

Asst. Prof. Muhammet Davut ARPA

Personal Information

Email: mdarpa@medipol.edu.tr

Web: <https://avesis.medipol.edu.tr/mdarpa>

International Researcher IDs

ScholarID: XbzWbBoAAAAJ

ORCID: 0000-0001-9290-2404

Publons / Web Of Science ResearcherID: GSM-6969-2022

ScopusID: 57038847500

Yoksis Researcher ID: 160303

Education Information

Doctorate, İstanbul University, Sağlık Bilimleri Enstitüsü, Farmasötik Teknoloji (Dr), Turkey 2012 - 2018

Undergraduate, İstanbul University, Eczacılık Fakültesi, Eczacılık Pr., Turkey 2006 - 2011

Dissertations

Doctorate, Kitosan bazlı bukkal biyoadezif ilaç taşıyıcı sistemlerin geliştirilmesi ve in vitro-in vivo değerlendirilmesi, İstanbul University, Sağlık Bilimleri Enstitüsü, Farmasötik Teknoloji (Dr), 2018

Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Pharmacology and Therapeutics, Life Sciences, Chemistry, Natural Sciences

Academic Titles / Tasks

Assistant Professor, İstanbul Medipol University, Eczacılık Fakültesi, Eczacılık Teknolojisi Bölümü, 2018 - Continues

Lecturer, İstanbul Medipol University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri Bölümü, 2013 - 2018

Research Assistant, İstanbul Medipol University, Eczacılık Fakültesi, Eczacılık Teknolojisi Bölümü, 2012 - 2013

Academic and Administrative Experience

Istanbul Medipol University, 2018 - Continues

Istanbul Medipol University, 2018 - Continues

Istanbul Medipol University, 2018 - Continues

Courses

İlaç Endüstrisinde Laboratuvar Uygulamaları, Undergraduate, 2019 - 2020, 2018 - 2019

Ruhsatlandırma, Undergraduate, 2019 - 2020
Eczacılık Terminolojisi, Undergraduate, 2019 - 2020, 2018 - 2019
İlaç Şekilleri ve Uygulamaları I, Associate Degree, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji II, Undergraduate, 2019 - 2020, 2018 - 2019
İlaç Şekilleri ve Uygulamaları II, Associate Degree, 2019 - 2020, 2018 - 2019
Eczacılık Mevzuatı ve Deontolojisi, Associate Degree, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji I, Undergraduate, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji Uygulama II, Undergraduate, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji Uygulama I, Undergraduate, 2019 - 2020, 2018 - 2019
Dermokozmetik, Undergraduate, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji Uygulama IV, Undergraduate, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji Uygulama III, Undergraduate, 2019 - 2020, 2018 - 2019
Farmasötik Teknoloji Uygulama IV, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
İlaç Şekilleri ve Uygulamaları I, Associate Degree, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
İlaç Şekilleri ve Uygulamaları II, Associate Degree, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Farmasötik Teknoloji Uygulama III, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
Eczacılık Mevzuatı ve Deontolojisi, Associate Degree, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
Ruhsatlandırma, Undergraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015
Farmasötik Teknoloji Uygulama II, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
Dermokozmetik, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Farmasötik Teknoloji Uygulama I, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
Eczacılık Tarihi, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Chitosan-based buccal mucoadhesive bilayer tablets enhance the bioavailability of tizanidine hydrochloride by bypassing the first-pass metabolism**
ARPA M. D., Okur N. Ü., GÖK M. K., CEVHER E.
Journal of Drug Delivery Science and Technology, vol.97, 2024 (SCI-Expanded)
- II. **Novel Microemulsion Containing Benzocaine and Fusidic Acid Simultaneously: Formulation, Characterization, and In Vitro Evaluation for Wound Healing**
ARPA M. D., Çağlar E. Ş., Güreşçi D., Sipahi H., Üstündağ Okur N.
AAPS PharmSciTech, vol.25, no.3, 2024 (SCI-Expanded)
- III. **Ginger essential oil-loaded hydrogels: preparation, characterization, cytotoxicity, antimicrobial and anti-inflammatory activity**
ARPA M. D., KESMEN E. E., ARSLAN T., KARADAĞ A. E., BİLTEKİN KALELİ S. N., DEMİRCİ F.
Journal of Essential Oil Research, vol.36, no.1, pp.16-29, 2024 (SCI-Expanded)
- IV. **Novel Sprayable Thermosensitive Benzydamine Hydrogels for Topical Application: Development, Characterization, and In Vitro Biological Activities**
ARPA M. D., KESMEN E. E., BİLTEKİN KALELİ S. N.
AAPS PharmSciTech, vol.24, no.8, 2023 (SCI-Expanded)
- V. **Chitosan-based buccal mucoadhesive patches to enhance the systemic bioavailability of tizanidine**
ARPA M. D., Okur N. Ü., GÖK M. K., Özgümüş S., CEVHER E.
International Journal of Pharmaceutics, vol.642, 2023 (SCI-Expanded)
- VI. **Novel benzydamine hydrochloride and chlorhexidine gluconate loaded bioadhesive films for local treatment of buccal infections**
ARPA M. D., Yağcılar A. P., Biltekin S. N.
Journal of Drug Delivery Science and Technology, vol.84, 2023 (SCI-Expanded)
- VII. **Azelaic acid loaded chitosan and HPMC based hydrogels for treatment of acne: formulation, characterization, in vitro-ex vivo evaluation**

