MARMARA UNIVERSITY
FACULTY OF ENGINEERING
ENVIRONMENTAL ENGINEERING DEPARTMENT

ENVE 4197/4198 ENGINEERING PROJECT PROPOSAL FORM FALL 2024-2025

Instructor: Gülay Arslan Çene

Project Title: Organic Matter Removal using Calcium Carbonate ($CaCO_3$) Particles

Proposal No: 1

Number of Students: 2-3 (*A student group of three has started working on this project topic within the scope of the 2209-A - University Students Research Projects Support Program*)
Cansu Şen
Abdullah Taha Doğruel
Dilara Uslu

Requirements (from students):

Students are required to conduct research and laboratory experiments throughout the project. Each student is expected to study a minimum of 3 hours in the laboratory each week.

Scope of the Project: (1) Synthesis and Characterization of Calcium Carbonate ($CaCO_3$) Particles (2) Evaluation of the Effectiveness of $CaCO_3$ Particles on the Removal of Organic Matter from Synthetic Waters

Hardware/Software/Lab/Equipment Requirements: UV-vis spectrophotometer, Magnetic stirrer, total organic carbon analyzer (TOC), Glass disc with nominal pore size (100-160 micrometers), Carbon Dioxide (CO_2) gas

Development Plan:

- Literature review
- Synthesis of $CaCO_3$ Particles
- Removal experiments with prepared $CaCO_3$ micro nano particles
- Thesis writing and poster preparation