



## CURRICULUM VITAE

### FERHAN ÇEÇEN

**Current Position:** Professor at Bogaziçi University, Istanbul, Turkey  
**Professional Address:** Bogaziçi University, Institute of Environmental Sciences, 34342, Bebek, Istanbul, Turkey  
Phone: +90 212 359 72 56  
Fax: +90 212 257 50 33  
E-mail: [cecenf@boun.edu.tr](mailto:cecenf@boun.edu.tr)  
**Place of birth:** Istanbul, Turkey  
**Citizenship:** Republic of Turkey  
**Languages:** Turkish (native), English and German (fluent in both languages)

#### Education and degrees:

- 1990 **Ph.D. Degree in Environmental Engineering**, Istanbul Technical University, Thesis Title: Nitrogen Removal from High-strength Wastewaters by Upflow Submerged Nitrification and Denitrification Filters", Advisor: Prof.Dr.Ethem Gönenç.
- 1986 **M.Sc. Degree in Environmental Engineering**, Istanbul Technical University, Thesis Title: Metal Complexation and its Implications on related Technologies", Advisor: Prof. Dr.Derin Orhon.
- 1984 **B.Sc. Degree in Chemical Engineering**, Bogaziçi University, Istanbul.
- 1980 Graduation from the German High School in Istanbul (Deutsche Schule Istanbul).

#### Professional career:

1984-1986 Work as a part-time process engineer at the engineering company TEKSER in Istanbul

February 1987- November 1989

Research Assistant in the Environmental Division of the Chemical Engineering Department of Turkish Scientific and Technical Research Institution (TÜBİTAK)-Marmara Center, Gebze, Turkey: participation and direction of several research projects

November 1989-November 1990

Research scholar at Vienna Bodenkultur University (Institut für Wasserversorgung, Gewässergüte und Fischereiwirtschaft) and activity in the project "Removal of nonbiodegradable matter from wastewaters by a combination of high energy irradiation and ozonation" (Principal supervisor: Prof.Dr. Raimund Haberl)

**Academic career:**

November1990- March 1993

Instructor at the Institute of Environmental Sciences, Bogaziçi University, Istanbul

March 1993-October 1993

Assistant Professor at the Institute of Environmental Sciences, Bogaziçi University, Istanbul

October 1993-June 1999

Associate Professor in the field of Environmental Technologies at the Institute of Environmental Sciences, Bogaziçi University

September-October 1996

Research Associate at Munich Technical University, (Lehrstuhl für Wassergüte und Abfallwirtschaft) and activity in the project "Application of biofiltration in the advanced treatment of domestic wastewaters and sludge treatment process wastewaters" (Project leader: Prof. Dr. P.A. Wilderer)

June 1999-present

Full Professor at the Institute of Environmental Sciences, Bogaziçi University, Istanbul

**University Service Positions:**

Nov.1990- present

Institute of Environmental Sciences, Bogaziçi University, Faculty Member

1996-1998

Institute of Environmental Sciences, Bogaziçi University, Laboratory Director

May 2002 –March 2005

Institute of Environmental Sciences, Bogaziçi University, Vice Director

May 2002 –March 2014

Institute of Environmental Sciences, Bogaziçi University, Member of the Institute Executive Committee

May 2002 –March 2014

Institute of Environmental Sciences, Bogaziçi University, Member of the Institute Board

2003-present

Member of the Commission for Ethics in Academic Relationships at Bogaziçi University (chief since 2019)

Member of the Commission for Research Policies at Bogaziçi University

2022-present

Member of the Scientific Research Projects (BAP) Committee of Bogaziçi University

### **Awards:**

- Turkish Scientific and Technical Research Institution (TUBITAK) Encouragement Award in Engineering Sciences (2000): The award is submitted to selected scientists in Turkey under the age of 40.
- Bogazici University Award of Outstanding Research for Young Scientists (2000): The award is submitted to scientists at the Bogaziçi University under the age of 40 for their research performance.

### **Research Interests**

Her studies generally focus on process characterization in water and wastewater treatment. The major part of these studies is within the scope of environmental biotechnology with a special emphasis on nitrification, denitrification, biofilm kinetics, activated sludge kinetics, domestic wastewater, industrial wastewater and leachate treatment, inhibitory effects of specific organics and heavy metals on biological treatment systems. She has conducted many studies on combination of adsorption and biological processes for elimination of specific toxic and/or slowly biodegradable organic pollutants.

### **Professional Memberships:**

- Member of the International Water Association (IWA)
- Member of the Turkish National Committee on Water Pollution Research (SKATMK)

### **Professional Services:**

- Referee of several international journals such as Water Research, Ecotoxicology and Environmental Safety, Environmental Technology, Chemosphere, the Environmentalist, Journal of Environmental Management, Environmental Conservation, Environmental Engineering Science, Journal of Hazardous Materials, Water, Air and Soil, Water Research.
- Referee in several International Water Association (IWA) conferences.
- Referee in several Turkish institutions and organizations supporting young scientists, offering research and doctorate scholarships.
- Referee and editor in several Turkish journals and conferences.
- From 2001 to 2005 she acted as the selected member of the TUBITAK-İÇTAG (Civil and Environmental Technologies Research Group) Executive Committee: TUBITAK is the Turkish Scientific and Technical Research Institution and the main project supporting organization in Turkey. In this group she acted as one of the major decision makers about primary research areas, evaluation of environmental projects, monitoring of ongoing projects, support of national symposiums, workshops etc., establishment of research excellence centers, support of joint projects between national and international universities.
- Management Committee member in the COST Action 636 “**Xenobiotics in The Urban Water Cycle**”. Start Date 14/03/2005, End Date 13/03/2009.

## EDUCATIONAL ACTIVITIES

### **Courses taught at Bogaziçi University:**

- ESc. 516 Water and Wastewater Treatment: Physicochemical Processes
- ESc. 511 Environmental Biotechnology
- ESc. 301 The Environmental Dimension
- ESc. 613 Nutrient Removal in Advanced Wastewater Treatment
- ESc. 500 On-Site Training
- ESc. 311 Environmental Science and Technology
- ESc. 517 Water and Wastewater Treatment: Biological Processes
- ESc. 660 Special Topics in Environmental Technology: Kinetics and Reactor Models in Biological Wastewater Treatment
- ESc.647 Industrial Wastewater Treatment
- ESc.661 Environmental Technology Laboratory
- ESc.603 Biotechnology for Environmental Sciences and Engineering
- ESc.513 Industrial Water Quality Control
- ESc.512 Wastewater Treatment Processes
- ESc.510 Water and Wastewater Engineering
- ESc.511 Water Treatment Processes
- ESc.561 Unit Operations and Reactor Design for Environmental Engineers

### **MSc. Theses supervised:**

**Pınar Gökçin**, Investigation of Nitrification Characteristics of a Nitrogenous Industrial Wastewater, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (June 1994).

**Elvan Orak**, Start-up and Operation of a Nitrifying Biofilm Reactor, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (January 1995).

**Suna İpek**, Investigation of Nitrification Inhibition in a Biofilm System, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (October 1996).

**Didem Çakıroğlu**, Combined Treatment of Landfill Leachate with Domestic Wastewater, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (June 1998).

**Gül Gürsoy**, Removal Alternatives of Heavy Metals from Landfill Leachate, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (June 1998).

**Çiğdem Yangın**, Evaluation of BOD Analysis and Different BOD test Methods in the Case of Landfill Leachate, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (September 1998).

**Özgür Aktaş**, Powdered Activated Carbon Addition to Activated Sludge in the Treatment of Landfill Leachate, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences, M.Sc.Thesis (August 1999).

**Emel Kılıç**, The Effect of Powdered Activated Carbon Addition on Substrate and Sludge Characteristics in Leachate Treatment, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (February 2001).

**Özgül Ayyıldız**, Relationship between Silver Inhibition and Feeding of Activated Sludge, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences (August 2013).

**Başak Kılıç**, Silver inhibition, surface charge and hydrophobicity in activated sludges fed with different substrates, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences, (2014).

**Taylan Berke Yıldız**, Industrial Stormwater Treatment and Reuse: A Case Study, M.Sc. Thesis, Bogaziçi University, Institute of Environmental Sciences, (2024).

