

CURRICULUM VITAE

AYŞEN ERDİNÇLER, Ph. D.

CONTACT INFORMATION

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EDUCATION

Ph. D.: Civil and Environmental Engineering, Duke University, Durham, North Carolina, USA, 1996

M. S.: Civil and Environmental Engineering, Duke University, Durham, North Carolina, USA, 1991

M. S.: Environmental Engineering, Middle East University, Ankara, Turkey, 1989

B. S.: Environmental Engineering, Department of Environmental Engineering, Middle East Technical University, Turkey, 1986

PROFESSIONAL APPOINTMENTS

2008- **Professor**, Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey

2006- **Vice Director**, Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey

1999-2002 **Vice Director**, Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey

2002- **Associate Professor**, Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey

1997-2002	Assistant Professor , Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey
1996-1996	Post Doctoral Research Associate , Civil and Environmental Eng., Dept. Duke University, North Carolina, U.S.A
1993-1996	Project Engineer (part-time), MacConnell & Associates, P.C., North Carolina, U.S.A
1995-1996	Teaching and Research Assistant , Civil and Environmental Eng. Dept., Duke University, North Carolina, U.S.A.
1990-1991	Research Engineer (part-time), Sunshares Recycling Co. North Carolina, U.S.A
1990-1991	Research Assistant , Civil and Environmental Eng. Dept., Duke University, North Carolina, U.S.A
1986-1990	Research Assistant , Environmental Eng. Dept., Middle East Technical University, Ankara, Turkey

RESEARCH INTERESTS AND EXPERTISE

1. Wastewater Sludges Management and Disposal
2. Solid Waste Management
3. Wastewater Treatment
4. Anaerobic Treatment Systems
5. Energy (Biogas) Production from Sewage Sludges
6. Waste to Energy Systems

HONORS, AWARDS AND RECOGNITION

1994	Jeffrey Taub Environmental Engineering Graduate Student Award
1991	Leach Fund Research Award
1993	Leach Fund Research Award
1996	Leach Fund Research Award
1991	Turkish Republic Ministry of National Education Youth and Sport "Education Abroad Scholarship"
1986	Turkish Republic Ministry of National Education Youth and Sport "Language Education in Goethe Institute"

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

Member, International Water Association
Member, Chamber of Environmental Engineers of Turkey
Member, Turkish National Committee on Solid Waste
Member, Turkish National Committee on Water Pollution Research and Control
Member, Boğaziçi University Centre for Disaster Management
Member, Woman and Water Platform
Member, Turkish Union of Chambers and Exchange Commodities

REVIEWS – REFEREES

- Manuscripts Reviews**
- *Journal of Hazardous Materials*
 - *Waste Management and Research*
 - *Desalination*
 - *Environmental Technology*
 - *Water Science and Technology*
- Project Referees**
- *European Commission FP7 Project Commission*
 - *İstanbul Chamber of Industry Commission for the Sustainable and Environmentally Friendly Product and Applications*
 - *Association for Evaluation and Accreditation of Engineering Programs (MÜDEK)*
 - *Projects Evaluations of the Boğaziçi University Research Fund Commission*
 - *Projects Evaluations of the Marmara University Research Fund Commission*
 - *Projects Evaluations of the İstanbul Technical University ARI Teknokent*
 - *Projects Evaluations of the Scientific and Technological Research Council of Turkey (TÜBİTAK)*

TEACHING

1. ESC 301 - The Environmental Dimension
2. ESC 566 - Fundamentals of Environmental Engineering
3. ESC 517 - Water and Wastewater Treatment: Biological
4. ESC 634 - Treatment and Disposal of Wastewater Sludges
5. ESC 531 - Solid Waste Management
6. ESC 690 - M.S. Thesis
7. ESC 790 - Ph.D. Thesis

