

Prof. Zehra Şapçı Ayas

Personal Information

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Education Information

Post Doctorate, Dept. Of Mathematical Sciences And Technology, Dept. Of Mathematical Sciences And Technology, Norway 2009 - 2012

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Çevre Mühendisliği, Turkey 2002 - 2008

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Çevre Mühendisliği, Turkey 1999 - 2002

Undergraduate, Trakya University, Fen Edebiyat, Biyoloji, Turkey 1994 - 1999

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Other, Management Committee and WGs meeting, COST Meeting, 2016

Education Management and Planning, Biological Treatment According to the C-TECH technology, CYCLIC ACTIVATED SLUDGE TECHNOLOGY, 2016

Education Management and Planning, Türkiye'de Çevre Yönetimi için Kurumsal Kapasitenin Geliştirilmesi Projesi, Sürdürülebili Şehirler Konferansı, REC Türkiye, 2016

Education Management and Planning, Su ve atıksu yönetimi eğitimi, TBB, 2016

Education Management and Planning, Türkiye'deki İçme Suyu Kaynaklarının ve Arıtma Tesislerinin Değerlendirilmesi, DSİ, 2016

Dissertations

Doctorate, SUCUL ORTAMLARDA DOĞAL GİDERİM YÖNTEMLERİ İLE METALLERDEKİ DEĞİŞİKLİĞİN ARAŞTIRILMASI, Yıldız Technical University, Fen Bilimleri Enstitüsü, Çevre Mühendisliği, 2008

Postgraduate, TEKSTİL ATIKSULARININ ANAEROBİK ARITILABİLİRLİĞİNİN İNCELENMESİ, Yıldız Technical University, Fen Bilimleri Enstitüsü, Çevre Mühendisliği, 2002

Research Areas

Environmental Engineering, Environmental Sciences, Engineering and Technology

Academic Titles / Tasks

Research Assistant PhD, Norges Landbrukskole; Nlh (Agricultural University Of Norway), Department Of Mathematical Sciences And Technology, Dept. Of Mathematical Sciences And Technology, 2009 - 2012
Research Assistant, Yildiz Technical University, Mühendislik Fakültesi, Çevre Mühendisliği, 1999 - 2008

Academic and Administrative Experience

Van Yüzüncü Yıl University, Çevre Mühendisliği, 2018 - Continues
Van Yüzüncü Yıl University, Mühendislik, Çevre Mühendisliği, 2016 - Continues

Jury Memberships

Post Graduate, Tez Savunma Jürisi,, Van Yüzüncü Yıl, December, 2020
Post Graduate, Tez Savunma Jurisi, Bitlis Eren Üniversitesi, December, 2019
Post Graduate, Tez Savunma Jürisi,, Bitlis Eren Üniversitesi, December, 2019
Post Graduate, Tez Savunma Jürisi,, Bitlis Eren Üniversitesi, December, 2019
Post Graduate, Tez Savunma Jürisi,, van yüzüncü yıl üniversitesi, December, 2019
Post Graduate, Tez Savunma Jürisi,, Bitlis Eren Üniversitesi, September, 2019
Post Graduate, Tez Savunma Jürisi,, van yüzüncü yıl, August, 2019
Doctorate, Tez Savunma Jürisi,, Atatürk Üniveristesi, May, 2019
Appointment to Academic Staff-Assistant Professorship, Araştırma Görevlisi Sınavı, Muş Alparslan Univ. Müh. Mim. fak., November, 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Electrochemical mineralization of abattoir wastewater with continuous system**
Öztürk D., Yilmaz A. B., Şapçı Ayas Z.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.18, no.12, pp.3761-3776, 2021 (SCI-Expanded)
- II. **Novel gas measurement based on pressure triggered release cycles for biochemical methane potential tests**
BEKMEZCİ O. K., Şapçı Ayas Z., Ucar D.
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, vol.19, no.6, pp.585-596, 2021 (SCI-Expanded)
- III. **Investigation of Direct Applicability of Modified Agricultural Waste for Contaminant Removal from Real Textile Wastewater**
Şapçı Ayas Z.
WATER, vol.13, no.10, 2021 (SCI-Expanded)
- IV. **Examination of the problems experienced in urban and industrial wastewater treatment facilities and constructed wetlands and the identification of circumstances: the case of Yozgat province of Turkey**
Şapçı Ayas Z., Fidan A., Avşar E.
Fresenius Environmental Bulletin, vol.30, pp.4307-4316, 2021 (SCI-Expanded)
- V. **Heavy Metal Uptakes by Myriophyllum verticillatum from Two Environmental Matrices: The Water and the Sediment**
Şapçı Z., Ustun E. B.
International Journal of Phytoremediation, vol.17, no.3, pp.290-297, 2015 (SCI-Expanded)
- VI. **Incorporation of fish by-product into the semi-continuous anaerobic co-digestion of pre-treated lignocellulose and cow manure, with recovery of digestate's nutrients**

- ESTEVEZ M. M., Sapci Z., LINJORDET R., MORKEN J.
RENEWABLE ENERGY, vol.66, pp.550-558, 2014 (SCI-Expanded)
- VII. **Semi-continuous anaerobic co-digestion of cow manure and steam-exploded Salix with recirculation of liquid digestate**
ESTEVEZ M. M., Sapci Z., LINJORDET R., SCHNURER A., MORKEN J.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.136, pp.9-15, 2014 (SCI-Expanded)
- VIII. **The effect of algae species on biodiesel and biogas production observed by using a data model combines algae cultivation with an anaerobic digestion (ACAD) and a biodiesel process**
Sapci Z., MORKEN J.
ENERGY CONVERSION AND MANAGEMENT, vol.79, pp.519-524, 2014 (SCI-Expanded)
- IX. **Modeling of biodiesel production in algae cultivation with anaerobic digestion (ACAD)**
MORKEN J., Sapci Z., STROMME J. E. T.
ENERGY POLICY, vol.60, pp.98-105, 2013 (SCI-Expanded)
- X. **An Investigation of the Enhancement of Biogas Yields from Lignocellulosic Material using Two Pretreatment Methods: Microwave Irradiation and Steam Explosion**
Sapci Z., MORKEN J., LINJORDET R.
BIORESOURCES, vol.8, no.2, pp.1976-1985, 2013 (SCI-Expanded)
- XI. **The effect of microwave pretreatment on biogas production from agricultural straws**
Sapci Z.
BIORESOURCE TECHNOLOGY, vol.128, pp.487-494, 2013 (SCI-Expanded)
- XII. **Interactions between contaminated aquatic environments and element uptake by Echinodorus amazinicus and Cryptocoryne undulata**
Sapci Z., Ustun E. B.
ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.76, pp.114-125, 2012 (SCI-Expanded)
- XIII. **Recovery of ammonium nitrogen from the effluent of UASB treating poultry manure wastewater by MAP precipitation as a slow release fertilizer**
YETİLMEZSOY K., Sapci-Zengin Z.
JOURNAL OF HAZARDOUS MATERIALS, vol.166, no.1, pp.260-269, 2009 (SCI-Expanded)
- XIV. **Ameliorative effect of different doses of MgNH₄PO₄ center dot 6H₍₂₎O precipitate recovered from the effluent of UASB treating poultry manure wastewater: Growth of Lolium perenne**
YETİLMEZSOY K., Sertyesilisik B., Kocak E., Sapci-Zengin Z.
JOURNAL OF FOOD AGRICULTURE & ENVIRONMENT, vol.7, pp.823-831, 2009 (SCI-Expanded)
- XV. **Decolorization and COD reduction of UASB pretreated poultry manure wastewater by electrocoagulation process: A post-treatment study**
YETİLMEZSOY K., İLHAN F., Sapci-Zengin Z., ŞAKAR S., GÖNÜLLÜ M. T.
JOURNAL OF HAZARDOUS MATERIALS, vol.162, no.1, pp.120-132, 2009 (SCI-Expanded)
- XVI. **Stochastic modeling applications for the prediction of COD removal efficiency of UASB reactors treating diluted real cotton textile wastewater**
YETİLMEZSOY K., Sapci-Zengin Z.
STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.23, no.1, pp.13-26, 2009 (SCI-Expanded)
- XVII. **Treatment of textile industry wastewater in anaerobic conditions; subcategory: Cotton industry**
Zengin Z., Aydinol F. I. T.
Fresenius Environmental Bulletin, vol.16, pp.1593-1599, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Challenges and suggestions for municipal solid waste management during the global COVID-19 outbreak**
BEKMEZCİ H. D., SAPCI AYAS Z.
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.12, no.1, pp.72-81, 2023 (Peer-Reviewed)

