



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

**ENVE 497/498 SENIOR DESIGN PROJECT
PROPOSAL FORM
FALL 2018-2019**

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 : 1

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, student will perform experiments in order to evaluate the biofilm attachment mechanisms in MBBR systems. The effects of nZVI and polymers on biofilm attachment efficiency will be evaluated for heterotrophic and autotrophic bacteria.

Hardware/Software/Lab/Equipment Requirements :-

Ion chromatograph

UV-VIS Spectrophotometer

Development Plan :

Experiments will be performed using experimental set-ups already exist

Data collection-Data evaluation