Our laboratory focus on bioenergy research at METU trying to address problems pertaining to energy and environment. We develop efficient biological and bio-electrochemical processes for sustainable wastewater management, biofuel production and value-added product generation and utilize fundamental bioprocess engineering tools to come up with solutions to the overarching problems of the 21st century. In bioenergy domain, Dr. Yilmazel Tokel has recently received a prestigious national funding for her project on integration of anaerobic digestion and bio-electrochemical systems for more efficient methane production from agro-wastes. Another on-going project funded by national and international funding is focused on the utilization of hyperthermophilic microorganisms for biohydrogen production in bio-electrochemical systems. We are also interested in using anaerobic biotechnology for treatment of low strenght wastewater and investigating the role of conductive materials in a newly discovered mechanism called “Direct Interspecies Electron Transfer (DIET)” present in anaerobic processes. Dr. Yilmazel is currently advising 1 doctoral, 4 Master’s level graduate and 3 undergraduate students. Currently, she is also collaborating with the Ministry of Environment and Urbanization (MOEU) of Turkey and contributing to one of MOEU project on national waste management.