- ARPA M. D., Seçen İ. M., ERİM Ü. C., HOŞ A., Üstündağ Okur N.
 Pharmaceutical Development and Technology, vol.27, no.3, pp.268-281, 2022 (SCI-Expanded)
- VIII. **Development and evaluation of mesoporous montmorillonite/magnetite nanocomposites loaded with 5-Fluorouracil**
 Çiftçi H., ARPA M. D., Gülaçar İ. M., Özcan L., Ersoy B.
Microporous and Mesoporous Materials, vol.303, 2020 (SCI-Expanded)
- IX. **New therapeutic system based on hydrogels for vaginal candidiasis management: formulation-characterization and in vitro evaluation based on vaginal irritation and direct contact test**
 ARPA M. D., Yoltaş A., Onay Tarlan E., Şenyüz C. Ş., Sipahi H., Aydin A., Üstündağ Okur N.
 Pharmaceutical Development and Technology, vol.25, no.10, pp.1238-1248, 2020 (SCI-Expanded)
- X. **Preparation and evaluation of novel microemulsion-based hydrogels for dermal delivery of benzocaine**
 Üstündağ Okur N., Çağlar E. Ş., ARPA M. D., KARASULU H. Y.
 Pharmaceutical Development and Technology, vol.22, no.4, pp.500-510, 2017 (SCI-Expanded)

Articles Published in Other Journals

- I. **Development and evaluation of azelaic acid-cyclodextrin hydrogels for treatment of acne**
 Arpa M. D., Doğan N., Gündüz M., Karavelioğlu E. S., Erim Ü. C.
JOURNAL OF RESEARCH IN PHARMACY, vol.28, no.1, pp.177-190, 2024 (ESCI)
- II. **Sprayable microemulsion of diphenhydramine hydrochloride for dermal delivery**
 ARPA M. D., ARSLAN T., ERASLAN H., Üstündağ Okur N.
Acta Pharmaceutica Sciencia, vol.62, no.2, pp.462-479, 2024 (Scopus)
- III. **Preparation of Diatomite-Chitosan Composites for Loading and Release of Diphenhydramine HCl**
 Özkan Z., Arpa M. D., Özçatal M., Çiftçi H.
Journal of Materials and Mechatronics:A (Online), vol.4, no.2, pp.542-560, 2023 (Peer-Reviewed Journal)
- IV. **Design of IKVAV peptide/gold nanoparticle decorated, micro/nano-channeled PCL/PLGA film scaffolds for neuronal differentiation and neurite outgrowth**
 Aydeger A., Ayşit N., Baydaş G., Çakıcı Ç., Erim Ü. C., Arpa M. D., Özçicek İ.
Biomaterials Advances, vol.152, 2023 (Scopus)
- V. **Formulation, characterization and in vitro release studies of terbinafine hydrochloride loaded buccal films**
 ARPA M. D., ÜNÜKÜR M. Z., ERİM Ü. C.
Journal of Research in Pharmacy, vol.25, no.5, pp.667-680, 2021 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Development and Optimization of Thermosensitive Spray Formulations of Poloxamer and Chitosan Based-Lidocaine Hydrochloride Using The Response Surface Methodology for Topical Application**
 ARPA M. D.
 12. Uluslararası Gevher Nesibe Sağlık Bilimleri Kongresi, Turkey, 19 - 20 February 2024
- II. **RESEARCH OF THE EFFECT OF ACID TYPE AND POLYMER CONCENTRATION ON RHEOLOGICAL PROPERTIES AND PHYSICAL STABILITY OF CHITOSAN HYDROGELS**
 Arpa M. D., Kesmen E. E.
 International Multidisciplinary Symposium on Drug Research and Development (DRD) 2023, İzmir, Turkey, 4 - 06 May 2023, pp.1
- III. **Development and Characterization of Sprayable Thermosensitive Benzylamine Gels for Dermal Application**
 Arpa M. D., Kesmen E. E.

