

## Asst. Prof. BURCU TEZCAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: D-7866-2018

Yoksis Researcher ID: 118888

### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2014 - 2022

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2011 - 2014

Undergraduate, Hacettepe University, Fen Fakültesi, Kimya (İng), Turkey 2006 - 2011

Undergraduate, Strathclyde University, Applied And Pure Chemistry, United Kingdom 2009 - 2010

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Postgraduate, DİOKSİM TÜREVİ METAL KOMPLEKSLERİN DEPOZİSYON İŞLEMLERİNDE ÖNCÜL OLARAK KULLANILABİLİRLİKLERİNİN İNCELENMESİ, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, 2014

### Research Areas

Chemistry, Inorganic Chemistry, Catalysis, Organometallic Chemistry, Novel Ligands, Clusters/Solids and Surfaces, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2024 - Continues

Research Assistant, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, 2011 - 2024

### Courses

Anorganik Kimya Labortauvarı, Undergraduate, 2011 - 2012

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

- I. **Palladium complexes of PNNP type diiminodiphosphine ligands for the Suzuki Csingle bondC coupling reactions**  
Tezcan B., Yılmaz M. K., Yakalı G., Aygün M., Güzel B.  
INORGANICA CHIMICA ACTA, no.543, pp.121-155, 2022 (SCI-Expanded)
- II. **Benzimidazolium Salts Containing Trifluoromethoxybenzyl: Synthesis, Characterization, Crystal Structure, Molecular Docking Studies and Enzymes Inhibitory Properties**  
Hamide M., GÖK Y., Demir Y., SEVİNÇEK R., TAŞKIN TOK T., TEZCAN B., AKTAŞ A., GÜLÇİN İ., AYGÜN M., GÜZEL B.  
CHEMISTRY & BIODIVERSITY, vol.19, 2022 (SCI-Expanded)
- III. **Benzimidazolium salts bearing the trifluoromethyl group as organofluorine compounds: Synthesis, characterization, crystal structure, in silico study, and inhibitory profiles against acetylcholinesterase and alpha-glycosidase**  
TEZCAN B., GÖK Y., SEVİNÇEK R., Taslimi P., TAŞKIN TOK T., AKTAŞ A., GÜZEL B., AYGÜN M., GÜLÇİN İ.  
JOURNAL OF BIOCHEMICAL AND MOLECULAR TOXICOLOGY, vol.36, no.4, 2022 (SCI-Expanded)
- IV. **Synthesis and characterization of new PNNP-type chiral ligands**  
TEZCAN B., GÜZEL B.  
PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.194, pp.315-316, 2019 (SCI-Expanded)
- V. **Preparation of metallic Pd nanoparticles using supercritical CO<sub>2</sub> deposition: An efficient catalyst for Suzuki cross-coupling reaction**  
TEZCAN B., ULUSAL F., EĞİTMEN A., GÜZEL B.  
JOURNAL OF NANOPARTICLE RESEARCH, vol.20, no.5, 2018 (SCI-Expanded)
- VI. **Supercritical carbondioxide deposition of gamma-Alumina supported Pd nanocatalysts with new precursors and using on Suzuki-Miyaura coupling reactions**  
Ulusal F., DARENDELİ B., ERÜNAL E., EGİTMEN A., GÜZEL B.  
JOURNAL OF SUPERCRITICAL FLUIDS, vol.127, pp.111-120, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Investigation Of Using Novel Vic Dioxime Metal Complexes As Precursors In Deposition**  
DARENDELİ B., GÜZEL B.  
FEN ve MÜHENDİSLİK BİLİMLERİ DERGİSİ, vol.34, no.4, pp.84-91, 2016 (Peer-Reviewed Journal)
- II. **Synthesis of Vic-Dioxime Palladium (II) Complex: Precursor for Deposition on SBA-15 in ScCO<sub>2</sub>**  
Eğitmen A., Demir A., DARENDELİ B., ULUSAL F., GÜZEL B.  
International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, vol.10, pp.1313-1317, 2016 (Peer-Reviewed Journal)
- III. **Palladium Nanoparticles Supported on Four Different Materials as Efficient Catalysts for Suzuki Cross-Coupling Reactions?**  
GÜZEL B., DARENDELİ B., Ulusal F.  
Chemical Sciences Journal, vol.7, no.2, pp.109, 2016 (Peer-Reviewed Journal)
- IV. **Dioksim türevi metal komplekslerin depozisyon işlemlerinde öncül olarak kullanılabilirliklerinin incelenmesi**  
DARENDELİ B., GÜZEL B.  
