

Assoc. Prof. Zerrin ÇALIŞKAN

Personal Information

Office Phone: [+90 212 383 4461](tel:+902123834461) Extension: 4469

Fax Phone: [+90 212 383 4464](tel:+902123834464)

Web: <https://avesis.yildiz.edu.tr/zcalis>

Address: Yıldız Teknik Üniversitesi Davutpaşa Kampüsü Fen-Edebiyat Fakültesi Moleküler Biyoloji ve Genetik Bölümü 34210 Esenler/İstanbul

International Researcher IDs

ORCID: 0000-0003-0010-1744

Publons / Web Of Science ResearcherID: A-1701-2016

Yoksis Researcher ID: 46228

Education Information

Doctorate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, Turkey 1989 - 1996

Dissertations

Doctorate, A Novel synthesis of various butenolides, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, 1996

Postgraduate, Synthesis of some 3,5-disubstituted tetrahydro-2H-1,3,5-thiadiazine -2- thione derivatives, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, 1988

Research Areas

Life Sciences, Biotechnology, Natural Sciences

Academic Titles / Tasks

Associate Professor, Yıldız Technical University, Faculty Of Arts & Science, Department Of Molecular Biology And Genetics, 1999 - Continues

Supervised Theses

Çalışkan Z., Aspergillus türleri ile farmakolojik olarak aktif ürünlerin biyotransformasyonu, Postgraduate, L.YILMAZ(Student), 2024

Çalışkan Z., Lipaz enzim katalizörleri ile dihidroindol türevlerinin enantioselektif sentezi, Postgraduate, H.BÜYÜKKAYA(Student), 2023

Çalışkan Z., Mikrobiyal Biyotransformasyon ile Biyoaktif Bileşiklerin Sentezi, Postgraduate, K.Avcı(Student), 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Synthesis of New 4-Oxo-Tetrahydroindol Derivatives by Using Chemical and Microbial Biotransformation Methods**
Caliskan Z., Soydan E., Kurt Gür G., Ordu E.
Polycyclic Aromatic Compounds, vol.40, no.5, pp.1390-1396, 2020 (SCI-Expanded)
- II. **Antimicrobial Activity of the Essential Oil and the Extracts of Kitaibelia balansae Species**
Yıldırım F., Memiş Y., Öztürk A., Çalışkan Z., Savran A., Abdullah M. I.
JOURNAL OF ESSENTIAL OIL BEARING PLANTS, vol.20, pp.809-819, 2017 (SCI-Expanded)
- III. **Stereoselective synthesis of optically active 1-benzyl-4,5,6,7-tetrahydro-6,6-dimethyl-4-oxo-1H-indol-7-yl acetate and 1-benzyl-6,7-dihydro-7-hydroxy-6,6-dimethyl-1H-indol-4(5H)-one through lipase-catalyzed esterification and transesterification processes**
Caliskan Z., Ersez M. S.
JOURNAL OF MOLECULAR CATALYSIS B-ENZYMATIC, vol.111, pp.64-70, 2015 (SCI-Expanded)
- IV. **Antifeedant activity of some Tanacetum species and bioassay guided isolation of the secondary metabolites of Tanacetum cadmeum ssp cadmeum (Compositae)**
Susurluk H., Caliskan Z., Guerkan O., Kirmiziguel S., Goeren N.
INDUSTRIAL CROPS AND PRODUCTS, vol.26, pp.220-228, 2007 (SCI-Expanded)
- V. **Enantioselective synthesis of 4,5,6,7-tetrahydro-4-oxo-benzofuran-5-yl acetate and 1-benzyl-4,5,6,7-tetrahydro-4-oxo-1(H)-indol-5-yl acetate using chemoenzymatic methods**
Çalışkan Z., Demir A. S., Şahin E.
Journal Of Molecular Catalysis B-Enzymatic, vol.44, pp.87-92, 2007 (SCI-Expanded)
- VI. **A new and efficient chemoenzymatic route to both enantiomers of alpha '-acetoxy and alpha '-hydroxy-alpha-methoxy cyclic enones**
Demir A., Caliskan Z., Aydın A., Bicer I.
TETRAHEDRON-ASYMMETRY, vol.17, pp.786-791, 2006 (SCI-Expanded)
- VII. **Isolation and structures of eudesmanolides from Tanacetum cadmeum ssp cadmeum**
Caliskan Z., Goren N., Watson W. H.
JOURNAL OF CHEMICAL CRYSTALLOGRAPHY, vol.34, no.5, pp.307-310, 2004 (SCI-Expanded)
- VIII. **erythro-2-Piperidinyl-1,2-diphenylethanol**
OCAK N., KAZAK C., OZTURK S., ZERRIN C., Arsu N., FUN H., ERDONMEZ A.
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.58, 2002 (SCI-Expanded)
- IX. **A facile synthesis of various butenolides**
Tanyeli C., Caliskan Z.
SYNTHETIC COMMUNICATIONS, vol.30, no.16, pp.2855-2862, 2000 (SCI-Expanded)
- X. **A facile synthesis of (+/-)-mintlactone**
Tanyeli C., Caliskan Z., Demir A. S.
SYNTHETIC COMMUNICATIONS, vol.27, no.19, pp.3471-3476, 1997 (SCI-Expanded)
- XI. **Butenolide annelations using a manganese(III) oxidation. A synthesis of jolkinolide E**
Demir A. S., Tanyeli C., Akgün H., ÇALIŞKAN Z., Özgül E.
BULLETIN DE LA SOCIETE CHIMIQUE DE FRANCE, vol.132, no.4, pp.423-7, 1995 (SCI-Expanded)