THESIS SUPERVISION

1. Seyhan, D., “Agricultural Use of Biological Phosphorus Removal Sludges”, M.S. Thesis, 2002.
2. Emir, E. U., “The Role Dewaterability Measures on the Liquid-Solid Separation of Biological Sludges: Compactibility as a New Measure of Sludge Dewaterability”, M.S. Thesis, 2002.
3. Çetin, S., “The Role of Extracellular Polymeric Substances on the Dewaterability of Biological Sludges”, M.S. Thesis, 2003.
4. Yıldırım, A., “Investigation of Protein and Carbonhydrate Components of Extracellular Polymeric Substances in Sludges Having Pin-Floc Characteristics and their role in in Dewaterability”, M.S. Thesis, 2006.
5. Tuncel, E.F., “Effects of Dual Polymer Conditioning on Sludge Dewatering”, M.S. Thesis, 2007.
6. Gökyay, O., “A Simple for Small Scale Wastewater Treatment Plants for the Thickening of Sludges: mesh Filter and Foam Filter”, Ph.D. Thesis, 2009.
7. Hacıosmanoğlu, G., “Pre-treatment of Wastewater Sludge by Pulsed Electric Field Application at Different pH Conditions”, M.S. Thesis, 2010.
8. Kalkan, E., “The Effect of Disintegration by Classical and Advanced Processes on Minimization and Characteristics of the Wastewater Sludges”, M.S. Thesis, 2010.
9. Sarıoğlu, S., “Low Load Greywater and Municipal Wastewater Treatment by Membrane Bioreactor”, M.S. Thesis, 2011.
10. Akyapı, A., “Minimization of Excess Sludge Production in the Treatment of Municipal Wastewaters by Using Membrane Bioreactor-Ultrasound Combined Systems”, M.S. Thesis, 2011.
11. Alagöz, B. A., “Investigation of Biogas Production from Agricultural Crops, Crop Residues and Wastewater Treatment Plant Sludges”, Ph.D. Thesis, (continued).
12. Aköz, A.Y., “Investigation of the Factors Affecting Dewaterability of Aerobic Granular Sludge”, Ph.D. Thesis, (continued).
13. Güneş, G., “Process Modelling and Energy Optimization of a Full Scale Advanced Biological Wastewater Treatment Plant”, Ph.D. Thesis, (continued).
14. Kumbaracıbaşı, S., “Investigation of the Impacts of Sewage Sludge Utilization in Cement Kiln as an Alternative Fuel”, Ph.D. Thesis, (continued).
15. Oğuz, O., “Defining New Sustainable- Intelligent Building Concept: Developing A New Risk Based Intelligent Building Performance Assessment Method Consisting of Most Conclusive Group of KPIs (Key Performance Indicators) and KIIs (Key Intelligence Indicators)”, Ph.D. Thesis (continued).
16. Sönmez, S., “Utilization of Sewage Sludge as an Alternative Fuel in Cement Kiln”, M.S. Thesis, (continued).
17. Karataş, Ö., “Effect of Ultrasonic Disintegration on the Characteristics of Biological Sludges and the Biogas Production in Anaerobic Digestion”, M.S. Thesis, (continued).
18. Ersöz, E., “The Effect of Enzymatic Pre-treatment on Sludge Stabilization”, M.S. Thesis, (continued).

RESEARCH PROJECTS

1. “Effect of Water Distribution on the Liquid Separation of Sludge”, Boğaziçi University Research Fund, 2000.
2. “Agricultural Use of Phosphorus-Rich Sewage Sludges”, Boğaziçi University Research Fund, 2004.
3. “Heavy Metal Removal from Municipal Solid Waste Leachate – Municipal Wastewater Sludges through Bioleaching (Evsel Katı Atık Sızıntı Suyu - Evsel Atıksu Artımı Çamurundan Biyolojik Ekstraksiyonla Ağır Metal Giderimi)”, Boğaziçi University Research Fund, 2005.
4. “Mesh Filtration as a New Method in Sludge Thickening”, Boğaziçi University Research Fund, 2007.
5. “Pre-treatment of Waste Water Sludge at Different pH Conditions by Pulsed Electric Field”, Boğaziçi University Research Fund, 2010.
6. “Investigation of Biogas Production from the Agricultural Crops, Crop Residues and the Wastewater Treatment Plant Sludges by the Anaerobic Digestion”, Project No: 08HY101D, Boğaziçi University Research Fund, (continued).
7. “Management of Domestic/Municipal Wastewater Sludges (Evsel/Kentsel Arıtma Çamurlarının Yönetimi)”, Project No: 108G167, the Scientific and Technological Research Council of Turkey (TÜBİTAK), (continued).

PUBLICATIONS

Theses

1. **Üçüncü, A.**, “Process Efficiency Characterization of the Plastic Medium Trickling Filters”, M. S. Thesis, Middle East Technical University, Ankara, Turkey, 1989.
2. **Üçüncü, A.**, “Energy Recovery from Mixed Waste Paper”, M. S. Thesis, Civil and Environmental Engineering, Duke University, Durham, North Carolina, USA, 1991.
3. **Erdinçler, A. Ü.**, “Effect of Sludge Cell Disruption on Water Distribution and Compactibility of Sludge”, Ph. D. Thesis, Civil and Environmental Engineering, Duke University, Durham, North Carolina, USA, 1991.

