

# Prof. SOLMAZ KARABULUT ŞEHİTOĞLU

## Personal Information

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## Education Information

Doctorate, Hacettepe University, Fen Fak, Kimya Böl, Turkey 2001 - 2006

Postgraduate, Hacettepe University, Fen Fak, Kimya Böl, Turkey 1997 - 2001

## Foreign Languages

English, B2 Upper Intermediate

## Research Areas

Chemistry, Inorganic Chemistry, Catalysis, Metal Carbene Complexes, Organometallic Chemistry, Natural Sciences

## Academic Titles / Tasks

Associate Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2011 - Continues

Assistant Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2009 - 2011

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 1998 - 2009

## Advising Theses

KARABULUT ŞEHİTOĞLU S., Aktivitesi kontrol edilebilir yeni rutenyum komplekslerinin sentezi, karakterizasyonu ve katalitik uygulamaları, Doctorate, B.ÖZGÜN(Student), 2016

KARABULUT ŞEHİTOĞLU S., Halka açılım metatez polimerizasyonu (ROMP) uygulamaları için aktivitesi kontrol edilebilen rutenyum bazlı katalitik sistemlerin geliştirilmesi, Postgraduate, B.SARIASLAN(Student), 2015

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

- 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)
- 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)

- III. **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)
- IV. **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)
- V. **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)
- VI. **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)
- VII. **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)
- VIII. **A ruthenium-based catalytic system with switchable selectivity between cyclootrimerization 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)
- IX. **Electro-Induced Early Transition Metal Metathesis Catalyst Systems for the Production of Polyacetylene**  
 Karabulut S.  
 POLYMER JOURNAL, vol.41, no.8, pp.629-633, 2009 (SCI-Expanded)
- X. **Solvent-free oxidation of benzyl alcohol over chromium orthoborate**  
 Oeztuerk O. F., Zuemreoglu-Karan B., Karabulut S.  
 CATALYSIS COMMUNICATIONS, vol.9, no.7, pp.1644-1648, 2008 (SCI-Expanded)
- XI. **Recent Advances in the Applications of Electrochemically Generated Molybdenum and Tungsten-Based Catalysts for the Olefins Metathesis**  
 Karabulut S., Imamoglu Y.  
 SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY, vol.38, no.10, pp.734-741, 2008 (SCI-Expanded)

## Books & Book Chapters

### I. Fizikokimya

TABAK A., KINAL A., YAKAR A., SALİH B., GECE E. G., Ayçık G. A., ASMAN G., KAYGUSUZ K., AKSU M. L., PULAT M., et al.  
 Palme, 2015

## 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. **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
- VI. **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
- 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. **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
- IX. **Modification of Functional Polyesters by Metathesis Reactions in the Presence of Hoveyda Grubbs TypeCatalysts**  
Okur D., ÖZTÜRK B. Ö., KARABULUT S.  
NCC6 Catalysis Conference, 27 - 30 April 2016
- X. **Acyclic Diene Metathesis (ADMET) Polymerization of Bis(4-pentenyl) dimethylstannane and Bis(4-pentenyl) diphenylstannane with an Electrochemically Activated Catalyst System**  
Karabulut S., Imamoglu Y.  
Conference of the NATO-Advanced-Study-Institute on Green Metathesis Chemistry - Great Challenges in Synthesis, Catalysis and Nanotechnology, Bucharest, Romania, 21 July - 02 August 2008, pp.361-368
- XI. **A study on the reactivity of  $WCl_6 \cdot e(-) - Al-CH_2Cl_2$  with the silicon-containing dienes**  
Karabulut S., AYDOĞDU C., DÜZ B., Imamoglu Y.  
Conference of the NATO Advanced Study Institute on New Frontiers in Metathesis Chemistry, Antalya, Turkey, 4 - 16 September 2006, vol.243, pp.367-368
- XII. **Ring-opening metatuesis activity of ruthenium-based olefin metathesis catalyst coordinated with 1,3-bis(2,6-diisopropylphenyl)-4,5dihydroimidazoline**  
Karabulut S., Verpoort F.  
Conference of the NATO Advanced Study Institute on New Frontiers in Metathesis Chemistry, Antalya, Turkey, 4 - 16 September 2006, vol.243, pp.185-187
- XIII. **Investigation of the microstructure of metal catalyzed cyclopentene co-norbornene polymers by spectral methods**  
ÇETİNKAYA S., Karabulut S., Imamoglu Y.  
Conference of the NATO Advanced Study Institute on New Frontiers in Metathesis Chemistry, Antalya, Turkey, 4 - 16 September 2006, vol.243, pp.355-356

## Supported Projects

- KARABULUT ŞEHİTOĞLU S., Project Supported by Higher Education Institutions, Üç Dişli (O-N-O) Schiff Bazı İçeren Yeni Rutenyum Alkilinden Komplekslerinin Sentezi, Karakterizasyonu ve Katalitik Uygulamaları, 2011 - Continues
- 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
- 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
- KARABULUT ŞEHİTOĞLU S., Project Supported by Higher Education Institutions, Monometalik ve homobimetalik rutenyum kompleksleriyle yağ asitlerinin metatez reaksiyonları, 2016 - 2017
- 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., Project Supported by Higher Education Institutions, Rutenyum Bazlı Katalitik Sistemlerin Terminal Alkinlerin Siklotrimerizasyon ve Enin MetatezDiels Alder reaksiyonları Üzerindeki Katalitik Aktivitelerinin Araştırılması, 2015 - 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
- KARABULUT ŞEHİTOĞLU S., Project Supported by Higher Education Institutions, Kendini Onarabilen Yeni Polimerik Sistemlerin Geliştirilmesi, 2014 - 2015
- KARABULUT ŞEHİTOĞLU S., Project Supported by Higher Education Institutions, ÇOKLU ENİN METATEZ/DİELS-ALDER REAKSİYONLARI İLE FONKSİYONEL SIKLIK DİEN TÜREVLERİ ve AROMATİK YAPILARIN SENTEZİ, 2014 - 2015

## Metrics

- Publication: 25  
Citation (WoS): 51  
Citation (Scopus): 48  
H-Index (WoS): 4  
H-Index (Scopus): 5

## Non Academic Experience

HACETTEPE ÜNİVERSİTESİ