Survival skills for scientists: developing and mentoring young researchers through the scientific minefield

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Abstract

Survival skills for scientists is an adapted tutorial from the book entitled “Survival Skills for Scientists”, co-authored by Federico Rosei and Tudor Johnston Wyatt, respectively Professor and Professor Emeritus of Energy Materials Telecommunications Center of INRS in Quebec, Canada. The tutorial aims to address key questions essential to the professional development of science and engineering graduate students. It will cover a broad range of topics focused on the job market (industry, government, laboratories, academia, etc.), career planning, finding a mentor, the scientific peer review system, effectively communicating one’s science, funding one’s research, as well as science and ethics, among other topics. The workshop aims to answer important questions on every graduate student’s mind such as (1) “What is the job of the researcher in the field of science and engineering?”, (2) “What are the major challenges?”, (3) “How do I navigate a career in academia?” and (4) “What opportunities exist in industry?” The talk is interactive and intended to stimulate discussion with the participants

Biography

Rafik Naccache obtained his PhD in Chemistry (2012) at Concordia University (Canada) where he studied lanthanide-doped upconverting nanoparticles for imaging applications, with John Capobianco. He was the recipient of the Governor General Gold Medal in the area of Technology, Industry, and the Environment. He subsequently carried out his NSERC postdoctoral training in nanobiophotonics at l’Institut National de la Recherche Scientifique (Canada) in Roberto Morandotti’s group. In December 2015, he accepted a tenure track faculty position as a strategic hire in the Department of Chemistry and Biochemistry at Concordia University. He is currently a Petro-Canada Young Innovator and a Concordia University Research Fellow. His group’s research program focuses on the study of the fundamental physico-chemical and optical properties of carbon nanomaterials and their application in imaging, sensing and drug delivery applications.