

Prof. DİLEK AK

Personal Information

Office Phone: [+90 335 058 0](tel:+903350580) Extension: 3764

Email: dak@anadolu.edu.tr

Web: <https://avesis.anadolu.edu.tr/dak>

International Researcher IDs

ORCID: 0000-0001-6986-3638

Yoksis Researcher ID: 39266

Education Information

Doctorate, Anadolu University, SAĞLIK BİLİMLERİ ENSTİTÜSÜ, ANALİTİK KİMYA ANABİLİM DALI, Turkey 1989 - 1993

Postgraduate, Anadolu University, SAĞLIK BİLİMLERİ ENSTİTÜSÜ, ANALİTİK KİMYA ANABİLİM DALI, Turkey 1987 - 1989

Undergraduate, Anadolu University, ECZACILIK FAKÜLTESİ, Eczacılık Pr., Turkey 1984 - 1987

Dissertations

Doctorate, Omeprazol'un polarografik, spektrofotometrik ve kromatografik miktar tayini, Anadolu University, SAĞLIK BİLİMLERİ ENSTİTÜSÜ, ANALİTİK KİMYA ANABİLİM DALI, 1993

Postgraduate, Sitarabin'in polarografik davranışlarının incelenmesi, Anadolu University, SAĞLIK BİLİMLERİ ENSTİTÜSÜ, ANALİTİK KİMYA ANABİLİM DALI, 1989

Research Areas

Health Sciences, Pharmacology and Therapeutics

Academic Titles / Tasks

Associate Professor, Anadolu University, ECZACILIK FAKÜLTESİ, TEMEL ECZACILIK BİLİMLERİ BÖLÜMÜ, 1998 - 2004

Assistant Professor, Anadolu University, ECZACILIK FAKÜLTESİ, TEMEL ECZACILIK BİLİMLERİ BÖLÜMÜ, 1994 - 1998

Research Assistant, Anadolu University, ECZACILIK FAKÜLTESİ, TEMEL ECZACILIK BİLİMLERİ BÖLÜMÜ, 1987 - 1994

