

Assoc. Prof. DERYA GÜLCEMAL

Personal Information

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Education Information

Post Doctorate, University Of Liverpool, Department Of Chemistry, United Kingdom 2015 - 2015

Doctorate, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2007 - 2013

Post Graduate, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (YI), Turkey 2004 - 2007

Under Graduate, Ege Üniversitesi, Fen Fakültesi, Kimya Bölümü, Turkey 1998 - 2003

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Isolation And Characterization Of Saponins From Some Astragalus Taxa, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (Dr), 2013

Post Graduate, The Analysis Of Essential Oil Contents Of Plants Marketed In Turkey, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (YI), 2007

Research Areas

Chemistry, Inorganic Chemistry, Catalysis, Organic Chemistry, Chemistry of Natural Products, Organometallics, Natural Sciences

Academic Titles / Tasks

Associate Professor, Ege Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2015 - Continues

Research Assistant PhD, Ege Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2013 - 2015

Research Assistant, Ege Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2008 - 2013

Courses

ORGANİK KİMYA, Under Graduate, 2016 - 2017, 2017 - 2018

TEMEL KİMYA II, Under Graduate, 2016 - 2017, 2017 - 2018

KİMYA II, Under Graduate, 2016 - 2017

TEMEL KİMYA I, Under Graduate, 2016 - 2017, 2017 - 2018

GENEL KİMYA, Under Graduate, 2016 - 2017, 2017 - 2018
KİMYA I, Under Graduate, 2016 - 2017
ORGANİK KİMYA, Under Graduate, 2015 - 2016, 2016 - 2017
GENEL KİMYA, Under Graduate, 2017 - 2018
GENERAL CHEMISTRY-II, Under Graduate, 2015 - 2016

Advising Theses

GÜLCEMAL D., İran Astragaluslarından triterpen saponinlerin izolasyonu ve immün sistem üzerindeki etkilerinin araştırılması, Doctorate, B.ASLANIPOUR(Student), Continues
Gülcemal D., Iridium catalyzed β -alkylation of secondary alcohols with primary alcohols, Post Graduate, S.GENÇ(Student), 2019

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Iridium-Catalyzed Alkylation of Secondary Alcohols with Primary Alcohols: A Route to Access Branched Ketones and Alcohols**