- Journal)
- II. **Atıkslardaki Ağır Metallerin Su Mercimeği ile Giderimi Üzerine Güncel Çalışmaların İncelenmesi**
Şapçı Ayas Z., Bahtiyar F., Yakan , Dağdaş .
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.24, no.1, pp.109-117, 2019 (Peer-Reviewed Journal)
 - III. **Atıksuların Yeniden Kazanımında, Yapay Sulak Alanların Önemi ve İşletme Problemleri**
Şapçı Ayas Z., Türkmenoğlu M., Aşan A.
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.24, no.1, pp.102-108, 2019 (Peer-Reviewed Journal)
 - IV. **Evaluation of Environmental Public Attitudes in Tatvan County / Bitlis Province, A Case Studies: Secondary School Students**
DURMAZ BEKMEZCİ H., Şapçı Ayas Z.
. Middle East Journal of Education (MEJE), no.2, pp.19-32, 2016 (Peer-Reviewed Journal)
 - V. **Evaluating biogas in Norway - bioenergy and greenhouse gas reduction potentials**
Morken J., Sapçı Z.
Agricultural Engineering International: CIGR Journal, vol.15, no.2, pp.148-160, 2013 (Scopus)

Books & Book Chapters

- I. **Ortaokul Öğrencilerinde Çevresel Bilinci; Bitlis Örneği**
DURMAZ BEKMEZCİ H., Şapçı Ayas Z.
Erman Basım Yayın Dağıtım, İstanbul, 2019
- II. **Evaluation of Anaerobic Treatability of Between Cotton and Polyester Textile Industry Wastewater**
Şapçı Ayas Z., Turkdogan F. I.
in: Waste Water - Treatment and Reutilization, Einschlag F. S. G., Editor, Intech, Rijeka, pp.49-64, 2011

Refereed Congress / Symposium Publications in Proceedings

- I. **Yozgat İli'nde Bulunan Kentsel-Endüstriyel Atıksu Aritma Tesisleri Ve Yapay Sulak Alanların Durumlarının İncelenmesi, Yaşanan Problemlerin Tespiti Ve Çözüm Önerileri**
fidan a., Şapçı Ayas Z.
5. Uluslararası Ispec Mühendislik Ve Fen Bilimleri Kongresi, Van, Turkey, 20 - 22 December 2019, pp.226-233
- II. **Effect Of Adsorbent Pretreatment On Cod Removal In The Adsorption Of Textile Industry Wastewater With Potato Husk**
Şapçı Ayas Z., Öztürk D., DURMAZ BEKMEZCİ H.
5. Uluslararası Ispec Mühendislik Ve Fen Bilimleri Kongresi, Van, Turkey, 20 - 22 December 2019, pp.417-422
- III. **Avrupa'da, Dünya'da, ve Türkiye'de Biyogaz Üretimi**
YAMAÇ A., Şapçı Ayas Z.
5. Uluslararası Ispec Mühendislik Ve Fen Bilimleri Kongresi, Van, Turkey, 20 - 22 December 2019, pp.646-663
- IV. **The Cost of Building an Ecolodge in Duhok Governorate, Northern Iraq**
Şapçı Ayas Z., Türkmenoğlu M., Araz BAHJAT ABDULLAH A.
Uluslararası Ispec Mühendislik Ve Fen Bilimleri Kongresi, Van, Turkey, 20 - 22 December 2019, pp.363-370
- V. **Environmental Impact of Freshwater Aquaculture on A Nature Based Tourism Site in North of Iraq, Duhok Governorate**
BAHJAT ABDULLAH A., Şapçı Ayas Z., Mohammed N. I.
4th International Engineering and Natural Sciences Conference (IENSC 2019), Diyarbakır, Turkey, 6 - 08 November 2019, pp.1038-1047
- VI. **Evaluation of Environmental Management of Small Size Wastewater Treatment Plants**
Hussein Mustafa N., Şapçı Ayas Z.
4th International Engineering and Natural Sciences Conference (IENSC 2019), Diyarbakır, Turkey, 6 - 08 November 2019, pp.1031-1037

