

## **Prof. MEHMET YILMAZ**

### **Personal Information**

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### **International Researcher IDs**

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ScopusID: 57191783648

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### **Education Information**

Doctorate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1999 - 2005

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Yıl) (Tezli), Turkey 1996 - 1999

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1990 - 1994

### **Foreign Languages**

English, B2 Upper Intermediate

### **Dissertations**

Doctorate, Trifluor &#946;-dikarbonil bileşiklerinin mangan (III) asetat aracılığıyla alkenlere radikalik katılma reaksiyonları, Ankara Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2005

Postgraduate, Halkalı (Beta) B-dikarbonil bileşiklerinin mangan (III) asetat ortamında alkenlerle radikalik halkalaşma reaksiyonları, Ankara Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (Yıl) (Tezli), 1999

### **Research Areas**

Chemistry, Organic Chemistry, Chemistry of Heterocyclic Compounds, Organic Reaction Mechanisms, Organic Spectroscopy, Free Radicals, Natural Sciences

### **Academic Titles / Tasks**

Professor, Kocaeli University, Fen Edebiyat Fakültesi, Kimya, 2019 - Continues

Associate Professor, Kocaeli University, Kimya Bölümü, 2012 - 2019

Assistant Professor, Kocaeli University, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2007 - 2012

Research Assistant, Ankara University, Fen Fakültesi, 1997 - 2005

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

- I. **Acute kidney disease beyond day 7 after major surgery: a secondary analysis of the EPIS-AKI trial**  
Meersch M., Weiss R., Strauß C., Albert F., Boone H., Forni L., Pittet J., Kellum J. A., Rosner M., Mehta R., et al.  
Intensive Care Medicine, vol.50, no.2, pp.247-257, 2024 (SCI-Expanded)
- II. **Microwave assisted synthesis and AChE inhibition studies of novel thiazolo and thiadiazolo [3,2-a]pyrimidinone fused dihydrofuran compounds**  
YILMAZ M., Inal A. U., SARI S.  
Medicinal Chemistry Research, vol.32, no.5, pp.957-974, 2023 (SCI-Expanded)
- III. **In vitro antioxidant activities and in silico molecular docking studies of N-substituted oxime derivatives**  
SARI S., Kilic N., YILMAZ M.  
STRUCTURAL CHEMISTRY, vol.34, no.2, pp.605-616, 2023 (SCI-Expanded)
- IV. **Microwave Assisted Synthesis of 2,3-Dihydro-4H-furo[2,3-d]pyrido[1,2-a]pyrimidin-4-ones and furo[2,3-d]pyrido[1,2-a]pyrimidin-4-one**  
