



Faculty of Engineering and Applied Science
Chemical Engineering Seminar Series



Do We Really Understand the Kinetics of Radical Polymerization?

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Thursday, April 7, 2016, 2:30pm
Dupuis Hall, Room 215



ABSTRACT

The worldwide production of polymer by radical means exceeds 100 million tons per annum. This evidences not just the usefulness of polymers as materials but also the agreeableness of radical polymerization as a chemical process. One would therefore expect that the kinetics of radical polymerization are well understood at a fundamental level, and indeed this is the impression one gains from textbooks and undergraduate courses on polymers. This contention will be scrutinized from the perspective of a physical chemist with 25 years of research experience in this area. Particular emphasis will be placed on the termination reaction, including its different pathways of combination and disproportionation; the related fundamental reaction of propagation will also be considered.