**Ph.D. Theses supervised:**

**Bilge Alpaslan Kocamemi**, Cometabolic Degradation of Trichloroethylene (TCE) and 1,2-Dichloroethane (1,2-DCA) in Nitrification Systems, Ph.D. Thesis, Bogaziçi University, Institute of Environmental Sciences (2005).

**Özgür Aktaş**, Bioregeneration of Activated Carbon in the Treatment of Phenolic Compounds, Ph.D. Thesis, Bogaziçi University, Institute of Environmental Sciences (2006).

**Neslihan Yazıcı Semerci**, Effect of Heavy Metal Speciation on Nitrification Inhibition, Ph.D. Thesis, Bogaziçi University, Institute of Environmental Sciences (2007).

**Kozet Yapsaklı**, Application of Biological Activated Carbon (BAC) In Drinking Water Treatment, Ph.D. Thesis, Bogaziçi University, Institute of Environmental Sciences (2008).

**Ayşe Gül Geyik**, Relationship between metal inhibition and microbial products in biological systems, Ph.D. Thesis, Bogaziçi University, Institute of Environmental Sciences (2015).

**Ongoing thesis supervisions:**

**Başak Kılıç**, Removal of Micropollutants from the Secondary Effluent of Wastewater Treatment Plants by Granular Activated Carbon Adsorption. (ongoing Ph.D.thesis)

**Gökçin Gül**, Removal of the Micropollutants from Drinking Water by Granular Activated Carbon (GAC). (ongoing Ph.D.thesis)

**Begüm Uzluk**, Leather Industry Wastewaters: Performance of Polymer-Based Hybrid Materials in Coagulation-Flocculation and Sludge Reduction (ongoing MSc.thesis)

## RESEARCHPROJECTS

### Projects supported by the Research Fund of Bogaziçi University (BAP):

- Combination of activated carbon and activated sludge in the treatment of Kraft pulp bleaching wastes (1993)
- Nitrogen removal from industrial wastewaters by biological treatment (also supported by TUBITAK) (1995)
- Application of biological treatment and TiO<sub>2</sub> photocatalyzed oxidation to pulp bleaching wastewaters (1997)
- Investigation of treatability and characterization of landfill leachates (1998).
- Application of respirometric methods in the biological treatment of landfill leachate with activated carbon addition (2000)
- Assessment of inhibition in the biological treatment of industrial wastewaters (2002)
- Investigation of the removal of chlorinated organic compounds in nitrification systems (2003).
- Combination of activated carbon and biological processes in the removal of refractory and toxic compounds (2005).
- The effect of metal complexation in biological systems, 2007.
- Application of Biological Activated Carbon (BAC) Filtration in Drinking Water Treatment , 2005-2008.
- Microbial products and metal inhibition in biological systems, Project No: 09Y101P, 2009-2013. January 2013.
- Effect of the carbon to nitrogen (C/N) ratio on the type and production of EPS in activated sludge. BAP Project No: 14Y00D1, 12.2. 2014-12.2.2016.
- Effect of nanosilver on biological treatment systems, Project No: 15Y001P1, B.Ü.BAP (16.3.2015-16.9.2016).
- Assessment of the biodegradation of micropollutants in secondary effluents, Project No: 13000, B.Ü.BAP ( 20.6.2017-20.12.2018).
- Removal of Micropollutants From Drinking Water by Granular Activated Carbon (GAC), Proje No: 19Y00D5, B.Ü.BAP (20.6.2019-9.8.2023)
- Removal of pharmaceuticals from secondary effluent by Granular Activated Carbon (GAC) filtration (İkincil arıtma atıksuyunda kalan farmasötik mikrokirleticilerin Granüler Aktif Karbon (GAK) filtrasyonu ile giderimi, Proje No: 19Y00D6, B.Ü.BAP (24.9.2019-20.12.2023)

### **Completed projects supported by TUBITAK:**

- Nitrogen removal from industrial wastewaters by biological treatment (1995).
- Investigation of the removal of chlorinated organic compounds in a nitrifying biofilm filter (2003).
- Investigation of cometabolic TCE degradation in nitrifying systems (2004).
- Determination of bioregeneration of activated carbon in the treatment of aromatic compounds, (2005).
- Removal of 1, 2-Dichloroethane in an upflow aerated filter by nitrifiers (2006).
- The effect of heavy metals on nitrification systems in the presence of complexing agents, (2006).
- Determination of nitrifier activities and species in biological wastewater treatment systems, 2006.
- Application of biological activated carbon (BAC) in drinking water treatment, 2007.
- Project No: 105Y379 Behavior of selected organic and inorganic xenobiotics in biological systems and formation of structure –activity relationship (SAR) models (within the scope of COST Action 636: Xenobiotics in the Urban Water Cycle), 2006-2009.
- Project No: 111Y 018, Microbial products and metal inhibition in biological systems (2012-2015) TUBITAK-ÇAYDAG. (Keywords: Extracellular Polymeric Substances (EPS), Inhibition, Heavy metal, Biological sludge)

### **Other projects:**

Participation in the project "Removal of nonbiodegradable matter from wastewaters by a combination of high energy irradiation and ozonation" at the Vienna Bodenkultur University (Institut für Wasserversorge, Gewässergüte und Fischereiwirtschaft) from November 1989 to November 1990.

### **Projects during the work time in TUBITAK-Gebze (February 1987- November 1989):**

- Nitrogen removal in combined nitrification and denitrification filters. NATO Wastewater Treatment and Disposal Studies Project, 1989.
- Design of a Wastewater Treatment System for a Detergent Industry, 1988.
- Design of a Wastewater Treatment System for Saline, Acidic and Alkaline Wastewaters of a Pesticide Industry, 1988.
- Design of a Domestic Wastewater Treatment System for a Pesticide Industry, 1987.

# FERHAN ÇEÇEN

## Publications in German:

### Research report

F.Çeçen (1990) Biologische und weitergehende Reinigung von Abwässern aus der Zellstoff-Chlorbleiche - Literaturüberblick und Laborversuche nach dem Belebtschlammverfahren und anschließender Ozonung/Bestrahlung, Fällung/Flockung und Adsorption an Aktivkohle. Institut für Wasserversorgung, Gewässergüte und Fischereiwirtschaft, Abteilung für Siedlungswasserbau, Industriegewässerschutz und Gewässerschutz, Universität für Bodenkultur, Wien.

### Publications in journals:

- 1) F.Çeçen, W.Urban, R.Haberl, G.Gehring (1991) Reinigung der Chlorbleicheabwässer der Zellstoffindustrie, I - Untersuchungen zur Reinigung mit dem Belebtschlammverfahren und nachfolgender Ozonung/Bestrahlung, Österreichische Wasserwirtschaft, ISSN 0029-9588, Heft 9/10. 221-227.
- 2) F.Çeçen, W.Urban, R.Haberl (1991) Reinigung der Chlorbleicheabwässer der Zellstoffindustrie, II - Weitergehende Reinigung von biologisch gereinigten Abwässern durch Fällung/Flockung und Adsorption an Aktivkohle, Österreichische Wasserwirtschaft, ISSN 0029-9588, Heft 9/10, 228-233.