Journal of Science and Engineering, vol.34, no.4, 2016 (Peer-Reviewed Journal)
- V. **Deposition Pd and Ni nanoparticles on carbon nanotubes in scCO<sub>2</sub>, using novel vic-dioximes metal complexes as precursors**  
Ulusal F., DARENDELİ B., Eğitmen A., Jamison S. M., GÜZEL B.  
International Journal of Multidisciplinary Research, vol.2, no.2, pp.11-14, 2013 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Preparation of Multiwall Carbon Nanotube Supported Cu and Pd Nanoparticles Using Supercritical CO<sub>2</sub> Deposition Method**  
Ulusal F., DARENDELİ B., GÜZEL B.  
14. Netherlands' Catalysis and Chemistry Conference4. Netherlands' Catalysis and Chemistry Conference, Netherlands, pp.62
- II. **Synthesis of Pd (II) Schiff Base Complexes Derived From Condensation of Salicylic Aldehyde with Aniline Derivatives for Suzuki Coupling Reactions**  
Eğitmen A., DARENDELİ B., GÜZEL B.  
OMCOS18, Spain, pp.349
- III. **SYNTHESIS AND CHARACTERIZATION OF NEW PNNP-TYPE CHIRAL LIGANDS**  
TEZCAN B., GÜZEL B.  
22nd International Conference on Phosphorus Chemistr, 8 - 13 July 2018
- IV. **Farklı Karbon Desteklerinin Süperkritik Karbondioksit Depozisyonu Metoduyla Elde Edilen Malzemelerin Özelliklerine Etkileri**  
ERÜNAL E., Ulusal F., TEZCAN B., GÜZEL B.  
Second National Carbon Conference, İstanbul, Turkey, 16 - 17 March 2018, pp.1-2
- V. **Farklı Karbon Desteklerinin Süperkritik Karbondioksit Depozisyonu Metoduyla Elde Edilen Malzemelerin Özelliklerine Etkileri**  
ERÜNAL E., Ulusal F., TEZCAN B., GÜZEL B.  
Second National Carbon Conference, İstanbul, Turkey, 16 - 17 March 2018, pp.1-2
- VI. **The synthesis and characterization of 2-(di-p-Tolylphosphynine)benzaldehyde**  
TEZCAN B., YILMAZ M. K., GÜZEL B.  
European Workshop on phosphorus Cheöistry EWPC 14/2017, 20 - 22 March 2017
- VII. **SYNTHESIS OF A NEW CHIRAL HETERO-DENTATE PHOSPHINE LIGAND**  
DARENDELİ B., Demir A., GÜZEL B.  
European Workshop on Phosphorus Chemistry, Cluj, Romania, 20 - 22 March 2017, pp.57
- VIII. **THE SYNTHESIS AND CHARACTERIZATION OF 2-(di-p-TOLYLPHOSPHINO)BENZALDEHYDE**  
DARENDELİ B., Yılmaz M. K., GÜZEL B.  
European Workshop on Phosphorus Chemistry, Cluj, Romania, 20 - 22 March 2017, pp.65
- IX. **Synthesis of Vic Dioxime Palladium II Complex Precursor for Deposition on SBA 15 in ScCO<sub>2</sub>**  
EĞİTMEN A., Demir A., DARENDELİ B., Ulusal F., GÜZEL B.  
World Academy of Science, Engineering and Technology, 24 - 25 November 2016
- X. **synthesis of viv dioxime palladium II complex precursor for deposition on SBA 15 in scCO<sub>2</sub>**  
EĞİTMEN A., demir a., DARENDELİ B., ulusal f., GÜZEL B.  
18. World academy of science engineering and technology conference proceeding, havana, Cuba, 24 - 25 November 2016, vol.1, pp.1970-1974
- XI. **Synthesis of scCO<sub>2</sub> soluble perfluorinated chral schiff base ligand and its metal complexes**  
DARENDELİ B., GÜZEL B.  
european chemistry congress, roma, Italy, 16 - 18 June 2016, vol.7, pp.110
- XII. **Synthesis of scCO<sub>2</sub> soluble perfluorinated chiral schiff base ligand and its metal complexes**  
DARENDELİ B., GÜZEL B.  
European Chemistry Congress, Roma, Italy, 16 - 18 June 2016, pp.110
- XIII. **Palladium nanoparticles supported on four different materials as efficient catalysts for suzuki cross coupling reactions**  
GÜZEL B., DARENDELİ B., Ulusal F.  
European chemistry congress, roma, Italy, 16 - 18 June 2016, vol.7, pp.109
- XIV. **Palladium nanoparticles Pd NPs as efficient catalyst for suzuki miyaura reaction in mild condition**  
DARENDELİ B., fatma u., GÜZEL B.  
6.th Catalysis Conferance, Bursa, Bursa, Turkey, 27 - 30 April 2016
- XV. **Palladium Nanoparticles as Efficient Catalysts for Suzuki Miyaura Reaction in Mild Conditions**

