

## Asst. Prof. UMUT CAN ÖZ

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-5225-748X

Publons / Web Of Science ResearcherID: F-4987-2016

ScopusID: 55918563400

Yoksis Researcher ID: 118174

### Education Information

Post Doctorate, The University of Nottingham, School of Pharmacy, Molecular Therapeutics and Formulation Division, England 2022 - 2023

Doctorate, Ankara University, Sağlık Bilimleri Enstitüsü, Farmasötik Teknoloji (Dr), Turkey 2011 - 2017

Postgraduate, Ankara University, Sağlık Bilimleri Enstitüsü, Farmasötik Teknoloji (YI) (Tezli), Turkey 2009 - 2011

Undergraduate, Inonu University, Eczacılık Fakültesi, Eczacılık Pr., Turkey 2003 - 2007

### Dissertations

Doctorate, Hücre içine gen/ilaç taşınımına yönelik aktif hedeflendirilmiş nano ilaç taşıyıcı sistemlerin geliştirilmesi, Ankara University, Sağlık Bilimleri Enstitüsü, Farmasötik Teknoloji (Dr), 2017

Postgraduate, Diklofenak sodyum yüklü mikropartiküler sistemlerden sulu dispersiyonların hazırlanmasına yönelik çalışmalar, Ankara University, Sağlık Bilimleri Enstitüsü, Farmasötik Teknoloji (YI) (Tezli), 2011

### Research Areas

Pharmaceutical Biotechnology, Pharmaceutical Technology, Polymer Technology, Polymeric Materials, Polymeric Materials, Medical Applications of Polymers

### Academic Titles / Tasks

Assistant Professor, Ankara University, Eczacılık Fakültesi, Eczacılık Teknolojisi Bölümü, 2023 - Continues

Research Assistant, Ankara University, Eczacılık Fakültesi, Eczacılık Teknolojisi Bölümü, 2014 - 2023

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

#### I. Responsive Nanomaterial Delivery Systems for Pancreatic Cancer Management

Elsherbeny A., Bayraktutan H., ÖZ U. C., Moloney C., Ashworth J. C., Grabowska A. M., Alexander C.  
ADVANCED THERAPEUTICS, vol.7, no.3, 2024 (SCI-Expanded)

