

## Assoc. Prof. ÖZGÜR ÜSTÜNDAĞ

### Personal Information

**Office Phone:** [+90 312 203 3171](tel:+903122033171)

**Fax Phone:** [+90 312 213 1081](tel:+903122131081)

**Web:** <https://avesis.ankara.edu.tr/ustundag>

**Address:** Ankara Üniversitesi Eczacılık Fakültesi Analitik Kimya Anabilim Dalı Emniyet Mah. Döğol Cad. No: 4 Posta Kod: 06561 Yenimahalle, Ankara, Türkiye

### Education Information

Doctorate, Ankara University, Sağlık Bilimleri Enstitüsü, Analitik Kimya (Dr), Turkey 2003 - 2009

Postgraduate, Ankara University, Sağlık Bilimleri Enstitüsü, Analitik Kimya (YI) (Tezli), Turkey 2000 - 2003

Undergraduate, Ankara University, Eczacılık Fakültesi, Eczacılık Pr., Turkey 1996 - 2000

### Dissertations

Doctorate, Anjiyotensin II reseptör antagonistleri içeren farmasötik preparatlardaki etkin maddelerin spektral olarak ? Sürekli dalgacık dönüşüm? yöntemleriyle miktar tayinleri, Ankara University, Sağlık Bilimleri Enstitüsü, Analitik Kimya (Dr), 2009

### Research Areas

Analytical Chemistry, Atomic Mass Spectrometry, Atomic and Molecular Spectroscopy, Separation Methods, Bioanalytical Methods, Emission Spectroscopy, fluorimetry, Food Analysis, Chemometry, Chromatographic Analysis, Mass Spectroscopy, Magnetic Resonance Spectroscopy, Mechanical Methods, Spectroscopical Methods, Volumetry, Health Sciences

### Academic Titles / Tasks

Associate Professor, Ankara University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2002 - Continues

### Courses

Genel Kimya II, Undergraduate, 2022 - 2023

Tez Çalışması, Doctorate, 2022 - 2023

Adli Bilimlerde Analitik Yöntemler, Postgraduate, 2022 - 2023

Analitik Kimya Uygulama II, Undergraduate, 2022 - 2023

Analitik Yöntem Optimizasyonu Ve Validasyonu, Postgraduate, 2022 - 2023

Araştırma Projesi II, Undergraduate, 2022 - 2023

GENERAL CHEMISTRY II, Undergraduate, 2022 - 2023

Uzmanlık Alan Dersi, Doctorate, 2022 - 2023

Analitik Yöntem Geçerlilik Testleri, Postgraduate, 2022 - 2023

Analitik Yöntem Optimizasyonu Ve Validasyonu (Uygulama), Postgraduate, 2022 - 2023  
Laboratuvar Güvenliği, Undergraduate, 2022 - 2023  
Analitik Yöntem Geçerlilik Testleri (Uygulama), Postgraduate, 2022 - 2023  
Analitik Kimya I (Uyg.), Undergraduate, 2022 - 2023  
Araştırma Projesi I, Undergraduate, 2022 - 2023  
General Chemistry I, Undergraduate, 2022 - 2023  
Analitik Kimya II, Undergraduate, 2021 - 2022  
Analitik Kimyada Hesaplamalar Ve Bilgisayar Kullanımı, Undergraduate, 2021 - 2022  
Analytical Chemistry II, Undergraduate, 2021 - 2022  
Adli Bilimlerde Spektroskopik Ve Kromatografik Yöntemler, Postgraduate, 2021 - 2022  
Araştırma Projesi II, Undergraduate, 2021 - 2022  
COMPUTER USAGE AND CALCULATION IN ANALYTICAL CHEMISTRY, Undergraduate, 2021 - 2022  
Analitik Validasyon, Postgraduate, 2022 - 2023, 2021 - 2022  
Analitik Kimya II (Uyg.), Undergraduate, 2021 - 2022  
LABORATORY SAFETY, Undergraduate, 2021 - 2022  
Analytical Chemistry I (Pra.), Undergraduate, 2021 - 2022  
Genel Kimya I, Undergraduate, 2022 - 2023  
Laboratuvar Güvenliği, Undergraduate, 2021 - 2022  
Tez Çalışması, Postgraduate, 2022 - 2023  
Numune Hazırlama Teknikleri, Doctorate, 2022 - 2023, 2021 - 2022  
Sample Preparation Techniques, Doctorate, 2022 - 2023  
Analytical Validation, Postgraduate, 2021 - 2022  
Uzmanlık Alan Dersi, Postgraduate, 2022 - 2023, 2021 - 2022  
Aletli Analiz, Undergraduate, 2018 - 2019  
Comp. Us. Cal. A. Chem., Undergraduate, 2018 - 2019  
A. Kim. Hes., Postgraduate, 2018 - 2019  
İ. Araş. Yönt., Doctorate, 2018 - 2019  
General Chemistry II, Undergraduate, 2018 - 2019  
Genel Kimya II, Undergraduate, 2018 - 2019  
İ. Et. Mad. Fiz. Pre., Doctorate, 2018 - 2019  
Analytical Validation, Undergraduate, 2018 - 2019  
Laboratory Safety, Undergraduate, 2018 - 2019, 2017 - 2018  
Instrumental Analysis, Undergraduate, 2018 - 2019  
Analitik Validasyon, Undergraduate, 2018 - 2019  
A. Kim. Hes. Bilg. Kul., Undergraduate, 2018 - 2019  
Analitik Kimya I, Undergraduate, 2017 - 2018  
Analytical Chemistry I, Undergraduate, 2017 - 2018  
Analytical Chemistry II (Pra.), Undergraduate, 2017 - 2018