Articles Published in Other Journals

- I. **Synthesis of Dihydrobenzofuranone Derivatives with Biotechnological Methods**
Çalışkan Z., Ay E. N.
Annales De Chimie-Science Des Materiaux, no.5, pp.1221-1232, 2018 (Scopus)
- II. **Sesquiterpene Lactones and Other Constituents from The Aerial Parts of Tanacetum Abrotonifolium Druce, Collected in East Turkey**
Çalışkan Z., Gören N.
Annales De Chimie-Science Des Materiaux, vol.5, no.2, pp.511-520, 2018 (Scopus)

Books

- I. **The Importance of Benzofuran and Its Derivatives in Pharmacology with Their Unique Structural Properties**
Çalışkan Z., Alkılıç Y.
in: Multidisciplinary Studies in Natural Sciences, Aydın ATAKAN, Editor, Gaziantep Üniversitesi Yayınları: 34, Gaziantep, pp.396-425, 2024
- II. **Pharmaceutical and Medical Importance of Indole Derivatives**
Çalışkan Z., Gün T.
in: Multidisciplinary Studies in Natural Sciences, Aydın ATAKAN, Editor, Gaziantep Üniversitesi Yayınları: 34, Gaziantep, pp.369-395, 2024
- III. **Chemical Characterization and Biological Activities of the genus Tanacetum (Compositae)**
Çalışkan Z., Gören N., Arda N.
in: Studies in Natural Products Chemistry , Atta-ur- Rahma, Editor, Elsewhere Press, Karachi, pp.547-658, 2002

Papers Published in Refereed Scientific Meetings

- I. **Heterohalkalı Bileşiklerin Enzimler ve Mikrobiyal Hücreler Katalizörlüğünde Kemoenzimatik Reaksiyonları**
Çalışkan Z., Aydın M.
7. Ulusal Uygulamalı Biyolojik Bilimler Kongresi, İstanbul, Turkey, 28 - 29 December 2024, pp.43
- II. **Biotransformation Of Pharmacologically Active Products With Aspergillus species**
Çalışkan Z., Kara L. Y.
9th International "Başkent" Congress On Physical, Engineering, And applied Sciences , Ankara, Turkey, 20 - 23 May 2023, pp.333-336
- III. **Enantioselective synthesis of dihydro indole derivatives by lipase enzyme catalysts**
Çalışkan Z., Büyükkaya H.
I. International Advances in Molecular Biology Congress, İstanbul, Turkey, 19 - 22 September 2022, pp.94
- IV. **Chemoenzymatic biotransformation of some dihydroindole derivatives by lipase enzymes**
Çalışkan Z., Garipcan Z.
1. International Advances in Molecular Biology Congress, İstanbul, Turkey, 19 - 22 September 2022, pp.103
- V. **Format Dehidrogenaz Reaksiyonu ile Kiral α -hidroksi Benzofuranon Türevlerinin Sentezi***
Çalışkan Z., Ordu E., Kurt Gür G., Avcı K., Erdöl S.
31. Ulusal Kimya Kongresi, İstanbul, Turkey, 10 - 13 September 2019, pp.116
- VI. **Yeni bir Yaklaşımla 4-Oxo-tetrahidroindolTürevlerinin Biyotransformasyonu**
Erdöl S., KURT GÜR G., ORDU E., ÇALIŞKAN Z.
7th Drug Chemistry Conference: Design, Synthesis, Production and Standardization of Drug Active Substances, Antalya, Turkey, 14 March 2019, pp.9
- VII. **Mikrobiyal Biyotransformasyon ile Biyoaktif Bileşiklerin Sentezleri**
Avcı K., Erdöl S., Kurt Gür G., Ordu E., Çalışkan Z.
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- VIII. **Chemoenzymatic Synthesis of 4-Oxo tetrahydro benzofuranone Derivatives**
Çalışkan Z., Dayıoğlu T.
7th Drug Chemistry Conference: Design, Synthesis, Production and Standardization of Drug Active Substances, , Antalya, Turkey, 14 - 17 March 2019, pp.17
- IX. **Farmakolojik Olarak Önemli İlaç Öncül Maddesi Benzofuranon Türevi Bileşiklerin Kemoenzimatik Sentezleri**
Çalışkan Z.
6. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi ve Standardizasyonu Kongresi , Antalya, Turkey, 22 -