Publications

1. Erdinçler A., Seyhan, L. D. “Agricultural Use of Municipal Wastewater Sludges: Phosphorus Availability of Biological Excess Phosphorus Removal Sludges” *Journal of Environmental Science and Technology* (SCI) (ISSN 0273-1223), 54 (5), 131-138, 2006.

2. Emir, E., Erdinçler, A. “The Role of Compactibility in liquid-Solid Separation of Wastewater Sludges” *Journal of Environmental Science and Technology* (SCI) (ISSN 0273-1223), 53 (7), 121-126, 2006.
3. Cetin S., Erdinçler A. “The Role of Carbohydrate and Protein Parts of Extracellular Polymeric Substances on the Dewaterability of Biological Sludges” *Journal of Environmental Science and Technology* (SCI) (ISSN 0273-1223), 50 (9), 49-56, 2004.
4. Çınar, S., Onay, T.T., Erdinçler, A. “Co-disposal Alternatives of Various Municipal Wastewater Treatment Plant Sludges with Refuse” *Advances in Environmental Research* (SCI Expanded) (ISSN 1093-0191), 8, 477-482, 2004.
5. Seyhan D., Erdinçler A. “Effect of Lime Stabilization of Enhanced Biological Phosphorus Removal Sludges on the Phosphorus Availability to Plants”, *Water Science and Technology* (SCI) (ISSN 0273-1223), 48 (1), 155-162, 2003.
6. Erdinçler A., Vesilind P.A. “Effect of Sludge Water Distribution on the Liquid-Solid separation of a Biological Sludge”, *Journal of Environmental Science and Health Part A.* (SCI) (ISSN 1093-4529), A38 (10), 2391-2400, 2003.
7. Seyhan D., Erdinçler A. “Plant Availability of Heavy Metals and Phosphorus in the Agricultural Use of Biological Sludges”, *Journal of Environmental Science and Health Part A.*(SCI) (ISSN 1093-4529), 38 (10), 2413-2423, 2003.
8. Çeçen, F., Erdinçler A., Kiliç, E., “Effect of Powdered Activated Carbon Addition on Substrate Removal and Sludge Dewaterability in Landfill Leachate Treatment”, *Advances in Environmental Research* (SCI Expanded) (ISSN 1093-0191), 7, 707-713, 2003.
9. Aralp, L. C., Erdinçler, A., Onay, T. T., “Heavy Metal Removal from the Wastewater and Leachate Co-Treatment Sludge by Sulfur Oxidizing Bacteria”, *Water Science and Technology* (SCI) (ISSN 0273-1223), 44 (10), 53-58, 2001.
10. Erdinçler, A., Köseoğlu S, Onay, T. T., “Role of Blending on Sludge Polymer Conditioning”, *Water Science and Technology* (SCI) (ISSN 0273-1223), 44 (6), 63-66, 2001.
11. Erdinçler A.U., Vesilind P.A., “Effect of Sludge Cell Disruption on the Compactibility of Waste Activated Sludge”, *Water Science and Technology* (SCI) (ISSN 0273-1223), 42 (9), 119-126, 2000.
12. Gülec, S.B., Onay, T. T., Erdinçler, A., “Determination of the Remaining Stabilization Potential of Landfilled Solid waste by Sludge Addition”, *Water Science and Technology* (SCI) (ISSN 0273-1223), 42 (9), 269-276, 2000.
13. Erdinçler A.U., Vesilind P.A., “Energy Recovery from Mixed Waste Paper”, *Waste Management and Research*, (SCI) (ISSN 0734-242X) 11, 507-513, 1993.
14. Ulug S.E., Ucuncu A., “Process Efficiency Characterization of Plastic Medium Trickling Filters,” *International Journal of Environmental Studies*, 42, 31-40, 1992.

