

Assoc. Prof. MELİKE KALKAN

Personal Information

Email: mkalkan@ankara.edu.tr

Web: <https://avesis.ankara.edu.tr/mkalkan>

International Researcher IDs

ScholarID: pxfuiowAAAAJ

ORCID: 0000-0001-5461-7151

Publons / Web Of Science ResearcherID: AAF-3228-2020

ScopusID: 26666792100

Yoksis Researcher ID: 36982

Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2002 - 2008

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 1999 - 2002

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1995 - 1999

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Occupational Health and Safety, İş Sağlığı ve Güvenliği, Ankara Üniversitesi, 2022

Dissertations

Doctorate, Alkil çinko ve -magnezyum bileşiklerinin allilik sübstitüsyon reaksiyonlarının sentetik ve alkil çinko bileşiklerinin allilik sübstitüsyon reaksiyonlarının mekanistik araştırılması, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2008

Postgraduate, Organolityum-grignard, organobakır ve organoçinko reaktiflerinin aminasyonu için yeni yöntemlerin geliştirilmesi, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2002

Research Areas

Catalysis, Chemistry of Carbanion, Organic Reaction Mechanisms, Organic Spectroscopy, Organometallics

Academic Titles / Tasks

Associate Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2002 - Continues

Courses

STEREOKİMYA I, Postgraduate, 2021 - 2022

CHM2241 ORGANIC CHEMISTRY, Undergraduate, 2021 - 2022

CHM224 ORGANIC CHEMISTRY, Undergraduate, 2020 - 2021, 2019 - 2020

KİM499 UZAY KİMYASI, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Stereochemistry II, Postgraduate, 2020 - 2021

KİM475 Organik Kimya Laboratuvarı II, Undergraduate, 2021 - 2022, 2018 - 2019, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003

KİM2241 ORGANİK KİMYA, Undergraduate, 2021 - 2022, 2020 - 2021

CHM0475 ORGANIC CHEMISTRY LAB II, Undergraduate, 2021 - 2022

KİM246 BOYARMADDE KİMYASI, Undergraduate, 2020 - 2021

KİM 241 Organik Kimya, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

KİM242 Organik Kimya, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

CHM126 ORGANIC CHEMISTRY, Undergraduate, 2017 - 2018

KİM101 Temel Kimya, Undergraduate, 2017 - 2018

KİM 101 Temel Kimya, Undergraduate, 2017 - 2018

KİM 134 Organik Kimya, Undergraduate, 2017 - 2018, 2016 - 2017

KİM 113 Temel Kimya, Undergraduate, 2016 - 2017

KM 377 Organik Kimya Laboratuvarı, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003

KİM 354 Organik Kimya Laboratuvarı I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003

Jury Memberships

Post Graduate, Post Graduate, Ankara Üniversitesi, January, 2022

Post Graduate, Post Graduate, Ankara Üniversitesi, July, 2019

Post Graduate, Post Graduate, Ankara Üniversitesi, February, 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Synthesis, characterization, COX1/2 inhibition and molecular modelling studies on novel 2-thio-diarylimidazoles**
Kalkan M.
Turkish Journal Of Chemistry, vol.45, pp.1841-1853, 2021 (SCI-Expanded)
- II. **Assessment of the inhibitive behavior of a triazole based Schiff base compound in acidic media; an experimental and theoretical approach**
Kaleli N. M., EROĞLU F., Sahin M., KALKAN M., EMREGÜL K. C.
JOURNAL OF MOLECULAR STRUCTURE, vol.1227, 2021 (SCI-Expanded)
- III. **Synthesis of some ketones via nano-nickel oxide catalyzed acylation of arylzinc reagents; strategy involving the use of mixed (methyl)(aryl)zincs**
Omur Pekel Ö., Erdik E., Kalkan M.
Turkish Journal of Chemistry, vol.42, no.3, pp.759-767, 2018 (SCI-Expanded)
- IV. **Revisiting Allylic Coupling of Grignard Reagents: Nano Copper Catalyzed One-Pot α -Selective Aryl-Allyl Coupling**
KALKAN M., Erdik E., Pekel Ö.
Organic Preparations and Procedures International, vol.49, no.5, pp.459-466, 2017 (SCI-Expanded)
- V. **Reactivity of mixed organozinc and mixed organocopper reagents: 14. Phosphine-nickel catalyzed aryl-allyl coupling of (n-butyl)(aryl)zincs. Ligand and substrate control on the group selectivity and**

regioselectivity

KALKAN M., Erdik E.

JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.818, pp.28-36, 2016 (SCI-Expanded)

- VI. **Reactivity of mixed organozinc and mixed organocopper reagents: 11. Nickel-catalyzed atom-economic aryl-allyl coupling of mixed (n-alkyl)(aryl)zincs**
KALKAN M.
APPLIED ORGANOMETALLIC CHEMISTRY, vol.28, no.9, pp.725-732, 2014 (SCI-Expanded)
- VII. **Reactivities of mixed organozinc and mixed organocopper reagents: 9. Solvent dependence of group transfer selectivity in sp³C coupling and acylation of mixed diorganocuprates and diorganozincs**
Erdik E., EROĞLU F., KALKAN M., Pekel Ö., Ozkan D., Serdar E. Z.
Journal of Organometallic Chemistry, vol.745-746, pp.235-241, 2013 (SCI-Expanded)
- VIII. **Reactivities of mixed organozinc and mixed organocopper reagents. Part 7. Comparison of the transfer rate of the same group in allylation of mixed and homo diorganozinc reagents**
KALKAN M., Erdik E.
JOURNAL OF PHYSICAL ORGANIC CHEMISTRY, vol.26, no.3, pp.256-260, 2013 (SCI-Expanded)
- IX. **Reactivity of mixed organozinc and organocopper reagents. 3. Atom economic electrophilic amination of methyl arylzinc reagents**
Erdik E., Pekel Ö., KALKAN M.
Applied Organometallic Chemistry, vol.23, no.6, pp.245-248, 2009 (SCI-Expanded)
- X. **An insight into copper catalyzed allylation of alkyl zinc halides. Comparison of reactivity profiles for catalytic and stoichiometric alkylzinc-copper reagents**
Erdik E., Kocoglu M.
Journal of Organometallic Chemistry, vol.694, no.12, pp.1890-1897, 2009 (SCI-Expanded)
- XI. **Copper catalyzed magnesium-Barbier reaction for γ -selective alkyl-allyl coupling**
Erdik E., Kocoglu M.
Tetrahedron Letters, vol.48, no.24, pp.4211-4214, 2007 (SCI-Expanded)
- XII. **A brief survey on the copper-catalyzed allylation of alkylzinc and Grignard reagents under Barbier conditions**
Erdik E., Kocoglu M.
Applied Organometallic Chemistry, vol.20, no.4, pp.290-294, 2006 (SCI-Expanded)
- XIII. **Revisiting the amination of organozincs with benzenediazonium tetrafluoroborate**
Erdik E., Kocoglu M.
Main Group Metal Chemistry, vol.25, no.10, pp.621-627, 2002 (SCI-Expanded)

Articles Published in Other Journals

- I. **DFT CALCULATIONS OF BENZOISOXAZOLE DERIVATIVES**
ÖZEN E., KALKAN M., ÜNAL CİVCİR P.
Communications Faculty Of Science University of Ankara Series B Chemistry and Chemical Engineering, vol.61, no.1-2, pp.31-54, 2019 (Peer-Reviewed Journal)
- II. **ALLYLATION OF ARYL GRIGNARD REAGENTS IN THE PRESENCE OF TRANSITION METAL CATALYSIS AND ORGANIC CATALYSIS**
Kalkan M.
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.4, no.3, pp.877-888, 2017 (Peer-Reviewed Journal)
- III. **Atom economy and Other Reaction Metrics**
Kalkan M.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.30, no.1, pp.66-74, 2012 (ESCI)

Books & Book Chapters

- I. **Organik Kimya İkinci Bir Dil (İkinci Dönem Konuları)**
Kalkan M., Yakut M., Bayramoğlu D., Kurtay G., Eroğlu F. (Editor)
Palme Yayın Dağıtım, Ankara, 2023
- II. **Organik Kimya İkinci Bir Dil (Birinci Dönem Konuları)**
Kalkan M., Yakut M., Bayramoğlu D., Kurtay G., Eroğlu F. (Editor)
Palme Yayın Dağıtım, Ankara, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **Nickel-Catalyzed Coupling of Mixed Diorganozincs with Aryl Halides: Chemoselective Synthesis of Aromatic Ketones**
Ömür Pekel Ö., Erdik E., Kalkan M.
5. International Organic Chemistry Congress, 14 - 17 October 2021, pp.74
- II. **Synthesis and investigations of antibacterial activity of new squaramide compound**
KALKAN M., ORHAN YANIKAN E., YAKUT M.
3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020), 19 - 20 March 2020
- III. **Synthesis of new polysubstituted dihydrofuroquinolinone compounds: Investigations of theoretical and experimental spectroscopic analysis**
YAKUT M., KALKAN M., Kaleli N. M., Şahin M.
3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020), 19 - 20 March 2020
- IV. **Selective Oxidation of 2-Hydroxybenzyl Alcohol in the Presence of Different TiO₂ Photocatalysts: Influence of Some Physico-Chemical Features**
Palmisano L., KALKAN M., YURDAKAL S., Ioddo v., Bellardita M.
SP7 7th International Conference on Semiconductor Photochemistry, Milan, Italy, 11 - 14 September 2019
- V. **ARİL GRİGNARD REAKTİFLERİNİN NANO CuO KATALİZLİ TEK BASAMAKLI α -SEÇİCİ ALLİLİK EŞLEŞMESİ**
KALKAN M., Erdik E., ÖMÜR PEKEL Ö.
VI. Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017
- VI. **Fenilmagnezyum Bromür'ün Krotil Klorür ile Allilik Eşleşme Reaksiyonunda Geçiş Metali Katalizi ve Organokataliz Etkisi**
KALKAN M.
VI. Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017
- VII. **Aril Grignard Reaktiflerinin Nano CuO Katalizli Tek Basamaklı α -Seçici Allilik Eşleşmesi**
KALKAN M., Erdik E., Pekel Ö. Ö.
VI. Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017
- VIII. **Phosphine Nickel Catalyzed Aryl Allyl Coupling of n butyl aryl zincs Ligand and Substrate Control on the Group Selectivity and Regioselectivity**
Kalkan M.
2nd International Turkic World Conference on Chemical Sciences and Technologies (ITWCCST), Skopje, Macedonia, 25 - 30 October 2016, pp.79
- IX. **Ligand Controlled Nickel Catalyzed Allyl Coupling Of Mixed Arylzinc Reagents**
Kalkan M.
28. Ulusal Kimya Kongresi, Mersin, Turkey, 15 - 21 August 2016, pp.79
- X. **Karışık Diorganoçinko Bileşiklerinin Elektrofilik Aminasyonu Arilaminlerin Atom Ekonomik Sentezi**
Kalkan M., Ömür Pekel Ö., Erdik E.
XXIII. Ulusal Kimya Kongresi, Sivas, Turkey, 16 - 20 June 2009