25 March 2018, pp.203

- X. **Çeşitli Dihydrobenzofuranon ve İndol Türevlerinin Mikrobiyal ve Enzimatik Metodlarla Biyotransformasyonu**
Çalışkan Z., Soydan E., Gülbay T.
29. Ulusal Kimya Kongresi, ODTÜ, Ankara, Turkey, 10 - 14 September 2017, pp.146
- XI. **Benzofuranon ve Indol Türevlerinin Biyokatalitik Rezolüsyonu**
ÇALIŞKAN Z., Soydan E.
III. Ulusal Organik Kimya Kongresi, 01 September 2016
- XII. **Antimicrobial activity of the volatile oil from *Kitaibelia balansae* species**
Yıldırım F., Çalışkan Z., Öztürk A., Savran A., Ibrahim Abdullah M.
International Congress on Fundamental and Applied Sciences (ICFAS 2016) 22-26 August 2016 Istanbul-Turkey, İstanbul, Turkey, 22 - 26 August 2016, pp.2-3
- XIII. **The Synthesis Of Benzofuranone and Indole Derivatives and Examination of their Cytotoxic and Anticarcinogenic Effects on NIH 3T3 and MCF7 Cells**
Şenel İ., ÇALIŞKAN Z., Yalman V., Alkan F.
28. Ulusal Kimya Kongresi, 01 August 2016
- XIV. **The Synthesize of Benzofuranone and Indole Derivatives which are Important in Pharmacy by using Biotechnological Methods**
ÇALIŞKAN Z., Soydan E.
28. Ulusal Kimya Kongresi, 01 August 2016
- XV. **Enantioselective synthesis of 4-oxo-tetrahydroindol derivatives by using biotechnological methods**
ÇALIŞKAN Z., Süleymanoğlu M.
International Conference on Enzyme Science and Technology, 01 November 2011
- XVI. **Bioassay directed structure elucidation of secondary metabolites in *Tanacetum abratonifolium* (Compositae)**
ÇALIŞKAN Z., Goren N.
European Biotechnology Congress, 01 October 2011, pp.143
- XVII. **Stereoselective Synthesis of Tetrahydroindol Derivatives**
Süleymanoğlu M., ÇALIŞKAN Z., Çağlar K.
01 September 2011, pp.85
- XVIII. **Bioassay directed structure elucidation of secondary metabolites in *Tanacetum abratonifolium* (Compositae)**
Caliskan Z., Goren N.
European Biotechnology Congress, İstanbul, Turkey, 28 September - 01 October 2011, vol.22
- XIX. **The Chemoenzymatic Synthesis of Some Indole Derivatives**
ÇALIŞKAN Z., Çağlar K., Demir A. S.
IEES'08 The International Enzyme Engineering Symposium, 01 October 2008, pp.73
- XX. ***Tanacetum cadmeum* ssp. *cadmeum* Bitkisinin Sekonder Metabolitlerinin Tayini ve Aktivitelerinin Saptanması**
ÇALIŞKAN Z., Aydın H., Kırmızıgül S., Gürkan O., Gören N.
XVIII. Ulusal Kimya Kongresi, Kafkas Üniversitesi, 01 July 2004, pp.892
- XXI. **Crystal Structure of Erythro-2-piperidinyl-1,2-diphenylethanol**
Ocak N., Kazak C., Öztürk S., Çalışkan Z., Arsu N., Erdönmez A.
5th International Conference on Chemical Physics, İstanbul, Turkey, 31 October - 01 November 2002, pp.8
- XXII. **A Novel Synthesis of Butenolides**
ÇALIŞKAN Z., Tanyeli C.
35th IUPAC Congress, İstanbul, Turkey, 14 August 1995, pp.534
- XXIII. **A Novel Synthesis of (+/-) - Mintlactone**
Tanyeli C., ÇALIŞKAN Z.
35th IUPAC Congress, İstanbul, Turkey, 14 August 1995, pp.775
- XXIV. **Yeni bir yöntemle Mintlaktone ve Menthofuran sentezi**

