

İdari Görevleri

- Ankara Üniversitesi Eczacılık Fakültesi Merkez Laboratuvarı Spektrofotometre

Ünitesi Sorumluluğu (2002-...)

- Ankara Üniversitesi Eczacılık Fakültesi Merkez Laboratuvarı Spektrofluorimetre Ünitesi Sorumluluğu (2002-...)

Görev aldığı komisyon ve kurullar

- Ankara Üniversitesi Eczacılık Fakültesi Sosyal Komite Üyeligi (2001-2009)
- Ankara Üniversitesi Eczacılık Fakültesi Satın Alma ve Muayene Komisyonu Üyeligi (2006-2009)
- Ankara Üniversitesi Bilgisayar ve Web Komisyonu Üyeligi (2005-2010)

Çalışma alanları

1. Spektrofotometri ve spektrofluorimetri
2. HPLC (yüksek basınçlı sıvı kromatografisi)
3. Kemometri; klasik en küçük kareler yöntemi, ters en küçük kareler yöntemi, temel bileşen regresyon yöntemi, kısmi en küçük kareler yöntemi, bivariate kalibrasyon ve lineer regresyon-multivariate kalibrasyon yöntemi
4. Wavelet transformasyon yöntemleri
5. Sinyal analizi ve kalibrasyon model dizaynları
6. Artificial neural networks
7. Analitik Validasyon

Projeler

- Ankara Üniversitesi BAP Proje no: 10A3336001

Bilimsel etkinlikleri

- 1- Acquity UPLC Seminar, Waters, 23.03.2005
- 2- II. Ulusal HPLC Sempozyumu, GATA, 07.10.2004
- 3- Erdal Dinç, Cem Yücesoy, İsmail Murat Palabıyık, **Özgür Üstündağ**, Feyyaz Onur, "Simultaneous determination of estradiol valerate and cyproterone acetate by spectrophotometric and chemometric methods, Drug Analysis 2002 Symposium, 21-22 April 2002, Abstract, p 147, P 232, Bruges, Belgium, 2002.