Genc S., Gülcemal S., Günnaz S., Cetinkaya B., Gülcemal D.
JOURNAL OF ORGANIC CHEMISTRY, vol.85, pp.9139-9152, 2020 (Journal Indexed in SCI)
- II. **Iridium(I)-Catalyzed C-C and C-N Bond Formation Reactions via the Borrowing Hydrogen Strategy**
Genc S., Arslan B., Gülcemal S., Günnaz S., Cetinkaya B., Gülcemal D.
JOURNAL OF ORGANIC CHEMISTRY, vol.84, pp.6286-6297, 2019 (Journal Indexed in SCI)
- III. **Enhanced Catalytic Activity of Oxygen-Tethered Ir-III NHC Complexes in Aqueous Transfer Hydrogenative Reductive Amination Reactions: Experimental Kinetic and Mechanistic Study**
ÖZBOZKURT I. K., GÜLCEMAL D., GÜNNAZ S., Gökce A. G., CETINKAYA B., Gulcemal S.
CHEMCATCHEM, vol.10, no.16, pp.3593-3604, 2018 (Journal Indexed in SCI)
- IV. **Iridium(I)-Catalyzed Alkylation Reactions To Form α -Alkylated Ketones**
GENC S., GÜNNAZ S., CETINKAYA B., GÜLCEMAL S., GÜLCEMAL D.
JOURNAL OF ORGANIC CHEMISTRY, vol.83, no.5, pp.2875-2881, 2018 (Journal Indexed in SCI)
- V. **Secondary metabolites from Astragalus karjaginii BORISS and the evaluation of their effects on cytokine release and hemolysis**
ASLANIPOUR B., GÜLCEMAL D., NALBANTSOY A., YUSUFOGLU H., Bedir E.
FITOTERAPIA, vol.122, pp.26-33, 2017 (Journal Indexed in SCI)
- VI. **Novel saponins from Nigella arvensis var. involucreta**
Bicak K., Gulcemal D., Demirtas I., Alankus O.
PHYTOCHEMISTRY LETTERS, vol.21, pp.128-133, 2017 (Journal Indexed in SCI)
- VII. **Cycloartane-type glycosides from Astragalus brachycalyx FISCHER and their effects on cytokine release and hemolysis**
ASLANIPOUR B., GÜLCEMAL D., NALBANTSOY A., YUSUFOGLU H., Bedir E.
PHYTOCHEMISTRY LETTERS, vol.21, pp.66-73, 2017 (Journal Indexed in SCI)
- VIII. **Acceptorless Dehydrogenative Oxidation of Secondary Alcohols Catalysed by Cp*Ir-III-NHC Complexes**
Gulcemal S., Gulcemal D., Whitehead G. F. S., Xiao J.
CHEMISTRY-A EUROPEAN JOURNAL, vol.22, no.30, pp.10513-10522, 2016 (Journal Indexed in SCI)
- IX. **A New Phenoxide Chelated Ir-III N-Heterocyclic Carbene Complex and Its Application in Reductive Amination Reactions**
Gulcemal D., Gulcemal S., Robertson C. M., Xiao J.
ORGANOMETALLICS, vol.34, no.17, pp.4394-4400, 2015 (Journal Indexed in SCI)
- X. **Oleanane-Type Glycosides from Tremastelma palaestinum (L.) Janchen**

