

MURAT OLUŞ ÖZBEK

ASSOCIATE PROFESSOR



E-Mail Address : olus.ozbek@gtu.edu.tr
Phone (Work) : 2626052126-
Phone (Mobile) : 5056437635
Address : Gebze Teknik Üniversitesi, Kimya Mühendisliği Bölümü,
Cumhuriyet Mah., Gebze, Kocaeli.

Education

Doctoral 2006 14/Eylül/2011	null Thesis name: Computational study of ethylene epoxidation (2011) Thesis Advisor:(Işık Önal; Rutger A. Van Santen)
Master (Thesis) 2003 29/Ağustos/2006	null Thesis name: Inferential model predictive control of poly(ethylene terephthalate) degradation during extrusion (2006) Thesis Advisor:(Canan Özgen; Göknur Bayram)
Bachelor's Degree 1998 29/Haziran/2003	null

Academic Title

ASSISTANT PROFESSOR 2020	GEBZE TECHNICAL UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ/PROSES VE REAKTÖR TASARIMI ANABİLİM DALI
ASSISTANT PROFESSOR 2015-2020	YEDİTEPE UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ
RESEARCH ASSISTANT 2006-2011	MIDDLE EAST TECHNICAL UNIVERSITY/FEN BİLİMLERİ ENSTİTÜSÜ

Supervised Theses:

Yüksek Lisans

2023

1. ÇELİKEL GÖKBERK, (2023). Quantum Chemical Investigation of Methanol Decomposition on Copper Embedded Boron Nitride To Be Used In A Fuel Cell, Gebze Teknik Üniversitesi->Lisansüstü Eğitim Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı (Devam Ediyor)

2022

2. USLU EZGİ, (2022). A DFT study of chlorine based copper corrosion and its inhibition, Yeditepe Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı (Tamamlandı)

2017

3. DALMAN AYŞE NUR, (2017). A wet-stock management and leak detection system for fuel tanks, Yeditepe Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı (Tamamlandı)

Positions in Projects:

1. Metanol Buhar Reformlamasında Cu-ZrO₂-Al₂O₃ katalizörünün etkinliğinin ve CO Seçiciliğinin DFT Simülasyonları ve deneysel yöntemler ile İncelenmesi , Scientific Research Project Supported by Higher Education Institutions, Araştırmacı:MURAT OLUŞ ÖZBEK, Yürütücü:ORHAN ÖZCAN, Araştırmacı:AYŞE NİLGÜN AKIN, , 04/07/2024 (In Progress) (NATIONAL)
2. Yakıt Hücrelerinde Kullanılmak Üzere Bakır Katkılı 2B AlN, BN ve TiN yapılarında Metanol Parçalanmasının Kuantum Kimyasal Metotlar İle İncelenmesi, Scientific Research Project Supported by Higher Education Institutions, Yürütücü:MURAT OLUŞ ÖZBEK, Araştırmacı:FATIMA BÜŞRA ASLAN, Araştırmacı:Dicle Sevilmiş, Araştırmacı:GÖKBERK ÇELİKEL, , 01/08/2024 (In Progress) (NATIONAL)
3. KARBONMONOKSİT KAYNAKLI YENİLENEBİLİR METANOL SENTEZİNİN BAKIR (111) YÜZEYİNDE TEORİK İNCELENMESİ, TUBITAK Project, Danışman:MURAT OLUŞ ÖZBEK, Yürütücü:Aleyna Yazel Kurtluk, , 24/04/2023 - 30/07/2023 (NATIONAL)
4. Rh Katkılı Anataz TiO₂ (101) ve (001) Yüzeylerinde Formaldehitin Fotokatalitik Oksidasyonu, TUBITAK Project, Danışman:MURAT OLUŞ ÖZBEK, Araştırmacı:İrem Alpaslan, , 27/01/2020 - 08/05/2020 (NATIONAL)
5. Karbonmonoksit Kaynaklı Yenilenebilir Metanol Sentezinin Bakır (110) yüzeyinde Teorik Olarak İncelenmesi, TUBITAK Project, Danışman:MURAT OLUŞ ÖZBEK, Yürütücü:İpek Yenda Çınar, , 24/04/2023 - 30/07/2023 (NATIONAL)
6. Karbonmonoksit Kaynaklı Yenilenebilir Metanol Sentezinin Bakır (100) Yüzeyinde Teorik İncelenmesi, TUBITAK Project, Danışman:MURAT OLUŞ ÖZBEK, Yürütücü:Beyza Yertürk, , 24/04/2023 - 30/07/2023 (NATIONAL)
7. Özgün Zeolitlerle Metanın Tek Aşamada Metanole Çevrilmesi, TUBITAK Project (3501), Yürütücü:BAHAR İPEK, Bursiyer:Özgün Memioğlu, Bursiyer:İKLİM GÖKÇE, , 01/11/2018 - 28/01/2021 (NATIONAL)
8. Karbonmonoksit Kaynaklı Yenilenebilir Metanol Sentezinin Bakır (211) yüzeyinde Teorik Olarak İncelenmesi, TUBITAK Project, Danışman:MURAT OLUŞ ÖZBEK, Yürütücü:Dilan Sarıtaş, , 24/04/2023 - 30/07/2023 (NATIONAL)
9. Atmosferik Basıncıta Holmiyum İçeren Destekli Katalizörlerle CO₂ Hidrojenlenmesi, TUBITAK Project (1001), Yürütücü:BAHAR İPEK, Araştırmacı:MURAT OLUŞ ÖZBEK, Araştırmacı:İŞİK ÖNAL, , 01/11/2019 - 12/01/2023 (NATIONAL)
10. Aromataz enzimi üzerinde potansiyel inhibisyon özelliği gösterebilecek yeni ilaç aday molekülleri ve bunların peptid hibritlerinin sentezi, karakterizasyonu ve antikanser aktivitelerinin in-siliko ve in-vitro incelenmesi, TUBITAK Project (1001), Yürütücü:SEVGİ SARIGÜL, Araştırmacı:MURAT OLUŞ ÖZBEK, Danışman:ÖZGÜL GÖK, Araştırmacı:ZEYNEP KANLIDERE, Araştırmacı:GÖKNİL PELİN COŞKUN, , 01/03/2022 (In Progress) (NATIONAL)
11. Aromataz enzimi üzerinde potansiyel inhibisyon özelliği gösterebilecek yeni ilaç aday molekülleri ve bunların peptid hibritlerinin sentezi, karakterizasyonu ve antikanser aktivitelerinin in-siliko ve in-vitro incelenmesi, TUBITAK Project (1001), Yürütücü:SEVGİ SARIGÜL ÖZBEK, Araştırmacı:MURAT OLUŞ ÖZBEK, Araştırmacı:GÖKNİL PELİN COŞKUN, Araştırmacı:ZEYNEP KANLIDERE, Danışman:ÖZGÜL GÖK, , 01/03/2022 (In Progress) (NATIONAL)
12. Sentez Gazının Bakır Tabanlı Katalizör İle Metanole Dönüşümünde Co İle Co₂ Arasındaki Seçiciliğin Yoğunluk Fonksiyoneli Teorisi İle Belirlenmesi, TUBITAK Project (1001), Yürütücü:MURAT OLUŞ ÖZBEK, , 04/04/2024 (In Progress) (NATIONAL)
13. FeMordenit Yapılarda Metan Gazının Metanole Dönüşüm Sürecinin Hesaplamalı Kimya Metotları İle İncelenmesi, TUBITAK Project (1002), Yürütücü:MURAT OLUŞ ÖZBEK, Danışman:BAHAR İPEK TORUN, , 01/02/2023 - 01/08/2023 (NATIONAL)
14. Karbondioksit Kaynaklı Yenilenebilir Metanol Sentezinin Bakır(100) Yüzeyinde Teorik İncelenmesi, TUBITAK Project, Danışman:MURAT OLUŞ ÖZBEK, Yürütücü:Ayşenur Uzuner, , 24/04/2023 - 30/07/2023 (NATIONAL)