- 4- Erdal Dinç ve **Özgür Üstündağ**, "Spectrophotometric quantitative resolution of hydrochlorothiazide and spironolactone in tablets by chemometric methods of analysis", 7th International Symposium on Pharmaceutical Sciences (ISOP-7), June 24-27, 2003, Ankara, Turkey, P-12, p. 145.
- 5- Erdal Dinç ve **Özgür Üstündağ**, "Simultaneous determination of pyridoxine hydrochloride and isoniazide (INH) in tablets by chemometric methods, Recent Developments in Pharmaceutical Analysis, Rimini, Italy, 25-28 September 2005, p. 34.
- 6- **Özgür Üstündağ** ve Erdal Dinç, "Wavelet analysis for the simultaneous determination of angiotensin II receptor antagonists and hydrochlorothiazide in mixtures", MME 2006, Çankaya Üniversitesi, Ankara, 27-29 Nisan, 2006, p. 52.
- 7- **Özgür Üstündağ** ve Erdal Dinç, "Simultaneous quantitative resolution of the binary mixture containing hydrochlorothiazide and losartan potassium in tablets by one dimensional continuous wavelet transform", Drug Analysis 2006, University of Namur, Belgium, 16-19 Mayıs 2006, PK 42.
- 8- Erdal Dinç, **Özgür Üstündağ**, "Artificial neural network for the simultaneous quantitative prediction of hydrochlorothiazide and losartan potassium in tablets", 8th International Symposium on Pharmaceutical Sciences (ISOP-8), June 13-16, 2006, Ankara, Turkey, P181, p. 299.
- 9- **Özgür Üstündağ** ve Erdal Dinç, "Simultaneous quantitative resolution of hydrochlorothiazide and irbesartan in tablets by one-dimensional continuous wavelet transform. International Workshop on New Trends in Science and Technology, 03-04 November 2008, Ankara-Türkiye.
- 10- **Özgür Üstündağ** ve Erdal Dinç, "Spectrophotometric Quantitative Resolution of Active Compounds in a Pharmaceutical Combination Containing Candesartan and Hydrochlorothiazide by Signal Processing and UPLC Methods" 18 Mayıs – 22 Mayıs, Side/Antalya "Uluslararası Katılımlı XII. Ulusal Spektroskopi Kongresi
- 11- Erdal Dinç, **Özgür Üstündağ**, M. Günseli Tilkan ve Nurten Özdemir, "Haar Sürekli Dalgacık Dönüşüm Yöntemiyle Lamivudin-Zidovudin İçeren Tabletlerin Kantitatif Analizi ve Çözünme Hızı Testleri" 18 Mayıs – 22 Mayıs, Side/Antalya "Uluslararası Katılımlı XII. Ulusal Spektroskopi Kongresi
- 12- **Özgür Üstündağ** ve Erdal Dinç, "Simultaneous Quantitative Determination of a Binary Mixture Containing Angiotensin II Receptor Antagonists by Continuous Wavelet Transform, Ratio Spectra-Derivative Spectrophotometry and UPLC Techniques" 08 Ekim – 11 Ekim Side/Antalya "First International Conference on New Trends in Chemometrics and Applications, 2011" Kongresi
- 13- **Özgür Üstündağ** ve Erdal Dinç, "Quantitative Resolution of Hydrochlorothiazide and Losartan Potassium in a Commercial Tablet by Artificial Neural Network" 08 Ekim – 11 Ekim Side/Antalya "First International Conference on New Trends in Chemometrics and Applications, 2011" Kongresi
- 14- Erdal Dinç, **Özgür Üstündağ**, M. Günseli Tilkan ve Nurten Özdemir, "Partial Least Squares and Principal Component Regression for the Simultaneous quantitative estimation and the Simultaneous Dissolution Test of ZID and LID in Tablets" 08 Ekim – 11 Ekim Side/Antalya "First International Conference on New Trends in Chemometrics and Applications, 2011" Kongresi
- 15- **Özgür Üstündağ** ve Erdal Dinç, "Simultaneous Quantitative Determination of a Binary Mixture Containing Angiotensin II Receptor Antagonists by Continuous Wavelet Transform, Ratio Spectra-Derivative Spectrophotometry and UPLC Techniques" 26 - 29 Haziran 2012 Ankara "ISOPS-10, 10th International Symposium on Pharmaceutical Sciences" Kongresi
- 16- **Özgür Üstündağ** ve Erdal Dinç, "Tablet Formülasyonundaki Etkin Maddelerin Sinyal İşleme ve UPLC Yöntemleri ile Spektrofotometrik ve Kromatografik Miktar Tayini" 3 - 7 Eylül 2012 Hatay "VI. Ulusal Analitik Kimya" Kongresi
- 17- **Özgür Üstündağ** ve Erdal Dinç, "Chromatographic and spectrofotometric quantitative prediction of active compounds in a binary mixture by UPLC and signal processing methods" 9 – 13 Eylül 2012 Torun / Polonya "ISC 2012, 29th International Symposium on Chromatography, September 9-13, 2012, Toruń, Poland" Kongresi
- 18- Erdal Dinç, **Özgür Üstündağ**, M. Günseli Tilkan ve Nurten Özdemir, "Continuous Wavelet Transforms for the Simultaneous Quantitative Analysis and Dissolution Testing of Lamivudine-Zidovudine Tablets" 15 Mayıs – 18 Mayıs 2013, Burdur "Uluslararası Katılımlı XIII. Ulusal Spektroskopi" Kongresi

19- **Özgür Üstündağ**, Erdal Dinç. Simultaneous quantitative resolution of irbesartan and hydrochlorothiazide in a pharmaceutical dosage form by signal processing and UPLC techniques. 25-28 October 2013 Second International Conference on New Trends in Chemometrics and Applications, 2013 Kongresi