Conference and Workshop

1. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “Re-use of Agricultural Waste and Disintegrated Wastewater Sludges in Energy Production”, International Conference on Recycling and Reuse (R&R 2012), İstanbul, 4-6 June 2012.
2. Aköz, A.Y., Koornneef, E., van Loosdrecht, M. C. M., Erdiñçler, A. “Anaerobic Digestibility and Dewaterability of Aerobic Granular Sludge”, International Conference on Recycling and Reuse (R&R 2012), İstanbul, 4-6 June 2012.
3. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “Effect of Sludge Pre-Treatment Techniques on the Biogas Production from Waste Activated Sludge”, IWA World Congress on Water, Climate and Energy, 13-18 May, 2012.
4. Akyapı, A., Erdiñçler, A. “Ultrasonic Minimization of Sludges Produced in the Municipal Wastewater Treatment”, IWA World Congress on Water, Climate and Energy, 13-18 May, 2012.
5. Akyapı, A., Erdiñçler, A. “Effect of the Ultrasonication on the Minimization of Biological Sludge Production in the Treatment of Municipal Wastewater by Using Membrane Bioreactors (Membran Biyoreaktörler İle Evsel Atıksu Arıtımından Kaynaklanan Çamurların Minimizasyonunda Ultrasonik Dezentegrasyonun Etkisi)”, 9. Ulusal Çevre Mühendisliği Kongresi, Samsun, 5-8 Ekim 2011 (in Turkish).
6. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “The Use of Sludge Disintegration to Accelerate the Anaerobic Co-Digestion of Sewage Sludge and Maize Silage”, The Eight International IWA Symposium on Waste Management Problems in Agro-Industries, Çeşme-İzmir, 22-24 June 2011.
7. Akyapı, A., Erdiñçler, A. “Minimization of Sludge Production in the Treatment of Municipal Wastewaters by Using Membrane Bioreactor-Ultrasonic Sludge Disintegration”, "The Eight International IWA Symposium on Waste Management Problems in Agro-Industries, Çeşme-İzmir, Turkey, 22-24 June 2011.
8. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “Enhanced Anaerobic Co-Digestion of Agricultural Biomass and Biological Sludge”, 16th European Biosolids and Organic Resources Conference and Exhibition, the Royal Armouries, Leeds, UK, 14-16 November, 2011.
9. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “Investigation of the Effects of Municipal Wastewater Sludge Disintegration Techniques on the Anaerobic Digestion (Kentsel Arıtma Çamuru Dezentegrasyon Yöntemlerinin Anaerobik Çürütme Üzerindeki Etkilerinin İncelenmesi)”, National Solid Waste Management Conference (UKAY 2011), Crete, Cyprus, 7-10 September, 2011 (in Turkish).
10. Aköz, A.Y., Koornneef, E., van Loosdrecht, M. C. M., Erdiñçler, A. “Anaerobic Digestion and Dewaterability of Aerobic Granular Sludge (Aerobik Granüler Çamurun Anaerobik Çürütülmesi ve Susuzlaştırılması)”, National Solid Waste Management Conference (UKAY 2011), Crete, Cyprus, 7-10 September, 2011 (in Turkish).
11. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “Co - Digestion of the Wastewater Treatment Sludges and the Agricultural Crop Residues for the Biogas Production”, 2nd European

