

LIST OF TOPICS OFFERED BY THE ADVISORS FOR ENVE 490
(2022-2023 II.)

Prof. Dr. F. Dilek SANİN

1. Measurement of additive chemicals leaching from plastics during sludge digestion
2. Mass, size and morphological changes in different microplastics by sludge pretreatment
3. Effect of polypropylene microplastics on mesophilic digestion
4. How does digestion affect physical and chemical properties of microplastics?

Prof. Dr. İpek İMAMOĞLU

1. Do UV-aging of microplastics affect their interaction with organic contaminants?
2. What does bio-aging of microplastics mean? Can we simulate this in the laboratory and would this have an impact on their interaction with organic contaminants?

Prof. Dr. Tuba Hande BAYRAMOĞLU

1. Photofermentative hydrogen production
2. Anaerobic treatment of poultry wastes

Dr. Y. Dilşad YILMAZEL TOKEL

1. Fluidized bed reactor design and operation for nutrient recovery through struvite precipitation
2. An introduction and literature review of life cycle assessment of biogas plants
3. Biomethane production from agricultural biomass in bioelectrochemical reactors
4. Biohydrogen production from agricultural biomass in bioelectrochemical reactors
5. Domestic wastewater treatment in anaerobic membrane bioreactors (in collaboration with Dr. Zeynep Culfaz-Emecen in Chemical Eng. Department)