



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

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

Instructor : Assoc. Prof. Dr. A. Evren TUĞTAŞ

Project Title : Volatile Fatty Acid production and modelling

Proposal No. : *AEvrenTugtasMay0117-1*

Number of Students : Maximum 2 students

Requirements (from students) : Interest to work in the laboratory and interested in modelling

Scope of the Project :

Volatile fatty acid producing culture will be enriched and the results will be modelled

Hardware/Software/Lab/Equipment Requirements :

Gas chromatography (GC) unit, pH meter, temperature control cabin, and peristaltic pump, modelling software

Development Plan :

Students are required to design a fermentative system to produce VFAs. Designed system will be assembled and the experimental studies will be carried out. The data will be periodically collected and the VFA production will be modelled.