**LIST OF TOPICS OFFERED BY THE ADVISORS FOR ENVE 490**

**(2021-2022 I. )**

**Prof. Dr. F. Dilek SANİN**

1. Occurrence of Microplastics in Industrial Wastewaters

2. Effect of Polyamide Microplastics on Anaerobic Digestion of Sludge

3. Enzymatic Pretreatment of Activated Sludge

**Prof. Dr. İpek İMAMOĞLU**

1. Plastisphere and organic pollutants: how do they interact?

2. Sorption of organic pollutants onto microplastics

3. Can we model the impact of the plastisphere and its interaction with organic pollutants?

**Doç. Dr. Emre ALP**

1- Water-Energy-Food-Ecosystem Nexus

2- Smart Environment in Smart Cities

3- Sustainable Stormwater Management

4- Circular Economy in Watershed Management

5- Big Data Applications in watershed Management

**Dr. Öğr. Üyesi Y. Dilşad YILMAZEL TOKEL**

1. Biohydrogen production at hyperthermophilic temperatures (experimental design and operation of high temperature bioreactors)

2. An industrial symbiosis opportunity to study nutrient (N and P) recovery from waste materials via struvite precipitation process

3. Anaerobic fluidized bed membrane bioractor (AFMBR) design and its use for domestic wastewater treatment (In collaboration with Dr. Zeynep Culfaz-Emecen in Chemical Engineering)

**Dr. Öğr. Üyesi S. Sevinç ŞENGÖR**

1. CO2 sequestration by carbon biomineralization in subsurface: An environmental sustainability application approach

2. Microbially induced calcite precipitation in subsurface: An environmental engineering sustainability perspective

3. Environmental isotopes and applications in subsurface