International Multidisciplinary Symposium on Drug Research and Development (DRD) 2023, İzmir, Turkey, 4 - 06 May 2023, pp.1

- IV. **Development of Gold Nanoparticle Decorated, Micro/Nano-channelled PCL/PLGA Film Scaffolds for Neural Tissue Engineering Applications**
Aydeğer A., Çakıcı Ç., Erim Ü. C., Arpa M. D., Özçíek İ.
16th NANOSCIENCE & NANOTECHNOLOGY CONFERENCE, Ankara, Turkey, 05 September 2022
- V. **Investigation of Rheological, Swelling and Bioadhesive Properties of Chitosan Based Gel Prepared with Different Acids**
Arpa M. D.
20th International Pharmaceutical Technology Symposium (IPTS), Ankara, Turkey, 21 - 23 February 2022, pp.138
- VI. **Development and Characterization of Buccal Films Including Benzydamine Hydrochloride and Chlorhexidine Gluconate**
Arpa M. D., Yağcılar A. P.
20th International Pharmaceutical Technology Symposium (IPTS), Ankara, Turkey, 21 - 23 February 2022, pp.243
- VII. **HPLC Method of Oxiconazole Nitrate For Quantitative Analyzes of Novel Drug Delivery Systems**
Arpa M. D., Ünükür M. Z.
13th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 22 - 25 June 2021, pp.1
- VIII. **HPLC Method Development and Validation Of Chlorhexidine Gluconate And Benzydamine HCl for Buccal Delivery**
Arpa M. D., Yağcılar A. P.
13th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 22 - 25 June 2021, pp.1
- IX. **HPLC Method Development and Validation For Topical Finasteride**
Arpa M. D., Seçen I. M.
13th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 22 - 25 June 2021, pp.1
- X. **A Novel RP-HPLC Method Development and Validation of Terbinafine Hydrochloride for Buccal Delivery**
Erim Ü. C., Arpa M. D.
8th BBBB International Conference on Pharmaceutical Sciences, İzmir, Turkey, 14 October 2019
- XI. **Development and Evaluation of HPMC Based Gel Loaded with Azelaic Acid**
Arpa M. D., Seçen İ. M., Erim Ü. C.
8th BBBB International Conference on Pharmaceutical Sciences, İzmir, Turkey, 14 October 2019
- XII. **Chitosan-Based Nanoparticles as Bioadhesive Drug Delivery System for Buccal Route**
ARPA M. D.
International IVEK BIO Congress, 26 - 28 November 2018
- XIII. **Terbinafin hidroklorür içeren vajinal jel formülasyonlarının geliştirilmesi, karakterizasyonu, in vitro salım çalışmaları ve antikandidiyal etkilerinin belirlenmesi**
Üstündağ Okur N., Arpa M. D., Onay Tarlan E., Yoltaş A.
2. Marmara Eczacılık Kongresi, İstanbul, Turkey, 14 - 16 November 2018, pp.1
- XIV. **Formulation and In vitro Evaluation of Chitosan Based Buccal Tizanidine Hydrochloride Mini-tablets**
Arpa M. D., Üstündağ Okur N., Cevher E.
2nd International Gazi Pharma Symposium, Ankara, Turkey, 11 - 13 October 2017, pp.1
- XV. **Terbinafine hydrochloride loaded vaginal gel: Preparation, characterization and in vitro release**
Üstündağ Okur N., Arpa M. D.
IVEK Uluslararası İlaç ve Eczacılık Kongresi, İstanbul, İstanbul, Turkey, 26 - 29 April 2017, pp.1
- XVI. **High-Performance Liquid Chromatography Method Development and Validation for Vaginal Delivery of Terbinafine Hydrochloride**
ÜSTÜNDAĞ OKUR N., ARPA M. D., ÇAĞLAR E. Ş., ONAY E.
2. İVEK Uluslararası İlaç ve Eczacılık Kongresi, İstanbul, Turkey, 27 - 29 November 2015
- XVII. **Benzocaine loaded microemulsion-based hydrogels: Preparation, Characterization and In vitro release**
Üstündağ Okur N., Arpa M. D., Çağlar E. Ş., Karasulu H. Y.

