

# CANSU DEMIR

## Hydrogeologist-Environmental Engineer

@ cdemir@utexas.edu    +1 512 915 8840    https://cansudemir.github.io

## RESEARCH EXPERIENCE

### Coastal Groundwater Dynamics in the Lagoons of Arctic

#### PhD dissertation project @ The University of Texas at Austin

Sept 2018 – today    Austin, TX - Kaktovik/ Deadhorse, AK

**TOOLS:** Field observations and multi-physics numerical modeling of groundwater flow, salt transport and freeze-thaw (COMSOL & ATS)

### Rehabilitation Assessment of a Depleted Coastal Aquifer

#### MSc Thesis project @ Middle East Technical University

Sept 2015 - Jul 2018    Ankara, Turkey - Guzelyurt, Cyprus

**TOOLS:** Field observations, parameter estimations and Water Budget Modeling via MODFLOW (GMS ArcGIS)

### Preparation of Industry Specific Guidebooks on Wastes: Thermal Power & Waste Accumulator Recycling Plants

#### Middle East Technical University (in collaboration with the Ministry of Environment and Urbanization)

Jun 2016 - Jan 2017    Ankara, Turkey

**TOOLS:** Site visits, interviews with business owners/managers and analysis of the waste generation data provided

## TEACHING EXPERIENCE

### TA | Dept. of Geological Sciences @ The University of Texas at Austin

August 2020 - May 2021    Austin, TX

**COURSES:** Introduction to Physical and Chemical Hydrogeology, Groundwater Hydrology

### TA | Dept. of Environmental Eng. @ Middle East Technical University

Nov 2015 - Jul 2018    Ankara, Turkey

**COURSES:** Environmental Engineering Modeling, Transport Processes in Environmental Engineering, Unit Operations and Processes of Water Treatment, Environmental Microbiology Laboratory, Environmental Management

## PUBLICATIONS & PRESENTATIONS

Demir, C., Cardenas, M. B., Pedrazas, M. N., McClelland, J. W., Charette, M. A. (2020) Nearshore Submarine Groundwater Discharge to an Arctic Lagoon. American Geophysical Union, Fall Meeting 2020, POSTER B120-04

Pedrazas, M. N., Bayani Cardenas, M., Demir, C., Watson, J. A., Connolly, C. T., McClelland, J. W. (2020). Absence of ice-bonded permafrost beneath an Arctic lagoon revealed by electrical geophysics. Science Advances, 6(43), eabb5083.

Demir, C., Cardenas, M. B., McClelland, J. W., Pedrazas, M. N. (2019) Groundwater Discharge in the Lagoons of Alaskan Beaufort Sea, American Geophysical Union, Fall Meeting 2019, POSTER C13E-1362

Demir, C., Yetiş, Ü., Ünlü, K. (2018). Identification of waste management strategies and waste generation factors for thermal power plant sector wastes in Turkey. Waste Management Research. 2019;37(3):210-218.

## EDUCATION

PhD | Geological Sciences | 2018-23  
The University of Texas at Austin

MSc | Environmental Eng. | 2015-18  
Middle East Technical University

BS | Environmental Eng. | 2010-15  
Middle East Technical University

## RESEARCH INTERESTS

Groundwater Flow and Transport Modeling

Cryohydrogeology

Groundwater-Surface Water Interactions

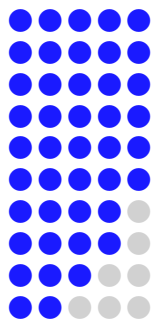
## AWARDS

Fulbright Scholarship  
2018-2020

GSA Research Grant  
2019

## SKILLS

Microsoft Office  
Adobe Illustrator  
ArcGIS  
GMS (MODFLOW/PEST)  
COMSOL  
MATLAB  
Python  
Git  
Bash  
R



## FIELD EXPERIENCE

Arsenic in Groundwater | Jan 2020  
Meghna River, Bangladesh

Arctic Coastal Groundwater | Aug 2019  
Kaktovik Lagoon, Barter Island, AK

Groundwater Field Methods Class | May 2019  
Hornsby Bend, TX & Valles Caldera, NM

## LANGUAGES

English (Fluent), Turkish (Native)