Yalduz S., YILMAZ M.  
CHEMISTRYSELECT, vol.8, no.10, 2023 (SCI-Expanded)
- V. **Manganese(III) Acetate-Based Radical Cyclization Reactions for Pyranocoumarin and Pyranoquinoline Compounds: Synthesis, DFT and Molecular Docking Studies**  
YAKUT M., YILMAZ M., Pekel T., ERKAN S., Katirci R., Bicer E.  
CHEMISTRYSELECT, vol.7, no.44, 2022 (SCI-Expanded)
- VI. **Microwave assisted synthesis of 2,3-dihydro-4H-benzo[4,5]thiazolo [3,2-a]furo[2,3-d] pyrimidin-4-ones by radical addition of 2-hydroxy-4H-benzo[4,5]thiazolo[3,2-a] pyrimidin-4-ones to various conjugated alkenes and dienes mediated Mn(OAc)(3)**  
YILMAZ M., Inal A. i. U.  
TETRAHEDRON, vol.116, 2022 (SCI-Expanded)
- VII. **Acetylcholinesterase inhibition, molecular docking and ADME prediction studies of new dihydrofuran-piperazine hybrid compounds**  
SARI S., YILMAZ M.  
MEDICINAL CHEMISTRY RESEARCH, vol.30, no.11, pp.2114-2126, 2021 (SCI-Expanded)
- VIII. **Formation of cyclopropa[c]indole system in the Mn-mediated radical addition of cyclohexane-1,3-diones to N-substituted acrylamides**  
YILMAZ M., Birincioglu S., Inal A. U.  
MENDELEEV COMMUNICATIONS, vol.30, no.6, pp.785-787, 2020 (SCI-Expanded)
- IX. **Synthesis, characterization, acetylcholinesterase inhibition, and molecular docking studies of new piperazine substituted dihydrofuran compounds**  
SARI S., YILMAZ M.  
MEDICINAL CHEMISTRY RESEARCH, vol.29, no.10, pp.1804-1818, 2020 (SCI-Expanded)
- X. **Synthesis and characterization of piperazine-substituted dihydrofuran derivatives via Mn(OAc)<sub>3</sub> mediated radical cyclizations**  
SARI S., YILMAZ M.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.5, pp.1303-1332, 2020 (SCI-Expanded)
- XI. **Regioselective radical addition of 3-oxopropanenitriles with terminal dienes promoted by cerium(IV) ammonium nitrate and manganese(III) acetate**  
Hocaoglu B., YILMAZ M.  
SYNTHETIC COMMUNICATIONS, vol.49, no.15, pp.1938-1946, 2019 (SCI-Expanded)
- XII. **Efficient syntheses and antimicrobial activities of new thiophene containing pyranone and quinolinone derivatives using manganese(III) acetate: the effect of thiophene on ring closure-opening reactions**  
Ozgur M., YILMAZ M., Nishino H., Avar E. C., Dal H., Pekel A. T., HÖKELEK T.  
NEW JOURNAL OF CHEMISTRY, vol.43, no.15, pp.5737-5751, 2019 (SCI-Expanded)
- XIII. **Synthesis and characterization of unsaturated diacyl and alkyl-acyl piperazine derivatives**  
SARI S., Unalan S., YILMAZ M.

