

HALE DEMİRTEPE

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ORCID: 0000-0003-4711-2467

Education

Ph.D. in Environmental Engineering 2012-2017

Dept. of Environmental Engineering, Middle East Technical University, Ankara

M.Sc. in Environmental Engineering 2010-2012

Dept. of Environmental Engineering, Middle East Technical University, Ankara

B.Sc. in Environmental Engineering 2003-2008

Dept. of Environmental Engineering, Middle East Technical University, Ankara

Minor in Chemical Reaction Engineering 2006-2008

Dept. of Chemical Engineering, Middle East Technical University, Ankara

Experience

Assistant Professor March 2020 – present
İzmir Institute of Technology, Department of Environmental Engineering

Research Specialist (Postdoctoral Researcher) Feb. 2018 – Feb. 2020
Masaryk University, Research Center for Toxic Compounds in the Environment
(RECETOX), Brno, Czech Republic

Teaching Assistant Nov. 2012 – July 2017
Middle East Technical University (METU), Department of Environmental Engineering

Scientific Programs Assistant Expert Aug. 2009 – March 2011
The Scientific and Technological Research Council of Turkey (TÜBİTAK), Public
Research Grant Group (KAMAG)

Environmental Engineer July 2008 – July 2009
Mavi Engineering, Ankara

Publications in Refereed International Journals

- Melymuk L., **Demirtepe H.**, Jílková R.S. (2020) Indoor dust and associated chemical exposures, *Current Opinion in Environmental Science & Health*, 15, 1-6.
- Kaya D., Sowers K.R., **Demirtepe H.**, Stiell B., Baker J.E., Imamoglu I., Kjellerup B.V. (2019) Assessment of PCB contamination, the potential for in situ microbial dechlorination and natural attenuation in an urban watershed at the East Coast of the United States, *Science of the Total Environment*, 683, 154–165.

- **Demirtepe H.**, Melymuk L., Diamond M.L., Bajard L., Vojta S., Prokeš, R., Sáňka, O., Klánová J., Palkovičová Murínová Ľ., Richterová D., Rašplová V., Trnovec T. (2019) Linking past uses of legacy SVOCs with today's indoor levels and human exposure, *Environment International*, 127, 653–663.
- **Demirtepe H.**, Imamoglu I. (2019) Biostimulation enhanced the biotic degradation of hexabromocyclododecane, *Journal of Soils and Sediments*, 19 (6), 2859–2868.
- **Demirtepe H.**, Imamoglu I. (2019) Levels of polybrominated diphenyl ethers and hexabromocyclododecane in treatment plant sludge: Implications on sludge management, *Chemosphere*, 221, 606-615.
- **Demirtepe H.**, Imamoglu I. (2019) Degradation of decabromodiphenyl ether (BDE-209) in microcosms mimicking sediment environment subjected to comparative bioremediation strategies, *Journal of Environmental Management*, 233, 120-130.
- **Demirtepe H.**, Kjellerup B., Sowers K., and Imamoglu I. (2015) Evaluation of PCB dechlorination pathways in anaerobic sediment microcosms using an anaerobic dechlorination model, *Journal of Hazardous Materials*, 296, 120-127.

Proceedings in International Conferences

- **Demirtepe H.**, Melymuk L., Codling G., Klánová J., Palkovičová Murínová Ľ., Richterová D., Rašplová V., Trnovec T. Human Exposure to Phthalates via Indoor Dust Ingestion at Urban and Rural Homes in Eastern Slovakia, platform presentation, Society of Environmental Toxicology and Chemistry (SETAC) 40th Annual Meeting, Toronto, Ontario, Canada, 3–7 November 2019.
- **Demirtepe H.**, Melymuk L., Diamond M.L., Bajard L., Vojta Š., Prokeš R., Sáňka O., Klánová J., Palkovičová Murínová Ľ., Richterová D., Rašplová V., Trnovec T. Levels and sources of SVOCs in homes near a former PCB-producing facility in Slovakia, platform presentation, International Societies of Exposure Science (ISES) and Indoor Air Quality and Climate (ISIAQ) 2019 Joint Conference, Kaunas, Lithuania, 18–22 August 2019.
- **Demirtepe H.**, İmamoğlu, İ., Sources and sinks of PBDEs in treatment plant sludge, platform presentation, Annual Conference of the International Network of Environmental Forensics (INEF) 2018, Salt Lake City, Utah, USA, 25–27 June, 2018.
- **Demirtepe H.**, İmamoğlu, İ., Brominated flame retardant levels in treatment plant sludges of Turkey, platform presentation, Sludge Management in Circular Economy (SMICE) 2018, Roma, Italy, 23–25 May, 2018.
- **Demirtepe H.**, İmamoğlu, İ., In-situ bioremediation alternatives for sediments contaminated with hexabromocyclododecane, platform presentation, 4th International Symposium on Bioremediation and Sustainable Environmental Technologies, Miami, Florida, USA, 22–25 May, 2017.
- **Demirtepe H.**, İmamoğlu, İ., Evaluation of remediation alternatives for reductive debromination of polybrominated diphenyl ethers in sediments, platform presentation, 36th International Symposium on Halogenated Persistent Organic Pollutants (DIOXIN 2016), Florence, Italy, 28 August–2 September, 2016.
- **Demirtepe H.**, İmamoğlu, İ., Polybrominated diphenyl ethers in treatment plant sludges: method validation and first results for Turkey, platform presentation, 35th

International Symposium on Halogenated Persistent Organic Pollutants (DIOXIN 2015), Sao Paulo, Brazil, 23–28 August, 2015.

