

# Prof. GÜLGÜN KILCIGİL

## Personal Information

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## Education Information

Doctorate, Ankara University, Sağlık Bilimleri Enstitüsü, Farmasötik Kimya (Dr), Turkey 1988 - 1995

Postgraduate, Ankara University, Sağlık Bilimleri Enstitüsü, Farmasötik Kimya (YI) (Tezli), Turkey 1985 - 1988

Undergraduate, Ankara University, Eczacılık Fakültesi, Eczacılık Pr., Turkey 1981 - 1985

## Foreign Languages

English, B2 Upper Intermediate

## Research Areas

Health Sciences

## Academic Titles / Tasks

Professor, Ankara University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri Bölümü, 2006 - Continues

Associate Professor, Ankara University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri Bölümü, 1999 - 2006

Assistant Professor, Ankara University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri Bölümü, 1996 - 1999

Research Assistant, Ankara University, Eczacılık Fakültesi, Eczacılık Meslek Bilimleri Bölümü, 1985 - 1996

## Advising Theses

Kılcıgil G., Bazı Tiyazol Halkası İçeren 1H-Benzimidazol Türevlerinin Sentezi ve Biyolojik Aktivitelerinin Değerlendirilmesi, Postgraduate, N.EBRU(Student), 2023

KILCIGİL G., EGFR kinaz inhibitörleri olarak triazol/tiyadiazol halkaları içeren bazı yeni benzimidazol türevlerinin sentezi ve biyolojik aktivitelerinin değerlendirilmesi, Doctorate, İ.ÇELİK(Student), 2020

KILCIGİL G., Bazı yeni oksadiazol- benzimidazol türevlerinin sentezi, yapılarının aydınlatılması ve antioksidan aktivitelerinin değerlendirilmesi, Doctorate, İ.KERİMOV(Student), 2011

KILCIGİL G., Bazı 1-heteroarilmetil-2-fenil/sübstitüefenil benzimidazol türevi bileşiklerin sentez, yapı aydınlatılması ve antimikrobiyal aktiviteleri üzerinde çalışmalar, Postgraduate, İ.KERİMOV(Student), 2004