- TURKISH JOURNAL OF CHEMISTRY, vol.43, no.6, pp.1656-1710, 2019 (SCI-Expanded)
- XIV. **Synthesis, Characterization, and Fluorescence Studies of Novel Heterocyclic Azo Dyes Derived from Benzothiazole**  
Sener N., Eriskin S., Sahin C., YILMAZ M., Sener I.  
JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.54, no.6, pp.3510-3518, 2017 (SCI-Expanded)
- XV. **Microwave assisted synthesis of 2,3-dihydro-4H-benzo[4,5]thiazolo[3,2-a]furo[2,3-d]pyrimidin-4-ones and 6,7-dihydro-5H-furo[2,3-d]thiazolo [3,2-a]pyrimidin-5-ones using Mn(OAc)(3)**  
Ustalar A., YILMAZ M.  
TETRAHEDRON LETTERS, vol.58, no.6, pp.516-519, 2017 (SCI-Expanded)
- XVI. **Synthesis and antifungal activity of new dihydrofurocoumarins and dihydrofuroquinolines**  
USTALAR A., YILMAZ M., OSMANİ A., KEÇELİ S. A.  
TURKISH JOURNAL OF CHEMISTRY, vol.41, no.1, pp.80-88, 2017 (SCI-Expanded)
- XVII. **Synthesis of new 2,5-di(thiophen-2-yl)furan-3-carbonitrile derivatives and investigation of the electrochromic properties of homopolymers and co-polymers with EDOT**  
Abaci U., Ustalar A., Yilmaz M., Güney H. Y.  
RSC ADVANCES, vol.6, no.33, pp.27836-27845, 2016 (SCI-Expanded)
- XVIII. **Synthesis of 2-(2-phenylethenyl) substituted 4,5-dihydrofurans by regioselective addition of 1,3-dicarbonyl compounds to dienes promoted by cerium(IV) ammonium nitrate**  
YILMAZ M., USTALAR A.  
ARKIVOC, pp.202-213, 2016 (SCI-Expanded)
- XIX. **Regio- and diastereoselective synthesis of trans-dihydrofuran-3carboxamides by radical addition of 1,3-dicarbonyl compounds to acrylamides using manganese(III) acetate and determination of exact configuration by X-ray crystallography**  
YILMAZ M., Ustalar A., Uçan B., Pekel A. T.  
Arkivoc, vol.2016, no.6, pp.79-91, 2016 (SCI-Expanded)
- XX. **Synthesis of 4,5-Dihydrofuran-3-carbonitrile Derivatives with Electron-Rich Alkenes in the Presence of Manganese(III) Acetate**  
Yilmaz M., Burgaz E. V., Yakut M., BİÇER E.  
JOURNAL OF THE CHINESE CHEMICAL SOCIETY, vol.61, no.10, pp.1101-1107, 2014 (SCI-Expanded)
- XXI. **Synthesis of furan-substituted dihydrofuran compounds by radical-cyclization reactions mediated by manganese(III) acetate**  
YILMAZ M., Biçer E., USTALAR A., Pekel A. T.  
Arkivoc, vol.2014, no.5, pp.225-236, 2014 (SCI-Expanded)
- XXII. **Synthesis of dihydrofuro- and C-alkenylated naphthoquinones catalyzed by manganese(III) acetate**  
Alagoz O., YILMAZ M., Pekel A. T., GRAIFF C., MAGGI R.  
RSC ADVANCES, vol.4, no.28, pp.14644-14654, 2014 (SCI-Expanded)
- XXIII. **Synthesis of trifluoromethylated dihydrofurans by addition of 1,3-dicarbonyl compounds to alkenes promoted by manganese(III) acetate**  
BİÇER E., YILMAZ M.  
Arkivoc, vol.2013, no.3, pp.304-316, 2013 (SCI-Expanded)
- XXIV. **Synthesis of Thienyl-Substituted Dihydrofuran Compounds Promoted by Manganese(III) Acetate**  
BİÇER E., YILMAZ M., Burgaz E. V., Pekel A. T.  
HELVETICA CHIMICA ACTA, vol.96, no.1, pp.135-141, 2013 (SCI-Expanded)
- XXV. **Radical Cyclization Reactions via Manganese(III) Acetate Leading to 2-Thienyl-Substituted Dihydrofuran Compounds**  
Bicer E., YILMAZ M., Karatas M., Pekel A. T.  
HELVETICA CHIMICA ACTA, vol.95, no.5, pp.795-804, 2012 (SCI-Expanded)
- XXVI. **Radical Cyclization of Fluorinated 1,3-Dicarbonyl Compounds with Dienes Using Manganese(III) Acetate and Synthesis of Fluoroacylated 4,5-Dihydrofurans**  
YILMAZ M., Yilmaz E. V. B., Pekel A. T.  
HELVETICA CHIMICA ACTA, vol.94, no.11, pp.2027-2038, 2011 (SCI-Expanded)

