



Faculty of Engineering and Applied Science  
Chemical Engineering Seminar Series



**Navigating the Slippery Slope from Macro to Micro  
Through Nano to Moleculo, in the Encapsulation,  
Retention and Delivery of Biologicals and Bioactives**

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Thursday, October 27, 2016, 2:30pm

Dupuis Hall, Room 215



**ABSTRACT**

Macro, micro, nano, droplets, beads, particles, emulsions, foams, sprays, films, fibres, molecules, or some combination thereof may be attempted, but with minimal risk to the seminar audience. Physical, chemical, physicochemical, thermodynamic, mind-bending, and theoretical approaches or some combination thereof have been considered with varying degrees of success. Extrusion, extraction, injection, drying, layering, coating, emulsification (Pickering and otherwise), prilling, spraying, reacting, coacervating, chilling, binding, gelling, evaporating, cross-linking, grafting have been approaches of interest, some of which may be described....

.... if time permits.

I will describe a journey that will keep our focus around one active, that being insulin. You might think that it should be a simple journey, but few things that I have learned. One is that the trend is toward small, then smaller yet, then smaller yet again. In that regard, size does matter. Another is that it is not good to get too hung up on shape. Third lesson is that if the mind can conceive, we should be able to make it happen.

Strange story I know, but thus is the fate of the Professor Emeritus.