

Asst. Prof. DENİZ AKGÜL

Personal Information

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Biography

Dr. Deniz Akgul received her PhD in Environmental Engineering at Marmara University, Turkey in 2012. In 2013, she was awarded a TUBITAK Postdoctoral Scholarship and joined a research project in the University of British Columbia on emerging pretreatment technologies (i.e. microwave, sonication, chemical treatment, high-pressure homogenization) for enhanced biogas production from anaerobic digestion and improved digestate quality. She has been working as a faculty member in Marmara University since 2015.

Her current research interests are Wastewater and Sludge Treatment, Pretreatment Technologies for Enhanced Biomethane from Organic Waste and Biological Nutrient Removal Processes.

Education Information

Post Doctorate, The University of British Columbia, Faculty of Engineering, Civil Engineering, Canada 2013 - 2014

Doctorate, Marmara University, Faculty of Engineering, Environmental Engineering, Turkey 2007 - 2012

Post Graduate, Marmara University, Faculty of Engineering, Environmental Engineering, Turkey 2005 - 2007

Under Graduate, Marmara University, Faculty of Engineering, Environmental Engineering, Turkey 2000 - 2005

Foreign Languages

English, C2 Proficiency

Dissertations

Doctorate, Characterization of landfill leachates in turkey and assessment of treatment alternatives, Marmara Üniversitesi, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2012

Post Graduate, Effect of polymer characteristics on floc strength, Marmara Üniversitesi, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2007

Research Areas

Environmental Sciences, Environmental Technology, Waste Water Collection and Treatment, Pollution Prevention and Waste Reduction, Water Supply and Treatment, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Marmara University, Faculty of Engineering, Environmental Engineering, 2015 - Continues

Research Assistant, Marmara University, Faculty of Engineering, Environmental Engineering, 2006 - Continues

Courses

Energy and the Environment, Under Graduate, 2015 - 2016

Advising Theses

AKGÜL D., Inhibitory effects of zinc oxide nanoparticles on anammox process, Post Graduate, S.CAN(Student), 2018
AKGÜL D., Short and long-term effects of titanium dioxide nanoparticles on anammox bacteria, Post Graduate, A.ÖZLEM(Student), 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Nitrogen Converters in Various Landfill Leachates**
AKGÜL D., Yüzer B., Yapsakli K., MERTOĞLU B.
POLISH JOURNAL OF ENVIRONMENTAL STUDIES, vol.27, pp.1941-1948, 2018 (Journal Indexed in SCI)
- **Assessing iron and aluminum-based coagulants for odour and pathogen reductions in sludge digesters and enhanced digestate dewaterability**
Akgul D., Abbott T., Eskicioglu C.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.598, pp.881-888, 2017 (Journal Indexed in SCI)
- **Influences of low-energy input microwave and ultrasonic pretreatments on single-stage and temperature-phased anaerobic digestion (TPAD) of municipal wastewater sludge**
Akgul D., Cella M. A. , Eskicioglu C.
ENERGY, vol.123, pp.271-282, 2017 (Journal Indexed in SCI)
- **Assessment of microbial viability in municipal sludge following ultrasound and microwave pretreatments and resulting impacts on the efficiency of anaerobic sludge digestion**
Cella M. A. , Akgul D., Eskicioglu C.
APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol.100, pp.2855-2868, 2016 (Journal Indexed in SCI)
- **Treatment of landfill leachate using UASB-MBR-SHARON-Anammox configuration**
AKGÜL D., KALKAN AKTAN Ç., Yapsakli K., MERTOĞLU B.
BIODEGRADATION, vol.24, pp.399-412, 2013 (Journal Indexed in SCI)
- **Solidification/stabilization of landfill leachate concentrate using different aggregate materials**
Hunçe S. Y. , AKGÜL D., DEMİR G., MERTOĞLU B.
WASTE MANAGEMENT, vol.32, pp.1394-1400, 2012 (Journal Indexed in SCI)
- **Evaluation of Biological Activated Carbon (BAC) process in wastewater treatment secondary effluent for reclamation purposes**
Kalkan C., Yapsakli K., MERTOĞLU B., Tufan D., Saatci A.
DESALINATION, vol.265, pp.266-273, 2011 (Journal Indexed in SCI)
- **CHARACTERIZATION OF LANDFILL LEACHATES IN TURKEY**
AKGÜL D., MERTOĞLU B., Yüzer B.
FRESENIUS ENVIRONMENTAL BULLETIN, vol.20, pp.2638-2642, 2011 (Journal Indexed in SCI)