- XXVII. **Synthesis of dihydrofurans containing trifluoromethyl ketone and heterocycles by radical cyclization of fluorinated 1,3-dicarbonyl compounds with 2-thienyl and 2-furyl substituted alkenes**  
Yilmaz M.  
TETRAHEDRON, vol.67, no.43, pp.8255-8263, 2011 (SCI-Expanded)
- XXVIII. **Synthesis of fluoroacylated 4,5-dihydrofurans and fluoroalkylated tetrahydrofurans by the radical cyclization using manganese(III) acetate. Part II**  
YILMAZ M., Pekel A. T.  
JOURNAL OF FLUORINE CHEMISTRY, vol.132, no.9, pp.628-635, 2011 (SCI-Expanded)
- XXIX. **Studies on the radical cyclization of 3-oxopropanenitriles and alkenes with cerium(IV) ammonium nitrate in ether solvents**  
YILMAZ M.  
Helvetica Chimica Acta, vol.94, no.7, pp.1335-1342, 2011 (SCI-Expanded)
- XXX. **Radical cyclizations of conjugated esters and amides with 3-oxopropanenitriles mediated by manganese(III) acetate**  
Yilmaz E. V. B., YILMAZ M., Öktemer A.  
Arkivoc, vol.2011, no.2, pp.363-376, 2011 (SCI-Expanded)
- XXXI. **Synthesis and biological activity studies of furan derivatives**  
Logoglu E., YILMAZ M., Katircioglu H., Yakut M., Mercan S.  
MEDICINAL CHEMISTRY RESEARCH, vol.19, no.5, pp.490-497, 2010 (SCI-Expanded)
- XXXII. **Synthesis, Characterization and Theoretical Calculations of 5-Methoxyisatin-3-thiosemicarbazone Derivatives**  
Kandemirli F., ARSLAN T., Koksoy B., YILMAZ M.  
JOURNAL OF THE CHEMICAL SOCIETY OF PAKISTAN, vol.31, no.3, pp.498-504, 2009 (SCI-Expanded)
- XXXIII. **Oxidative cyclisation of 3-oxopropanenitriles mediated manganese(III) acetate with 2-thienyl substituted Alkenes**  
YILMAZ M., UZUNALIOGLU N., YAKUT M., PEKEL A. T.  
TURKISH JOURNAL OF CHEMISTRY, vol.32, no.4, pp.411-422, 2008 (SCI-Expanded)
- XXXIV. **Synthesis of 2,3-Dihydro-4H-furo[3,2-c] chromen-4-ones and 2,3-dihydronaphtho[2,3-b]furan-4,9-diones by the radical cyclizations of hydroxyenones with electron-rich alkenes using manganese(III) acetate**  
YILMAZ M., Yakut M., Pekel A. T.  
SYNTHETIC COMMUNICATIONS, vol.38, no.6, pp.914-927, 2008 (SCI-Expanded)
- XXXV. **Oxidative cyclization of 3-oxopropanenitriles with alpha,beta-unsaturated amides by manganese(III) acetate. Regio- and stereoselective synthesis of 4-cyano-2,3-dihydrofuran-3-carboxamides**  
Burgaz E. V., YILMAZ M., Pekel A. T., Oektemer A.  
TETRAHEDRON, vol.63, no.30, pp.7229-7239, 2007 (SCI-Expanded)
- XXXVI. **Free radical cyclization of 1,3-dicarbonyl compounds mediated by manganese(III) acetate with alkynes and synthesis of tetrahydrobenzofurans, naphthalene, and trifluoroacetyl substituted aromatic compounds**  
ALAGÖZ O., Yilmaz M., PEKEL A. T.  
SYNTHETIC COMMUNICATIONS, vol.36, no.8, pp.1005-1013, 2006 (SCI-Expanded)
- XXXVII. **Manganese(III) acetate based oxidative cyclizations of 3-oxopropanenitriles with conjugated alkenes and synthesis of 4,5-dihydrofuran-3-carbonitriles containing heterocycles**  
Yilmaz M., UZUNALIOGLU N., PEKEL A. T.  
TETRAHEDRON, vol.61, no.37, pp.8860-8867, 2005 (SCI-Expanded)
- XXXVIII. **Manganese(III) acetate mediated synthesis of 3-trifluoroacetyl-4,5-dihydrofurans and 3-(dihydrofuran-2(3H)-ylidene)-1,1,1-trifluoroacetones by free radical cyclization. Part 1**  
Yilmaz M., PEKEL A. T.  
JOURNAL OF FLUORINE CHEMISTRY, vol.126, no.3, pp.401-406, 2005 (SCI-Expanded)
- XXXIX. **Manganese(III) acetate mediated free radical cyclization of 1,3-dicarbonyl compounds with sterically hindered olefins**

