

CURRICULUM VITAE AND LIST OF PUBLICATIONS

CURRICULUM VITAE

Name and Second Name: Meltem ÇELEN

Date of Birth: 19/12/1978

Title: Assistant Prof.

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Language skills: English – 87.5 (YDS)

Research Area: Water Quality Modeling and Management, Hydrology, Impact of Climate Change on Water Resources, Geographical Information Systems (GIS)

Degree	Department/Faculty	University	Year
Bachelor's degree	Environmental Engineering	Trakya University	2002
Master	Environmental Engineering	Gebze Technical University	2006
Ph. D	Environmental Engineering	Gebze Technical University	2014
Assoc. Prof. Dr/Prof.			

Master Thesis Title and Thesis Supervisor (s): Investigation of water quality in Porsuk dam lake using a mathematical model – Prof. Dr. Mehmet KARPUZCU

Title of Doctorate Thesis and Supervisor (s): “Investigation of phosphorus pollution with a decision support model- a case study: Porsuk reservoir catchment” - Prof. Dr. Mehmet KARPUZCU – Prof. Dr. Güleda ENGİN

Working Experience:

Work Title	University/Company	Year
Specialist	Gebze Technical University	2005
Assist. Prof.	Gebze Technical University	2019

Supervised Master Theses:

1. Züleyha Yazıcı, (2019), Phosphate removal from wastewater using aluminum industry chemical sludges, Gebze Technical University, Institute of Science.

Supervised Doctoral Theses:

Tasks Performed in Projects:

NATIONAL PROJECTS

2019-2021: Investigation of Hydromorphological Modification Levels in Water Resources by Using Geographical Information Science and Technology and Development of a Decision Support Tool: Çayırova-Saz Stream (Funded By: The Scientific and Technological Research Council of Turkey), **Researcher**.

2016-2019: Watershed Information System Development, 115Y008, TUBITAK 1003 Program-**Researcher**

2017-2018: Sustainable Management Of The Settlements In Terkos Lake Basin From The Point of Water Quality Effects. GTU BAP 2017 A105-54, 2017-2018, **Coordinator**.

2015-2018: Determination of Ergene Basin Water Budget, Yıldız Technical University Scientific Research Project, **Researcher**.

2010: Determination of Sensitive Areas and Urban Wastewater Treatment Principles Project, TÜBİTAK KAMAG 107G264, 2010, **Assistant personnel**.

INTERNATIONAL PROJECTS

2014-2018: Developing an International Virtual Topic Network on Modelling and Management of Cathments in Mediterranean Basins, Forchungzentrum Juelich (FZJ)-Germany, **Researcher**.

2010-2013: Climate Induced Changes on the Hydrology of Mediterranean Basins Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modeling System (CLIMB), 244151, EU 7th Framework Program, **Assistant Staff (2 years) Institution Coordinator (1 year)**.

2005-2007: Integrated Modelling of Nutrient Loads and Eutrophication in the Catchment Area of the Izmit Bay, the Tahtalı and the Porsuk River Basins, Turkey, Funded By: The Scientific and Technological Research Council of Turkey: Bilateral Cooperation with BMBF-Julich Research Institute from Germany, **Assistant personnel**.

Administrative Tasks:

1. Deputy Director of the Institute of Earth and Marine Sciences at Gebze Technical University

Memberships of Scientific Organizations:

1. International Association of Hydrological Sciences, 2015-
2. International Water Association (IWA), 2009-
3. Chamber of Environmental Engineers Istanbul Branch, 2002-

Awards:

1. European Meteorological Society - Young Scientist Travel Award 2012, given for the paper presented at the BALWOIS 2012 Conference.
2. PhD Scholarship within the scope of HELMHOLTZ - TÜBİTAK bilateral cooperation, 2009-2012.

Undergraduate and graduate courses taught in the last two years:

Academic year	Term	Course Title	Weekly Hour		Number of Students
			Theoric	Application	
2019-2020	Fall	Earth Science	5	0	56
	Spring	Fundamentals of Earth Science and Engineering	3	0	4
		Watershed Management	3	0	4
		Geographic Information System (GIS) Applications in Earth Science	3	0	4