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

- I. **A New Ultra-Performance Liquid Chromatographic Method for the Quantification of Vitamin C in Fresh and Dried Goji Berries (*Lycium barbarum* L.) Cultivated in Turkey**  
DİNÇ E., ÜÇER A., UNAL N., ÜSTÜNDAĞ Ö.  
JOURNAL OF AOAC INTERNATIONAL, vol.106, pp.429-435, 2023 (SCI-Expanded)
- II. **Wavelet Signal Processing Tools for Quantifying and Monitoring the in-vitro Dissolution Profiles of Tenofovir Disoproxil Fumarate and Emtricitabine in Tablets**  
DİNÇ E., ÖZDEMİR N., ÜSTÜNDAĞ Ö., BIYIK E., TILKAN G., HOANG V. D.  
Journal of the Mexican Chemical Society, vol.66, no.4, pp.488-499, 2022 (SCI-Expanded)
- III. **CONTINUOUS WAVELET TRANSFORM APPROACH FOR THE ASSAY OF ACTIVE COMPONENTS IN**

## TABLETS

ÜSTÜNDAĞ Ö., DİNÇ E.

Revue Roumaine de Chimie, vol.67, no.8-9, pp.447-454, 2022 (SCI-Expanded)

- IV. **Continuous wavelet transforms and ultra performance liquid chromatography applied to the simultaneous quantitative determination of candesartan cilexetil and hydrochlorothiazide in tablets**  
ÜSTÜNDAĞ Ö., DİNÇ E.  
MONATSHEFTE FÜR CHEMIE, vol.152, no.9, pp.1097-1106, 2021 (SCI-Expanded)
- V. **Continuous wavelet transform methods for the simultaneous determinations and dissolution profiles of valsartan and hydrochlorothiazide in tablets**  
DİNÇ E., ÜSTÜNDAĞ Ö., Tilkan G. Y., Turkmen B., Ozdemir N.  
Brazilian Journal of Pharmaceutical Sciences, vol.53, no.1, 2017 (SCI-Expanded)
- VI. **Comparative application of PLS and PCR methods to simultaneous quantitative estimation and simultaneous dissolution test of zidovudine - Lamivudine tablets**  
ÜSTÜNDAĞ Ö., DİNÇ E., Ozdemir N., Tilkan M. G.  
Acta Chimica Slovenica, vol.62, no.2, pp.437-444, 2015 (SCI-Expanded)
- VII. **Continuous wavelet transforms for the simultaneous quantitative analysis and dissolution testing of lamivudine-zidovudine tablets**  
DİNÇ E., Ozdemir N., ÜSTÜNDAĞ Ö., Tilkan M. G.  
Chemical and Pharmaceutical Bulletin, vol.61, no.12, pp.1220-1227, 2013 (SCI-Expanded)
- VIII. **Simultaneous chemometric determination of pyridoxine hydrochloride and isoniazid in tablets by multivariate regression methods**  
DİNÇ E., ÜSTÜNDAĞ Ö., BALEANU D.  
DRUG TESTING AND ANALYSIS, vol.2, no.7-8, pp.383-387, 2010 (SCI-Expanded)
- IX. **Simultaneous determination of tartrazine and allura red in commercial preparation by chemometric HPLC method**  
DİNÇ E., Aktas A. H., Baleanu D., Ustundag Ö.  
JOURNAL OF FOOD AND DRUG ANALYSIS, vol.14, no.3, pp.284-291, 2006 (SCI-Expanded)
- X. **Chemometric determination of naproxen sodium and pseudoephedrine hydrochloride in tablets by HPLC**  
DİNÇ E., Ozdemir A. N., Aksoy H., Ustundag Ö., Baleanu D.  
CHEMICAL & PHARMACEUTICAL BULLETIN, vol.54, no.4, pp.415-421, 2006 (SCI-Expanded)
- XI. **Discrete and continuous wavelet transforms for the multicomponent determination of sunset Yellow and tartrazine in their soft drink powders**  
DİNÇ E., Baleanu D., Ustundag Ö., Aboul-Enein H.  
REVISTA DE CHIMIE, vol.57, no.1, pp.29-35, 2006 (SCI-Expanded)