- II. **Investigation on formulation parameters of donepezil HCl loaded solid lipid nanoparticles**  
Topal G. R., Küçüktürkmen B., Öz U. C., Özkan E., Bakar Ateş F., Bozkır A.  
BRAZILIAN JOURNAL OF PHARMACEUTICAL SCIENCES, vol.59, no.59, pp.1-11, 2023 (SCI-Expanded)
- III. **Development of Zoledronic Acid Containing Biomaterials for Enhanced Guided Bone Regeneration**  
KÜÇÜKTÜRKMEN B., ÖZ U. C., Toptas M., DEVRİM GÖKBERK B., SAKA O. M., Bilgili H., Deveci M. S., ÜNSAL E., BOZKIR A.  
JOURNAL OF PHARMACEUTICAL SCIENCES, vol.110, no.9, pp.3200-3207, 2021 (SCI-Expanded)
- IV. **A robust optimization approach for the breast cancer targeted design of PEtOx-b-PLA polymersomes**  
ÖZ U. C., Bolat Z. B., Ozkose U. U., Gulyuz S., KÜÇÜKTÜRKMEN B., PARLAK KHALILY M., ÖZÇUBUKÇU S., Yilmaz O., TELCİ D., ESENDAĞLI G., et al.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.123, 2021 (SCI-Expanded)
- V. **The Utilization of Poly(2-ethyl-2-oxazoline)-b-Poly(epsilon-caprolactone) Ellipsoidal Particles for Intracellular BIKDDA Delivery to Prostate Cancer**  
Kocak P., ÖZ U. C., Bolat Z. B., Ozkose U. U., Gulyuz S., TAŞDELEN M. A., Yilmaz O., BOZKIR A., ŞAHİN F., TELCİ D.  
MACROMOLECULAR BIOSCIENCE, vol.21, no.2, 2021 (SCI-Expanded)
- VI. **Guided bone regeneration by the development of alendronate sodium loaded in-situ gel and membrane formulations**  
ÖZ U. C., Toptas M., KÜÇÜKTÜRKMEN B., DEVRİM GÖKBERK B., SAKA O. M., Deveci M. S., Bilgili H., ÜNSAL E., BOZKIR A.  
EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES, vol.155, 2020 (SCI-Expanded)
- VII. **Development of self-assembled poly(2-ethyl-2-oxazoline)-<i>b</i>-poly( $\epsilon$ -caprolactone) (PEtOx-<i>b</i>-PCL) copolymeric nanostructures in aqueous solution and evaluation of their morphological transitions**  
Ozkose U. U., Gulyuz S., ÖZ U. C., Tasdelen M. A., Alpturk O., Bozkir A., Yilmaz O.  
EXPRESS POLYMER LETTERS, no.11, pp.1048-1062, 2020 (SCI-Expanded)
- VIII. **Prostate cancer cell-specific BikDDA delivery by targeted polymersomes**  
Öz U. C., Bolat Z. B., Poma A., Guan L., Telci D., Şahin F., Battaglia G., Bozkır A.  
APPLIED NANOSCIENCE, vol.10, no.9, pp.3389-3401, 2020 (SCI-Expanded)
- IX. **Central Composite Design for Optimization of Zoledronic Acid Loaded PLGA Nanoparticles**  
SAKA O. M., ÖZ U. C., KÜÇÜKTÜRKMEN B., DEVRİM GÖKBERK B., BOZKIR A.  
JOURNAL OF PHARMACEUTICAL INNOVATION, vol.15, no.1, pp.3-14, 2020 (SCI-Expanded)
- X. **Development and Optimization of Alendronate Sodium Loaded PLGA Nanoparticles by Central Composite Design**  
ÖZ U. C., KÜÇÜKTÜRKMEN B., DEVRİM GÖKBERK B., SAKA O. M., BOZKIR A.  
MACROMOLECULAR RESEARCH, vol.27, no.9, pp.857-866, 2019 (SCI-Expanded)
- XI. **Design of Colloidally Stable and Non-Toxic Petox-Based Polymersomes for Cargo Molecule Encapsulation**  
ÖZ U. C., KÜÇÜKTÜRKMEN B., ÖZKÖSE U. U., Gulyuz S., Bolat Z. B., TELCİ D., ŞAHİN F., Yilmaz O., BOZKIR A.  
CHEMNANOMAT, vol.5, no.6, pp.766-775, 2019 (SCI-Expanded)
- XII. **Development of reconstitutable suspensions containing diclofenac sodium-loaded microspheres for pediatric delivery**  
ÖZ U. C., DEVRİM GÖKBERK B., BOZKIR A., Canefe K.  
JOURNAL OF MICROENCAPSULATION, vol.32, no.4, pp.317-328, 2015 (SCI-Expanded)
- XIII. **Formulation and Optimization of Nonionic Surfactants Emulsified Nimesulide-Loaded PLGA-Based Nanoparticles by Design of Experiments**  
