CHEMICAL ENGINEERING DEPARTMENT
10.991 Student Seminar Series
FALL 2026

All Student Seminars are MIT ONLY events and will be held in-person in room 66-110 unless otherwise noted.

MONDAY, September 14th		
3:00 pm	Environment, Health, & Safety (EHS)	Safety Seminar
MONDAY, September 21st		
3:00 pm	Yein Yoon	"Engineering Backbone Rigidity and Fixed Charge to Control Ion Transport in Microporous Tröger's Base Membranes"
3:30 pm	Jacob Rosenfeld	"Structure-Preserving Dynamic Elementary Flux Modes for Parsimonious Modeling of Heterogenous Bioproducts"
4:00 pm	Aidan Kindopp	"Effects of Nanoparticle Size, Shape, and Surface Chemistry on Penetration into Ovarian Tumors"
MONDAY, September 28th		
3:00 pm	Olivia Wilkinson	"Unraveling the role of PIM-1 polymer architecture on its gas separation performance and aging"
3:30 pm	Marieke De Bock	"Engineering In Vitro Transcription for Scalable and Affordable Gene Therapy Manufacturing"
4:00 pm	Michaela Wenning	"Combinatorial discovery of biodegradable polymers for mRNA vaccination"
MONDAY, October 5th		
3:00 pm	Heecheol Jang	"Generalized Tensioned Model for Bond Activation: Transition Force Prediction of Organic Mechanophore"
3:30 pm	Emily Wu	"Electrostatic effects on liquid phase catalysis in zeolites"

MONDAY, October 19th		
3:00 pm	Keyu Chen	"Creating Platform for Scalable Delivery of Organ-Scale Cellular Therapeutics for Chronic Disease Treatment"
3:30 pm	Gigi Wang	"Computational Modeling and Generative Design of OLED Emitters and Host Materials"
MONDAY, October 26th		
3:00 pm	Katie Traynelis	"Platform Engineering for the Development of Cyclotide Therapeutics"
3:30 pm	Miyu Mudalamane	"Mapping the Human Anti-αGal Antibody Repertoire: A High-Throughput Platform for Glyco-antigen Profiling"

MONDAY, November 2nd		
3:00 pm	Gokulnath Ganesan	"Design and Material Strategies for Endovascular Devices that Deliver Minimally Invasive Cellular Therapeutics"
3:30 pm	Lauren Hubert	"Single Cell Profiling of B and T Cell Responses to Multivalent Pneumococcal Conjugate Vaccines in Non-Human Primates"
4:00 pm	Zahmiria Johnson	"Computational design of peptidic effectors of DnaJB6 for treating neurodegenerative disease"
MONDAY, November 16th		
3:00 pm	Brandon Tapia	"Development of computational atomistic systems for high free volume polymers to elucidate the microstructural origins of physical aging"
MONDAY, November 23rd		
3:00 pm	James Law	"Modeling Nuclear Plasmid Distribution of Transiently Transfected HEK293 Cells using Kinetic Monte Carlo"
3:30 pm	Hannah Uhl	"Thermodynamics-Informed Modeling of Polymer Solution Phase Behavior"
4:00 pm	Myungsun Lee	"Chemically driven electrochemical lithium extraction from low-quality brines"
MONDAY, November 30th		
3:00 pm	Benjamin Kash	"Operando Investigations of Molten Salt–Material Interactions"
3:30 pm	Leah Soldner	"Characterization and Monitoring of Electrode Degradation in Li-ion Batteries via Acoustic Emissions"
4:00 pm	Matthew Cox	"Post-Training LLM Agents for Atomistic Simulation"
MONDAY, December 7th		
3:00 pm	Xiaomian Yang	"Learning Linear Systems under Heavy-Tailed Noise: A Non-Asymptotic Analysis from A Single Trajectory"
3:30pm	Callie Zheng	"Engineering Liquid Crystal Elastomer Formulations for Enhanced Magnetic Alignment"