

## Assoc. Prof. BENGİ ÖZGÜN ÖZTÜRK

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-8977-5202

Publons / Web Of Science ResearcherID: J-1650-2013

ScopusID: 35590466300

Yoksis Researcher ID: 136534

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2009 - 2016

Undergraduate, Hacettepe University, Fen Fakültesi, Kimya Bölümü, Turkey 2005 - 2009

### Dissertations

Doctorate, Aktivitesi kontrol edilebilir yeni rutenyum komplekslerinin sentezi, karakterizasyonu ve katalitik uygulamaları, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (Dr), 2016

### Research Areas

Chemistry, Inorganic Chemistry, Metal Carbene Complexes, Metal olefin complexes, Organometallic Chemistry, Novel Ligands, Organic Chemistry, Catalysis, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2022 - Continues

Assistant Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2019 - Continues

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2011 - 2019

### Courses

Endüstriyel Kimya Lab., Undergraduate, 2022 - 2023

Bitirme Ödevi, Undergraduate, 2023 - 2024

Homojen ve Heterojen Kataliz, Undergraduate, 2023 - 2024

Özel Konular, Postgraduate, 2023 - 2024

Anorganik Reaksiyon Mekanizmaları, Postgraduate, 2022 - 2023

Anorganik Kimya Lab., Undergraduate, 2023 - 2024

Kimya I, Undergraduate, 2023 - 2024

Görsel Sanatlarda Anorganik Kimya , Undergraduate, 2023 - 2024, 2022 - 2023

Katı Yakıt Kimyası, Undergraduate, 2023 - 2024

Temel Kimya , Undergraduate, 2023 - 2024

Kendini Onarabilen Malzemeler , Undergraduate, 2023 - 2024

Heteroen Kataliz, Postgraduate, 2022 - 2023

## Advising Theses

Öztürk B. Ö., ALTIN İÇEREN YENİ NESİL TABLET KATALİZÖR SİSTEMLERİNİN GELİŞTİRİLMESİ, Postgraduate, Z.TUNALI(Student), 2023

Öztürk B. Ö., ATIK BİTKİSEL YAĞLARIN ETENOLİZİ İÇİN MORFOLOJİK OLARAK FARKLI SİLİKA JELLER İÇERİSİNDE HOVEYDA-GRUBBS İKİNCİ NESİL KATALİZÖRÜNÜN ENKAPSÜLASYONU, Postgraduate, M.AŞKUN(Student), 2023

Öztürk B. Ö., The development of ruthenium containing amphiphilic nano-reactor systems for transfer hydrogenation reactions in aqueous media, Postgraduate, B.DURMUŞ(Student), 2022

Öztürk B. Ö., Karabulut Şehitoğlu S., Fonksiyonel imidazol son-grubu içeren halka açılım metatez polimerlerinin sentezi ve karakterizasyonu, Postgraduate, G.ÇALIŞGAN(Student), 2018