Administrative Position

Head of Commission 2020	GEBZE TECHNICAL UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ/PROSES VE REAKTÖR TASARIMI ANABİLİM DALI
Commission Membership 2020	GEBZE TECHNICAL UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ/PROSES VE REAKTÖR TASARIMI ANABİLİM DALI
Head of Commission 2020	GEBZE TECHNICAL UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ/PROSES VE REAKTÖR TASARIMI ANABİLİM DALI

Commission Membership 2020	GEBZE TECHNICAL UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ/PROSES VE REAKTÖR TASARIMI ANABİLİM DALI
Co-head of Department 19.09.2021-19.04.2022	GEBZE TECHNICAL UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ/KİMYA MÜHENDİSLİĞİ PR. (İNGİLİZCE)
Co-head of Department 2015-2020	YEDİTEPE UNIVERSITY/MÜHENDİSLİK FAKÜLTESİ/KİMYA MÜHENDİSLİĞİ BÖLÜMÜ

Memberships to Scientific Organizations

1. Türk Kataliz Derneği, Member , 2018

Courses *

Öğrenim Dili Course Hour Semester

2023-2024

Bachelor's Degree Programme

CED463	Mathematical Modeling in Chemical Engineering	English	3	Güz
CED492	Graduation Project II	English	4	Bahar
CED491	Graduation Project I	English	4	Bahar
CED302	Chemical Process Control	English	3	Bahar
	Graduation Project I (Güz Dönemi)	English	4	Güz

Doctorate Programme

KMB613	Kimyasal Reaktör Tasarımında İleri Konular	English	3	Bahar
	Katalizör Araştırmalarında Hesaplamalı Metotlar	English	3	Güz

2022-2023

Bachelor's Degree Programme

	Graduation Project II (Bahar dönemi)	English	4	
	Computer Applications in Chemical Engineering (Bahar dönemi)	English	3	
	Chemical Process Design (Bahar dönemi)	English	5	
	Graduation Project I (Güz dönemi)	English	4	
	Mathematical Modeling in Chemical Engineering (Güz Dönemi)	English	3	

Doctorate Programme

	Kimyasal Reaktör Tasarımında İleri Konular	Turkish	3	
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Works

Articles published in international refereed journals:

1. GÖKÇE İKLİM, ÖZBEK MURAT OLUŞ, İPEK TORUN BAHAR (2023). Conditions for higher methanol selectivity for partial CH₄ oxidation over Fe-MOR using N₂O as the oxidant and comparison to Fe-SSZ-13, Fe-SSZ-39, Fe-FER, and Fe-ZSM-5. JOURNAL OF CATALYSIS, 427, 115113, Doi: 10.1016/j.jcat.2023.115113 (Publication No: 8491351)
2. sarohan nurkan, ÖZBEK MURAT OLUŞ, kaya yasemin, Abdellatif Mahmoud, İPEK TORUN BAHAR (2022). Hydrogen adsorption on Co²⁺ - and Ni²⁺- exchanged -US-Y and -ZSM-5. A combined sorption, DR UV-Vis, synchrotron XRD and DFT study. International Journal of Hydrogen Energy, 47(75), 32181-32201., Doi: 10.1016/j.ijhydene.2022.07.130 (Publication No: 7761667)

Articles published in international refereed journals:

3. ÖZBEK MURAT OLUŞ (2022). A theoretical study of CO adsorption on Cu(211) surface with coverage effects. *Turkish Journal of Chemistry*, 46(4), 1199-1209., Doi: 10.55730/1300-0527.3427 (Publication No: 7757852)
4. ÖZBEK MURAT OLUŞ, İPEK TORUN BAHAR (2022). A Theoretical Investigation of Cu+, Ni2+ and Co2+ Exchanged Zeolites for Hydrogen Storage. *ChemPhysChem*, 23(20), 1-11., Doi: 10.1002/cphc.202200272 (Publication No: 7748936)
5. SAROHAN NURKAN, ÖZBEK MURAT OLUŞ, Kaya Yasemin, Abdellatief Mahmoud, İPEK TORUN BAHAR (2022). Hydrogen adsorption on Co2+ - and Ni2+- exchanged -US-Y and -ZSM-5. A combined sorption, DR UV-Vis, synchrotron XRD and DFT study. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 47(75), 32181-32201., Doi: 10.1016/j.ijhydene.2022.07.130 (Publication No: 7929018)
6. ÇAĞLAR BAŞAR, ÖZBEK MURAT OLUŞ, Niemantsverdriet J W, Westrate C. J. (2016). The effect of C-OH functionality on the surface chemistry of biomass-derived molecules: ethanol chemistry on Rh(100). *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 18(43), 30117-30127., Doi: 10.1039/c6cp06069b (Publication No: 4298266)
7. atmaca deniz onay, DÜZENLİ DERYA, ÖZBEK MURAT OLUŞ, ÖNAL IŞIK (2016). A density functional theory study of propylene epoxidation on RuO2(110) surface. *APPLIED SURFACE SCIENCE*, 385, 99-105., Doi: 10.1016/j.apsusc.2016.05.090 (Publication No: 4298263)
8. ÇAĞLAR BAŞAR, ÖZBEK MURAT OLUŞ, Niemantsverdriet J W, Westrate C. J. (2015). Modeling the Surface Chemistry of Sugars: Glycolaldehyde on Rhodium (100). *The Journal of Physical Chemistry C*, 119(40), 22915-22923., Doi: 10.1021/acs.jpcc.5b05916 (Publication No: 4298268)
9. ÖZBEK MURAT OLUŞ, Niemantsverdriet JW (Hans) (2015). Methane, formaldehyde and methanol formation pathways from carbon monoxide and hydrogen on the (0 0 1) surface of the iron carbide χ -Fe5C2. *Journal of Catalysis*, 325, 9-18., Doi: 10.1016/j.jcat.2015.01.018 (Publication No: 4298270)
10. ÖZBEK MURAT OLUŞ, Niemantsverdriet JW (Hans) (2014). Elementary reactions of CO and H-2 on C-terminated χ -Fe5C2(001) surfaces. *JOURNAL OF CATALYSIS*, 317, 158-166., Doi: 10.1016/j.jcat.2014.06.009 (Publication No: 4298273)
11. ÖZBEK MURAT OLUŞ, BAYRAM GÖKNUR, ÖZGEN CANAN (2014). Molecular weight control of poly(ethylene terephthalate) in extrusion process. *POLYMER ENGINEERING AND SCIENCE*, 54(2), 459-465., Doi: 10.1002/pen.23577 (Publication No: 4298275)
12. ÖZBEK MURAT OLUŞ, van Santen Rutger (2013). The Mechanism of Ethylene Epoxidation Catalysis. *CATALYSIS LETTERS*, 143(2), 131-141., Doi: 10.1007/s10562-012-0957-3 (Publication No: 4298281)
13. ÖZBEK MURAT OLUŞ, Önal Işık, van Santen Rutger (2013). Chlorine and Caesium Promotion of Silver Ethylene Epoxidation Catalysts. *CHEMCATCHEM*, 5(2), 443-451., Doi: 10.1002/cctc.201200690 (Publication No: 4298279)
14. ÖZBEK MURAT OLUŞ, Önal Işık, van Santen Rutger (2012). Effect of Surface and Oxygen Coverage on Ethylene Epoxidation. *TOPICS IN CATALYSIS*, 55, 710-717., Doi: 10.1007/s11244-012-9870-7 (Publication No: 4298284)
15. ÖZBEK MURAT OLUŞ, Önal Işık, van Santen Rutger (2011). Why silver is the unique catalyst for ethylene epoxidation. *Journal of Catalysis*, 284(2), 230-235., Doi: 10.1016/j.jcat.2011.08.004 (Publication No: 4298286)
16. ÖZBEK MURAT OLUŞ, Önal Işık, van Santen Rutger (2011). Ethylene epoxidation catalyzed by chlorine-promoted silver oxide. *Journal of Physics: Condensed Matter*, 23(40), 404202, Doi: 10.1088/0953-8984/23/40/404202 (Publication No: 4298289)
17. ÖZBEK MURAT OLUŞ, Önal Işık, van Santen Rutger (2011). Ethylene Epoxidation Catalyzed by Silver Oxide. *ChemCatChem*, 3(1), 150-153., Doi: 10.1002/cctc.201000249 (Publication No: 4298292)
18. Erdogan Rezan, ÖZBEK MURAT OLUŞ, Önal Işık (2010). A periodic DFT study of water and ammonia adsorption on anatase TiO2 (001) slab. *Surface Science*, 604(11), 1029-1033., Doi: 10.1016/j.susc.2010.03.016 (Publication No: 4298294)

B. Papers presented at international scientific meetings and published in proceedings :

1. ÖZBEK MURAT OLUŞ, KIZILKAYA ALİ CAN, FELLAH MEHMET FERDİ, ÖNAL IŞIK (2009). A DFT study on Cu doped Ag surfaces for propylene epoxidation. 21st North American Catalysis Society Meeting 2009 (Abstract/Poster) (Publication No: 7757974)
2. ÖZBEK MURAT OLUŞ, van Santen Rutger, Önal Işık (2009). A DFT Study of Ethylene Epoxidation on AgO And Ag2O Slab Surfaces. 21st North American Catalysis Society Meeting 2009 (Abstract/Poster) (Publication No: 7757978)

3. ÖZBEK MURAT OLUŞ, van Santen Rutger (2012). Direct Ethylene Epoxidation by Silver Oxide. 15th International Congress on Catalysis (Abstract/Poster) (Publication No: 7758010)
4. ÖZBEK MURAT OLUŞ, Niemantsverdriet J.W. (Hans) (2013). Theoretical Investigation of Fischer-Tropsch Synthesis on γ -Fe₅C₂(001) Surface. XIth European Congress On Catalysis (Abstract/Poster) (Publication No: 7758879)
5. GÖKÇE İKLİM, ÖZBEK MURAT OLUŞ, İPEK TORUN BAHAR (2023). Active Site Candidates for Direct Methane to Methanol Conversion on Fe-MOR. 19th Asian Chemical Congress (Abstract/Oral Presentation) (Publication No: 8398859)
6. ÇELİKEL GÖKBERK, ÖZBEK MURAT OLUŞ (2024). Quantum Chemical Investigation of Methanol Decomposition on Copper Embedded Boron Nitride Surface to be Used in a Fuel Cell. 17th Quantum Reactive Scattering Workshop (Abstract/Poster) (Publication No: 9106966)
7. Sevilmiş Dicle, ÖZBEK MURAT OLUŞ (2024). From CO to CH₃OH: A Comparative Study of Zn Doping over Cu (100) and Cu (110) Catalytic Surfaces. 17th Quantum Reactive Scattering Workshop (Abstract/Poster) (Publication No: 9106956)
8. ASLAN FATIMA BÜŞRA, ÖZBEK MURAT OLUŞ (2024). Periodic DFT investigation of CO hydrogenation to methanol on Zn/Cu(111) and Zn/Cu(211) surfaces with dispersion and Hubbard effects.. 17th Quantum Reactive Scattering Workshop (Abstract/Poster) (Publication No: 9106963)
9. SARIGÜL SEVGİ, KARAKOÇ JÜLİDE CANSU, ÖZBEK MURAT OLUŞ, KÖKSAL AKKOÇ MERİÇ (2023). The Structural Analysis of Acetohydrazide Derivatives by NMR and the Elucidation of the Formation Reaction Mechanism by DFT. 19th Asian Chemical Congress, ACC2023 (Abstract/Oral Presentation) (Publication No: 8456781)
10. Dokumacı Nazar, ÖZBEK MURAT OLUŞ, COŞKUN GÖKNİL PELİN (2022). Synthesis, Structure Elucidation and Molecular Docking Studies of Novel Thiosemicarbazide Derivatives. 8th International BAU Drug Design Congress, 90-91. (Full Text Publication/Oral Presentation) (Publication No: 8278164)