### Publications in International Journals:

- 1) F.Çeçen, W.Urban and R.Haberl (1992) Biological and advanced treatment of sulfate pulp bleaching effluents, Water Science and Technology, Vol.26 (1/2). 435-444.  
<http://wst.iwaponline.com/ppiwa/wst/26/1-2/435.full.pdf>
- 2) F.Çeçen (1992) Physicochemical and biological treatment on surfactant wastewaters, Water Science and Technology, Vol.26 (1/2), 377-386.  
<http://wst.iwaponline.com/ppiwa/wst/26/1-2/377.full.pdf>
- 3) F.Çeçen and E.Gönenç (1992) Nitrification-denitrification of high-strength nitrogen wastes in two upflow submerged filters, Water Science and Technology, Vol.26, (9/11), 2225-2228. <http://wst.iwaponline.com/ppiwa/wst/26/9-11/2225.full.pdf>
- 4) F.Çeçen (1993) Adsorption characteristics of a biotreated pulp mill effluent, Water Science and Technology, Vol.28 (2), pp.1-10.  
<http://wst.iwaponline.com/ppiwa/wst/28/2/1.full.pdf>
- 5) F.Çeçen and I.E.Gönenç (1994) Nitrogen removal characteristics of nitrification and denitrification filters, Water Science and Technology, Vol.29 (10/11), pp.409-416.  
<http://wst.iwaponline.com/ppiwa/wst/29/10-11/409.full.pdf>

- 6) **F.Çeçen** (1994) Activated carbon addition to activated sludge in the treatment of kraft pulp bleaching wastes. Water Science and Technology, Vol.3, pp. 183-192.  
**<http://wst.iwaponline.com/ppi/wawst/30/3/183.full.pdf>**
- 7) **F.Çeçen** and E.Gönenç (1995) Criteria for nitrification and denitrification of high-strength wastes in two upflow submerged filters. Water Environment Research, Vol.67, No.2, 132-142. **<http://www.jstor.org/stable/25044530>**
- 8) **F.Çeçen**, E.Orak, P.Gökçin (1995) Nitrification studies on fertilizer wastewaters in activated sludge and biofilm reactors. Water Science and Technology, Vol.32 (12), pp.141-148. **doi:10.1016/0273-1223(96)00148-5**
- 9) **F.Çeçen**, E.Orak (1996) Nitrification of fertilizer wastewaters in a biofilm reactor. Journal of Chemical Technology and Biotechnology, Vol.65, 229-238.  
**doi: 10.1002/(SICI)1097-4660(199603)65:3<229:AID-JCTB429>3.0.CO;2-3**
- 10) **F. Çeçen** (1996) Investigation of partial and full nitrification characteristics of fertilizer wastewaters in a submerged biofilm reactor. Water Science and Technology, Vol.34 (11), pp.77-85. **doi:10.1016/S0273-1223(96)00823-2**
- 11) M.Bekbölet, **F.Çeçen**, G.Özkösem (1996) Photocatalytic oxidation and subsequent adsorption characteristics of humic acids. Water Science and Technology, Vol.34 (9), pp.65-72. **doi:10.1016/S0273-1223(96)00788-3**
- 12) **F.Çeçen** and S.Ipek (1998) Determination of the inhibition of ammonia-N and urea-N oxidation by the fed-batch reactor (FBR) technique. Water Science and Technology, Vol.38 (1), pp.141-148. **[http://dx.doi.org/10.1016/S0273-1223\(98\)00398-9](http://dx.doi.org/10.1016/S0273-1223(98)00398-9)**.
- 13) I.Akmehmet Balcıoğlu , **F.Çeçen** (1999) Treatability of Kraft pulp bleaching wastewater by biochemical and photocatalytic oxidation. Water Science and Technology Vol.40 (1), pp.281-288. **doi:10.1016/S0273-1223(99)00396-0**
- 14) **F.Çeçen** (1999) Determination of biotreatability of a kraft pulp bleaching wastewater based on conventional and spectrophotometric parameters. Toxicological and Environmental Chemistry, Vol.71, pp.51-62. **DOI:10.1080/02772249909358780**.
- 15) **F.Çeçen** (1999) Investigation of substrate degradation and nonbiodegradable portion in several pulp bleaching wastes. Water Science and Technology, Vol.40, (11/12) ,pp.305-312.  
**doi:10.1016/S0273-1223(99)00732-5**
- 16) **F.Çeçen** and G.Gürsoy (2000) Characterization of landfill leachates and studies on heavy metal removal. Journal of Environmental Monitoring. Vol 2, pp.436-442.  
**DOI: 10.1039/B004729P**
- 17) **F.Çeçen** and Ç.Yangın (2000) Comparison of BOD results obtained by dilution and manometric methods in sanitary landfill leachates. Journal of Environmental Monitoring, Vol.2, No.6, pp.628-633. **DOI: 10.1039/B003244L**

- 18) **F.Çeçen** and D.Çakroğlu (2001) Impact of landfill leachate on the co-treatment of domestic wastewater. Biotechnology Letters, Vol.23, pp.821-826.  
**doi:10.1023/A:1010317823529**
- 19) **F.Çeçen** and Ç.Yangın (2001) Application of various BOD test methods in landfill leachates . Journal of Environmental Science and Health, Part A. Vol.A36, No.4, pp.545-564. **doi: 10.1081/ESE-100103483**
- 20) **F.Çeçen** and Ö.Aktaş (2001) Effect of PAC addition in combined treatment of landfill leachate and domestic wastewater in semi-continuously fed batch and continuous-flow reactors.Water SA, Vol.27, No.2, pp.177-188. <http://dx.doi.org/10.4314/wsa.v27i2.4991>
- 21) Ö.Aktaş, **F.Çeçen** (2001) Addition of activated carbon to batch activated sludge reactors in the treatment of landfill leachate and domestic wastewater, Journal of Chemical Technology and Biotechnology, Vol.76, No.8, pp.793-802. **doi: 10.1002/jctb.450**
- 22) **F.Çeçen** and G.Gürsoy (2001) Biosorption of heavy metals from landfill leachate onto activated sludge. Journal of Environmental Science and Health, Part A, Vol.A36, No.6, pp.987-998. **doi: 10.1081/ESE-100104126**
- 23) Ö.Aktaş, **F.Çeçen** (2001) Nitrification inhibition in landfill leachate treatment and impact of activated carbon addition. Biotechnology Letters, Vol.23, pp.1607-1611.  
**Ddoi:10.1023/A:1011939312889**
- 24) **F.Çeçen** and Ö.Aktaş (2001) Powdered activated carbon-assisted biotreatment of a chemical synthesis wastewater Journal of Chemical Technology and Biotechnology, Vol.76, pp.1249-1259. **doi: 10.1002/jctb.513**
- 25) **F.Çeçen**, A.Erdinçler, E.Kılıç (2003) Effect of powdered activated carbon addition on sludge dewaterability and substrate removal in landfill leachate treatment. Advances in Environmental Research , 7, pp.707-713. **doi:10.1016/S1093-0191(02)00033-3**
- 26) **F. Çeçen**, Ö. Aktaş (2004) Upgrading of the biotreatment in a pharmaceutical industry with powdered activated carbon addition, Water Science and Technology Vol. 48, No. 11-12, pp.437-444. <http://wst.iwaponline.com/ppiwa/wst/48/11-12/437.full.pdf>
- 27) **F.Çeçen**, Ö. Aktaş (2004) Aerobic co-treatment of landfill leachate with domestic wastewater and impact of carbon addition on effluent quality. Environmental Engineering Science, Vol.21, No:3, pp. 303-312. **doi:10.1089/109287504323066941.**
- 28) B.Kocamemi, **F.Çeçen** (2005) Cometabolic Degradation of TCE in Enriched Nitrifying Batch Systems, Journal of Hazardous Materials, B124, pp.260-265.  
**doi:10.1016/j.jhazmat.2005.06.002**