20- Erdal Dinç, Nurten Özdemir, **Özgür Üstündağ**, Günseli Tilkan. One-dimensional continuous wavelet transforms applied to the quantitative resolution and in vitro dissolution testing of Ten-Emt tablets. 25-28 October 2013 Second International Conference on New Trends in Chemometrics and Applications, 2013 Kongresi

21- **Özgür Üstündağ**, Erdal Dinç. Simultaneous quantitative estimation of active components in a binary mixture by using ratio spectra-derivative spectrophotometry. ISOPS-11, 11th International Symposium on Pharmaceutical Sciences Kongresi

22- **Özgür Üstündağ**, Erdal Dinç. Simultaneous quantitative determination of active compounds in a tablet dosage form by continuous wavelet transform and UPLC techniques. 21st International Symposium on Separation Sciences 2015

Yayınları

- Yurt içi
- Yurt dışı

- 1- Erdal Dinç, **Özgür Üstündağ**, "Lineer Regresyon Fonksiyonlarına Dayalı Çok Değişkenli Kalibrasyonlar ve Analitik Uygulamaları", Hacettepe Üniversitesi, Eczacılık Fakültesi Dergisi, Cilt 26 (2) 87- 111, 2006
- 2- Murat Palabıyık, **Özgür Üstündağ**, Erdal Dinç ve Feyyaz Onur, "Simultaneous Spectrophotometric Determination of Paracetamol and Methocarbamol in a Pharmaceutical Preparation using chemometric techniques", Turkish Journal of Pharmaceutical Sciences, 30, 1-17 (2004)
- 3- **Özgür Üstündağ**, Erdal Dinç; Quantitative analysis of hydrochlorothiazide and losartan potassium in a binary mixture by artificial neural network. FABAD J. Pharm. Sci. Volume 35, Issue 3, Pages 119–172, 2012
- 4- Erdal Dinç, **Özgür Üstündağ**, "Chemometric resolution of a mixture containing hydrochlorothiazide and amiloride by absorption and derivative spectrophotometry", Journal of Pharmaceutical and Biomedical Analysis, 29 (1-2), 371-379 (2002).
- 5- Erdal Dinç, İsmail Murat Palabıyık, **Özgür Üstündağ**, Filiz Yurtsever, Feyyaz Onur, "Simultaneous spectrophotometric determination of chlorphenoxamine hydrochloride and caffeine in a pharmaceutical preparation using first derivative of the ratio spectra and chemometric methods", Journal of Pharmaceutical and Biomedical Analysis, 28 (3-4), 591-600 (2002).
- 6- Erdal Dinç, **Özgür Üstündağ**, "Spectrophotometric quantitative resolution of hydrochlorothiazide and spironolactone in tablets by chemometric analysis methods", Farmaco, 58 (11), 1151-1161 (2003).
- 7- Erdal Dinç, Dumitru Baleanu, **Özgür Üstündağ**, "An approach to quantitative two-component analysis of a mixture containing hydrochlorothiazide and spironolactone in tablets by onedimensional continuous daubechies and biorthogonal wavelet analysis of UV-spectra", Spectroscopy Letters, 36 (4), 341-355 (2003).
- 8- **Özgür Üstündağ**, Erdal Dinç, "Simultaneous resolution of a binary mixture of captopril and hydrochlorothiazide in tablets by bivariate and multivariate spectral calibrations", Pharmazie, 58 (9), 623-628 (2003).
- 9- Erdal Dinç, Cem Yücesoy, İsmail Murat Palabıyık, **Özgür Üstündağ**, Feyyaz Onur, "Simultaneous spectrophotometric determination of cyproterone acetate and estradiol valerate in pharmaceutical preparations by ratio spectra derivative and chemometric methods" Journal of Pharmaceutical and Biomedical Analysis, 32 (3), 539-547 (2003).

