

**Title:** Impact of model foam processing into the physical chemistry of various polyolefin architectures.

**Name of project supervisor:** Prof. Patrick Lee

Contact person: Dr. Jean-Mathieu Pin <jeanmathieu.pin@utoronto.ca>

Elaborating polyolefin foams deeply modify the polymer bulk physical-chemistry due to the orientational stress induced during the foam cell formation. Our aim is to correlate the polymer architecture (various branching topology) and polymer chain configurational state with the crystalline and amorphous phase's nature of the elaborated foams. This investigation involves preparation of the model foams and subsequent characterization combining advanced thermal analysis and spectroscopies.