



MARMARA UNIVERSITY FACULTY OF ENGINEERING ENVIRONMENTAL ENGINEERING DEPARTMENT

ENVE 497/498 ENGINEERING PROJECT PROPOSAL FORM FALL 2017

Instructor: Orhan Gökyay

Project Title: Sludge Drying Using Microwave

Proposal No.: OrhanGökyay-1

Number of Students: 3 - 4

Requirements (from students): None

Scope of the Project: Trying to reduce sludge volume using microwave. Moreover, control the COD, TS, VS of the sludge.

Hardware/Software/Lab/Equipment Requirements : Microwave oven, 105^{0} C oven, 550^{0} C oven, COD reactor, thermometer.

Development Plan: First, sludge volume reduction will be defined with different power inputs and time. COD, TS, VS reduction will be measured. Then, effect of sludge amount and condition of sludge will be investigated using microwave oven.