PUBLICATIONS

A. Peer-reviewed Journal Articles:

- A 1. Omwene P.I., Çelen M., Öncel M.S., Kobya M., (2019), Arsenic removal from naturally arsenic contaminated ground water by packed-bed electrocoagulator using Al and Fe scrap anodes, Process Safety and Environmental Protection, 121 (2019) 20-31.
- A 2. [Yurdakul S., Çelik I., Çelen M., Öztürk F., Cetin B., \(2019\), Levels, temporal/spatial variations and sources of PAHs and PCBs in soil of a highly industrialized area, Atmospheric Pollution Research, 10 \(4\) 1227-1238.](#)
- A 3. Omwene P.I., Öncel M.S., Çelen M., Kobya M., (2019), Influence of arsenic and boron on the water quality index in mining stressed catchments of Emet and Orhaneli streams (Turkey), Environmental Monitoring and Assessment 191(4)
- A 4. Omwene P I., Öncel M. S., Çelen M., Kobya M., (2018), Heavy metal pollution and spatial distribution in surface sediments of Mustafakemalpaşa stream located in the world's largest borate basin (Turkey), Chemosphere, 208 (2018) 782-792.
- A 5. Delipinar S., Karpuzcu M., Celen M., (2018), New Basin Institutions and Legislative Arrangements in Integrated River Basin Management in Turkey: A case of Nizip Stream Catchment Area, Desalination and Water Treatment, Desalination and Water Treatment, 110, 117-128. doi: 10.5004/dwt.2018.22230
- A 6. Kobya M., Öncel S., Demirbas E., Celen M., (2017), Arsenic and Boron Removals from Spring and Groundwater Samples in Boron Mining Regions of Turkey by Electrocoagulation and Ion-exchange Consecutive Processes, Desalination and Water Treatment, 93 (2017), 288-296. doi:10.5004/dwt.2017.20821

- A 7.** Guler E., Onkal Engin G., Celen M., Sarı Erkan H. (2015), Cost Analysis of Seawater Desalination Using an Integrated Reverse Osmosis System on a Cruise Ship, *Global Network of Environmental Science and Technology*, 17 (2), 389-396.
- A 8.** Celen, M.; Karpuzcu, M.; Engin, G. Onkal; Tetzlaff, B.; Wendland, F., (2014) Modelling Total Phosphorus Input Pathways in the Porsuk Reservoir Catchment in Turkey, *Environmental Earth Sciences*, 72 (12), 5019-5034. **doi:** 10.1007/s12665-014-3371-x
- A 9.** Onkal Engin, G.; Gurbulak, E.; Çelen, M.; Ulu, F.; Oncel, M.S., (2014), Nutrient Modelling in Coastal Waters of Izmit Bay, Turkey, *Fresenius Environmental Bulletin*, 23 (12B), 3345-3352.

B. Conference Proceedings:

- B 1.** Meltem Çelen, Şermin Delipınar, Mehmet Karpuzcu, Hancağız Baraj Havzası Su Kalitesinin Sulama Suyu Açısından Araştırılması, Uluslararası Baraj Güvenliği sempozyumu, 27-31 Ekim 2018, İstanbul.
- B 2.** Guleda Onkal Engin, Meltem Çelen, Ahmet Adiller and Seref Naci Engin Advantages of Decision Support Systems For Comprehensive Watershed Management, 17 November 2017, Morocco.
- B 3.** Philip Isaac Omwene, Salim Oncel, Meltem Çelen, Mehmet Kobya, Mapping of Arsenic and Boron Pollution in the Intense Mining Catchment of Mustafakemalpaşa Stream - Northwestern Turkey, International Symposium on GIS Applications in Geography and Geosciences - ISGGG-2017, 18-21 Oct 2017, Canakkale, Turkey
- B 4.** Guleda Onkal Engin, Ibrahim Demir, Gamze Varank, Ahmet Adiller, Seref Naci Engin, Meltem Çelen, Web-Based Watershed Information Systems – Advantages For Decision Support Systems, International Water Conference 2016 Water Resource in Arid Areas: The Way Forward, 13-16 March 2016, Muscat, Sultanate of Oman
- B 5.** Guleda Onkal Engin, Meltem Celen, Land Use Change in Izmit Bay Catchment, International Conference on Civil and Environmental Engineering, 22-23 May 2015, Cappadocia, Nevşehir, Turkey
- B 6.** G. Onkal Engin*, M. Celen, A. Adiller, Climate Induced Change on Water Resources: Risks and Uncertainties, International Water Symposium on Impacts of Climate Change on Coastal Cities, 4 January 2014, Izmir, Turkey.
- B 7.** Guleda Engin, Meltem Çelen*, Mehmet S. Öncel, Water Resources Management Strategy Establishment For The Semi Arid Regions Affected By Climate Change. International Conference on Water, Climate and Environment BALWOIS 2012, 28 May -2 June 2012, Ohrid, Republic of Macedonia.
- B 8.** Guleda Engin, Meltem Çelen, Mehmet S. Öncel, Mehmet Karpuzcu, Thomas Ammerl, Ralf Ludwig, Climate Induced Changes on the Hydrology of Mediterranean Basins (CLIMB), The 2nd International Geography Symposium – Mediterranean Environment, 2-5 June 2010, Kemer, Antalya, Turkey.
- B 9.** Mehmet karpuzcu, Meltem Koçal Çelen, Su Kirliliği Kontrolünde Entegre Havza Yönetimi Yaklaşımı, Uluslararası Çevre Sempozyumu (UCS 2009), 20-23 Mayıs 2009, Bıřkek, Kırgızistan.
- B 10.** Mehmet Karpuzcu, Meltem Koçal Çelen, Guleda Onkal Engin, Application of Mathematical Models in Water Pollution Control, Uluslararası Çevre Sempozyumu (UCS 2009), 20-23 Mayıs 2009, Bıřkek, Kırgızistan.
- B 11.** Frank Wendland*, Björn Tetzlaff, Mehmet Karpuzcu, Guleda Engin, Salim Oncel, Meltem Celen, Regional modelling of nitrate flux into groundwater, in Porsuk Basin, Turkey, Seminar on Groundwater Modelling, June 2008, Ankara, Turkey.
- B 12.** Mehmet Karpuzcu, Frank Wendland, Meltem Kocal*, Björn Tetzlaff, Asaf Pekdeger, Salim Oncel, Hans Voigt, Güleda Engin, Preliminary investigation on

