

Dr. Idris KARAKAYA



KİŞİSEL BİLGİLER

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EĞİTİM

Post Doc.	University of Pennsylvania, USA, Sept. 2014 – Sept. 2015
Doktora	Atatürk Üniversitesi Fen Bilimleri Enstitüsü, 2008-2014
Lisans	Atatürk Üniversitesi, Kazım Karabekir Eğitim Fakültesi, 2002-2007

İŞ BİLGİLERİ

2009-2014	Osmaniye Korkut Ata Üniversitesi Fen Edebiyat Fakültesi (Arş. Gör.)
2014-2016	Osmaniye Korkut Ata Üniversitesi Fen Edebiyat Fakültesi (Dr. Arş. Gör.)
2020-	Gebze Teknik Üniversitesi Temel Bilimler Fakültesi (Dr. Arş. Gör.)

ARAŞTIRMA İLGİ ALANLARI

Asimetrik sentez
Biyolojik aktif heterohalkalı yapıların sentezi
Organoboronic moleküllerin sentezi
Photoredox Cross-coupling reaksiyonları
Transfer Hidrojenasyon Reaksiyonları

ÖDÜL VE BAŞARI

2003-2007 : Bölüm Birinciliği
2008-2013 : TÜBİTAK Doktora Bursu
2014-2015 : TÜBİTAK Doktora sonrası yurtdışı araştırma bursu (Amerika)

BİLDİRİLER

1. Synthesis and asymmetric catalytic activity of 4-aminoquinazolinone imines in diethylzinc addition to aldehydes (25. National Chemistry Congress 27 June - 2 July 2011 Erzurum Turkey) (Poster)
2. Synthesis of Quinazolinols as chiral catalysts in enantioselective phenylboronic acid addition to aldehydes (Pharmaceutical Chemistry, Production, Technology and Standardization Congress, 29-31 March 2013 Antalya, Turkey) (Poster)
3. Synthesis and Asymmetric Catalytic Activity of 4-Phenylquinazolines (XVth Conference on Heterocycles in Bio-organic Chemistry May 27-30, 2013, Riga, Latvia) (Poster)
4. Synthesis of Quinazolinone and Quinazoline Based Chiral Alcohols and Application In Catalytic Asymmetric Weitz-Scheffer Epoxidation of Chalcones, Trans Mediterranean Colloquium on Heterocyclic Chemistry TRAMECH VIII, 11-15 November 2015, Antalya, Turkey (Poster)
5. Synthesis of heterogeneous ruthenium (II) complex and its application in transfer

- hydrogenation reaction. Anatolian Conference on Synthetic Organic Chemistry ACSOC II 2016, Aydin, Turkey (Poster)
6. Quinazolinebased ruthenium(II) complexes for asymmetric transfer hydrogenation of ketones. Anatolian Conference on Synthetic Organic Chemistry ACSOC II (Poster)
 7. Hydroxyl group effect in novel NNN type pyridine based ruthenium (II) complex for the transfer hydrogenation of ketones. Anatolian Conference on Synthetic Organic Chemistry ACSOC II 2016, Aydin, Turkey (Poster)
 8. Asymmetric transfer hydrogenation of ketones by aminomethyl quinazoline based ruthenium (II) complex under mild conditions. Anatolian Conference on Synthetic Organic Chemistry ACSOC II 2016, Aydin, Turkey (Poster)
 9. Photoredox / Ni Dual Catalysis for the Synthesis of Benzylic Ethers. Anatolian Conference on Synthetic Organic Chemistry ACSOC II 2016, Aydin, Turkey (Oral Presentation)

YAYINLAR

- (1) **Karakaya, I.**; Karabuga, S.; Ulukanli, Z.; Ulukanli, S.; Synthesis and antifungal evaluation of imines derived from 3-Amino-2-isopropyl-3H-quinazolin-4-one. *Org. Commun.* 6:4 (2013) 139-147.
- (2) **Karakaya, I.**; Karabuga, S.; Altundas, R.; Ulukanli, S.; Synthesis of quinazoline based chiral ligands and application in the enantioselective addition of phenylacetylene to aldehydes. *Tetrahedron* **2014**, 70, 8385–8388.
- (3) Karabuga, S.; **Karakaya, I.**; Ulukanli, S.; 3-Aminoquinazolinones as chiral ligands in catalytic enantioselective diethylzinc and phenylacetylene addition to aldehydes. *Tetrahedron Asymmetry* **2014**, 25, 851–855.
- (4) Karabuga S.; Bars, S.; **Karakaya, I.**; Gumus, S. Efficient transfer hydrogenation reactions with quinazoline-based ruthenium complexes. *Tetrahedron Lett.* **2015**, 56, 101–104.
- (5) Primer, D. N.; **Karakaya, I.**; Tellis, J. C.; Molander, G. A.; Single-Electron Transmetalation: An Enabling Technology for Secondary Alkylboron Cross-Coupling. *J. Am. Chem. Soc.* **2015**, 137 (6), pp 2195–2198.
- (6) **Karakaya, I.**; Primer, D. N.; Molander, G. A.; Photoredox Cross-Coupling: Ir/Ni Dual Catalysis for the Synthesis of Benzylic Ethers. *Org. Lett.* **2015**, 17, 3294–3297.
- (7) Rizwan, K.; **Karakaya, I.**; Heitz D.; Zubair M.; Rasool N.; Molander G. A.; Copper-mediated N-arylation of methyl 2-aminothiophene-3-carboxylate with organoboron reagents. *Tetrahedron Lett.*, **2015**, 56, 6839–6842.
- (8) Kucukturkmen, C.; Agac, A.; Eren, A.; **Karakaya, I.**; Aslantas, M.; Celik, O.; Ulukanli, S.; Karabuga, S.; Asymmetric transfer hydrogenation of ketones by N,N-containing quinazoline-based ruthenium(II) complexes. *Catalysis Communications* **2016**, 74, 122-125.
- (9) **Karakaya, I.**; Karabuga, S.; Mart, M.; Altundas, R.; Ulukanli, S.; Synthesis and Catalytic Asymmetric Applications of Quinazolinol Ligands. *Synthesis* **2016** 48, Doi: 10.1055/s-0035-1561584.
- (10) Sahin, I.; Emir, S.; Ispir, E.; **Karakaya, I.**; Gumus, S.; Ulusoy, M.; Karabuga. S.; Hydroxyl group effect in novel NNN type pyridine based ruthenium (II) complex for the transfer hydrogenation of ketones *Catalysis Communications* **2016**, 85, 30-33.
- (11) Agac, A.; **Karakaya, I.**; Sahin, I.; Emir, S.; Karabuga, S.; Ulukanli, S.; Synthesis of aminomethyl quinazoline based ruthenium (II) complex and its application in asymmetric transfer hydrogenation under mildconditions. *Journal of Organometallic Chemistry* 819 (**2016**) 189-193.

PROJELER

Fenolik grup içeren prolin bileşiklerinin aldol reaksiyonlarındaki katalitik uygulamaları- Yardımcı Yürütücü (Kahramanmaraş Sütçü İmam Üniversitesi BAB Projeleri 2014)