- SENEL G., GÜLCEMAL D., MASULLO M., PIACENTE S., KARAYILDIRIM T.
CHEMISTRY & BIODIVERSITY, vol.11, no.3, pp.408-418, 2014 (Journal Indexed in SCI)
- XI. **Oleanane type glycosides from *Paronychia anatolica* subsp *balansae***
GÜLCEMAL D., MASULLO M., ALANKUS-CALISKAN Ö., PIACENTE S.
FITOTERAPIA, vol.92, pp.274-279, 2014 (Journal Indexed in SCI)
- XII. **Saponins from *Cephalaria aristata* C. Koch**
GÜLCEMAL D., MASULLO M., ŞENOL S. G. , ALANKUS-CALISKAN O., PIACENTE S.
RECORDS OF NATURAL PRODUCTS, vol.8, no.3, pp.228-233, 2014 (Journal Indexed in SCI)
- XIII. **Hydroxyl and ester functionalized N-heterocyclic carbene complexes of iridium(I): efficient catalysts for transfer hydrogenation reactions**
GÜLCEMAL D., Gokce A. G. , GÜLCEMAL S., CETINKAYAA B.
RSC ADVANCES, vol.4, no.50, pp.26222-26230, 2014 (Journal Indexed in SCI)
- XIV. **Cycloartane glycosides from *Astragalus plumosus* var. *krugianus* and evaluation of their antioxidant potential**
DENIZLI N., HORO I., GÜLCEMAL D., MASULLO M., FESTA M., CAPASSO A., KOZ O., PIACENTE S., ALANKUS-CALISKAN Ö.
FITOTERAPIA, vol.92, pp.211-218, 2014 (Journal Indexed in SCI)
- XV. **Unusual Secondary Metabolites from *Astragalus halicacabus* LAM.**
DJIMTOMBAYE B., ALANKUS-CALISKAN Ö., GÜLCEMAL D., Khan I. A. , ANIL H., BEDİR E.
CHEMISTRY & BIODIVERSITY, vol.10, no.7, pp.1328-1334, 2013 (Journal Indexed in SCI)
- XVI. **Oleanane glycosides from *Astragalus tauricolus*: Isolation and structural elucidation based on a preliminary liquid chromatography-electrospray ionization tandem mass spectrometry profiling**
GÜLCEMAL D., MASULLO M., NAPOLITANO A., KARAYILDIRIM T., BEDİR E., ALANKUS-CALISKAN Ö., PIACENTE S.
PHYTOCHEMISTRY, vol.86, pp.184-194, 2013 (Journal Indexed in SCI)
- XVII. **Triterpene Glycosides from *Astragalus angustifolius***
GÜLCEMAL D., MASULLO M., BEDİR E., FESTA M., KARAYILDIRIM T., ALANKUS-CALISKAN Ö., PIACENTE S.
PLANTA MEDICA, vol.78, no.7, pp.720-729, 2012 (Journal Indexed in SCI)
- XVIII. **Triterpene saponins from *Cyclamen hederifolium***
ALTUNKEYIK H., GÜLCEMAL D., MASULLO M., ALANKUS-CALISKAN Ö., PIACENTE S., KARAYILDIRIM T.
PHYTOCHEMISTRY, vol.73, pp.127-133, 2012 (Journal Indexed in SCI)
- XIX. **Cycloartane Glycosides from *Astragalus erinaceus***
SAVRAN T., GÜLCEMAL D., MASULLO M., KARAYILDIRIM T., POLAT E., PIACENTE S., ALANKUS-CALISKAN Ö.
RECORDS OF NATURAL PRODUCTS, vol.6, no.3, pp.230-236, 2012 (Journal Indexed in SCI)
- XX. **Cycloartane glycosides from *Astragalus aureus***
GÜLCEMAL D., ALANKUS-CALISKAN Ö., PERRONE A., Özgökçe F., PIACENTE S., BEDİR E.
PHYTOCHEMISTRY, vol.72, no.8, pp.761-768, 2011 (Journal Indexed in SCI)
- XXI. **Phenolic Glycosides with antiproteasomal activity from *Centaurea urvillei* DC. subsp *urvillei***
GÜLCEMAL D., Alankus-Caliskan Ö., KARAALP C., ÖRS A. U. , Ballar P., BEDİR E.
CARBOHYDRATE RESEARCH, vol.345, no.17, pp.2529-2533, 2010 (Journal Indexed in SCI)
- XXII. **alpha-Glucosidase Inhibitory Constituents of *Linaria kurdica* subsp *ericalyx***
AYDOĞDU I., ZİHNİOĞLU F., KARAYILDIRIM T., GÜLCEMAL D., ALANKUS-CALISKAN Ö., BEDİR E.
NATURAL PRODUCT COMMUNICATIONS, vol.5, no.6, pp.841-844, 2010 (Journal Indexed in SCI)
- XXIII. **Monoterpenoid glucoindole alkaloids and iridoids from *Pteroccephalus pinardii***
GÜLCEMAL D., MASULLO M., ALANKUS-CALISKAN Ö., KARAYILDIRIM T., ŞENOL S. G. , PIACENTE S., BEDİR E.
MAGNETIC RESONANCE IN CHEMISTRY, vol.48, no.3, pp.239-243, 2010 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. ***Astragalus* Türlerinin İmmün Sistem Üzerindeki Etkisi**
GÜLCEMAL D., BEDİR E.

