



Department of Chemistry Seminar Series Spring 2023

Monday, February 6, 2023, 3:30 PM – HPA1-O119 (Health Sciences)
Host: Matthieu Baudelet

**Development of Raman spectroscopy from academic laboratories
to industrial applications**



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Raman spectroscopy is an established tool in many scientific fields because of its sampling versatility, minimal sample preparation, and compatibility with aqueous systems. The sharp bands of a Raman spectrum provide a high level of contrast in identifying and quantifying analytes in a process environment for chemical, pharmaceutical, polymer, and life science industries. This talk will provide an overview of Raman spectroscopy measurement principles, its nearly 100-year history, and how it fits into modern industry applications from basic science research to mega-scale process control. Translating technology from a laboratory to industrial use is a fascinating process, involving a multi-disciplinary group from Marketing, Engineering, Operations, and Sales. The second part of this talk will delve into the role of technical marketing in analytical instrumentation development. To some, scientific sales and marketing is “the dark side” of scientific research. In fact, the first day of my career in scientific marketing involved a picture of Darth Vader with the phrase “Come to the dark side. We have cookies”! Many cookies and years later, I will share perspectives on my move from a research-based academic career to one in technical marketing. I’ll also share some pleasant surprises upon discovering commonalities between my academic and marketing jobs involving the many roles of writer, teacher, researcher, cat herding, and project or product manager.