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Doğum Tarihi 19/09/1984

EĞİTİM

2008 – 2013	Doktora - Kimya Bölümü University of Miami, Miami, FL, USA <i>Danışman: Dr. Rajeev Prabhakar</i> Tez Başlığı: “Integrated Theoretical and Computational Approaches to Study Hydrolysis and Aggregation of Biomolecules”
2003 – 2007	Lisans - Kimya Bölümü İstanbul Teknik Üniversitesi, İstanbul, Türkiye
1995 – 2003	Kadıköy Anadolu Lisesi, İstanbul, Türkiye

PROFESYONEL DENEYİM

03/2023 – Devam	Doçent, Biyoteknoloji Enstitüsü, Gebze Teknik Üniversitesi, Kocaeli, Türkiye
06/2020 – 05/2022	Doktor öğretim üyesi, Biyoteknoloji Enstitüsü, Gebze Teknik Üniversitesi, Kocaeli, Türkiye
09/2015 – 06/2020	Doktor öğretim üyesi, Moleküler Biyoloji Bölümü, İstanbul Arel Üniversitesi, İstanbul, Türkiye
01/2014 – 01/2015	Doktora sonrası Araştırmacı, Kimya Bölümü, Yale University, CT, USA <i>Danışman: Prof. Dr. Victor Batista</i>
08/2012 – 01/2014	Araştırma görevlisi, Kimya Bölümü, University of Miami, FL, USA <i>Danışman: Prof. Dr. Rajeev Prabhakar</i>
08/2008 – 05/2012	Öğretim görevlisi, Kimya Bölümü, University of Miami, FL, USA
05/2006 – 06/2006	Stajyer, Kalite Kontrol Departmanı, IDOL, İlaç Dolum Sanayi, İstanbul, Türkiye
07/2006 – 08/2006	Stajyer, ARGE Departmanı, Vi-Vet Kozmetik, İstanbul, Türkiye

ÖDÜLLER

1. TÜSEB B-Grubu Çağrısı – “Türkiye’de Yetişen Fındık Yeşil Kabuğu Ekstraktının Antimikrobiyal ve Antibiyofilm Etkilerinin Deneysel ve Hesapsal Analizi” Yürütücü. Gebze Teknik Üniversitesi, Biyoteknoloji Enstitüsü, Kocaeli, Türkiye, **2023-2025**.
2. COST Çağrısı ‘CA21162- The COZYME(Computationally assisted design of enZYMES)’, Çalışma Üyesi, **2023-**.
3. TUBITAK-1001 Projesi. “Menenjitte Karşı N. meningitidis Bakterisi Demir Alım Yolaklarını Hedefleyen Aday İlaç Moleküllerinin Farmakofor Modelli Sanal Taramayla Keşfi” Yürütücü. Gebze Teknik Üniversitesi, Biyoteknoloji Enstitüsü, Kocaeli, Türkiye, **2023-2026**.
4. H2020-EraNET Projesi. “IPSUS - İklim Açısından Akıllı Gıda İnovasyonu: İleri Dönüşümlü Kaynaklardan Bitki ve Denizyosunu Proteinleri Kullanımı” Danışman. Gebze Teknik Üniversitesi, Biyoteknoloji Enstitüsü, Kocaeli, Türkiye, **2022-2025**.
5. TUBITAK-1001 Projesi. “Litik Bakteriyofaj K’nın S. aureus lizis mekanizmasındaki kilit molekülü Holin proteininin biyoteknolojik araç olarak kullanımının değerlendirilmesi” Araştırmacı. Gebze Teknik Üniversitesi, Biyoteknoloji Enstitüsü, Kocaeli, Türkiye, **2022-2025**.
6. TUBITAK-3501 Projesi. “Neisseria Meningitidis Bakterisinin Fe³⁺ İyonu Transfer Mekanizmasının Bilgisayarlı Hesaplamalarla İncelenmesi”. Yürütücü. Gebze Teknik Üniversitesi, Biyoteknoloji Enstitüsü, Kocaeli, Türkiye, **2019-2022**.