SENGEL TÜRK C. T., ÖZ U. C., SERİM T. M., HASÇIÇEK C.  
AAPS PHARMSCITECH, vol.15, no.1, pp.161-176, 2014 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. EFFECTIVE DRUG DELIVERY SYSTEMS IN LOCALIZED BREAST CANCER THERAPIES: INJECTABLE HYDROGELS LOKALİZE MEME KANSERİ TEDAVİLERİNE EFEKTİF İLAÇ TAŞIYICI SİSTEMLER: ENJEKTABL HİDROJELLER  
Konca S. F., ÖZ U. C., BOZKIR A.  
Ankara Üniversitesi Eczacılık Fakultesi Dergisi, vol.48, no.1, pp.274-288, 2024 (Scopus)
- II. DEVELOPMENT OF AMPHOTERICIN-B LOADED NANOPARTICLES AND EVALUATION THE ANTIMICROBIAL POTENCY  
Oz U. C., Rizvanoglu S. S., Abamor E. S., CENGİZ G., Berber H., DERMAN S., eryilmaz m., Bozkır A.  
Ankara Üniversitesi Eczacılık Fakultesi Dergisi, vol.47, no.3, pp.1033-1040, 2023 (Scopus)
- III. PREPARATION AND IN VITRO CHARACTERIZATION OF SOLID LIPID MICROPARTICLES FOR PROTEIN DELIVERY PROTEİN VERİLİSİ İÇİN KATI LİPİT MİKROPARTİKÜLLERİN HAZIRLANMASI VE İN VİTRO KARAKTERİZASYONU  
KÜÇÜKTÜRKMEN B., ÖZ U. C., BOZKIR A.  
Ankara Üniversitesi Eczacılık Fakultesi Dergisi, vol.46, no.3, pp.872-882, 2022 (Scopus)
- IV. Polymeric vesicles and biological applications Polimerik veziküler ve biyolojik uygulamaları  
ÖZ U. C., BOZKIR A.  
Turk Hijyen ve Deneysel Biyoloji Dergisi, vol.75, no.4, pp.443-458, 2018 (Scopus)
- V. In Situ Hydrogel Formulation for Intra-Articular Application of Diclofenac Sodium-Loaded Polymeric Nanoparticles  
KÜÇÜKTÜRKMEN B., ÖZ U. C., BOZKIR A.  
TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.14, no.1, pp.56-64, 2017 (ESCI)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. Development and Evaluation of Nanoparticulate Prototype Vaccine Formulations Against COVID-19  
Sena A., Küçüktürkmen B., Öz U. C., Bozkır A.  
4. ULUSLARARASI AŞI BİLİMİ KONGRESİ, Ankara, Turkey, 03 November 2022
- II. PREPARATION AND IN VITRO EVALUATION OF APO-E MODIFIED SOLID LIPID NANOPARTICLES FOR DELIVERY OF HUMANIN PEPTIDE  
TOPAL G. R., MÉSZÁROS M., PORKOLÁB G., SZECSKÓ A., KÜÇÜKTÜRKMEN B., ÖZ U. C., DELI M., VESZELKA S., BOZKIR A.  
13th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 22 - 25 June 2021
- III. Development and in vitro/in vivo evaluation of a gelling system comprising bisphosphonate loaded plga nanoparticles for guided bone regeneration  
ÖZ U. C., KÜÇÜKTÜRKMEN B., topbaş m., SAKA O. M., DEVRİM B., DEVECİ M. S., ÜNSAL E., BOZKIR A.  
8th BBBB international Conference on Pharmaceutical Scieneces, İzmir, Turkey, 14 - 16 October 2019
- IV. Doxorubicin and BIKDD Delivery to Au565 Breast Cancer Cell Line by Targeted Polymeric Nanocarriers  
BOLAT Z. B., ÖZ U. C., NEZİR A. E., ÖZKÖSE U. U., YILMAZ Ö., BOZKIR A., TELCİ D., ŞAHİN F.  
28th International Conference on Cancer Research and Anticancer Therapies, 17 - 18 September 2018
- V. Targeting of Prostate Cancer with Polymeric Nanocarriers Labelled with PSMA-Binding Peptide  
Nezir A. E., ÖZ U. C., Polen K., Özköse U. U., Özgür Y., BOZKIR A., ŞAHİN F., TELCİ D.  
II International Conference on Cancer Research and Targeted Therapy, 26 - 28 October 2017
- VI. IN-VITRO CHARACTERISATION OF PEPTIDE-563 CONJUGATED LIPOSOMES  
SAKA O. M., ÖZ U. C., KÜÇÜKTÜRKMEN B., BOZKIR A.  
GPSS 2017, Ankara, Turkey, 11 - 13 October 2017
- VII. Characterisation and Evaluation of Targeted Liposomes. I- In vitro studies  
SAKA O. M., ÖZ U. C., KÜÇÜKTÜRKMEN B., Gülyüz S., Özgür Y., BOZKIR A.