- DARENDELİ B., Ulusal F., GÜZEL B.  
NCC6-6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016, pp.132
- XVI. **Synthesis of Chiral Catalysts and Their Catalytic Activities in ScCO<sub>2</sub>**  
Demir A., DARENDELİ B., GÜZEL B.  
NCC6- 6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016, pp.42
- XVII. **Effect of Crystal Structure on the Catalytic Activity for Suzuki-Miyaura Coupling Reaction**  
Ulusal F., DARENDELİ B., Atış Ö., Yılmaz M. K., GÜZEL B.  
NCC6- 6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016, pp.140
- XVIII. **PALLADIUM NANOPARTICLES(Pd NPs) AS EFFICIENT CATALYSTS FOR SUZUKI-MIYAUURA REACTION IN MILD CONDITIONS**  
DARENDELİ B., Ulusal F., GÜZEL B.  
NCC6- 6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016, pp.132
- XIX. **Synthesis Of Novel vic-Dioxime Metal Complexes and Using As Precursors For Metallic Deposition Methods**  
DARENDELİ B., GÜZEL B.  
Organometallic chemistry Direct Towards Organic Sythesis IUPAC Int Symp, Barcelona, Spain, 28 June - 02 July 2015, vol.1, no.1, pp.97
- XX. **Synthesis of Pd (II) Schiff Base Complexes Derived From Condensation of Salicylic Aldehyde with Aniline Derivatives for Suzuki Coupling Reactions**  
Eğitmen A., DARENDELİ B., GÜZEL B.  
OMCOS18, Sitges, Spain, 28 June - 02 July 2015, vol.1, no.1, pp.349
- XXI. **Synthesis of Pd (II) Schiff Base Complexes Derived From Condensation of Salicylic Aldehyde with Aniline Derivatives for Suzuki Coupling Reactions**  
Eğitmen A., Seven S., Atış Ö., TEZCAN B., GÜZEL B.  
OMCOS18, Sitges, Spain, 28 May - 02 July 2015, pp.397-398
- XXII. **Manyetik Nanopartikül Destekli Shiff Bazı Ni(II) Kompleksi Sentezi Ve Katalitik Etkinliğinin İncelenmesi**  
DARENDELİ B., Eğitmen A., Demir A., GÜZEL B.  
5. Ulusal Anorganik Kimya Kongresi, Mersin, Turkey, 22 - 25 April 2015, pp.32
- XXIII. **Synthesis of novel precursors for metalic nanoparticles: deposition on MWCNT utilizing scCO<sub>2</sub> and chemical methods**  
DARENDELİ B., GÜZEL B.  
5. Ulusal Kataliz Kongresi, Adana, Turkey, 23 - 26 April 2014, pp.406
- XXIV. **Metalik nanotanicikler oluşturulmasında yeni öncül sentezi: scCO<sub>2</sub> ve kimyasal metotla MWCNT üzerine depozisyonu**  
TEZCAN B., GÜZEL B.  
4.ULUSAL ANORGANİK KİMYA KONGRESİ, Turkey, 30 May 2013
- XXV. **Yeni Vic-Dioksim Komplekslerinin Sentezi Ve ScCO<sub>2</sub> Ortamında MWCNT Destekli Cu Ve Pd Nano Tanecik Olusturulmasında Öncül Olarak Kullanılması**  
ULUSAL F., TEZCAN B., GÜZEL B.  
4.ULUSAL ANORGANİK KİMYA KONGRESİ, Turkey, 30 May 2013
- XXVI. **YENİ PD(II) VE CU(II) KOMPLEKSLERİNİN SCCO<sub>2</sub> ORTAMINDA MWCNT ÜZERİNE BİRİKTİRİLME İŞLEMİNDE ÖNCÜL OLARAK KULLANIMI**  
DARENDELİ B., ULUSAL F., GÜZEL B.  
4.ULUSAL ANORGANİK KİMYA KONGRESİ, Tokat, Turkey, 30 May - 02 June 2013, pp.197
- XXVII. **Yeni Vic-dioksim Komplekslerinin Sentezi ve scCO<sub>2</sub> Ortamında MWCNT Destekli Cu ve Pd Nano Tanecik Oluşturulmasında Öncül Olarak Kullanılması**  
Ulusal F., DARENDELİ B., GÜZEL B.  
4. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013, pp.24
- XXVIII. **Preparation of Multiwall Carbon Nanotube Supported Cu and Pd Nanoparticles Using Supercritical CO<sub>2</sub> Deposition Method**