- I. **Design, synthesis, molecular docking and molecular dynamic studies of novel benzimidazole-thiazole derivatives as potent and selective COX-2 inhibitors**  
IRMAK N. E., SAĞLIK ÖZKAN B. N., ÇELİK İ., Tahsin Sen H., ÖZKAY Y., KILCIGİL G.  
New Journal of Chemistry, vol.47, no.47, pp.21620-21632, 2023 (SCI-Expanded)
- II. **In Vitro and in Silico Evaluation of Some New 1H-Benzimidazoles Bearing Thiosemicarbazide and Triazole as Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitor**  
ÇELİK İ., Ayhan-Kilcigil G., GÜVEN B., Kara Z., Onay-Besikci A.  
POLYCYCLIC AROMATIC COMPOUNDS, vol.43, no.1, pp.444-455, 2023 (SCI-Expanded)
- III. **Synthesis, molecular docking, in silico ADME, and EGFR kinase inhibitor activity studies of some new benzimidazole derivatives bearing thiosemicarbazide, triazole, and thiadiazole**  
ÇELİK İ., Ayhan-Kilcigil G., Karayel A., GÜVEN B., BEŞİKCİ A.  
JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.59, no.2, pp.371-387, 2022 (SCI-Expanded)
- IV. **Novel Benzimidazole-Based Compounds as Antimicrobials: Synthesis, Molecular Docking, Molecular Dynamics and in silico ADME Profile Studies**  
Yeşilçayır E., Çelik İ., Şen H. T., Rızvanoğlu S. S., Eryılmaz M., Ayhan-Kilcigil G.  
Acta Chimica Slovenica, vol.69, no.2, pp.419-429, 2022 (SCI-Expanded)
- V. **Approach to the mechanism of action of hydroxychloroquine on SARS-CoV-2: a molecular docking study**  
ÇELİK İ., Onay-Besikci A., Ayhan-Kilcigil G.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.39, no.15, pp.5792-5798, 2021 (SCI-Expanded)
- VI. **Design, synthesis and docking studies of benzimidazole derivatives as potential EGFR inhibitors**  
ÇELİK İ., KILCIGİL G., GÜVEN B., Kara Z., Gurkan-Alp A. S., KARAYEL A., BEŞİKCİ A.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.173, pp.240-249, 2019 (SCI-Expanded)
- VII. **Restricted rotation around the methylene bridge of 5-(2-p-(chlorophenyl)benzimidazole-1-yl)methyl-4-(o-substitutedphenyl)-2,4-dihydro-[1,2,4]-triazole-3-thiones as evidenced by NMR, X-RAY and DFT studies and the importance of low energy rotational conformers**  
KARAYEL A., Ozbey S., KUŞ C., KILCIGİL G.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1177, pp.476-484, 2019 (SCI-Expanded)
- VIII. **Crystal structures and intermolecular interactions of two novel antioxidant triazolyl-benzimidazole compounds**  
Karayel A., Ozbey S., KILCIGİL G., Kus C.  
Crystallography Reports, vol.60, no.7, pp.1084-1088, 2015 (SCI-Expanded)
- IX. **Design and One-Pot and Microwave-Assisted Synthesis of 2-Amino/5-Aryl-1,3,4-oxadiazoles Bearing a Benzimidazole Moiety as Antioxidants**  
Kerimov I., KILCIGİL G., ÖZDAMAR E. D., EKE B., ÇOBAN T., ÖZBEY S., KAZAK C.  
ARCHIV DER PHARMAZIE, vol.345, no.7, pp.549-556, 2012 (SCI-Expanded)
- X. **Synthesis and Evaluation of Antioxidant Properties of Novel 2-[2-(4-chlorophenyl) benzimidazole-1-yl]-N-(2-arylmethylene amino) acetamides and 2-[2-(4-chlorophenyl) benzimidazole-1-yl]-N-(4-oxo-2-aryl-thiazolidine-3-yl) acetamides-I**  
KILCIGİL G., Gurkan S., ÇOBAN T., ÖZDAMAR E. D., EKE B.  
CHEMICAL BIOLOGY & DRUG DESIGN, vol.79, no.5, pp.869-877, 2012 (SCI-Expanded)
- XI. **NMR, X-RAY and DFT studies on antioxidant triazolyl-benzimidazole derivatives**  
KARAYEL A., ÖZBEY S., KILCIGİL G., KUŞ C.  
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.67, 2011 (SCI-Expanded)
- XII. **Crystal Structures and Radical-Scavenging Mechanism Investigation by X-Ray and Quantum Mechanical Methods of Antioxidant Triazolyl-Benzimidazole Derivatives**  
Karayel A., ÖZBEY S., KILCIGİL G., KUŞ C.  
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.66, 2010 (SCI-Expanded)
- XIII. **Crystal Structures and Theoretical Investigations on DPPH Radical-scavenging Mechanism of New Triazolymethyl Benzimidazole Derivatives**  
Karayel A., ÖZBEY S., KILCIGİL G., Kus C.

- ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.65, 2009 (SCI-Expanded)
- XIV. **Synthesis and antioxidant capacities of some new benzimidazole derivatives**  
KILCIGİL G., Kus C., Ozdamar E. D., EKE B., Iscan M.  
ARCHIV DER PHARMAZIE, vol.340, no.11, pp.607-611, 2007 (SCI-Expanded)
- XV. **Synthesis, antifungal and antioxidant screening of some novel benzimidazole derivatives**  
Kerimov I., KILCIGİL G., EKE B., Altanlar N., Iscan M.  
JOURNAL OF ENZYME INHIBITION AND MEDICINAL CHEMISTRY, vol.22, no.6, pp.696-701, 2007 (SCI-Expanded)
- XVI. **Crystal Structures and Interactions in Packing of Novel Thiadiazolyl - and Triazolyl-benzimidazole Derivatives**  
KAYNAK F. B., ÖZBEY S., KILCIGİL G., KUŞ C.  
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.63, 2007 (SCI-Expanded)
- XVII. **Synthesis and antifungal properties of some benzimidazole derivatives**  
Kilcigil G., Altanlar N.  
TURKISH JOURNAL OF CHEMISTRY, vol.30, no.2, pp.223-228, 2006 (SCI-Expanded)
- XVIII. **Synthesis, antioxidant and radical scavenging activities of novel benzimidazoles**  
KILCIGİL G., Ku C., Coban T., Can-Eke B., Ozbey S., Iscan M.  
Journal of Enzyme Inhibition and Medicinal Chemistry, vol.20, no.5, pp.503-514, 2005 (SCI-Expanded)
- XIX. **Antibacterial 4-amino-N-(5-methylisoxazol-3-yl)-N-[(4-oxo-2-phenyl-4H-1-benzopyran-6-yl)methyl]benzenesulfonamide**  
Ozbey S., Akbas A., KILCIGİL G., Ertan R.  
ACTA CRYSTALLOGRAPHICA SECTION C-STRUCTURAL CHEMISTRY, vol.61, 2005 (SCI-Expanded)
- XX. **Synthesis and antimicrobial evaluation of some new 2-(2-(p-chlorophenyl) benzimidazol-1-yl methyl)-5-substituted amino-[1,3,4]-thiadiazoles**  
Kilcigil G., Kus C., Altanlar N., Ozbey S.  
TURKISH JOURNAL OF CHEMISTRY, vol.29, no.2, pp.153-162, 2005 (SCI-Expanded)
- XXI. **Antioxidant properties of flavone-6(4')-carboxaldehyde oxime ether derivatives**  
KILCIGİL G., Coban T., Tuncbilek M., Can-Eke B., Bozdog-Dundar O., Ertan R., Iscan M.  
Archives of Pharmacal Research, vol.27, no.6, pp.610-614, 2004 (SCI-Expanded)
- XXII. **Evaluation of the antioxidant effects of some flavonylthiazolidinediones by determining their effects on lipid peroxidation, superoxide anion formation, and 2,2-diphenyl-1-picrylhydrazyl stable free radical**  
Tuncbilek M., EKE B., KILCIGİL G., Coban T., Iscan M.  
Biological and Pharmaceutical Bulletin, vol.27, no.6, pp.912-915, 2004 (SCI-Expanded)
- XXIII. **Synthesis and antioxidant properties of novel benzimidazole derivatives**  
KILCIGİL G., Kus C., Coban T., Can-Eke B., Iscan M.  
Journal of Enzyme Inhibition and Medicinal Chemistry, vol.19, no.2, pp.129-135, 2004 (SCI-Expanded)
- XXIV. **Synthesis and antioxidant properties of some novel benzimidazole derivatives on lipid peroxidation in the rat liver**  
Kus C., KILCIGİL G., EKE B., Iscan M.  
ARCHIVES OF PHARMACAL RESEARCH, vol.27, no.2, pp.156-163, 2004 (SCI-Expanded)
- XXV. **Synthesis and antimicrobial testing of some flavonylsulfonamide derivatives**  
Kilcigil G., Dundar O., Ertan R., Altanlar N.  
TURKISH JOURNAL OF CHEMISTRY, vol.27, no.4, pp.461-465, 2003 (SCI-Expanded)
- XXVI. **Synthesis and antioxidant properties of some new flavone derivatives on lipid peroxidation in the rat liver**  
Tuncbilek M., KILCIGİL G., Ertan R., Can-Eke B., Iscan M.  
PHARMAZIE, vol.55, no.5, pp.359-361, 2000 (SCI-Expanded)
- XXVII. **Synthesis of 3-substituted phenacyl-5-[2-phenyl-4H-4-oxo-1-benzopyran-6-yl)methylenyl]-thiazolidine-2,4-diones and evaluation of their antimicrobial activity**  
KILCIGİL G., Altanlar N.  
ARZNEIMITTEL-FORSCHUNG-DRUG RESEARCH, vol.50, no.2, pp.154-157, 2000 (SCI-Expanded)