Academic and Administrative Experience

Anadolu University, 2017 - 2021

Anadolu University, 2016 - 2019

Anadolu University, 2014 - 2017

Anadolu University, 2013 - 2014

Anadolu University, 2007 - 2010

Anadolu University, 2004 - 2010

Anadolu University, 2002 - 2007

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Simultaneous Determination of Substance P and CGRP in Rat Brainstem Tissue Using LC-ESI-MS/MS Method**
Alasag N., Şener E., Dogrukol-Ak D.
CURRENT ANALYTICAL CHEMISTRY, no.6, pp.583-590, 2018 (SCI-Expanded)
- II. **Validated Method for the Determination of Piroxicam by Capillary Zone Electrophoresis and Its Application to Tablets**
DAL POÇAN A. G., Oktayer Z., Dogrukol-Ak D.
JOURNAL OF ANALYTICAL METHODS IN CHEMISTRY, 2014 (SCI-Expanded)
- III. **Development of a CD-MEKC method for investigating the metabolism of tamoxifen by flavin-containing monooxygenases and the inhibitory effects of methimazole, nicotine and DMXAA**
Yeniceli D., Deng X., Adams E., Dogrukol-Ak D., Van Schepdael A.
ELECTROPHORESIS, no.3, pp.463-470, 2013 (SCI-Expanded)
- IV. **A simple and sensitive LC-ESI-MS (ion trap) method for the determination of bupropion and its major metabolite, hydroxybupropion in rat plasma and brain microdialysates**
Yeniceli D., Şener E., Korkmaz O. T., Dogrukol-Ak D., Tuncel N.
TALANTA, no.1, pp.19-26, 2011 (SCI-Expanded)
- V. **The Effects of Vasoactive Intestinal Peptide on Dura Mater Nitric Oxide Levels and Vessel-Contraction Responses in Sympathectomized Rats**
Töre F., Korkmaz O. T., Dogrukol-Ak D., Tuncel N.
JOURNAL OF MOLECULAR NEUROSCIENCE, no.2, pp.288-293, 2010 (SCI-Expanded)
- VI. **A Validated Thin-Layer Chromatographic Method for Analysis of Bupropion Hydrochloride in a Pharmaceutical Dosage Form**
Yeniceli Uğur D., Dogrukol-Ak D.
JPC-JOURNAL OF PLANAR CHROMATOGRAPHY-MODERN TLC, no.3, pp.212-218, 2010 (SCI-Expanded)
- VII. **Retention Behaviour of Bupropion Hydrochloride in Reversed Phase Ion Pair LC and Validated Analysis of the Drug in Pharmaceuticals**
Yeniceli D., Dogrukol-Ak D.
CHROMATOGRAPHIA, no.1-2, pp.79-84, 2010 (SCI-Expanded)
- VIII. **A SIMPLE AND SPECIFIC HPLC METHOD FOR THE DETERMINATION OF ATOMOXETINE IN PHARMACEUTICALS AND HUMAN PLASMA**
Dogrukol-Ak D., YENİCELİ UĞUR D.
JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES, no.19, pp.1745-1759, 2010 (SCI-Expanded)
- IX. **An LC Method for the Determination of Bupropion and Its Main Metabolite, Hydroxybupropion in Human Plasma**
Yeniceli D., Dogrukol-Ak D.
CHROMATOGRAPHIA, no.11-12, pp.1703-1708, 2009 (SCI-Expanded)
- X. **Isolation of peptide transport system-6 from brain endothelial cells: therapeutic effects with antisense inhibition in Alzheimer and stroke models**
Dogrukol-Ak D., Kumar V. B., Ryerse J. S., Farr S. A., Verma S., Nonaka N., Nakamachi T., Ohtaki H., Niehoff M. L., Edwards J. C., et al.
JOURNAL OF CEREBRAL BLOOD FLOW AND METABOLISM, no.2, pp.411-422, 2009 (SCI-Expanded)
- XI. **Determination of carbamazepine and its main metabolite carbamazepine-10, 11-epoxide in rat brain microdialysate and blood using ESI-LC-MS (ion trap)**
ŞENER E., Korkmaz O. T., Yeniceli D., Dogrukol-Ak D., Tuncel M., Tuncel N.
CHROMATOGRAPHIA, 2007 (SCI-Expanded)
- XII. **Determination of Sotalol in tablets and serum by CZE**
Dogrukol-Ak D., Dal A. G., Tuncel M.
CHROMATOGRAPHIA, 2007 (SCI-Expanded)