11. ÖZBEK MURAT OLUŞ (2022). RECENT RESEARCH ON HYDROGEN STORAGE AND CO CONVERSION. CPC XIII - 13th Chemical Physics Congress (Abstract/Oral Presentation) (Publication No: 7863330)
12. SAROHAN NURKAN, ÖZBEK MURAT OLUŞ, İPEK TORUN BAHAR (2022). EFFECT OF Co²⁺ AND Ni²⁺ CATIONS ON H₂ STORAGE PROPERTIES OF ZEOLITES. 20th International Zeolite Conference (IZC-2022), 1(1), 362-365. (Full Text Publication/Oral Presentation) (Publication No: 7750077)
13. SAROHAN NURKAN, ÖZBEK MURAT OLUŞ, İPEK TORUN BAHAR (2022). EFFECT OF Co²⁺ AND Ni²⁺ CATIONS ON H₂ STORAGE PROPERTIES OF ZEOLITES. 20th International Zeolite Conference, 1(1), 362-365. (Full Text Publication/Oral Presentation) (Publication No: 7734108)
14. SAROHAN NURKAN, ÖZBEK MURAT OLUŞ, kaya yasemin, İPEK TORUN BAHAR (2022). High H₂ Uptake on Co(II)- and Ni(II)- exchanged ZSM-5 and US-Y having Optimal Heat of Adsorption Values. 23 rd World Hydrogen Energy Conference (WHEC-2022), 1(1), 455-457. (Full Text Publication/Oral Presentation) (Publication No: 7750066)
15. SAROHAN NURKAN, ÖZBEK MURAT OLUŞ, Kaya Yasemin, İPEK TORUN BAHAR (2022). High H₂ Uptake on Co(II)- and Ni(II)- exchanged ZSM-5 and US-Y having Optimal Heat of Adsorption Values. 23rd World Hydrogen Energy Conference, 1(1), 488-490. (Full Text Publication/Oral Presentation) (Publication No: 7732890)
16. ÖZBEK MURAT OLUŞ (2018). Ab-initio thermodynamics applications in surface science and heterogeneous catalysis. 12th chemical physics congress, 1(1), 47 (Abstract/Oral Presentation) (Publication No: 5131076)
17. ÖZBEK MURAT OLUŞ, van Santen Rutger (2010). Effect of oxygen coverage on ethylene epoxidation on Ag(111) surface. NCCC XI, The Netherlands' Catalysis and Chemistry Conference 2010 (Abstract/Oral Presentation) (Publication No: 7757988)

D. Articles published in national refereed journals :

1. ÖZBEK MURAT OLUŞ (2021). Theoretical Investigation Of Coverage Effects Of CO Adsorption On Cu(100) Surface. Sakarya University Journal of Science, 25(2), 297-307., Doi: 10.16984/saufenbilder.795798 (Control No: 7050744)
2. Dalman Ayşe Nur, ÖZBEK MURAT OLUŞ (2020). A Wet-Stock Management and Leak Detection System for Fuel Tanks. Journal of Advanced Research in Natural and Applied Sciences, 6(2), 303-316., Doi: 10.28979/jarnas.845193 (Control No: 6799047)

E. Papers presented at national scientific meetings and published in

1. ÇELİKEL GÖKBERK, ÖZBEK MURAT OLUŞ (2024). Quantum Chemical Investigation of Methanol Decomposition on Copper Doped Boron Nitride Surface for Fuel Cell Applications. 7th Anatolian School of Catalysis (ASC-7) (Abstract/Poster) (Publication No: 9107018)