integrated modelling of nutrient loads in catchment areas. A case study: The Porsuk Reservoir Catchment, IWA DipCon 2006, 10th International Specialized Conference on Diffuse Pollution and Sustainable Basin Management, 18-22 September 2006, Istanbul, Turkey.

C. National / international books or chapters:

C1. National / international books:

C1.1. M. Karpuzcu, N. Agiralioglu, N. Alpaslan, G. Engin, H. Gömann, O. Gunduz, **M.Kocal**, S. Oncel, A. Pekdeger, H. Voigt, P. Kuhr, C. Montzka, B. Tetzlaff, H. Vereecken, F. Wendland, 2008, Integrated Modelling of Nutrients in Selected River Basins of Turkey. Forchungzentrum Jülich GmbH, ISBN: 978-3-89336-541-8.

C2. National / international chapters:

D. Peer-reviewed Journal Articles in National:

E. Papers presented at national scientific meetings and published in proceedings:

- E 1.** Güleda Engin, Salim Öncel, Meltem Çelen, Ercan Gürbulak, Feride Ulu, Senem Bayar, Elif Şentürk, İklim Değişikliğinin Akdeniz Su Havzaları Üzerine Etkisi ve CLIMB Projesi, Türkiye’de Çevre Kirlenmesi Öncelikleri Sempozyumu, İstanbul, 22-23 Kasım 2012.
- E 2.** Meltem Çelen, Güleda Engin, Salim Öncel, Mehmet Karpuzcu, Porsuk Baraj Gölü Havzasında Üst Toprak Toplam-P İçeriğinin Arazi Kullanımı İle Değişiminin Araştırılması, Türkiye’de Çevre Kirlenmesi Öncelikleri Sempozyumu, İstanbul, 22-23 Kasım 2012.
- E 3.** Meltem Çelen, Elif Şentürk, Mahir İnce, Ayşe P. Pekcan Yatmaz, Güleda Önkal Engin, Mehmet S. Öncel*, Mehmet Karpuzcu, İzmit Körfezi’nde Ötrofikasyona Neden Olan Bazı Parametrelerin Su Sütunu Boyunca İncelenmesi, Çevre Sorunları Sempozyumu, Kocaeli Üniversitesi, 14-16 Mayıs 2008.
- E 4.** Mehmet Karpuzcu, Frank Wendland, Güleda Engin, Salim Öncel, Ebubekir Yüksel, Björn Tetzlaff, Meltem Çelen, Su Bütçesi Modellemesinde Coğrafi Bilgi Sisteminin Kullanılması-Porsuk Nehri Örneği, Su ve Enerji Konferansı, Artvin, 25 - 26 Eylül 2008.
- E 5.** Mehmet Karpuzcu, Meltem Çelen, Göllerde Ötrofikasyon ve Çözüm Önerileri, Göller Yöresi, İç Anadolu Gölleri ve Sorunları Kongresi, Isparta-2007.

F. Art and design events:

G. Other publications: