

Seminar



Title: *Ordered Fluids as Functional Materials*

Name: Dr. Vance Williams, Department of Chemistry, Simon Fraser University

Date: Tuesday, January 20, 2026

Time: 3:00pm – 4:00pm

Location: EH 186

Abstract:

Despite their many desirable characteristics, crystalline solids are largely static structures, which inhibits their ability to respond to external physical and chemical stimuli. While liquid crystals share many of the electro-optical features of solid-state materials, their inherent fluidity makes them uniquely suited to applications such as display devices, chemical sensors, and shape-changing materials. Because self-assembly is highly sensitive to molecular structure, it remains challenging to design materials that combine targeted optical and electronic properties with the ability to form ordered fluid phases. The overarching goal of our research is to untangle the subtle interplay of structural features that govern liquid crystal formation. I will present our recent efforts to create novel functional materials from a diverse range of molecular architectures.