- 29) Aktaş, Ö., **Çeçen, F.** (2006). Effect of Type of Carbon Activation on Adsorption and its Reversibility, Journal of Chemical Technology and Biotechnology, 81, 94-101. **doi: 10.1002/jctb.1363**
- 30) Ö.Aktaş, **F.Çeçen** (2006) Effect of activation type on bioregeneration of various activated carbons loaded with phenol, Journal of Chemical Technology and Biotechnology, 81, 1081-1092. **doi: 10.1002/jctb.1472**
- 31) B.Kocamemi, **F.Çeçen** (2007) Kinetic Analysis of the Inhibitory Effect of Trichloroethylene (TCE) on Nitrification in Cometabolic Degradation, Biodegradation, 18:71-81. **doi:10.1007/s10532-005-9037-3**
- 32) Ö.Aktaş, **F.Çeçen** (2007) Adsorption, desorption and bioregeneration in the treatment of 2-chlorophenol with activated carbon, Journal of Hazardous Materials, 141, 769-777. **doi: 10.1016/j.jhazmat.2006.07.050**
- 33) N.Semerci, **F.Çeçen** (2006) Importance of free Zn species in batch nitrification systems. Proceedings of IWA World Water Congress, 10-14 September 2006, Beijing/China. Printed in the online journal: Water Practice and Technology 2006 Sep, 1 (3) **doi: 10.2166/wpt.2006.053**
- 34) Ö.Aktaş, **F.Çeçen** (2007) Adsorption reversibility and bioregeneration of activated carbon in the treatment of phenol. Water Science and Technology, Vol. 55, No.10, pp. 237-244. **doi: 10.2166/wst.2007.327**
- 35) B.Kocamemi, **F.Çeçen** (2007) Inhibitory Effect of the Xenobiotic 1,2-DCA in a Nitrifying Reactor. Water Science and Technology Vol.55 (8-9), pp.67-73. **doi: 10.2166/wst.2007.243.**
- 36) Ö.Aktaş, **F.Çeçen** (2007) Bioregeneration of Activated Carbon: A Review, International Biodeterioration & Biodegradation, 59, pp.257-272. **doi:10.1016/j.ibiod.2007.01.003**
- 37) N.Semerci, **F.Çeçen** (2007) Importance of Cadmium Speciation in Nitrification Inhibition, Journal of Hazardous Materials, 147, 503-512. **doi: 10.1016/j.jhazmat.2007.01.041.**
- 38) Ö.Aktaş, **F.Çeçen** (2007) Competitive Adsorption and Desorption of a Bi-Solute Mixture: Effect of Activated Carbon Type, Adsorption, 13, 159-169. **doi: 10.1007/s10450-007-9017-5**
- 39) Bulent Mertoglu, Neslihan Semerci, Nuray Guler, Baris Calli, **Ferhan Çeçen**, Ahmet Mete Saatci (2008) Monitoring of population shifts in an enriched nitrifying system under gradually increased cadmium loading, Journal of Hazardous Materials, 160, pp.495-501. **doi:10.1016/j.jhazmat.2008.03.056**
- 40) Neslihan Semerci, **Ferhan Çeçen** (2009) Effect of continuous Cd feeding on the performance of a nitrification reactor, Biodegradation, 20, 155-164. **doi: 10.1007/s10532-008-9209-z.**

- 41) Yapsaklı, K., **Çeçen, F.**, Aktaş, Ö., Can, Z.S. (2009). Impact of surface properties of granular activated carbon and preozonation on adsorption and desorption of natural organic matter. Environmental Engineering Science, Vol.26, No.3, pp.489-500. **doi:10.1089/ees.2008.0005.**
- 42) Alpaslan Kocamemi, B., **Çeçen, F.**, (2009) Biodegradation of 1,2-dichloroethane (1,2-DCA) by cometabolism in a nitrifying biofilm reactor, International Biodeterioration & Biodegradation, 63, 717-726. **doi:10.1016/j.ibiod.2009.04.008**
- 43) Özgür Aktas, **Ferhan Çeçen** (2009). Cometabolic bioregeneration of activated carbons loaded with 2-chlorophenol, Bioresource Technology, 100, 4604–4610. **doi: 10.1016/j.biortech.2009.04.053**
- 44) K.Yapsaklı, **F.Çeçen** (2009) Use of an Enriched Inoculum for Determination of Biodegradable Dissolved Organic Carbon (BDOC) in Drinking Water, Water Science and Technology: Water Supply, WSTWS, 9 (2) 149-157; **DOI: 10.2166/ws.2009.158**
- 45) Sacan, MT; **Cecen, F**; Erturk, MD, Semerci N. (2009) Modelling the relative toxicity of metals on respiration of nitrifiers using ion characteristics. SAR AND QSAR IN ENVIRONMENTAL RESEARCH, 20 (7-8), 727-740. **Doi:10.1080/10629360903438594**
- 46) B. Alpaslan Kocamemi, **F. Çeçen** (2010) Biological removal of the xenobiotic trichloroethylene (TCE) through cometabolism in nitrifying systems, Bioresource Technology, 101, 1, pp. 430-433. **doi: 10.1016/j.biortech.2009.07.079**
- 47) Yapsaklı, K.,**Çeçen, F.** (2010) Effect of Type of Granular Activated Carbon on DOC Biodegradation in Biological Activated Carbon Filters, Process Biochemistry , 45, 355–362. **doi:10.1016/j.procbio.2009.10.005**
- 48) Özgür Aktas, **Ferhan Çeçen** (2010) Adsorption and cometabolic bioregeneration in activated carbon treatment of 2-nitrophenol. Journal of Hazardous Materials,177, 956–961. **doi: 10.1016/j.jhazmat.2010.01.011**
- 49) **Ferhan Çeçen**, Neslihan Semerci, Ayşe Gül Geyik (2010 ) Inhibitory effects of Cu, Zn, Ni and Co on nitrification and relevance of speciation Journal of Chemical Technology and Biotechnology , 85, 520-528. **DOI: 10.1002/jctb.2321**
- 50) B.Kocamemi, **F.Çeçen** (2010) Cometabolic degradation and inhibition kinetics of 1,2-dichloroethane (1,2-DCA) in suspended-growth nitrifying systems, Environmental Technology, 31 (3), 295-305. **DOI:10.1080/09593330903470677**
- 51) **Ferhan Çeçen**, Neslihan Semerci, Ayşe Gül Geyik (2010) Inhibition of respiration and distribution of Cd, Pb, Hg, Ag and Cr species in a nitrifying sludge. Journal of Hazardous Materials, 178, 619–627. **doi:10.1016/j.jhazmat.2010.01.130**

- 52) Yapsaklı,K., Mertoğlu, B., Çeçen, F. (2010) Identification of nitrifiers and nitrification performance in drinking water biological activated carbon (BAC) filtration. *Process Biochemistry*, 45, 1543–1549. doi: [10.1016/j.procbio.2010.06.004](https://doi.org/10.1016/j.procbio.2010.06.004).
- 53) A.G. Geyik, F. Çeçen (2015) Variations in extracellular polymeric substances (EPS) during adaptation of activated sludges to new feeding conditions, *International Biodeterioration & Biodegradation* ,105, 137-145. <https://doi.org/10.1016/j.ibiod.2015.08.021>.
- 54) A.G. Geyik, F. Çeçen (2016) Production of protein- and carbohydrate-EPS in activated sludge reactors operated at different carbon to nitrogen ratios, *J. Chem. Technol. Biotechnol.*, 91: 522–531, doi: [10.1002/jctb.4608](https://doi.org/10.1002/jctb.4608).
- 55) F.Çeçen, B.Kılıç (2016) Inhibitory effect of silver on activated sludge: effect of organic substrate and the carbon to nitrogen ratio, *J. Chem. Technol. Biotechnol.*, 91: 1190–1198, doi: [10.1002/jctb.4709](https://doi.org/10.1002/jctb.4709).
- 56) A.G. Geyik, B. Kılıç, F. Çeçen (2016) Extracellular polymeric substances (EPS) and surface properties of activated sludges: effect of organic carbon sources, *Environmental Sciences and Pollution Research*, 23: 1653–1663, doi:[10.1007/s11356-015-5347-0](https://doi.org/10.1007/s11356-015-5347-0).
- 57) A.G. Geyik, F. Çeçen (2016) Exposure of activated sludge to nanosilver and silver ion: Inhibitory effects and binding to the fractions of Extracellular Polymeric Substances, *Bioresource Technology*, 211, pp. 691-697, doi: [10.1016/j.biortech.2016.03.157](https://doi.org/10.1016/j.biortech.2016.03.157).
- 58) Çeçen, F., Geyik, A.G. & Kılıç, B. (2020) Response of Activated Sludge to Long-Term Nanosilver Input and Changes in Extracellular Polymeric Substances (EPS). *Water Air Soil Pollut* 231, 501 <https://doi.org/10.1007/s11270-020-04882-7>
- 59) Çeçen, F., Gül, G. Biodegradation of five pharmaceuticals: estimation by predictive models and comparison with activated sludge data. *Int. J. Environ. Sci. Technol.* (2021) 18: 237-340. <https://doi.org/10.1007/s13762-020-02820-y>
- 60) Kılıç, B., Çeçen, F. (2023) Review of experimental biodegradation data on pharmaceuticals and comparison with predictive BIOWIN models. *Journal of Environmental Management* 344 (2023) 118310, <https://doi.org/10.1016/j.jenvman.2023.118310>

