

**AKADEMİK ÖZGEÇMİŞ****1. Adı Soyadı:** Süleyman AŞIR**2. Unvanı:** Doç. Dr.**3. Öğrenim Durumu:**

Derece	Bölüm/Program	Üniversite	Yıl
Lisans	Kimya	Hacettepe Üniversitesi	2002
Y. Lisans	Kimya - Biyokimya	Hacettepe Üniversitesi	2004
Doktora	Kimya – Organik Kimya	Doğu Akdeniz Üniversitesi	2009

**4. Yüksek Lisans / Doktora Tezi**

**4.1. Yüksek Lisans Tez Başlığı ve Tez Danışman(lar):** Preparation of Ion-Selective Imprinted Polymeric Monolith for Cadmium Detoxification from Human Plasma, Danışman: Prof. Dr. Adil Denizli

**4.2. Doktora Tezi/Tıpta Uzmanlık Tez Başlığı ve Danışman(lar):** The Synthesis of Chiral Perylene and Naphthalene Diimides, Danışman: Prof. Dr. Huriye Icil, Eşdanışman: Prof. Dr. Ayhan S. Demir (from METU-Ankara)

**5. Akademik Unvanlar:**

Yardımcı doçentlik tarihi: 21/12/2015

Doçentlik tarihi: 11/04/2022

Profesörlük tarihi: -

**6. Yönetilen Yüksek Lisans ve Doktora Tezleri:****6.1. Yüksek lisans tezleri**

- Electrochemical Determination of Adriamycin- DNA Interaction Using  $\text{Fe}_3\text{O}_4$  Nanoparticles Modified Carbon Paste Electrode, Minwer E'waysi Bseibes Alsarhan, 2020.
- Effect of Iron Oxide Nanoparticles on the Prediction of Ferricyanide Concentration by Carbon Paste Electrode Using Machine Learning, Najya Maarof Saleem Saleem, 2021.
- Synthesis of Sulfamethoxazole Surface Imprinted Core-Shell Magnetic Nanoparticles for Selective Detection of Sulfamethoxazole in Poultry by an Electrochemical Sensor, Tuleen Faridon Bahjat Shegem, 2021.
- Electrochemical Determination of Dopamine in the Presence of Ascorbic Acid Using Machine Learning Technique, Chukwuebuka Ikpeama C, 2023.

**6.2. Doktora tezleri**

- Electrochemical Detection of DNA and Their Interaction with Chemical Compounds, Pwdubashiyi Coston Pwavodi, 2021.
- Determination of Multi-Pesticide Residues in Honey with a Modified Quechers Procedure Followed by LC-MS/MS and GC/MS-MS, Beste Oymen, 2022.
- Gold-Modified Molecularly Imprinted N-Methacryloyl-(L)-Phenylalanine Containing Electrodes for Electrochemical Detection of Dopamine, Nemah Abushama , 2022.
- Development of a Plasmonic Sensor for a Chemotherapeutic Agent Cabazitaxel, Buse Uğur, 2023.