7. TÜBİTAK-1001 Projesi. “S. aureus hedefli, vankomisin ve oksasilin içeren nanoformülasyonların eldesi ve antibakteriyal etkinliğinin in vitro-in vivo değerlendirilmesi”. Araştırmacı. Gebze Teknik Üniversitesi, Biyoteknoloji Enstitüsü, Kocaeli, Türkiye, **2020-2023**.
8. TÜBİTAK-1001 Projesi. “Türkiye’de Hemofili B olgularında genetik varyasyonları tanımlama ve Türkiye Hemofili B Genetik Veri Tabanı (Tr-UHBGVT) oluşturulması”. Araştırmacı. İstanbul Arel University, Department of Molecular Biology and Genetics, İstanbul, Turkey, **2019-2022**.
9. TÜBİTAK-2232 Project. “İnfluenza A Virüsü M2 Proteinin İşleyiş ve İnhibisyonunun Bilgisayarlı Hesaplamalarla İncelenmesi”. Principal Investigator. İstanbul Arel Üniversitesi, Moleküler Biyoloji Bölümü, İstanbul, Türkiye, **2015-2017**.
10. Editör, *Frontiers in Chemistry*, **2022-devam**.
11. Editör, *Advances In Proteomics and Bioinformatics*, **2017-devam**.
12. Dekanlık Yaz Dönemi Proje Bursu, “The Mechanism and Structure-Function Relationship of Zn Metalloproteinase”, University of Miami, Fen-Edebiyat Fakültesi, **2012**.
13. Tekrar eden en iyi öğretim görevlisi ödülü, University of Miami, Kimya Bölümü, **2011**.
14. Tekrar eden en iyi öğretim görevlisi ödülü, University of Miami, Kimya Bölümü, **2010**.
15. En iyi öğretim görevlisi ödülü, University of Miami, Kimya Bölümü, **2009**.

YAYINLAR

Uluslararası hakemli dergilerde

1. Dönmez, S., Lapinskaite, R., Atalay, H.N., Tokay, E., Kockar, F., Rycek, L., **Özbil, M.**, Tumer, T.B. “Selagibenzophenone B and Its Derivatives: SelB-1, a Dual Topoisomerase I/II Inhibitor Identified through In Vitro and In Silico Analyses”, *ACS Bio & Med Chem Au*, 4(4), 178-189, **2024**.
2. Atiq, F., Rawley, O., O'Sullivan, J.M., **Özbil, M.**, Doherty, D., Cooke, N., Terraube, V., Chion, A., Amin, A., Hulshof, A., Baci, B., Byrne, C., Aburawi, H., Lillicrap, D., O'Donnell, J.S. “R1205H (Vicenza) causes conformational changes in the VWF-D'D3 domains and enhances VWF binding to clearance receptors LRP1 and SR-A1”, *Journal of Thrombosis and Haemostasis*, kabul edildi. **2024**.
3. Antika, G., Cinar, Z.Ö., Dönmez, S., Seçen, E., **Özbil, M.**, Prandi, C., and Tumer, T.B. “Effects of Strigolactones on NLRP3 Activation, Nitrosative Stress, and Antioxidant Mox Phenotype: In Vitro and In Silico Evidence” *ACS Bio & Med Chem Au*, 4(3), 131–136, **2024**.
4. Dokuz, S., Tasdurmazlı, S., Acar, T., Duran, G.N., Ozdemir, C., Ozbey, U., **Ozibil, M.**, Karadayı, S., Bayrak, O.F., Derman, S., Chen, J.Y-S., Ozbek, T. "Evaluation of Bacteriophage ϕ 11 host recognition protein and its host-binding peptides for diagnosing/targeting of Saphylococcus aureus infections", *International Journal of Antimicrobial Agents*, 64(2), 107230, **2024**.
5. Soylu-Eter, Ö., Göktaş, F., Duran, G. N., **Özibil, M.**, Karalı, N. L. "1H-Indole-2,3-dione 3-thiosemicarbazones carrying a 4-sulfamoylphenyl moiety with selective antiviral activity against Reovirus-1" *Acta. Chimica. Slov.*, 71(2), 215-225, **2024**.
6. Çapan, Ö.Y., Yapıcı, Z., **Özibil, M.**, Çağlayan, H.S. “Exome data of developmental and epileptic encephalopathy patients reveals de novo and inherited pathologic variants in epilepsy-associated genes” *Seizure: European Journal of Epilepsy*, 116, 51-64, **2024**.
7. Soylu-Eter, Ö., Duran, G.N., **Özibil, M.**, Göktaş, F., Cihan-Üstündağ, G., Karalı, N. “Antiviral activity and molecular modeling studies on 1H-indole-2,3-diones carrying a naphthalene moiety”, *J. Mol. Struc.*, 1281, 135100, **2023**.
8. Çubuk, H., **Özibil, M.** “In silico analysis of SARS-CoV-2 spike protein N501Y and N501T mutation effects on human ACE2 binding” *J. Mol. Graph. Model.*, 116, 108260, **2022**.