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

- I. **A hybrid Au/Ru catalyst for sequential alkyne hydration/asymmetric transfer hydrogenation reactions**  
ÖZTÜRK B. Ö., Durmuş Ağlamaz B., Aşkun M., Tunali Z., Özer H., Sagdic K., Inci F.  
Catalysis Science and Technology, 2024 (SCI-Expanded)
- II. **A catalytic system based on  $\pi$ - $\pi$  stacking interactions between a pyrene substituted gold NHC catalyst and amphiphilic polymers for alkyne hydration reactions**  
ÖZTÜRK B. Ö., Acar H., Balcı A., Cihnioğlu S., Aşkun M., KARABULUT ŞEHİTOĞLU S.  
Dalton Transactions, vol.52, no.38, pp.13587-13593, 2023 (SCI-Expanded)
- III. **Poly(dimethylsiloxane)-Based Recyclable Tablet Catalysts Bearing Gold N-Heterocyclic Carbene Complexes for Alkyne Hydration Reactions**  
Tunali Z., Dagistanli S., Kubalas S., ÖZTÜRK B. Ö.  
Organic Process Research and Development, vol.27, no.7, pp.1300-1307, 2023 (SCI-Expanded)
- IV. **Dosage delivery of chiral ruthenium catalysts using non-ionic surfactants for asymmetric transfer hydrogenation reactions in aqueous media**  
ÖZTÜRK B. Ö., Aklan M., KARABULUT ŞEHİTOĞLU S.  
REACTION CHEMISTRY & ENGINEERING, vol.8, no.2, pp.424-431, 2022 (SCI-Expanded)
- V. **Olefin metathesis in confined spaces: the encapsulation of Hoveyda-Grubbs catalyst in peanut, square, and capsule shaped hollow silica gels**  
Askun M., Sagdic K., Inci F., ÖZTÜRK B. Ö.  
CATALYSIS SCIENCE & TECHNOLOGY, vol.12, no.20, pp.6174-6183, 2022 (SCI-Expanded)
- VI. **Encapsulation of the Hoveyda-Grubbs 2nd generation catalyst in magnetically separable alginate/mesoporous carbon beads for olefin metathesis reactions in water**  
Tunali Z., Sagdic K., Inci F., ÖZTÜRK B. Ö.  
REACTION CHEMISTRY & ENGINEERING, vol.7, no.7, pp.1617-1625, 2022 (SCI-Expanded)
- VII. **One-pot synthesis of alpha,beta-unsaturated ketones through sequential alkyne dimerization/hydration reactions using the Hoveyda-Grubbs catalyst**  
ÖZTÜRK B. Ö., Sariaslan B., Askun M., Tunali Z., KARABULUT ŞEHİTOĞLU S.  
NEW JOURNAL OF CHEMISTRY, vol.45, pp.16689-16695, 2021 (SCI-Expanded)
- VIII. **A non-ionic surfactant based catalyst tablet: a reusable gold-NHC catalyst system for alkyne hydration reactions**

Durmus B., Tunalı Z., ÖZTÜRK B. Ö.

CATALYSIS SCIENCE & TECHNOLOGY, vol.11, pp.3880-3884, 2021 (SCI-Expanded)

- IX. **Dehydrogenative alcohol coupling and one-pot cross metathesis/dehydrogenative coupling reactions of alcohols using Hoveyda-Grubbs catalysts**  
Ozer H., Arslan D., ÖZTÜRK B. Ö.  
NEW JOURNAL OF CHEMISTRY, vol.45, no.13, pp.5992-6000, 2021 (SCI-Expanded)
- X. **Encapsulation of N-heterocyclic carbene-gold (I) catalysts within magnetic core/shell silica gels: A reusable alkyne hydration catalyst**  
ÖZTÜRK B. Ö., Cetinel B., KARABULUT ŞEHİTOĞLU S.  
APPLIED ORGANOMETALLIC CHEMISTRY, vol.34, no.9, 2020 (SCI-Expanded)
- XI. **Transfer-hydrogenation reactions of ketones/aldehydes in water using first generation ruthenium indenylidene olefin metathesis catalyst: One step towards sequential cross-metathesis/transfer hydrogenation reactions**  
ÖZTÜRK B. Ö., ÖZTÜRK S.  
Molecular Catalysis, vol.480, 2020 (SCI-Expanded)
- XII. **Pyrene substituted amphiphilic ROMP polymers as nano-sized fluorescence sensors for detection of TNT in water**  
ÖZTÜRK B. Ö., Şehitoğlu S. K.  
Polymer, vol.183, 2019 (SCI-Expanded)
- XIII. **Carboxylic acid addition to terminal alkynes utilizing ammonium tagged Hoveyda-Grubbs catalyst supported on magnetically separable core/shell silica: A highly reusable and air compatible catalytic system**  
ÖZTÜRK B. Ö., Gurcu D., Sehitoglu S. K.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.883, pp.11-16, 2019 (SCI-Expanded)
- XIV. **Olefin metathesis in air using latent ruthenium catalysts: imidazole substituted amphiphilic hydrogenated ROMP polymers providing nano-sized reaction spaces in water**  
ÖZTÜRK B. Ö., Durmus B., Sehitoglu S. K.  
CATALYSIS SCIENCE & TECHNOLOGY, vol.8, no.22, pp.5807-5815, 2018 (SCI-Expanded)
- XV. **Ammonium tagged Hoveyda-Grubbs catalysts immobilized on magnetically separable core-shell silica supports for ring-closing metathesis reactions**  
ÖZTÜRK B. Ö.  
MICROPOROUS AND MESOPOROUS MATERIALS, vol.267, pp.249-256, 2018 (SCI-Expanded)
- XVI. **Imidazole end-functionalized polycyclooctenes from chain-transfer ring-opening metathesis polymerization and aminolysis reactions**  
ÖZTÜRK B. Ö., Calisgan G., Ozer H., Sehitoglu S. K.  
REACTIVE & FUNCTIONAL POLYMERS, vol.126, pp.63-73, 2018 (SCI-Expanded)
- XVII. **Nonaqueous and Aqueous Emulsion ROMP Reactions Induced by Environment-Friendly Latent Ruthenium Indenylidene Catalyst Bearing Morpholine Substituted Bidentate (N, O) Schiff Bases**  
ÖZTÜRK B. Ö., Kolberg A., Sehitoglu S. K.  
MACROMOLECULAR CHEMISTRY AND PHYSICS, vol.218, no.9, 2017 (SCI-Expanded)
- XVIII. **Imidazole-substituted ROMP polymers: Post-modification of poly(norbornenediester) derivatives with aminolysis reactions**  
ÖZTÜRK B. Ö., Yakut E., Ak E., Sehitoglu S. K.  
REACTIVE & FUNCTIONAL POLYMERS, vol.111, pp.22-29, 2017 (SCI-Expanded)
- XIX. **Improved molecular weight control in ring-opening metathesis polymerization reactions in organic and aqueous media using N-heterocyclic carbene-ruthenium arene/alkyne catalyst systems**  
ÖZTÜRK B. Ö., Sehitoglu S. K.  
APPLIED ORGANOMETALLIC CHEMISTRY, vol.30, no.5, pp.367-372, 2016 (SCI-Expanded)
- XX. **Tuning the molecular weight of ROMP polymers by using Grubbs type catalysts and terminal alkynes**  
ÖZTÜRK B. Ö., Sariaslan B., KARABULUT ŞEHİTOĞLU S.  
Journal of Organometallic Chemistry, vol.822, pp.13-19, 2016 (SCI-Expanded)

