



**MARMARA UNIVERSITY  
FACULTY OF ENGINEERING  
ENVIRONMENTAL ENGINEERING DEPARTMENT**

**ENVE 497/498 SENIOR DESIGN PROJECT  
PROPOSAL FORM  
FALL 2017**

**Instructor :** Assoc. Prof. Bilge Alpaslan Kocamemi

**Project Title :** Initial Attachment of microbial species in Moving Bed Biofilm Reactor Systems

**Proposal No. :** *Bilge Alpaslan Kocamemi-2*

**Number of Students :** 2-3

**Requirements (from students) :** Courses on Enve 301, Enve 302 and Enve 303 has to be taken.

**Scope of the Project :**

In the scope of this project, the students will perform experiments in order to evaluate the biofilm attachment mechanisms in MBBR systems. The effects of various physical and chemical pre-treatment methods on biofilm attachment efficiency will be evaluated for heterotrophic and autotrophic bacteria.

**Hardware/Software/Lab/Equipment Requirements :-**

**Development Plan :**

Experiments will be performed using experimental set-ups already exist



The students first will collect data and then evaluate.