9. Antika, G., Cinar, Z.Ö., Seçen, E., **Özbil, M.**, Tokay, E., Köçkar, F., Prandi, C., Tumer, T.B. “Strigolactone Analogs: Two New Potential Bioactiphores For Glioblastoma” *ACS Chem. Neurosci.*, 13, 5, 572–580, **2022**.
10. Duran, G.N., **Özbil, M.** “Structural rearrangement of Neisseria meningitidis transferrin binding protein A (TbpA) prior to human transferrin protein (hTf) binding” *Turk. J. Chem*, 45, 1146-1154, **2021**.
11. Cubuk, H., **Ozbil, M.**, Hatir, P.C. “Computational analysis of functional monomers used in molecular imprinting for promising COVID-19 detection” *Comput. Theor. Chem.*, 11325, **2021**.
12. Fareed, F.M.A, Korulu, S., **Özbil, M.**, Çapan, Ö.Y. “HNF1A-MODY Mutations in Nuclear Localization Signal Impair HNF1A-Import Receptor KPNA6 Interactions” *Protein J.*, 40, 512-521, **2021**.
13. Turk-Erbul, B., Karaman E.F., Duran, G.N., **Ozbil, M.**, Ozden, S., Goktas, F. “Synthesis, in vitro cytotoxic and apoptotic effects, and molecular docking study of novel adamantane derivatives” *Arch Pharm.*, 354:e2000256, **2021**.
14. Sevincli, Z.S., Duran, G.N., **Özbil, M.**, Karali, N. “Synthesis, molecular modeling and antiviral activity of novel 5-fluoro-1H-indole-2,3-dione 3-thiosemicarbazones” *Bioorg. Chem.* 104, 104202, **2020**.
15. Çubuk, H., **Özbil, M.** “Comparison of clinically approved molecules on SARS-CoV-2 drug target proteins: A molecular docking study” *Turk. J. Chem*, 45, 35-41, **2021**.
16. Göktaş, F., **Özbil, M.**, Cesur, N., Vanderlinden, E., Naesens, L., Cesur, Z. “Novel N-(1-thia-4-azaspiro[4.5]decan-4-yl)carboxamide derivatives as potent and selective influenza virus fusion inhibitors” *Arc. Pharm. Chem. Life Sci.*, 352:e1900028, **2019**.
17. **Özbil, M.** “Computational investigation of influenza A virus M2 protein inhibition mechanism by ion channel blockers” *Turk. J. Chem.* 43, 335-351, **2019**.
18. Lalehan, O., Sağ Erdem, S., Yüce-Dursun, B., Mutlu, Ö., **Özbil, M.** “Computational insight into the phthalocyanine-DNA binding via docking and molecular dynamics simulations” *Comput. Biol. Chem.*, 77, 87 – 96, **2018**.
19. Ahmed, L., Zhang, Y., Block, E., Buehl, M., Corr, M.J., Cormanich, R.A., Gundala, S., Matsunami, H., O’Hagan, D., **Ozbil, M.**, et al. “Molecular mechanism of activation of human musk receptors OR5AN1 and OR1A1 by (R)-muscone and diverse other musk-smelling compounds”. *Proc. Natl. Acad. Sci., USA*, 115 (17) E3950-E3958; **2018**.
20. Lee, H.J., Korshavn, K.J., Nam, Y., Kang, J., Paul, T.J., Kerr, R.A., Youn, I.S., **Ozbil, M.**, et al. “Structural and Mechanistic Insights into Development of Chemical Tools to Control Individual and Inter-Related Pathological Features in Alzheimer’s Disease”. *Chem. Eur. J.*, 23, 2706 – 2715, **2017**.
21. Berber, E., **Ozbil, M.**, Brown, C., Baslar, Z., Caglayan, S.H., Lillcrap, D. “Functional Characterization of the Type 1 VWD candidate VWF gene variants: p.M771I, p.L881R , p.P1413L, and p.Q1475X”. *Blood*, 120(21), 97, **2016**.
22. Paul, T.J., Barman, A., **Ozbil, M.**, Bora, R.P., Zhang, T., Sharma, G., Hoffmann, Z. and Prabhakar, R. “Mechanisms of Peptide hydrolysis by Aspartyl and Metalloproteases”, *Phys. Chem. Chem. Phys.*, 18, p: 24790-24801, **2016**.
23. Block, E., Jang, S., Matsunami, H., Batista, V.S., Dethier, B., Ertem. M.Z., Gundala, S., Jiang, H., Li, S., Li, Z., Lodge, S.N., **Ozbil, M.**, Pan, Y., Penalba, S.F., Sekharan, S., and Zhuang, H. “Implausibility of the vibrational theory of olfaction”. *Proc. Natl. Acad. Sci., USA*, 112, E2766–E2774, **2015**.
24. Derrick, J.S., Kerr, R.A., Nam, Y., Oh, S.B., Lee, H.J., Earnest, K.G., Suh, N., Peck, K.L., **Ozbil, M.**, Korshavn, K.J., Ramamoorthy, A., Prabhakar, R., Merino, E.J., Shearer, J., Lee, J-Y., Ruotolo, B.T., and Lim, M.H. “A redox-active, compact tool for the crosslinking of amyloidogenic peptides into nontoxic, off-pathway aggregates: in vitro and in vivo efficacy and molecular mechanisms”. *J. Am. Chem. Soc.*, 137(46), 14785-14797, **2015**.

