# Institute of Biomedical Engineering Seminar

## Functional Polymeric Nanostructures for Bioengineering Applications

26 NOV TUE at 1:00 PM (GMT+3)
Boğaziçi University Kandilli Campus, BME Building AZ19

Gözde İnce, PhD
Sabancı University

*About the Seminar: In this seminar, I will share the latest research from my group on functional polymeric nanomaterials. In the first part of the talk, I will focus on our work with stimuli-responsive nanoparticles designed as drug carriers for targeted therapy. Next, I will introduce the templated initiated chemical vapor deposition (iCVD) technique, highlighting its potential to fabricate conformal nanoscale polymeric structures. This includes the development of stimuli-responsive nanostructures for molecular delivery and smart membranes with tunable pores for macromolecular separation. Finally, I will present our studies on biosensors, emphasizing surfaces functionalized with polymeric nanostructures for enhanced sensitivity and selectivity.*

*About the Speaker: Prof. Ince obtained her BS degree in Physics from Boğaziçi University and her Ph.D. in Mechanical Engineering from Boston University. During her doctoral studies, she focused on synchrotron x-ray studies of surface morphology evolution in semiconductors and thin film growth. She completed her postdoctoral research in Chemical Engineering at MIT, where she concentrated on vapor phase deposition and kinetic studies of organic thin film coatings. Currently, she is a faculty member in the Materials Science and Nanoengineering program at Sabancı University. Her research interests include the synthesis and development of organic coatings and nanostructures for biomedical and electronic applications.*