- XII. **New liquid chromatographic-chemometric approach for the determination of sunset yellow and tartrazine in commercial preparation**  
DİNÇ E., Aktas A., Ustundag Ö.  
JOURNAL OF AOAC INTERNATIONAL, vol.88, no.6, pp.1748-1755, 2005 (SCI-Expanded)
- XIII. **Chemometric calibration based on the wavelet transform for the quantitative resolution of two-colorant mixtures**  
DİNÇ E., Baleanu D., Ustundag Ö., Tas K.  
REVUE ROUMAINE DE CHIMIE, vol.50, no.4, pp.283-290, 2005 (SCI-Expanded)
- XIV. **Application of multivariate calibration techniques to HPLC data for quantitative analysis of a binary mixture of hydrochlorothiazide and losartan in tablets**  
DİNÇ E., Ustundag Ö.  
CHROMATOGRAPHIA, vol.61, no.5-6, pp.237-244, 2005 (SCI-Expanded)
- XV. **A new application of chemometric techniques to HPLC data for the simultaneous analysis of a two-component mixture**  
DİNÇ E., Ustundag Ö., Ozdemir A. N., Baleanu D.  
JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES, vol.28, no.14, pp.2179-2194, 2005 (SCI-

Expanded)

- XVI. **Continuous wavelet transformation applied to the simultaneous quantitative analysis of two-component mixtures**  
DİNÇ E., Baleanu D., Ustundag Ö., Aboul-Enein H.  
PHARMAZIE, vol.59, no.8, pp.618-623, 2004 (SCI-Expanded)
- XVII. **Simultaneous resolution of a binary mixture of captopril and hydrochlorothiazide in tablets by bivariate and multivariate spectral calibrations**  
Ustundag Ö., DİNÇ E.  
PHARMAZIE, vol.58, no.9, pp.623-628, 2003 (SCI-Expanded)
- XVIII. **Simultaneous spectrophotometric determination of cyproterone acetate and estradiol valerate in pharmaceutical preparations by ratio spectra derivative and chemometric methods**  
DİNÇ E., Yucesoy C., Palabiyik İ. M., Ustundag Ö., Onur F.  
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.32, no.3, pp.539-547, 2003 (SCI-Expanded)
- XIX. **An approach to quantitative two-component analysis of a mixture containing hydrochlorothiazide and spironolactone in tablets by one-dimensional continuous Daubechies and biorthogonal wavelet analysis of UV-spectra**  
DİNÇ E., Baleanu D., Ustundag Ö.  
SPECTROSCOPY LETTERS, vol.36, no.4, pp.341-355, 2003 (SCI-Expanded)
- XX. **Spectrophotometric quantitative resolution of hydrochlorothiazide and spironolactone in tablets by chemometric analysis methods**  
DİNÇ E., ÜSTÜNDAĞ Ö.  
Farmaco, vol.58, no.11, pp.1151-1161, 2003 (SCI-Expanded)
- XXI. **Chemometric resolution of a mixture containing hydrochlorothiazide and amiloride by absorption and derivative spectrophotometry**  
DİNÇ E., Ustundag Ö.  
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.29, no.1-2, pp.371-379, 2002 (SCI-Expanded)
- XXII. **Simultaneous spectrophotometric determination of chlorphenoxamine hydrochloride and caffeine in a pharmaceutical preparation using first derivative of the ratio spectra and chemometric methods**  
DİNÇ E., Palabiyik İ. M., Ustundag Ö., Yurtsever F., Onur F.  
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.28, no.3-4, pp.591-600, 2002 (SCI-Expanded)