- XI. **Alkilçinko Reaktiflerinin Allilik Eşleşmesinde Rejioselektiflik Kontrolü**
Erdik E., Kalkan M.
XXII. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kkct), 17 October 2008, pp.79
- XII. **Alkilçinko Reaktiflerinin Bakır Katalizli Allilik Eşleşmesi Mekanizması**
Erdik E., Kalkan M.
XXII. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kkct), 17 October 2008, pp.79
- XIII. **Magnezyum-Barbier Koşullarında Bakır Katalizli Rejioselektif Alkil-Allil Eşleşmesi**
Erdik E., Kalkan M.
XXI. Ulusal Kimya Kongresi, Malatya, Turkey, 18 August 2007, pp.79
- XIV. **Alkilçinko Reaktiflerinin Allilik Bileşiklerle Barbier Türü Eşleşmesi**
Erdik E., Kalkan M.
XX. Ulusal Kimya Kongresi, Kayseri, Turkey, 18 September 2006, pp.79
- XV. **Organoçinko Bileşiklerinin Benzendiazonyum Tetrafluoroborat ile Elektrofilik Aminasyonu**
Erdik E., Kalkan M.
XVII. Ulusal Kimya Kongresi, İstanbul, Turkey, 12 September 2003, pp.79

Supported Projects

- Özer H. B., Yazıhan N., Kalkan M., Özdağ Sevgili H., Sınağ A., Süzen S., Çiçek M., Sareyyüpoğlu B., TUBITAK Project, Ankara Üniversitesi'nde Nitelikli Araştırma Projesi Üretim Altyapısının Geliştirilmesi, 2014 - 2017
- KALKAN M., TUBITAK Project, Karışık Diorganoçinko Reaktiflerinin Allilik Eşleşmesi Grup Seçiciliği Ve Kontrolü Karışık Arilçinko Reaktifleriyle Aril Allil Eşleşmesi İçin Sentetik Yöntem Geliştirilmesi, 2013 - 2015
- Erdik E., Kalkan M., Ömür Pekel Ö., Project Supported by Higher Education Institutions, Allilleme ve Açılleme Reaksiyonlarında Karışık Organoçinko ve -Bakır Bileşiklerinin Kullanılması. Sentetik ve Mekanistik Araştırma, 2009 - 2012
- KALKAN M., TUBITAK Project, Karışık organoçinko bakır bileşiklerinin C C eşleşmesinde grup seçimliliğinin sentetik ve mekanistik araştırılması, 2007 - 2010
- Erdik E., Ömür Pekel Ö., Kalkan M., Özkan D., Serdar E. Z., TUBITAK Project, Karışık Organoçinko ve Bakır Bileşiklerinin CC ve C-N Eşleşmesinde Grup Seçimliliğinin Sentetik ve Mekanistik Araştırılması, 2007 - 2010
- KALKAN M., TUBITAK Project, Temel grup organometalik bileşiklerin aminasyonu için yeni yöntemler, 2001 - 2004

Activities in Scientific Journals

Journal of the Turkish Chemical Society, Section A: Chemistry, Editor, 2022 - Continues

Metrics

- Publication: 33
Citation (WoS): 76
Citation (Scopus): 87
H-Index (WoS): 6
H-Index (Scopus): 6