Al7Nb Alloy Dental Implants with highly Porous Surfaces”, 5th International Symposium of Advanced Protocols in Oral Implantology, April 2013, Antalya, TURKEY.

PARTICIPATED CONGRESSES & SEMINARS

- **PPM 2015**, International Porous & Powder Materials, Çeşme, Turkey 15-18 September 2015.
- **TMS 2015**, 144th Annual Meeting & Exhibition, Florida, USA / 15-18 March 2015.
- **IMMC 2014**, 17th International Metallurgy and Materials Congress, Istanbul, Turkey / 11-13 September 2014.
- **THERMEC 2013**, Processing & Manufacturing of Advanced Materials, Vegas, USA / 2-6 December 2013.
- **5th International Symposium of Advanced Protocols in Oral Implantology,** Antalya, TURKEY, 20-23 April 2013.
- **IMMC 2012**, 16th International Metallurgy and Materials Congress, Istanbul, Turkey / 13-15 September 2012.

ACADEMIC RESPONSIBILITIES

- Biomaterials Laboratory Coordinator, Çankaya University
- Metallography Laboratory Coordinator, Çankaya University
- Summer Internship Committee, Çankaya University
- Department Exam Coordinator, Çankaya University
- University-Industry Cooperation Commission, Çankaya University
- Department of Promotion and Social Affairs Commission, Çankaya University
- Alumni / Stakeholder Relations Commission, Çankaya University
- Data Collection and Evaluation Commission, Çankaya University
- Material Error and Notes Objection Commission, ,Çankaya University

COURSES ASSISTED

MSE 407- Innovative Engineering Analysis and Design, **MSE 401**- Design in Materials Engineering I, **MSE 320**- Mechanical Behavior of Materials, **MSE 309**- Phase Diagrams, **MSE 307**- Materials Characterization II, **MSE 235**- Materials Science for Electronics Engineers, **MSE 225**- Introduction to Materials Science, **MSE 206**- Materials Characterization I, **MSE 202**- Material Science II, **MSE 201**- Material Science I, **MSE 125**- Materials Science and General Chemistry, **CHEM 103**- General Chemistry, **PHYS 132**- General Physics for Engineering II

PROFESSIONAL SKILLS

Language

- English (Advanced), YDS:80
- German (Beginner)

Instruments:

- Scanning Electron Microscope (SEM)
- Instron Mechanical Testing Machine
- MTS Mechanical Testing Machine
- Atomic Force Microscopy (AFM)
- X-ray Diffraction Analysis (XRD)

Computer Skills:

- Microsoft Office Programs
- MSC. MARC / MENTAT (Finite element analysis)
- OriginPro 8.5
- SigmaPlot
- C Programming Language

ORGANIZATIONS

- METU Material Science Student Community (2007-2011)
    - The head of the community (2010-2011)
    - Secretariat general of the community (2008-2010)
- METU Mountaineering and Winter Sports Club (2010-2011)