

CV

1. **Name/ Surname:** Baha ÖNDEŞ
2. **Date of Birth:** 24/01/1992
3. **Title:** Ph.D.
4. **Educational Status:**

Degree	Department	University	Year
Bachelors	Chemistry	Adnan Menderes University	2014
Masters	Chemistry	Adnan Menderes University	2017
Masters (Non-thesis)	Occupational Health and Safety	Aydın Adnan Menderes University	2019
PhD	Chemistry	Aydın Adnan Menderes University	2023

Master's Thesis Title and Supervisor(s):

Öndeş, B. (2017). Investigation of Voltammetric Determination Conditions of Some Neonicotinoid Insecticides with Modified and Unmodified Electrodes, Aydın.

Supervisor: Assoc. Prof. Dr. Mıhrıcan ERDEM

Doctoral Thesis Title and Supervisor(s):

Öndeş, B. (2023). Preparation of Nanowire-Based Biosensors for the Early Diagnosis of Some Cancer Biomarkers, Aydın.

Supervisor: Prof. Dr. Deniz AKTAŞ UYGUN

5. **Academic Titles:** Ph.D.

Doctoral Researcher: Department of Nanoengineering, University of California, San Diego (USA).
10.2022-04.2023

Postdoctoral Researcher: Faculty of Science, Department of Chemistry, Adnan Menderes University, Aydın (Turkey). 10.2023-10.2025

Ph.D. : Faculty of Medicine, Department of Medical Biochemistry, Girne American University (Turkish Republic of Northern Cyprus). 09.2025-Ongoing.

6. **Supervised Masters and Doctoral Theses**

6.1. Masters Theses

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6.2. Doctoral Theses

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7. Publications

7.1. Articles published in internationally refereed journals (SCI & SCI-E)

7.1.1. Öndeş, B., Soysal, M. (2019). "Determination of Diuron by Using Electrochemical Sensor Based on Molecularly Imprinted Polymer Film." *Journal of The Electrochemical Society*, 166 (6), 395-401.

7.1.2. Öndeş, B., Muti, M. (2020). "Electrochemical Determination of the Effect of Caffeic Acid Onto the Interaction Between Idarubicin and DNA by Single Use Disposable Electrodes." *Electroanalysis*, 32 (6), 1288-1296.

7.1.3. Öndeş, B., Muti, M. (2020). "Electrochemical Determination of Neonicotinoid Insecticide Clothianidin by Nanomaterial based Disposable Electrode." *Analytical & Bioanalytical Electrochemistry*, 12 (3), 392-401.

7.1.4. Öndeş, B., Akpınar, F., Uygun, M., Muti, M., Uygun, D.A. (2021). "High Stability Potentiometric Urea Biosensor Based on Enzyme Attached Nanoparticles." *Microchemical Journal*, 160 (Part B), 105667.

7.1.5. Kilimci, U., Evli, S., Öndeş, B., Uygun, M., Uygun, D.A. (2021). "Inulinase Immobilized Lectin Affinity Magnetic Nanoparticles for Inulin Hydrolysis." *Applied Biochemistry and Biotechnology*, 193 (5), 1415-1426.

7.1.6. Evli, S., Öndeş, B., Uygun, M., Uygun, D.A. (2021). "Asparaginase Immobilized, Magnetically Guided and Bubble Propelled Micromotors." *Process Biochemistry*, 108, 193-199.

7.1.7. Öndeş, B., Evli, S., Uygun, M., Uygun, D.A. (2021). "Boron Nitride Nanosheet Modified Label-Free Electrochemical Immunosensor for Cancer Antigen 125 Detection." *Biosensors and Bioelectronics*, 191, 113454.

7.1.8. Öndeş, B., Evli, S., Uygun, M., Uygun, D.A. (2022). "Immobilization of Urokinase onto Magnetically Directed Micromotors." *Applied Biochemistry and Biotechnology*, 194, 3351-3364.

7.1.9. Öndeş, B., Evli, S., Şahin, Y., Uygun, M., Uygun, D.A. (2022). "Uricase Based Amperometric Biosensor Improved by AuNPs-TiS₂ Nanocomposites for Uric Acid Determination." *Microchemical Journal*, 181, 107725.