## 7. Yayınlar

- 7.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI, SSCI, AHCI, ESCI, Scopus)**
- 1- Shama, N. A., Aşır, S., Göktürk, I., Yılmaz, F., Türkmen, D., & Denizli, A. (2023). **Electrochemical Detection of Cortisol by Silver Nanoparticle-Modified Molecularly Imprinted Polymer-Coated Pencil Graphite Electrodes.** ACS omega, 8(32), 29202-29212.
  - 2- Oymen, B., Jalilzadeh, M., Yılmaz, F., Aşır, S., Türkmen, D., & Denizli, A. (2023). **Simple and Fast Pesticide Nanosensors: Example of Surface Plasmon Resonance Coumaphos Nanosensor.** Micromachines, 14(4), 707.
  - 3- Koç, İ., Şarkaya, K., Türkmen, D., Aşır, S., & Denizli, A. (2023). **Preparation of Immobilised 17 $\beta$ -Estradiol-Imprinted Nanoparticles onto Bacterial Cellulose Nanofibres to Use for the Removal of 17 $\beta$ -Estradiol from Wastewater.** Polymers, 15(5), 1201.
  - 4- Kayali, D., Shama, N. A., Asir, S., & Dimililer, K. (2023). **Machine learning-based models for the qualitative classification of potassium ferrocyanide using electrochemical methods.** The Journal of Supercomputing, 1-20.
  - 5- Aşır, S., Uğur, B., Jalilzadeh, M., Göktürk, I., & Türkmen, D. (2022). **Development of a Plasmonic Sensor for a Chemotherapeutic Agent Cabazitaxel.** ACS omega, 8(1), 492-501.
  - 6- Kannin, D., Moghazi, M., Aşır, S., Büyük, S., & Kaba, Ş. (2022). **Viral Nano-Bio-Sensing and SARS-CoV-2: A Literature Review.** Cyprus Journal of Medical Sciences, 7(5).
  - 7- Ektirici, S., Kurç, O., Jalilzadeh, M., Aşır, S., & Türkmen, D. (2022). **Computational investigation of the monomer ratio and solvent environment for the complex formed between sulfamethoxazole and functional monomer methacrylic acid.** ACS omega, 7(20), 17175-17184.
  - 8- Abu Shama, N., Aşır, S., Ozsoz, M., Göktürk, I., Türkmen, D., Yılmaz, F., & Denizli, A. (2022). **Gold-Modified Molecularly Imprinted N-Methacryloyl-(I)-phenylalanine-containing Electrodes for Electrochemical Detection of Dopamine.** Bioengineering, 9(3), 87.
  - 9- Asir, S., Bakhshpour, M., Unal, S., & Denizli, A. (2022). **Nanoparticle-based plasmonic devices for bacteria and virus recognition.** In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 167-183). Academic Press.
  - 10- Oymen, B., Aşır, S., Türkmen, D., & Denizli, A. (2022). **Determination of multi-pesticide residues in honey with a modified QuEChERS procedure followed by LC-MS/MS and GC-MS/MS.** Journal of Apicultural Research, 1-13.
  - 11- Türkmen, D., Bakhshpour, M., Göktürk, I., Aşır, S., Yılmaz, F., & Denizli, A. (2021). **Selective dopamine detection by SPR sensor signal amplification using gold nanoparticles.** New Journal of Chemistry, 45(39), 18296-18306.
  - 12- Refiker, H., & Asir, S. (2021). **HEALTH PROMOTING BREAD; COMPRISING NATURAL-MIRACLE ANTHOCYANINS.** *Journal of microbiology, biotechnology and food sciences*, 10(5), e3354-e3354.
  - 13- Pwavodi, P. C., Ozyurt, V. H., Asir, S., & Ozsoz, M. (2021). **Electrochemical Sensor for Determination of Various Phenolic Compounds in Wine Samples Using Fe<sub>3</sub>O<sub>4</sub> Nanoparticles Modified Carbon Paste Electrode.** *Micromachines*, 12(3), 312.
  - 14- Shama, N. A., Asir, S., Dimililer, K., & Özsöz, M. (2020, October). **Potassium Ferro cyanide electrochemically detected by Differential Pulse and Square Wave Voltammetry in a Competition using Gradient Boosting as Machine Learning Algorithm.** In *2020 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)* (pp. 1-4). IEEE.
  - 15- Şarkaya, K., Aşır, S., Göktürk, I., Yılmaz, F., Yavuz, H., & Denizli, A. (2020). **Electrochromatographic separation of hydrophobic amino acid enantiomers by molecularly imprinted capillary columns.** *Process Biochemistry*, 92, 69-77.
  - 16- Şarkaya, K., Aşır, S., Göktürk, I., Ektirici, S., Yılmaz, F., Yavuz, H., & Denizli, A. (2020). **Separation of histidine enantiomers by capillary electrochromatography with molecularly imprinted monolithic columns.** *Separation Science Plus*, 3(6), 235-245.
  - 17- Asir, S., Dimililer, K., Kirsal-Ever, Y., Özsöz, M., & Shama, N. A. (2019, October). **Electrochemical determination of potassium ferricyanide using artificial intelligence.** In *2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)* (pp. 1-4). IEEE.