- XXVIII. **Synthesis of a new dihydropyridine derivative containing a known vasodilator khellin**  
Kilcigil G., Tuncbilek M., Ertan R., Erol K., Yildirim E.  
TURKISH JOURNAL OF CHEMISTRY, vol.24, no.3, pp.255-259, 2000 (SCI-Expanded)
- XXIX. **Synthesis and evaluation of anti-inflammatory activity of some thiazolo[3,2-b]-1,2,4-triazole-5(6H)-ones and their Michael addition products**  
Tozkoparan B., Kilcigil G., Ertan R., Ertan M., Kelicen P., Demirdamar R.  
ARZNEIMITTEL-FORSCHUNG-DRUG RESEARCH, vol.49, no.12, pp.1006-1011, 1999 (SCI-Expanded)
- XXX. **Synthesis and antihistaminic H-1 activity of 1,2,5(6)-trisubstituted benzimidazoles**  
GÖKER A. H., KILCIGİL G., Tuncbilek M., Kus C., Ertan R., Kendi E., Ozbey S., Fort M., Garcia C., Farre A.  
HETEROCYCLES, vol.51, no.11, pp.2561-2573, 1999 (SCI-Expanded)
- XXXI. **Synthesis and antimicrobial activity of some new flavonyl oxime ether derivatives**  
Tuncbilek M., Bozdog O., KILCIGİL G., Altanlar N., Buyukbingol E., Ertan R.  
ARZNEIMITTEL-FORSCHUNG-DRUG RESEARCH, vol.49, no.10, pp.853-857, 1999 (SCI-Expanded)
- XXXII. **Synthesis and antimicrobial activity of some new benzimidazole carboxylates and carboxamides**  
KILCIGİL G., Tuncbilek M., Altanlar N., GÖKER A. H.  
FARMACO, vol.54, no.8, pp.562-565, 1999 (SCI-Expanded)
- XXXIII. **A flavone 1,4-dihydropyridine calcium antagonist**  
Ozbey S., Kendi E., Ayhan G., Ertan R.  
ACTA CRYSTALLOGRAPHICA SECTION C-CRYSTAL STRUCTURE COMMUNICATIONS, vol.55, pp.678-681, 1999 (SCI-Expanded)
- XXXIV. **Synthesis and antimicrobial activity of flavone-6-carboxaldehyde oxime ether derivatives**  
KILCIGİL G., Bozdog O., Tuncbilek M., Altanlar N., Ertan R.  
PHARMAZIE, vol.54, no.3, pp.228-229, 1999 (SCI-Expanded)
- XXXV. **Studies on the synthesis of some substituted flavonyl thiazolidinedione derivatives, II**  
Bozdog O., Tuncbilek M., KILCIGİL G., Ertan R.  
PHARMAZIE, vol.54, no.2, pp.151-152, 1999 (SCI-Expanded)
- XXXVI. **Studies on the synthesis of some substituted flavonyl thiazolidinedione derivatives-I**  
Bozdog O., Kilcigil G., Tuncbilek M., Ertan R.  
TURKISH JOURNAL OF CHEMISTRY, vol.23, no.2, pp.163-169, 1999 (SCI-Expanded)
- XXXVII. **Studies on the synthesis of some dihydropyridine derivatives possessing calcium antagonistic activity**  
Kilcigil G., Ertan R., Ozbey S., Kendi E.  
JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.35, no.6, pp.1485-1492, 1998 (SCI-Expanded)
- XXXVIII. **Synthesis of some new benzimidazolecarboxamides and evaluation of their antimicrobial activity**  
Göker A. H., Tuncbilek M., Ayhan G., Altanlar N.  
FARMACO, vol.53, no.6, pp.415-420, 1998 (SCI-Expanded)
- XXXIX. **Synthesis and antimicrobial activity of some new piperidiny benzimidazoles**  
Kus C., GÖKER A. H., Ayhan G., Ertan R., Altanlar N., Akin A.  
FARMACO, vol.51, no.6, pp.413-417, 1996 (SCI-Expanded)
- XL. **SYNTHESIS AND ANTIFUNGAL ACTIVITIES OF SOME NEW TRIAZOLYLACETOPHENONE DERIVATIVES**  
ERTAN R., AYHAN G., YULUG N., ROLLAND Y.  
ARZNEIMITTEL-FORSCHUNG/DRUG RESEARCH, vol.45-1, no.5, pp.620-623, 1995 (SCI-Expanded)
- XLI. **SYNTHESIS AND ANTIAGGREGATOR ACTIVITY OF SOME NEW DERIVATIVES OF 4H-1-BENZOPYRAN-4-ONE**  
GÖKER A. H., AYHAN G., TUNCBILEK M., ERTAN R., LEONCINI G., GARZOGLIO R., MAZZEI M.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.30, no.7-8, pp.561-567, 1995 (SCI-Expanded)