Refereed Congress / Symposium Publications in Proceedings

- I. **Enhanced catalytic activity of oxygen-tethered Ir(III) N-heterocyclic carbene complexes in aqueous transfer hydrogenative reductive amination reactions**
ÖZBOZKURT İ. K., GÜNNAZ S., GÜLCEMAL D., ÇETİNKAYA B., GÜLCEMAL S.
28th International Conference on Organometallic Chemistry, Florence, Italy, 15 July 2018, pp.303
- II. **Iridium-catalyzed hydrogen transfer reactions**
GENC S., ARSLAN B., GÜNNAZ S., ÇETİNKAYA B., GÜLCEMAL S., GÜLCEMAL D.
28th International Conference on Organometallic Chemistry, Florence, Italy, 15 July 2018
- III. **Isolation and Characterization of Saponins from Astragalus gummifer**
YAŞARİKİZ Ö., GÜLCEMAL D., ÜN R. N., MASULLO M., PIACENTE S., ALANKUŞ Ö.
ISCNP-29, 24 - 27 September 2016
- IV. **Synthesis of Barringtonol C Derivatives and Their Cytotoxic Activities**
GÜLCEMAL D., NALBANTSOY A., ÜN R. N., ALANKUŞ Ö.
29. International Symposium on the Chemistry of Natural Products and 9. International Conference on Biodiversity, 24 - 27 September 2016
- V. **Molecular and crystal structures of hydroxyl and ester functionalized N-heterocyclic carbene complexes of iridium(I)**
İZMİRLİ M., GOKÇE A. G., GÜLCEMAL D., GÜLCEMAL S., AYGÜN M.
The 29th European Crystallographic Meeting, Rovinj, Croatia, 23 August 2015
- VI. **Oleanane type glycosides from Astragalus tauricolus**
GÜLCEMAL D., MASULLO M., NAPOLITANO A., KARAYILDIRIM T., BEDİR E., ALANKUS-CALISKAN O., PIACENTE S.
Phytochemical Society of Europe Congress on Bio-communication-Semiochemicals involving plants, Cadiz, Spain, 10 September 2012, pp.36
- VII. **Phytochemical Investigation on Astragalus halicacabus**
DJIMTOMBAYE B., ALANKUS-CALISKAN O., GÜLCEMAL D., ANIL H., KHAN I. A., BEDİR E.
Phytochemical Society of Europe Congress on Bio-communication-Semiochemicals involving plants, Cadiz, Spain, 10 September 2012, pp.30
- VIII. **Oleanane type glycosides from Tremastelma palaestinum**
SENEL G., GÜLCEMAL D., MASULLO M., PIACENTE S., KARAYILDIRIM T.
Phytochemical Society of Europe Congress on Bio-communication-Semiochemicals involving plants, Cadiz, Spain, 10 September 2012, pp.38
- IX. **Phytochemical investigations of Alyssum corsicum**
TAĞ Ö., MASULLO M., GÜLCEMAL D., ŞENOL S. G., PIACENTE S., KARAYILDIRIM T.
59th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-and-Natural-Product-Research, Antalya, Turkey, 04 September 2011, vol.77, no.12, pp.1347
- X. **Constituents of Verbascum reeseanum**
DJIMTOMBAYE B., KARAYILDIRIM T., MASULLO M., PIACENTE S., GÜLCEMAL D., ŞENOL S. G.
59th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-and-Natural-Product-Research, Antalya, Turkey, 04 September 2011, vol.77, no.12, pp.1347
- XI. **Phytochemical investigations on Astragalus erinaceus**
GÜLCEMAL D., SAVRAN T., MASULLO M., POLAT E., PIACENTE S., ALANKUS-CALISKAN O.
Trends in Natural Products Research a PSE Young Scientists' Meeting, Crete, Greece, 12 June 2011, pp.144
- XII. **Saponins from Astragalus plumosus WILLD. var. krugianus**
DENİZLİ N., KOZ O., GÜLCEMAL D., HORO I., ALANKUS-CALISKAN O., MASULLO M., PIACENTE S.
Trends in Natural Products Research a PSE Young Scientists' Meeting, Crete, Greece, 12 June 2011, pp.148
- XIII. **Oleanane type glycosides from Cephalaria aristata**
GÜLCEMAL D., MASULLO M., KARAYILDIRIM T., ŞENOL S. G., PIACENTE S., ALANKUS-CALISKAN O.

Trends in Natural Products Research a PSE Young Scientists' Meeting, Crete, Greece, 12 June 2011, pp.146

XIV. Constituents of *Pterocephalus pinardii* Boiss

GÜLCEMAL D., BEDİR E., KARAYILDIRIM T., MASULLO M., PIACENTE S., ŞENOL S. G. , ALANKUS-CALISKAN O.

57th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-Research-and-Natural-Product-Research, Geneva, Switzerland, 16 August 2009, vol.75, no.9, pp.1056

XV. Phytochemical investigations of *Centaurea urvillei* DC. subsp *urvillei*

GÜLCEMAL D., ALANKUS-CALISKAN O., KARAALP C., BEDİR E.

57th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-Research-and-Natural-Product-Research, Geneva, Switzerland, 16 August 2009, vol.75, no.9, pp.1054

XVI. Phytochemical Investigations on *Cyclamen Hederifolium*

ALTUNKEYİK H., KARAYILDIRIM T., GÜLCEMAL D., ALANKUS-CALISKAN O., ANIL H.