25. Song, E.S., **Ozbil, M.**, Zhang, T., Sheetz, M., Lee, D., Tran, D., Li, S., Prabhakar, R., Hersh, L.B., and Rodgers, D.W. “An Extended Polyanion Activation Surface in Insulin Degrading Enzyme”. *PLoS One*, 10(7):e0133114, **2015**.
26. Zhang, T., **Ozbil, M.**, Barman, A., Paul, T.J., Bora, R.P., Barman, A., and Prabhakar, R. “Theoretical Insights into the Functioning of Metallopeptidases and their Synthetic Analogues”. *Acc. Chem. Res.* (invited article), 48(2), 192-200, **2015**.
27. Cook, N.P., **Ozbil, M.**, Katsampes, C., Prabhakar, R., and Martí, A.A. “Unraveling the Photoluminescence Response of Light-Switching Ruthenium (II) Complexes Bound to Amyloid- β ”. *J. Am. Chem. Soc.*, 135 (29), 10810–10816, **2013**. (Highlighted in C&EN NEWS, 90, 21, p:27, July 22 Issue, **2013**).
28. Liu, Y., Mukherjee, A., Nahumi, N., **Ozbil, M.**, Brown, D., Angeles-Boza, A.M., Dooley, D.M., Prabhakar, R., and Roth, J.P. “Experimental and Computational Evidence of Metal-O₂ Activation in a Copper Amine Oxidase”. *J. Phys. Chem. B*, 117 (1), 218–229, **2013**.
29. **Ozbil, M.**, Barman, A., Bora, R.P., and Prabhakar, R. “Perspective: Computational Insights into Dynamics of Protein Aggregation and Enzyme-Substrate Interactions”. *J. Phys. Chem. Lett.*, 3, 3460-3469, **2012**.
30. Kurouski, D., Washington, J., **Ozbil, M.**, Prabhakar, R., Shekhtman, A., and Lednev, I., “Disulfide Bridges Remain Intact While Native Insulin Converts into Amyloid Fibrils”. *PLoS ONE*, 7(6), e36989, **2012**.
31. Zhu, X., Barman, A., **Ozbil, M.**, Zhang, T., Li, S. and Prabhakar, R., “Mechanism of Peptide Hydrolysis by Co-catalytic Metal Centers Containing Leucine Aminopeptidase Enzyme: A DFT Approach”. *J. Biol. Inorg. Chem.*, 17(2), 209-222, **2011**.
32. Bora, R.P., Barman, A., Zhu, X., **Ozbil, M.**, and Prabhakar, R., “Which One Among Aspartyl Protease, Metallopeptidase, and Artificial Metallopeptidase is the Most Efficient Catalyst in Peptide Hydrolysis?”. *J. Phys. Chem. B*, 114, 10860-10875, **2010**.
33. Bora, R.P., **Ozbil, M.**, and Prabhakar, R., “Elucidation of Insulin Degrading Enzyme Catalyzed Site Specific Hydrolytic Cleavage of Amyloid β -Peptide: A Comparative DFT Study”. *J. Biol. Inorg. Chem.*, 15(40), 485-495, **2010**.