- XXI. **Applications of ruthenium indenylidene catalysts on ROMP-based self-healing epoxy systems**  
ÖZTÜRK B. Ö., Şehitoğlu S. K.  
Polymer, vol.69, pp.343-348, 2015 (SCI-Expanded)
- XXII. **Metathesis reactions of rapeseed oil-derived fatty acid methyl esters induced by monometallic and homobimetallic ruthenium complexes**  
ÖZTÜRK B. Ö., TOPOGLU B., Sehitoglu S. K.  
EUROPEAN JOURNAL OF LIPID SCIENCE AND TECHNOLOGY, vol.117, no.2, pp.200-208, 2015 (SCI-Expanded)
- XXIII. **A latent and controllable ruthenium-indenylidene catalyst for emulsion ROMP in water**  
ÖZTÜRK B. Ö., Sehitoglu S. K., MEIER M. A. R.  
EUROPEAN POLYMER JOURNAL, vol.62, pp.116-123, 2015 (SCI-Expanded)
- XXIV. **Highly controllable poly(N-vinylimidazole)-supported ruthenium catalysts for olefin metathesis reactions in aqueous media**  
ÖZTÜRK B. Ö., SARIASLAN B., Bayramgil N. P., Sehitoglu S.  
APPLIED CATALYSIS A-GENERAL, vol.483, pp.19-24, 2014 (SCI-Expanded)
- XXV. **A ruthenium-based catalytic system with switchable selectivity between cyclotrimerization and enyne metathesis/Diels-Alder reactions of terminal alkynes**  
Karabulut S., SARIASLAN B., ÖZTÜRK B. Ö.  
CATALYSIS COMMUNICATIONS, vol.41, pp.12-16, 2013 (SCI-Expanded)
- XXVI. **In situ modification of the Grubbs first generation catalyst: A highly controllable metathesis catalyst bearing tridentate Schiff base ligands**  
ÖZTÜRK B. Ö., BUCAK E., Karabulut S.  
JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL, vol.376, pp.53-62, 2013 (SCI-Expanded)
- XXVII. **A practical ruthenium based catalytic system bearing a switchable selectivity between the dimerization and cyclotrimerization reactions of alkynes**  
ÖZTÜRK B. Ö., Karabulut S., İmamoglu Y.  
APPLIED CATALYSIS A-GENERAL, vol.433, pp.214-222, 2012 (SCI-Expanded)
- XXVIII. **Activity of homobimetallic ruthenium alkylidene complexes on intermolecular [2+2+2] cyclotrimerisation reactions of terminal alkynes**  
ÖZTÜRK B. Ö., Karabulut S., İmamoglu Y.  
INORGANICA CHIMICA ACTA, vol.378, no.1, pp.257-263, 2011 (SCI-Expanded)
- XXIX. **Ru-mediated selective addition reactions of carboxylic acids to internal and terminal alkynes**  
Karabulut S., ÖZTÜRK B. Ö., İmamoglu Y.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.695, pp.2161-2166, 2010 (SCI-Expanded)
- XXX. **Silicon and Chlorine Substituted Unsaturated Polymers: ROMP of (bicyclo[2,2,1]hept-5-en-2-yl)ethylchlorodimethylsilane via Mo-based catalyst**  
Karabulut S., Şahin V., Öztürk B. Ö., İmamoglu Y.  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, vol.19, no.4, pp.570-574, 2009 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Mechanoactive Latent Ruthenium Metathesis Catalysts Bearing Imidazole End-Functionalized ROMP Polymers**  
ÖZTÜRK B. Ö., KARABULUT S.  
22th International Symposium on Olefin Metathesis and Related Chemistry, Zürich, Switzerland, 9 - 12 July 2017
- II. **"Latent Ruthenium Metathesis Catalysts Supported on Amphiphilic ROMP Polymers: Olefin Metathesis in Aqueous Media**  
ÖZTÜRK B. Ö., KARABULUT S.  
22th International Symposium on Olefin Metathesis and Related Chemistry, Zürich, Switzerland, 9 - 12 July 2017
- III. **Amfifilik Polimer Destekli Nano-Rutenyum Katalizör Sistemlerinin Geliştirilmesi**