9th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 23 June 2009, pp.175

Supported Projects

Gülcemal D., TÜBİTAK Project, İridyum Katalizli Hidrojen Ototransfer Tepkimeleri ile a,a-Dialkil Ketonların Sentezi, 2019 - 2020

GÜLCEMAL D., GENÇ S., Project Supported by Higher Education Institutions, SEKONDER AKLOLLERİN PRİMER ALKOLLERLE İRİDYUM KATALİZLİ B-ALKİLASYONU, 2018 - 2019

Gülcemal S., Gülcemal D., Günnaz S., TÜBİTAK Project, Donör-Fonksiyonel N-Heterosiklik Karben İridyum(III) Komplekslerinin Sentezi ve İndirgen Aminasyon Tepkimelerindeki Katalitik Aktivitelerinin İncelenmesi, 2017 - 2019

GÜLCEMAL D., Project Supported by Higher Education Institutions, N-HETEROSİKLİK KARBEN KOMPLEKSLERİNİN SENTEZİ VE ÇEŞİTLİ KANSER HÜCRELERİNE KARŞI SİTOTOKSİK AKTİVİTELERİNİN İNCELENMESİ, 2016 - 2017

BAŞPINAR Y., ODACI DEMİRKOL D., İNCE İ., GÜLCEMAL D., TİMUR S., Industrial Thesis Project, VEZİKÜLER SİSTEMLERDE HAZIRLANMIŞ DOĞAL ÜRÜNLER, 2014 - 2016

GÜLCEMAL D., Project Supported by Higher Education Institutions, PARANYCHİA ANATOLİCADAN SAPONİNLERİN İZOLASYONU VE KARAKTERİZASYONU, 2013 - 2014

KARAYILDIRIM T., ALANKUŞ Ö., TÜBİTAK Project, Bazı Astragalus Türlerinden Dogal Bilesiklerin İzolasyonu, Kimyasal Yapılarının Belirlenmesi ve Sitotoksik Aktivitelerinin İncelenmesi, 2009 - 2013

Scientific Refereeing

Records of Natural Products, SCI Journal, April 2017

Records of Natural Products, SCI Journal, March 2017

Records of Natural Products, SCI Journal, January 2017

Records of Natural Products, SCI Journal, November 2016

Phytochemistry Letters, SCI Journal, May 2016

Records of Natural Products, SCI Journal, August 2014

Records of Natural Products, SCI Journal, March 2014

Records of Natural Products, SCI Journal, March 2014

Records of Natural Products, SCI Journal, January 2014

Records of Natural Products, SCI Journal, December 2013

Records of Natural Products, SCI Journal, October 2013

Records of Natural Products, SCI Journal, July 2013

European Journal of Chemistry, Other Indexed Journal, March 2013

Records of Natural Products, SCI Journal, November 2012

European Journal of Chemistry, Other Indexed Journal, September 2012

Records of Natural Products, SCI Journal, September 2012

European Journal of Chemistry, Other Indexed Journal, June 2012

Invited Congress and Symposium Activities

Phytochemical Society of Europe Congress on Bio-communication-Semiochemicals involving plants, Attendee, Cadiz, Spain, 2012

59th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-and-Natural-Product-Research, Attendee, Antalya, Turkey, 2011

Trends in Natural Products Research a PSE Young Scientists' Meeting, Attendee, Heraklion, Greece, 2011

57th International Congress and Annual Meeting of the Society-for-Medicinal-Plant-Research-and-Natural-Product-Research, Attendee, Geneva, Switzerland, 2009

9th International Symposium on Pharmaceutical Sciences, Attendee, Ankara, Turkey, 2009

7 th Joint meeting of AFERP,ASP,GA, PSE&SIF, Attendee, Athens, Greece, 2008

Citations

Total Citations (WOS):333

h-index (WOS):12

Scholarships

2219 Yurt Dışı Doktora Sonrası Araştırma Bursu (9 Ay), University of Liverpool, UK, TUBITAK, 2015 - 2015

Yurt İçi Doktora Bursu, TUBITAK, 2007 - 2012

Erasmus Bursu, Salerno University (6 Ay), Italy, University, 2010 - 2011

Awards

GÜLCEMAL D., ELGİN CEBE G., Yayın Teşvik Ödülü, TÜBİTAK, July 2018

GÜLCEMAL D., Yayın Teşvik Ödülü, TÜBİTAK, November 2015

GÜLCEMAL D., Yayın Teşvik Ödülü, TÜBİTAK, June 2013

GÜLCEMAL D., Yayın Teşvik Ödülü, TÜBİTAK, January 2012

GÜLCEMAL D., Yayın Teşvik Ödülü, TÜBİTAK, May 2011

GÜLCEMAL D., Yayın Teşvik Ödülü, TÜBİTAK, February 2010