### **Oral presentations/posters in international conferences:**

- 1) **F.Çeçen** and U. Altınbaş (1992) Aerobic biological treatability of an anaerobically treated fermentation waste , Proceedings of the IAWPRC Second International Symposium on Waste Management Problems in Agro-Industries, 23-25 September 1992, Istanbul , pp.43-47.
- 2) **F.Çeçen** (1995) Factors for substrate removal in nitrifying and denitrifying biofilm reactors. Proceedings of the (IAWQ) Conference Workshop on Biofilm Structure, Growth and Dynamics", 30 August-1 September 1995, Holland, 317-324.
- 3) **F.Çeçen** (1997) Evaluation of substrate degradation and biomass relationships for an industrial waste with a high xenobiotic portion. Proceedings of the Second International IAWQ Conference on Microorganisms in Activated Sludge and Biofilm Processes. July 21-23 , Berkeley, California, pp.547-550.
- 4) **F.Çeçen** (1997) Evaluation of the significance of the substrate to biomass ratio and inhibitory factors in enriched nitrifying systems. Proceedings of the Second International IAWQ Conference on Microorganisms in Activated Sludge and Biofilm Processes. July 21-23 , Berkeley, California, pp.547-550.
- 5) I.Akmehmet Balcıoğlu and **F.Çeçen** (1998) Biological and photocatalytic treatability of pulp bleaching effluents , Poster in IAWQ 19<sup>th</sup> Biennial International Conference, Vancouver, Canada, 21-26 June 1998.
- 6) **F.Çeçen** and Ç.Yangın (2000) BOD Determination In Landfill Leachates By Manometric And Dilution Methods. IWA Paris 2000 (3-7 July 2000) Biennial Conference. (Poster in CD-ROM).
- 7) **F.Çeçen** and Ö. Aktaş (2000) Effect of PAC Addition in Combined Treatment of Landfill Leachate and Domestic Wastewater in a Continuous-Flow Reactor. IWA Paris 2000 (3-7 July 2000) Biennial Conference. (Poster in CD-ROM)., Vancouver, Canada, 21-26 June 1998).
- 8) **F.Çeçen**, D.Çakıroğlu (2001) Treatability and adverse effects of landfill leachate in a municipal wastewater treatment system (IWA 2001 Berlin World Water Congress, 15-19 October 2001) (Poster in CD-ROM).
- 9) **F.Çeçen**, Ö.Aktaş, M.Robinson (2001) Biotreatment of a pharmaceutical manufacturing wastewater with powdered activated carbon addition (IWA 2001 Berlin World Water Congress 15-19 October 2001) (Poster in CD-ROM).
- 10) **F. Çeçen**, A. Erdinçler, E. Kılıç (2001) Effect of powdered activated carbon addition on substrate removal and sludge dewaterability in landfill leachate treatment, IWA Conference Proceedings "Sludge Management Entering the 3<sup>rd</sup> Millenium- Industrial, Combined, Water and Wastewater Residues", pp. 517-522, 25-28 March, 2001, Taipei, Taiwan.
- 11) **F. Çeçen** (2002) The use of UV-vis measurements in the activated sludge treatment of industrial wastewaters, IWA World Water Congress, Melbourne, Australia 7-12 April 2002 (poster in CD-Rom)
- 12) Ö.Aktaş, **F.Çeçen** (2002) Effect of Activated Carbon Addition to Activated Sludge in the Treatment of Landfill Leachate and Domestic Wastewater, (unpublished poster) , IWA Workshop, Delft University of Technology, the Netherlands, 29-31 May 2002.
- 13) **F. Çeçen**, D. Çakıroğlu, G. Gürsoy (2002) Biological landfill leachate treatment and sorption of heavy metals onto sludge, IWA World Water Congress, Melbourne, Australia 7-12 April 2002 (oral pres. in CD-Rom).

- 14) **F. Çeçen**, Ö. Aktaş, E. Kılıç (2002) Improvement of effluent quality in landfill leachate treatment by activated carbon addition to biological reactors, IWA World Water Congress, Melbourne, Australia 7-12 April 2002 (poster in CD-Rom).
- 15) **F.Çeçen** (2003) The use of UV-Vis Measurements in the Determination of Biological Treatability of Pulp Bleaching Effluents, Proceedings of the 7th IWA Symposium on Forest Industry Wastewaters, June 1-4, 2003 Seattle (Washington)/USA.
- 16) **F.Çeçen**, Aktaş, Ö., (2004) Nitrification Characteristics in the Co-treatment of High-strength Nitrogenous Landfill Leachates with Domestic Wastewaters, Poster presented in IWA International Conference on Wastewater Treatment for Nutrient Removal and Reuse 2004, Conference Proceedings, Vol. 2, pp 326-330, Bangkok, Thailand, 26-29 January 2004.
- 17) Bilge A. Kocamemi, **F.Çeçen** (2004) Cometabolic degradation of TCE in enriched nitrifying batch systems. Poster presented in 4<sup>th</sup> IWA World Water Congress, 19-24 September 2004, Marrakesh/Morocco.
- 18) Semerci, N., **F.Çeçen** (2005) The effect of Cd in Nitrification Systems, Proceedings of the IWA Specialized Conference: Nutrient Management in Wastewater Treatment Processes and Recycle Streams, 19-21 September 2005, Krakow/Poland , pp. 1015-1018.
- 19) K.Yapsaklı, **F.Çeçen** (2006) Use of Different Granular Activated Carbons (GAC) in Drinking Water Treatment Proceedings of IWA World Water Congress, 10-14 September 2006, Beijing/China.
- 20) K.Yapsaklı, **F.Çeçen** (2007) Adsorption and Desorption of Natural Organic Matter onto Several Granular Activated Carbon Types, Poster in the Proceedings of the 5th IWA Specialised Conference on Assessment and Control of Micropollutants / Hazardous Substances in Water 17 – 20 June 2007 DECHEMA e.V., Frankfurt/Main, Germany , 552.
- 21) B.Kocamemi, **F.Çeçen** (2007), Kinetic analysis of cometabolic trichloroethylene (TCE) degradation by nitrifiers, Poster in the Proceedings of the 5th IWA Specialised Conference on Assessment and Control of Micropollutants / Hazardous Substances in Water 17 – 20 June 2007 DECHEMA e.V., Frankfurt/Main, Germany , 501-502.
- 22) Yapsaklı, K., **Çeçen, F.**(2008) Optimization of ozonation for the production of biodegradable dissolved organic carbon (BDOC) in Ömerli Reservoir Water, Proceedings of the IWA conference: NOM: From Source to Tap, 2-4 September 2008, Bath, UK, pp. 331-337.
- 23) Bulent Mertoglu, Kozet Yapsakli, **Ferhan Çeçen** (2008), Detection of nitrifier population in BAC columns, Proceedings of the IWA conference: NOM: From Source to Tap, 2-4 September 2008, Bath, UK.
- 24) **Ferhan Çeçen**, Neslihan Semerci, Ayşe Gül Geyik. (2009) Inhibitory effects and speciation of the heavy metals Ni, Cu, Zn, Co in a nitrifying activated sludge. IWA/GRA Micropol & Ecohazard 2009 conference, 8-10 June 2009, San Francisco, p.190 (poster).
- 25) Sacan, MT; **Cecen, F**; Erturk, MD, Semerci N. (2009) Modeling the relative toxicity of metals on respiration of nitrifiers using ion characteristics. 5th International Symposium on Computational Methods in Toxicology and Pharmacology Integrating Internet Resources (CMTPI 2009). Oral presentation. 04-08 July 2009, Istanbul.
- 26) **Ferhan Çeçen**, Neslihan Semerci, Ayşe Gül Geyik (2010) Inhibitory and speciation properties of nine heavy metals in a nitrifying sludge (Poster). IWA World Water Congress. 19-24 September 2010 Montreal/Canada.
- 27) **Ferhan Çeçen**, Ayşe Gül Geyik (2013) Respirometric assessment of nitrification