Konferans bildirileri

1. **Özbil, M.**, Duran G, Dervişoğlu, C., Erdem, S. “Understanding Fe³⁺ Theft by Neisseria Meningitidis: A Comprehensive Computational Study”, EuChem SCompChem 2023, Thessaloniki, Greece, August 27-31, **2023**.
2. **Özbil, M.** “The applications of computational techniques in biotechnological research”, 1st International Advances in Molecular Biology, İstanbul, Turkey, September 19-22, **2022**.
3. **Özbil, M.** “Neisseria meningitidis Transferrin Binding Protein A (TbpA) Rearranges Itself For Binding Human Transferrin Protein (hTf)”, 3rd Euroasia Biochemical Approaches & Technologies Congress, Antalya, Turkey, November 4-7, **2021**.
4. **Özbil, M.** “Computational Construction of Neisseria Meningitidis Fe³⁺ Transfer Triple Complex”, 2nd Euroasia Biochemical Approaches & Technologies Congress, Antalya, Turkey, October 26-30, **2019**.
5. **Özbil, M.** “Antiviral Bileşiklerin Herpes simpleks Virüslerine Bağlanmalarının in silico Analizi”, 31. Ulusal Kimya Kongresi, İstanbul, Turkey, September 10-14, **2019**.
6. **Özbil, M.** “Computational Investigation on Influenza A Virus M2 Protein Inhibition”, 1st Euroasia Biochemical Approaches & Technologies Congress, Antalya, Turkey, October 27-30, **2018**.
7. **Özbil, M.** “Chemical and Structural Effects of Inhibitor Molecules on Influenza A Virus M2 Proton Channel” 11th European Conference of Theoretical and Computational Chemistry, Barcelona, Spain, September 4-7, **2017**.
8. **Özbil, M.** “Investigating Inhibitor Binding Sites on Influenza A Virus M2 Protein” 4th International BAU Drug Design Congress, İstanbul, Turkey, October 13-15, **2016**.
9. **Ozbil, M.** and Prabhakar, R. “Mechanisms of Stimulation of Insulin Degrading Enzyme (IDE) and Substrate Specificity of Neprilysin (NEP)” ACS National Meeting, New Orleans, LA, April 7-11, **2013**. (selected for Chairs' Prime Choices Section)
10. **Ozbil, M.** and Prabhakar, R., “Investigating The Activation of Insulin Degrading Enzyme (IDE) and Selectivity of Neprilysin (NEP)” FAME-ACS Florida Section Meeting, Tampa, FL, May 17-20, **2012**.
11. **Ozbil, M.** and Prabhakar, R., “Investigating The Peptide Bond Hydrolysis by Neprilysin (NEP)” FAME-ACS Florida Section Meeting, Tampa, FL, May 15-18, **2011**.

12. **Ozbil, M.** and Prabhakar, R., “Computational Study of Neprilysin (NEP) and The Full Length Alzheimer’s Amyloid Beta (A β)” FAME-ACS Florida Section Meeting, Tampa, FL, May 13-16, **2010**.

VERİLEN DERSLER

Sonbahar 2020 – Devam	Doçent, Pharmaceutical Biotechnology and Drug Discovery (Yüksek Lisans), Advanced Biochemistry (Yüksek Lisans), Molecular Pharmacology (Doktora), Forensic Technologies (Doktora)
Sonbahar 2015 – Bahar 2020	Dr. Öğr. Üyesi, General Chemistry 1-2, General Chemistry Lab-1-2, Organic Chemistry 1-2, Biochemistry Lab-1, Protein Folding & Misfolding, Bioinformatics, Enzymology, Seminar (Lisans) İstanbul Arel Üniversitesi, İstanbul, Türkiye
Sonbahar 2008 – Bahar 2012	Öğretim görevlisi, CHM 113 General Chemistry 1, CHM 114 General Chemistry 2, CHM 364 Physical Chemistry 1 (Undergraduate), University of Miami, FL
Sonbahar 2007 Bahar 2006	Öğretim görevlisi, CHM 101: General Chemistry (Lisans), İstanbul Teknik Üniversitesi, İstanbul, Türkiye Öğretim görevlisi, CHM 101: General Chemistry (Lisans), İstanbul Teknik Üniversitesi, İstanbul, Türkiye

BİLGİSAYAR PROGRAMLARI

- Microsoft Office
- VMD, PyMol, YASARA, Raswin, Swiss PDB Viewer
- GROMACS, CHARMM, NAMD, Gaussian, AutoDock, MOE Suites

KİŞİSEL BİLGİLER

Uyruk	T.C.
Diller	Türkçe – anadil İngilizce – akıcı

EDİTÖRLÜK ve ÜYELİKLER

- Editör, Journal of Research in Pharmacy – 2023-Devam
 Editör, Frontiers in Chemistry – 2022-Devam
 Editör, Advances in Proteomics & Bioinformatics – 2017-Devam
 Türk Kimya Derneği Üyeliği – 2015-Devam
 Amerikan Kimya Derneği Üyeliği – 2013-Devam

REFERANSLAR

1. Victor S. Batista, Yale University, victor.batista@yale.edu
2. Rajeev Prabhakar, University of Miami, rpr@miami.edu
3. Safiye Erdem, Marmara University, erdem@marmara.edu.tr