Ulusal F., DARENDELİ B., GÜZEL B.

14. Netherlands' Catalysis and Chemistry Conference4. Netherlands' Catalysis and Chemistry Conference, Noordwijkerhout, Netherlands, 11 - 13 March 2013, pp.62

**XXIX. Preparation of Multiwall Carbon Nanotube Supported Cu and Pd Nanoparticles Using Chemical Deposition Method**

DARENDELİ B., ULUSAL F., GÜZEL B.

Netherlands' Catalysis and Chemistry Conference, Noordwijkerhout, Netherlands, 11 - 13 March 2013, pp.110

**XXX. Manyetik Nanopartiküller Üzerine Desteklenmiş Schiff Bazı Türevi Metal Komplekslerinin Sentezleri ve Katalitik Etkinliklerinin İncelenmesi**

DARENDELİ B., GÜZEL B.

10. Ulusal Kimya Mühendisliği Kongresi, İstanbul, Turkey, 3 - 06 September 2012, pp.25

## Supported Projects

GÜZEL B., TEZCAN B., YILMAZ M. K., Baran S., Project Supported by Higher Education Institutions, C-C Eşleşme Reaksiyonları İçin Yeni İminofosfin Türevi Katalizörlerin Geliştirilmesi, 2018 - 2022

GÜZEL B., DARENDELİ B., Project Supported by Higher Education Institutions, PNNP TİPİ DİİMİNODİFOSFİN TÜREVİ LİGANDLAR VE PALADYUM(II) KOMPLEKSLERİNİN SENTEZİ, SUZUKİ C-C EŞLEŞME TEPKİMLERİNDE KATALİTİK ETKİNLİKLERİNİN İNCELENMESİ, 2016 - 2022

GÜZEL B., DARENDELİ B., Project Supported by Higher Education Institutions, Gaz Kromatografi Cihazının Bakım ve Onarımı, 2017 - 2017

GÜZEL B., DARENDELİ B., Öğretmen A., Project Supported by Higher Education Institutions, Kiral Binaftil Schiffbazı Türevi Metal Komplekslerinin Sentezi ve Alken Epoksidasyonunda Katalizör Olarak Kullanılması, 2016 - 2017

GÜZEL B., DARENDELİ B., Project Supported by Higher Education Institutions, Aldoksimve Vic-Dioksim Türevi Ligandlar Kullanarak Nikel (II) Katalizörler Hazırlanması ve Zeolit Üzerinde Depozisyon İşlemlerinde Kullanabilirliğin İncelenmesi, 2014 - 2015

## Metrics

Publication: 43

Citation (WoS): 27

Citation (Scopus): 30

H-Index (WoS): 2

H-Index (Scopus): 2

## Congress and Symposium Activities

5. Ulusal Kataliz Kongresi, Attendee, Adana, Turkey, 2014

Kataliz Yaz Okulu, Attendee, Malatya, Turkey, 2013

14. Netherlands' Catalysis and Chemistry Conference, Attendee, Netherlands, 2013

10. Ulusal Kimya Mühendisliği Kongresi, Attendee, İstanbul, Turkey, 2012

## Non Academic Experience

Strathclyde University