7.1.10. Uygun, M., Evli, S., Öndeş, B., Özaydın, M.S., Uygun, D.A. (2023). "Uricase Modified Au/Ni/PANI Microrockets to Reduce Uric Acid Level." *Catalysis Letters*, 153, 1564–1573.

7.1.11. Evli, S., Öndeş, B., Uygun, M., Uygun, D.A. (2023). "Lipase Loaded Motion-Based Multisegmental Nanowires for Pollutant Tributyrin Degradation." *International Journal of Environmental Science and Technology*, 20, 5509–5518.

7.1.12. Öndeş, B., Evli, S., Uygun, M., Uygun, D.A. (2023). “New Lysozyme-Modified Pt/rGO Microengines for Efficient Bacteria Degradation.” *Bulletin of Materials Science*, 46 (3), 153.

7.1.13. Öndeş, B., Sunna, Ç., Kilimci, U., Uygun, M., Uygun, D.A. (2023). “Boron Nitride Nanosheet Modified Amperometric Biosensor For Uric Acid Determination.” *Microchemical Journal*, 194, 109240.

7.1.14. Öndeş, B., Kilimci, U., Uygun, M., Uygun, D.A. (2024). “Determination of carcinoembryonic antigen (CEA) by label-free electrochemical immunosensor using functionalized boron nitride nanosheets.” *Bioelectrochemistry*, 157,108676.

7.1.15. Öndeş, B., Sunna, Ç., Kilimci, U., Uygun, D.A., Uygun, M. (2024). “Enzymatic phenolics removal by tyrosinase-modified micromotors.” *Process Biochemistry*, 147, 101-108.

7.1.16. Kilimci, U., Öndeş, B., Sunna, Ç., Uygun, M., Uygun, D.A. (2025). “Development of label-free immunosensors based on AuNPs-fullerene nanocomposites for the determination of cancer antigen 125.” *Bioelectrochemistry*, 163, 108863.

7.1.17. Abbas, A., Sage-Sepulveda, J. S., Mahato, K., Siddiqui, M., Balaje, A., Öndeş, B., Wang, J. (2025). “Daily multi-segment capsule for time-tunable drug release toward enhanced polypharmacy adherence.” *Matter*, 8, 101947.

7.1.18. Öndeş, B., Uygun, D.A. (2025). “Development of Pt/Au/PPy-COOH multisegmental nanowires modified label-free impedimetric immunosensor to determine mucin 1 (MUC1).” *Analytical Biochemistry*, 702, 115857.

7.1.19. Askarinam, N., Chen, C., Vo, V., Casares, M., Wu, K., Shen, E., Iskandarani, M., de la Asunción-Nadal, V., Chang, A., Yamamoto, T., Sage-Sepulveda, J., Öndeş, B., Zhou, Z., Yan, Z., Qualliotine, J., Wang, J. (2025). “Sublingual Microrobotic Pills for Rapid and Efficient Drug Delivery.” *Nanoscale Advances*, 7 (15), 4730-4739.

7.1.20. Öndeş, B., Uygun, D.A. (2025). “Ultrasensitive NSE detection by multisegmental nanowire modified immunosensor.” *Microchemical Journal*, 215, 114430.

7.2. Articles published in other internationally refereed journals

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7.3. Papers presented at international scientific meetings and published in proceedings

7.3.1. Öndeş, B., Soysal, M. “Electrochemical Polymerization of Purplad (4-amino-3-hydrazino-5-mercapto-1,2,4-triazole).” 10th Aegean Analytical Chemistry Days, 29 September-2 October 2016, Çanakkale (Özet Bildiri/Poster).