- inhibition in a municipal wastewater treatment plant with industrial input (Poster), 10th IWA Leading Edge Conference on Water and Wastewater Technologies (LET2013), 2-6 June 2013, Bordeaux, France.
- 28) Geyik, A.G., **Çeçen, F.**, Synthesis of nanosilver (AgNP) and its toxic effect on activated sludge, **Poster presentation**, in : IWA 6th Eastern European Young Water Professionals Conference : East Meets West, 28-30 MAY 2014, Istanbul, Turkey.
  - 29) Geyik, A.G., **Çeçen, F.** Complexation of silver and nanosilver with extracellular polymeric substances (EPS) in activated sludge. **Oral presentation**, in “The Perfect slime: Nature, Properties, Regulation and Dynamics of EPS”, September 10th to 12th 2014 in Essen, Germany. <http://eps-perfect-slime-iwa.de/index.php>
  - 30) Geyik, A.G., **Çeçen, F.** The role of silver addition on the production of EPS in an activated sludge. **Poster presentation**, in “The Perfect slime: Nature, Properties, Regulation and Dynamics of EPS”, September 10th to 12th 2014 in Essen, Germany. <http://eps-perfect-slime-iwa.de/index.php>
  - 31) Geyik, A.G., **Çeçen, F.** Effect of the carbon to nitrogen (C/N) ratio on composition and fractionation of extracellular polymeric substances (EPS) in activated sludge. **Oral presentation**, in “IWA World Water Congress & Exhibition” September 21st to 26th 2014 in Lisbon, Portugal. <http://www.iwa2014lisbon.org/>
  - 32) **Çeçen, F.**, Ayyıldız Ö. Inhibitory effect of silver ion on activated sludges operated at various C/N ratios, **Poster presentation**, in “IWA World Water Congress & Exhibition” September 21st to 26th 2014 in Lisbon, Portugal. <http://www.iwa2014lisbon.org/>.
  - 33) Ayşe Gül Geyik, **Ferhan Çeçen**, Continuous silver nanoparticle addition to an activated sludge: Effect on Extracellular Polymeric Substances (EPS), **Oral presentation**, in IWA Micropol & Ecohazard Conference 2015, 22-25 November 2015, Singapore.
  - 34) Ayşe Gül Geyik, **Ferhan Çeçen**, Toxicities of Ag<sup>+</sup> and AgNP on activated sludge, **Poster presentation**, in IWA Micropol & Ecohazard Conference 2015, 22-25 November 2015, Singapore.
  - 35) Ayşe Gül Geyik, **Ferhan Çeçen**, Effect of continuous AgNP addition on surface characteristics of activated sludges, **Poster presentation**, 252nd American Chemical Society (ACS) National Meeting & Exposition , 21-25 August 2016 Philadelphia, USA.
  - 36) Ayşe Gül Geyik, **Ferhan Çeçen**, Changes in the production of protein-EPS in an activated sludge receiving AgNP, **Poster presentation**, 252nd American Chemical Society (ACS) National Meeting & Exposition , 21-25 August 2016 Philadelphia, USA.
  - 37) **Ferhan Çeçen**, Ayşe Gül Geyik, Effect of long-term nanosilver dosing to activated sludge on EPS fractions, **Oral presentation**, IWA “10th Micropol & Ecohazard Conference 2017”, 17-20 September 2017, Vienna, Austria.
  - 38) **Ferhan Çeçen**, Başak Kılıç, Impact of silver (Ag<sup>+</sup>) on activated sludge: Variation of the inhibitory effect with feed composition, **Poster presentation**, IWA “10th Micropol & Ecohazard Conference 2017”, 17-20 September 2017, Vienna, Austria.
  - 39) Başak Kılıç, **Ferhan Çeçen**, Biodegradation of Pharmaceuticals: Comparison of Estimations and Experimental Findings, **Poster presentation**, 12th Micropol & Ecohazard Conference, 6 – 10 June 2022 Santiago de Compostela, Spain.
  - 40) Başak Kılıç, **Ferhan Çeçen**, Ayşe Gül Peker, Inhibitory Effect of Silver and Nanosilver on Activated Sludge Fed with Proteinaceous Feed, Oral presentation, 8th World Congress on New Technologies (NEWTECH'22) ICEPR'22 – 12th International Conference on Environmental Pollution and Remediation, 3-5 August, 2022, Prague, Czech Republic. [https://avestia.com/NewTech2022\\_Proceedings/files/NewTech22\\_Proceedings.pdf](https://avestia.com/NewTech2022_Proceedings/files/NewTech22_Proceedings.pdf)

Doi:10.11159/icepr22.121

- 41) Başak Kılıç, **Ferhan Çeçen**, Estimation of Biodegradation Potential of Pharmaceuticals by BIOWIN Models and Comparison with Experimental Data, **Oral presentation**, IWA 4th Regional Conference on Diffuse Pollution & Eutrophication (DIPCON), 24-28 October 2022, Istanbul, Turkey. [https://img1.wsimg.com/blobby/go/e34e2390-8304-4f18-9435-041febc1f4c8/DIPCON2022\\_ProceedingBook.pdf](https://img1.wsimg.com/blobby/go/e34e2390-8304-4f18-9435-041febc1f4c8/DIPCON2022_ProceedingBook.pdf)
- 42) Gökçin Gül, **Ferhan Çeçen**, Assessing pesticide biodegradability through predictive tools and databases, **Online oral presentation**, 6th International Eurasian Conference on Biological and Chemical Sciences (EURASIANBIOCHEM 2023), 11-13 October 2023, Ankara/Türkiye, Proceeding Book-Abstracts and Full-Texts, page 222, [www.EurasianBioChem.org](http://www.EurasianBioChem.org).
- 43) Başak Kılıç, **Ferhan Çeçen**, Biodegradation of pharmaceuticals: model estimations and comparison with experimental results, **Online oral presentation**, 5th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2024), June 26-28, 2024 Ankara, Türkiye.
- 44) Gökçin Gül, **Ferhan Çeçen**, Evaluating the efficacy of rapid small-scale column tests (RSSCTs) in the treatment of drinking water, **Oral presentation**, Proceeding Book: 5th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2024), p.135, June 26-28, 2024 Ankara, Türkiye.
- 45) Gökçin Gül, **Ferhan Çeçen**, Pesticide Biodegradation: Comparing Theoretical Models with Experimental Data, **Oral presentation**, Proceeding Book: 7th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2024), p.488-492, October 02-04, 2024. Ankara, Türkiye. [www.EurasianBioChem.org](http://www.EurasianBioChem.org)

### **Book Chapter (2010):**

**Ferhan Çeçen**, Bilge Alpaslan Kocamemi, Özgür Aktaş (2010) **Chapter 9: Metabolic and Co-Metabolic Degradation of Industrially Important Chlorinated Organics Under Aerobic Conditions.** in: *Xenobiotics in the Urban Water Cycle: Mass Flows, Environmental Processes, Mitigation and Treatment Strategies*, Eds: Despo-Fatto Kasinos, Kai Bester, Klaus Kümmerer, Book Series: Environmental Pollution 16, Springer Science+Business Media, 161-178.

### **Encyclopedia chapters:**

**Ferhan Çeçen**, “**ACTIVATED CARBON**”,

Kirk-Othmer Encyclopedia of Chemical Technology. John Wiley & Sons, Inc. (April 2014).

