

# **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**

Kılçigil 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/tyiadiazol 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-heteroarilmetyl-2-fenil/sübstüfenil benzimidazol türevi bileşiklerin sentez, yapı aydınlatılması ve antimikrobial 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  
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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., Sen H. T., Rizvanoğlu 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., Bozdag-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 flavonysulfonamide 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., Bozdag 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., Bozdag 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**  
 Bozdag 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**  
 Bozdag 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 piperidinyl 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.  
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- V. **Studies on spasmolytic activity of some benzimidazole derivatives**  
GÖKER A. H., GUMUS F., Ayhan G., Ozden T., Ozden S.  
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## Books & Book Chapters

- I. **İnsomnia Tedavisinde Oreksin Rezeptör 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 DİŞİ AKCİĞER KANSERİNDE EGFR L858R/T790M VE EGFR L858R/T790M/C797S DİRENÇ MUTASYONLARINI HEDEFLEME: MEDİSİNAL KİMYADA GÜNCEL YAKLAŞIMLAR**  
KILCIGİL G., ÇELİK İ.  
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- 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.  
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- V. **Chromatographic Separation and Identification of Sildenafil and Yohimbine Analogues Illegally Added in Herbal Supplements**  
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