BBBB International Conference on Pharmaceutical Sciences, 5 - 07 October 2017

- VIII. **Development and in vitro / in vivo evaluation of bisphosphonate loaded membranes for guided bone regeneration**  
ÖZ U. C., KÜÇÜKTÜRKMEN B., SAKA O. M., DEVRİM B., topbaş m., ÖZDEMİR Ö., bilgili h., DEVECİ M. S., ÜNSAL E., BOZKIR A.  
12th International symposium on pharmaceutical sciences, Ankara, Turkey, 26 - 29 June 2018
- IX. **Development of HPLC Method for Thymoquinone Quantification and Pre-Eliminary Investigation on Nanoparticle Production**  
KONCA S. F., ÖZ U. C., BOZKIR A.  
22. Uluslararası Biyomedikal Bilim ve Teknoloji Sempozyumu, 12 - 14 May 2017
- X. **Comparison Studies on Peptide-18 ConjugatedLiposomes**  
SAKA O. M., ÖZ U. C., Gülyüz S., Yılmaz Ö., BOZKIR A.  
22nd International Symposium on Biomedical Science and Technology, 12 - 14 May 2017
- XI. **Preparation and Evaluation of Zoledronic Acid Loaded PLGA Nanoparticles**  
DEVRİM B., SAKA O. M., ÖZ U. C., KÜÇÜKTÜRKMEN B., BOZKIR A.  
11th Central European Symposium on Pharmaceutical Technology, 22 - 24 September 2016
- XII. **Optimization of alendronate sodium loaded nanoparticle formulation for higher efficiency**  
KÜÇÜKTÜRKMEN B., ÖZ U. C., DEVRİM B., SAKA O. M., BOZKIR A.  
AAPS Annual Meeting and Exposition, 25 - 29 October 2015
- XIII. **Evaluation of nanoparticle production process via central composite design for efficient zoledronic acid delivery**  
ÖZ U. C., KÜÇÜKTÜRKMEN B., SAKA O. M., DEVRİM B., BOZKIR A.  
AAPS Annual Meeting and Exposition, 25 - 29 October 2015
- XIV. **Polymeric Nanoparticles for Intra Articular Application of Diclofenac Sodium**  
ÇANKAYA Z. A., YILMAZ E., KÜÇÜKTÜRKMEN B., ÖZ U. C., BOZKIR A.  
11th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 9 - 12 June 2015
- XV. **Development of reconstitutable suspensions for pediatric delivery of diclofenac sodium loaded microspheres**  
ÖZ U. C., DEVRİM B., BOZKIR A., CANEFE K.  
17th International Pharmaceutical Technology Symposium, 8 - 10 September 2014
- XVI. **A Systematic Study of PLGA Nanoparticles Part II Effect Of Formulation Variables On Particle Characteristics**  
SERİM T. M., ÖZ U. C., ŞENGEL TÜRK C. T., HASÇİÇEK C.  
FIP World Congress, Towards a future vision for complex patients: Integrated care in a dynamic continuum (FIP-2013), Dublin, Ireland, 31 August - 05 September 2013
- XVII. **A systemic study of PLGA nanoparticles: Part II. Effect of formulation variables on particle characteristics**  
SERİM T. M., ÖZ U. C., ŞENGEL TÜRK C. T., HASÇİÇEK C.  
73rd International Congress of FIP, World Congress of Pharmacy and Pharmaceutical Sciences, Dublin, Ireland, 31 August - 05 September 2013
- XVIII. **A full factorial design study of PLGA nanoparticles: Part I. Effect of two factors on encapsulation efficiency**  
ÖZ U. C., ŞENGEL TÜRK C. T., SERİM T. M., HASÇİÇEK C.  
16th International Pharmaceutical Technology Symposium, Antalya, Turkey, 10 - 12 September 2012
- XIX. **Preparation and evaluation of the model protein loaded thermosensitive in situ gelling systems**  
SERİM T. M., ÖZ U. C., DEVRİM B., SAKA O. M., BOZKIR A.  
10th International Symposium on Pharmaceutical Sciences, 26 - 29 June 2012
- XX. **A Full Factorial Design Study of PLGA Nanoparticles I Effect of Two Factors on Encapsulation Efficiency**  
ÖZ U. C., SERİM T. M., ŞENGEL TÜRK C. T., HASÇİÇEK C.  
16th International Pharmaceutical Technology Symposium (IPTS-2012), Antalya, Turkey, 10 - 12 April 2012