ÇALIŞKAN Z., Tanyeli C., Demir A. S.

X. Ulusal Kimya Kongresi , Uludağ Üniversitesi , F.E.F Kimya Bölümü, 01 June 1994

XXV. Antifungal etki gösteren 2-H-1,3,5-Thiodizine-2-thione Türevlerinin Sentezi

ÇALIŞKAN Z., Tarhan O., Ertan M.

IV. Kimya Mühendisliği Sempozyumu, Fırat Üniversitesi ,, 01 June 1987

Supported Projects

ÇALIŞKAN Z., Yılmaz L., KURT GÜR G., Project Supported by Higher Education Institutions, Aspergillus Türleri ile İndol Türevlerinin Biyotransformasyonu, 2023 - Continues

ÇALIŞKAN Z., YILDIZ D., İSLİM A., Project Supported by Higher Education Institutions, Mikrobiyal Biyotransformasyon İle Enantiyosaf Öncü Maddelerin Sentezi, 2023 - 2024

ÇALIŞKAN Z., Büyükkaya H., Project Supported by Higher Education Institutions, Lipaz Enzim Katalizörleri ile Dihidroindol Türevlerinin Enantioselektif Sentezi, 2020 - 2023

ÇALIŞKAN Z., Avcı K., Project Supported by Higher Education Institutions, MİKROBİYAL BİYOTRANSFORMASYON İLE 4,5,6,7-TETRAHİDRO-6-FENİL-4-OKSOBENZOFURANON TÜREVLERİNİN SENTEZİ, 2018 - 2020

ÇALIŞKAN Z., Project Supported by Higher Education Institutions, Optikçe Aktif Benzofuranon ve Indol Türevlerinin Biyoteknolojik Yöntemler Kullanılarak Eldesi, 2012 - 2017

ÇALIŞKAN Z., Project Supported by Higher Education Institutions, Kemoenzimatik Reaksiyonlarla Dihydrobenzofuranone ve Dihydroindolone Türevlerinin Enantioselektif Hidrolizi, 2012 - 2015

ÇALIŞKAN Z., Project Supported by Higher Education Institutions, Mikrobiyal ve Enzimatik Reaksiyonlar Kullanılarak Biyoteknolojik Yöntemlerle Biyoaktif Maddelerin Sentezi, 2011 - 2015

ÇALIŞKAN Z., Other International Funding Programs, Mikrobiyal ve Enzimatik Reaksiyonlar Kullanılarak Biyoteknolojik Yöntemlerle Indol Türevlerinin Sentezi, 2011 - 2014

ÇALIŞKAN Z., Project Supported by Higher Education Institutions, Biyoteknolojik Yöntemlerle Kiral 4-oxo-tetrahidroindol Türevlerinin Sentezi, 2010 - 2011

ÇALIŞKAN Z., Other International Funding Programs, Bazı Indol Türevlerinin Kemoenzimatik Sentezleri, 2006 - 2009

ÇALIŞKAN Z., Biyoaktif Maddelerin Biyoteknolojik Ürünlerle Biyodönüşüm ile Yeni Aktif Madde Sentezleri, 2003 - 2006

ÇALIŞKAN Z., Project Supported by Higher Education Institutions, Tanacetum (Compositae) Sekonder Metabolitlerin Yapılarının Tayini ve Aktivitelerinin Saptanması, 2003 - 2005

ÇALIŞKAN Z., Other International Funding Programs, Tanacetum abratonifolium (Compositae) Sekonder Metabolitlerinin Yapılarının Tayini ve Aktivitelerinin Saptanması, 2003 - 2005

Metrics

Publication: 42

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