- VII. **Evaluation of Suitability of Van Lake Water in Alkaline Hydrolysis of Wheat Straw in Biogas Production**
PİRO E., DURMAZ BEKMEZCİ H., Şapçı Ayas Z., Bekmezci o. K.
4th International Engineering and Natural Sciences Conference (IENSC 2019), Diyarbakır, Turkey, 6 - 08 November 2019, pp.9-12
- VIII. **Sürekli Sistemde Kesimhane Atıksuyunun Elektro-oksidasyon Yöntemi ile Aritimında Akım Yoğunluğunun Renk Giderimine ve Enerji Tüketimine Etkisi**
ÖZTÜRK D., ŞAPCI AYAS Z., YILMAZ A. E.
4. Uluslararası Bilimsel Araştırmalar Kongresi (UBAK), Yalova, Turkey, 14 - 17 February 2019, pp.76-81
- IX. **The Effect of Current Density On Color Removal and Energy Consumption in the Treatment of Slaughterhouse Wastewater by Electro-Oxidation Method in a Continuous System**
Şapçı Ayas Z., Öztürk D.
4th international Scientific Research Congress, Yalova, Turkey, 14 - 17 February 2019, pp.246-252
- X. **ATIK SULARIN YENİDEN KAZANIMINDA YAPAY SULAK ALANLARIN ÖNEMİ VE İŞLETME PROBLEMLERİ**
Şapçı Ayas Z., Türkmenoğlu M., Aşan A.
13. Ulusal Kimya Kongresi, Van, Turkey, 3 - 06 September 2018, pp.7491-7499
- XI. **ATIKSULARDAKİ AĞIR METALLERİN SU MERCİMEĞİ İLE GİDERİMİ ÜZERİNE GÜNCEL ÇALIŞMALARIN İNCELENMESİ**
Bahtiyar F., Yakan , Dağdaş , Şapçı Ayas Z.
13. Ulusal Kimya kongresi, Van, Turkey, 3 - 06 September 2018, pp.7198-7207
- XII. **Atık Suların Yeniden Kazanımında Yapay Sulak Alanların Önemi ve İşletme Problemleri**
Şapçı Ayas Z., Türkmenoğlu M., Aşan A.
13. Ulusal Kimya Mühendisliği Kongresi, Van, Turkey, 3 - 06 September 2018, pp.7491-7498
- XIII. **Investigation of Environmental Attitude of Secondary School Students in Bitlis (TURKEY)**
Şapçı Ayas Z., DURMAZ BEKMEZCİ H., ÇINKILIÇ Y. E.
The 3rd International Congress on Education Sciences and Learning Technology (ICESLT), Atina, Greece, 15 - 19 November 2017, pp.33
- XIV. **Applications of phytoremediation in the World**
Şapçı Ayas Z.
International Conference on Multidisciplinary, Engineering, Science, Education and Technology (IMESET'17 Bitlis), Bitlis, Turkey, 27 - 29 October 2017, pp.135-140
- XV. **Greenhouse Gas Emissions from Cattle and Small Ruminant Breeding in Turkey and Biogas Proposal for this Emission Reduction**
Şapçı Ayas Z.
International Conference on Multidisciplinary, Engineering, Science, Education and Technology (IMESET'17 Bitlis), Bitlis, Turkey, 27 - 29 October 2017, pp.141-145
- XVI. **EVALUATION OF ENVIRONMENTAL PUBLIC ATTITUDES IN TATVAN COUNTY / BİTLİS PROVINCE, A CASE STUDIES: SECONDARY SCHOOL STUDENTS**
DURMAZ BEKMEZCİ H., Şapçı Ayas Z.
International Engineering, Science and Education Conference ISBN:978-975-7635-97-0, Diyarbakır, Turkey, 1 - 03 December 2016, pp.213-221