- 18- Mubarak, A. S., Süleyman, A., & Mehmet, O. (2019, August). **Development of CNN Model for Prediction of CRISPR/Cas12 Guide RNA Activity**. In *International Conference on Theory and Application of Soft Computing, Computing with Words and Perceptions* (pp. 697-703). Springer, Cham.
- 19- Derazshamshir, A., Aşır, S., Göktürk, I., Ektirici, S., Yılmaz, F., & Denizli, A. "Polymethacryloyl-L-phenylalanine [PMAPA]-based Monolithic column for Capillary electrochromatography", *Journal of Chromatographic Science*, 57(8), 758-765., 2019.
- 20- Sarı, D., Derazshamshir, A., Aşır, S., Göktürk, I., Yılmaz, F., & Denizli, A. "Separation of D,L-Ampicillin by Ligand Exchange-Micellar Electrokinetic Chromatography", *Biointerface Res. Appl. Chem.*, 9: 4522-4533, 2019.
- 21- S. Aşır, D. Sarı, A. Derazshamshir, F. Yılmaz, K. Şarkaya, A. Denizli "Dopamine-imprinted Monolithic Column for Capillary Electrochromatography", *Electrophoresis*, 38(22-23): 3003-3012, 2017.
- 22- S. Aşır, C. Zanardi, R. Seeber, H. İcil "A novel unsymmetrically substituted chiral amphiphilic perylene diimide: Synthesis, photophysical and electrochemical properties both in solution and solid state", *Journal of Photochemistry and Photobiology A: Chemistry*, 318: 104-113, 2016.
- 23- S. Aşır, A. Derazshamshir, F. Yılmaz, A. Denizli "Triazine Herbicide Imprinted Monolithic Column for Capillary Electrochromatography", *Electrophoresis*, 36: 2888-2895, 2015.
- 24- D. Özdal, S.Aşır, J. B. Bodapati, H. İcil "Synthesis of a novel fluorescent amphiphilic chitosan biopolymer: photophysical and electrochemical behavior", *Photochemical & Photobiological Sciences*, 12: 1927-1938, 2013.
- 25- S.Aşır, Ayhan S. Demir, H. İcil "The synthesis of novel, unsymmetrically substituted, chiral naphthalene and perylene diimides: Photophysical, electrochemical, chiroptical and intramolecular charge transfer properties", *Dyes and Pigments*, 84: 1-13, 2009.
- 26- S. Aşır, L. Uzun, D. Türkmen, R. Say and A. Denizli, "Ion-selective imprinted superporous monolith for cadmium removal from human plasma", *Separation Science and Technology*, 40:3167-3185, 2005.

### **7.2. Uluslararası diğer hakemli dergilerde yayınlanan makaleler**

- 1- Türkmen, D., Bakhshpour, M., Akgönüllü, S., Aşır, S., & Denizli, A. (2022). **Heavy metal ions removal from wastewater using cryogels: a review**. *Frontiers in Sustainability*, 7.

### **7.3. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler**

- 1- Shama, N. A., Asir, S., Dimililer, K., & Özsöz, M. (2020, October). Potassium Ferro cyanide electrochemically detected by Differential Pulse and Square Wave Voltammetry in a Competition using Gradient Boosting as Machine Learning Algorithm. In *2020 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)* (pp. 1-4). IEEE.
- 2- Asir, S., Dimililer, K., Kirsal-Ever, Y., Özsöz, M., & Shama, N. A. (2019, October). **Electrochemical determination of potassium ferricyanide using artificial intelligence**. In *2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)* (pp. 1-4). IEEE.
- 3- Mubarak, A. S., Süleyman, A., & Mehmet, O. (2019, August). **Development of CNN Model for Prediction of CRISPR/Cas12 Guide RNA Activity**. In *International Conference on Theory and Application of Soft Computing, Computing with Words and Perceptions* (pp. 697-703). Springer, Cham.

### **7.4. Yazılan ulusal/uluslararası kitaplar veya kitaplarda bölümler**

- 1- Asir, S., Bakhshpour, M., Unal, S., & Denizli, A. (2022). **Nanoparticle-based plasmonic devices for bacteria and virus recognition**. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 167-183). Academic Press.

### **7.5. Ulusal hakemli dergilerde yayınlanan makaleler**

- 1- Zidan, A., & Süleyman, A. S. I. R. (2023). **Programmable living nanorobots**. Hacettepe Journal of Biology and Chemistry, 51(2), 183-190.
- 2- A. A. Topçu, S. Aşır, D. Türkmen "DNA Purification by Solid Phase Extraction (SPE) Methods", *Hacettepe Journal of Biology and Chemistry*, 44(3): 259-266, 2016.