Durmuş B., ÖZTÜRK B. Ö., KARABULUT S.

Uluslararası Katılımlı 6.Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017

- IV. **Kendini Onarabilen Polimerik Sistemler için Mekanik Olarak Aktive Edilebilen Yeni Nesil Rutenyum Katalizörlerinin Geliştirilmesi,**  
ÖZTÜRK B. Ö., KARABULUT S.  
6.Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017
- V. **Modification of Functional Polyesters by Metathesis Reactions in the Presence of Hoveyda Grubbs Type Catalysts**  
Okur D., ÖZTÜRK B. Ö., KARABULUT S.  
NCC6 Catalysis Conference, 27 - 30 April 2016
- VI. **Synthesis of poly cyclooctene derivatives bearing imidazole end group by ROMP reactions**  
Çalışgan G., ÖZTÜRK B. Ö., KARABULUT S.  
NCC6 Catalysis Conference, 27 - 30 April 2016
- VII. **Magnetic Nanoparticle Supported Latent Ruthenium Metathesis Catalysts for Olefin Metathesis Reactions**  
ÖZTÜRK B. Ö., KARABULUT S.  
NCC6 Catalysis Conference, 27 - 30 April 2016
- VIII. **Environmental Friendly Latent Ruthenium Metathesis Catalysts for the Synthesis of Nano ROMP Polymers**  
ÖZTÜRK B. Ö., KARABULUT S.  
NCC6 Catalysis Conference, 27 - 30 April 2016
- IX. **Modification of Poly norbornenediester Derivatives with Primary and Secondary Amine Groups**  
Ak E., Yakut E., ÖZTÜRK B. Ö., KARABULUT S.  
NCC6 Catalysis Conference, 27 - 30 April 2016

## Supported Projects

ÖZTÜRK B. Ö., Durmuş B., Project Supported by Higher Education Institutions, Homobimetallik rutenyumaren katalizörleri varlığında dehidrojenatif alkol eşleşme reaksiyonları ile fonksiyonel monoalkol ve ester bileşiklerinin sentezi, 2021 - 2024

Öztürk B. Ö., İnci F., TUBITAK Project, Akıllı Polimer Entegre Edilen Mikroakışkan Çiplerde Nadir Kanser Hücrelerinin Yakalanması ve Salınması, 2021 - 2024

KARABULUT ŞEHİTOĞLU S., ÖZTÜRK B. Ö., KURALAY F., Project Supported by Higher Education Institutions, TNT Sensör Uygulamaları için Manyetik Olarak Ayrılabilir Çok Katmanlı Silika Üzerine Destekli Rutenyum Bazlı Yeni Malzemelerin Geliştirilmesi, 2018 - 2023