**10.1002/0471238961.0103200902011105.a01.pub3.**

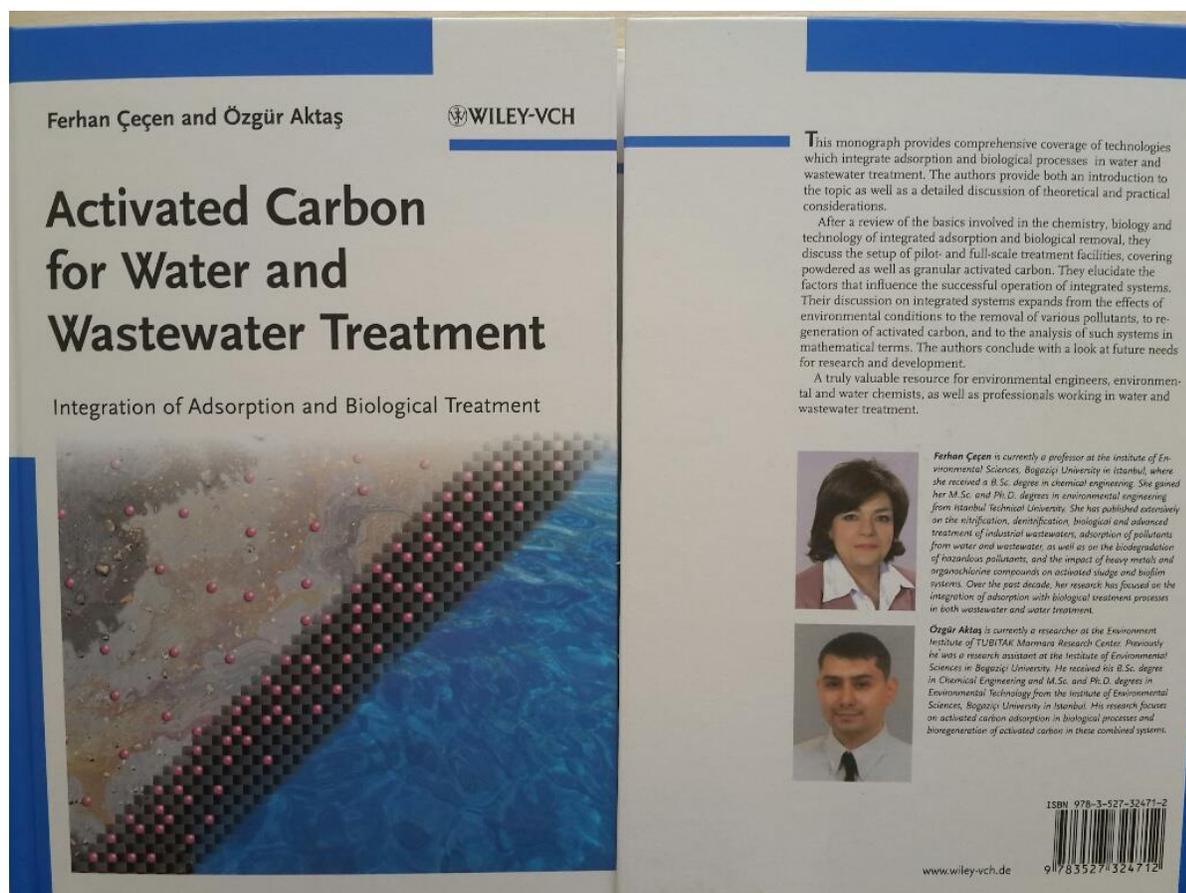
**Ferhan Çeçen**, “**ACTIVATED CARBON**”, Kirk-Othmer Encyclopedia of Chemical Technology. 2024 John Wiley & Sons, Inc.

**DOI: 10.1002/0471238961.0103200902011105.a01.pub4**

## Book (2011):

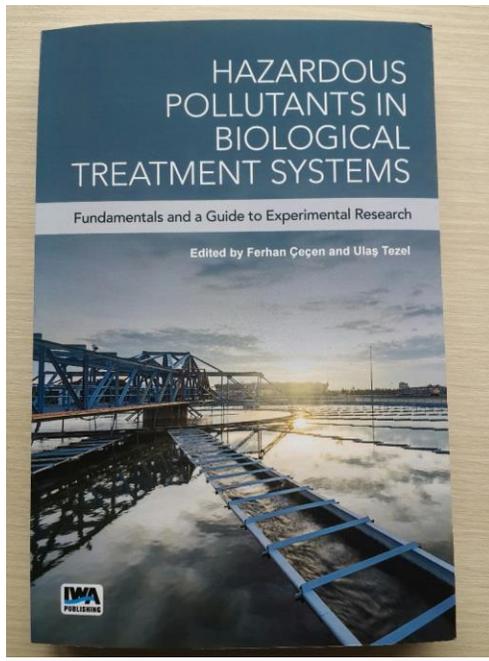
**Ferhan Çeçen, Özgür Aktaş. Activated Carbon for Water and Wastewater Treatment: Integration of Adsorption and Biological Treatment**, 388 pages, ISBN: 978-3-527-32471-2, Wiley-VCH, September 2011.

Content: [http://www.wiley-vch.de/books/sample/3527324712\\_ftoc.pdf](http://www.wiley-vch.de/books/sample/3527324712_ftoc.pdf)



## **Edited Book (2017):**

**Ferhan Çeçen and Ulaş Tezel (eds.) (2017) Hazardous Pollutants in Biological Treatment Systems: Fundamentals and a Guide to Experimental Research**, IWA Publishing; ISBN: 9781780407708, 386 pages. Paperback.



## **Book Chapter (2017):**

**Ferhan Çeçen (2017) Chapter 1:** A guide book to studying the fate and effect of hazardous pollutants in biological treatment systems, in: *Hazardous Pollutants in Biological Treatment Systems: Fundamentals and a Guide to Experimental Research*, IWA Publishing; ISBN: 9781780407708, pp. 1-16.

## **Book Chapter (2017):**

**Ferhan Çeçen (2017) Chapter 4:** Removal and behavior of hazardous pollutants in biological treatment systems, in: *Hazardous Pollutants in Biological Treatment Systems: Fundamentals and a Guide to Experimental Research*, IWA Publishing; ISBN: 9781780407708, pp. 123-182.

## **Book Chapter (2017):**

**Ferhan Çeçen, Ulaş Tezel, Bilge Alpaslan Kocamemi (2017) Chapter 5:** Experimental assessment of the inhibitory effect and biodegradation of hazardous pollutants, in: *Hazardous Pollutants in Biological Treatment Systems: Fundamentals and a Guide to Experimental Research*, IWA Publishing; ISBN: 9781780407708, pp.183-237.

## NATIONAL PUBLICATIONS

### Major Project Reports:

- H.Kınlı, **F.Çeçen** (1987) Design of a Domestic Wastewater Treatment System for a Pesticide Industry (in Turkish), TÜBİTAK - MAE- Project No: 075105870
- H. Kınlı, **F.Çeçen** (1988) Design of a Wastewater Treatment System for Saline, Acidic and Alkaline Wastewaters of a Pesticide Industry (in Turkish), TÜBİTAK -MAE, Project No: 0751058701.
- F.Çeçen** (1988) Design of a Wastewater Treatment System for a Detergent Industry (in Turkish), TÜBİTAK -MAE, Project No: 0751108701.
- F.Çeçen** (1989) Nitrogen removal in combined nitrification and denitrification filters. TÜBİTAK (Turkish Scientific and Technical Research Center) MAE, NATO Wastewater Treatment and Disposal Studies Project, Final Report.
- M.Karpuzcu, L.Akça, M.Bekbölet, A.Akkoyunlu, N.Ince, **F. Çeçen**, G. Özkösem (1992) Meat and Fish Wastewater Treatment (in Turkish) Project Report, Bogaziçi University.
- F.Çeçen** (1993) Combination of activated carbon and activated sludge in the treatment of Kraft pulp bleaching wastes. Bogaziçi University Research Fund Project No: 91Y0024, Final Report, March 1993, İstanbul.
- F.Çeçen**, E.Orak, P.Gökçin, G.Özkösem (1995) Biological nitrogen removal from industrial wastes (in Turkish). TÜBİTAK (Turkish Scientific and Technical Research Centre) Project No.: KTÇAG-94. Final Report, June 1995, İstanbul.
- I.Akmehmet Balcıoğlu, **F.Çeçen et al.** (1997) Biological Treatment and TiO<sub>2</sub> Photocatalyzed Oxidation of Pulp Bleaching Wastes. Bogaziçi University Research Fund Project No: 95 Y 0044 Final Report, July 1997, İstanbul.
- F.Çeçen et al.** (1998) Investigation of Characteristics and Treatability of Landfill Leachates. Bogaziçi University Research Fund Project No: 96 HY 0029 Final Report, June 1998, İstanbul.
- F.Çeçen et al.** (2000) Application of respirometric methods in the biological treatment of landfill leachate with activated carbon addition, Bogaziçi University Research Fund Project No: 98 HY 02 Final Report, January 2000, İstanbul.
- F.Çeçen** and Ö.Aktaş (2002) 00Y103 Assessment of inhibition in the biological treatment of industrial effluents). Bogaziçi University Research Fund Project No: 00Y103 Final Report, January 2002, İstanbul.
- I.Balcıoğlu, **F.Çeçen**, M.Türker Saçan, D.Avcı, İ.Arslan Alaton, (2002) Combination of advanced oxidation processes with conventional processes in the treatment of industrial wastewaters, TÜBİTAK-YDABÇAG-199Y017 Final Report, September 2002.
- F.Çeçen**, B. Alpaslan Kocamemi (2003) Investigation of the removal of chlorinated organic compounds in nitrification systems. Bogaziçi University Research Fund Project No.02Y101D, Final Report, March 2003.
- O.Yenigün, **F.Çeçen**, B. Alpaslan Kocamemi (2003) Investigation of the removal of chlorinated organic compounds in a nitrifying biofilm filter, TÜBİTAK-İÇTAG Project No.A027, Final Report, February 2003.
- B. Alpaslan Kocamemi, **F.Çeçen** (2004) Investigation of cometabolic TCE degradation in nitrifying systems (in Turkish), TÜBİTAK-İÇTAG Project No.: A038 Final Report , May

2004.