- Conference on Sludge Management, ECSM, Budapest, Hungary, 9-10 September, 2010.
12. Aköz, A.Y., Erdiñçler, A., Koornneef, E., van Loosdrecht, M. C. M. “Dewaterability and Digestibility of Different Types of Sludges”, 2nd European Conference on Sludge Management, ECSM, Budapest, Hungary, 9-10 September, 2010.
 13. Alagöz, B. A., Erdiñçler, A., Yenigün, O. “Co - Digestion of Agricultural Crop Residues and the Wastewater Treatment Sludge for the Biogas Production”, IWA Water and Energy Conference, Amsterdam, the Netherlands, 10-12 November, 2010.
 14. Aköz, A.Y., Koornneef, E., van Loosdrecht, M. C. M., Erdiñçler, A., “Investigation of Biogas Production and Dewaterability of Different Types of Sludges”, IWA Water and Energy Conference, Amsterdam, The Netherlands, 10-12 November, 2010.
 15. Yıldırım A, Erdiñçler A. Proceedings of IWA Specialty Conference: Sustainable Sludge Management: State of the Art, Challenges and Perspectives. Moscow, Russia, 29-31 May, 2006.
 16. Erdiñçler A. “Agricultural Use of Municipal Wastewater Sludges: Phosphorus Availability of Biological Excess Phosphorus Removal Sludges”. IWA Conference on Management of Residues Emanating from Water and Wastewater Treatment, Johannesburg, South Africa, 9-12 August 2005.
 17. Emir E., Erdiñçler A. “The role of Compactibility in Liquid-Solid Separation of Wastewater Sludges”, IWA Conference on Particle Separation, Saul, South Korea, 1-3 June 2005.
 18. Cetin S., Erdiñçler A. “The Role of Carbohydrate and Protein Parts of Extracellular Polymeric Substances on the Dewaterability of Biological Sludges”, IWA Specialty Conference: Resources from Sludge Forging New Frontiers, Singapore, 2-4 March 2004.
 19. Emir E. U., Erdiñçler A. “The Role of Compactibility in Measuring Sludge Dewaterability”, IWA Asia Pacific Regional Conference: Asian Waterqual 2003, 19-23 October, Bangkok, Thailand, 2003.
 20. Seyhan D., Erdiñçler A. “Effect of Lime Stabilization of Enhanced Biological Phosphorus Removal Sludges on the Phosphorus Availability to Plants”, IWA International Conference on From Nutrient Removal to Recovery, 2-4 October, Amsterdam, the Netherlands, 2002.
 21. Erdiñçler A., Vesilind P.A. “Effect of Sludge Water Distribution on the Liquid-Solid separation of a Biological Sludge”, IWA Fifth Specialized Conference on Small Water and Wastewater Treatment Systems, Istanbul, Turkey, 2002.
 22. Seyhan D., Erdiñçler A., (2002) “Plant Availability of Heavy Metals and Phosphorus in the Agricultural Use of Biological Sludges”, IWA Fifth Specialized Conference on Small Water and Wastewater Treatment Systems, Istanbul, Turkey, 2002.
 23. Emir U.E., Erdiñçler A. “Compactibility as a New Measure in sludge Dewaterability”, IWA Fifth Specialized Conference on Small Water and Wastewater Treatment Systems, Istanbul, Turkey, 2002.
 24. Erdiñçler A. “Effect of Sludge Cell Disruption on the Water Distribution in a Biological Sludge”, ISWA 2002 World Environment Congress, Istanbul, Turkey.

25. Seyhan D., Erdinçler A. "Agricultural Use of Sewage Sludges: Phosphorus Availability of Biological Excess Phosphorus Removal Sludges", ISWA 2002 World Environment Congress, V.3, 1401-1408, Istanbul, Turkey.
26. Aralp,C., Erdinçler, A. "Heavy Metal Removal from the Wastewater and Leachate Co-Treatment Sludge by Sulfur Oxidizing Bacteria", Specialized Conference of IWA on Sludge Management Entering the Third Millennium-Industrial, Combined, Water and Wastewater Residues, Taipei, Taiwan, March 2001.
27. Çınar, S., T.T. Onay, Erdinçler, A. "Co-disposal Alternatives of Various Municipal Wastewater Treatment Plant Sludges with Refuse", Specialized Conference of IWA on Sludge Management Entering the 3rd Millennium-Industrial, Combined Water and Wastewater Residues, Taipei, Taiwan, 2001.
28. Çeçen, F., Erdinçler A., Kilic, E. "Effect of Powdered Activated Carbon Addition on Substrate Removal and Sludge Dewaterability in Landfill Leachate Treatment", Specialized Conference of IWA on Sludge Management Entering the 3rd Millennium-Industrial, Combined Water and Wastewater Residues, Taipei, Taiwan ,2001.
29. Erdinçler, A., Köseoğlu S, Onay, T. "Role of Blending on Sludge Polymer Conditioning", Specialized Conference of IWA on Managing Water and Waste in the New Millenium, p. 3D1, Johannesburg, South Africa, May, 2000.
30. Erdinçler, A., Vesilind P.A. "Effect of Sludge Cell Disruption on Compactibility of Waste Activated Sludge", Specialized Conference of IWA on Disposal and Utilization of Sewage Sludge, Athens, Greece, October 1999.
31. Erdinçler A., Onay T.T. "Development of a Management Strategy for Mixed Waste Paper in Istanbul Metropolitan Area," Second International Waste Management and Landfill Symposium, Cagliari, Italy, October 1999.
32. Erdinçler A. "Effect of Blending on Sludge Polymer Conditioning," Second International Symposium on Anaerobic Digestion of Solid Waste, Barcelona, Spain, June, 1999.
33. Köseoğlu, S., Erdinçler, A. "Effect of NaCl Treatment on Water Distribution and Compactibility of Waste Activated Sludge", First World Congress of the International Water Association, Paris, July, 2000.
34. Erdinçler, A. "Effect of Sludge Cell Disruption on the Water Distribution in a Biological Sludge" Third World Congress of the International Water Association, Melbourne, Australia, 2002.