- 7.3.2.** Öndeş, B., Muti, M. “Grafen Esaslı Tek Kullanımlık Elektrotlar İle Neonikotinoid İnsektisiti Imidacloprid’in Elektrokimyasal Olarak Belirlenmesi.” Uluslararası Tarım Çevre ve Sağlık Kongresi, 26-28 Ekim 2018, Aydın (Tam Metin Bildiri/Sözlü Sunum).
- 7.3.3.** Öndeş, B., Akpınar, F., Muti, M., Uygun, M., Uygun, D.A. “Development of potentiometric urea biosensor based on a screen-printed electrodes modified with urease immobilized into nano poly (HEMA) membranes.” 4th International Congress on Biosensors, 8-11 July 2019, Çanakkale (Özet Bildiri/Poster).
- 7.3.4.** Çalıcıoğlu, U. P., Öndeş, B., Güçlü, K., Muti M. “Electrochemical Investigation of the Effect of Caffeic Acid on the Oxidative Damage Caused by UV Rays.” Electrochem 2019, 30 September–2 October 2019, İstanbul (Özet Bildiri/Poster).
- 7.3.5.** Karagöz, M., Kilimci, U., Öndeş, B., Uygun, D.A., Uygun, M. “Karsinoembriyonik Antijen (CEA) Saflaştırılması için Con-A Modifiyeli Manyetik Nanopartiküllerin Sentezlenmesi ve Karakterizasyonu.” Kromatografi XX, 24-26 Şubat 2022, Ankara (Özet Bildiri/Poster).
- 7.3.6.** Öndeş, B., Kilimci, U., Uygun, M., Uygun, D.A. “Detection of carcinoembryonic antigen (CEA) by label-free electrochemical immunosensor based on boron nitride nanosheets functionalized SPE.” 5th International Congress on Biosensors, 21-23 September 2022, Çanakkale (Özet Bildiri/Poster).
- 7.3.7.** Öndeş, B., Sunna, Ç., Kilimci, U., Uygun, M., Uygun, D.A. “An Amperometric Uric Acid Biosensor Based on Boron Nitride Nanosheet.” 5th International Congress on Biosensors, 21-23 September 2022, Çanakkale (Özet Bildiri/Poster).
- 7.3.8.** Kilimci, U., Öndeş, B., Sunna, Ç., Uygun, M., Uygun, D.A. “Label-Free Immunosensor Based on AuNPs-Fullerene Nanocomposites for Ovarian Cancer Antigen CA-125 Detection.” 5th Eurasia Biochemical Approaches & Technologies Congress (EBAT), 02-05 November 2023, Antalya (Özet Bildiri/Sözlü Sunum).
- 7.3.9.** Öndeş, B., Kilimci, U., Sunna, Ç., Uygun, M., Uygun, D.A. “Development of the Tyrosinase Enzyme Modified Multisegmental Nanowire Biosensor for Determination of Bisphenol A.” 5th Eurasia Biochemical Approaches & Technologies Congress (EBAT), 02-05 November 2023, Antalya (Özet Bildiri/Sözlü Sunum).
- 7.3.10.** Öndeş, B. “Organofosfat Pestisitlerinin Tespitinde Elektrokimyasal Sensör Uygulamaları.” 7.Uluslararası Tarım Çevre ve Sağlık Kongresi, 30 Mayıs-1 Haziran 2024, Bursa (Özet Bildiri/Sözlü Sunum).

7.4. International books or chapters in books

7.4.1. Evli, S., Uygun, M., Öndeş, B., Uygun, D.A. (2024). “Micro/Nanomotors: Recent Applications.” Biophysics at the Nanoscale, Applications of Functional Materials; Academic Press (pp. 27-42), Elsevier.

7.5. Articles published in nationally refereed journals

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7.6. Papers presented at national scientific meetings and published in proceedings

7.6.1. Öndeş, B., Soysal, M. “Linalool Baskılı Polimer Sentezi.” 27. Ulusal Kimya Kongresi, 23-28 Ağustos 2015, Çanakkale (Özet Bildiri/Sözlü Sunum).

7.6.2. Öndeş, B., Soysal, M. “Diuron Baskılı Polimer Esaslı Elektrokimyasal Sensör Geliştirilmesi.” 8. Ulusal Analitik Kimya Kongresi, 30 Mayıs-03 Haziran 2016, Isparta (Özet Bildiri/Poster).