- **Demirtepe H.**, B. Kjellerup, K. Sowers and İ. İmamoğlu, Evaluation of the major anaerobic PCB dechlorination pathways in Baltimore Harbor sediments, platform presentation, 2nd International Symposium on Bioremediation and Sustainable Environmental Technologies, Jacksonville, Florida, USA, 10–13 June, 2013.

Book Chapter

- **Demirtepe, H.** “Impacts of Remediation of Halogenated Organic Compounds in Soils and Sediments” in “Handbook of Research on Emerging Developments and Environmental Impacts of Ecological Chemistry”, Eds. Duca G. and Vaseashta A., IGI Global, pp. 341-362, 2020.

Publications in Refereed National Journals

- Karahan İ., **Demirtepe H.**, İmamoğlu İ. Investigation of Biological Degradation of Hexabromocyclododecane (in Turkish), *Çevre Bilim ve Teknoloji Dergisi*, 2, 2, 28-39, (2017).

Proceedings in National Conferences

- **Demirtepe H.**, İmamoğlu İ., Brominated Flame Retardant Contamination Levels in Turkey and First Results for Treatment Plant Sludges of Turkey (in Turkish), platform presentation, 12th National Environmental Engineering Congress, Ankara, Turkey, 5-7 October 2017.
- **Demirtepe H.**, İmamoğlu İ., Development of Bioremediation Strategies in Contaminated Sites (in Turkish), platform presentation, 12th National Environmental Engineering Congress, Ankara, Turkey, 5-7 October 2017.
- Karahan İ., **Demirtepe H.**, İmamoğlu İ., Investigation of Biological Degradation of Hexabromocyclododecane (in Turkish), platform presentation, 12th National Environmental Engineering Congress, Ankara, Turkey, 5-7 October 2017.
- **Demirtepe H.**, İmamoğlu, İ., Identification of polybrominated diphenyl ether levels in Turkey’s treatment plant sludges (in Turkish), platform presentation, 7th National Solid Waste Congress (UKAY 2015), Gaziantep, Turkey, 14-16 October 2015.

Awards and Fellowships

- Best Thesis Award, Graduate School of Natural and Applied Sciences, Middle East Technical University (METU) (2016-2017 Academic year – PhD dissertation)
- Ph.D. Fellowship, The Scientific and Technological Research Council of Turkey (TÜBİTAK) (March 2012 – January 2017)
- Best Oral Presentation Award, 7th National Solid Waste Congress (14-16 October 2015)
- Course Performance Award, Graduate School of Natural and Applied Sciences, Middle East Technical University (METU) (2011-2012 Academic year)
- First-ranking graduate among all graduates of the Bachelor’s Degree Program in the Department of Environmental Engineering, Middle East Technical University (2008)

Research Projects

- Researcher, “RECETOX Research Infrastructure”, Project No: CZ.02.1.01/0.0/0.0/16_013/0001761, 2019-2020.
- Researcher, “Dust in the environment as an important exposure pathway for endocrine disruptors”, Project No: GACR 19-20479S, 2019-2022.
- Researcher, “Drought Management Plan of East Mediterranean Watershed – Sectoral Vulnerability Assessment”, Ministry of Forestry and Water Affairs of Turkey, 2017-2018.
- Researcher, “Drought Management Plan of North Aegean Watershed – Sectoral Vulnerability Assessment”, Ministry of Forestry and Water Affairs of Turkey, 2017-2018.
- Researcher, “Drought Management Plan of Küçük Menderes Watershed – Sectoral Vulnerability Assessment”, Ministry of Forestry and Water Affairs of Turkey, 2017-2018.
- Ph.D. scholar, “Investigation of the fate of brominated flame retardants in aquatic sediments”, TÜBİTAK Scientific and Technological Research Projects Funding Program, Project No: 115Y122, 2015-2018.
- Researcher, “Investigation of the fate of flame retardants frequently used in the textile sector”, METU-Research Fund, Project No: BAP-03-11-2014-002, 2014-2017.

Consultancy Projects

- National coordinating expert, “Identification of High-Priority Sectors for Action on Persistent Organic Pollutants”, Ministry of Environment and Urbanisation – UNIDO, Project No:140288, 2020.

Teaching Activities

- Department of Environmental Engineering, IZTECH
 - ENV 511 Micropollutants in the Environment
- RECETOX, Faculty of Science, Chemistry Section, Masaryk University
 - C2003 Environmental Chemistry (Seminar Tutor for Environmental Modeling Module)

Other Academic Duties

- Reviewer in international journals: Journal of Hazardous Materials

Languages

Turkish: Native language

English: Advanced

German: Elementary

Technical Skills

Programming language: MATLAB

Computer-aided design and engineering: WaterCAD, SewerCAD, AutoCAD

Other: SigmaPlot, SPSS