Öztürk B. Ö., TUBITAK Project, Amfifilik Polimer Tabanlı Tablet Katalizör Sistemleri: Pi-Pi İstiflenmesi İle Altın-NHC Komplekslerini İçeren Yeni Nesil Nano-Reaktörlerin Hazırlanması, 2021 - 2022

ÖZTÜRK B. Ö., TUBITAK Project, Çift Kompartmanlı Au/Ru Bazlı Yeni Nesil Nano-Reaktör Sistemlerinin Geliştirilmesi, 2020 - 2022

ÖZTÜRK B. Ö., TUBITAK Project, Sıralı Çapraz Metatez/Dehidrojenatif Alkol Eşleşmesi Reaksiyonları İle Fonksiyonel Ester Bileşiklerinin Sentezi, 2019 - 2020

KARABULUT ŞEHİTOĞLU S., ÖZTÜRK B. Ö., Project Supported by Higher Education Institutions, Suda Çözünebilir Piren Bazlı TNT Sensör Sistemlerinin Geliştirilmesi, 2017 - 2019

ÖZTÜRK B. Ö., KARABULUT ŞEHİTOĞLU S., Project Supported by Higher Education Institutions, Manyetik Olarak Ayrılabilir Çok Katmanlı Silika Üzerine Destekli Yeni Nesil Rutenyum Katalizörlerinin Sentezi ve Katalitik Uygulamaları, 2017 - 2019

KARABULUT ŞEHİTOĞLU S., ÖZTÜRK B. Ö., Project Supported by Higher Education Institutions, Uç Alkinler ve Grubbs Tipi Katalizörler Kullanılarak ROMP Polimerlerinin Molekül Ağırlıklarının Ayarlanması, 2018 - 2018

ÖZTÜRK B. Ö., TUBITAK Project, Rutenyum içeren amfifilik nano-reaktör sistemlerinin geliştirilmesi ve su ortamındaki olefin metatez uygulamaları, 2017 - 2018

ÖZTÜRK B. Ö., TUBITAK Project, Kendini Onaran Polimerler için Mekanoaktif Rutenyum Metatez Katalizörlerinin Geliştirilmesi, 2016 - 2018

ÖZTÜRK B. Ö., Project Supported by Higher Education Institutions, Su Ortamındaki Olefin Metatez Reaksiyonları için Yüksek Derecede Kontrol Edilebilir Polivinilimidzol Destekli Rutenyum Katalizörleri, 2016 - 2016

ÖZTÜRK B. Ö., KARABULUT ŞEHİTOĞLU S., Project Supported by Higher Education Institutions, NanoROMP Polimerlerinin Sentezi için Aktivitesi Geciktirilebilir Çevre Dostu Rutenyum Metatez Katalizörleri, 2016 - 2016

KARABULUT ŞEHİTOĞLU S., SARIASLAN B., ÖZTÜRK B. Ö., Project Supported by Higher Education Institutions, Ru Alkiliden/Alkin İkili Sisteminin Geliştirilmesi ve Katalitik Aktivitesinin Araştırılması, 2015 - 2016

ÖZTÜRK B. Ö., TUBITAK Project, Romp Uygulamaları için Aktivitesi Kontrol Edilebilen Rutenyum Aren Bazlı Katalizör Sistemlerinin Geliştirilmesi Proje No 114Z669, 2014 - 2016

ÖZTÜRK B. Ö., TUBITAK Project, Romp Uygulamaları için Aktivitesi Kontrol Edilebilen Rutenyum Aren Bazlı Katalizör Sistemlerinin Geliştirilmesi, 2014 - 2015

## Metrics

Publication: 39

Citation (WoS): 184

Citation (Scopus): 253

H-Index (WoS): 9

H-Index (Scopus): 11

## Scholarships

221-A Yurtiçi Doktora Başarı Bursu, TUBITAK, 2009 - 2015

2214-A Yurtdışı Araştırma Bursu, TUBITAK, 2013 - 2013

## Awards

Öztürk B. Ö., Bilim Akademisi BAGEP 2023 Ödülü (Genç Bilim İnsanları Ödül Programı), Bilim Akademisi , April 2023

Öztürk B. Ö., Hacettepe Üniversitesi 2020 yılı Bilim Teşvik Ödülü , Hacettepe Üniversitesi, October 2021

Öztürk B. Ö., Türkiye Kataliz Derneği Lisansüstü Tez Ödülü 2014, Türkiye Kataliz Derneği, April 2014

## Non Academic Experience

Hacettepe Üniversitesi