## Articles Published in Other Journals

- I. Evaluation of the Antioxidant Activity of Some (mines Containing 1H-Benzimidazoles

Basaran R., KILCIGİL G., Eke B.

TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.17, no.6, pp.626-630, 2020 (ESCI)

**II. Synthesis and Pharmacologic Evaluation of Some Benzimidazole Acetohydrazide Derivatives as EGFR Inhibitors**

Demirel S., KILCIGİL G., Kara Z., GÜVEN B., BEŞİKCİ A.

TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.14, no.3, pp.285-289, 2017 (ESCI)

**III. Synthesis and antimicrobial activities of some new benzimidazole derivatives**

Ayhan-Kilcigil G., ALTANLAR N.

Farmaco, vol.58, no.12, pp.1345-1350, 2003 (Scopus)

**IV. Synthesis and hypoglycemic activity of some substituted flavonyl thiazolidinedione derivatives - Fifth communication: Flavonyl benzyl substituted 2,4-thiazolidinediones**

TUNÇBİLEK M., BOZDAĞ DÜNDAR O., Ayhan-Kilcigil G., Ceylan M., Waheed A., Verspohl E. J., Ertan R.

Farmaco, vol.58, no.1, pp.79-83, 2003 (Scopus)

**V. Studies on spasmolytic activity of some benzimidazole derivatives**

GÖKER A. H., Gumus F., Ayhan G., Ozden T., Ozden S.

Acta Pharmaceutica Turcica, vol.31, no.2, pp.53-56, 1989 (Scopus)

## **Books & Book Chapters**

**I. İnsomnia Tedavisinde Oreksin Reseptör Antagonistleri**

ERGİN E., Kaya O., KILCIGİL G.

in: CUMHURİYETİN 100. YILINDA ECZACILIKTA YENİLİKLER 4, Asuman Bozkır, İlkay Yıldız, Editor, Ankara Üniversitesi Basımevi, Ankara, pp.187-204, 2023

**II. Duchenne Musküler Distrofi Tedavisinde Antisens Oligonükleotit Casimersen**

Teke F., KILCIGİL G.

in: CUMHURİYETİN 100. YILINDA ECZACILIKTA YENİLİKLER 4, Asuman BOZKIR, İlkay YILDIZ, Editor, Ankara Üniversitesi Basımevi, Ankara, pp.223-237, 2023

**III. KÜÇÜK HÜCRELİ DIŞI AKCİĞER KANSERİNDE EGFR L858R/T790M VE EGFR L858R/T790M/C797S DİRENÇ MUTASYONLARINI HEDEFLEME: MEDİSİNAL KİMYADA GÜNCEL YAKLAŞIMLAR**

KILCIGİL G., ÇELİK İ.

in: Eczacılıkta Yenilikler-3, Gülbin Özçelikay, İlkay Yıldız, Editor, Ankara Üniversitesi Basımevi, Ankara, pp.249-264, 2022

**IV. Farmasötik Kimya pratikleri 1 2**

AKI YALÇIN E. E., YALÇIN İ., BÜYÜKBİNGÖL M. E., GÖKER A. H., YILDIZ İ., ALTUNTAŞ DİNLENÇ T., KILCIGİL G., TUNÇBİLEK M., ARPACI Ö., KUŞ C., et al.

Ankara Üniversitesi Basımevi, Ankara, 2018

**V. Chromatographic Separation and Identification of Sildenafil and Yohimbine Analogues Illegally Added in Herbal Supplements**

GÖKER A. H., COŞKUN M., KILCIGİL G.

in: Chromatography and Its Applications, Sasikumar Dhanarasu, Editor, InTech press, Rijeka, pp.51-68, 2012