- Gazi Pharma Symposium (GPSS), Antalya, Turkey, 12 - 15 November 2015, pp.1
- XVIII. **Development and validation of high performance liquid chromatography method for domperidone maleate in pharmaceutical dosage forms**
Üstündağ Okur N., Çağlar E. Ş., Arpa M. D., Berk B., Karasulu H. Y.
Gazi Pharma Symposium (GPSS), Antalya, Turkey, 12 - 15 November 2015, pp.1
- XIX. **Benzocaine loaded microemulsion formulations for dermal application: Design, Optimization and Characterization**
Üstündağ Okur N., Arpa M. D., Çağlar E. Ş., Karasulu H. Y.
FIP 2015, Düsseldorf, Germany, 29 September - 03 October 2015, pp.1
- XX. **Preparation and evaluation of novel microemulsion-based hydrogels for dermal delivery of benzocaine**
Üstündağ Okur N., Çağlar E. Ş., Arpa M. D., Karasulu H. Y.
International Eurasia Pharmacy Congress, Erzincan, Turkey, 3 - 07 September 2015, pp.122

Supported Projects

ARPA M. D., Aksolotl Blastemasının İlaç Formülasyonunun Sağlıklı ve Diyabetik Sıçanlarda Oluşturulacak Yara Modelinde
İn vivo Testlerinin Gerçekleştirilmesi Ve Blastema İçeriğinin Yara İyileştirme Mekanizmasının Araştırılması, 2022 -
Continues

Doğan N., Arpa M. D., Akyıl E., Project Supported by Higher Education Institutions, TRİAMSİNOLON ASETONİT İÇEREN
BUKKAL NANOLİF FORMÜLASYONU GELİŞTİRİLMESİ VE KARAKTERİZASYONU, 2023 - 2024

ARPA M. D., Project Supported by Higher Education Institutions, Bir İlaç Taşıyıcı Sistemi Olarak Montmorillonit / Manyetit
Nano-Kompozit Sentezi ve Karakterizasyonu, 2018 - 2019

ARPA M. D., Kitosan Bazlı Bukkal Biyoadezif İlaç Taşıyıcı Sistemlerin Geliştirilmesi ve In vitro-In vivo Degerlendirilmesi,
2018 - 2019

Arpa M. D., Project Supported by Higher Education Institutions, Benzokain İçeren Mikroemülsiyon ve Mikroemülsiyon
Bazlı Jel Formülasyonlarının Hazırlanması ve İn vitro Ex vivo Değerlendirilmesi Üzerine Çalışmalar, 2015 - 2016

Patent

Muhammet Davut A., TEDAVİ AMAÇLI BENZOKAİN İÇEREN MİKROEMÜLSİYON BAZLI HİDROJEL FORMÜLASYONLARI VE
ÜRETİM YÖNTEMİ, Patent, CHAPTER A Human Needs, 2018