### **8. Sanat ve Tasarım Etkinlikleri**

#### **9. Projeler**

- 1- 2017-2019, NEU - BAP, "Preparation of Molecularly Imprinted Biosensors for Helicobacter Pylori Detection", Proje Yürüttüsü  
Yakın Doğu Üniversitesi adına 20 yılına patentlenmiştir.
- 2- 2016-2018, NEU - Centre of Excellence, "Preparation of Molecularly Imprinted Biosensors for Salmonella Detection", Proje Yürüttüsü
- 3- 2010-2013, TUBITAK, TBAG-110T201 "Dye Sensitized Solar Cells", Turkey, Scientific Researcher
- 4- "Preparation of a Novel Sustainable Water Filter for Heavy Metal Removal from Water and Detailed Analysis of Pb (II) Adsorption on Snail (*Helix pomatia*) Shell Adsorbents"  
Suleyman Asir, Ruofan Lily Chen, Yigitcan Yilmaz  
The International Sustainable World (Energy, Engineering, and Environment) Project: Team awarded a "BRONZE MEDAL", Harmony Public Schools, Houston, TX, USA, May 2013. (<http://isweeep.org/>)
- 5- "Development of a Low-Cost Sustainable Water Filter: Removal of Water Pollutants Cu (II) and Pb (II) Using Snail (*Helix pomatia*) Shells "  
Suleyman Asir, Ruofan Lily Chen, Yigitcan Yilmaz  
International Concept Project Competition (ICPC), Junior Green Brain of the Year Contest: This team awarded a "SPECIAL RECOGNITION", METU-NCC, North Cyprus, September 2012. (<http://greenbrain.ncc.metu.edu.tr>)
- 6- "Red Glowing TRNC Flag on the Pentadaktylos Mountain"  
Huriye Icil, Duygu Uzun, Suleyman Asir, Jagadeesh B. Bodapati, Hurmus Refiker, Ilke Yuçukan.  
International Chemical Products and Raw Materials Industry R & D Project Market: Rated the BEST in the `paints and Adhesives` category and won the `BEST OVERALL AWARDS` in all categories, Istanbul Turkey, September 2012. (<http://www.kimyaargeprojepazari.com/>)
- 7- 2005-2006, DPT-YUUP "Synthetic Technology of Chiral Drug Materials within Health Biotechnology", Turkey, Scientific Researcher

#### **10. İdari Görevler**

##### **2016-Halen**

YAKIN DOĞU ÜNİVERSİTESİ  
Mühendislik Fakültesi (Malzeme Bilimi ve Nanoteknoloji  
Mühendisliği Bölüm Başkan Vekili)

##### **2019-Halen**

YAKIN DOĞU ÜNİVERSİTESİ  
Mühendislik Fakültesi (Dekan Yardımcısı)

##### **2022-Halen**

YAKIN DOĞU ÜNİVERSİTESİ  
Mühendislik Fakültesi (Biyomedikal Mühendisliği Bölüm Başkanı  
ve Biyomühendislik Bölüm Başkan Vekili)

##### **2023-Halen**

YAKIN DOĞU ÜNİVERSİTESİ  
Bilim, Teknoloji, Mühendislik Uygulama ve Araştırma Merkezi  
(Merkez Başkan Yardımcısı)

**11. Bilimsel ve Mesleki Kuruluşlara Üyelikler**

- 1- Kıbrıs Türk Bilim ve Teknoloji Derneği (BİLTED), 2011, kurucu asbaşkan ve halen dernek asbaşkanı  
 2- European Photochemistry Association - EPA, üye

**12. Ödüller**

- 1- 2021, Yakın Doğu Üniversitesi - DESAM, Yayın Ödülü  
 2- 2019, Yakın Doğu Üniversitesi - DESAM, Yayın Ödülü  
 3- 2016, Yakın Doğu Üniversitesi - DESAM, Genç Araştırmacı Ödülü  
 4- 2010-2011, Avrupa Komisyonu, Kıbrıs Türk Toplumu Burs Programı 2010/11 Akademik Yılı  
 5- 2002-2004, KKTC Milli Eğitim ve Kültür Bakanlığı Kimya Eğitimi Yüksek Lisans Bursu  
 6- 1997-2002, KKTC Milli Eğitim ve Kültür Bakanlığı Lisans Eğitim Bursu

**13. Son İki Yılda Verilen Lisans ve Lisansüstü Dersler**

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2021 - 2022	GÜZ	MED101 – ORGANIC CHEMISTRY	4	-	200
	GÜZ	TFT 101 – ORGANİK KİMYA	4	-	150
	GÜZ	MSN 309 - RESEARCH SKILLS IN SCIENCE	3	-	2
	GÜZ	PHA209 - ORGANIC CHEMISTRY II	2	-	170
	BAHAR	CHM122 - ORGANIC CHEMISTRY I	3	-	163
	BAHAR	CHM503 - ADVANCED ORGANIC CHEMISTRY	3	-	8
	BAHAR	KIM212 – ANALİTİK KİMYA	3	-	2
	BAHAR	MSN 206 - MATERIALS FOR BIOLOGICAL AND MEDICAL APPLICATIONS	3	-	1
2022 - 2023	GÜZ	MED101 – ORGANIC CHEMISTRY	4	-	200
	GÜZ	TFT 101 – ORGANİK KİMYA	4	-	150
	GÜZ	CHM123 - ORGANIC CHEMISTRY II	2	-	111
	GÜZ	KIM123 - ORGANİK KİMYA II	2	-	15
	GÜZ	MSN203 - FOUNDATIONS OF NANOTECHNOLOGY	3	-	1
	BAHAR	CHM122 - ORGANIC CHEMISTRY I	3	-	196
	BAHAR	KİM122 - ORGANİK KİMYA I	3	-	56
	BAHAR	CHM551 - SPECIAL TOPICS IN AFFINITY BASED SENSORS	3	-	9