- F. Çeçen**, Ö.Aktaş (2005), Combination of activated carbon and biological processes in the removal of refractory and toxic compounds (in Turkish) Bogaziçi University Research Fund Project No 02Y102D, Final report , January 2005.
- Ö.Aktaş, **F. Çeçen** (2005), Determination of bioregeneration of activated carbon in the treatment of aromatic compounds (in Turkish) , TÜBİTAK İÇTAG Project No: Ç043 (102I037), Final report, January 2005.
- B. Alpaslan Kocamemi, **F.Çeçen** (2006), Removal of 1,2-Dichloroethane in an upflow aerated filter by nitrifiers (in Turkish), TÜBİTAK İÇTAG Project No: A 052, Final Report, January 2006.
- O.Yenigün, **F.Çeçen**, N.Semerci (2006) The effect of heavy metals on nitrification systems in the presence of complexing agents (in Turkish) TÜBİTAK İÇTAG-Ç067 (102I071), Final Report, March 2006.
- A. M. Saatçı, **F. Çeçen**; M. A. Yükselen; B. Çallı; B. Mertoğlu; E. Girgin (2006) Determination of nitrifier activities and species in biological wastewater treatment systems (in Turkish), TÜBİTAK İÇTAG-Ç106, , July 2006.
- Ferhan Çeçen** et al. (2007) Effect of heavy metal complexation in on nitrification systems in the presence of complexing agents. Bogaziçi University Research Fund Project No: 03S103, Final report, March 2007.
- Zehra S. CAN, **Ferhan Çeçen**, Ahmet Mete SAATÇI, Aslıhan KERÇ, Kozet YAPSAKLI (2008) Application of biological activated carbon (BAC) in drinking water treatment. TÜBİTAK İÇTAG-Ç110 Final Report.
- Ferhan Çeçen**, Kozet Yapsaklı, Özgür Aktaş (2008) Application of biological activated carbon (BAC) in drinking water treatment. Bogaziçi University Research Fund Project No: 05Y103D, Final Report, September 2008.
- Ferhan Çeçen** (2009) Investigation of bacterial species in Biological Activated Carbon (BAC) systems, Project No. 108Y101, Final report. TÜBİTAK-ÇAYDAG.
- Ferhan Çeçen**, Melek Türker Saçan, Neslihan Yazıcı Semerci, Özgür Aktaş, Kozet Yapsaklı, Bilge Alpaslan Kocamemi (2009) “Behavior of selected organic and inorganic xenobiotics in biological systems and formation of structure –activity relationship (SAR) models *Project No*: 105Y379. Final Report (TÜBİTAK COST project).
- Ferhan Çeçen**, Neslihan Yazıcı Semerci, Ayşe Gül Geyik (2013) “Microbial products and metal inhibition in biological systems “Bogaziçi University Research Fund Project No: 09Y101P, Final report, January 2013.
- Ferhan Çeçen** (2015) Microbial products and metal inhibition in biological systems, Project No: 111Y018, TÜBİTAK-ÇAYDAG (2012-2015).
- Ferhan Çeçen**, Effect of the carbon to nitrogen (C/N) ratio on the type and production of EPS in activated sludge. BAP Project No: 14Y00D1, February 2016.
- Ferhan Çeçen**, Effect of nanosilver on biological treatment systems, Project No: 15Y001P1, B.Ü.BAP, October 2016.
- Ferhan Çeçen**, Assessment of the biodegradation of micropollutants in secondary effluents, Project No: 13000, B.Ü.BAP, December 2018.

### **Papers in Turkish Symposiums:**

- F.Çeçen** (1991) The importance of AOX compounds in the pulp and paper wastewaters, environmental effects and removal in waste treatment systems (in Turkish), Bogaziçi University, Symposium on Environmental Pollution Priorities in Turkey, 21- 22 May 1991, pp.504-519.
- F.Çeçen**, A.Helvacı, M.Karpuzcu (1992) Pollution loads of meat and fish industries (in Turkish), Istanbul Technical University, Symposium on Industrial Pollution, 7-9 September 1992, pp. 19-26.
- F.Çeçen** (1998) Treatability of Kraft pulp bleaching wastewaters (in Turkish) I.T.U. 6<sup>th</sup> Symposium on Industrial Pollution Control , 3-5 June 1998, pp.175-182.
- Ç.Yangın, F. Çeçen** (2001) Measurement of Biochemical Oxygen Demand (BOD) in landfill leachates by dilution and manometric methods (in Turkish). 15th National Chemistry Congress, Boğaziçi University, 4-7 September 2001.
- F. Çeçen, Ö. Aktaş** (2002) The impact of powdered activated carbon addition on the activated sludge treatment of pharmaceutical wastewaters. I.T.U. 8<sup>th</sup> Industrial Pollution Symposium (in Turkish), pp. 401-408.
- Ö.Aktaş, F.Çeçen** (2003) The improvement of effluent quality by addition of activated carbon to systems treating landfill leachate, Proceedings of the ODTU 2<sup>nd</sup> National Symposium on Environmental Pollution Control, p.187-194, 22-24 October 2003, Ankara.
- Ö. Aktaş, F. Çeçen**, (2006) Bioregeneration of activated carbon in the removal of phenol , Proceedings of the Istanbul Technical University 10th Industrial Pollution Symposium, 35-42, Istanbul, 07-09 June 2006.
- Mertoğlu B., Semerci N., Çeçen F., Saatçı A.M.**, (2007) Effect of Cadmium on nitrifiers- investigation with molecular techniques (in Turkish), Ulusal Çevre Sempozyumu (National Environment Symposium), 18-21 April 2007, Mersin/Turkey.

### **Papers in Turkish Journals:**

- F.Çeçen** (1992) A general view of waste treatment studies on the pulp and paper wastewaters (in Turkish), Environmental Bulletin of Institute of Environmental Sciences, Bogaziçi University, January 1992.
- F.Çeçen** (1992) Nitrification and denitrification of high-strength nitrogenous wastes in submerged filters (in Turkish), Su Kirlenmesi Kontrolü Dergisi, No. 1, pp. 37-44.
- F.Çeçen** (1992) Nitrification and denitrification kinetics in submerged filters (in Turkish), Su Kirlenmesi Kontrolü Dergisi, No.2, pp.113-120.
- Ç.Yangın, F. Çeçen** (2002) Biochemical oxygen demand (BOD) analyses in landfill leachates by manometric and dilution techniques (in Turkish), Su Kirlenmesi Kontrolü Dergisi, Vol.12, Issue 2, pp. 7-15.
- F. Çeçen, Ö. Aktaş** (2003) Activated carbon addition to activated sludge in the treatment of a pharmaceutical wastewater (in Turkish) Su Kirlenmesi Kontrolü Dergisi, Vol.13, Issue 2, pp. 19-26.

### **Chapter in a Research Report:**

- Ferhan Çeçen** (2015) Environmental Impacts of Coal Mining (in Turkish), pp. 149-163 in: Bogazici University, Soma Research Group Report.