2. Sevilmiş Dicle, ÖZBEK MURAT OLUŞ (2024). Periodic DFT study of Cu(100) and Cu(110) Catalytic Surfaces with Hubbard and Dispersion Effects for methanol production from CO. 7th Anatolian School of Catalysis (ASC-7) (Abstract/Poster) (Publication No: 9107015)
3. ASLAN FATIMA BÜŞRA, ÖZBEK MURAT OLUŞ (2024). A periodic DFT investigation of CO hydrogenation to methanol on Cu(111) and CuO(111) surfaces with Hubbard and dispersion effects. 7th Anatolian School of Catalysis (ASC-7) (Abstract/Poster) (Publication No: 9107010)
4. Çınar İpek Yenda, ÖZBEK MURAT OLUŞ, ÖZÖNDER ŞENER (2024). Theoretical Investigation of the Behavior of the Components in Liquid Electrolytes Used in Lithium-ion Batteries. 7th Anatolian School of Catalysis (ASC-7) (Abstract/Poster) (Publication No: 9107022)
5. ÖZBEK MURAT OLUŞ (2024). Catalysis Research Through DFT. 7th Anatolian School of Catalysis (ASC-7) (Abstract/Guest Speaker) (Publication No: 9107005)
6. Dalman Aysenur, ÖZBEK MURAT OLUŞ (2023). Yakıt Tankları İçin Gelişmiş Sızıntı Tespit Modeli. 15. Ulusal Kimya Mühendisliği Kongresi (Abstract/Oral Presentation) (Publication No: 8456797)
7. ÖZBEK MURAT OLUŞ (2018). Application of ab-initio thermodynamics in surface science and heterogeneous catalysis. 7th National Catalysis Conference (Abstract/Oral Presentation) (Publication No: 5131062)
8. ÖZBEK MURAT OLUŞ, ÖZGEN CANAN, BAYRAM GÖKNUR (2006). Extrüzyon İşleminde Polietilen Terafitalat Bozulmasının Algısal Model Öngörümü Denetleç İle Denetlenmesi. Otomatik Kontrol Türk Milli Kongresi (TOK'06), 1(1), 590-595. (Full Text Publication/Oral Presentation) (Publication No: 7757955)

Technical Notes, Case Reports, Research Notes, etc.

1. Expert Report, ÖZBEK MURAT OLUŞ (2023). (Hakemlik) Study of oxygen's conversion path on Co₂C catalysts in Fischer-Tropsch synthesis of low carbon olefins process. Reaction Kinetics, Mechanisms and Catalysis (Publication No: 8362343)
2. Expert Report, ÖZBEK MURAT OLUŞ (2023). (Hakemlik) Surface morphology of Fe₃C catalyst under different CO coverage from DFT and thermodynamics. New Journal Of Chemistry (Publication No: 8362335)
3. Expert Report, ÖZBEK MURAT OLUŞ (2022). (Hakemlik) Development of Effective Bimetallic Electrocatalysts for Glucose Electrooxidation. Journal of The Electrochemical Society (Publication No: 7763340)
4. Expert Report, ÖZBEK MURAT OLUŞ (2022). (Hakemlik) Investigation of electronic and topological properties of S/Bi-terminated short stanene nanoribbons: a DFT study. turkish journal of chemistry (Publication No: 7763267)
5. Expert Report, ÖZBEK MURAT OLUŞ (2022). (Hakemlik) Formaldehyde adsorption and sensing: A Density Functional Theory study on Pd₄ nanocluster decorated CNT structure. Periodica Polytechnica Chemical Engineering (Publication No: 7763325)
6. Expert Report, ÖZBEK MURAT OLUŞ (2021). (Hakemlik) Detailed structure and defect chemistry analyses on sol-gel derived PbTiO₃ powders. Turkish Journal of Chemistry (Publication No: 7763300)
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Non-academic Experience

01.12.2011- 01.08.2014	Doktora Sonrası Araştırmacı	Eindhoven Teknoloji Üniversitesi, Doktora Sonrası Araştırmacı, (Abroad University)
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