Supported Projects

Şapçı Ayas Z., Project Supported by Higher Education Institutions, Gerçek tekstil atıksuyunu arıtılabilirliğinin incelenmesi, 2019 - 2020

Şapçı Ayas Z., Onay M., DURMAZ BEKMEZCİ H., Project Supported by Higher Education Institutions, Atıksudaki ağır metalin işlem yapılmış ve yapılmamış patates kabuğu ile gideriminin araştırılması, 2017 - 2020

Onay M., Şapçı Ayas Z., Project Supported by Higher Education Institutions, Mikroalglerin yağ miktarlarının belirlenmesi

için uygun florasan metodun geliştirilmesi ve bunun biyodizel üretiminde kullanılması, 2017 - 2019
Şapçı Ayas Z., Project Supported by Higher Education Institutions, Çevre mühendisliği laboratuvar altyapısının geliştirilmesi, 2018 - 2018
Şapçı Ayas Z., Project Supported by Higher Education Institutions, Çevre mühendisliği katı atık laboratuvarı altyapısının geliştirilmesi, 2017 - 2018

Memberships / Tasks in Scientific Organizations

Society of Environmental Engineers, Member, 2018 - Continues

Scientific Refereeing

Kentsel Katı Atıklar ve Geri Kazanımlarının Faydaları; Eskişehir Örneği, National Scientific Refreed Journal, December 2019

TUBITAK Project, August 2019

RSC ADVANCES, SCI Journal, May 2018

Sigma Journal of Engineering and Natural Sciences, National Scientific Refreed Journal, October 2017

Project Supported by Higher Education Institutions, March 2017

Scientific Research / Working Group Memberships

VAN YÜZUNCÜ YIL ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, VAN YÜZUNCÜ YIL ÜNİVERSİTESİ, Turkey,
<http://dergipark.gov.tr/yyufbed>, 2018 - 2019

Metrics

Publication: 40

Citation (WoS): 575

Citation (Scopus): 536

H-Index (WoS): 11

H-Index (Scopus): 10

Congress and Symposium Activities

ISPEC 5. ULUSLARARASI MÜHENDİSLİK ve FEN BİLİMLERİ KONGRESİ, Session Moderator, Van, Turkey, 2019

4. Uluslararası Bilimsel Araştırma Kongresi, Session Moderator, Yalova, Turkey, 2019

International Conference on Multidisciplinary, Engineering, Science, Education and Technology (IMESET'17 Bitlis),
Session Moderator, Bitlis, Turkey, 2017

Global Conference of Environmental Studies, Moderator, Antalya, Turkey, 2013

International Conference of Agricultural Engineering, Moderator, Valencia, Spain, 2012

international conference of agricultural engineering, Moderator, Valencia, Spain, 2012

Awards

Şapçı Ayas Z., Teşvik önergesinin 5/6 maddesi gereği ile TAKDİR BELGESİ, Bitlis Eren Üniversitesi, September 2014

Non Academic Experience

Other Public Institution, Tekirdağ Su Ve Kanalizasyon İdaresi
TEKİRDAĞ SU VE KANALİZASYON İDARESİ