- XIII. **A validated HPLC method with fluorescence detection for the determination of droperidol in pharmaceutical tablets, human serum, and human milk**
Yeniceli D., Dogrukol-Ak D., Tuncel M.
CHROMATOGRAPHIA, 2007 (SCI-Expanded)
- XIV. **CE determination of droperidol in tablets and human serum**
Tuncel M., Dogrukol-Ak D., Yeniceli D., USLU B., Dogan B.
CHROMATOGRAPHIA, no.9-10, pp.507-511, 2006 (SCI-Expanded)
- XV. **Determination of leflunomide in tablets by high performance liquid chromatography**
Yeniceli D., Dogrukol-Ak D., Tunçel M.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, no.1, pp.197-201, 2006 (SCI-Expanded)
- XVI. **Flow injection analysis of mitomycin-C in flacons**
Dal A. G., Dogrukol-Ak D., TUNÇEL M.
JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES, no.4, pp.619-629, 2005 (SCI-Expanded)
- XVII. **The antioxidants alpha-lipoic acid and N-acetylcysteine reverse memory impairment and brain oxidative stress in aged SAMP8 mice**
Farr S., Poon H., Dogrukol-Ak D., Drake J., Banks W., Eyerman E., Butterfield D., Morley J.
JOURNAL OF NEUROCHEMISTRY, no.5, pp.1173-1183, 2003 (SCI-Expanded)
- XVIII. **Determination of Amlodipine in pharmaceutical formulations by differential-pulse voltammetry with a glassy carbon electrode**
Altıokka G., Dogrukol-Ak D., Tuncel M., Aboul-Enein H.
ARCHIV DER PHARMAZIE, no.2-3, pp.104-108, 2002 (SCI-Expanded)
- XIX. **Capillary electrophoretic behaviour and determination of enoxacin in pharmaceutical preparations and human serum**
Tuncel M., Dogrukol-Ak D., Senturk Z., ÖZKAN S. A., Aboul-Enein H.
JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES, vol.24, no.16, pp.2455-2467, 2001 (SCI-Expanded)
- XX. **The determination of lansoprazole in pharmaceutical preparation by capillary electrophoresis**
Dogrukol-Ak D., Tuncel M., Aboul-Enein H.
CHROMATOGRAPHIA, no.7-8, pp.527-530, 2001 (SCI-Expanded)
- XXI. **A capillary zone electrophoretic method for the determination of nimesulide in pharmaceutical preparation and serum**
Dogrukol-Ak D., Tuncel M., Aboul-Enein H.
JOURNAL OF SEPARATION SCIENCE, no.9, pp.743-748, 2001 (SCI-Expanded)
- XXII. **Capillary electrophoretic method for the determination of etodolac in pharmaceutical tablet formulation**
Dogrukol-Ak D., Kutluk Ö., Tunçel M., Aboul-Enein H.
JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES, vol.24, no.6, pp.773-780, 2001 (SCI-Expanded)
- XXIII. **Modified method for the determination of capillary electrophoresis nitric oxide-correlated nitrate in tissue homogenates**
TUNÇEL M., Dogrukol-Ak D., ERKASAP N.
JOURNAL OF CHROMATOGRAPHY B, no.2, pp.257-263, 2001 (SCI-Expanded)
- XXIV. **Validated analysis of fluvastatin in a pharmaceutical capsule formulation and serum by capillary electrophoresis**
Dogrukol-Ak D., Kircali K., Tunçel M., Aboul-Enein H.
BIOMEDICAL CHROMATOGRAPHY, vol.15, no.6, pp.389-392, 2001 (SCI-Expanded)
- XXV. **Determination of rutin in *Hypericum perforatum* extract bu capillary electrophoresis**
Dogrukol-Ak D., Kirimer N., Tuncel M., Aboul-Enein H.
ANALYTICAL LETTERS, no.2, pp.185-191, 2001 (SCI-Expanded)
- XXVI. **Vasoactive intestinal peptide inhibits degranulation and changes granular content of mast cells: a potential therapeutic strategy in controlling septic shock**

- Tuncel N., Tore F., ŞAHİNTÜRK V., Ak D., Tuncel M.
PEPTIDES, vol.21, no.1, pp.81-89, 2000 (SCI-Expanded)
- XXVII. **Voltammetry of trazodone by platinum electrode and its determination in tablets using DP technique in the rotating conditions**
Dogrukol-Ak D., Zaimoglu V., Tuncel M.
EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES, vol.7, no.3, pp.215-220, 1999 (SCI-Expanded)
- XXVIII. **TLC densitometric determination of omeprazole in pharmaceutical preparations**
Dogrukol-Ak D., Tunalier Z., Tuncel M.
PHARMAZIE, no.4, pp.272-273, 1998 (SCI-Expanded)
- XXIX. **The protective effect of vasoactive intestinal peptide (VIP) on stress-induced gastric ulceration in rats**
Tunçel N., ERKASAP N., ŞAHİNTÜRK V., Doğrukol Ak D., TUNÇEL M.
VIP, PACAP, AND RELATED PEPTIDES, pp.309-322, 1998 (SCI-Expanded)
- XXX. **A differential pulse voltammetric determination of nisoldipine using glassy carbon electrode in pharmaceutical preparations**
Dogrukol-Ak D., Gokoren N., Tuncel M.
ANALYTICAL LETTERS, no.1, pp.105-116, 1998 (SCI-Expanded)
- XXXI. **Flow-through spectrophotometric determination of omeprazole in pharmaceutical preparations containing enteric coated pellets**
Tuncel M., DogrukolAk D.
PHARMAZIE, no.1, pp.73-74, 1997 (SCI-Expanded)
- XXXII. **THE EFFECT OF VASOACTIVE-INTESTINAL-PEPTIDE (VIP) ON SUPEROXIDE-DISMUTASE AND CATALASE ACTIVITIES IN RENAL TISSUES OF RATS EXPOSED TO HEMORRHAGIC ISCHEMIA-REPERFUSION**
UZUNER K., TUNCEL N., AYDIN Y., TUNCEL M., GURER F., BENLI P., AK D.
PEPTIDES, vol.16, no.5, pp.911-915, 1995 (SCI-Expanded)
- XXXIII. **A STUDY ON THE POLAROGRAPHIC-BEHAVIOR AND DETERMINATION OF TIZANIDINE**
TUNCEL M., DOGRUKOL D.
ANALYTICAL LETTERS, no.6, pp.1087-1094, 1992 (SCI-Expanded)
- XXXIV. **A POLAROGRAPHIC STUDY ON DIPYRIDAMOLE AND ITS DETERMINATION IN COMMERCIAL TABLETS**
TUNCEL M., YAZAN Y., DOGRUKOL D., ATKOSAR Z.
ANALYTICAL LETTERS, no.10, pp.1837-1846, 1991 (SCI-Expanded)

