



**Department of  
Chemistry**  
Faculty of Exact Sciences  
Bar-Ilan University



**The Department of Chemistry  
Weekly Seminar  
Wednesday 22/6/22 at 11:00am  
(Refreshments 10:45am)**

**Molecular precision as a tool for designing Stimuli-Responsive  
polymeric assemblies**

**Prof. Roey J. Amir**

Department of chemistry, Tel-Aviv University

Polymeric amphiphiles and their assemblies have been widely explored for applications ranging from nanocarriers for controlled drug delivery to nano-containers for green chemistry. Taking advantage of accelerated synthetic approaches for the synthesis of dendritic amphiphiles and their well-defined structures - their degree of amphiphilicity can be tuned with high molecular precision reminiscent of low molecular weight amphiphiles and amphiphilic peptides. Over the past few years, we used highly modular synthetic methodology to study how small changes in the hydrophobic dendron can affect the enzymatic responsiveness of micellar nanocarriers. In this talk, we will share our key findings as well as preliminary data on how molecular architecture can be used as a tool for controlling the stability and responsiveness of polymeric assemblies.

**Location: Building 211 Room 112**

**Looking forward to seeing you!**