**XXI. Evaluation and Preparation of Nimesulide Loaded PLGA Nanoparticles Using Factorial Design for the Treatment of Rheumatoid Arthritis**  
ŞENGEL TÜRK C. T., SERİM T. M., ÖZ U. C., HASÇİÇEK C.  
8th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, İstanbul, Turkey, 19 - 22 March 2012

## Supported Projects

Küçüktürkmen B., Bozkır A., Öz U. C., Kurter S., Ayçiçek S., Project Supported by Higher Education Institutions, İleri Teknoloji Protein Taşıyıcı Formülasyonlarının Geliştirilmesi, 2022 - 2024  
Bozkır A., Abamor E. Ş., Öz U. C., TUBITAK Project, Visseral Leishmaniasise Karşı Polikaprolakton Temelli İmmünokemoterapötik Ajanları İçeren Nanopartiküler Taşıyıcı Sistemlerin Geliştirilmesi, 2017 - 2022  
Öz U. C., Bozkır A., Küçüktürkmen B., Bakar Ateş F., TUBITAK Project, Alzheimer Hastalığı Tedavisine Yönelik Humanin İçeren Lipit Nanopartikül Formülasyonlarının Hazırlanması, İn-Vitro ve İn-Vivo Değerlendirilmesi, 2019 - 2021  
Bozkır A., Saka O. M., Devrim Gökberk B., TUBITAK Project, Prostat Ve Meme Kanseri Teşhis Ve Tedavisinde Kullanılacak Poli(2-Etil-2-Oksazolin) (Petox) Esası Çok İşlevsel Taşıyıcı Sistemlerin Geliştirilmesi, 2014 - 2018  
ÖZ U. C., TUBITAK Project, Prostat Kanseri Tedavisi İçin Spesifik Aktif Hedeflendirilmiş Gen Taşıyıcı Polimerzomların Geliştirilmesi, 2015 - 2016  
Devrim Gökberk B., Saka O. M., Bozkır A., Ünsal E., KÜÇÜKTÜRKLEN B., TUBITAK Project, Bifosfonat Yüklü Membran ve in situ Jel Formülasyonlarının Yönlendirilmiş Kemik Rejenerasyonu Üzerine Etkisinin in vitro ve in vivo Değerlendirilmesi, 2013 - 2015

## Scientific Refereeing

MOLECULAR PHARMACEUTICS, SCI Journal, September 2022  
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, SCI Journal, June 2022  
MATERIALIA, Journal Indexed in ESCI, May 2022  
JOURNAL OF BIONIC ENGINEERING, SCI Journal, March 2022  
ADVANCED DRUG DELIVERY REVIEWS, SCI Journal, January 2022  
AAPS JOURNAL, SCI Journal, September 2021  
JOURNAL OF RESEARCH IN PHARMACY (ONLINE), National Scientific Refreed Journal, September 2021  
JOURNAL OF NANOBIOTECHNOLOGY, SCI Journal, August 2021  
BIOENGINEERING & TRANSLATIONAL MEDICINE, SCI Journal, June 2021  
MATERIALS RESEARCH EXPRESS, SCI Journal, April 2021  
PHARMACEUTICAL DEVELOPMENT AND TECHNOLOGY, SCI Journal, June 2019

## Metrics

Publication: 39  
Citation (WoS): 162  
Citation (Scopus): 109  
H-Index (WoS): 7  
H-Index (Scopus): 7

## Scholarships

TUBİTAK 2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, TUBITAK, 2022 - 2023  
TUBİTAK 2214-A Yurt Dışı Doktora Sırası Araştırma Burs Programı, TUBITAK, 2015 - 2016