## Articles Published in Other Journals

- I. **SPECTROPHOTOMETRIC DETERMINATION OF ACTIVE COMPOUNDS IN AN ANTIHYPERTENSIVE FORMULATION BY HAAR-CWT METHOD BİR ANTİHİPERTANSİF FORMÜLASYONDAKİ AKTİF BİLEŞİKLERİN HAAR-CWT YÖNTEMİYLE SPEKTROFOTOMETRİK TAYİNİ**  
ÜSTÜNDAĞ Ö., DİNÇ E.  
Ankara Üniversitesi Eczacılık Fakültesi Dergisi, vol.45, no.3, pp.535-544, 2021 (Scopus)
- II. **VALIDATION STUDY OF A SPECTROPHOTOMETRIC BINARY MIXTURE ANALYSIS BİR SPEKTROFOTOMETRİK İKİLİ KARIŞIM ANALİZİNİN DOĞRULAMA ÇALIŞMASI**  
ÜSTÜNDAĞ Ö., DİNÇ E.  
Ankara Üniversitesi Eczacılık Fakültesi Dergisi, vol.45, no.3, pp.545-553, 2021 (Scopus)
- III. **Simultaneous quantitative resolution and validation of a binary mixture in a pharmaceutical dosage form by using a spectrophotometric signal processing technique** Farmasötik bir preparattaki ikili karışımın spektrofotometrik sinyal işleme tekniği kullanılarak aynı anda miktar tayini ve validasyonu  
ÜSTÜNDAĞ Ö., DİNÇ E.  
Ankara Üniversitesi Eczacılık Fakültesi Dergisi, vol.44, no.3, pp.506-516, 2020 (Scopus)
- IV. **Simultaneous quantitative resolution of irbesartan and hydrochlorothiazide in a pharmaceutical dosage form by signal processing techniques**  
ÜSTÜNDAĞ Ö., DİNÇ E.

Fabad Journal of Pharmaceutical Sciences, vol.38, no.1, pp.25-32, 2013 (Scopus)

V. **Quantitative analysis of hydrochlorothiazide and losartan potassium in a binary mixture by artificial neural network**

DİNÇ E., ÜSTÜNDAĞ Ö.

Fabad Journal of Pharmaceutical Sciences, vol.35, no.3, pp.133-141, 2010 (Scopus)

## Books & Book Chapters

- I. **ECZACILIKTA GÜNCEL ANALİTİK KİMYA UYGULAMALARI**  
ÜSTÜNDAĞ Ö.  
in: Eczacılıkta Yenilikler 3, İlkay Yıldız, Editor, Ankara Üniversitesi, Ankara, pp.93-96, 2020
- II. **Kromatografik Ayırma Teknikleri**  
USLU B., SAĞIRLI A. O., SÜSLÜ İ., GÜNDEM GÖĞER N., SAĞLIK ASLAN S., ÖZKAN S. A., DOĞAN TOPAL B., KUL D., ARIKSOYSAL D., NEMUTLU E., et al.  
in: Türk Farmakopesi 2017, Yalçın Özkan, Editor, Sağlık Bakanlığı Türkiye İlaç ve Tıbbi Cihaz Kurumu, Ankara, pp.89-96, 2018
- III. **Applications of Wavelets: Wavelet transform for the simultaneous predictions of the colorants in food products**  
AKTAŞ A. H., DİNÇ E., Pekcan G., ÜSTÜNDAĞ Ö., TAŞ A.  
in: Mathematical Methods in Engineering, K. Taş, J. A. Tenreiro Machado, D. Baleanu, Editor, Springer, pp.257-284, 2007