- YILMAZ M., BİÇER E., PEKEL A. T.  
TURKISH JOURNAL OF CHEMISTRY, vol.29, no.6, pp.579-587, 2005 (SCI-Expanded)
- XL. Regioselective synthesis of 5-carbamoyl-dihydrofurans mediated manganese (III) acetate in acetic acid  
Yilmaz M., PEKEL A. T.  
SYNTHETIC COMMUNICATIONS, vol.31, no.14, pp.2189-2194, 2001 (SCI-Expanded)
- XLI. Synthesis of benzofuran derivatives using manganese (III) acetate mediated addition of beta-dicarbonyl compounds to alkyne and alkenes - A comparative study  
Yilmaz M., PEKEL A. T.  
SYNTHETIC COMMUNICATIONS, vol.31, no.24, pp.3871-3876, 2001 (SCI-Expanded)

### Articles Published in Other Journals

- I. MANGANESE(III) ACETATE MEDIATED SYNTHESIS OF NEW ANGULAR AND LINEAR DIHYDROFUROQUINOLINONES  
Özgür M., Yilmaz M., Pekel A. T.  
Communications, Series B: Chemistry and Chemical Engineering, vol.59, pp.1-11, 2017 (Peer-Reviewed Journal)
- II. Synthesis characterization and theoretical calculations of 5 methoxyisatin 3 thiosemicarbazone derivatives Fatma Kandemirli  
KANDEMİRİLİ F., ARSLAN T., KOKSOY B., YILMAZ M.  
Journal Of The Chemical Society Of Pakistan, vol.31, pp.498-504, 2009 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. N-sübstütüe Oksimlerin Sentezi ve Antioksidan Aktivitelerinin İncelenmesi  
KILIÇ N., SARI S., YILMAZ M.  
32. ULUSAL KİMYA KONGRESİ, Turkey, 17 - 19 September 2020
- II. AChE inhibition and molecular docking studies of new piperazine-dihydrofuran compounds  
SARI S., YILMAZ M.  
3RD INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES, 19 - 20 March 2020
- III. 1. Mn(OAc)<sub>3</sub> mediated synthesis of novel piperazine bearing dihydrofurans and investigation of their enzyme inhibititon capabilities.Part 2.  
Sari S., Yilmaz M.  
2nd International Conference on Applied Chemistry, Al-Ghardaqah, Egypt, 25 - 28 November 2017, pp.118-119
- IV. Synthesis of New Furyl-substituted Dihydrofuran Compounds  
Özgür M., Alagöz O., Yilmaz M.  
ANCON 2017, Ankara, Turkey, 5 - 07 October 2017, pp.175
- V. Mn(OAc)<sub>3</sub> mediated synthesis of novel piperazine bearing dihydrofurans and investigation of their enzyme inhibititon capabilities.Part 1.  
SARI S., YILMAZ M.  
ANCON 2017, 5 - 07 October 2017
- VI. Microwave Assisted Synthesis and Acetylcholine Esterase Inhibition of 6,7-Dihydro-5H-furo[2,3-d]thiazolo[3,2-a]pyrimidin-5-ones  
Ustalar A., YILMAZ M.  
ANCON 2017, 5 - 07 October 2017
- VII. Photopolymerization of a novel piperazine derivative  
Yeldir E. K., ORAL A., YILMAZ M.  
The internationl Joint Science congress of materials and polymers, 25 - 28 August 2017
- VIII. Synthesis of pyrimido[2,1-b]benzotiazole compounds

- Ustalar A., YILMAZ M.  
248th National Meeting of the American-Chemical-Society (ACS), San-Francisco, Costa Rica, 10 - 14 August 2014,  
vol.248
- IX. **Microwave assisted radical addition of 2-hydroxy-4H-pyrimido[2,1-b][1,3]benzothiazole-4-ones to conjugated alkenes by manganese(III) acetate**  
Ustalar A., YILMAZ M.  
248th National Meeting of the American-Chemical-Society (ACS), San-Francisco, Costa Rica, 10 - 14 August 2014,  
vol.248
- X. **Synthesis of 4 Phenyl 2 5 Di Thiophene 2 Yı 4 5 Dihydrifuran 3 Carbonitrile and Investigation of Its Electrochromic Properties**  
ABACI U., YILMAZ M., GÜNEY H. Y.  
44th World Chemistry Congress, İstanbul, Turkey, 11 - 16 August 2013