Articles Published in Other Journals

- **Temperature phased anaerobic digestion of municipal sewage sludge: a Bardenpho treatment plant study**
Akgul D., Cella M. A. , Eskicioglu C.
WATER PRACTICE AND TECHNOLOGY, vol.11, pp.569-573, 2016 (Journal Indexed in ESCI)
- **Treatment of Landfill Leachate by Advanced Oxidation Processes**
Koçak S., Güney C., Tarkın B., Kirtman E. Ö. , AKGÜL D., MERTOĞLU B.
Marmara Fen Bilimleri Dergisi, 2013 (Other Refereed National Journals)
- **Effect of High Ammonia Concentration on UASB Reactor Treating Sanitary Landfill Leachate**
YÜZER B., AKGÜL D., MERTOĞLU B.
Marmara Fen Bilimleri Dergisi, 2012 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

- **Identification of Anammox bacteria in landfill leachates of Turkey**
BAKIRCI K., AKGÜL D., MERTOĞLU B.
IWA World Conference on Anaerobic Digestion, 17 Ekim 2017 - 20 Ekim 2107
- **Start Up of Anammox Reactor and Short Term Effects of TiO₂ Nanoparticles on Anammox Bacteria**
Yar A. Ö. , AKGÜL D.
ICETI 2017, 22 - 26 Mart 2017
- **Inhibitory effects of zinc oxide nanoparticles on anammox process**
Can S., AKGÜL D.
ICETI 2017, 22 - 26 Mart 2017
- **Size and Coating Effects of ZnO Nanoparticles on Mesophilic and Thermophilic Sludge Digestion**
OLAYA W., AKGÜL D., ESKİCİOĞLU C.
10th International Society for Environmental Biotechnology Conference Barcelona, 1 - 03 Haziran 2016
- **Application of Microbial Stains in Pre Treated Municipal Sludge to Study Subsequent Effects on Biogas and Methane Production During Anaerobic Digestion**
CELLA M., AKGÜL D., ESKİCİOĞLU C.
WEF/IWA Residuals and Biosolids 2015 Conference, Washington, DC, 7 - 10 Haziran 2015
- **Investigation of Hazardous Waste Generation by Turkish Automotive Industry**
YAZICI B., CAN Z. S. , GÖKYAY O., ÇALLI B., MERTOĞLU B., AKGÜL D., YETİŞ Ü.
EurAsia Waste Management Symposium, 14 - 16 Kasım 2011
- **Hazardous Waste Generation From Household Appliances Industry in Turkey**
YAZICI B., ÇALLI B., MERTOĞLU B., CAN Z. S. , GÖKYAY O., AKGÜL D., YETİŞ Ü.
EurAsia Waste Management Symposium, 14 - 16 Kasım 2011

Supported Projects

Akgül D., Mertoğlu B., TUBITAK Project, Anammox Prosesinde Hidrazin Toleransı ve Metabolizmasının Araştırılması, 2019 - 2020

Akgül D., Mertoğlu B., TUBITAK Project, Nanoparçacıkların Zenginleştirilmiş Anammox Kültürü Üzerindeki İnhibisyon Etkileri, 2018 - 2020

Akgül D., Sarı T., Project Supported by Higher Education Institutions, Uzun Süreli Nanopartikül Maruziyetinde Bırakılan Anaerobik Amonyum Oksidasyon (Anammox) Bakterilerinin Moleküler İncelenmesi, 2018 - 2019

Akgül D., Mertoğlu B., Project Supported by Higher Education Institutions, Zenginleştirilmiş Anammox kültüründe çinko oksit nanoparçacık inhibisyonunun araştırılması, 2016 - 2019

Akgül D., Can S., Project Supported by Higher Education Institutions, Çinko Oksit Nanoparçacıklarının Anammox Prosesi Üzerindeki İnhibisyon Etkileri, 2017 - 2018

Akgül D., Project Supported by Higher Education Institutions, TiO₂ Nanoparçacıklarının Anammox Bakterileri Üzerindeki Kısa ve Uzun Süreli Etkileri, 2017 - 2018

Gökyay O., Can Z. S. , Çallı B., Mertoğlu B., Akgül D., TUBITAK Project, Türkiye de AB Çevre Mevzuatı ile uyumlu Tehlikeli Atık Yönetimi, 2009 - 2013

Can Z. S. , Yükselen M. A. , Gökyay O., Akgül D., Şam S., TUBITAK Project, Yüksek Çözünmüş Organik Madde İçeren Sularda Flok Yapılarının İncelenmesi , 2005 - 2008

Citations

Total Citations (WOS):147

h-index (WOS):6

Scholarships