- 10- Erdal Dinç, Dumitru Baleanu, **Özgür Üstündağ**, Hassan Y. Aboul-Enein, "Continuous wavelet transformation applied to the simultaneous quantitative analysis of two-component mixtures" , Pharmazie, 59 (8), 618-623 (2004).
- 11- Erdal Dinç, **Özgür Üstündağ**, Abdil Özdemir, Dumitru Baleanu, "A New Application of Chemometric Techniques to HPLC Data for the Simultaneous Analysis of Two Component Mixture", Journal of Liquid Chromatography & Related Technologies, 28 (14), 2179-2194 (2005).
- 12- Erdal Dinç, Dumitru Baleanu, **Özgür Üstündağ** ve Kenan Tas, "Chemometric calibration based on the wavelet transform for the quantitative resolution of two-colorants mixtures", Revue Roumaine de Chimie, 50(4)283-290 (2005).
- 13- Erdal Dinç, **Özgür Üstündağ**, "Application of multivariate calibration techniques to HPLC data for quantitative analysis of a binary mixture of hydrochlorothiazide and losartan in tablets", Chromatographia, 61 (5-6), 237-244 (2005).
- 14- Erdal Dinç, Hakan A. Aktas, **Özgür Üstündağ**, "New liquid chromatographic-chemometric approach for the determination of sunset yellow and tartrazine in commercial preparation" Journal of AOAC International, 88(6), 1748-1755 (2005).
- 15- Erdal Dinç, A. Hakan Aktas, Dumitru Baleanu ve **Özgür Üstündağ**, "Simultaneous determination of tartrazine and allura red in commercial preparation by chemometric HPLC methods", Journal of Food and Drug Analysis, 14 (3) 284-291 (2006).
- 16- Erdal Dinç, Abdil Özdemir, Halil Aksoy, **Özgür Üstündağ**, ve Dumitru Baleanu "Chemometric Determination of Naproxen Sodium and Pseudoephedrine Hydrochloride in Tablets by HPLC", Chemical & Pharmaceutical Bulletin, 54(4), 415-421 (2006).
- 17- Erdal Dinç, Dumitru Baleanu , **Özgür Üstündağ**, Hassan Y. Aboul- Enein, "Discrete and continuous wavelet transforms for the multicomponent determination of sunset Yellow and tartrazine in their soft drink powders", Revista de Chimie, 57 (1), 29-35 (2006).
- 18- **Özgür Üstündağ**, Erdal Dinç, Dumitru Baleanu, "Applications of Mexican hat wavelet function to binary mixture analysis, Revista de Chimie, 59 (12), 1387-1391 (2008).
- 19- Erdal Dinç, **Özgür Üstündağ**, Dumitru Baleanu, " Simultaneous chemometric determination of pyridoxine hydrochloride and isoniazid in tablets by multivariate regression methods. ", Drug testing and analysis 2010;2(8):383-7.
- 20- **Özgür Üstündağ**, Erdal Dinç (2010). Quantitative analysis of hydrochlorothiazide and losartan potassium in a binary mixture by artificial neural network. FABAD Journal of Pharmaceutical Sciences, 35, 133-141.
- 21- Erdal Dinç, Nurten Özdemir, **Özgür Üstündağ**, Günseli Tilkan (2013). Continuous wavelet transforms for the simultaneous quantitative analysis and dissolution testing of lamivudine-zidovudine tablets. Chemical & Pharmaceutical Bulletin, 61(12), 1220-1227.
- 22- **Özgür Üstündağ**, Erdal Dinç. Simultaneous quantitative resolution of irbesartan and hydrochlorothiazide in a pharmaceutical dosage form by signal processing techniques. FABAD Journal of Pharmaceutical Sciences, 38 (1), 25-32, 2013.
- 23- **Özgür Üstündağ** , Erdal Dinç , Ayşe Nurten Özdemir , M. Günseli Tilkan (2015). Comparative application of PLS and PCR methods to simultaneous quantitative estimation and simultaneous dissolution test of zidovudine - lamivudine tablets. Acta Chimica Slovenica, 62, 437-444

1- A.Hakan Aktas, Erdal Diñ, Güzide Pekcan, **Özgür Üstündag**, Aysegül Tas, (2007) Applications of Wavelets: Wavelet transform for the simultaneous predictions of the colorants in food products, *Mathematical Methods in Engineering*, 257-284. Springer