## Supported Projects

- YILMAZ M., ÜNALAN S., Project Supported by Higher Education Institutions, DOYMAMIŞ C=C BAĞI İÇEREN DİAÇİL PİPERAZİN TÜREVLERİNİN SENTEZİ, KARAKTERİZASYONU VE ANTİOKSİDAN ÖZELLİKLERİNİN İNCELENMESİ, 2018 - 2019
- YILMAZ M., Project Supported by Higher Education Institutions, ETİL 2, 4-DİOKSO-4-FENİL BÜTONOAT BİLEŞİKLERİNİN SENTEZİ VE YAPILARININ AYDINLATILMASI, 2018 - 2019
- Dündar D., Yılmaz M., TUBITAK Project, TÜBİTAK-116Z455 Doymamış Grup İçeren Yeni Piperazin Türevlerinin Sentezi, Mn(Oac)<sub>3</sub> Aracılığıyla 1,3-Dikarbonil Bileşikleriyle Halkalaşma Tepkimeleri Ve Elde Edilen Bileşiklerin Antibakteriyal Aktivitelerinin Araştırılması, 2017 - 2019
- YILMAZ M., Project Supported by Higher Education Institutions, BAZI 1,3 -DİKARBONİL BİLEŞİKLERİNİN MANGAN (III) ASETAT ARACILIĞIYLA 1,1-DİFENİL ETİLEN VE TÜREVLERİYLE RADİKAL HALKALAŞMA REAKSİYONLARININ İNCELENMESİ, 2017 - 2018
- YILMAZ M., Project Supported by Higher Education Institutions, 4-HİDROKSİ-PİRAN-2-ON BİLEŞİKLERİNİN MANGAN(III) ASETAT ARACILIĞIYLA -DOYMAMIŞ AMİT VE ESTERLERLE OKSİDATİF HALKALAŞMA REAKSİYONLARI, VE DİHİDROFURANLARIN ENZİM İNHİBİSYONLARININ İNCELENMESİ, 2016 - 2018
- YILMAZ M., Project Supported by Higher Education Institutions, DİHİDROFURO-PİRİMİDO-BENZOTİYAZOL VE DİHİDROFURO-TİYAZOLO-PİRİMİDİN BİLEŞİKLERİNİN SENTEZİ VE ENZİM İNHİBİSYONLARININ İNCELENMESİ, 2016 - 2017
- YILMAZ M., Project Supported by Higher Education Institutions, DİHİDROFURAN-KARBPKSİAMİTLERİN SENTEZİ VE KARETERİZASYONLARININ YAPILMASI, 2015 - 2016
- YILMAZ M., Project Supported by Higher Education Institutions, 1,3-Dikarbonil Bileşiklerinin Seryum(IV)amonyum Nitrat Aracılığıyla Konjuge Doymamış Sistemlere Radikalik Katılma Tepkimelerinin İncelenmesi, 2014 - 2016
- YILMAZ M., Project Supported by Higher Education Institutions, ETİL TRİFLUORASETOasetatin MANGAN (III) ASETAT ARACILIĞIYLA 1,1-DİFENİL ETİLEN VE TÜREVLERİYLE RADİKAL HALKALAŞMA REAKSİYONLERININ İNCELENMESİ, 2014 - 2015
- YILMAZ M., TUBITAK Project, Dihidrofuro pirimido benzotiyazol ve Dihidrofuro tiyazolo pirimidin Bileşiklerinin Sentezi ve Antibakteriyal Aktivitelerinin İncelenmesi, 2013 - 2015
- YILMAZ M., Project Supported by Higher Education Institutions, ?-Konjuge 3-Siyano-furan Bileşiklerinin Sentezi ve Elektrokromik Özelliklerinin İncelenmesi, 2012 - 2014
- YILMAZ M., Project Supported by Higher Education Institutions, Oksopropannitrillerin Seryum (IV) Amonyum Nitrat Aracılığıyla Konjuge Dienlerle Radikalik Halkalaşma Tepkimeleri, 2010 - 2012

## Metrics

Citation (WoS): 670

Citation (Scopus): 665

H-Index (WoS): 17

H-Index (Scopus): 16

## **Non Academic Experience**

Bitli Group-Polisan Kimya San. A.Ş.