Articles Published in Other Journals

- I. **Effect of nitric oxide inhibition on rat liver ischemia reperfusion injury**
ÖZAKYOL A H., TUNÇEL A. N., SARIÇAM T., UZUNER K., AK D., GÜRER F.
PATHOPHYSIOLOGY, vol.7, pp.183-188, 2000 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Optimization of the Novel Antiviral Drug Molnupiravir by LC-ESI-MS/MS**
DARI Y., DİNCEL D., ŞENER E., AK D.
33rd International Symposium on Pharmaceuticals and Biomedical Analysis, Ankara, Turkey, 2 - 06 July 2023
- II. **LC MS MS method development for the new antiepileptic drugs from patient s blood**
ŞENER E., AK D., KORKMAZ O. T., TORUN Ş., GENÇ L., TUNÇEL A. N., KAHVECİ M. Ü., BAŞLAR Z., AR M. C., ELVERDİ T., et al.
HPLC 2014, New Orleans, United States Of America, 11 - 15 May 2014
- III. **A simple and sensitive LC ESI MS method for the determination of bupropion and its major**

metabolite hydroxybupropion in fat plasma and brain microdialysates

YENİCELİ D., ŞENER E., KORKMAZ O. T., AK D., TUNÇEL A. N.

10th International symposium on pharmaceutical sciences, Ankara, Turkey, 26 - 29 June 2012

- IV. **The effects of vasoactive intestinal peptide on dura mater nitric oxide levels and vessel contraction responses in sympathectomized rats**
TÖRE F., KORKMAZ O. T., AK D., TUNÇEL A. N.
Neuropeptides, United States Of America, 20 - 23 July 2009, vol.43, pp.401-455
- V. **THE EFFECTS OF VASOACTIVE INTESTINAL PEPTIDE ON DURAMATER NITRIC OXIDE LEVELS AND VESSEL-CONTRACTION RESPONSES AT SYMPATHECTOMIZED RATS**
Tore F., Korkmaz O. T., Dogrukol-Ak D., Tuncel N.
Joint Meeting of the European-Neuropeptides-Club/Summer Neuropeptides Conference, Salzburg, Austria, 20 - 23 July 2009, pp.413-414
- VI. **Determination of carbamazepine and its main metabolite carbamazepine 10 11 epoxide in rat brain microdialysate and blood using ESI LC MS Ion trap**
ŞENER E., KORKMAZ O. T., YENİCELİ D., AK D., TUNÇEL M., TUNÇEL A. N.
Pharmaceuticital scvience world conress 3. PSWC, Amsterdam, Netherlands, 22 - 25 December 2007
- VII. **The therapeutic potential of VIP vasoactive intestinal peptide in a parkinson s disease model in rats brain microdialysis behavior and histology**
Tuncel N., ŞENER E., CERİT C., Karasu U., Gürer F., ŞAHİNTÜRK V., BAYÇU C., AK D., FİLİZ Z.
II International congress on neuroregeneration, Brazil, 20 - 24 September 2004
- VIII. **Modified method for capillary electrophoresis to determine nitric oxide correlated nitrate in tissue homogenates**
Tuncel M., Dogrukol-Ak D., Erkasap N.
Conference of the NATO Advanced Study Institute on Nitric Oxide, ERICE, Italy, 7 - 17 September 2000, pp.217-220