## Refereed Congress / Symposium Publications in Proceedings

- I. **QUANTITATIVE DETERMINATION OF ACTIVE COMPONENTS IN A TABLET BY RATIO SPECTRA-DERIVATIVE METHOD**  
ÜSTÜNDAĞ Ö., DİNÇ E.  
The 3rd International Conference on Applications in Chemistry and Chemical Engineering (ICACChE), Macedonia, 11 September 2019
- II. **Quantitative Estimation of Active Compounds in a Binary Mixture by Signal Processing Method**  
ÜSTÜNDAĞ Ö., DİNÇ E.  
Fourth International Conference on New Trends in Chemometrics and Applications, 01 May 2019
- III. **Simultaneous Chemometric Determination of Nebivolol and Hydrochlorothiazide in Tablets by PCR and PLS Techniques**  
Şen B., ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.  
4th International Conference on New Trends on chemometrics and Applications, 1 - 04 May 2019
- IV. **Chemometric pKa Determination of Ciprofloxacin by PARAFAC Application to Cyclic and Square Wave Voltammetric Data Analysis**  
Şen B., ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.  
4th International Conference on New Trends on chemometrics and Applications, 1 - 04 May 2019
- V. **Parallel Factor Analysis of Voltammetric Data Arrays for The Enrofloxacin's pKa Prediction Using Cyclic and Square Wave Voltammetry**  
Şen B., ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.  
4th International Conference on New Trends on chemometrics and Applications, 1 - 04 May 2019
- VI. **Analysis of Three-Dimensional pH-Spectral Data for The Quantitation of an Analyte and Estimation of Its pKa Value in Presence of Interferences**  
Şen B., ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.  
4th International Conference on New Trends on chemometrics and Applications, 1 - 04 May 2019
- VII. **Spectrofluorimetric Determination of Telmisartan and Amlodipine by Multivariate Curve Resolution**

Şen B., ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.

4th International Conference on New Trends on chemometrics and Applications, 1 - 04 May 2019

VIII. **Spectrophotometric Quantitation of Nebivolol and Hydrochlorothiazide by Artificial Neural Network**

Şen B., ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.

4th International Conference on New Trends on chemometrics and Applications, 1 - 04 May 2019

IX. **Quantitative Estimation of Active Compounds in a Pharmaceutical Dosage Form by Continuous Wavelet Transform Method**

ÜSTÜNDAĞ Ö., DİNÇ E.

4th International World Conference on Chemical Sciences and Technologies 7th to 10th September 2018 Kiev, Ukraine, 7 - 10 September 2018

X. **QUANTITATIVE ESTIMATION OF ACTIVE COMPOUNDS IN APHARMACEUTICAL TABLET BY USING RATIO SPECTRA –DERIVATIVE SPECTROPHOTOMETRY AND UPLC TECHNIQUE**

ÜSTÜNDAĞ Ö., DİNÇ E.

2nd International Gazi Pharma Symposium Series (GPSS-2017), 11 - 13 October 2017

XI. **A SIGNAL PROCESSING TECHNIQUE APPROACH FOR THESIMULTANEOUS DETERMINATION OF A BINARY MIXTURE IN APHARMACEUTICAL DOSAGE FORM**

ÜSTÜNDAĞ Ö., DİNÇ E.

2nd International Gazi Pharma Symposium Series (GPSS-2017), 11 - 13 October 2017

XII. **One Dimensional Continuous Wavelet Transforms Applied to the Quantitative Resolution and In Vitro Dissolution Testing of TEN EMT Tablets**

DİNÇ E., ÖZDEMİR A. N., ÜSTÜNDAĞ Ö., Tilkan G., Bükler E.

Third International Conference on New Trends in Chemometrics and Applications (NTCA-2016), 25 - 28 May 2016

XIII. **Continuous Wavelet Transforms for Spectral Quantitation of Amlodipine and Rosuvastatin in Marketed Tablets**

DİNÇ E., ERTEKİN ÖZKAN Z. C., ÜSTÜNDAĞ Ö.

Third International Conference on New Trends in Chemometrics and Applications (NTCA-2016), 25 - 28 May 2016

XIV. **Quantitative Analysis of a Pharmaceutical Preparation Containing Atorvastatin and Ezetibime by Spectral Continuous Wavelet Transform Method**

ÜSTÜNDAĞ Ö., ERTEKİN ÖZKAN Z. C., DİNÇ E.

Third International Conference on New Trends in Chemometrics and Applications (NTCA-2016), 25 - 28 May 2016

XV. **Simultaneous Quantitative Determination of Active Compounds in a Tablet Dosage Form by Continuous Wavelet Transform and UPLC Techniques**

ÜSTÜNDAĞ Ö., DİNÇ E.

21st International Symposium on Separation Sciences 2015, Ljubljana, Slovenia, 30 June - 03 July 2015

XVI. **Simultaneous Quantitative Estimation of Active Components in a Binary Mixture by Using Ratio Spectra Derivative Spectrophotometry**

ÜSTÜNDAĞ Ö., DİNÇ E.

11th International Symposium on Pharmaceutical Sciences, 9 - 12 June 2015

## Metrics

Publication: 49

Citation (WoS): 293

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