

PoND CREATE Module

Polymer Synthesis for Drug Delivery

Course Description

This course is open to students in the PoND program.

This module will describe the methods to synthesize polymers that can be designed in drug delivery. Not only conventional polymerization methods including step-growth and chain-growth polymerization including living anionic and cationic polymerization, but also modern controlled/living radical polymerization and ring-opening metathesis polymerization (ROMP) will be covered. Furthermore, the synthesis and self-assembly of amphiphilic block copolymers for drug delivery applications will be discussed. Lectures only.

Instructor:

Prof. John Oh, Concordia University, Department of Chemistry and Biochemistry
John.oh@concordia.ca

Lectures:

10:00 - 11:30 am PDT (1:00-2:30 pm ET) on

Wed, Sep 25 Fri, Sep 27

Wed, Oct 2 Fri, Oct 4

Wed, Oct 9 Fri, Oct 11

Evaluation:

20% - Participation in class discussions

80% - Individual report where the student provides a critical analysis of two papers from the literature describing the design and synthesis of functional polymers to study drug delivery.

Schedule:

Oct 18: Choice of the 2 papers. Papers will be sent to Oh to check if they are appropriate

Nov 22: Deadline for submission of report.