



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

**ENVE 4197/4198 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2019**

Instructor : Prof. Dr. S. Sinan Keskin

Project Title : Mineralogical profile of a Tuz Lake sediment core

Proposal No. : S. Sinan KeskinSept18.2019-1

Number of Students : 2

Requirements (from students) :

Sample preparation for x-ray diffraction (XRD) measurements of sediment samples, data analysis, literature survey.

Scope of the Project :

Previously measured trace element profiles of a Tuz Lake sediment core will be used to select some samples for further mineralogical analysis. Any possible change of sediment mineralogy with respect to deposition time will be determined. Possible sources, changes in source strengths, and climatic effects will be examined.

Hardware/Software/Lab/Equipment Requirements :

X-ray diffractometer, diffraction pattern analysis software

Development Plan :

Detailed literature survey about the subject and XRD measurements of selected sediment samples will be performed within the Fall semester. XRD pattern analyses, data process, and evaluation of the results will be accomplished within the Spring semester.