7.6.3. Kilimci, U., Öndeş, B., Uygun, D.A., Uygun, M. “Metal İle Şelatlanmış BN/GO/Fe₃O₄ Nanokompozitlerine Ürikaz Adsorpsiyonu.” Kromatografi XXI, 14-16 Haziran 2023, Aydın (Özet Bildiri/Poster).

7.6.4. Kilimci, U., Öndeş, B., Sunna, Ç., Uygun, M., Uygun, D.A. “Pt-Tis₂ Nanokompozit Temelli Amperometrik Glukoz Biyosensörü Hazırlanması.” VIII. Ulusal Biyomühendislik Kongresi “Biyomühendislik Uygulamaları”, 16-18 Mayıs 2024, Manisa (Özet Bildiri/Sözlü Sunum).

7.6.5. Öndeş, B., Sunna, Ç., Kilimci, U., Uygun, D.A., Uygun, M. “Enzimatik Fenol Giderimi İçin Tirozinaz Bazlı Mikromotorların Üretimi.” VIII. Ulusal Biyomühendislik Kongresi “Biyomühendislik Uygulamaları”, 16-18 Mayıs 2024, Manisa (Özet Bildiri/Sözlü Sunum).

7.6.6. Evli, S., Şair, A., Öndeş, B., Topcu, A., Dost, T., Uygun, M., Akyol, A., Uygun, D.A. “Trombolizis İçin Peg’lenmiş Ürokinaz Modifiye Manyetik Nanotellerin Kullanılabilirliğinin Araştırılması.” VIII. Ulusal Biyomühendislik Kongresi “Biyomühendislik Uygulamaları”, 16-18 Mayıs 2024, Manisa (Özet Bildiri/Poster).

7.7. Other publications

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7.8. International citations

- **Web of Science:** H-index 7 / 193 citations
- **Scopus:** H-index 8 / 235 citations
- **Google Scholar:** H-index 7 / 265 citations, i10 index: 7

8. National and International Projects

8.1. Investigation of Voltammetric Determination Conditions of Some Neonicotinoid Insecticides with Modified and Unmodified Electrodes. ADU BAP Project FEF-15048, Researcher (2015-2017).

8.2. Biosensor Applications of Two Dimensional Nanomaterials in Cancer Diagnosis. ADU BAP Project FEF-19011, Researcher (2020-2021).

8.3. Preparation of Nanowire Based Biosensors for Early Diagnosis of Some Cancer Biomarkers. ADU BAP Project FEF-20016, Researcher (2020-2023).

8.4. Preparation and Application of Magnetic Nanomotors Carrying Urokinase Enzyme for Thrombolysis. ADU BAP Project FEF-21011, Researcher (2021-2025).

8.5. Preparation of Nanocomposite Based Amperometric Enzyme Biosensors for Uric Acid Determination. ADU BAP Project FEF-21018, Researcher (2021-2022).

8.6. Micromotors for Enzymatic Phenol Removal. ADU BAP Project FEF-21019, Researcher (2021-2025).

8.7. Preparation of Nanomaterial Based Amperometric Enzyme Biosensors. ADU BAP Project FEF-22018, Researcher (2022-Ongoing).

8.8. Preparation and Application of Tyrosinase Based Nanobiosensors. TUBITAK 2218 Project 123C188, Project Executive (2023-Ongoing).

9. Administrative Duties

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10. Memberships in Scientific and Professional Organizations

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11. Awards and Scholarships

11.1. YOK 100/2000 PhD Scholarships of Biosensor (02.2018-02.2022)

11.2. TUBİTAK 2211-C National PhD Scholarship Program in the Priority Fields in Science and Technology (10.2020-09.2023)

11.3. TUBİTAK 2214-A International Research Fellowship Programme for PhD Students (10.2022-04.2023)

11.4. TUBİTAK 2218 National Postdoctoral Research Fellowship Program (10.2023-10.2025)

12. Fill in the table below for the undergraduate and graduate level courses you have taught in the last two years.

Academic Year	Period	Course Name	Weekly Hours		Number of Students
			Theoretic	Practical	
	Fall				
	Spring				
	Fall				
	Spring				

Note: If opened, courses offered in the summer term please also add to the list.